

Owner: Gabriel A/S  
No.: MD-26023-EN  
Issued: 18-02-2026  
Valid to: 18-02-2031

3<sup>rd</sup> 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.gabriefabrics.com](http://www.gabriefabrics.com)



**Programme**

EPD Danmark  
[www.epddanmark.dk](http://www.epddanmark.dk)



- |                                       |  |
|---------------------------------------|--|
| <input type="checkbox"/> Industry EPD | <input checked="" type="checkbox"/> Product specific |
| <input type="checkbox"/> Product EPD  | <input type="checkbox"/> Average                     |
|                                       | <input type="checkbox"/> Worst Case                  |

**Declared products**

Product name (design number)

Athlon (6500)	Step (2440)
Athlon Plus (6501)	Step Melange (2441/2442/2543)
Atlantic (8690)	Step Melange Screen (2305/2306/2307)
Go Check (2450)	Step Screen (2304)
Go Couture (2449)	Twist (2445)
Go Uni (2448)	Twist Melange (2446/2447)
Spin (2504)	
Spin (2504)	

Number of declared datasets/product variations: 13

**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 m<sup>2</sup> of textile (incl. packaging) for upholstery, screen or panel

**Year of production site data (A3)**

Fiscal year of 2022/2023 (Oct-Sep)

**EPD version**

1<sup>st</sup> version, 11 February 2026

**Issued:**  
18-02-2026

**Valid to:**  
18-02-2031

**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  <input type="checkbox"/> internal <input checked="" type="checkbox"/> 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
Virgin PET	100%

Please see elaborated information about each product on page 5.

### 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 m<sup>2</sup> of textile (incl. packaging) for upholstery or screen at the production sites located in Lithuania. Product specific data are based on average values collected in the period January 2024 to June 2025, representing the fiscal year of 2022/2023. Background data are based on primarily the GaBi 2024.2 professional database and secondly the EcoInvent 3.9.1 2022 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.

### Table of products

### 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](http://www.gabrielfabrics.com)

### Reference Service Life (RSL)

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](#).

Design name	Design no.	Composition (% of declared unit)*	Weight (kg/m <sup>2</sup> )	Certifications	Technical product specifications	Martindale (EN ISO 12947-2)	Results found on page
Athlon	6500	100% virgin polyester	0.536	OEKO-TEX STANDARD 100	See <a href="#">Athlon - Gabriel</a>	100,000	9-10
Athlon Plus	6501	56% virgin polyester / 44% virgin polyester with FR (Trevira CS)	0.536	OEKO-TEX STANDARD 100	See <a href="#">Athlon Plus - Gabriel</a>	100,000	11-12
Atlantic	8690	100% virgin polyester	0.353	EU Ecolabel, OEKO-TEX STANDARD 100	See <a href="#">Atlantic - Gabriel</a>	110,000	13-14
Go Check	2450	100% virgin polyester with FR (Trevira CS)	0.311	EU Ecolabel, OEKO-TEX STANDARD 100	See <a href="#">Go Check - Gabriel</a>	80,000	15-16
Go Couture	2449	100% virgin polyester with FR (Trevira CS)	0.311	EU Ecolabel, OEKO-TEX STANDARD 100	See <a href="#">Go Couture - Gabriel</a>	80,000	17-18
Go Uni	2448	100% virgin polyester with FR (Trevira CS)	0.311	EU Ecolabel, OEKO-TEX STANDARD 100	See <a href="#">Go Uni - Gabriel</a>	70,000	19-20
Spin	2504	100% virgin polyester with FR (Trevira CS)	0.289	EU Ecolabel, OEKO-TEX STANDARD 100	See <a href="#">Spin - Gabriel</a>	70,000	21-22
Step	2440	100% virgin polyester with FR (Trevira CS)	0.336	EU Ecolabel, OEKO-TEX STANDARD 100	See <a href="#">Step - Gabriel</a>	100,000	23-24
Step Melange	2441 2442 2543	100% virgin polyester with FR (Trevira CS)	0.336	EU Ecolabel, OEKO-TEX STANDARD 100	See <a href="#">Step Melange - Gabriel</a>	100,000	25-26
Step Melange Screen	2305 2306 2307	100% virgin polyester with FR (Trevira CS)	0.259	EU Ecolabel, OEKO-TEX STANDARD 100	See <a href="#">Step Melange Screen - Gabriel</a>	N/A	27-28
Step Screen	2304	100% virgin polyester with FR (Trevira CS)	0.259	EU Ecolabel, OEKO-TEX STANDARD 100	See <a href="#">Step Screen - Gabriel</a>	N/A	29-30
Twist	2445	100% virgin polyester with FR (Trevira CS)	0.218	EU Ecolabel, OEKO-TEX STANDARD 100	See <a href="#">Twist - Gabriel</a>	N/A	31-32
Twist Melange	2446 2447	100% virgin polyester with FR (Trevira CS)	0.218	EU Ecolabel, OEKO-TEX STANDARD 100	See <a href="#">Twist Melange - Gabriel</a>	N/A	33-34

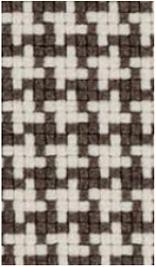
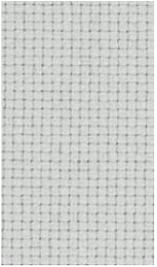
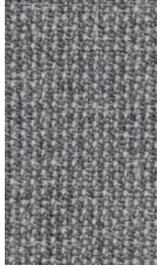
\*Composition includes fibre composition only, as the resulting content of, e.g., dyestuff in the final product corresponds to less than a total of 1%.

Abbreviations: B2F = Bottle-to-fibre. FR = flame retardant properties.

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 impacts across all core environmental impacts categories differ 1.5% on average with the maximum difference being 3.1%.

## Picture of products

<b>Design name</b>	Athlon	Athlon Plus	Atlantic	Go Check	Go Couture	Go Uni
<b>Design no.</b>	6500	6501	8690	2450	2449	2448
<b>Picture*</b>						
<b>Design name</b>	Spin	Step	Step Melange	Step Melange Screen	Step Screen	Twist
<b>Design no.</b>	2504	2440	2441, 2442, 2543	2305, 2306, 2307	2304	2445
<b>Picture*</b>						
<b>Design name</b>	Twist Melange					
<b>Design no.</b>	2446, 2447					
<b>Picture*</b>						

\*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 m<sup>2</sup> of textile (incl. packaging) for upholstery or screen.

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

### 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.

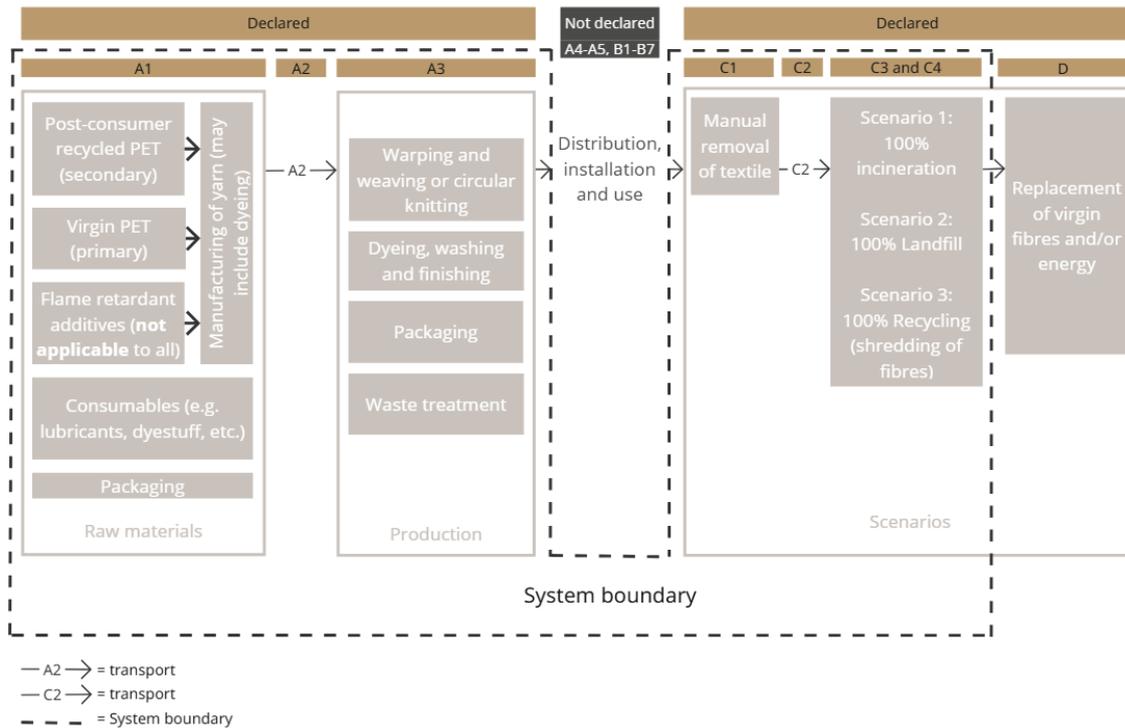
Information about the energy mix in the foreground system:

Energy mix	EF	Unit
Electricity – at Gabriel Textiles	0.03	kg CO <sub>2</sub> e/kWh
Electricity – at Scandye	0.42	kg CO <sub>2</sub> e/kWh
Residual grid mix, LT	0.52	kg CO <sub>2</sub> e/kWh
Natural gas, LT	0.07	kg CO <sub>2</sub> e/MJ
Diesel, RER	0.55	kg CO <sub>2</sub> 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.

### 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 extraction of raw materials, 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, as determined by the applied GaBi dataset. 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 43. Results are presented per declared unit: 1 m<sup>2</sup>.

ENVIRONMENTAL IMPACTS PER m <sup>2</sup>															
			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 <sub>2</sub> eq.	5.04E+00	0.00E+00	2.93E-03	1.23E+00	0.00E+00	-3.17E-01	2.93E-03	0.00E+00	1.58E-02	0.00E+00	2.44E-02	1.23E-01	0.00E+00	-1.08E+00
GWP-fossil	kg CO <sub>2</sub> eq.	5.00E+00	0.00E+00	2.87E-03	1.23E+00	0.00E+00	-3.14E-01	2.87E-03	0.00E+00	1.58E-02	0.00E+00	2.39E-02	1.23E-01	0.00E+00	-1.07E+00
GWP-biogenic	kg CO <sub>2</sub> eq.	1.54E-02	0.00E+00	6.86E-06	4.27E-05	0.00E+00	-2.00E-03	6.86E-06	0.00E+00	-4.34E-05	0.00E+00	5.72E-05	5.23E-06	0.00E+00	-8.40E-03
GWP-luluc	kg CO <sub>2</sub> eq.	2.07E-02	0.00E+00	4.83E-05	3.02E-06	0.00E+00	-7.25E-05	4.83E-05	0.00E+00	5.79E-05	0.00E+00	4.02E-04	3.18E-07	0.00E+00	3.55E-04
ODP	kg CFC 11 eq.	4.50E-11	0.00E+00	4.23E-16	8.84E-14	0.00E+00	-3.33E-12	4.23E-16	0.00E+00	5.20E-14	0.00E+00	3.53E-15	1.12E-14	0.00E+00	-6.54E-13
AP	mol H <sup>+</sup> eq.	8.11E-03	0.00E+00	4.51E-06	1.19E-04	0.00E+00	-6.08E-04	4.51E-06	0.00E+00	9.43E-05	0.00E+00	3.76E-05	1.21E-05	0.00E+00	-1.25E-03
EP-freshwater	kg P eq.	7.81E-05	0.00E+00	1.23E-08	1.89E-08	0.00E+00	-1.89E-06	1.23E-08	0.00E+00	9.06E-06	0.00E+00	1.02E-07	2.34E-09	0.00E+00	-4.39E-06
EP-marine	kg N eq.	2.60E-03	0.00E+00	1.73E-06	3.45E-05	0.00E+00	-1.79E-04	1.73E-06	0.00E+00	2.03E-05	0.00E+00	1.44E-05	3.50E-06	0.00E+00	-3.57E-04
EP-terrestrial	mol N eq.	2.50E-02	0.00E+00	2.03E-05	5.79E-04	0.00E+00	-1.76E-03	2.03E-05	0.00E+00	2.23E-04	0.00E+00	1.69E-04	5.84E-05	0.00E+00	-3.89E-03
POCP	kg NMVOC eq.	1.24E-02	0.00E+00	4.48E-06	9.65E-05	0.00E+00	-4.63E-04	4.48E-06	0.00E+00	6.49E-05	0.00E+00	3.73E-05	9.80E-06	0.00E+00	-2.82E-03
ADPm <sup>1</sup>	kg Sb eq.	5.93E-07	0.00E+00	2.50E-10	9.17E-10	0.00E+00	-3.55E-08	2.50E-10	0.00E+00	1.05E-09	0.00E+00	2.09E-09	1.12E-10	0.00E+00	-6.88E-08
ADPf <sup>1</sup>	MJ	9.53E+01	0.00E+00	3.78E-02	1.93E-01	0.00E+00	-5.15E+00	3.78E-02	0.00E+00	2.66E-01	0.00E+00	3.15E-01	2.16E-02	0.00E+00	-2.96E+01
WDP <sup>1</sup>	m <sup>3</sup> world eq. deprived	1.14E+00	0.00E+00	4.45E-05	1.09E-01	0.00E+00	-4.90E-02	4.45E-05	0.00E+00	2.04E-03	0.00E+00	3.71E-04	1.10E-02	0.00E+00	-9.46E-04
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 <sup>2</sup> or 195, while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112.														
Disclaimer	<sup>1</sup> 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 <sup>2</sup>															
			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]	1.04E-07	0.00E+00	4.75E-11	6.38E-10	0.00E+00	-5.07E-09	4.75E-11	0.00E+00	9.76E-10	0.00E+00	3.96E-10	6.53E-11	0.00E+00	-1.09E-08
IRP <sup>2</sup>	[kBq U235 eq.]	1.31E-01	0.00E+00	1.00E-05	1.78E-03	0.00E+00	-8.11E-02	1.00E-05	0.00E+00	5.15E-04	0.00E+00	8.33E-05	2.37E-04	0.00E+00	6.89E-02
ETP-fw <sup>1</sup>	[CTUe]	3.89E+01	0.00E+00	2.81E-02	7.61E-02	0.00E+00	-1.11E+00	2.81E-02	0.00E+00	5.79E-01	0.00E+00	2.34E-01	8.28E-03	0.00E+00	-1.86E+01
HTP-c <sup>1</sup>	[CTUh]	1.24E-09	0.00E+00	5.68E-13	6.86E-12	0.00E+00	-7.70E-11	5.68E-13	0.00E+00	8.58E-12	0.00E+00	4.73E-12	7.24E-13	0.00E+00	-2.90E-10
HTP-nc <sup>1</sup>	[CTUh]	3.71E-08	0.00E+00	2.55E-11	7.08E-11	0.00E+00	-2.15E-09	2.55E-11	0.00E+00	1.79E-10	0.00E+00	2.12E-10	7.64E-12	0.00E+00	-5.44E-09
SQP <sup>1</sup>	-	2.56E+01	0.00E+00	1.86E-02	6.27E-02	0.00E+00	-8.33E+00	1.86E-02	0.00E+00	4.52E-02	0.00E+00	1.55E-01	7.20E-03	0.00E+00	-6.25E-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 <sup>2</sup> or 195, while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112.														
Disclaimers	<sup>1</sup> 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. <sup>2</sup> 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 <sup>2</sup>															
			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]	1.62E+01	0.00E+00	3.26E-03	5.58E-02	0.00E+00	-3.52E+00	3.26E-03	0.00E+00	4.02E-02	0.00E+00	2.72E-02	7.20E-03	0.00E+00	1.95E-01
PERM	[MJ]	3.24E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	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]	1.95E+01	0.00E+00	3.26E-03	5.58E-02	0.00E+00	-3.52E+00	3.26E-03	0.00E+00	4.02E-02	0.00E+00	2.72E-02	7.20E-03	0.00E+00	1.95E-01
PENRE	[MJ]	9.60E+01	0.00E+00	3.78E-02	1.24E+01	0.00E+00	-5.15E+00	3.78E-02	0.00E+00	2.66E-01	0.00E+00	3.15E-01	2.16E-02	0.00E+00	-2.96E+01
PENRM	[MJ]	1.17E+01	0.00E+00	0.00E+00	-1.22E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-1.22E+01	0.00E+00	0.00E+00
PENRT	[MJ]	1.08E+02	0.00E+00	3.78E-02	1.93E-01	0.00E+00	-5.15E+00	3.78E-02	0.00E+00	2.66E-01	0.00E+00	3.15E-01	-1.22E+01	0.00E+00	-2.96E+01
SM	[kg]	1.47E-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 <sup>3</sup> ]	2.09E-02	0.00E+00	3.63E-06	2.57E-03	0.00E+00	-1.96E-03	3.63E-06	0.00E+00	6.09E-05	0.00E+00	3.03E-05	2.58E-04	0.00E+00	-3.95E-03
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 <sup>2</sup> or 195, while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112														

WASTE CATEGORIES AND OUPUT FLOWS PER m <sup>2</sup>															
			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]	1.24E-02	0.00E+00	1.45E-12	1.16E-10	0.00E+00	-4.47E-09	1.45E-12	0.00E+00	6.58E-11	0.00E+00	1.21E-11	1.48E-11	0.00E+00	-8.93E-10
NHWD	[kg]	2.59E-01	0.00E+00	6.18E-06	5.81E-03	0.00E+00	-4.67E-03	6.18E-06	0.00E+00	5.34E-01	0.00E+00	5.15E-05	5.83E-04	0.00E+00	-2.44E-02
RWD	[kg]	1.34E-03	0.00E+00	6.89E-08	1.11E-05	0.00E+00	-4.93E-04	6.89E-08	0.00E+00	3.76E-06	0.00E+00	5.74E-07	1.47E-06	0.00E+00	3.76E-04
CRU	[kg]	1.16E-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
MFR	[kg]	5.64E-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	5.36E-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]	1.60E-01	0.00E+00	0.00E+00	1.76E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.76E-01	0.00E+00	0.00E+00
EET	[MJ]	2.90E-01	0.00E+00	0.00E+00	3.16E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.16E-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 <sup>2</sup> or 195, while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112.														

ENVIRONMENTAL IMPACTS PER m <sup>2</sup>															
			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 <sub>2</sub> eq.	4.88E+00	0.00E+00	2.93E-03	1.23E+00	0.00E+00	-3.17E-01	2.93E-03	0.00E+00	1.58E-02	0.00E+00	2.44E-02	1.23E-01	0.00E+00	-1.08E+00
GWP-fossil	kg CO <sub>2</sub> eq.	4.85E+00	0.00E+00	2.87E-03	1.23E+00	0.00E+00	-3.14E-01	2.87E-03	0.00E+00	1.58E-02	0.00E+00	2.39E-02	1.23E-01	0.00E+00	-1.07E+00
GWP-biogenic	kg CO <sub>2</sub> eq.	1.54E-02	0.00E+00	6.86E-06	4.27E-05	0.00E+00	-2.00E-03	6.86E-06	0.00E+00	-4.34E-05	0.00E+00	5.72E-05	5.23E-06	0.00E+00	-8.40E-03
GWP-luluc	kg CO <sub>2</sub> eq.	1.97E-02	0.00E+00	4.83E-05	3.02E-06	0.00E+00	-7.25E-05	4.83E-05	0.00E+00	5.79E-05	0.00E+00	4.02E-04	3.18E-07	0.00E+00	3.55E-04
ODP	kg CFC 11 eq.	4.52E-11	0.00E+00	4.23E-16	8.84E-14	0.00E+00	-3.33E-12	4.23E-16	0.00E+00	5.20E-14	0.00E+00	3.53E-15	1.12E-14	0.00E+00	-6.54E-13
AP	mol H <sup>+</sup> eq.	8.02E-03	0.00E+00	4.51E-06	1.19E-04	0.00E+00	-6.08E-04	4.51E-06	0.00E+00	9.43E-05	0.00E+00	3.76E-05	1.21E-05	0.00E+00	-1.25E-03
EP-freshwater	kg P eq.	7.68E-05	0.00E+00	1.23E-08	1.89E-08	0.00E+00	-1.89E-06	1.23E-08	0.00E+00	9.06E-06	0.00E+00	1.02E-07	2.34E-09	0.00E+00	-4.39E-06
EP-marine	kg N eq.	2.50E-03	0.00E+00	1.73E-06	3.45E-05	0.00E+00	-1.79E-04	1.73E-06	0.00E+00	2.03E-05	0.00E+00	1.44E-05	3.50E-06	0.00E+00	-3.57E-04
EP-terrestrial	mol N eq.	2.41E-02	0.00E+00	2.03E-05	5.79E-04	0.00E+00	-1.76E-03	2.03E-05	0.00E+00	2.23E-04	0.00E+00	1.69E-04	5.84E-05	0.00E+00	-3.89E-03
POCP	kg NMVOC eq.	1.21E-02	0.00E+00	4.48E-06	9.65E-05	0.00E+00	-4.63E-04	4.48E-06	0.00E+00	6.49E-05	0.00E+00	3.73E-05	9.80E-06	0.00E+00	-2.82E-03
ADPm <sup>1</sup>	kg Sb eq.	5.84E-07	0.00E+00	2.50E-10	9.17E-10	0.00E+00	-3.55E-08	2.50E-10	0.00E+00	1.05E-09	0.00E+00	2.09E-09	1.12E-10	0.00E+00	-6.88E-08
ADPf <sup>1</sup>	MJ	9.24E+01	0.00E+00	3.78E-02	1.93E-01	0.00E+00	-5.15E+00	3.78E-02	0.00E+00	2.66E-01	0.00E+00	3.15E-01	2.16E-02	0.00E+00	-2.96E+01
WDP <sup>1</sup>	m <sup>3</sup> world eq. deprived	8.79E-01	0.00E+00	4.45E-05	1.09E-01	0.00E+00	-4.90E-02	4.45E-05	0.00E+00	2.04E-03	0.00E+00	3.71E-04	1.10E-02	0.00E+00	-9.46E-04
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 <sup>2</sup> or 195, while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112.														
Disclaimer	<sup>1</sup> 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 <sup>2</sup>															
			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]	1.02E-07	0.00E+00	4.75E-11	6.38E-10	0.00E+00	-5.07E-09	4.75E-11	0.00E+00	9.76E-10	0.00E+00	3.96E-10	6.53E-11	0.00E+00	-1.09E-08
IRP <sup>2</sup>	[kBq U235 eq.]	1.19E-01	0.00E+00	1.00E-05	1.78E-03	0.00E+00	-8.11E-02	1.00E-05	0.00E+00	5.15E-04	0.00E+00	8.33E-05	2.37E-04	0.00E+00	6.89E-02
ETP-fw <sup>1</sup>	[CTUe]	3.70E+01	0.00E+00	2.81E-02	7.61E-02	0.00E+00	-1.11E+00	2.81E-02	0.00E+00	5.79E-01	0.00E+00	2.34E-01	8.28E-03	0.00E+00	-1.86E+01
HTP-c <sup>1</sup>	[CTUh]	1.20E-09	0.00E+00	5.68E-13	6.86E-12	0.00E+00	-7.70E-11	5.68E-13	0.00E+00	8.58E-12	0.00E+00	4.73E-12	7.24E-13	0.00E+00	-2.90E-10
HTP-nc <sup>1</sup>	[CTUh]	3.55E-08	0.00E+00	2.55E-11	7.08E-11	0.00E+00	-2.15E-09	2.55E-11	0.00E+00	1.79E-10	0.00E+00	2.12E-10	7.64E-12	0.00E+00	-5.44E-09
SQP <sup>1</sup>	-	2.54E+01	0.00E+00	1.86E-02	6.27E-02	0.00E+00	-8.33E+00	1.86E-02	0.00E+00	4.52E-02	0.00E+00	1.55E-01	7.20E-03	0.00E+00	-6.25E-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 <sup>2</sup> or 195, while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112.														
Disclaimers	<sup>1</sup> 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. <sup>2</sup> 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 <sup>2</sup>															
			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]	1.61E+01	0.00E+00	3.26E-03	5.58E-02	0.00E+00	-3.52E+00	3.26E-03	0.00E+00	4.02E-02	0.00E+00	2.72E-02	7.20E-03	0.00E+00	1.95E-01
PERM	[MJ]	3.24E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	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]	1.93E+01	0.00E+00	3.26E-03	5.58E-02	0.00E+00	-3.52E+00	3.26E-03	0.00E+00	4.02E-02	0.00E+00	2.72E-02	7.20E-03	0.00E+00	1.95E-01
PENRE	[MJ]	9.31E+01	0.00E+00	3.78E-02	1.24E+01	0.00E+00	-5.15E+00	3.78E-02	0.00E+00	2.66E-01	0.00E+00	3.15E-01	2.16E-02	0.00E+00	-2.96E+01
PENRM	[MJ]	1.17E+01	0.00E+00	0.00E+00	-1.22E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-1.22E+01	0.00E+00	0.00E+00
PENRT	[MJ]	1.05E+02	0.00E+00	3.78E-02	1.93E-01	0.00E+00	-5.15E+00	3.78E-02	0.00E+00	2.66E-01	0.00E+00	3.15E-01	-1.22E+01	0.00E+00	-2.96E+01
SM	[kg]	1.47E-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 <sup>3</sup> ]	2.04E-02	0.00E+00	3.63E-06	2.57E-03	0.00E+00	-1.96E-03	3.63E-06	0.00E+00	6.09E-05	0.00E+00	3.03E-05	2.58E-04	0.00E+00	-3.95E-03
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 <sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112														

WASTE CATEGORIES AND OUPUT FLOWS PER m <sup>2</sup>															
			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]	1.24E-02	0.00E+00	1.45E-12	1.16E-10	0.00E+00	-4.47E-09	1.45E-12	0.00E+00	6.58E-11	0.00E+00	1.21E-11	1.48E-11	0.00E+00	-8.93E-10
NHWD	[kg]	2.68E-01	0.00E+00	6.18E-06	5.81E-03	0.00E+00	-4.67E-03	6.18E-06	0.00E+00	5.34E-01	0.00E+00	5.15E-05	5.83E-04	0.00E+00	-2.44E-02
RWD	[kg]	1.12E-03	0.00E+00	6.89E-08	1.11E-05	0.00E+00	-4.93E-04	6.89E-08	0.00E+00	3.76E-06	0.00E+00	5.74E-07	1.47E-06	0.00E+00	3.76E-04
CRU	[kg]	1.16E-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
MFR	[kg]	5.64E-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	5.36E-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]	1.60E-01	0.00E+00	0.00E+00	1.76E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.76E-01	0.00E+00	0.00E+00
EET	[MJ]	2.90E-01	0.00E+00	0.00E+00	3.16E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.16E-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 <sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112.														

ENVIRONMENTAL IMPACTS PER m <sup>2</sup>															
		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 <sub>2</sub> eq.	2.93E+00	0.00E+00	1.93E-03	8.08E-01	0.00E+00	-2.08E-01	1.93E-03	0.00E+00	1.04E-02	0.00E+00	1.61E-02	8.09E-02	0.00E+00	-7.11E-01
GWP-fossil	kg CO <sub>2</sub> eq.	2.91E+00	0.00E+00	1.89E-03	8.08E-01	0.00E+00	-2.07E-01	1.89E-03	0.00E+00	1.04E-02	0.00E+00	1.58E-02	8.09E-02	0.00E+00	-7.06E-01
GWP-biogenic	kg CO <sub>2</sub> eq.	8.25E-03	0.00E+00	4.52E-06	2.81E-05	0.00E+00	-1.32E-03	4.52E-06	0.00E+00	-2.86E-05	0.00E+00	3.76E-05	3.44E-06	0.00E+00	-5.53E-03
GWP-luluc	kg CO <sub>2</sub> eq.	1.33E-02	0.00E+00	3.18E-05	1.99E-06	0.00E+00	-4.78E-05	3.18E-05	0.00E+00	3.81E-05	0.00E+00	2.65E-04	2.10E-07	0.00E+00	2.34E-04
ODP	kg CFC 11 eq.	2.67E-11	0.00E+00	2.79E-16	5.82E-14	0.00E+00	-2.19E-12	2.79E-16	0.00E+00	3.42E-14	0.00E+00	2.32E-15	7.40E-15	0.00E+00	-4.31E-13
AP	mol H <sup>+</sup> eq.	7.22E-03	0.00E+00	2.97E-06	7.84E-05	0.00E+00	-4.01E-04	2.97E-06	0.00E+00	6.21E-05	0.00E+00	2.47E-05	7.97E-06	0.00E+00	-8.20E-04
EP-freshwater	kg P eq.	4.74E-05	0.00E+00	8.08E-09	1.25E-08	0.00E+00	-1.25E-06	8.08E-09	0.00E+00	5.97E-06	0.00E+00	6.73E-08	1.54E-09	0.00E+00	-2.89E-06
EP-marine	kg N eq.	2.29E-03	0.00E+00	1.14E-06	2.27E-05	0.00E+00	-1.18E-04	1.14E-06	0.00E+00	1.34E-05	0.00E+00	9.48E-06	2.30E-06	0.00E+00	-2.35E-04
EP-terrestrial	mol N eq.	2.29E-02	0.00E+00	1.34E-05	3.81E-04	0.00E+00	-1.16E-03	1.34E-05	0.00E+00	1.47E-04	0.00E+00	1.11E-04	3.85E-05	0.00E+00	-2.56E-03
POCP	kg NMVOC eq.	9.56E-03	0.00E+00	2.95E-06	6.35E-05	0.00E+00	-3.05E-04	2.95E-06	0.00E+00	4.27E-05	0.00E+00	2.46E-05	6.46E-06	0.00E+00	-1.86E-03
ADPm <sup>1</sup>	kg Sb eq.	3.26E-07	0.00E+00	1.65E-10	6.04E-10	0.00E+00	-2.34E-08	1.65E-10	0.00E+00	6.88E-10	0.00E+00	1.37E-09	7.35E-11	0.00E+00	-4.53E-08
ADPf <sup>1</sup>	MJ	5.39E+01	0.00E+00	2.49E-02	1.27E-01	0.00E+00	-3.39E+00	2.49E-02	0.00E+00	1.75E-01	0.00E+00	2.08E-01	1.42E-02	0.00E+00	-1.95E+01
WDP <sup>1</sup>	m <sup>3</sup> world eq. deprived	3.45E-01	0.00E+00	2.93E-05	7.20E-02	0.00E+00	-3.23E-02	2.93E-05	0.00E+00	1.34E-03	0.00E+00	2.44E-04	7.23E-03	0.00E+00	-6.23E-04
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 <sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112.														
Disclaimer	<sup>1</sup> 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 <sup>2</sup>															
		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]	1.15E-07	0.00E+00	3.13E-11	4.20E-10	0.00E+00	-3.34E-09	3.13E-11	0.00E+00	6.42E-10	0.00E+00	2.61E-10	4.30E-11	0.00E+00	-7.15E-09
IRP <sup>2</sup>	[kBq U235 eq.]	5.32E-02	0.00E+00	6.60E-06	1.17E-03	0.00E+00	-5.34E-02	6.60E-06	0.00E+00	3.39E-04	0.00E+00	5.49E-05	1.56E-04	0.00E+00	4.54E-02
ETP-fw <sup>1</sup>	[CTUe]	2.37E+01	0.00E+00	1.85E-02	5.01E-02	0.00E+00	-7.31E-01	1.85E-02	0.00E+00	3.81E-01	0.00E+00	1.54E-01	5.45E-03	0.00E+00	-1.23E+01
HTP-c <sup>1</sup>	[CTUh]	7.30E-10	0.00E+00	3.74E-13	4.52E-12	0.00E+00	-5.07E-11	3.74E-13	0.00E+00	5.65E-12	0.00E+00	3.11E-12	4.77E-13	0.00E+00	-1.91E-10
HTP-nc <sup>1</sup>	[CTUh]	2.24E-08	0.00E+00	1.68E-11	4.66E-11	0.00E+00	-1.41E-09	1.68E-11	0.00E+00	1.18E-10	0.00E+00	1.40E-10	5.03E-12	0.00E+00	-3.58E-09
SQP <sup>1</sup>	-	1.54E+01	0.00E+00	1.22E-02	4.13E-02	0.00E+00	-5.49E+00	1.22E-02	0.00E+00	2.98E-02	0.00E+00	1.02E-01	4.74E-03	0.00E+00	-4.11E-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 <sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112.														
Disclaimers	<sup>1</sup> 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. <sup>2</sup> 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 <sup>2</sup>															
			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]	8.83E+00	0.00E+00	2.15E-03	3.67E-02	0.00E+00	-2.32E+00	2.15E-03	0.00E+00	2.65E-02	0.00E+00	1.79E-02	4.74E-03	0.00E+00	1.29E-01
PERM	[MJ]	2.10E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	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]	1.09E+01	0.00E+00	2.15E-03	3.67E-02	0.00E+00	-2.32E+00	2.15E-03	0.00E+00	2.65E-02	0.00E+00	1.79E-02	4.74E-03	0.00E+00	1.29E-01
PENRE	[MJ]	5.43E+01	0.00E+00	2.49E-02	8.18E+00	0.00E+00	-3.39E+00	2.49E-02	0.00E+00	1.75E-01	0.00E+00	2.08E-01	1.42E-02	0.00E+00	-1.95E+01
PENRM	[MJ]	7.66E+00	0.00E+00	0.00E+00	-8.05E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-8.05E+00	0.00E+00	0.00E+00
PENRT	[MJ]	6.19E+01	0.00E+00	2.49E-02	1.27E-01	0.00E+00	-3.39E+00	2.49E-02	0.00E+00	1.75E-01	0.00E+00	2.08E-01	-8.03E+00	0.00E+00	-1.95E+01
SM	[kg]	9.69E-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
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 <sup>3</sup> ]	1.29E-02	0.00E+00	2.39E-06	1.69E-03	0.00E+00	-1.29E-03	2.39E-06	0.00E+00	4.01E-05	0.00E+00	1.99E-05	1.70E-04	0.00E+00	-2.60E-03
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 <sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112														

WASTE CATEGORIES AND OUPUT FLOWS PER m <sup>2</sup>															
			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]	7.69E-03	0.00E+00	9.54E-13	7.63E-11	0.00E+00	-2.94E-09	9.54E-13	0.00E+00	4.33E-11	0.00E+00	7.95E-12	9.76E-12	0.00E+00	-5.88E-10
NHWD	[kg]	1.40E-01	0.00E+00	4.07E-06	3.83E-03	0.00E+00	-3.08E-03	4.07E-06	0.00E+00	3.52E-01	0.00E+00	3.39E-05	3.84E-04	0.00E+00	-1.61E-02
RWD	[kg]	5.31E-04	0.00E+00	4.54E-08	7.31E-06	0.00E+00	-3.25E-04	4.54E-08	0.00E+00	2.47E-06	0.00E+00	3.78E-07	9.67E-07	0.00E+00	2.47E-04
CRU	[kg]	7.62E-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]	1.87E-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	3.53E-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]	9.31E-02	0.00E+00	0.00E+00	1.16E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-01	0.00E+00	0.00E+00
EET	[MJ]	1.68E-01	0.00E+00	0.00E+00	2.08E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.08E-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 <sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112.														

ENVIRONMENTAL IMPACTS PER m <sup>2</sup>															
			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 <sub>2</sub> eq.	2.55E+00	0.00E+00	1.70E-03	7.12E-01	0.00E+00	-1.84E-01	1.70E-03	0.00E+00	9.14E-03	0.00E+00	1.41E-02	7.13E-02	0.00E+00	-6.26E-01
GWP-fossil	kg CO <sub>2</sub> eq.	2.52E+00	0.00E+00	1.66E-03	7.12E-01	0.00E+00	-1.82E-01	1.66E-03	0.00E+00	9.14E-03	0.00E+00	1.39E-02	7.13E-02	0.00E+00	-6.22E-01
GWP-biogenic	kg CO <sub>2</sub> eq.	-1.06E-04	0.00E+00	3.98E-06	2.48E-05	0.00E+00	-1.16E-03	3.98E-06	0.00E+00	-2.52E-05	0.00E+00	3.32E-05	3.03E-06	0.00E+00	-4.87E-03
GWP-luluc	kg CO <sub>2</sub> eq.	2.96E-02	0.00E+00	2.80E-05	1.75E-06	0.00E+00	-4.21E-05	2.80E-05	0.00E+00	3.36E-05	0.00E+00	2.33E-04	1.85E-07	0.00E+00	2.06E-04
ODP	kg CFC 11 eq.	3.64E-11	0.00E+00	2.46E-16	5.13E-14	0.00E+00	-1.93E-12	2.46E-16	0.00E+00	3.02E-14	0.00E+00	2.05E-15	6.52E-15	0.00E+00	-3.79E-13
AP	mol H <sup>+</sup> eq.	4.82E-03	0.00E+00	2.62E-06	6.90E-05	0.00E+00	-3.53E-04	2.62E-06	0.00E+00	5.47E-05	0.00E+00	2.18E-05	7.02E-06	0.00E+00	-7.22E-04
EP-freshwater	kg P eq.	5.12E-05	0.00E+00	7.12E-09	1.10E-08	0.00E+00	-1.10E-06	7.12E-09	0.00E+00	5.26E-06	0.00E+00	5.93E-08	1.36E-09	0.00E+00	-2.55E-06
EP-marine	kg N eq.	1.43E-03	0.00E+00	1.00E-06	2.00E-05	0.00E+00	-1.04E-04	1.00E-06	0.00E+00	1.18E-05	0.00E+00	8.36E-06	2.03E-06	0.00E+00	-2.07E-04
EP-terrestrial	mol N eq.	1.36E-02	0.00E+00	1.18E-05	3.36E-04	0.00E+00	-1.02E-03	1.18E-05	0.00E+00	1.29E-04	0.00E+00	9.81E-05	3.39E-05	0.00E+00	-2.26E-03
POCP	kg NMVOC eq.	6.81E-03	0.00E+00	2.60E-06	5.60E-05	0.00E+00	-2.69E-04	2.60E-06	0.00E+00	3.76E-05	0.00E+00	2.17E-05	5.69E-06	0.00E+00	-1.64E-03
ADPm <sup>1</sup>	kg Sb eq.	4.11E-07	0.00E+00	1.45E-10	5.32E-10	0.00E+00	-2.06E-08	1.45E-10	0.00E+00	6.06E-10	0.00E+00	1.21E-09	6.47E-11	0.00E+00	-3.99E-08
ADPf <sup>1</sup>	MJ	4.88E+01	0.00E+00	2.20E-02	1.12E-01	0.00E+00	-2.99E+00	2.20E-02	0.00E+00	1.55E-01	0.00E+00	1.83E-01	1.25E-02	0.00E+00	-1.72E+01
WDP <sup>1</sup>	m <sup>3</sup> world eq. deprived	3.46E-01	0.00E+00	2.58E-05	6.34E-02	0.00E+00	-2.84E-02	2.58E-05	0.00E+00	1.18E-03	0.00E+00	2.15E-04	6.37E-03	0.00E+00	-5.49E-04
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 <sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112.														
Disclaimer	<sup>1</sup> 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 <sup>2</sup>															
			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]	6.51E-08	0.00E+00	2.76E-11	3.70E-10	0.00E+00	-2.94E-09	2.76E-11	0.00E+00	5.66E-10	0.00E+00	2.30E-10	3.79E-11	0.00E+00	-6.30E-09
IRP <sup>2</sup>	[kBq U235 eq.]	6.38E-02	0.00E+00	5.82E-06	1.03E-03	0.00E+00	-4.71E-02	5.82E-06	0.00E+00	2.99E-04	0.00E+00	4.83E-05	1.37E-04	0.00E+00	4.00E-02
ETP-fw <sup>1</sup>	[CTUe]	2.24E+01	0.00E+00	1.63E-02	4.42E-02	0.00E+00	-6.44E-01	1.63E-02	0.00E+00	3.36E-01	0.00E+00	1.36E-01	4.80E-03	0.00E+00	-1.08E+01
HTP-c <sup>1</sup>	[CTUh]	7.59E-10	0.00E+00	3.30E-13	3.98E-12	0.00E+00	-4.47E-11	3.30E-13	0.00E+00	4.98E-12	0.00E+00	2.74E-12	4.20E-13	0.00E+00	-1.69E-10
HTP-nc <sup>1</sup>	[CTUh]	2.45E-08	0.00E+00	1.48E-11	4.11E-11	0.00E+00	-1.25E-09	1.48E-11	0.00E+00	1.04E-10	0.00E+00	1.23E-10	4.43E-12	0.00E+00	-3.16E-09
SQP <sup>1</sup>	-	1.85E+01	0.00E+00	1.08E-02	3.64E-02	0.00E+00	-4.84E+00	1.08E-02	0.00E+00	2.62E-02	0.00E+00	9.00E-02	4.18E-03	0.00E+00	-3.63E-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 <sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112.														
Disclaimers	<sup>1</sup> 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. <sup>2</sup> 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 <sup>2</sup>															
			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]	1.20E+01	0.00E+00	1.89E-03	3.24E-02	0.00E+00	-2.05E+00	1.89E-03	0.00E+00	2.33E-02	0.00E+00	1.58E-02	4.17E-03	0.00E+00	1.13E-01
PERM	[MJ]	1.87E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	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]	1.39E+01	0.00E+00	1.89E-03	3.24E-02	0.00E+00	-2.05E+00	1.89E-03	0.00E+00	2.33E-02	0.00E+00	1.58E-02	4.17E-03	0.00E+00	1.13E-01
PENRE	[MJ]	4.91E+01	0.00E+00	2.20E-02	7.20E+00	0.00E+00	-2.99E+00	2.20E-02	0.00E+00	1.54E-01	0.00E+00	1.83E-01	1.25E-02	0.00E+00	-1.72E+01
PENRM	[MJ]	6.76E+00	0.00E+00	0.00E+00	-7.09E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-7.09E+00	0.00E+00	0.00E+00
PENRT	[MJ]	5.59E+01	0.00E+00	2.20E-02	1.12E-01	0.00E+00	-2.99E+00	2.20E-02	0.00E+00	1.54E-01	0.00E+00	1.83E-01	-7.08E+00	0.00E+00	-1.72E+01
SM	[kg]	8.54E-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
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 <sup>3</sup> ]	1.23E-02	0.00E+00	2.11E-06	1.49E-03	0.00E+00	-1.14E-03	2.11E-06	0.00E+00	3.53E-05	0.00E+00	1.76E-05	1.50E-04	0.00E+00	-2.29E-03
Caption	<p>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</p> <p>The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10<sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10<sup>-11</sup> or 0.0000000000112</p>														

WASTE CATEGORIES AND OUPUT FLOWS PER m <sup>2</sup>															
			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]	7.04E-03	0.00E+00	8.41E-13	6.72E-11	0.00E+00	-2.59E-09	8.41E-13	0.00E+00	3.82E-11	0.00E+00	7.01E-12	8.60E-12	0.00E+00	-5.18E-10
NHWD	[kg]	1.65E-01	0.00E+00	3.59E-06	3.37E-03	0.00E+00	-2.71E-03	3.59E-06	0.00E+00	3.10E-01	0.00E+00	2.99E-05	3.38E-04	0.00E+00	-1.41E-02
RWD	[kg]	5.09E-04	0.00E+00	4.00E-08	6.44E-06	0.00E+00	-2.86E-04	4.00E-08	0.00E+00	2.18E-06	0.00E+00	3.33E-07	8.52E-07	0.00E+00	2.18E-04
CRU	[kg]	6.72E-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]	2.66E-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	3.11E-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]	8.92E-02	0.00E+00	0.00E+00	1.02E+00	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
EET	[MJ]	1.61E-01	0.00E+00	0.00E+00	1.83E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.83E-01	0.00E+00	0.00E+00
Caption	<p>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</p> <p>The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10<sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10<sup>-11</sup> or 0.0000000000112.</p>														

ENVIRONMENTAL IMPACTS PER m <sup>2</sup>															
			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 <sub>2</sub> eq.	2.55E+00	0.00E+00	1.70E-03	7.12E-01	0.00E+00	-1.84E-01	1.70E-03	0.00E+00	9.14E-03	0.00E+00	1.41E-02	7.13E-02	0.00E+00	-6.26E-01
GWP-fossil	kg CO <sub>2</sub> eq.	2.52E+00	0.00E+00	1.66E-03	7.12E-01	0.00E+00	-1.82E-01	1.66E-03	0.00E+00	9.14E-03	0.00E+00	1.39E-02	7.13E-02	0.00E+00	-6.22E-01
GWP-biogenic	kg CO <sub>2</sub> eq.	-2.18E-03	0.00E+00	3.98E-06	2.48E-05	0.00E+00	-1.16E-03	3.98E-06	0.00E+00	-2.52E-05	0.00E+00	3.32E-05	3.03E-06	0.00E+00	-4.87E-03
GWP-luluc	kg CO <sub>2</sub> eq.	2.96E-02	0.00E+00	2.80E-05	1.75E-06	0.00E+00	-4.21E-05	2.80E-05	0.00E+00	3.36E-05	0.00E+00	2.33E-04	1.85E-07	0.00E+00	2.06E-04
ODP	kg CFC 11 eq.	3.64E-11	0.00E+00	2.46E-16	5.13E-14	0.00E+00	-1.93E-12	2.46E-16	0.00E+00	3.02E-14	0.00E+00	2.05E-15	6.52E-15	0.00E+00	-3.79E-13
AP	mol H <sup>+</sup> eq.	4.80E-03	0.00E+00	2.62E-06	6.90E-05	0.00E+00	-3.53E-04	2.62E-06	0.00E+00	5.47E-05	0.00E+00	2.18E-05	7.02E-06	0.00E+00	-7.22E-04
EP-freshwater	kg P eq.	4.86E-05	0.00E+00	7.12E-09	1.10E-08	0.00E+00	-1.10E-06	7.12E-09	0.00E+00	5.26E-06	0.00E+00	5.93E-08	1.36E-09	0.00E+00	-2.55E-06
EP-marine	kg N eq.	1.42E-03	0.00E+00	1.00E-06	2.00E-05	0.00E+00	-1.04E-04	1.00E-06	0.00E+00	1.18E-05	0.00E+00	8.36E-06	2.03E-06	0.00E+00	-2.07E-04
EP-terrestrial	mol N eq.	1.35E-02	0.00E+00	1.18E-05	3.36E-04	0.00E+00	-1.02E-03	1.18E-05	0.00E+00	1.29E-04	0.00E+00	9.81E-05	3.39E-05	0.00E+00	-2.26E-03
POCP	kg NMVOC eq.	6.80E-03	0.00E+00	2.60E-06	5.60E-05	0.00E+00	-2.69E-04	2.60E-06	0.00E+00	3.76E-05	0.00E+00	2.17E-05	5.69E-06	0.00E+00	-1.64E-03
ADPm <sup>1</sup>	kg Sb eq.	4.10E-07	0.00E+00	1.45E-10	5.32E-10	0.00E+00	-2.06E-08	1.45E-10	0.00E+00	6.06E-10	0.00E+00	1.21E-09	6.47E-11	0.00E+00	-3.99E-08
ADPf <sup>1</sup>	MJ	4.87E+01	0.00E+00	2.20E-02	1.12E-01	0.00E+00	-2.99E+00	2.20E-02	0.00E+00	1.55E-01	0.00E+00	1.83E-01	1.25E-02	0.00E+00	-1.72E+01
WDP <sup>1</sup>	m <sup>3</sup> world eq. deprived	3.39E-01	0.00E+00	2.58E-05	6.34E-02	0.00E+00	-2.84E-02	2.58E-05	0.00E+00	1.18E-03	0.00E+00	2.15E-04	6.37E-03	0.00E+00	-5.49E-04
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 <sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112.														
Disclaimer	<sup>1</sup> 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 <sup>2</sup>															
			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]	6.48E-08	0.00E+00	2.76E-11	3.70E-10	0.00E+00	-2.94E-09	2.76E-11	0.00E+00	5.66E-10	0.00E+00	2.30E-10	3.79E-11	0.00E+00	-6.30E-09
IRP <sup>2</sup>	[kBq U235 eq.]	6.35E-02	0.00E+00	5.82E-06	1.03E-03	0.00E+00	-4.71E-02	5.82E-06	0.00E+00	2.99E-04	0.00E+00	4.83E-05	1.37E-04	0.00E+00	4.00E-02
ETP-fw <sup>1</sup>	[CTUe]	2.21E+01	0.00E+00	1.63E-02	4.42E-02	0.00E+00	-6.44E-01	1.63E-02	0.00E+00	3.36E-01	0.00E+00	1.36E-01	4.80E-03	0.00E+00	-1.08E+01
HTP-c <sup>1</sup>	[CTUh]	7.47E-10	0.00E+00	3.30E-13	3.98E-12	0.00E+00	-4.47E-11	3.30E-13	0.00E+00	4.98E-12	0.00E+00	2.74E-12	4.20E-13	0.00E+00	-1.69E-10
HTP-nc <sup>1</sup>	[CTUh]	2.33E-08	0.00E+00	1.48E-11	4.11E-11	0.00E+00	-1.25E-09	1.48E-11	0.00E+00	1.04E-10	0.00E+00	1.23E-10	4.43E-12	0.00E+00	-3.16E-09
SQP <sup>1</sup>	-	1.85E+01	0.00E+00	1.08E-02	3.64E-02	0.00E+00	-4.84E+00	1.08E-02	0.00E+00	2.62E-02	0.00E+00	9.00E-02	4.18E-03	0.00E+00	-3.63E-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 <sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112.														
Disclaimers	<sup>1</sup> 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. <sup>2</sup> 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 <sup>2</sup>															
			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]	1.20E+01	0.00E+00	1.89E-03	3.24E-02	0.00E+00	-2.05E+00	1.89E-03	0.00E+00	2.33E-02	0.00E+00	1.58E-02	4.17E-03	0.00E+00	1.13E-01
PERM	[MJ]	1.87E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	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]	1.39E+01	0.00E+00	1.89E-03	3.24E-02	0.00E+00	-2.05E+00	1.89E-03	0.00E+00	2.33E-02	0.00E+00	1.58E-02	4.17E-03	0.00E+00	1.13E-01
PENRE	[MJ]	4.91E+01	0.00E+00	2.20E-02	7.20E+00	0.00E+00	-2.99E+00	2.20E-02	0.00E+00	1.54E-01	0.00E+00	1.83E-01	1.25E-02	0.00E+00	-1.72E+01
PENRM	[MJ]	6.76E+00	0.00E+00	0.00E+00	-7.09E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-7.09E+00	0.00E+00	0.00E+00
PENRT	[MJ]	5.59E+01	0.00E+00	2.20E-02	1.12E-01	0.00E+00	-2.99E+00	2.20E-02	0.00E+00	1.54E-01	0.00E+00	1.83E-01	-7.08E+00	0.00E+00	-1.72E+01
SM	[kg]	8.55E-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
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 <sup>3</sup> ]	1.22E-02	0.00E+00	2.11E-06	1.49E-03	0.00E+00	-1.14E-03	2.11E-06	0.00E+00	3.53E-05	0.00E+00	1.76E-05	1.50E-04	0.00E+00	-2.29E-03
Caption	<p>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</p> <p>The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10<sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10<sup>-11</sup> or 0.0000000000112</p>														

WASTE CATEGORIES AND OUPUT FLOWS PER m <sup>2</sup>															
			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]	7.04E-03	0.00E+00	8.41E-13	6.72E-11	0.00E+00	-2.59E-09	8.41E-13	0.00E+00	3.82E-11	0.00E+00	7.01E-12	8.60E-12	0.00E+00	-5.18E-10
NHWD	[kg]	1.61E-01	0.00E+00	3.59E-06	3.37E-03	0.00E+00	-2.71E-03	3.59E-06	0.00E+00	3.10E-01	0.00E+00	2.99E-05	3.38E-04	0.00E+00	-1.41E-02
RWD	[kg]	5.07E-04	0.00E+00	4.00E-08	6.44E-06	0.00E+00	-2.86E-04	4.00E-08	0.00E+00	2.18E-06	0.00E+00	3.33E-07	8.52E-07	0.00E+00	2.18E-04
CRU	[kg]	6.72E-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]	2.66E-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	3.11E-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]	8.92E-02	0.00E+00	0.00E+00	1.02E+00	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
EET	[MJ]	1.61E-01	0.00E+00	0.00E+00	1.83E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.83E-01	0.00E+00	0.00E+00
Caption	<p>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</p> <p>The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10<sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10<sup>-11</sup> or 0.0000000000112.</p>														

ENVIRONMENTAL IMPACTS PER m <sup>2</sup>															
			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 <sub>2</sub> eq.	2.67E+00	0.00E+00	1.70E-03	7.12E-01	0.00E+00	-1.84E-01	1.70E-03	0.00E+00	9.14E-03	0.00E+00	1.41E-02	7.13E-02	0.00E+00	-6.26E-01
GWP-fossil	kg CO <sub>2</sub> eq.	2.64E+00	0.00E+00	1.66E-03	7.12E-01	0.00E+00	-1.82E-01	1.66E-03	0.00E+00	9.14E-03	0.00E+00	1.39E-02	7.13E-02	0.00E+00	-6.22E-01
GWP-biogenic	kg CO <sub>2</sub> eq.	1.47E-04	0.00E+00	3.98E-06	2.48E-05	0.00E+00	-1.16E-03	3.98E-06	0.00E+00	-2.52E-05	0.00E+00	3.32E-05	3.03E-06	0.00E+00	-4.87E-03
GWP-luluc	kg CO <sub>2</sub> eq.	2.96E-02	0.00E+00	2.80E-05	1.75E-06	0.00E+00	-4.21E-05	2.80E-05	0.00E+00	3.36E-05	0.00E+00	2.33E-04	1.85E-07	0.00E+00	2.06E-04
ODP	kg CFC 11 eq.	3.63E-11	0.00E+00	2.46E-16	5.13E-14	0.00E+00	-1.93E-12	2.46E-16	0.00E+00	3.02E-14	0.00E+00	2.05E-15	6.52E-15	0.00E+00	-3.79E-13
AP	mol H <sup>+</sup> eq.	4.91E-03	0.00E+00	2.62E-06	6.90E-05	0.00E+00	-3.53E-04	2.62E-06	0.00E+00	5.47E-05	0.00E+00	2.18E-05	7.02E-06	0.00E+00	-7.22E-04
EP-freshwater	kg P eq.	5.13E-05	0.00E+00	7.12E-09	1.10E-08	0.00E+00	-1.10E-06	7.12E-09	0.00E+00	5.26E-06	0.00E+00	5.93E-08	1.36E-09	0.00E+00	-2.55E-06
EP-marine	kg N eq.	1.47E-03	0.00E+00	1.00E-06	2.00E-05	0.00E+00	-1.04E-04	1.00E-06	0.00E+00	1.18E-05	0.00E+00	8.36E-06	2.03E-06	0.00E+00	-2.07E-04
EP-terrestrial	mol N eq.	1.40E-02	0.00E+00	1.18E-05	3.36E-04	0.00E+00	-1.02E-03	1.18E-05	0.00E+00	1.29E-04	0.00E+00	9.81E-05	3.39E-05	0.00E+00	-2.26E-03
POCP	kg NMVOC eq.	6.94E-03	0.00E+00	2.60E-06	5.60E-05	0.00E+00	-2.69E-04	2.60E-06	0.00E+00	3.76E-05	0.00E+00	2.17E-05	5.69E-06	0.00E+00	-1.64E-03
ADPm <sup>1</sup>	kg Sb eq.	4.18E-07	0.00E+00	1.45E-10	5.32E-10	0.00E+00	-2.06E-08	1.45E-10	0.00E+00	6.06E-10	0.00E+00	1.21E-09	6.47E-11	0.00E+00	-3.99E-08
ADPf <sup>1</sup>	MJ	5.05E+01	0.00E+00	2.20E-02	1.12E-01	0.00E+00	-2.99E+00	2.20E-02	0.00E+00	1.55E-01	0.00E+00	1.83E-01	1.25E-02	0.00E+00	-1.72E+01
WDP <sup>1</sup>	m <sup>3</sup> world eq. deprived	3.47E-01	0.00E+00	2.58E-05	6.34E-02	0.00E+00	-2.84E-02	2.58E-05	0.00E+00	1.18E-03	0.00E+00	2.15E-04	6.37E-03	0.00E+00	-5.49E-04
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 <sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112.														
Disclaimer	<sup>1</sup> 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 <sup>2</sup>															
			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]	6.64E-08	0.00E+00	2.76E-11	3.70E-10	0.00E+00	-2.94E-09	2.76E-11	0.00E+00	5.66E-10	0.00E+00	2.30E-10	3.79E-11	0.00E+00	-6.30E-09
IRP <sup>2</sup>	[kBq U235 eq.]	6.35E-02	0.00E+00	5.82E-06	1.03E-03	0.00E+00	-4.71E-02	5.82E-06	0.00E+00	2.99E-04	0.00E+00	4.83E-05	1.37E-04	0.00E+00	4.00E-02
ETP-fw <sup>1</sup>	[CTUe]	2.25E+01	0.00E+00	1.63E-02	4.42E-02	0.00E+00	-6.44E-01	1.63E-02	0.00E+00	3.36E-01	0.00E+00	1.36E-01	4.80E-03	0.00E+00	-1.08E+01
HTP-c <sup>1</sup>	[CTUh]	7.73E-10	0.00E+00	3.30E-13	3.98E-12	0.00E+00	-4.47E-11	3.30E-13	0.00E+00	4.98E-12	0.00E+00	2.74E-12	4.20E-13	0.00E+00	-1.69E-10
HTP-nc <sup>1</sup>	[CTUh]	2.45E-08	0.00E+00	1.48E-11	4.11E-11	0.00E+00	-1.25E-09	1.48E-11	0.00E+00	1.04E-10	0.00E+00	1.23E-10	4.43E-12	0.00E+00	-3.16E-09
SQP <sup>1</sup>	-	1.85E+01	0.00E+00	1.08E-02	3.64E-02	0.00E+00	-4.84E+00	1.08E-02	0.00E+00	2.62E-02	0.00E+00	9.00E-02	4.18E-03	0.00E+00	-3.63E-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 <sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112.														
Disclaimers	<sup>1</sup> 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. <sup>2</sup> 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 <sup>2</sup>															
			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]	1.20E+01	0.00E+00	1.89E-03	3.24E-02	0.00E+00	-2.05E+00	1.89E-03	0.00E+00	2.33E-02	0.00E+00	1.58E-02	4.17E-03	0.00E+00	1.13E-01
PERM	[MJ]	1.87E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	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]	1.38E+01	0.00E+00	1.89E-03	3.24E-02	0.00E+00	-2.05E+00	1.89E-03	0.00E+00	2.33E-02	0.00E+00	1.58E-02	4.17E-03	0.00E+00	1.13E-01
PENRE	[MJ]	5.08E+01	0.00E+00	2.20E-02	7.20E+00	0.00E+00	-2.99E+00	2.20E-02	0.00E+00	1.54E-01	0.00E+00	1.83E-01	1.25E-02	0.00E+00	-1.72E+01
PENRM	[MJ]	6.76E+00	0.00E+00	0.00E+00	-7.09E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-7.09E+00	0.00E+00	0.00E+00
PENRT	[MJ]	5.76E+01	0.00E+00	2.20E-02	1.12E-01	0.00E+00	-2.99E+00	2.20E-02	0.00E+00	1.54E-01	0.00E+00	1.83E-01	-7.08E+00	0.00E+00	-1.72E+01
SM	[kg]	8.54E-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
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 <sup>3</sup> ]	1.23E-02	0.00E+00	2.11E-06	1.49E-03	0.00E+00	-1.14E-03	2.11E-06	0.00E+00	3.53E-05	0.00E+00	1.76E-05	1.50E-04	0.00E+00	-2.29E-03
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 <sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112														

WASTE CATEGORIES AND OUPUT FLOWS PER m <sup>2</sup>															
			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]	7.04E-03	0.00E+00	8.41E-13	6.72E-11	0.00E+00	-2.59E-09	8.41E-13	0.00E+00	3.82E-11	0.00E+00	7.01E-12	8.60E-12	0.00E+00	-5.18E-10
NHWD	[kg]	1.66E-01	0.00E+00	3.59E-06	3.37E-03	0.00E+00	-2.71E-03	3.59E-06	0.00E+00	3.10E-01	0.00E+00	2.99E-05	3.38E-04	0.00E+00	-1.41E-02
RWD	[kg]	5.07E-04	0.00E+00	4.00E-08	6.44E-06	0.00E+00	-2.86E-04	4.00E-08	0.00E+00	2.18E-06	0.00E+00	3.33E-07	8.52E-07	0.00E+00	-5.18E-10
CRU	[kg]	6.72E-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]	2.66E-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	3.11E-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]	8.89E-02	0.00E+00	0.00E+00	1.02E+00	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
EET	[MJ]	1.61E-01	0.00E+00	0.00E+00	1.83E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.83E-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 <sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112.														

ENVIRONMENTAL IMPACTS PER m <sup>2</sup>															
			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 <sub>2</sub> eq.	2.69E+00	0.00E+00	1.58E-03	6.62E-01	0.00E+00	-1.71E-01	1.58E-03	0.00E+00	8.50E-03	0.00E+00	1.31E-02	6.63E-02	0.00E+00	-5.82E-01
GWP-fossil	kg CO <sub>2</sub> eq.	2.65E+00	0.00E+00	1.55E-03	6.62E-01	0.00E+00	-1.70E-01	1.55E-03	0.00E+00	8.50E-03	0.00E+00	1.29E-02	6.63E-02	0.00E+00	-5.78E-01
GWP-biogenic	kg CO <sub>2</sub> eq.	-6.10E-03	0.00E+00	3.70E-06	2.30E-05	0.00E+00	-1.08E-03	3.70E-06	0.00E+00	-2.34E-05	0.00E+00	3.08E-05	2.82E-06	0.00E+00	-4.53E-03
GWP-luluc	kg CO <sub>2</sub> eq.	4.05E-02	0.00E+00	2.60E-05	1.63E-06	0.00E+00	-3.91E-05	2.60E-05	0.00E+00	3.12E-05	0.00E+00	2.17E-04	1.72E-07	0.00E+00	1.91E-04
ODP	kg CFC 11 eq.	3.83E-11	0.00E+00	2.28E-16	4.77E-14	0.00E+00	-1.80E-12	2.28E-16	0.00E+00	2.80E-14	0.00E+00	1.90E-15	6.06E-15	0.00E+00	-3.53E-13
AP	mol H <sup>+</sup> eq.	4.90E-03	0.00E+00	2.43E-06	6.42E-05	0.00E+00	-3.28E-04	2.43E-06	0.00E+00	5.09E-05	0.00E+00	2.03E-05	6.53E-06	0.00E+00	-6.71E-04
EP-freshwater	kg P eq.	5.22E-05	0.00E+00	6.62E-09	1.02E-08	0.00E+00	-1.02E-06	6.62E-09	0.00E+00	4.88E-06	0.00E+00	5.51E-08	1.26E-09	0.00E+00	-2.37E-06
EP-marine	kg N eq.	1.49E-03	0.00E+00	9.31E-07	1.86E-05	0.00E+00	-9.63E-05	9.31E-07	0.00E+00	1.10E-05	0.00E+00	7.77E-06	1.89E-06	0.00E+00	-1.92E-04
EP-terrestrial	mol N eq.	1.42E-02	0.00E+00	1.10E-05	3.12E-04	0.00E+00	-9.51E-04	1.10E-05	0.00E+00	1.20E-04	0.00E+00	9.12E-05	3.15E-05	0.00E+00	-2.10E-03
POCP	kg NMVOC eq.	6.70E-03	0.00E+00	2.42E-06	5.20E-05	0.00E+00	-2.50E-04	2.42E-06	0.00E+00	3.50E-05	0.00E+00	2.01E-05	5.29E-06	0.00E+00	-1.52E-03
ADPm <sup>1</sup>	kg Sb eq.	4.54E-07	0.00E+00	1.35E-10	4.94E-10	0.00E+00	-1.91E-08	1.35E-10	0.00E+00	5.64E-10	0.00E+00	1.12E-09	6.02E-11	0.00E+00	-3.71E-08
ADPf <sup>1</sup>	MJ	5.00E+01	0.00E+00	2.04E-02	1.04E-01	0.00E+00	-2.78E+00	2.04E-02	0.00E+00	1.44E-01	0.00E+00	1.70E-01	1.16E-02	0.00E+00	-1.60E+01
WDP <sup>1</sup>	m <sup>3</sup> world eq. deprived	3.42E-01	0.00E+00	2.40E-05	5.90E-02	0.00E+00	-2.64E-02	2.40E-05	0.00E+00	1.10E-03	0.00E+00	2.00E-04	5.92E-03	0.00E+00	-5.10E-04
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 <sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112.														
Disclaimer	<sup>1</sup> 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 <sup>2</sup>															
			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]	7.05E-08	0.00E+00	2.56E-11	3.44E-10	0.00E+00	-2.73E-09	2.56E-11	0.00E+00	5.26E-10	0.00E+00	2.14E-10	3.52E-11	0.00E+00	-5.85E-09
IRP <sup>2</sup>	[kBq U235 eq.]	6.12E-02	0.00E+00	5.40E-06	9.59E-04	0.00E+00	-4.37E-02	5.40E-06	0.00E+00	2.78E-04	0.00E+00	4.49E-05	1.28E-04	0.00E+00	3.72E-02
ETP-fw <sup>1</sup>	[CTUe]	2.13E+01	0.00E+00	1.51E-02	4.10E-02	0.00E+00	-5.98E-01	1.51E-02	0.00E+00	3.12E-01	0.00E+00	1.26E-01	4.46E-03	0.00E+00	-1.00E+01
HTP-c <sup>1</sup>	[CTUh]	8.09E-10	0.00E+00	3.06E-13	3.70E-12	0.00E+00	-4.15E-11	3.06E-13	0.00E+00	4.62E-12	0.00E+00	2.55E-12	3.90E-13	0.00E+00	-1.57E-10
HTP-nc <sup>1</sup>	[CTUh]	2.54E-08	0.00E+00	1.37E-11	3.81E-11	0.00E+00	-1.16E-09	1.37E-11	0.00E+00	9.65E-11	0.00E+00	1.14E-10	4.12E-12	0.00E+00	-2.93E-09
SQP <sup>1</sup>	-	1.87E+01	0.00E+00	1.00E-02	3.38E-02	0.00E+00	-4.49E+00	1.00E-02	0.00E+00	2.44E-02	0.00E+00	8.36E-02	3.88E-03	0.00E+00	-3.37E-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 <sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112.														
Disclaimers	<sup>1</sup> 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. <sup>2</sup> 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 <sup>2</sup>															
			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]	1.23E+01	0.00E+00	1.76E-03	3.01E-02	0.00E+00	-1.90E+00	1.76E-03	0.00E+00	2.17E-02	0.00E+00	1.46E-02	3.88E-03	0.00E+00	1.05E-01
PERM	[MJ]	1.72E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	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]	1.40E+01	0.00E+00	1.76E-03	3.01E-02	0.00E+00	-1.90E+00	1.76E-03	0.00E+00	2.17E-02	0.00E+00	1.46E-02	3.88E-03	0.00E+00	1.05E-01
PENRE	[MJ]	5.03E+01	0.00E+00	2.04E-02	6.69E+00	0.00E+00	-2.78E+00	2.04E-02	0.00E+00	1.43E-01	0.00E+00	1.70E-01	1.16E-02	0.00E+00	-1.60E+01
PENRM	[MJ]	6.27E+00	0.00E+00	0.00E+00	-6.59E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-6.59E+00	0.00E+00	0.00E+00
PENRT	[MJ]	5.66E+01	0.00E+00	2.04E-02	1.04E-01	0.00E+00	-2.78E+00	2.04E-02	0.00E+00	1.43E-01	0.00E+00	1.70E-01	-6.58E+00	0.00E+00	-1.60E+01
SM	[kg]	7.93E-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	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 <sup>3</sup> ]	1.19E-02	0.00E+00	1.96E-06	1.39E-03	0.00E+00	-1.06E-03	1.96E-06	0.00E+00	3.28E-05	0.00E+00	1.63E-05	1.39E-04	0.00E+00	-2.13E-03
Caption	<p>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</p> <p>The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10<sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10<sup>-11</sup> or 0.0000000000112</p>														

WASTE CATEGORIES AND OUPUT FLOWS PER m <sup>2</sup>															
			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]	6.32E-03	0.00E+00	7.81E-13	6.25E-11	0.00E+00	-2.41E-09	7.81E-13	0.00E+00	3.55E-11	0.00E+00	6.51E-12	7.99E-12	0.00E+00	-4.81E-10
NHWD	[kg]	1.49E-01	0.00E+00	3.33E-06	3.13E-03	0.00E+00	-2.52E-03	3.33E-06	0.00E+00	2.88E-01	0.00E+00	2.78E-05	3.14E-04	0.00E+00	-1.31E-02
RWD	[kg]	4.80E-04	0.00E+00	3.72E-08	5.99E-06	0.00E+00	-2.66E-04	3.72E-08	0.00E+00	2.03E-06	0.00E+00	3.10E-07	7.92E-07	0.00E+00	2.02E-04
CRU	[kg]	6.24E-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]	1.48E-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	2.89E-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]	7.59E-02	0.00E+00	0.00E+00	9.50E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.50E-02	0.00E+00	0.00E+00
EET	[MJ]	1.37E-01	0.00E+00	0.00E+00	1.70E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.70E-01	0.00E+00	0.00E+00
Caption	<p>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</p> <p>The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10<sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10<sup>-11</sup> or 0.0000000000112.</p>														

ENVIRONMENTAL IMPACTS PER m <sup>2</sup>															
			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 <sub>2</sub> eq.	2.67E+00	0.00E+00	1.83E-03	7.69E-01	0.00E+00	-1.98E-01	1.83E-03	0.00E+00	9.88E-03	0.00E+00	1.53E-02	7.70E-02	0.00E+00	-6.77E-01
GWP-fossil	kg CO <sub>2</sub> eq.	2.64E+00	0.00E+00	1.80E-03	7.69E-01	0.00E+00	-1.97E-01	1.80E-03	0.00E+00	9.88E-03	0.00E+00	1.50E-02	7.70E-02	0.00E+00	-6.72E-01
GWP-biogenic	kg CO <sub>2</sub> eq.	1.42E-02	0.00E+00	4.30E-06	2.67E-05	0.00E+00	-1.25E-03	4.30E-06	0.00E+00	-2.72E-05	0.00E+00	3.58E-05	3.28E-06	0.00E+00	-5.27E-03
GWP-luluc	kg CO <sub>2</sub> eq.	1.28E-02	0.00E+00	3.03E-05	1.90E-06	0.00E+00	-4.55E-05	3.03E-05	0.00E+00	3.63E-05	0.00E+00	2.52E-04	2.00E-07	0.00E+00	2.22E-04
ODP	kg CFC 11 eq.	3.75E-11	0.00E+00	2.65E-16	5.54E-14	0.00E+00	-2.09E-12	2.65E-16	0.00E+00	3.26E-14	0.00E+00	2.21E-15	7.05E-15	0.00E+00	-4.10E-13
AP	mol H <sup>+</sup> eq.	4.91E-03	0.00E+00	2.83E-06	7.46E-05	0.00E+00	-3.81E-04	2.83E-06	0.00E+00	5.91E-05	0.00E+00	2.36E-05	7.59E-06	0.00E+00	-7.81E-04
EP-freshwater	kg P eq.	5.21E-05	0.00E+00	7.69E-09	1.19E-08	0.00E+00	-1.19E-06	7.69E-09	0.00E+00	5.68E-06	0.00E+00	6.41E-08	1.46E-09	0.00E+00	-2.75E-06
EP-marine	kg N eq.	1.48E-03	0.00E+00	1.08E-06	2.16E-05	0.00E+00	-1.12E-04	1.08E-06	0.00E+00	1.27E-05	0.00E+00	9.03E-06	2.19E-06	0.00E+00	-2.24E-04
EP-terrestrial	mol N eq.	1.39E-02	0.00E+00	1.27E-05	3.63E-04	0.00E+00	-1.11E-03	1.27E-05	0.00E+00	1.40E-04	0.00E+00	1.06E-04	3.66E-05	0.00E+00	-2.44E-03
POCP	kg NMVOC eq.	7.06E-03	0.00E+00	2.81E-06	6.05E-05	0.00E+00	-2.91E-04	2.81E-06	0.00E+00	4.07E-05	0.00E+00	2.34E-05	6.15E-06	0.00E+00	-1.77E-03
ADPm <sup>1</sup>	kg Sb eq.	3.81E-07	0.00E+00	1.57E-10	5.75E-10	0.00E+00	-2.22E-08	1.57E-10	0.00E+00	6.55E-10	0.00E+00	1.31E-09	6.99E-11	0.00E+00	-4.31E-08
ADPf <sup>1</sup>	MJ	5.08E+01	0.00E+00	2.37E-02	1.21E-01	0.00E+00	-3.23E+00	2.37E-02	0.00E+00	1.67E-01	0.00E+00	1.98E-01	1.35E-02	0.00E+00	-1.86E+01
WDP <sup>1</sup>	m <sup>3</sup> world eq. deprived	3.44E-01	0.00E+00	2.79E-05	6.85E-02	0.00E+00	-3.07E-02	2.79E-05	0.00E+00	1.28E-03	0.00E+00	2.32E-04	6.88E-03	0.00E+00	-5.93E-04
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 <sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112.														
Disclaimer	<sup>1</sup> 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 <sup>2</sup>															
			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]	6.12E-08	0.00E+00	2.98E-11	4.00E-10	0.00E+00	-3.18E-09	2.98E-11	0.00E+00	6.12E-10	0.00E+00	2.48E-10	4.09E-11	0.00E+00	-6.80E-09
IRP <sup>2</sup>	[kBq U235 eq.]	6.38E-02	0.00E+00	6.28E-06	1.12E-03	0.00E+00	-5.08E-02	6.28E-06	0.00E+00	3.23E-04	0.00E+00	5.22E-05	1.48E-04	0.00E+00	4.32E-02
ETP-fw <sup>1</sup>	[CTUe]	2.33E+01	0.00E+00	1.76E-02	4.77E-02	0.00E+00	-6.96E-01	1.76E-02	0.00E+00	3.63E-01	0.00E+00	1.47E-01	5.19E-03	0.00E+00	-1.17E+01
HTP-c <sup>1</sup>	[CTUh]	7.37E-10	0.00E+00	3.56E-13	4.30E-12	0.00E+00	-4.83E-11	3.56E-13	0.00E+00	5.38E-12	0.00E+00	2.96E-12	4.54E-13	0.00E+00	-1.82E-10
HTP-nc <sup>1</sup>	[CTUh]	2.47E-08	0.00E+00	1.60E-11	4.44E-11	0.00E+00	-1.35E-09	1.60E-11	0.00E+00	1.12E-10	0.00E+00	1.33E-10	4.79E-12	0.00E+00	-3.41E-09
SQP <sup>1</sup>	-	1.86E+01	0.00E+00	1.17E-02	3.93E-02	0.00E+00	-5.22E+00	1.17E-02	0.00E+00	2.83E-02	0.00E+00	9.72E-02	4.51E-03	0.00E+00	-3.92E-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 <sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112.														
Disclaimers	<sup>1</sup> 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. <sup>2</sup> 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 <sup>2</sup>															
			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]	1.22E+01	0.00E+00	2.04E-03	3.50E-02	0.00E+00	-2.21E+00	2.04E-03	0.00E+00	2.52E-02	0.00E+00	1.70E-02	4.51E-03	0.00E+00	1.22E-01
PERM	[MJ]	2.01E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	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]	1.42E+01	0.00E+00	2.04E-03	3.50E-02	0.00E+00	-2.21E+00	2.04E-03	0.00E+00	2.52E-02	0.00E+00	1.70E-02	4.51E-03	0.00E+00	1.22E-01
PENRE	[MJ]	5.12E+01	0.00E+00	2.37E-02	7.78E+00	0.00E+00	-3.23E+00	2.37E-02	0.00E+00	1.67E-01	0.00E+00	1.98E-01	1.35E-02	0.00E+00	-1.86E+01
PENRM	[MJ]	7.30E+00	0.00E+00	0.00E+00	-7.66E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-7.66E+00	0.00E+00	0.00E+00
PENRT	[MJ]	5.85E+01	0.00E+00	2.37E-02	1.21E-01	0.00E+00	-3.23E+00	2.37E-02	0.00E+00	1.67E-01	0.00E+00	1.98E-01	-7.65E+00	0.00E+00	-1.86E+01
SM	[kg]	9.23E-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
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 <sup>3</sup> ]	1.25E-02	0.00E+00	2.28E-06	1.61E-03	0.00E+00	-1.23E-03	2.28E-06	0.00E+00	3.82E-05	0.00E+00	1.90E-05	1.62E-04	0.00E+00	-2.47E-03
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 <sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112														

WASTE CATEGORIES AND OUPUT FLOWS PER m <sup>2</sup>															
			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]	7.45E-03	0.00E+00	9.08E-13	7.26E-11	0.00E+00	-2.80E-09	9.08E-13	0.00E+00	4.12E-11	0.00E+00	7.57E-12	9.29E-12	0.00E+00	-5.60E-10
NHWD	[kg]	1.67E-01	0.00E+00	3.87E-06	3.64E-03	0.00E+00	-2.93E-03	3.87E-06	0.00E+00	3.35E-01	0.00E+00	3.23E-05	3.66E-04	0.00E+00	-1.53E-02
RWD	[kg]	5.23E-04	0.00E+00	4.32E-08	6.96E-06	0.00E+00	-3.09E-04	4.32E-08	0.00E+00	2.35E-06	0.00E+00	3.60E-07	9.20E-07	0.00E+00	2.35E-04
CRU	[kg]	7.26E-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]	2.30E-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	3.36E-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]	9.21E-02	0.00E+00	0.00E+00	1.10E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-01	0.00E+00	0.00E+00
EET	[MJ]	1.67E-01	0.00E+00	0.00E+00	1.98E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.98E-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 <sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112.														

## Step Melange (Design no. 2441, 2442, 2543)

ENVIRONMENTAL IMPACTS PER m <sup>2</sup>															
			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 <sub>2</sub> eq.	2.57E+00	0.00E+00	1.83E-03	7.69E-01	0.00E+00	-1.98E-01	1.83E-03	0.00E+00	9.88E-03	0.00E+00	1.53E-02	7.70E-02	0.00E+00	-6.77E-01
GWP-fossil	kg CO <sub>2</sub> eq.	2.54E+00	0.00E+00	1.80E-03	7.69E-01	0.00E+00	-1.97E-01	1.80E-03	0.00E+00	9.88E-03	0.00E+00	1.50E-02	7.70E-02	0.00E+00	-6.72E-01
GWP-biogenic	kg CO <sub>2</sub> eq.	1.20E-02	0.00E+00	4.30E-06	2.67E-05	0.00E+00	-1.25E-03	4.30E-06	0.00E+00	-2.72E-05	0.00E+00	3.58E-05	3.28E-06	0.00E+00	-5.27E-03
GWP-luluc	kg CO <sub>2</sub> eq.	1.28E-02	0.00E+00	3.03E-05	1.90E-06	0.00E+00	-4.55E-05	3.03E-05	0.00E+00	3.63E-05	0.00E+00	2.52E-04	2.00E-07	0.00E+00	2.22E-04
ODP	kg CFC 11 eq.	3.75E-11	0.00E+00	2.65E-16	5.54E-14	0.00E+00	-2.09E-12	2.65E-16	0.00E+00	3.26E-14	0.00E+00	2.21E-15	7.05E-15	0.00E+00	-4.10E-13
AP	mol H <sup>+</sup> eq.	4.82E-03	0.00E+00	2.83E-06	7.46E-05	0.00E+00	-3.81E-04	2.83E-06	0.00E+00	5.91E-05	0.00E+00	2.36E-05	7.59E-06	0.00E+00	-7.81E-04
EP-freshwater	kg P eq.	4.96E-05	0.00E+00	7.69E-09	1.19E-08	0.00E+00	-1.19E-06	7.69E-09	0.00E+00	5.68E-06	0.00E+00	6.41E-08	1.46E-09	0.00E+00	-2.75E-06
EP-marine	kg N eq.	1.43E-03	0.00E+00	1.08E-06	2.16E-05	0.00E+00	-1.12E-04	1.08E-06	0.00E+00	1.27E-05	0.00E+00	9.03E-06	2.19E-06	0.00E+00	-2.24E-04
EP-terrestrial	mol N eq.	1.35E-02	0.00E+00	1.27E-05	3.63E-04	0.00E+00	-1.11E-03	1.27E-05	0.00E+00	1.40E-04	0.00E+00	1.06E-04	3.66E-05	0.00E+00	-2.44E-03
POCP	kg NMVOC eq.	6.94E-03	0.00E+00	2.81E-06	6.05E-05	0.00E+00	-2.91E-04	2.81E-06	0.00E+00	4.07E-05	0.00E+00	2.34E-05	6.15E-06	0.00E+00	-1.77E-03
ADPm <sup>1</sup>	kg Sb eq.	3.74E-07	0.00E+00	1.57E-10	5.75E-10	0.00E+00	-2.22E-08	1.57E-10	0.00E+00	6.55E-10	0.00E+00	1.31E-09	6.99E-11	0.00E+00	-4.31E-08
ADPf <sup>1</sup>	MJ	4.93E+01	0.00E+00	2.37E-02	1.21E-01	0.00E+00	-3.23E+00	2.37E-02	0.00E+00	1.67E-01	0.00E+00	1.98E-01	1.35E-02	0.00E+00	-1.86E+01
WDP <sup>1</sup>	m <sup>3</sup> world eq. deprived	3.38E-01	0.00E+00	2.79E-05	6.85E-02	0.00E+00	-3.07E-02	2.79E-05	0.00E+00	1.28E-03	0.00E+00	2.32E-04	6.88E-03	0.00E+00	-5.93E-04
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 <sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112.														
Disclaimer	<sup>1</sup> 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 <sup>2</sup>															
			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]	5.97E-08	0.00E+00	2.98E-11	4.00E-10	0.00E+00	-3.18E-09	2.98E-11	0.00E+00	6.12E-10	0.00E+00	2.48E-10	4.09E-11	0.00E+00	-6.80E-09
IRP <sup>2</sup>	[kBq U235 eq.]	6.37E-02	0.00E+00	6.28E-06	1.12E-03	0.00E+00	-5.08E-02	6.28E-06	0.00E+00	3.23E-04	0.00E+00	5.22E-05	1.48E-04	0.00E+00	4.32E-02
ETP-fw <sup>1</sup>	[CTUe]	2.30E+01	0.00E+00	1.76E-02	4.77E-02	0.00E+00	-6.96E-01	1.76E-02	0.00E+00	3.63E-01	0.00E+00	1.47E-01	5.19E-03	0.00E+00	-1.17E+01
HTP-c <sup>1</sup>	[CTUh]	7.14E-10	0.00E+00	3.56E-13	4.30E-12	0.00E+00	-4.83E-11	3.56E-13	0.00E+00	5.38E-12	0.00E+00	2.96E-12	4.54E-13	0.00E+00	-1.82E-10
HTP-nc <sup>1</sup>	[CTUh]	2.35E-08	0.00E+00	1.60E-11	4.44E-11	0.00E+00	-1.35E-09	1.60E-11	0.00E+00	1.12E-10	0.00E+00	1.33E-10	4.79E-12	0.00E+00	-3.41E-09
SQP <sup>1</sup>	-	1.86E+01	0.00E+00	1.17E-02	3.93E-02	0.00E+00	-5.22E+00	1.17E-02	0.00E+00	2.83E-02	0.00E+00	9.72E-02	4.51E-03	0.00E+00	-3.92E-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 <sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112.														
Disclaimers	<sup>1</sup> 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.														
	<sup>2</sup> 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 <sup>2</sup>															
			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]	1.22E+01	0.00E+00	2.04E-03	3.50E-02	0.00E+00	-2.21E+00	2.04E-03	0.00E+00	2.52E-02	0.00E+00	1.70E-02	4.51E-03	0.00E+00	1.22E-01
PERM	[MJ]	2.01E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	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]	1.42E+01	0.00E+00	2.04E-03	3.50E-02	0.00E+00	-2.21E+00	2.04E-03	0.00E+00	2.52E-02	0.00E+00	1.70E-02	4.51E-03	0.00E+00	1.22E-01
PENRE	[MJ]	4.97E+01	0.00E+00	2.37E-02	7.78E+00	0.00E+00	-3.23E+00	2.37E-02	0.00E+00	1.67E-01	0.00E+00	1.98E-01	1.35E-02	0.00E+00	-1.86E+01
PENRM	[MJ]	7.30E+00	0.00E+00	0.00E+00	-7.66E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-7.66E+00	0.00E+00	0.00E+00
PENRT	[MJ]	5.70E+01	0.00E+00	2.37E-02	1.21E-01	0.00E+00	-3.23E+00	2.37E-02	0.00E+00	1.67E-01	0.00E+00	1.98E-01	-7.65E+00	0.00E+00	-1.86E+01
SM	[kg]	9.23E-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
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 <sup>3</sup> ]	1.24E-02	0.00E+00	2.28E-06	1.61E-03	0.00E+00	-1.23E-03	2.28E-06	0.00E+00	3.82E-05	0.00E+00	1.90E-05	1.62E-04	0.00E+00	-2.47E-03
Caption	<p>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</p> <p>The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10<sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10<sup>-11</sup> or 0.0000000000112</p>														

WASTE CATEGORIES AND OUPUT FLOWS PER m <sup>2</sup>															
			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]	7.45E-03	0.00E+00	9.08E-13	7.26E-11	0.00E+00	-2.80E-09	9.08E-13	0.00E+00	4.12E-11	0.00E+00	7.57E-12	9.29E-12	0.00E+00	-5.60E-10
NHWD	[kg]	1.62E-01	0.00E+00	3.87E-06	3.64E-03	0.00E+00	-2.93E-03	3.87E-06	0.00E+00	3.35E-01	0.00E+00	3.23E-05	3.66E-04	0.00E+00	-1.53E-02
RWD	[kg]	5.22E-04	0.00E+00	4.32E-08	6.96E-06	0.00E+00	-3.09E-04	4.32E-08	0.00E+00	2.35E-06	0.00E+00	3.60E-07	9.20E-07	0.00E+00	2.35E-04
CRU	[kg]	7.26E-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]	2.30E-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	3.36E-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]	9.23E-02	0.00E+00	0.00E+00	1.10E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-01	0.00E+00	0.00E+00
EET	[MJ]	1.67E-01	0.00E+00	0.00E+00	1.98E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.98E-01	0.00E+00	0.00E+00
Caption	<p>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</p> <p>The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10<sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10<sup>-11</sup> or 0.0000000000112.</p>														

## Step Melange Screen (Design no. 2305, 2306, 2307)

ENVIRONMENTAL IMPACTS PER m <sup>2</sup>															
		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 <sub>2</sub> eq.	2.22E+00	0.00E+00	1.41E-03	5.93E-01	0.00E+00	-1.53E-01	1.41E-03	0.00E+00	7.61E-03	0.00E+00	1.18E-02	5.94E-02	0.00E+00	-5.22E-01
GWP-fossil	kg CO <sub>2</sub> eq.	2.20E+00	0.00E+00	1.39E-03	5.93E-01	0.00E+00	-1.52E-01	1.39E-03	0.00E+00	7.61E-03	0.00E+00	1.16E-02	5.94E-02	0.00E+00	-5.18E-01
GWP-biogenic	kg CO <sub>2</sub> eq.	1.10E-02	0.00E+00	3.32E-06	2.06E-05	0.00E+00	-9.66E-04	3.32E-06	0.00E+00	-2.10E-05	0.00E+00	2.76E-05	2.53E-06	0.00E+00	-4.06E-03
GWP-luluc	kg CO <sub>2</sub> eq.	9.89E-03	0.00E+00	2.33E-05	1.46E-06	0.00E+00	-3.50E-05	2.33E-05	0.00E+00	2.80E-05	0.00E+00	1.94E-04	1.54E-07	0.00E+00	1.71E-04
ODP	kg CFC 11 eq.	2.99E-11	0.00E+00	2.05E-16	4.27E-14	0.00E+00	-1.61E-12	2.05E-16	0.00E+00	2.51E-14	0.00E+00	1.70E-15	5.43E-15	0.00E+00	-3.16E-13
AP	mol H <sup>+</sup> eq.	3.94E-03	0.00E+00	2.18E-06	5.75E-05	0.00E+00	-2.94E-04	2.18E-06	0.00E+00	4.56E-05	0.00E+00	1.82E-05	5.85E-06	0.00E+00	-6.02E-04
EP-freshwater	kg P eq.	4.07E-05	0.00E+00	5.93E-09	9.14E-09	0.00E+00	-9.14E-07	5.93E-09	0.00E+00	4.38E-06	0.00E+00	4.94E-08	1.13E-09	0.00E+00	-2.12E-06
EP-marine	kg N eq.	1.21E-03	0.00E+00	8.34E-07	1.67E-05	0.00E+00	-8.63E-05	8.34E-07	0.00E+00	9.82E-06	0.00E+00	6.96E-06	1.69E-06	0.00E+00	-1.72E-04
EP-terrestrial	mol N eq.	1.15E-02	0.00E+00	9.82E-06	2.80E-04	0.00E+00	-8.53E-04	9.82E-06	0.00E+00	1.08E-04	0.00E+00	8.17E-05	2.82E-05	0.00E+00	-1.88E-03
POCP	kg NMVOC eq.	5.69E-03	0.00E+00	2.17E-06	4.66E-05	0.00E+00	-2.24E-04	2.17E-06	0.00E+00	3.13E-05	0.00E+00	1.80E-05	4.74E-06	0.00E+00	-1.36E-03
ADPm <sup>1</sup>	kg Sb eq.	3.09E-07	0.00E+00	1.21E-10	4.43E-10	0.00E+00	-1.71E-08	1.21E-10	0.00E+00	5.05E-10	0.00E+00	1.01E-09	5.39E-11	0.00E+00	-3.33E-08
ADPf <sup>1</sup>	MJ	4.18E+01	0.00E+00	1.83E-02	9.32E-02	0.00E+00	-2.49E+00	1.83E-02	0.00E+00	1.29E-01	0.00E+00	1.52E-01	1.04E-02	0.00E+00	-1.43E+01
WDP <sup>1</sup>	m <sup>3</sup> world eq. deprived	2.70E-01	0.00E+00	2.15E-05	5.28E-02	0.00E+00	-2.37E-02	2.15E-05	0.00E+00	9.84E-04	0.00E+00	1.79E-04	5.30E-03	0.00E+00	-4.57E-04
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 <sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112.														
Disclaimer	<sup>1</sup> 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 <sup>2</sup>															
		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]	4.94E-08	0.00E+00	2.30E-11	3.08E-10	0.00E+00	-2.45E-09	2.30E-11	0.00E+00	4.71E-10	0.00E+00	1.91E-10	3.16E-11	0.00E+00	-5.24E-09
IRP <sup>2</sup>	[kBq U235 eq.]	5.01E-02	0.00E+00	4.84E-06	8.60E-04	0.00E+00	-3.92E-02	4.84E-06	0.00E+00	2.49E-04	0.00E+00	4.03E-05	1.14E-04	0.00E+00	3.33E-02
ETP-fw <sup>1</sup>	[CTUe]	1.83E+01	0.00E+00	1.36E-02	3.68E-02	0.00E+00	-5.36E-01	1.36E-02	0.00E+00	2.80E-01	0.00E+00	1.13E-01	4.00E-03	0.00E+00	-9.00E+00
HTP-c <sup>1</sup>	[CTUh]	5.93E-10	0.00E+00	2.75E-13	3.32E-12	0.00E+00	-3.72E-11	2.75E-13	0.00E+00	4.14E-12	0.00E+00	2.28E-12	3.50E-13	0.00E+00	-1.40E-10
HTP-nc <sup>1</sup>	[CTUh]	1.93E-08	0.00E+00	1.23E-11	3.42E-11	0.00E+00	-1.04E-09	1.23E-11	0.00E+00	8.65E-11	0.00E+00	1.03E-10	3.69E-12	0.00E+00	-2.63E-09
SQP <sup>1</sup>	-	1.46E+01	0.00E+00	8.99E-03	3.03E-02	0.00E+00	-4.03E+00	8.99E-03	0.00E+00	2.18E-02	0.00E+00	7.50E-02	3.48E-03	0.00E+00	-3.02E-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 <sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112.														
Disclaimers	<sup>1</sup> 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. <sup>2</sup> 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 <sup>2</sup>															
			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]	9.73E+00	0.00E+00	1.58E-03	2.69E-02	0.00E+00	-1.70E+00	1.58E-03	0.00E+00	1.94E-02	0.00E+00	1.31E-02	3.48E-03	0.00E+00	9.43E-02
PERM	[MJ]	1.56E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	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]	1.13E+01	0.00E+00	1.58E-03	2.69E-02	0.00E+00	-1.70E+00	1.58E-03	0.00E+00	1.94E-02	0.00E+00	1.31E-02	3.48E-03	0.00E+00	9.43E-02
PENRE	[MJ]	4.21E+01	0.00E+00	1.83E-02	6.00E+00	0.00E+00	-2.49E+00	1.83E-02	0.00E+00	1.29E-01	0.00E+00	1.52E-01	1.04E-02	0.00E+00	-1.43E+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]	4.78E+01	0.00E+00	1.83E-02	9.33E-02	0.00E+00	-2.49E+00	1.83E-02	0.00E+00	1.29E-01	0.00E+00	1.52E-01	-5.89E+00	0.00E+00	-1.43E+01
SM	[kg]	7.11E-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
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 <sup>3</sup> ]	9.84E-03	0.00E+00	1.75E-06	1.24E-03	0.00E+00	-9.47E-04	1.75E-06	0.00E+00	2.94E-05	0.00E+00	1.46E-05	1.25E-04	0.00E+00	-1.91E-03
Caption	<p>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</p> <p>The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10<sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10<sup>-11</sup> or 0.0000000000112</p>														

WASTE CATEGORIES AND OUPUT FLOWS PER m <sup>2</sup>															
			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]	5.86E-03	0.00E+00	7.00E-13	5.60E-11	0.00E+00	-2.16E-09	7.00E-13	0.00E+00	3.18E-11	0.00E+00	5.84E-12	7.16E-12	0.00E+00	-4.31E-10
NHWD	[kg]	1.36E-01	0.00E+00	2.99E-06	2.81E-03	0.00E+00	-2.26E-03	2.99E-06	0.00E+00	2.58E-01	0.00E+00	2.49E-05	2.82E-04	0.00E+00	-1.18E-02
RWD	[kg]	4.10E-04	0.00E+00	3.33E-08	5.36E-06	0.00E+00	-2.38E-04	3.33E-08	0.00E+00	1.81E-06	0.00E+00	2.78E-07	7.09E-07	0.00E+00	1.81E-04
CRU	[kg]	5.59E-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]	2.26E-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	2.59E-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]	7.45E-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]	1.35E-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	<p>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</p> <p>The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10<sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10<sup>-11</sup> or 0.0000000000112.</p>														

## Step Screen (2304)

ENVIRONMENTAL IMPACTS PER m <sup>2</sup>															
			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 <sub>2</sub> eq.	2.02E+00	0.00E+00	1.41E-03	5.93E-01	0.00E+00	-1.53E-01	1.41E-03	0.00E+00	7.61E-03	0.00E+00	1.18E-02	5.94E-02	0.00E+00	-5.22E-01
GWP-fossil	kg CO <sub>2</sub> eq.	2.00E+00	0.00E+00	1.39E-03	5.93E-01	0.00E+00	-1.52E-01	1.39E-03	0.00E+00	7.61E-03	0.00E+00	1.16E-02	5.94E-02	0.00E+00	-5.18E-01
GWP-biogenic	kg CO <sub>2</sub> eq.	1.36E-02	0.00E+00	3.32E-06	2.06E-05	0.00E+00	-9.66E-04	3.32E-06	0.00E+00	-2.10E-05	0.00E+00	2.76E-05	2.53E-06	0.00E+00	-4.06E-03
GWP-luluc	kg CO <sub>2</sub> eq.	9.88E-03	0.00E+00	2.33E-05	1.46E-06	0.00E+00	-3.50E-05	2.33E-05	0.00E+00	2.80E-05	0.00E+00	1.94E-04	1.54E-07	0.00E+00	1.71E-04
ODP	kg CFC 11 eq.	2.99E-11	0.00E+00	2.05E-16	4.27E-14	0.00E+00	-1.61E-12	2.05E-16	0.00E+00	2.51E-14	0.00E+00	1.70E-15	5.43E-15	0.00E+00	-3.16E-13
AP	mol H <sup>+</sup> eq.	3.81E-03	0.00E+00	2.18E-06	5.75E-05	0.00E+00	-2.94E-04	2.18E-06	0.00E+00	4.56E-05	0.00E+00	1.82E-05	5.85E-06	0.00E+00	-6.02E-04
EP-freshwater	kg P eq.	4.44E-05	0.00E+00	5.93E-09	9.14E-09	0.00E+00	-9.14E-07	5.93E-09	0.00E+00	4.38E-06	0.00E+00	4.94E-08	1.13E-09	0.00E+00	-2.12E-06
EP-marine	kg N eq.	1.15E-03	0.00E+00	8.34E-07	1.67E-05	0.00E+00	-8.63E-05	8.34E-07	0.00E+00	9.82E-06	0.00E+00	6.96E-06	1.69E-06	0.00E+00	-1.72E-04
EP-terrestrial	mol N eq.	1.07E-02	0.00E+00	9.82E-06	2.80E-04	0.00E+00	-8.53E-04	9.82E-06	0.00E+00	1.08E-04	0.00E+00	8.17E-05	2.82E-05	0.00E+00	-1.88E-03
POCP	kg NMVOC eq.	5.47E-03	0.00E+00	2.17E-06	4.66E-05	0.00E+00	-2.24E-04	2.17E-06	0.00E+00	3.13E-05	0.00E+00	1.80E-05	4.74E-06	0.00E+00	-1.36E-03
ADPm <sup>1</sup>	kg Sb eq.	2.96E-07	0.00E+00	1.21E-10	4.43E-10	0.00E+00	-1.71E-08	1.21E-10	0.00E+00	5.05E-10	0.00E+00	1.01E-09	5.39E-11	0.00E+00	-3.33E-08
ADPf <sup>1</sup>	MJ	3.87E+01	0.00E+00	1.83E-02	9.32E-02	0.00E+00	-2.49E+00	1.83E-02	0.00E+00	1.29E-01	0.00E+00	1.52E-01	1.04E-02	0.00E+00	-1.43E+01
WDP <sup>1</sup>	m <sup>3</sup> world eq. deprived	2.78E-01	0.00E+00	2.15E-05	5.28E-02	0.00E+00	-2.37E-02	2.15E-05	0.00E+00	9.84E-04	0.00E+00	1.79E-04	5.30E-03	0.00E+00	-4.57E-04
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 <sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112.														
Disclaimer	<sup>1</sup> 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 <sup>2</sup>															
			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]	4.72E-08	0.00E+00	2.30E-11	3.08E-10	0.00E+00	-2.45E-09	2.30E-11	0.00E+00	4.71E-10	0.00E+00	1.91E-10	3.16E-11	0.00E+00	-5.24E-09
IRP <sup>2</sup>	[kBq U235 eq.]	5.02E-02	0.00E+00	4.84E-06	8.60E-04	0.00E+00	-3.92E-02	4.84E-06	0.00E+00	2.49E-04	0.00E+00	4.03E-05	1.14E-04	0.00E+00	3.33E-02
ETP-fw <sup>1</sup>	[CTUe]	1.85E+01	0.00E+00	1.36E-02	3.68E-02	0.00E+00	-5.36E-01	1.36E-02	0.00E+00	2.80E-01	0.00E+00	1.13E-01	4.00E-03	0.00E+00	-9.00E+00
HTP-c <sup>1</sup>	[CTUh]	5.86E-10	0.00E+00	2.75E-13	3.32E-12	0.00E+00	-3.72E-11	2.75E-13	0.00E+00	4.14E-12	0.00E+00	2.28E-12	3.50E-13	0.00E+00	-1.40E-10
HTP-nc <sup>1</sup>	[CTUh]	2.09E-08	0.00E+00	1.23E-11	3.42E-11	0.00E+00	-1.04E-09	1.23E-11	0.00E+00	8.65E-11	0.00E+00	1.03E-10	3.69E-12	0.00E+00	-2.63E-09
SQP <sup>1</sup>	-	1.46E+01	0.00E+00	8.99E-03	3.03E-02	0.00E+00	-4.03E+00	8.99E-03	0.00E+00	2.18E-02	0.00E+00	7.50E-02	3.48E-03	0.00E+00	-3.02E-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 <sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112.														
Disclaimers	<sup>1</sup> 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. <sup>2</sup> 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 <sup>2</sup>															
			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]	9.73E+00	0.00E+00	1.58E-03	2.69E-02	0.00E+00	-1.70E+00	1.58E-03	0.00E+00	1.94E-02	0.00E+00	1.31E-02	3.48E-03	0.00E+00	9.43E-02
PERM	[MJ]	1.56E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	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]	1.13E+01	0.00E+00	1.58E-03	2.69E-02	0.00E+00	-1.70E+00	1.58E-03	0.00E+00	1.94E-02	0.00E+00	1.31E-02	3.48E-03	0.00E+00	9.43E-02
PENRE	[MJ]	3.90E+01	0.00E+00	1.83E-02	6.00E+00	0.00E+00	-2.49E+00	1.83E-02	0.00E+00	1.29E-01	0.00E+00	1.52E-01	1.04E-02	0.00E+00	-1.43E+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]	4.47E+01	0.00E+00	1.83E-02	9.33E-02	0.00E+00	-2.49E+00	1.83E-02	0.00E+00	1.29E-01	0.00E+00	1.52E-01	-5.89E+00	0.00E+00	-1.43E+01
SM	[kg]	7.11E-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
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 <sup>3</sup> ]	1.00E-02	0.00E+00	1.75E-06	1.24E-03	0.00E+00	-9.47E-04	1.75E-06	0.00E+00	2.94E-05	0.00E+00	1.46E-05	1.25E-04	0.00E+00	-1.91E-03
Caption	<p>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</p> <p>The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10<sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10<sup>-11</sup> or 0.0000000000112</p>														

WASTE CATEGORIES AND OUPUT FLOWS PER m <sup>2</sup>															
			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]	5.86E-03	0.00E+00	7.00E-13	5.60E-11	0.00E+00	-2.16E-09	7.00E-13	0.00E+00	3.18E-11	0.00E+00	5.84E-12	7.16E-12	0.00E+00	-4.31E-10
NHWD	[kg]	1.41E-01	0.00E+00	2.99E-06	2.81E-03	0.00E+00	-2.26E-03	2.99E-06	0.00E+00	2.58E-01	0.00E+00	2.49E-05	2.82E-04	0.00E+00	-1.18E-02
RWD	[kg]	4.10E-04	0.00E+00	3.33E-08	5.36E-06	0.00E+00	-2.38E-04	3.33E-08	0.00E+00	1.81E-06	0.00E+00	2.78E-07	7.09E-07	0.00E+00	1.81E-04
CRU	[kg]	5.59E-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]	2.26E-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	2.59E-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	8.51E-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]	1.34E-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	<p>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</p> <p>The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10<sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10<sup>-11</sup> or 0.0000000000112.</p>														

ENVIRONMENTAL IMPACTS PER m <sup>2</sup>															
		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 <sub>2</sub> eq.	1.80E+00	0.00E+00	1.19E-03	4.99E-01	0.00E+00	-1.29E-01	1.19E-03	0.00E+00	6.41E-03	0.00E+00	9.91E-03	5.00E-02	0.00E+00	-4.39E-01
GWP-fossil	kg CO <sub>2</sub> eq.	1.78E+00	0.00E+00	1.17E-03	4.99E-01	0.00E+00	-1.28E-01	1.17E-03	0.00E+00	6.41E-03	0.00E+00	9.73E-03	5.00E-02	0.00E+00	-4.36E-01
GWP-biogenic	kg CO <sub>2</sub> eq.	9.21E-03	0.00E+00	2.79E-06	1.74E-05	0.00E+00	-8.13E-04	2.79E-06	0.00E+00	-1.77E-05	0.00E+00	2.32E-05	2.13E-06	0.00E+00	-3.42E-03
GWP-luluc	kg CO <sub>2</sub> eq.	8.29E-03	0.00E+00	1.96E-05	1.23E-06	0.00E+00	-2.95E-05	1.96E-05	0.00E+00	2.35E-05	0.00E+00	1.64E-04	1.29E-07	0.00E+00	1.44E-04
ODP	kg CFC 11 eq.	3.22E-11	0.00E+00	1.72E-16	3.60E-14	0.00E+00	-1.36E-12	1.72E-16	0.00E+00	2.11E-14	0.00E+00	1.43E-15	4.57E-15	0.00E+00	-2.66E-13
AP	mol H <sup>+</sup> eq.	3.28E-03	0.00E+00	1.83E-06	4.84E-05	0.00E+00	-2.47E-04	1.83E-06	0.00E+00	3.84E-05	0.00E+00	1.53E-05	4.92E-06	0.00E+00	-5.06E-04
EP-freshwater	kg P eq.	3.34E-05	0.00E+00	4.99E-09	7.70E-09	0.00E+00	-7.70E-07	4.99E-09	0.00E+00	3.68E-06	0.00E+00	4.16E-08	9.50E-10	0.00E+00	-1.79E-06
EP-marine	kg N eq.	9.95E-04	0.00E+00	7.02E-07	1.40E-05	0.00E+00	-7.26E-05	7.02E-07	0.00E+00	8.26E-06	0.00E+00	5.86E-06	1.42E-06	0.00E+00	-1.45E-04
EP-terrestrial	mol N eq.	9.43E-03	0.00E+00	8.26E-06	2.35E-04	0.00E+00	-7.18E-04	8.26E-06	0.00E+00	9.07E-05	0.00E+00	6.88E-05	2.38E-05	0.00E+00	-1.58E-03
POCP	kg NMVOC eq.	4.64E-03	0.00E+00	1.82E-06	3.92E-05	0.00E+00	-1.89E-04	1.82E-06	0.00E+00	2.64E-05	0.00E+00	1.52E-05	3.99E-06	0.00E+00	-1.15E-03
ADPm <sup>1</sup>	kg Sb eq.	2.85E-07	0.00E+00	1.02E-10	3.73E-10	0.00E+00	-1.44E-08	1.02E-10	0.00E+00	4.25E-10	0.00E+00	8.48E-10	4.54E-11	0.00E+00	-2.80E-08
ADPf <sup>1</sup>	MJ	3.38E+01	0.00E+00	1.54E-02	7.85E-02	0.00E+00	-2.10E+00	1.54E-02	0.00E+00	1.08E-01	0.00E+00	1.28E-01	8.77E-03	0.00E+00	-1.20E+01
WDP <sup>1</sup>	m <sup>3</sup> world eq. deprived	2.22E-01	0.00E+00	1.81E-05	4.45E-02	0.00E+00	-1.99E-02	1.81E-05	0.00E+00	8.28E-04	0.00E+00	1.51E-04	4.46E-03	0.00E+00	-3.85E-04
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 <sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112.														
Disclaimer	<sup>1</sup> 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 <sup>2</sup>															
		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]	4.10E-08	0.00E+00	1.93E-11	2.59E-10	0.00E+00	-2.06E-09	1.93E-11	0.00E+00	3.97E-10	0.00E+00	1.61E-10	2.66E-11	0.00E+00	-4.41E-09
IRP <sup>2</sup>	[kBq U235 eq.]	4.10E-02	0.00E+00	4.08E-06	7.24E-04	0.00E+00	-3.30E-02	4.08E-06	0.00E+00	2.09E-04	0.00E+00	3.39E-05	9.63E-05	0.00E+00	2.80E-02
ETP-fw <sup>1</sup>	[CTUe]	1.49E+01	0.00E+00	1.14E-02	3.10E-02	0.00E+00	-4.51E-01	1.14E-02	0.00E+00	2.35E-01	0.00E+00	9.52E-02	3.37E-03	0.00E+00	-7.58E+00
HTP-c <sup>1</sup>	[CTUh]	5.05E-10	0.00E+00	2.31E-13	2.79E-12	0.00E+00	-3.13E-11	2.31E-13	0.00E+00	3.49E-12	0.00E+00	1.92E-12	2.94E-13	0.00E+00	-1.18E-10
HTP-nc <sup>1</sup>	[CTUh]	1.60E-08	0.00E+00	1.04E-11	2.88E-11	0.00E+00	-8.74E-10	1.04E-11	0.00E+00	7.28E-11	0.00E+00	8.63E-11	3.11E-12	0.00E+00	-2.21E-09
SQP <sup>1</sup>	-	1.40E+01	0.00E+00	7.56E-03	2.55E-02	0.00E+00	-3.39E+00	7.56E-03	0.00E+00	1.84E-02	0.00E+00	6.31E-02	2.93E-03	0.00E+00	-2.54E-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 <sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112.														
Disclaimers	<sup>1</sup> 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.														
	<sup>2</sup> 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 <sup>2</sup>															
			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]	9.88E+00	0.00E+00	1.33E-03	2.27E-02	0.00E+00	-1.43E+00	1.33E-03	0.00E+00	1.64E-02	0.00E+00	1.10E-02	2.93E-03	0.00E+00	7.94E-02
PERM	[MJ]	1.29E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	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	1.33E-03	2.27E-02	0.00E+00	-1.43E+00	1.33E-03	0.00E+00	1.64E-02	0.00E+00	1.10E-02	2.93E-03	0.00E+00	7.94E-02
PENRE	[MJ]	3.41E+01	0.00E+00	1.54E-02	5.05E+00	0.00E+00	-2.10E+00	1.54E-02	0.00E+00	1.08E-01	0.00E+00	1.28E-01	8.77E-03	0.00E+00	-1.20E+01
PENRM	[MJ]	4.73E+00	0.00E+00	0.00E+00	-4.97E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-4.97E+00	0.00E+00	0.00E+00
PENRT	[MJ]	3.88E+01	0.00E+00	1.54E-02	7.85E-02	0.00E+00	-2.10E+00	1.54E-02	0.00E+00	1.08E-01	0.00E+00	1.28E-01	-4.96E+00	0.00E+00	-1.20E+01
SM	[kg]	5.99E-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
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 <sup>3</sup> ]	8.11E-03	0.00E+00	1.48E-06	1.05E-03	0.00E+00	-7.97E-04	1.48E-06	0.00E+00	2.48E-05	0.00E+00	1.23E-05	1.05E-04	0.00E+00	-1.60E-03
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 <sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112														

WASTE CATEGORIES AND OUPUT FLOWS PER m <sup>2</sup>															
			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]	4.72E-03	0.00E+00	5.89E-13	4.71E-11	0.00E+00	-1.82E-09	5.89E-13	0.00E+00	2.68E-11	0.00E+00	4.91E-12	6.03E-12	0.00E+00	-3.63E-10
NHWD	[kg]	1.02E-01	0.00E+00	2.51E-06	2.36E-03	0.00E+00	-1.90E-03	2.51E-06	0.00E+00	2.17E-01	0.00E+00	2.09E-05	2.37E-04	0.00E+00	-9.92E-03
RWD	[kg]	3.36E-04	0.00E+00	2.80E-08	4.51E-06	0.00E+00	-2.00E-04	2.80E-08	0.00E+00	1.53E-06	0.00E+00	2.34E-07	5.97E-07	0.00E+00	1.53E-04
CRU	[kg]	4.71E-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]	1.02E-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	2.18E-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]	5.66E-02	0.00E+00	0.00E+00	7.17E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.17E-02	0.00E+00	0.00E+00
EET	[MJ]	1.02E-01	0.00E+00	0.00E+00	1.28E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.28E-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 <sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112.														

ENVIRONMENTAL IMPACTS PER m <sup>2</sup>															
			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 <sub>2</sub> eq.	1.66E+00	0.00E+00	1.19E-03	4.99E-01	0.00E+00	-1.29E-01	1.19E-03	0.00E+00	6.41E-03	0.00E+00	9.91E-03	5.00E-02	0.00E+00	-4.39E-01
GWP-fossil	kg CO <sub>2</sub> eq.	1.65E+00	0.00E+00	1.17E-03	4.99E-01	0.00E+00	-1.28E-01	1.17E-03	0.00E+00	6.41E-03	0.00E+00	9.73E-03	5.00E-02	0.00E+00	-4.36E-01
GWP-biogenic	kg CO <sub>2</sub> eq.	7.54E-03	0.00E+00	2.79E-06	1.74E-05	0.00E+00	-8.13E-04	2.79E-06	0.00E+00	-1.77E-05	0.00E+00	2.32E-05	2.13E-06	0.00E+00	-3.42E-03
GWP-luluc	kg CO <sub>2</sub> eq.	8.28E-03	0.00E+00	1.96E-05	1.23E-06	0.00E+00	-2.95E-05	1.96E-05	0.00E+00	2.35E-05	0.00E+00	1.64E-04	1.29E-07	0.00E+00	1.44E-04
ODP	kg CFC 11 eq.	3.22E-11	0.00E+00	1.72E-16	3.60E-14	0.00E+00	-1.36E-12	1.72E-16	0.00E+00	2.11E-14	0.00E+00	1.43E-15	4.57E-15	0.00E+00	-2.66E-13
AP	mol H <sup>+</sup> eq.	3.16E-03	0.00E+00	1.83E-06	4.84E-05	0.00E+00	-2.47E-04	1.83E-06	0.00E+00	3.84E-05	0.00E+00	1.53E-05	4.92E-06	0.00E+00	-5.06E-04
EP-freshwater	kg P eq.	3.15E-05	0.00E+00	4.99E-09	7.70E-09	0.00E+00	-7.70E-07	4.99E-09	0.00E+00	3.68E-06	0.00E+00	4.16E-08	9.50E-10	0.00E+00	-1.79E-06
EP-marine	kg N eq.	9.38E-04	0.00E+00	7.02E-07	1.40E-05	0.00E+00	-7.26E-05	7.02E-07	0.00E+00	8.26E-06	0.00E+00	5.86E-06	1.42E-06	0.00E+00	-1.45E-04
EP-terrestrial	mol N eq.	8.87E-03	0.00E+00	8.26E-06	2.35E-04	0.00E+00	-7.18E-04	8.26E-06	0.00E+00	9.07E-05	0.00E+00	6.88E-05	2.38E-05	0.00E+00	-1.58E-03
POCP	kg NMVOC eq.	4.48E-03	0.00E+00	1.82E-06	3.92E-05	0.00E+00	-1.89E-04	1.82E-06	0.00E+00	2.64E-05	0.00E+00	1.52E-05	3.99E-06	0.00E+00	-1.15E-03
ADPm <sup>1</sup>	kg Sb eq.	2.77E-07	0.00E+00	1.02E-10	3.73E-10	0.00E+00	-1.44E-08	1.02E-10	0.00E+00	4.25E-10	0.00E+00	8.48E-10	4.54E-11	0.00E+00	-2.80E-08
ADPf <sup>1</sup>	MJ	3.18E+01	0.00E+00	1.54E-02	7.85E-02	0.00E+00	-2.10E+00	1.54E-02	0.00E+00	1.08E-01	0.00E+00	1.28E-01	8.77E-03	0.00E+00	-1.20E+01
WDP <sup>1</sup>	m <sup>3</sup> world eq. deprived	2.17E-01	0.00E+00	1.81E-05	4.45E-02	0.00E+00	-1.99E-02	1.81E-05	0.00E+00	8.28E-04	0.00E+00	1.51E-04	4.46E-03	0.00E+00	-3.85E-04
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 <sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112.														
Disclaimer	<sup>1</sup> 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 <sup>2</sup>															
			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]	3.92E-08	0.00E+00	1.93E-11	2.59E-10	0.00E+00	-2.06E-09	1.93E-11	0.00E+00	3.97E-10	0.00E+00	1.61E-10	2.66E-11	0.00E+00	-4.41E-09
IRP <sup>2</sup>	[kBq U235 eq.]	4.08E-02	0.00E+00	4.08E-06	7.24E-04	0.00E+00	-3.30E-02	4.08E-06	0.00E+00	2.09E-04	0.00E+00	3.39E-05	9.63E-05	0.00E+00	2.80E-02
ETP-fw <sup>1</sup>	[CTUe]	1.46E+01	0.00E+00	1.14E-02	3.10E-02	0.00E+00	-4.51E-01	1.14E-02	0.00E+00	2.35E-01	0.00E+00	9.52E-02	3.37E-03	0.00E+00	-7.58E+00
HTP-c <sup>1</sup>	[CTUh]	4.81E-10	0.00E+00	2.31E-13	2.79E-12	0.00E+00	-3.13E-11	2.31E-13	0.00E+00	3.49E-12	0.00E+00	1.92E-12	2.94E-13	0.00E+00	-1.18E-10
HTP-nc <sup>1</sup>	[CTUh]	1.51E-08	0.00E+00	1.04E-11	2.88E-11	0.00E+00	-8.74E-10	1.04E-11	0.00E+00	7.28E-11	0.00E+00	8.63E-11	3.11E-12	0.00E+00	-2.21E-09
SQP <sup>1</sup>	-	1.40E+01	0.00E+00	7.56E-03	2.55E-02	0.00E+00	-3.39E+00	7.56E-03	0.00E+00	1.84E-02	0.00E+00	6.31E-02	2.93E-03	0.00E+00	-2.54E-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 <sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.0000000000112.														
Disclaimers	<sup>1</sup> 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. <sup>2</sup> 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 <sup>2</sup>															
			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]	9.87E+00	0.00E+00	1.33E-03	2.27E-02	0.00E+00	-1.43E+00	1.33E-03	0.00E+00	1.64E-02	0.00E+00	1.10E-02	2.93E-03	0.00E+00	7.94E-02
PERM	[MJ]	1.29E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	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	1.33E-03	2.27E-02	0.00E+00	-1.43E+00	1.33E-03	0.00E+00	1.64E-02	0.00E+00	1.10E-02	2.93E-03	0.00E+00	7.94E-02
PENRE	[MJ]	3.21E+01	0.00E+00	1.54E-02	5.05E+00	0.00E+00	-2.10E+00	1.54E-02	0.00E+00	1.08E-01	0.00E+00	1.28E-01	8.77E-03	0.00E+00	-1.20E+01
PENRM	[MJ]	4.73E+00	0.00E+00	0.00E+00	-4.97E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-4.97E+00	0.00E+00	0.00E+00
PENRT	[MJ]	3.68E+01	0.00E+00	1.54E-02	7.85E-02	0.00E+00	-2.10E+00	1.54E-02	0.00E+00	1.08E-01	0.00E+00	1.28E-01	-4.96E+00	0.00E+00	-1.20E+01
SM	[kg]	5.99E-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
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 <sup>3</sup> ]	7.97E-03	0.00E+00	1.48E-06	1.05E-03	0.00E+00	-7.97E-04	1.48E-06	0.00E+00	2.48E-05	0.00E+00	1.23E-05	1.05E-04	0.00E+00	-1.60E-03
Caption	<p>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</p> <p>The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10<sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10<sup>-11</sup> or 0.0000000000112</p>														

WASTE CATEGORIES AND OUPUT FLOWS PER m <sup>2</sup>															
			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]	4.71E-03	0.00E+00	5.89E-13	4.71E-11	0.00E+00	-1.82E-09	5.89E-13	0.00E+00	2.68E-11	0.00E+00	4.91E-12	6.03E-12	0.00E+00	-3.63E-10
NHWD	[kg]	9.83E-02	0.00E+00	2.51E-06	2.36E-03	0.00E+00	-1.90E-03	2.51E-06	0.00E+00	2.17E-01	0.00E+00	2.09E-05	2.37E-04	0.00E+00	-9.92E-03
RWD	[kg]	3.35E-04	0.00E+00	2.80E-08	4.51E-06	0.00E+00	-2.00E-04	2.80E-08	0.00E+00	1.53E-06	0.00E+00	2.34E-07	5.97E-07	0.00E+00	1.53E-04
CRU	[kg]	4.71E-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]	9.87E-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	2.18E-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]	5.64E-02	0.00E+00	0.00E+00	7.17E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.17E-02	0.00E+00	0.00E+00
EET	[MJ]	1.02E-01	0.00E+00	0.00E+00	1.28E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.28E-01	0.00E+00	0.00E+00
Caption	<p>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</p> <p>The numbers are declared in scientific notation. fx 1.95E+02. This number can also be written as: 1.95*10<sup>2</sup> or 195. while 1.12E-11 is the same as 1.12*10<sup>-11</sup> or 0.0000000000112.</p>														

Design name	BIOGENIC CARBON CONTENT PER m <sup>2</sup>	
	In product [kg C]	In accompanying packaging [kg C]
Athlon	0	0.016
Athlon Plus	0	0.016
Atlantic	0	0.011
Go Check	0	0.009
Go Couture	0	0.009
Go Uni	0	0.009
Spin	0	0.009
Step	0	0.010
Step Melange	0	0.010
Step Melange Screen	0	0.008
Step Screen	0	0.008
Twist	0	0.007
Twist Melange	0	0.007

## 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	0.9	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

<b>Publisher</b>	 www.epddanmark.dk Template version 2025.1
<b>Programme operator</b>	Danish Technological Institute Gregersensvej DK-2630 Taastrup www.teknologisk.dk
<b>LCA-practitioners</b>	<i>Pernille Elbrønd Neve and Louise Agersnap Scherer</i> Gabriel A/S Hjulgagervej 55 DK-9000 Aalborg
<b>LCA software / background data</b>	GaBi 2024.2 and 2025.1 professional database <i>EN 15804 reference package 3.1</i>
<b>3<sup>rd</sup> party verifier</b>	<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](http://www.epddanmark.dk)

### **Technical Rules and Guidelines**

Technical Rules and Guidelines. version 1.0. spring 2025

[www.epddanmark.dk](http://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](http://www.gabrielfabrics.com)