epddanmark

ECO PLATFORM EPD VERIFIED

Owner: Harpun
No.: MD-26020-EN
Issued: 20-04-2026
Valid to: 20-04-2031

3rd PARTY **VERIFIED**

EPD

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

Owner of declaration
Harpun
Vestermarksvej 5, 6630 Rødding
12483503
www.harpun.com

Programme
EPD Danmark
www.epddanmark.dk

☐ Industry EPD
☒ Product EPD

☐ Product specific
☒ Average
☐ Worst Case

Declared product(s)
Plastic elements for the construction sector and industry. The declared datasets represent the following product categories of plastic elements by Harpun: Wedges, Wall brackets, Flooring wedge system, Sound reducers, Adjustment panels, QuickFix/QuickFix mini, Glass panels, Concrete accessories, Mix boxes/bags and Terrace concept.

Number of declared datasets/product variations: 46

Production sites
Vestermarksvej 5, 6630 Rødding, Denmark
Lindholmvej 15, 3550 Slangerup, Denmark

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

Declared unit
1 kg

Year of production site data (A3)
2024

EPD version
1st version

Issued: 20-04-2026
Valid to: 20-04-2031

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

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

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

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

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

CEN standard EN 15804 serves as the core PCR

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

☐ internal ☒ external

Third party verifier:

Linda Høibye
Life Cycle Assessment Consulting

Martha Katrine Sørensen
EPD Danmark

Life cycle stages and modules (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	X	X	ND	ND	ND	MD	ND	ND	ND	X	X	X	X	X

Product information

Product description

The declared products are manufactured at two production sites in Denmark: Slangerup and Rødding. Data from both production sites have been used for this EPD covering the production in 2024. The declared products represent a weighted average of the two production sites, where the weighting is based on the production volumes in kg in 2024 for each site.

This EPD describes the environmental impact for Harpun plastic elements. The EPD covers 187 individual products across 10 product categories:

- Wedges (8 products)
- Wall brackets (4 products)
- Flooring wedge system (15 products)
- Sound reducers (10 products)
- Adjustment panels (44 products)
- QuickFix/QuickFix mini (12 products)
- Glass panels (56 products)
- Concrete accessories (4 products)
- Mix boxes/bags (33 products)
- Terrace concept (1 products)

The products are grouped into 46 average datasets. EPD Denmark's rules for grouping have been applied and the averages are based on simple averages.

The relationship between individual products, product categories and average groups are presented in the table below. The table also contains information about the weight per sold unit, and the number of pieces in each sold unit, which can be used to convert the impacts of the declared unit (1 kg product) to the impacts per sold unit or per single piece.

Product category	Average group	Product number and name	Sold unit weight (kg)	Pcs per sold unit
Concrete accessories	1	12404 Betonkile Grå 52 pcs/box	17,14	52
		12402 Betonkile White 52 pcs/box	17,14	52
	2	12480 Tentor cap 6-16 mm Rød 800 pcs/box	7,04	800
		12482 Tentor cap 16-32 mm Rød 250 pcs/box	5,10	250
Glass panels	3	10511 Glasklods 50x24x4 mm Sort 1.000 pcs/box	4,39	1000
		10480 Glasklods 50x24x3 mm Grå 1.000 pcs/box	3,37	1000
		10427 Glasklods 50x24x2 mm Hvid 1.000 pcs/box	2,35	1000
		10390 Glasklods 50x24x1 mm -7° Blå 1.000 pcs/box	3,57	1000
		10526 Glasklods 50x23x4 mm -7° Sort 1.000 pcs/box	7,83	1000
		10542 Glasklods 50x22x5 mm Brun 1.000 pcs/box	5,14	1000
		10508 Glasklods 50x22x4 mm Sort 1.000 pcs/box	4,08	1000
		10493 Glasklods 50x22x3 mm -7° Grå 1.000 pcs/box	1,43	1000
		10428 Glasklods 50x26x2 mm Hvid 1.000 pcs/box	2,55	1000
		10424 Glasklods 50x22x2 mm Hvid 1.000 pcs/box	2,04	1000
		10218 Glasklods 50x22x1 mm Blå 1.000 pcs/box	1,27	1000
		10505 Glasklods 50x20x4 mm Sort 1.000 pcs/box	3,98	1000
		10474 Glasklods 50x20x3 mm Grå 1.000 pcs/box	2,65	1000
		10421 Glasklods 50x20x2 mm Hvid 1.000 pcs/box	1,94	1000
		10477 Glasklods 50x22x3 mm Grå 1.000 pcs/box	3,11	1000
		10481 Glasklods 50x26x3 mm Grå 1.000 pcs/box	3,67	1000
		10222 Glasklods 50x27x1 mm Blå 1.000 pcs/box	1,63	1000
		10504 Glasklods 50x15x4 mm Sort 1.000 pcs/box	2,96	1000
		10221 Glaskods 50x26x1 mm Blå 1.000 pcs/box	1,33	1000
		10534 Glasklods 50x36x4 mm -7° Sort 1.000 pcs/box	10,20	1000
		10434 Glasklods 50x36x2 mm Hvid 1.000 pcs/box	3,67	1000
		10548 Glasklods 50x35x5 mm Brun 1.000 pcs/box	9,38	1000
		10547 Glasklods 50x30x5 mm Brun 1.000 pcs/box	8,24	1000
		10517 Glasklods 50x30x4 mm Sort 1.000 pcs/box	6,22	1000
		10533 Glasklods 50x30x4 mm -7° Sort 1.000 pcs/box	7,08	1000
		10487 Glasklods 50x30x3 mm Grå 1.000 pcs/box	3,06	1000
		10495 Glasklods 50x30x3 mm -7° Grå 1.000 pcs/box	1,36	1000
		10432 Glasklods 50x30x2 mm Hvid 1.000 pcs/box	3,16	1000
		10544 Glasklods 50x27x5 mm Brun 1.000 pcs/box	6,10	1000
		10514 Glasklods 50x27x4 mm Sort 1.000 pcs/box	4,90	1000
		10530 Glasklods 50x27x4 mm -7° Sort 1.000 pcs/box	6,63	1000
		10484 Glasklods 50x27x3 mm Grå 1.000 pcs/box	6,32	1000
		10430 Glasklods 50x27x2 mm Hvid 1.000 pcs/box	2,65	1000
		10512 Glasklods 50x26x4 mm Sort 1.000 pcs/box	4,79	1000

Product category	Average group	Product number and name	Sold unit weight (kg)	Pcs per sold unit
		10470 Glasklods 50x15x3 mm Grå 1.000 pcs/box	2,04	1000
		10527 Glasklods 50x24x4 mm -7° Sort 1.000 pcs/box	5,56	1000
		10546 Glasklods 100x30x5 mm Brun 1.000 pcs/box	16,48	1000
		10422 Glasklods 100x22x2 mm Hvid 1.000 pcs/box	3,92	1000
		10475 Glasklods 100x22x3 mm Grå 1.000 pcs/box	6,29	1000
		10506 Glasklods 100x22x4 mm Sort 1.000 pcs/box	8,26	1000
		10540 Glasklods 100x22x5 mm Brun 1.000 pcs/box	10,30	1000
		10420 Glasklods 50x15x2 mm Hvid 1.000 pcs/box	1,53	1000
		10525 Glasklods 100x23x4 mm -7° Sort 1.000 pcs/box	11,65	1000
		10426 Glasklods 100x24x2 mm Hvid 1.000 pcs/box	4,69	1000
		10479 Glasklods 100x24x3 mm Grå 1.000 pcs/box	6,94	1000
		10216 Glasklods 100x22x1 mm Blå 1.000 pcs/box	2,65	1000
		10510 Glasklods 100x24x4 mm Sort 1.000 pcs/box	8,87	1000
		10429 Glasklods 100x27x2 mm Hvid 1.000 pcs/box	5,30	1000
		10483 Glasklods 100x27x3 mm Grå 1.000 pcs/box	7,55	1000
		10529 Glasklods 100x27x4 mm -7° Sort 1.000 pcs/box	13,31	1000
		10513 Glasklods 100x27x4 mm Sort 1.000 pcs/box	9,36	1000
		10247 Glasklods 100x30x1 mm Blå 1.000 pcs/box	3,88	1000
		10431 Glasklods 100x30x2 mm Hvid 1.000 pcs/box	6,63	1000
		10486 Glasklods 100x30x3 mm Grå 1.000 pcs/box	8,93	1000
		10516 Glasklods 100x30x4 mm Sort 1.000 pcs/box	12,60	1000
		10391 Glasklods 100x25x1 mm -7° Rød 1.000 pcs/box	7,34	1000
Flooring wedge system	4	13010 Skrå Fodplade 2,5% 110x110x3 mm Sort 100 pcs/box	2,75	100
		13011 Skrå Fodplade 5% 110x110x3 mm Sort 90 pcs/box	2,47	90
	5	10839 Gulvopklodsning Bundkile 100x43x110 mm Brun 36 pcs/box	5,17	36
		10843 Gulvopklodsning Topkile 110x43x85 mm Brun 99 pcs/box	8,87	99
		10847 Gulvopklodsning Topkile 110x43x45 Grøn 150 pcs/box	5,01	150
		10838 Gulvopklodsning Bundkile 100x43x90 mm Grå 45 pcs/box	5,09	45
		10836 Gulvopklodsning Bundkile 100x43x70 mm Grøn 72 pcs/box	5,13	72
		10834 Gulvopklodsning Bundkile 100x43x50 mm Sort 108 pcs/box	5,56	108
	6	10857 Gulvopklodsning Topkile 60x43x30 mm Sort 400 pcs/box	6,08	400
	45	13142 HARPUN Gulvopklodsning Topkile 110x43x45 mm Sort ECO 150 pcs/box	5,01	150
		13140 HARPUN Gulvopklodsning Bundkile 100x43x110 mm Sort ECO 36 pcs/box	5,17	36
		15611 HARPUN Gulvopklodsning Bundkile 100x43x50 mm Sort ECO 108 pcs/box	5,61	108
		13136 HARPUN Gulvopklodsning Bundkile 100x43x70 mm Sort ECO 72 pcs/box	5,12	72
		13138 HARPUN Gulvopklodsning Bundkile 100x43x90 mm Sort ECO 45 pcs/box	5,09	45
		13144 HARPUN Gulvopklodsning Topkile 110x43x85 mm Sort ECO 99 pcs/box	8,87	99
Adjustment panels	7	10769 Justerbrik 80x50x10 mm Black Heavy Load 450 pcs/box	10,49	450
		10777 Justerbrik 80x50x15 mm Yellow Heavy Load 250 pcs/box	9,23	250
		10787 Justerbrik 80x50x2 mm Red Heavy Load 500 pcs/box	2,93	500
		10793 Justerbrik 80x50x5 mm Blå Heavy Load 500 pcs/box	5,64	500
		10790 Justerbrik 80x50x3 mm Green Heavy Load 500 pcs/box	2,94	500
		10797 Justerbrik 80x50x7 mm Brun Heavy Load 500 pcs/box	9,04	500
		10784 Justerbrik 80x50x20 mm GREY Heavy Load 250 pcs/box	12,25	250
	8	12455 Justerbrik 100 Grid 100x100x3 mm Grøn 450 pcs/box	6,12	450
		12410 Justerbrik 100 Grid 100x100x5 mm Blå 500 pcs/box	11,26	500
		10782 Justerbrik 160x50x3 mm Green Heavy Load 250 pcs/box	3,28	250
		10783 Justerbrik 160x50x5 mm Blue Heavy Load 250 pcs/box	5,31	250
		10776 Justerbrik 120x50x5 mm Blue Medium Load 250 pcs/box	3,95	250
		10774 Justerbrik 120x50x2 mm Red Medium Load 250 pcs/box	1,62	250
		10775 Justerbrik 120x50x3 mm Green Medium Load 250 psc/box	2,47	250
		12409 Justerbrik 100 Grid 100x100x2 mm Rød 500 pcs/box	4,68	500
		12502 Justerbrik 100 Solid 100x100x2 mm Rød 400 pcs/box	5,62	400
		12491 Justerbrik 100 Solid 100x100x20 mm Grå 50 pcs/box	8,50	50
		12412 Justerbrik 100 Solid 100x100x3 mm Grøn 300 pcs/box	6,97	300
		12413 Justerbrik 100 Solid 100x100x5 mm Blå 200 pcs/box	7,55	200
		10772 Justerbrik 120x50x10 mm Black Medium Load 100 pcs/box	3,10	100
		12490 Justerbrik 100 Solid 100x100x15 mm Gul 75 pcs/box	8,99	75
		10773 Justerbrik 120x50x15 mm Yellow Medium Load 100 pcs/box	4,38	100
		12451 Justerbrik 80x50x30 mm MørkeGrå Medium Load 200 pcs/box	11,00	200
		12562 Justerbrik Reglar 45 80x45x5 mm Blå 500 pcs/box	5,43	500
		10794 Justerbrik 80x50x5 mm Blå Medium Load 500 pcs/box	5,33	500
		12711 Justerbrik 80x50x50 mm Rosa Medium Load 100 pcs/box	14,14	100
		10798 Justerbrik 80x50x7 mm Brun Medium Load 500 pcs/box	7,04	500
		12560 Justerbrik Reglar 45 80x45x2 mm Rød 500 pcs/box	2,33	500
		12564 Justerbrik Reglar 45 80x45x20 mm Grey 250 pcs/box	9,30	250
		12561 Justerbrik Reglar 45 80x45x3 mm Grøn 500 pcs/box	3,13	500
		10781 Justerbrik 160x50x2 mm Red Heavy Load 250 pcs/box	2,22	250

Product category	Average group	Product number and name	Sold unit weight (kg)	Pcs per sold unit
		10780 Justerbrik 160x50x15 mm Yellow Heavy Load 100 pcs/box	5,87	100
		10785 Justerbrik 80x50x20 mm Grey Medium Load 250 pcs/box	9,30	250
		10788 Justerbrik 80x50x2 mm Red Medium Load 500 pcs/box	2,28	500
		12454 Justerbrik 80x50x30 mm MørkeGrå Heavy Load 180 pcs/box	9,90	180
		10778 Justerbrik 80x50x15 mm Yellow Medium Load 250 pcs/box	7,30	250
		10791 Justerbrik 80x50x3 mm Green Medium Load 500 pcs/box	3,16	500
	9	13068 Justerbrik 80x30x20 mm Black Medium Load 200 pcs/box	5,00	200
		12563 Justerbrik Reglar 45 80x45x10 mm Sort 500 pcs/box	9,68	500
		10770 Justerbrik 80x50x10 mm Black Medium Load 500 pcs/box	9,65	500
		12722 Justerbrik 80x28x12 mm Sort 300 pcs/box	4,81	300
		12411 Justerbrik 100 Grid 100x100x10 mm Sort 300 pcs/box	12,15	300
		12414 Justerbrik 100 Solid 100x100x10 mm Sort 100 pcs/box	8,23	100
		10779 Justerbrik 160x50x10 mm Black Heavy Load 100 pcs/box	3,81	100
Wedges	10	11844 Møbel Kile 100x20x8 mm Brun 500 pcs/box	3,69	500
	11	10845 Split Kile 70x35x10 mm Gul 1.000 pcs/box	5,25	1000
		10850 Split Kile 77x38x10 mm Hvid 1.000 pcs/box	6,28	1000
		10955 Split Kile 88x43x15 mm Grå 500 pcs/box	4,65	500
		10852 Kile 65x28x8 mm Rød 1.000 pcs/box	3,59	1000
	12	12135 Kile 88x43x15 mm Grå 550 pcs/box	5,83	550
	13	10957 Split Kile 140x43x25 mm Sort 364 pcs/box	7,83	364
	14	10855 Kile 140x43x25 mm Sort 364 pcs/box	8,47	364
Sound reducers	15	10837 Gulvbrik 81x47x5 mm Sort 250 pcs/box	5,10	250
	16	10722 Gulvopklodsning Fodplade 110x110x3 mm Sort 150 pcs/box	4,12	150
	17	10800 Lyddæmper 110x110x13 mm 110 pcs/box	13,33	110
	18	10801 Gummibrik 110x110x10 mm 120 pcs/box	11,30	120
	19	10821 Sportsbrik 50x40x12 Blå 200 pcs/box	3,46	200
		10803 Lydbrik 50x40x8 mm Rød 300 pcs/box	5,20	300
	20	10835 Gulvopklodsning Bundklik 100x100x38 mm Sort 78 pcs/box	4,87	78
	21	10833 Gulvopklodsning Bundklik 100x100x19 mm Rød 150 pcs/box	4,57	150
	46	15615 HARPUN Gulvopklodsning Bundklik 100x100x38 mm Sort ECO 78 pcs/box	4,84	78
		15613 HARPUN Gulvopklodsning Bundklik 100x100x19 mm sort ECO 150 pcs/box	4,51	150
Mix boxes and bags	22	12437 GDS Pose Møbelkiler 8 mm 10 pcs/bag 16 bags/box	1,18	160
	23	12128 Pro Box BrickMix L 90 pcs/box	1,54	90
	24	10865 Pro Box QuickFix 250 pcs/box	2,10	250
		10866 Pro Box Mini QuickFix 450 pcs/box	1,89	450
	25	12129 Pro Box BrickMix XL 80 pcs/box	2,13	80
	26	12006 Handy box Brick mix 50 pcs/box	0,94	50
	27	10864 Pro Box TriaMix 240 pcs/box	2,08	240
	28	12565 Pro Box BrickMix Reglar 45 160 pcs/box	2,23	160
		10863 Pro Box BrickMix M 140 pcs/box	2,25	140
		12586 Pro Box BrickMix 100 Grid 100x100 mm 85 pcs/box	2,08	85
		10862 Pro Box DuoTriaMix 100 pcs/box	2,10	100
	29	12008 Handy box Mini Quick Fix 160 pcs/box	0,94	160
		12428 GDS Pose QuickFix 12 pcs/bag 16 bags/box	1,25	192
		12429 GDS Pose QuickFix 22 pcs/bag 16 bags/box	1,16	352
		12433 GDS Pose Rød Kile 8 mm 16 pcs/bag 16 bags/box	0,91	256
		12430 GDS Pose TriaMix 12 pcs/bag 16 bags/box	0,97	192
		11717 Handy box Quick Fix 80 pcs/box	0,85	80
	30	10867 Pro Box SpacerMix 500 pcs/box	2,68	500
	31	10698 Easy Box Split Wedges White 150 pcs/box	1,49	150
	32	12585 Pro Box BrickMix 100 Solid 100x100 mm 51 pcs/box	2,91	51
	33	10697 Easy Box Wedges Grey 100 pcs/box	1,62	100
		12432 GDS Pose Grå Kile 15 mm 10 pcs/bag 16 bags/box	1,70	160
		12431 GDS Pose Topkile Grøn 4 pcs/bag 16 bags/box	2,14	64
	34	12435 GDS Pose DuoTriaMix 6 pcs/bag 16 bags/box	1,22	96
		12438 GDS Pose Justerbrikker 6 pcs/bag 16 bags/box	1,11	96
	35	12007 Handy box TriaMix 70 pcs/box	0,87	70
	36	12436 GDS Pose Hvid Kile 10 mm 16 pcs/bag 16 bags/box	1,61	256
	37	12434 GDS Pose Sort Kile 25 mm 6 pcs/bag 16 bags/box	2,23	96
	38	12439 GDS Pose Glasklods 55 pcs/bag 16 bags/box	3,09	880
		11716 Handy box Spacer mix 200 pcs/box	1,51	200
	39	10699 Easy Box Wedges Black 50 pcs/box	1,70	50
	40	12595 Easy Box Tentor cap 6/16 mm Rød 180 pcs/box	2,10	180
		12596 Easy Box Tentor cap 16/32 mm Rød 54 pcs/box	1,83	54
Wall brackets	41	12360 Murbeslag 28 Indmuring 86 pcs/box	5,80	86
		12362 Murbeslag 28 Eftermontering 140 pcs/box	7,31	140
	42	12359 Murbeslag 50 Indmuring 60 pcs/box	4,90	60
		12361 Murbeslag 50 Eftermontering 90 pcs/box	6,01	90

Product category	Average group	Product number and name	Sold unit weight (kg)	Pcs per sold unit
QuickFix	43	10809 QuickFix 80x50x1 mm Blå 1.000 pcs/box	3,24	1000
		10871 Mini QuickFix 50x38x1 mm Blå 500 pcs/box	0,79	500
		10872 Mini QuickFix 50x38x10 mm Gul 250 pcs/box	1,96	250
		10877 Mini QuickFix 50x38x3 mm Rød 500 pcs/box	1,45	500
		10879 Mini QuickFix 50x38x4 mm Sort 500 pcs/box	1,72	500
		10875 Mini QuickFix 50x38x2 mm Hvid 500 pcs/box	2,36	500
		10819 QuickFix 80x50x5 mm Grøn 1.000 pcs/box	7,00	1000
		10817 QuickFix 80x50x4 mm Sort 1.000 pcs/box	6,57	1000
		10815 QuickFix 80x50x3 mm Rød 1.000 pcs/box	6,28	1000
		10813 QuickFix 80x50x2 mm Hvid 1.000 pcs/box	5,00	1000
		10810 QuickFix 80x50x10 mm Gul 500 pcs/box	5,49	500
		10881 Mini QuickFix 50x38x5 mm Grøn 500 pcs/box	2,16	500
Terrace concept	44	12800 Terrasse concept 60 pcs/box	5,65	60

Product composition:

The material composition of the declared average groups are shown in the table below. The materials originating from recycled sources have been specified in the table. If not specified, the materials are of virgin origin. PB-rubber = polymer-bound rubber. PCR = post-consumer recycled. HDPE = polyethylene, high density. LDPE = polyethylene, low density. PP = polypropylene. PPG = glass-filled polypropylene. PS = polystyrene. TPE = thermoplastic elastomer. MB = masterbatch consisting of LDPE and additives.

% material composition											
Group no.	PB Rubber	PCR HDPE	HDPE	LDPE	PCR LDPE	PP	PPG	PS	TPE	MB	Total
1							99,93%			0,07%	100,00%
2				97,52%						2,48%	100,00%
3				97,88%						2,12%	100,00%
4								98,03%		1,97%	100,00%
5			29,20%	66,82%						3,98%	100,00%
6		97,96%								2,04%	100,00%
7							98,03%			1,97%	100,00%
8			95,98%							4,02%	100,00%
9		97,46%								2,54%	100,00%
10								99,01%		0,99%	100,00%
11			97,44%							2,56%	100,00%
12			29,71%	66,88%						3,41%	100,00%
13		98,00%								2,00%	100,00%
14		67,61%			30,37%					2,02%	100,00%
15									97,96%	2,04%	100,00%
16								97,02%		2,98%	100,00%
17	77,33%							21,99%		0,68%	100,00%
18	100,00%										100,00%
19			45,96%						51,39%	2,66%	100,00%
20			65,31%	31,73%						2,95%	100,00%
21			31,05%	64,96%						3,99%	100,00%
22								99,01%		0,99%	100,00%
23			61,05%			35,56%	0,91%			2,48%	100,00%
24			70,43%			27,50%	0,70%			1,37%	100,00%
25		66,58%				25,68%	0,66%			7,08%	100,00%
26			62,14%			28,31%				9,55%	100,00%
27		60,05%		10,98%		26,32%	0,67%			1,97%	100,00%
28		71,90%				25,26%	0,65%			2,19%	100,00%
29			88,57%			9,93%				1,50%	100,00%
30				77,38%		20,42%	0,52%			1,68%	100,00%
31			62,37%			36,68%	0,94%			0,01%	100,00%
32		78,35%				18,79%	0,48%			2,38%	100,00%
33			26,12%	59,47%		11,25%	0,29%			2,88%	100,00%
34		95,46%								4,54%	100,00%
35		36,84%		30,73%		30,63%				1,80%	100,00%
36				98,80%						1,20%	100,00%
37		30,37%		67,61%						2,02%	100,00%
38				89,34%		8,82%				1,85%	100,00%
39		20,78%		46,24%		32,16%	0,82%				100,00%
40				71,27%		27,99%	0,72%			0,02%	100,00%
41			99,01%							0,99%	100,00%

% material composition											
42		100,00%									100,00%
43			98,08%							1,92%	100,00%
44		31,52%		36,79%				28,30%		3,38%	100,00%
45		30,00%			70,00%						100,00%
46		30,00%			70,00%						100,00%

Product packaging:

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

Packaging material composition (for 1 kg declared product)					
Average product no.	**Euro pallet %**	**Cardboard %**	**LDPE %**	**Total %**	**Total kg**
1	69,28%	29,23%	1,49%	100,00%	0,088
2	67,18%	28,34%	4,48%	100,00%	0,262
3	64,23%	34,38%	1,38%	100,00%	0,196
4	63,99%	34,63%	1,38%	100,00%	0,268
5	69,28%	29,23%	1,49%	100,00%	0,270
6	69,28%	29,23%	1,49%	100,00%	0,247
7	61,79%	31,40%	6,81%	100,00%	0,154
8	61,50%	31,57%	6,93%	100,00%	0,188
9	63,07%	30,67%	6,25%	100,00%	0,148
10	69,28%	29,23%	1,49%	100,00%	0,408
11	68,29%	30,23%	1,47%	100,00%	0,261
12	69,28%	29,23%	1,49%	100,00%	0,258
13	69,28%	29,23%	1,49%	100,00%	0,192
14	69,28%	29,23%	1,49%	100,00%	0,178
15	63,99%	34,63%	1,38%	100,00%	0,137
16	63,99%	34,63%	1,38%	100,00%	0,169
17	69,28%	29,23%	1,49%	100,00%	0,113
18	63,99%	34,63%	1,38%	100,00%	0,062
19	63,99%	34,63%	1,38%	100,00%	0,168
20	69,28%	29,23%	1,49%	100,00%	0,309
21	69,28%	29,23%	1,49%	100,00%	0,329
22	54,60%	37,38%	8,03%	100,00%	0,693
23	97,12%	0,79%	2,09%	100,00%	0,266
24	97,12%	0,79%	2,09%	100,00%	0,205
25	97,12%	0,79%	2,09%	100,00%	0,192
26	97,12%	0,79%	2,09%	100,00%	0,435
27	97,12%	0,79%	2,09%	100,00%	0,197
28	97,12%	0,79%	2,09%	100,00%	0,189
29	64,28%	29,05%	6,68%	100,00%	0,670
30	97,12%	0,79%	2,09%	100,00%	0,153
31	97,12%	0,79%	2,09%	100,00%	0,274
32	97,12%	0,79%	2,09%	100,00%	0,140
33	64,19%	29,12%	6,69%	100,00%	0,372
34	54,60%	37,38%	8,03%	100,00%	0,704
35	97,12%	0,79%	2,09%	100,00%	0,471
36	54,60%	37,38%	8,03%	100,00%	0,509
37	54,60%	37,38%	8,03%	100,00%	0,366
38	76,10%	18,88%	5,03%	100,00%	0,268
39	97,12%	0,79%	2,09%	100,00%	0,240
40	97,12%	0,79%	2,09%	100,00%	0,209
41	67,18%	28,34%	4,48%	100,00%	0,240
42	67,18%	28,34%	4,48%	100,00%	0,287
43	64,95%	33,65%	1,40%	100,00%	0,328
44	69,28%	29,23%	1,49%	100,00%	0,266
45	69,28%	29,23%	1,49%	100,00%	0,270
46	69,28%	29,23%	1,49%	100,00%	0,311

Representativity

The declared unit of the LCA is 1 kg plastic element. The LCA has been conducted for each product, and the results have been scaled to 1 kg by dividing by the weight of each product. The LCA covers the production of plastic elements on the production sites located in Vestermarksvej 5, 6630 Rødding, Denmark and Lindholmvej 15, 3550 Slangerup, Denmark. Production data are based on a weighted average of the two factories for the year 2024 (the weighting is performed based on the produced volume in kg at each factory). Background data are based on ecoinvent v3.11 (cut-off by classification method) and are less than 10 years old in accordance with EN 15804:2012+A2:2019. The data quality has been assessed according to Annex E, Table E.2 in EN 15804:2012+A2:2019. Overall, the data quality has been evaluated as 'good', except for products containing TPE. For these products (group 15 and 19), the data quality has been evaluated as 'fair', since the applied datasets for manufacturing and disposal of TPE have a 'poor' technological representativeness.

The geographical scope of the LCA is Denmark (production, use and end-of-life).

Hazardous substances

The declared Harpun plastic elements for the construction sector and industry do not contain substances listed on the ”Candidate List of Substances of Very High Concern for authorisation”.

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

Product(s) use

Harpun plastic elements are high-quality plastic accessories used for leveling, spacing, supporting, and sound reduction in the building sector and industry. They include wedges, flooring wedge systems, adjustment panels, wall brackets, spacers, concrete aids, sound reducers, QuickFix spacers, and terrace supports for the precise installation of floors, windows, doors, and concrete elements, among others.

Essential characteristics

Technical information can be obtained by contacting the manufacturer or on the manufacturers website:

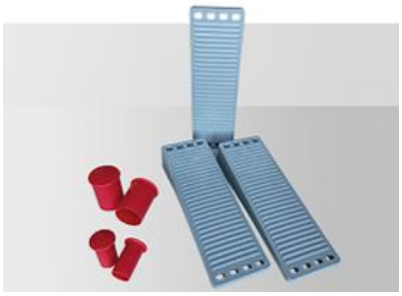
www.harpun.com

Reference Service Life (RSL)

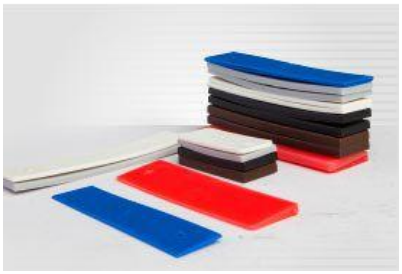
Not defined.

Picture of product(s)

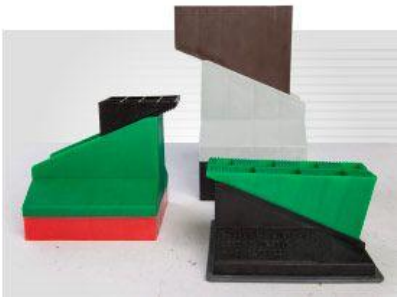
Concrete accessories:



Glass panels:



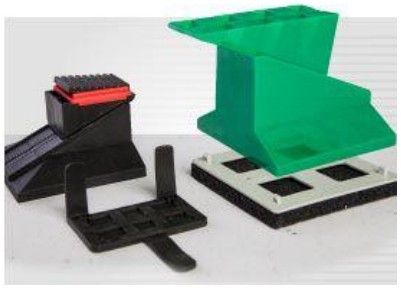
Flooring wedge systems:



Adjustment pieces:

Wedges:

Sound reducers:



Mix boxes and bags:

Wall brackets:

QuickFix/QuickFix Mini:

Terrace concept:

LCA background

Declared unit

The LCI and LCIA results in this EPD relate to 1 kg of plastic element.

Name	Value	Unit
Declared unit	1	kg

Functional unit

Not defined

Material properties

Name	Mass factor (kg/declared unit)
All declared products	1

PCR

This EPD is developed according to the core rules for the product category of construction products in EN 15804:2012+A2:2019.

Energy modelling principles

Foreground system: In A3, the product is produced using a combination of power from Harpun's own solar installations and a residual mix from the grid.

Information about the energy mix in the foreground system:

Energy mix	EF	Unit
Residual grid mix	0,703	kg CO_2e/kWh
Own solar installation	0,031	kg CO_2e/kWh

Background system: Upstream processes are modelled using consumption/grid mix. Downstream processes are modelled using consumption/grid mix.

System boundary

This EPD is based on an LCA with the following system boundary: cradle-to-gate with options, modules C1-C4 and D. 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 practice, no known processes have been cut-off in the LCA model.

Product stage (A1-A3) includes:

A1 – Extraction and processing of raw materials

Module A1 includes the extraction and processing of the raw materials for the production. Furthermore, module A1 also includes the production of packaging for the raw materials. All transport of the raw materials until they reach Harpun's suppliers is included in A1. In module A1 all processes use national or regional average grid mixes, since the background datasets from ecoinvent v3.11 are not available with residual mixes. Pre-consumer recycled materials in the products are modelled as virgin materials due to lack of data substantiating a lower environmental impact for pre-consumer recycled materials. Post-consumer recycled

materials in the products are modelled as follows: all processes after the end-of-waste point in the previous life cycle are allocated to the post-consumer recycled material.

A2 – Transport to the production site

Module A2 includes the transportation of raw materials from Harpun's suppliers to Harpun's production facilities in Rødding and Slangerup. A weighted average was calculated from the distances between Harpun's suppliers, and each production site based on the number of deliveries to each site.

A3 – Manufacturing processes

Module A3 includes all relevant processes taking place at Harpun's two production sites in Rødding and Slangerup. The production is carried out by injection-molding of plastic granules. Electricity is the only energy source consumed at Harpun's production facilities since heating comes from heat pumps. Electricity and other processes at Harpun were allocated to each product based on physical allocation (kg produced in 2024). The residual mix for Denmark was used for modelling electricity consumed from the grid. Furthermore, Harpun consumes some electricity produced on their own solar installations. Treatment of produced waste until it reaches its End-of-Waste state is included in module A3. In line with EN 15804, there is no crediting in module D (or any other module) related to the waste treated in A3. Furthermore, module A3 includes the production and delivery of product packaging (Euro pallets, cardboard boxes and LDPE bags/film). Euro pallets are assumed to be reused 25 times, and consequently only 1/25 of the environmental impact of the consumed Euro pallets is attributed to Harpun's products.

Construction process stage (A4-A5) includes:

A4 – Transportation to the construction site

Module A4 includes the transportation of the products incl. packaging to the customer. The distance to the customer is highly variable, and therefore a conservative distance of 300 km to a Danish customer is considered. This can be adapted by the user of the EPD since the environmental impact in module A4 is directly correlated with the distance in kilometers.

A5 – Installation

Module A5 includes the installation of the products and packaging waste disposal. Installation is carried out manually without any environmental impacts. Collection and waste management of packaging waste is accounted for. 96% of the pallets consumed are reused without any environmental impact due to the assumption of Euro pallets being reused 25 times. The consumed amount of euro pallet (1/25 = 4%) is sent for incineration with energy recovery. For cardboard and plastic the recycling rates are based on recycling rates according to MST (2025). The remaining cardboard and plastic waste is sent to incineration with energy recovery. The waste materials have been treated until the end-of-waste state in module A5. The recovered materials and energy from recycling and incineration of waste, have been accounted for in module D.

End of Life (C1-C4) includes:

C1 – Dismantling

The dismantling of the products at end-of-life is done manually without any environmental impacts.

C2 – Transportation for waste treatment

Module C2 includes the transportation of waste from the place of dismantling to the waste treatment facilities.

C3 – Incineration and recycling

Module C3 includes the sorting and recycling or incineration with energy recovery of Harpun products after their useful life.

In module C3 and C4, the percentages of each waste fraction being recycled, incinerated or landfilled are based on statistics on treatment methods of construction waste from DST (2025). The product waste has been treated until the end-of-waste state in module C3. The recovered materials and energy from recycling and incineration of waste, have been accounted for in module D.

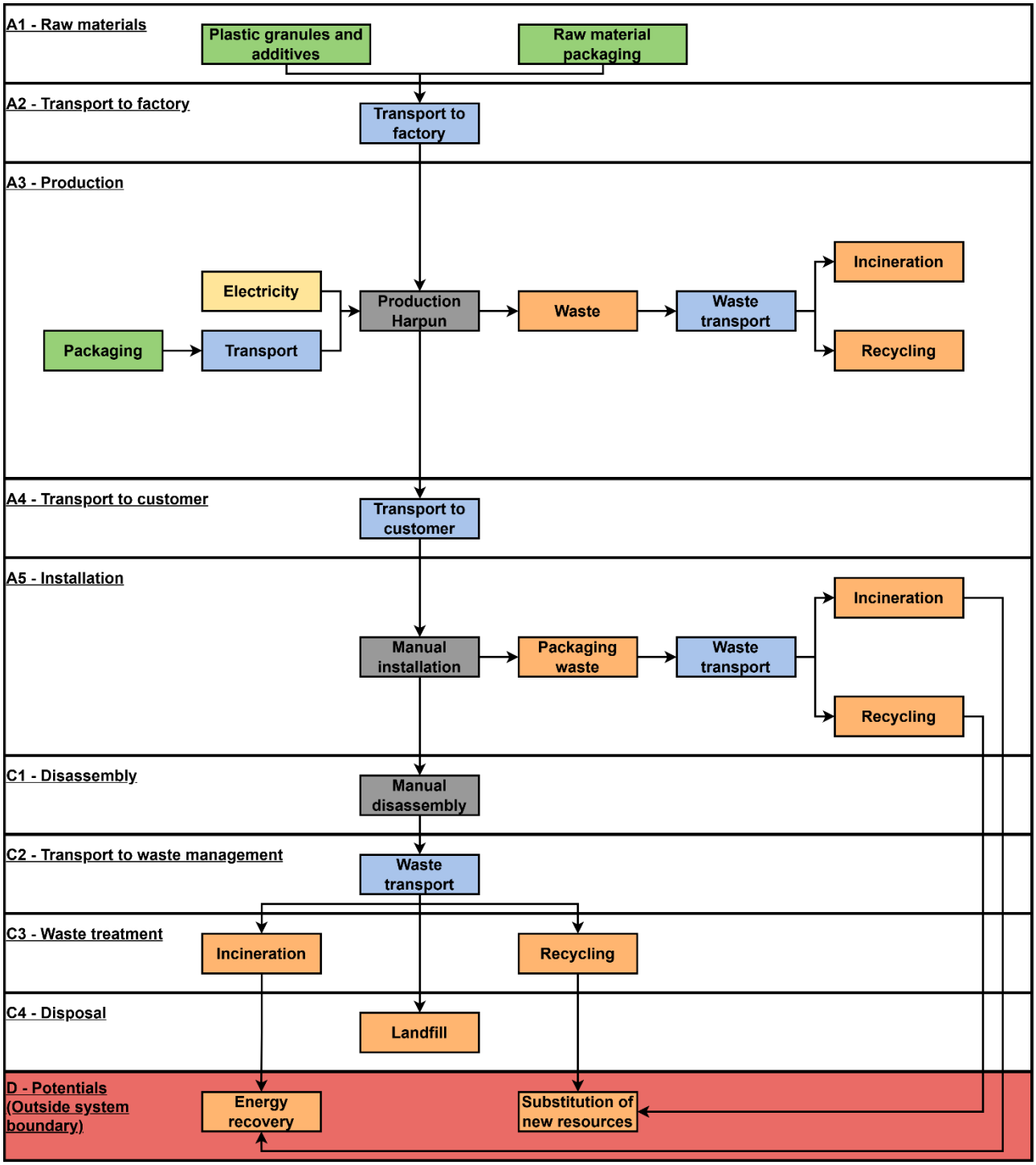
C4 – Landfill disposal

Module C4 includes the disposal of waste into landfills of Harpun products after their useful life. The percentages of each waste fraction being recycled, incinerated or landfilled are based on statistics on treatment methods of construction waste from DST (2025).

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

Module D includes the credits related to energy recovered from incineration and materials recovered from recycling processes in A5 and C3. The recovered energy substitutes electricity (Danish average grid mix) and heat (based on biomass furnace). The efficiency of incineration is 73% for thermal recovery and 17% for electrical recovery based on Denmark's largest waste incineration plant, Vestforbrænding. This means an overall efficiency of 90% with 10% loss. The net heating value of the waste materials have been applied. Materials that enter the life cycle as secondary (recycled) materials are not credited in module D. Materials that enter the life cycle as primary (virgin) materials are credited in module D. To calculate the amount of substituted virgin material, the LCA accounts for any losses in the sorting and recycling processes.

Flowdiagram



LCA results

LCA results for Group 1:

Representative for the following article numbers: 12404, 12402. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 1)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	2,89E+00	5,94E-03	1,00E+00	3,42E-02	1,31E-01	0,00E+00	6,24E-03	2,13E-01	7,10E-03	-9,22E-01
GWP-fossil	[kg CO_2 eq.]	2,91E+00	5,94E-03	1,11E+00	3,42E-02	4,57E-03	0,00E+00	6,24E-03	2,13E-01	7,10E-03	-9,21E-01
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-1,10E-01	0,00E+00	1,26E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	2,15E-03	2,15E-06	4,05E-04	1,24E-05	6,14E-07	0,00E+00	2,17E-06	1,76E-04	1,56E-07	-3,54E-04
ODP	[kg CFC 11 eq.]	3,52E-08	2,98E-12	2,06E-09	1,72E-11	1,39E-12	0,00E+00	3,25E-12	1,66E-10	6,40E-13	-1,67E-09
AP	[mol H^+ eq.]	1,25E-02	2,42E-05	3,23E-03	1,40E-04	8,67E-06	0,00E+00	2,87E-05	7,06E-04	4,58E-06	-2,67E-03
EP-freshwater	[kg P eq.]	7,25E-05	4,53E-08	5,78E-05	2,61E-07	2,23E-08	0,00E+00	4,74E-08	4,29E-06	5,55E-09	-1,29E-05
EP-marine	[kg N eq.]	2,53E-03	8,99E-06	6,81E-04	5,18E-05	3,39E-06	0,00E+00	1,12E-05	2,18E-04	2,39E-06	-5,75E-04
EP-terrestrial	[mol N eq.]	2,78E-02	9,88E-05	7,67E-03	5,69E-04	3,66E-05	0,00E+00	1,23E-04	2,31E-03	2,08E-05	-6,21E-03
POCP	[kg NMVOC eq.]	1,36E-02	3,74E-05	2,42E-03	2,15E-04	1,24E-05	0,00E+00	4,31E-05	8,61E-04	9,24E-06	-5,88E-03
ADPm[1]	[kg Sb eq.]	9,80E-05	1,68E-08	5,89E-06	9,67E-08	6,48E-09	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-4,94E-06
ADPf[1]	[MJ]	6,73E+01	8,74E-02	1,47E+01	5,03E-01	1,78E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-3,61E+01
WDP[1]	[m^3 world eq. deprived]	6,27E-01	3,97E-04	7,77E-02	2,29E-03	1,22E-04	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-5,19E-01
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 1)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	1,29E-07	6,13E-10	1,54E-08	3,53E-09	1,47E-10	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-1,92E-08
IRP[2]	[kBq U235 eq.]	4,83E-02	3,60E-05	3,18E-02	2,08E-04	2,24E-05	0,00E+00	4,03E-05	1,95E-03	1,07E-05	-1,22E-02
ETP-fw[1]	[CTUe]	2,29E+01	1,02E-02	2,41E+00	5,90E-02	1,93E-02	0,00E+00	1,18E-02	1,29E+00	2,99E-03	-1,83E+00
HTP-c[1]	[CTUh]	9,36E-10	9,75E-13	1,26E-10	5,61E-12	9,69E-13	0,00E+00	1,59E-12	2,79E-10	1,64E-13	-1,48E-10
HTP-nc[1]	[CTUh]	5,17E-08	5,63E-11	6,95E-09	3,24E-10	3,37E-11	0,00E+00	6,27E-11	2,85E-09	2,12E-11	-5,05E-09
SQP[1]	-	7,77E+00	8,79E-02	2,94E+00	5,06E-01	6,86E-03	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-3,02E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 1)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	1,94E+00	1,35E-03	7,52E-01	7,77E-03	7,83E-04	0,00E+00	1,50E-03	1,20E-01	4,28E-04	-6,21E-01
PERM	[MJ]	1,43E-01	0,00E+00	1,00E+00	0,00E+00	-1,14E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,08E+00	1,35E-03	1,75E+00	7,77E-03	-1,14E+00	0,00E+00	1,50E-03	1,20E-01	4,28E-04	-6,21E-01
PENRE	[MJ]	6,73E+01	8,74E-02	1,47E+01	5,03E-01	1,78E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-3,61E+01
PENRM	[MJ]	2,31E+01	0,00E+00	-1,16E-01	0,00E+00	-5,56E-02	0,00E+00	0,00E+00	-2,14E+01	-1,61E+00	0,00E+00
PENRT	[MJ]	9,05E+01	8,74E-02	1,45E+01	5,03E-01	-3,78E-02	0,00E+00	9,01E-02	-1,92E+01	-1,59E+00	-3,61E+01
SM	[kg]	0,00E+00	0,00E+00	5,83E-02	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
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
FW	[m^3]	1,42E+01	1,04E-02	2,52E+00	6,00E-02	5,56E-03	0,00E+00	1,14E-02	8,82E-01	5,19E-03	-3,06E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 1)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	9,25E-04	1,91E-06	1,58E-03	1,10E-05	1,43E-04	0,00E+00	1,78E-06	1,00E-03	1,37E-06	2,92E-03
NHWD	[kg]	2,18E-01	7,54E-03	3,42E-02	4,34E-02	5,55E-04	0,00E+00	5,60E-03	7,38E-02	7,01E-02	-1,64E-02
RWD	[kg]	3,32E-05	2,41E-08	2,36E-05	1,38E-07	1,74E-08	0,00E+00	2,75E-08	1,31E-06	6,04E-09	-8,75E-06
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	5,83E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	1,88E-02	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	1,63E-01	0,00E+00	2,80E-02	0,00E+00	0,00E+00	3,90E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	6,98E-01	0,00E+00	1,20E-01	0,00E+00	0,00E+00	1,68E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 1)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	3,45E-02
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 2:

Representative for the following article numbers: 12480, 12482. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 2)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	2,35E+00	6,75E-02	8,52E-01	3,97E-02	3,98E-01	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-8,12E-01
GWP-fossil	[kg CO_2 eq.]	2,37E+00	6,75E-02	1,20E+00	3,97E-02	3,14E-02	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-8,12E-01
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-3,50E-01	0,00E+00	3,66E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	2,12E-03	2,44E-05	8,57E-04	1,43E-05	2,23E-06	0,00E+00	2,17E-06	1,76E-04	1,57E-07	-4,07E-04
ODP	[kg CFC 11 eq.]	5,49E-09	3,39E-11	1,00E-09	1,99E-11	4,68E-12	0,00E+00	3,25E-12	1,66E-10	6,41E-13	-1,98E-09
AP	[mol H^+ eq.]	8,19E-03	2,76E-04	3,43E-03	1,62E-04	2,90E-05	0,00E+00	2,87E-05	7,07E-04	4,59E-06	-2,73E-03
EP-freshwater	[kg P eq.]	4,95E-05	5,15E-07	6,16E-05	3,03E-07	7,66E-08	0,00E+00	4,74E-08	4,29E-06	5,56E-09	-1,51E-05
EP-marine	[kg N eq.]	1,49E-03	1,02E-04	7,66E-04	6,01E-05	1,14E-05	0,00E+00	1,12E-05	2,18E-04	2,49E-06	-6,40E-04
EP-terrestrial	[mol N eq.]	1,59E-02	1,12E-03	8,33E-03	6,60E-04	1,23E-04	0,00E+00	1,23E-04	2,32E-03	2,08E-05	-6,83E-03
POCP	[kg NMVOC eq.]	1,47E-02	4,25E-04	2,90E-03	2,50E-04	4,06E-05	0,00E+00	4,31E-05	8,61E-04	9,57E-06	-8,27E-03
ADPm[1]	[kg Sb eq.]	1,26E-05	1,91E-07	2,70E-06	1,12E-07	2,15E-08	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-3,96E-06
ADPf[1]	[MJ]	7,49E+01	9,93E-01	1,67E+01	5,84E-01	5,81E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-4,26E+01
WDP[1]	[m^3 world eq. deprived]	2,07E+00	4,52E-03	1,82E-01	2,65E-03	4,67E-04	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-1,18E+00
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 2)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	5,19E-08	6,96E-09	1,62E-08	4,09E-09	4,69E-10	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-1,96E-08
IRP[2]	[kBq U235 eq.]	8,86E-02	4,10E-04	3,63E-02	2,41E-04	7,07E-05	0,00E+00	4,03E-05	1,95E-03	1,11E-05	-1,36E-02
ETP-fw[1]	[CTUe]	6,60E+00	1,16E-01	2,36E+00	6,85E-02	6,22E-02	0,00E+00	1,18E-02	1,29E+00	3,32E-03	-1,33E+00
HTP-c[1]	[CTUh]	4,76E-10	1,11E-11	1,37E-10	6,51E-12	3,79E-12	0,00E+00	1,59E-12	2,79E-10	1,72E-13	-8,53E-11
HTP-nc[1]	[CTUh]	1,47E-08	6,40E-10	6,43E-09	3,76E-10	1,21E-10	0,00E+00	6,27E-11	2,85E-09	2,46E-11	-3,85E-09
SQP[1]	-	7,73E+00	1,00E+00	5,63E+00	5,88E-01	2,48E-02	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-4,87E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 2)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	3,06E+00	1,53E-02	1,34E+00	9,01E-03	2,60E-03	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-1,02E+00
PERM	[MJ]	1,43E-01	0,00E+00	3,17E+00	0,00E+00	-3,32E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	3,20E+00	1,53E-02	4,51E+00	9,01E-03	-3,31E+00	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-1,02E+00
PENRE	[MJ]	7,49E+01	9,93E-01	1,67E+01	5,84E-01	5,81E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-4,26E+01
PENRM	[MJ]	4,26E+01	0,00E+00	3,27E-01	0,00E+00	-4,99E-01	0,00E+00	0,00E+00	-3,95E+01	-2,97E+00	0,00E+00
PENRT	[MJ]	1,18E+02	9,93E-01	1,70E+01	5,84E-01	-4,41E-01	0,00E+00	9,01E-02	-3,73E+01	-2,96E+00	-4,26E+01
SM	[kg]	6,24E-01	0,00E+00	1,95E-01	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
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
FW	[m^3]	1,88E+01	1,18E-01	3,35E+00	6,96E-02	1,87E-02	0,00E+00	1,14E-02	8,82E-01	5,36E-03	-3,39E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 2)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	8,62E-04	2,17E-05	2,30E-03	1,28E-05	5,89E-04	0,00E+00	1,78E-06	1,05E-03	1,49E-06	2,92E-03
NHWD	[kg]	1,65E-01	8,57E-02	5,14E-02	5,04E-02	1,84E-03	0,00E+00	5,60E-03	7,38E-02	7,01E-02	9,34E-02
RWD	[kg]	5,20E-05	2,73E-07	2,65E-05	1,61E-07	5,42E-08	0,00E+00	2,75E-08	1,31E-06	6,22E-09	-9,49E-06
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,69E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	5,68E-02	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	3,01E-01	0,00E+00	1,23E-01	0,00E+00	0,00E+00	7,22E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,29E+00	0,00E+00	5,26E-01	0,00E+00	0,00E+00	3,10E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 2)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	1,00E-01
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 3:

Representative for the following article numbers: 10511, 10480, 10427, 10390, 10526, 10542, 10508, 10493, 10428, 10424, 10218, 10505, 10474, 10421, 10477, 10481, 10222, 10504, 10221, 10534, 10434, 10548, 10547, 10517, 10533, 10487, 10495, 10432, 10544, 10514, 10530, 10484, 10430, 10512, 10470, 10527, 10546, 10422, 10475, 10506, 10540, 10420, 10525, 10426, 10479, 10216, 10510, 10429, 10483, 10529, 10513, 10247, 10431, 10486, 10516, 10391. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 3)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	2,34E+00	6,77E-02	8,95E-01	3,76E-02	2,94E-01	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-8,09E-01
GWP-fossil	[kg CO_2 eq.]	2,35E+00	6,77E-02	1,16E+00	3,76E-02	1,03E-02	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-8,09E-01
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-2,67E-01	0,00E+00	2,84E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	2,14E-03	2,45E-05	7,67E-04	1,36E-05	1,54E-06	0,00E+00	2,17E-06	1,76E-04	1,57E-07	-3,89E-04
ODP	[kg CFC 11 eq.]	5,43E-09	3,40E-11	9,24E-10	1,89E-11	3,59E-12	0,00E+00	3,25E-12	1,66E-10	6,41E-13	-1,87E-09
AP	[mol H^+ eq.]	7,77E-03	2,76E-04	3,27E-03	1,53E-04	2,23E-05	0,00E+00	2,87E-05	7,07E-04	4,59E-06	-2,69E-03
EP-freshwater	[kg P eq.]	4,86E-05	5,17E-07	6,01E-05	2,87E-07	5,65E-08	0,00E+00	4,74E-08	4,29E-06	5,56E-09	-1,48E-05
EP-marine	[kg N eq.]	1,47E-03	1,02E-04	7,28E-04	5,69E-05	8,73E-06	0,00E+00	1,12E-05	2,18E-04	2,49E-06	-6,30E-04
EP-terrestrial	[mol N eq.]	1,57E-02	1,13E-03	7,96E-03	6,26E-04	9,40E-05	0,00E+00	1,23E-04	2,32E-03	2,08E-05	-6,67E-03
POCP	[kg NMVOC eq.]	1,46E-02	4,26E-04	2,70E-03	2,37E-04	3,18E-05	0,00E+00	4,31E-05	8,61E-04	9,57E-06	-8,25E-03
ADPm[1]	[kg Sb eq.]	1,26E-05	1,91E-07	2,54E-06	1,06E-07	1,67E-08	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-3,94E-06
ADPf[1]	[MJ]	7,49E+01	9,96E-01	1,58E+01	5,53E-01	4,57E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-4,25E+01
WDP[1]	[m^3 world eq. deprived]	2,06E+00	4,53E-03	1,61E-01	2,52E-03	3,08E-04	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-1,18E+00
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 3)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	5,03E-08	6,98E-09	1,47E-08	3,88E-09	3,80E-10	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-1,91E-08
IRP[2]	[kBq U235 eq.]	8,81E-02	4,11E-04	3,51E-02	2,28E-04	5,64E-05	0,00E+00	4,03E-05	1,95E-03	1,11E-05	-1,31E-02
ETP-fw[1]	[CTUe]	6,39E+00	1,17E-01	2,12E+00	6,49E-02	4,99E-02	0,00E+00	1,18E-02	1,29E+00	3,32E-03	-1,32E+00
HTP-c[1]	[CTUh]	4,64E-10	1,11E-11	1,26E-10	6,17E-12	2,45E-12	0,00E+00	1,59E-12	2,79E-10	1,72E-13	-8,26E-11
HTP-nc[1]	[CTUh]	1,45E-08	6,41E-10	6,12E-09	3,56E-10	8,61E-11	0,00E+00	6,27E-11	2,85E-09	2,46E-11	-3,75E-09
SQP[1]	-	7,63E+00	1,00E+00	4,99E+00	5,57E-01	1,73E-02	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-4,24E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1{,}95*10^{2}$ or 195, while 1,12E-11 is the same as $1{,}12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 3)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	3,04E+00	1,54E-02	1,20E+00	8,54E-03	1,97E-03	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-8,34E-01
PERM	[MJ]	1,43E-01	0,00E+00	2,41E+00	0,00E+00	-2,55E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	3,19E+00	1,54E-02	3,61E+00	8,54E-03	-2,55E+00	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-8,34E-01
PENRE	[MJ]	7,49E+01	9,96E-01	1,58E+01	5,53E-01	4,57E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-4,25E+01
PENRM	[MJ]	4,26E+01	0,00E+00	-5,66E-02	0,00E+00	-1,15E-01	0,00E+00	0,00E+00	-3,95E+01	-2,97E+00	0,00E+00
PENRT	[MJ]	1,18E+02	9,96E-01	1,57E+01	5,53E-01	-6,96E-02	0,00E+00	9,01E-02	-3,73E+01	-2,96E+00	-4,25E+01
SM	[kg]	6,26E-01	0,00E+00	1,47E-01	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
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
FW	[m^3]	1,87E+01	1,19E-01	3,07E+00	6,59E-02	1,40E-02	0,00E+00	1,14E-02	8,82E-01	5,36E-03	-3,28E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1{,}95*10^{2}$ or 195, while 1,12E-11 is the same as $1{,}12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 3)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	8,31E-04	2,18E-05	2,21E-03	1,21E-05	3,60E-04	0,00E+00	1,78E-06	1,05E-03	1,49E-06	2,95E-03
NHWD	[kg]	1,53E-01	8,59E-02	4,62E-02	4,77E-02	1,42E-03	0,00E+00	5,60E-03	7,38E-02	7,01E-02	9,41E-02
RWD	[kg]	5,16E-05	2,74E-07	2,56E-05	1,52E-07	4,37E-08	0,00E+00	2,75E-08	1,31E-06	6,22E-09	-9,25E-06
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,21E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	4,93E-02	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	3,01E-01	0,00E+00	6,68E-02	0,00E+00	0,00E+00	7,22E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,29E+00	0,00E+00	2,87E-01	0,00E+00	0,00E+00	3,10E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^{2}$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 3)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	7,74E-02
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 4:

Representative for the following article numbers: 13010, 13011. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 4)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	3,75E+00	3,12E-02	8,83E-01	3,99E-02	4,02E-01	0,00E+00	6,24E-03	2,19E-01	8,51E-03	-2,12E+00
GWP-fossil	[kg CO_2 eq.]	3,77E+00	3,12E-02	1,25E+00	3,98E-02	1,41E-02	0,00E+00	6,24E-03	2,19E-01	8,51E-03	-2,12E+00
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-3,71E-01	0,00E+00	3,88E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	4,56E-04	1,13E-05	9,17E-04	1,44E-05	2,11E-06	0,00E+00	2,17E-06	1,76E-04	1,57E-07	6,50E-04
ODP	[kg CFC 11 eq.]	1,30E-09	1,57E-11	8,14E-10	2,00E-11	4,93E-12	0,00E+00	3,25E-12	1,66E-10	6,41E-13	1,51E-10
AP	[mol H^+ eq.]	1,60E-02	1,27E-04	3,73E-03	1,63E-04	3,07E-05	0,00E+00	2,87E-05	7,07E-04	4,64E-06	-8,84E-03
EP-freshwater	[kg P eq.]	1,06E-05	2,38E-07	6,05E-05	3,04E-07	7,76E-08	0,00E+00	4,74E-08	4,29E-06	5,57E-09	2,12E-05
EP-marine	[kg N eq.]	2,51E-03	4,73E-05	8,23E-04	6,03E-05	1,20E-05	0,00E+00	1,12E-05	2,18E-04	3,54E-06	-1,33E-03
EP-terrestrial	[mol N eq.]	2,71E-02	5,19E-04	8,85E-03	6,63E-04	1,29E-04	0,00E+00	1,23E-04	2,31E-03	2,10E-05	-1,45E-02
POCP	[kg NMVOC eq.]	1,15E-02	1,96E-04	2,69E-03	2,51E-04	4,38E-05	0,00E+00	4,31E-05	8,61E-04	9,66E-06	-6,49E-03
ADPm[1]	[kg Sb eq.]	1,22E-06	8,83E-08	2,18E-06	1,13E-07	2,30E-08	0,00E+00	2,04E-08	9,94E-07	1,38E-09	3,10E-06
ADPf[1]	[MJ]	8,52E+01	4,59E-01	1,67E+01	5,86E-01	6,28E-02	0,00E+00	9,01E-02	2,15E+00	1,63E-02	-5,39E+01
WDP[1]	[m^3 world eq. deprived]	2,26E+00	2,09E-03	1,83E-01	2,67E-03	4,24E-04	0,00E+00	3,73E-04	3,50E-02	-3,68E-04	-1,54E+00
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 4)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	1,69E-07	3,22E-09	2,09E-08	4,11E-09	5,22E-10	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-1,02E-07
IRP[2]	[kBq U235 eq.]	4,67E-03	1,89E-04	3,26E-02	2,42E-04	7,75E-05	0,00E+00	4,03E-05	1,95E-03	1,16E-05	4,67E-02
ETP-fw[1]	[CTUe]	2,54E+00	5,39E-02	2,28E+00	6,88E-02	6,87E-02	0,00E+00	1,18E-02	1,31E+00	6,76E-03	1,47E+00
HTP-c[1]	[CTUh]	3,70E-10	5,12E-12	1,36E-10	6,54E-12	3,36E-12	0,00E+00	1,59E-12	2,79E-10	1,95E-13	2,09E-11
HTP-nc[1]	[CTUh]	4,78E-09	2,96E-10	6,21E-09	3,78E-10	1,18E-10	0,00E+00	6,27E-11	2,88E-09	2,51E-11	2,87E-09
SQP[1]	-	1,95E+00	4,62E-01	5,98E+00	5,90E-01	2,38E-02	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-1,91E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 4)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	6,10E-01	7,09E-03	1,35E+00	9,05E-03	2,71E-03	0,00E+00	1,50E-03	1,20E-01	4,57E-04	4,27E-01
PERM	[MJ]	1,43E-01	0,00E+00	3,35E+00	0,00E+00	-3,49E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	7,53E-01	7,09E-03	4,70E+00	9,05E-03	-3,49E+00	0,00E+00	1,50E-03	1,20E-01	4,57E-04	4,27E-01
PENRE	[MJ]	8,52E+01	4,59E-01	1,67E+01	5,86E-01	6,28E-02	0,00E+00	9,01E-02	2,15E+00	1,63E-02	-5,39E+01
PENRM	[MJ]	3,89E+01	0,00E+00	-1,49E-02	0,00E+00	-1,57E-01	0,00E+00	0,00E+00	-3,60E+01	-2,71E+00	0,00E+00
PENRT	[MJ]	1,24E+02	4,59E-01	1,66E+01	5,86E-01	-9,41E-02	0,00E+00	9,01E-02	-3,39E+01	-2,70E+00	-5,39E+01
SM	[kg]	0,00E+00	0,00E+00	1,65E-01	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
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
FW	[m^3]	1,40E+00	5,47E-02	2,56E+00	6,99E-02	1,93E-02	0,00E+00	1,14E-02	8,82E-01	5,59E-03	7,91E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^{2}$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 4)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	1,73E-03	1,01E-05	2,42E-03	1,28E-05	4,94E-04	0,00E+00	1,78E-06	1,03E-03	1,28E-06	8,90E-03
NHWD	[kg]	9,93E-02	3,96E-02	4,91E-02	5,06E-02	1,95E-03	0,00E+00	5,60E-03	7,38E-02	7,01E-02	4,87E-02
RWD	[kg]	3,43E-06	1,26E-07	2,44E-05	1,61E-07	6,01E-08	0,00E+00	2,75E-08	1,31E-06	6,46E-09	3,83E-05
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,65E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	6,78E-02	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	2,74E-01	0,00E+00	9,16E-02	0,00E+00	0,00E+00	6,59E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,18E+00	0,00E+00	3,93E-01	0,00E+00	0,00E+00	2,83E-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: $1,95*10^{2}$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 4)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	1,06E-01
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 5:

Representative for the following article numbers: 10839, 10843, 10847, 10838, 10836, 10834. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 5)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	2,40E+00	7,16E-02	8,10E-01	3,99E-02	4,03E-01	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-5,58E-01
GWP-fossil	[kg CO_2 eq.]	2,42E+00	7,16E-02	1,18E+00	3,99E-02	1,41E-02	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-5,58E-01
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-3,72E-01	0,00E+00	3,89E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	1,84E-03	2,59E-05	8,60E-04	1,44E-05	1,89E-06	0,00E+00	2,17E-06	1,76E-04	1,57E-07	-2,89E-04
ODP	[kg CFC 11 eq.]	6,02E-09	3,60E-11	9,84E-10	2,01E-11	4,29E-12	0,00E+00	3,25E-12	1,66E-10	6,41E-13	-1,40E-09
AP	[mol H^+ eq.]	8,06E-03	2,92E-04	3,35E-03	1,63E-04	2,67E-05	0,00E+00	2,87E-05	7,07E-04	4,59E-06	-1,89E-03
EP-freshwater	[kg P eq.]	4,98E-05	5,47E-07	6,12E-05	3,05E-07	6,87E-08	0,00E+00	4,74E-08	4,29E-06	5,56E-09	-1,05E-05
EP-marine	[kg N eq.]	1,51E-03	1,08E-04	7,58E-04	6,04E-05	1,05E-05	0,00E+00	1,12E-05	2,18E-04	2,49E-06	-4,44E-04
EP-terrestrial	[mol N eq.]	1,61E-02	1,19E-03	8,22E-03	6,64E-04	1,13E-04	0,00E+00	1,23E-04	2,32E-03	2,08E-05	-4,77E-03
POCP	[kg NMVOC eq.]	1,42E-02	4,51E-04	2,76E-03	2,51E-04	3,80E-05	0,00E+00	4,31E-05	8,61E-04	9,57E-06	-5,68E-03
ADPm[1]	[kg Sb eq.]	1,27E-05	2,03E-07	2,62E-06	1,13E-07	2,00E-08	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-2,72E-06
ADPf[1]	[MJ]	7,55E+01	1,05E+00	1,61E+01	5,87E-01	5,48E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-2,91E+01
WDP[1]	[m^3 world eq. deprived]	1,84E+00	4,79E-03	1,60E-01	2,67E-03	3,75E-04	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-8,10E-01
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 5)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	5,34E-08	7,39E-09	1,57E-08	4,12E-09	4,52E-10	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-1,37E-08
IRP[2]	[kBq U235 eq.]	7,51E-02	4,35E-04	3,51E-02	2,42E-04	6,90E-05	0,00E+00	4,03E-05	1,95E-03	1,11E-05	-9,54E-03
ETP-fw[1]	[CTUe]	7,27E+00	1,24E-01	2,29E+00	6,89E-02	5,93E-02	0,00E+00	1,18E-02	1,29E+00	3,32E-03	-9,23E-01
HTP-c[1]	[CTUh]	5,01E-10	1,18E-11	1,35E-10	6,55E-12	2,98E-12	0,00E+00	1,59E-12	2,79E-10	1,72E-13	-6,02E-11
HTP-nc[1]	[CTUh]	1,48E-08	6,79E-10	6,34E-09	3,78E-10	1,04E-10	0,00E+00	6,27E-11	2,85E-09	2,46E-11	-2,69E-09
SQP[1]	-	7,58E+00	1,06E+00	5,75E+00	5,91E-01	2,11E-02	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-4,20E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 5)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	2,77E+00	1,63E-02	1,34E+00	9,07E-03	2,41E-03	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-8,76E-01
PERM	[MJ]	1,43E-01	0,00E+00	3,38E+00	0,00E+00	-3,52E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,92E+00	1,63E-02	4,72E+00	9,07E-03	-3,52E+00	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-8,76E-01
PENRE	[MJ]	7,55E+01	1,05E+00	1,61E+01	5,87E-01	5,48E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-2,91E+01
PENRM	[MJ]	4,26E+01	0,00E+00	-5,64E-04	0,00E+00	-1,71E-01	0,00E+00	0,00E+00	-3,95E+01	-2,97E+00	0,00E+00
PENRT	[MJ]	1,18E+02	1,05E+00	1,61E+01	5,87E-01	-1,16E-01	0,00E+00	9,01E-02	-3,73E+01	-2,96E+00	-2,91E+01
SM	[kg]	6,41E-01	0,00E+00	2,06E-01	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
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
FW	[m^3]	1,60E+01	1,26E-01	3,08E+00	7,00E-02	1,71E-02	0,00E+00	1,14E-02	8,82E-01	5,36E-03	-2,37E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 5)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	8,23E-04	2,31E-05	2,33E-03	1,29E-05	4,41E-04	0,00E+00	1,78E-06	1,05E-03	1,49E-06	1,98E-03
NHWD	[kg]	1,54E-01	9,09E-02	5,06E-02	5,07E-02	1,71E-03	0,00E+00	5,60E-03	7,38E-02	7,01E-02	6,32E-02
RWD	[kg]	4,65E-05	2,90E-07	2,59E-05	1,62E-07	5,35E-08	0,00E+00	2,75E-08	1,31E-06	6,22E-09	-6,63E-06
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,80E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	5,80E-02	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	3,01E-01	0,00E+00	8,63E-02	0,00E+00	0,00E+00	7,22E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,29E+00	0,00E+00	3,71E-01	0,00E+00	0,00E+00	3,10E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 5)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	1,06E-01
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 6:

Representative for the following article numbers: 10857. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 6)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	5,80E-01	2,76E-02	7,57E-01	3,92E-02	3,69E-01	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-1,25E-02
GWP-fossil	[kg CO_2 eq.]	5,96E-01	2,76E-02	1,10E+00	3,92E-02	1,29E-02	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-1,25E-02
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-3,39E-01	0,00E+00	3,56E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	8,57E-04	9,98E-06	7,59E-04	1,42E-05	1,73E-06	0,00E+00	2,17E-06	1,76E-04	1,57E-07	-5,53E-05
ODP	[kg CFC 11 eq.]	1,64E-07	1,39E-11	7,53E-09	1,97E-11	3,93E-12	0,00E+00	3,25E-12	1,66E-10	6,41E-13	-2,97E-10
AP	[mol H^+ eq.]	2,44E-03	1,13E-04	3,07E-03	1,60E-04	2,44E-05	0,00E+00	2,87E-05	7,07E-04	4,59E-06	-1,20E-04
EP-freshwater	[kg P eq.]	2,30E-05	2,11E-07	5,95E-05	2,99E-07	6,29E-08	0,00E+00	4,74E-08	4,29E-06	5,56E-09	-9,92E-07
EP-marine	[kg N eq.]	5,39E-04	4,18E-05	7,00E-04	5,93E-05	9,56E-06	0,00E+00	1,12E-05	2,18E-04	2,49E-06	-3,30E-05
EP-terrestrial	[mol N eq.]	5,91E-03	4,60E-04	7,64E-03	6,52E-04	1,03E-04	0,00E+00	1,23E-04	2,32E-03	2,08E-05	-4,89E-04
POCP	[kg NMVOC eq.]	2,00E-03	1,74E-04	2,21E-03	2,47E-04	3,48E-05	0,00E+00	4,31E-05	8,61E-04	9,57E-06	-1,09E-04
ADPm[1]	[kg Sb eq.]	5,00E-06	7,81E-08	2,26E-06	1,11E-07	1,83E-08	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-7,91E-08
ADPf[1]	[MJ]	7,21E+00	4,06E-01	1,31E+01	5,77E-01	5,02E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-2,26E-01
WDP[1]	[m^3 world eq. deprived]	9,45E-02	1,85E-03	8,31E-02	2,62E-03	3,43E-04	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-2,92E-03
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 6)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	2,41E-08	2,85E-09	1,39E-08	4,04E-09	4,14E-10	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-1,45E-09
IRP[2]	[kBq U235 eq.]	2,78E-02	1,68E-04	3,28E-02	2,38E-04	6,31E-05	0,00E+00	4,03E-05	1,95E-03	1,11E-05	-1,33E-03
ETP-fw[1]	[CTUe]	4,62E+00	4,76E-02	2,11E+00	6,76E-02	5,42E-02	0,00E+00	1,18E-02	1,29E+00	3,32E-03	-5,13E-02
HTP-c[1]	[CTUh]	3,18E-10	4,53E-12	1,24E-10	6,44E-12	2,73E-12	0,00E+00	1,59E-12	2,79E-10	1,72E-13	-8,82E-12
HTP-nc[1]	[CTUh]	6,91E-09	2,62E-10	5,89E-09	3,72E-10	9,50E-11	0,00E+00	6,27E-11	2,85E-09	2,46E-11	-2,99E-10
SQP[1]	-	6,09E+00	4,09E-01	5,32E+00	5,81E-01	1,93E-02	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-2,97E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 6)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	2,50E+00	6,27E-03	1,26E+00	8,90E-03	2,21E-03	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-7,05E-01
PERM	[MJ]	1,43E-01	0,00E+00	3,08E+00	0,00E+00	-3,22E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,65E+00	6,27E-03	4,34E+00	8,90E-03	-3,22E+00	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-7,05E-01
PENRE	[MJ]	7,21E+00	4,06E-01	1,31E+01	5,77E-01	5,02E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-2,26E-01
PENRM	[MJ]	4,26E+01	0,00E+00	-1,51E-02	0,00E+00	-1,57E-01	0,00E+00	0,00E+00	-3,95E+01	-2,97E+00	0,00E+00
PENRT	[MJ]	4,99E+01	4,06E-01	1,31E+01	5,77E-01	-1,07E-01	0,00E+00	9,01E-02	-3,73E+01	-2,96E+00	-2,26E-01
SM	[kg]	9,80E-01	0,00E+00	2,05E-01	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
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
FW	[m^3]	6,24E+00	4,84E-02	2,61E+00	6,88E-02	1,57E-02	0,00E+00	1,14E-02	8,82E-01	5,36E-03	-3,10E-01
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^{2}$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 6)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	3,40E-02	8,90E-06	3,64E-03	1,26E-05	4,03E-04	0,00E+00	1,78E-06	1,05E-03	1,49E-06	-7,96E-05
NHWD	[kg]	1,64E-01	3,51E-02	4,67E-02	4,98E-02	1,56E-03	0,00E+00	5,60E-03	7,38E-02	7,01E-02	-2,53E-03
RWD	[kg]	1,81E-05	1,12E-07	2,45E-05	1,59E-07	4,89E-08	0,00E+00	2,75E-08	1,31E-06	6,22E-09	-7,28E-07
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,64E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	5,30E-02	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	3,01E-01	0,00E+00	7,90E-02	0,00E+00	0,00E+00	7,22E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,29E+00	0,00E+00	3,39E-01	0,00E+00	0,00E+00	3,10E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^{2}$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 6)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	9,72E-02
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 7:

Representative for the following article numbers: 10769, 10777, 10787, 10793, 10790, 10797, 10784. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 7)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	2,94E+00	6,21E-03	9,78E-01	3,63E-02	2,37E-01	0,00E+00	6,24E-03	2,13E-01	7,12E-03	-9,11E-01
GWP-fossil	[kg CO_2 eq.]	2,96E+00	6,21E-03	1,17E+00	3,63E-02	2,69E-02	0,00E+00	6,24E-03	2,13E-01	7,12E-03	-9,11E-01
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-1,93E-01	0,00E+00	2,10E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	2,25E-03	2,24E-06	6,34E-04	1,31E-05	1,59E-06	0,00E+00	2,17E-06	1,76E-04	1,56E-07	-3,72E-04
ODP	[kg CFC 11 eq.]	3,50E-08	3,12E-12	2,16E-09	1,82E-11	3,26E-12	0,00E+00	3,25E-12	1,66E-10	6,40E-13	-1,77E-09
AP	[mol H^+ eq.]	1,37E-02	2,54E-05	3,50E-03	1,48E-04	2,02E-05	0,00E+00	2,87E-05	7,06E-04	4,58E-06	-2,68E-03
EP-freshwater	[kg P eq.]	7,59E-05	4,74E-08	6,06E-05	2,77E-07	5,34E-08	0,00E+00	4,74E-08	4,29E-06	5,55E-09	-1,31E-05
EP-marine	[kg N eq.]	2,59E-03	9,40E-06	7,50E-04	5,49E-05	7,95E-06	0,00E+00	1,12E-05	2,18E-04	2,40E-06	-5,79E-04
EP-terrestrial	[mol N eq.]	2,83E-02	1,03E-04	8,31E-03	6,04E-04	8,57E-05	0,00E+00	1,23E-04	2,31E-03	2,08E-05	-6,32E-03
POCP	[kg NMVOC eq.]	1,38E-02	3,91E-05	2,69E-03	2,28E-04	2,81E-05	0,00E+00	4,31E-05	8,61E-04	9,25E-06	-5,83E-03
ADPm[1]	[kg Sb eq.]	9,65E-05	1,76E-08	6,06E-06	1,03E-07	1,49E-08	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-4,89E-06
ADPf[1]	[MJ]	6,77E+01	9,14E-02	1,58E+01	5,34E-01	3,98E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-3,57E+01
WDP[1]	[m^3 world eq. deprived]	6,99E-01	4,16E-04	1,09E-01	2,43E-03	3,43E-04	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-5,14E-01
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 7)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	1,34E-07	6,41E-10	1,78E-08	3,74E-09	3,19E-10	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-1,95E-08
IRP[2]	[kBq U235 eq.]	5,08E-02	3,77E-05	3,36E-02	2,20E-04	4,69E-05	0,00E+00	4,03E-05	1,95E-03	1,07E-05	-1,26E-02
ETP-fw[1]	[CTUe]	2,35E+01	1,07E-02	2,81E+00	6,26E-02	4,27E-02	0,00E+00	1,18E-02	1,29E+00	3,00E-03	-1,82E+00
HTP-c[1]	[CTUh]	9,71E-10	1,02E-12	1,43E-10	5,95E-12	2,81E-12	0,00E+00	1,59E-12	2,79E-10	1,65E-13	-1,49E-10
HTP-nc[1]	[CTUh]	5,16E-08	5,89E-11	7,49E-09	3,44E-10	8,68E-11	0,00E+00	6,27E-11	2,85E-09	2,13E-11	-5,09E-09
SQP[1]	-	8,25E+00	9,20E-02	4,17E+00	5,37E-01	1,78E-02	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-4,07E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 7)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	2,06E+00	1,41E-03	1,01E+00	8,24E-03	1,78E-03	0,00E+00	1,50E-03	1,20E-01	4,29E-04	-8,85E-01
PERM	[MJ]	1,43E-01	0,00E+00	1,75E+00	0,00E+00	-1,90E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,20E+00	1,41E-03	2,76E+00	8,24E-03	-1,89E+00	0,00E+00	1,50E-03	1,20E-01	4,29E-04	-8,85E-01
PENRE	[MJ]	6,77E+01	9,14E-02	1,58E+01	5,34E-01	3,98E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-3,57E+01
PENRM	[MJ]	2,35E+01	0,00E+00	2,73E-01	0,00E+00	-4,45E-01	0,00E+00	0,00E+00	-2,17E+01	-1,63E+00	0,00E+00
PENRT	[MJ]	9,12E+01	9,14E-02	1,61E+01	5,34E-01	-4,05E-01	0,00E+00	9,01E-02	-1,95E+01	-1,62E+00	-3,57E+01
SM	[kg]	0,00E+00	0,00E+00	9,13E-02	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
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
FW	[m^3]	1,48E+01	1,09E-02	2,95E+00	6,36E-02	1,29E-02	0,00E+00	1,14E-02	8,82E-01	5,19E-03	-3,14E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 7)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	1,03E-03	2,00E-06	1,84E-03	1,17E-05	4,45E-04	0,00E+00	1,78E-06	1,00E-03	1,38E-06	2,84E-03
NHWD	[kg]	2,55E-01	7,88E-03	4,40E-02	4,60E-02	1,27E-03	0,00E+00	5,60E-03	7,38E-02	7,01E-02	-1,68E-02
RWD	[kg]	3,51E-05	2,52E-08	2,50E-05	1,47E-07	3,58E-08	0,00E+00	2,75E-08	1,31E-06	6,04E-09	-8,91E-06
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	9,13E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	3,77E-02	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	1,65E-01	0,00E+00	9,27E-02	0,00E+00	0,00E+00	3,97E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	7,10E-01	0,00E+00	3,98E-01	0,00E+00	0,00E+00	1,70E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 7)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	5,74E-02
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 8:

Representative for the following article numbers: 12455, 12410, 10782, 10783, 10776, 10774, 10775, 12409, 12502, 12491, 12412, 12413, 10772, 12490, 10773, 12451, 12562, 10794, 12711, 10798, 12560, 12564, 12561, 10781, 10780, 10785, 10788, 12454, 10778, 10791. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 8)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	2,45E+00	8,27E-02	9,55E-01	3,73E-02	2,90E-01	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-7,99E-01
GWP-fossil	[kg CO_2 eq.]	2,46E+00	8,27E-02	1,19E+00	3,73E-02	3,33E-02	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-7,99E-01
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-2,39E-01	0,00E+00	2,56E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	1,33E-03	2,99E-05	6,99E-04	1,35E-05	1,96E-06	0,00E+00	2,17E-06	1,76E-04	1,57E-07	-1,29E-04
ODP	[kg CFC 11 eq.]	6,60E-09	4,15E-11	1,02E-09	1,88E-11	4,01E-12	0,00E+00	3,25E-12	1,66E-10	6,41E-13	-2,49E-09
AP	[mol H^+ eq.]	8,13E-03	3,37E-04	3,37E-03	1,52E-04	2,48E-05	0,00E+00	2,87E-05	7,07E-04	4,59E-06	-2,46E-03
EP-freshwater	[kg P eq.]	4,70E-05	6,31E-07	6,05E-05	2,85E-07	6,58E-08	0,00E+00	4,74E-08	4,29E-06	5,56E-09	-4,54E-06
EP-marine	[kg N eq.]	1,51E-03	1,25E-04	7,39E-04	5,65E-05	9,78E-06	0,00E+00	1,12E-05	2,18E-04	2,49E-06	-5,90E-04
EP-terrestrial	[mol N eq.]	1,62E-02	1,38E-03	8,12E-03	6,21E-04	1,05E-04	0,00E+00	1,23E-04	2,32E-03	2,08E-05	-6,40E-03
POCP	[kg NMVOC eq.]	1,30E-02	5,20E-04	2,78E-03	2,35E-04	3,45E-05	0,00E+00	4,31E-05	8,61E-04	9,57E-06	-6,91E-03
ADPm[1]	[kg Sb eq.]	1,27E-05	2,34E-07	2,66E-06	1,06E-07	1,83E-08	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-3,81E-06
ADPf[1]	[MJ]	7,53E+01	1,22E+00	1,66E+01	5,49E-01	4,89E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-4,11E+01
WDP[1]	[m^3 world eq. deprived]	1,34E+00	5,53E-03	1,47E-01	2,50E-03	4,23E-04	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-6,98E-01
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 8)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	5,54E-08	8,53E-09	1,58E-08	3,85E-09	3,92E-10	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-2,04E-08
IRP[2]	[kBq U235 eq.]	4,25E-02	5,02E-04	3,40E-02	2,27E-04	5,76E-05	0,00E+00	4,03E-05	1,95E-03	1,11E-05	5,97E-03
ETP-fw[1]	[CTUe]	7,14E+00	1,43E-01	2,28E+00	6,44E-02	5,26E-02	0,00E+00	1,18E-02	1,29E+00	3,32E-03	-1,09E+00
HTP-c[1]	[CTUh]	5,02E-10	1,36E-11	1,31E-10	6,13E-12	3,46E-12	0,00E+00	1,59E-12	2,79E-10	1,72E-13	-8,48E-11
HTP-nc[1]	[CTUh]	1,46E-08	7,83E-10	6,22E-09	3,54E-10	1,07E-10	0,00E+00	6,27E-11	2,85E-09	2,46E-11	-3,32E-09
SQP[1]	-	7,18E+00	1,22E+00	4,75E+00	5,53E-01	2,19E-02	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-4,21E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 8)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	2,08E+00	1,88E-02	1,13E+00	8,48E-03	2,19E-03	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-4,60E-01
PERM	[MJ]	1,43E-01	0,00E+00	2,17E+00	0,00E+00	-2,31E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,22E+00	1,88E-02	3,30E+00	8,48E-03	-2,31E+00	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-4,60E-01
PENRE	[MJ]	7,53E+01	1,22E+00	1,66E+01	5,49E-01	4,89E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-4,11E+01
PENRM	[MJ]	4,26E+01	0,00E+00	3,81E-01	0,00E+00	-5,53E-01	0,00E+00	0,00E+00	-3,95E+01	-2,97E+00	0,00E+00
PENRT	[MJ]	1,18E+02	1,22E+00	1,70E+01	5,49E-01	-5,04E-01	0,00E+00	9,01E-02	-3,73E+01	-2,96E+00	-4,11E+01
SM	[kg]	7,01E-01	0,00E+00	1,40E-01	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
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
FW	[m^3]	9,11E+00	1,45E-01	2,86E+00	6,55E-02	1,58E-02	0,00E+00	1,14E-02	8,82E-01	5,36E-03	-5,59E-02
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 8)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	7,48E-04	2,66E-05	2,13E-03	1,20E-05	5,49E-04	0,00E+00	1,78E-06	1,05E-03	1,49E-06	2,97E-03
NHWD	[kg]	1,47E-01	1,05E-01	4,71E-02	4,74E-02	1,56E-03	0,00E+00	5,60E-03	7,38E-02	7,01E-02	9,72E-02
RWD	[kg]	3,23E-05	3,35E-07	2,54E-05	1,51E-07	4,39E-08	0,00E+00	2,75E-08	1,31E-06	6,22E-09	6,43E-06
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,11E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	4,63E-02	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	3,01E-01	0,00E+00	1,14E-01	0,00E+00	0,00E+00	7,22E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,29E+00	0,00E+00	4,91E-01	0,00E+00	0,00E+00	3,10E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 8)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	6,99E-02
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 9:

Representative for the following article numbers: 13068, 12563, 10770, 12722, 12411, 12414, 10779. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 9)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	5,97E-01	2,76E-02	9,01E-01	3,61E-02	2,28E-01	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-1,35E-02
GWP-fossil	[kg CO_2 eq.]	6,13E-01	2,76E-02	1,09E+00	3,61E-02	2,40E-02	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-1,35E-02
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-1,87E-01	0,00E+00	2,04E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	1,14E-03	9,97E-06	5,60E-04	1,30E-05	1,47E-06	0,00E+00	2,17E-06	1,76E-04	1,57E-07	-5,39E-05
ODP	[kg CFC 11 eq.]	1,63E-07	1,39E-11	7,48E-09	1,81E-11	3,02E-12	0,00E+00	3,25E-12	1,66E-10	6,41E-13	-3,09E-10
AP	[mol H^+ eq.]	2,57E-03	1,13E-04	3,02E-03	1,47E-04	1,87E-05	0,00E+00	2,87E-05	7,07E-04	4,59E-06	-1,22E-04
EP-freshwater	[kg P eq.]	2,41E-05	2,10E-07	5,81E-05	2,75E-07	4,96E-08	0,00E+00	4,74E-08	4,29E-06	5,56E-09	-9,71E-07
EP-marine	[kg N eq.]	5,66E-04	4,17E-05	6,60E-04	5,46E-05	7,37E-06	0,00E+00	1,12E-05	2,18E-04	2,49E-06	-3,26E-05
EP-terrestrial	[mol N eq.]	6,20E-03	4,59E-04	7,34E-03	6,01E-04	7,95E-05	0,00E+00	1,23E-04	2,32E-03	2,08E-05	-4,89E-04
POCP	[kg NMVOC eq.]	2,08E-03	1,74E-04	2,18E-03	2,27E-04	2,61E-05	0,00E+00	4,31E-05	8,61E-04	9,57E-06	-1,19E-04
ADPm[1]	[kg Sb eq.]	5,16E-06	7,80E-08	2,23E-06	1,02E-07	1,38E-08	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-8,42E-08
ADPf[1]	[MJ]	7,51E+00	4,06E-01	1,32E+01	5,31E-01	3,70E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-3,01E-01
WDP[1]	[m^3 world eq. deprived]	1,09E-01	1,85E-03	8,11E-02	2,42E-03	3,15E-04	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-5,14E-03
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 9)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	2,55E-08	2,85E-09	1,31E-08	3,72E-09	2,97E-10	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-1,42E-09
IRP[2]	[kBq U235 eq.]	2,81E-02	1,67E-04	3,25E-02	2,19E-04	4,40E-05	0,00E+00	4,03E-05	1,95E-03	1,11E-05	-1,36E-03
ETP-fw[1]	[CTUe]	4,80E+00	4,76E-02	1,99E+00	6,23E-02	3,98E-02	0,00E+00	1,18E-02	1,29E+00	3,32E-03	-4,88E-02
HTP-c[1]	[CTUh]	3,21E-10	4,53E-12	1,15E-10	5,93E-12	2,57E-12	0,00E+00	1,59E-12	2,79E-10	1,72E-13	-8,60E-12
HTP-nc[1]	[CTUh]	7,04E-09	2,61E-10	5,59E-09	3,42E-10	8,01E-11	0,00E+00	6,27E-11	2,85E-09	2,46E-11	-3,06E-10
SQP[1]	-	6,32E+00	4,08E-01	3,96E+00	5,35E-01	1,64E-02	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-2,39E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 9)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	2,56E+00	6,26E-03	1,00E+00	8,20E-03	1,66E-03	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-6,15E-01
PERM	[MJ]	1,43E-01	0,00E+00	1,70E+00	0,00E+00	-1,84E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,70E+00	6,26E-03	2,70E+00	8,20E-03	-1,84E+00	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-6,15E-01
PENRE	[MJ]	7,51E+00	4,06E-01	1,32E+01	5,31E-01	3,70E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-3,01E-01
PENRM	[MJ]	4,26E+01	0,00E+00	2,22E-01	0,00E+00	-3,94E-01	0,00E+00	0,00E+00	-3,95E+01	-2,97E+00	0,00E+00
PENRT	[MJ]	5,02E+01	4,06E-01	1,34E+01	5,31E-01	-3,57E-01	0,00E+00	9,01E-02	-3,73E+01	-2,96E+00	-3,01E-01
SM	[kg]	9,75E-01	0,00E+00	1,30E-01	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
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
FW	[m^3]	6,37E+00	4,84E-02	2,55E+00	6,33E-02	1,20E-02	0,00E+00	1,14E-02	8,82E-01	5,36E-03	-3,18E-01
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 9)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	3,38E-02	8,88E-06	3,36E-03	1,16E-05	4,06E-04	0,00E+00	1,78E-06	1,05E-03	1,49E-06	-7,46E-05
NHWD	[kg]	1,65E-01	3,50E-02	4,05E-02	4,58E-02	1,18E-03	0,00E+00	5,60E-03	7,38E-02	7,01E-02	-1,92E-03
RWD	[kg]	1,83E-05	1,12E-07	2,41E-05	1,46E-07	3,36E-08	0,00E+00	2,75E-08	1,31E-06	6,22E-09	-7,37E-07
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,98E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	3,53E-02	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	3,01E-01	0,00E+00	8,46E-02	0,00E+00	0,00E+00	7,22E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,29E+00	0,00E+00	3,63E-01	0,00E+00	0,00E+00	3,10E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 9)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	5,56E-02
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 10:

Representative for the following article numbers: 11844. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 10)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	3,74E+00	3,13E-02	7,19E-01	4,43E-02	6,09E-01	0,00E+00	6,24E-03	2,19E-01	8,51E-03	-2,14E+00
GWP-fossil	[kg CO_2 eq.]	3,76E+00	3,13E-02	1,29E+00	4,42E-02	2,12E-02	0,00E+00	6,24E-03	2,19E-01	8,51E-03	-2,15E+00
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-5,71E-01	0,00E+00	5,88E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	4,12E-04	1,13E-05	1,15E-03	1,60E-05	2,86E-06	0,00E+00	2,17E-06	1,76E-04	1,57E-07	6,41E-04
ODP	[kg CFC 11 eq.]	1,07E-09	1,57E-11	8,81E-10	2,22E-11	6,48E-12	0,00E+00	3,25E-12	1,66E-10	6,41E-13	7,79E-11
AP	[mol H^+ eq.]	1,59E-02	1,28E-04	3,89E-03	1,81E-04	4,03E-05	0,00E+00	2,87E-05	7,07E-04	4,64E-06	-8,96E-03
EP-freshwater	[kg P eq.]	8,94E-06	2,39E-07	6,27E-05	3,38E-07	1,04E-07	0,00E+00	4,74E-08	4,29E-06	5,57E-09	2,11E-05
EP-marine	[kg N eq.]	2,50E-03	4,74E-05	8,83E-04	6,70E-05	1,58E-05	0,00E+00	1,12E-05	2,18E-04	3,56E-06	-1,36E-03
EP-terrestrial	[mol N eq.]	2,70E-02	5,21E-04	9,38E-03	7,36E-04	1,70E-04	0,00E+00	1,23E-04	2,31E-03	2,10E-05	-1,47E-02
POCP	[kg NMVOC eq.]	1,14E-02	1,97E-04	2,86E-03	2,79E-04	5,74E-05	0,00E+00	4,31E-05	8,61E-04	9,66E-06	-6,59E-03
ADPm[1]	[kg Sb eq.]	1,02E-06	8,86E-08	2,33E-06	1,25E-07	3,01E-08	0,00E+00	2,04E-08	9,94E-07	1,38E-09	3,11E-06
ADPf[1]	[MJ]	8,50E+01	4,61E-01	1,73E+01	6,51E-01	8,28E-02	0,00E+00	9,01E-02	2,15E+00	1,63E-02	-5,45E+01
WDP[1]	[m^3 world eq. deprived]	2,27E+00	2,10E-03	2,01E-01	2,96E-03	5,66E-04	0,00E+00	3,73E-04	3,50E-02	-3,68E-04	-1,56E+00
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 10)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	1,69E-07	3,23E-09	2,26E-08	4,57E-09	6,83E-10	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-1,04E-07
IRP[2]	[kBq U235 eq.]	3,29E-03	1,90E-04	3,37E-02	2,69E-04	1,04E-04	0,00E+00	4,03E-05	1,95E-03	1,16E-05	4,69E-02
ETP-fw[1]	[CTUe]	2,03E+00	5,40E-02	2,54E+00	7,64E-02	8,95E-02	0,00E+00	1,18E-02	1,31E+00	6,80E-03	1,47E+00
HTP-c[1]	[CTUh]	3,52E-10	5,14E-12	1,51E-10	7,27E-12	4,51E-12	0,00E+00	1,59E-12	2,79E-10	1,95E-13	1,87E-11
HTP-nc[1]	[CTUh]	4,54E-09	2,97E-10	6,68E-09	4,19E-10	1,57E-10	0,00E+00	6,27E-11	2,88E-09	2,51E-11	2,82E-09
SQP[1]	-	1,80E+00	4,64E-01	7,59E+00	6,55E-01	3,19E-02	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-2,84E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 10)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	5,58E-01	7,11E-03	1,67E+00	1,01E-02	3,64E-03	0,00E+00	1,50E-03	1,20E-01	4,57E-04	2,28E-01
PERM	[MJ]	1,43E-01	0,00E+00	5,18E+00	0,00E+00	-5,32E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	7,00E-01	7,11E-03	6,85E+00	1,01E-02	-5,32E+00	0,00E+00	1,50E-03	1,20E-01	4,57E-04	2,28E-01
PENRE	[MJ]	8,50E+01	4,61E-01	1,73E+01	6,51E-01	8,28E-02	0,00E+00	9,01E-02	2,15E+00	1,63E-02	-5,45E+01
PENRM	[MJ]	3,89E+01	0,00E+00	8,69E-02	0,00E+00	-2,59E-01	0,00E+00	0,00E+00	-3,60E+01	-2,71E+00	0,00E+00
PENRT	[MJ]	1,24E+02	4,61E-01	1,74E+01	6,51E-01	-1,76E-01	0,00E+00	9,01E-02	-3,38E+01	-2,69E+00	-5,45E+01
SM	[kg]	0,00E+00	0,00E+00	2,71E-01	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
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
FW	[m^3]	1,05E+00	5,49E-02	2,81E+00	7,76E-02	2,59E-02	0,00E+00	1,14E-02	8,82E-01	5,59E-03	7,91E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^{2}$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 10)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	1,73E-03	1,01E-05	2,70E-03	1,43E-05	6,66E-04	0,00E+00	1,78E-06	1,03E-03	1,28E-06	8,97E-03
NHWD	[kg]	9,77E-02	3,98E-02	5,78E-02	5,62E-02	2,58E-03	0,00E+00	5,60E-03	7,38E-02	7,01E-02	4,85E-02
RWD	[kg]	2,42E-06	1,27E-07	2,53E-05	1,79E-07	8,08E-08	0,00E+00	2,75E-08	1,31E-06	6,47E-09	3,85E-05
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,71E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	8,75E-02	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	2,74E-01	0,00E+00	1,30E-01	0,00E+00	0,00E+00	6,58E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,18E+00	0,00E+00	5,60E-01	0,00E+00	0,00E+00	2,83E-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: $1,95*10^{2}$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 10)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	1,60E-01
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 11:

Representative for the following article numbers: 10845, 10850, 10955, 10852. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 11)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	2,41E+00	8,36E-02	8,23E-01	3,96E-02	3,90E-01	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-8,07E-01
GWP-fossil	[kg CO_2 eq.]	2,43E+00	8,36E-02	1,18E+00	3,96E-02	1,36E-02	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-8,07E-01
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-3,60E-01	0,00E+00	3,76E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	1,06E-03	3,02E-05	8,26E-04	1,43E-05	1,87E-06	0,00E+00	2,17E-06	1,76E-04	1,57E-07	-1,23E-04
ODP	[kg CFC 11 eq.]	6,28E-09	4,20E-11	9,93E-10	1,99E-11	4,27E-12	0,00E+00	3,25E-12	1,66E-10	6,41E-13	-2,46E-09
AP	[mol H^+ eq.]	7,58E-03	3,41E-04	3,33E-03	1,62E-04	2,66E-05	0,00E+00	2,87E-05	7,07E-04	4,59E-06	-2,47E-03
EP-freshwater	[kg P eq.]	4,43E-05	6,38E-07	6,09E-05	3,02E-07	6,81E-08	0,00E+00	4,74E-08	4,29E-06	5,56E-09	-4,45E-06
EP-marine	[kg N eq.]	1,46E-03	1,27E-04	7,56E-04	6,00E-05	1,04E-05	0,00E+00	1,12E-05	2,18E-04	2,49E-06	-5,93E-04
EP-terrestrial	[mol N eq.]	1,57E-02	1,39E-03	8,20E-03	6,60E-04	1,12E-04	0,00E+00	1,23E-04	2,32E-03	2,08E-05	-6,41E-03
POCP	[kg NMVOC eq.]	1,29E-02	5,26E-04	2,71E-03	2,49E-04	3,78E-05	0,00E+00	4,31E-05	8,61E-04	9,57E-06	-6,98E-03
ADPm[1]	[kg Sb eq.]	1,25E-05	2,36E-07	2,60E-06	1,12E-07	1,99E-08	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-3,85E-06
ADPf[1]	[MJ]	7,51E+01	1,23E+00	1,61E+01	5,83E-01	5,45E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-4,16E+01
WDP[1]	[m^3 world eq. deprived]	1,32E+00	5,59E-03	1,38E-01	2,65E-03	3,72E-04	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-7,04E-01
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 11)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	5,19E-08	8,63E-09	1,56E-08	4,09E-09	4,50E-10	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-2,05E-08
IRP[2]	[kBq U235 eq.]	4,09E-02	5,08E-04	3,37E-02	2,41E-04	6,83E-05	0,00E+00	4,03E-05	1,95E-03	1,11E-05	6,34E-03
ETP-fw[1]	[CTUe]	6,47E+00	1,44E-01	2,25E+00	6,84E-02	5,91E-02	0,00E+00	1,18E-02	1,29E+00	3,32E-03	-1,10E+00
HTP-c[1]	[CTUh]	4,78E-10	1,37E-11	1,34E-10	6,51E-12	2,96E-12	0,00E+00	1,59E-12	2,79E-10	1,72E-13	-8,48E-11
HTP-nc[1]	[CTUh]	1,43E-08	7,92E-10	6,32E-09	3,76E-10	1,03E-10	0,00E+00	6,27E-11	2,85E-09	2,46E-11	-3,31E-09
SQP[1]	-	6,80E+00	1,24E+00	5,68E+00	5,87E-01	2,09E-02	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-4,43E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 11)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	1,98E+00	1,90E-02	1,30E+00	9,00E-03	2,39E-03	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-4,49E-01
PERM	[MJ]	1,43E-01	0,00E+00	3,26E+00	0,00E+00	-3,40E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,12E+00	1,90E-02	4,56E+00	9,00E-03	-3,40E+00	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-4,49E-01
PENRE	[MJ]	7,51E+01	1,23E+00	1,61E+01	5,83E-01	5,45E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-4,16E+01
PENRM	[MJ]	4,26E+01	0,00E+00	-8,70E-03	0,00E+00	-1,63E-01	0,00E+00	0,00E+00	-3,95E+01	-2,97E+00	0,00E+00
PENRT	[MJ]	1,18E+02	1,23E+00	1,61E+01	5,83E-01	-1,09E-01	0,00E+00	9,01E-02	-3,73E+01	-2,96E+00	-4,16E+01
SM	[kg]	7,11E-01	0,00E+00	2,01E-01	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
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
FW	[m^3]	8,68E+00	1,47E-01	2,77E+00	6,95E-02	1,70E-02	0,00E+00	1,14E-02	8,82E-01	5,36E-03	8,22E-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: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 11)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	7,05E-04	2,69E-05	2,33E-03	1,28E-05	4,36E-04	0,00E+00	1,78E-06	1,05E-03	1,49E-06	3,02E-03
NHWD	[kg]	1,33E-01	1,06E-01	5,02E-02	5,03E-02	1,70E-03	0,00E+00	5,60E-03	7,38E-02	7,01E-02	9,84E-02
RWD	[kg]	3,12E-05	3,39E-07	2,52E-05	1,61E-07	5,29E-08	0,00E+00	2,75E-08	1,31E-06	6,22E-09	6,68E-06
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,71E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	5,79E-02	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	3,01E-01	0,00E+00	8,45E-02	0,00E+00	0,00E+00	7,22E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,29E+00	0,00E+00	3,63E-01	0,00E+00	0,00E+00	3,10E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 11)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	1,03E-01
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 12:

Representative for the following article numbers: 12135. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 12)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	2,39E+00	7,20E-02	8,23E-01	3,95E-02	3,85E-01	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-5,58E-01
GWP-fossil	[kg CO_2 eq.]	2,40E+00	7,20E-02	1,18E+00	3,95E-02	1,34E-02	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-5,58E-01
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-3,55E-01	0,00E+00	3,72E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	1,82E-03	2,60E-05	8,28E-04	1,43E-05	1,81E-06	0,00E+00	2,17E-06	1,76E-04	1,57E-07	-2,88E-04
ODP	[kg CFC 11 eq.]	5,92E-09	3,62E-11	9,70E-10	1,99E-11	4,10E-12	0,00E+00	3,25E-12	1,66E-10	6,41E-13	-1,40E-09
AP	[mol H^+ eq.]	7,63E-03	2,94E-04	3,32E-03	1,61E-04	2,55E-05	0,00E+00	2,87E-05	7,07E-04	4,59E-06	-1,89E-03
EP-freshwater	[kg P eq.]	4,86E-05	5,49E-07	6,08E-05	3,02E-07	6,56E-08	0,00E+00	4,74E-08	4,29E-06	5,56E-09	-1,05E-05
EP-marine	[kg N eq.]	1,49E-03	1,09E-04	7,49E-04	5,99E-05	9,98E-06	0,00E+00	1,12E-05	2,18E-04	2,49E-06	-4,44E-04
EP-terrestrial	[mol N eq.]	1,59E-02	1,20E-03	8,14E-03	6,58E-04	1,08E-04	0,00E+00	1,23E-04	2,32E-03	2,08E-05	-4,76E-03
POCP	[kg NMVOC eq.]	1,42E-02	4,53E-04	2,74E-03	2,49E-04	3,63E-05	0,00E+00	4,31E-05	8,61E-04	9,57E-06	-5,68E-03
ADPm[1]	[kg Sb eq.]	1,26E-05	2,04E-07	2,59E-06	1,12E-07	1,91E-08	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-2,72E-06
ADPf[1]	[MJ]	7,54E+01	1,06E+00	1,60E+01	5,82E-01	5,23E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-2,92E+01
WDP[1]	[m^3 world eq. deprived]	1,82E+00	4,82E-03	1,57E-01	2,65E-03	3,58E-04	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-8,11E-01
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 12)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	5,14E-08	7,43E-09	1,54E-08	4,08E-09	4,32E-10	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-1,36E-08
IRP[2]	[kBq U235 eq.]	7,43E-02	4,37E-04	3,49E-02	2,40E-04	6,59E-05	0,00E+00	4,03E-05	1,95E-03	1,11E-05	-9,51E-03
ETP-fw[1]	[CTUe]	6,97E+00	1,24E-01	2,24E+00	6,82E-02	5,66E-02	0,00E+00	1,18E-02	1,29E+00	3,32E-03	-9,22E-01
HTP-c[1]	[CTUh]	4,87E-10	1,18E-11	1,33E-10	6,49E-12	2,85E-12	0,00E+00	1,59E-12	2,79E-10	1,72E-13	-5,99E-11
HTP-nc[1]	[CTUh]	1,46E-08	6,82E-10	6,28E-09	3,75E-10	9,91E-11	0,00E+00	6,27E-11	2,85E-09	2,46E-11	-2,68E-09
SQP[1]	-	7,43E+00	1,07E+00	5,56E+00	5,86E-01	2,02E-02	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-4,09E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 12)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	2,74E+00	1,63E-02	1,30E+00	8,98E-03	2,30E-03	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-8,51E-01
PERM	[MJ]	1,43E-01	0,00E+00	3,22E+00	0,00E+00	-3,36E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,88E+00	1,63E-02	4,52E+00	8,98E-03	-3,36E+00	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-8,51E-01
PENRE	[MJ]	7,54E+01	1,06E+00	1,60E+01	5,82E-01	5,23E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-2,92E+01
PENRM	[MJ]	4,26E+01	0,00E+00	-8,28E-03	0,00E+00	-1,64E-01	0,00E+00	0,00E+00	-3,95E+01	-2,97E+00	0,00E+00
PENRT	[MJ]	1,18E+02	1,06E+00	1,60E+01	5,82E-01	-1,11E-01	0,00E+00	9,01E-02	-3,73E+01	-2,96E+00	-2,92E+01
SM	[kg]	6,45E-01	0,00E+00	1,98E-01	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
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
FW	[m^3]	1,58E+01	1,26E-01	3,04E+00	6,94E-02	1,64E-02	0,00E+00	1,14E-02	8,82E-01	5,36E-03	-2,37E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 12)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	7,90E-04	2,32E-05	2,29E-03	1,27E-05	4,21E-04	0,00E+00	1,78E-06	1,05E-03	1,49E-06	1,99E-03
NHWD	[kg]	1,42E-01	9,14E-02	4,91E-02	5,02E-02	1,63E-03	0,00E+00	5,60E-03	7,38E-02	7,01E-02	6,33E-02
RWD	[kg]	4,59E-05	2,92E-07	2,57E-05	1,60E-07	5,11E-08	0,00E+00	2,75E-08	1,31E-06	6,22E-09	-6,61E-06
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,72E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	5,53E-02	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	3,01E-01	0,00E+00	8,24E-02	0,00E+00	0,00E+00	7,22E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,29E+00	0,00E+00	3,54E-01	0,00E+00	0,00E+00	3,10E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 12)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	1,01E-01
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 13:

Representative for the following article numbers: 10957. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 13)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	5,97E-01	2,76E-02	8,17E-01	3,75E-02	2,87E-01	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-1,07E-02
GWP-fossil	[kg CO_2 eq.]	6,13E-01	2,76E-02	1,08E+00	3,75E-02	1,00E-02	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-1,07E-02
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-2,60E-01	0,00E+00	2,77E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	8,59E-04	9,98E-06	6,19E-04	1,35E-05	1,35E-06	0,00E+00	2,17E-06	1,76E-04	1,57E-07	-4,78E-05
ODP	[kg CFC 11 eq.]	1,64E-07	1,39E-11	7,49E-09	1,88E-11	3,05E-12	0,00E+00	3,25E-12	1,66E-10	6,41E-13	-2,62E-10
AP	[mol H^+ eq.]	3,87E-03	1,13E-04	3,05E-03	1,53E-04	1,90E-05	0,00E+00	2,87E-05	7,07E-04	4,59E-06	-1,04E-04
EP-freshwater	[kg P eq.]	2,46E-05	2,11E-07	5,83E-05	2,86E-07	4,89E-08	0,00E+00	4,74E-08	4,29E-06	5,56E-09	-8,53E-07
EP-marine	[kg N eq.]	5,69E-04	4,18E-05	6,67E-04	5,67E-05	7,44E-06	0,00E+00	1,12E-05	2,18E-04	2,49E-06	-2,84E-05
EP-terrestrial	[mol N eq.]	6,20E-03	4,60E-04	7,36E-03	6,24E-04	8,01E-05	0,00E+00	1,23E-04	2,32E-03	2,08E-05	-4,23E-04
POCP	[kg NMVOC eq.]	2,08E-03	1,74E-04	2,12E-03	2,36E-04	2,71E-05	0,00E+00	4,31E-05	8,61E-04	9,57E-06	-9,27E-05
ADPm[1]	[kg Sb eq.]	5,04E-06	7,81E-08	2,17E-06	1,06E-07	1,42E-08	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-6,81E-08
ADPf[1]	[MJ]	6,78E+00	4,06E-01	1,28E+01	5,51E-01	3,90E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-1,91E-01
WDP[1]	[m^3 world eq. deprived]	1,55E-01	1,85E-03	7,62E-02	2,51E-03	2,67E-04	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-2,39E-03
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 13)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	2,89E-08	2,85E-09	1,31E-08	3,87E-09	3,22E-10	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-1,25E-09
IRP[2]	[kBq U235 eq.]	2,86E-02	1,68E-04	3,22E-02	2,27E-04	4,91E-05	0,00E+00	4,03E-05	1,95E-03	1,11E-05	-1,17E-03
ETP-fw[1]	[CTUe]	4,68E+00	4,77E-02	1,96E+00	6,47E-02	4,22E-02	0,00E+00	1,18E-02	1,29E+00	3,32E-03	-4,34E-02
HTP-c[1]	[CTUh]	3,33E-10	4,53E-12	1,17E-10	6,15E-12	2,12E-12	0,00E+00	1,59E-12	2,79E-10	1,72E-13	-7,61E-12
HTP-nc[1]	[CTUh]	7,24E-09	2,62E-10	5,63E-09	3,55E-10	7,38E-11	0,00E+00	6,27E-11	2,85E-09	2,46E-11	-2,61E-10
SQP[1]	-	6,41E+00	4,09E-01	4,49E+00	5,55E-01	1,50E-02	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-2,44E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 13)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	2,55E+00	6,27E-03	1,09E+00	8,51E-03	1,71E-03	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-5,92E-01
PERM	[MJ]	1,43E-01	0,00E+00	2,36E+00	0,00E+00	-2,51E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,69E+00	6,27E-03	3,46E+00	8,51E-03	-2,50E+00	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-5,92E-01
PENRE	[MJ]	6,78E+00	4,06E-01	1,28E+01	5,51E-01	3,90E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-1,91E-01
PENRM	[MJ]	4,26E+01	0,00E+00	-5,00E-02	0,00E+00	-1,22E-01	0,00E+00	0,00E+00	-3,95E+01	-2,97E+00	0,00E+00
PENRT	[MJ]	4,94E+01	4,06E-01	1,27E+01	5,51E-01	-8,29E-02	0,00E+00	9,01E-02	-3,73E+01	-2,96E+00	-1,91E-01
SM	[kg]	9,80E-01	0,00E+00	1,69E-01	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
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
FW	[m^3]	6,37E+00	4,84E-02	2,47E+00	6,57E-02	1,22E-02	0,00E+00	1,14E-02	8,82E-01	5,36E-03	-2,71E-01
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 13)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	3,41E-02	8,90E-06	3,48E-03	1,21E-05	3,14E-04	0,00E+00	1,78E-06	1,05E-03	1,49E-06	-7,02E-05
NHWD	[kg]	2,09E-01	3,51E-02	4,39E-02	4,76E-02	1,22E-03	0,00E+00	5,60E-03	7,38E-02	7,01E-02	-2,11E-03
RWD	[kg]	1,88E-05	1,12E-07	2,40E-05	1,52E-07	3,80E-08	0,00E+00	2,75E-08	1,31E-06	6,22E-09	-6,33E-07
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,28E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	4,12E-02	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	3,01E-01	0,00E+00	6,14E-02	0,00E+00	0,00E+00	7,22E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,29E+00	0,00E+00	2,64E-01	0,00E+00	0,00E+00	3,10E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 13)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	7,56E-02
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 14:

Representative for the following article numbers: 10855. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 14)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	6,65E-01	3,03E-02	8,36E-01	3,70E-02	2,65E-01	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-1,02E-02
GWP-fossil	[kg CO_2 eq.]	6,81E-01	3,03E-02	1,07E+00	3,70E-02	9,25E-03	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-1,02E-02
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-2,39E-01	0,00E+00	2,56E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	1,07E-03	1,10E-05	5,90E-04	1,34E-05	1,24E-06	0,00E+00	2,17E-06	1,76E-04	1,57E-07	-4,58E-05
ODP	[kg CFC 11 eq.]	1,14E-07	1,52E-11	5,40E-09	1,86E-11	2,82E-12	0,00E+00	3,25E-12	1,66E-10	6,41E-13	-2,52E-10
AP	[mol H^+ eq.]	2,86E-03	1,24E-04	2,98E-03	1,51E-04	1,76E-05	0,00E+00	2,87E-05	7,07E-04	4,59E-06	-9,98E-05
EP-freshwater	[kg P eq.]	1,19E-04	2,31E-07	6,19E-05	2,82E-07	4,52E-08	0,00E+00	4,74E-08	4,29E-06	5,56E-09	-8,16E-07
EP-marine	[kg N eq.]	1,50E-03	4,59E-05	6,97E-04	5,60E-05	6,87E-06	0,00E+00	1,12E-05	2,18E-04	2,49E-06	-2,72E-05
EP-terrestrial	[mol N eq.]	6,73E-03	5,05E-04	7,30E-03	6,16E-04	7,40E-05	0,00E+00	1,23E-04	2,32E-03	2,08E-05	-4,06E-04
POCP	[kg NMVOC eq.]	2,24E-03	1,91E-04	2,10E-03	2,33E-04	2,50E-05	0,00E+00	4,31E-05	8,61E-04	9,57E-06	-8,84E-05
ADPm[1]	[kg Sb eq.]	5,91E-06	8,57E-08	2,19E-06	1,05E-07	1,31E-08	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-6,51E-08
ADPf[1]	[MJ]	9,20E+00	4,46E-01	1,28E+01	5,45E-01	3,60E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-1,81E-01
WDP[1]	[m^3 world eq. deprived]	1,67E-01	2,03E-03	7,42E-02	2,48E-03	2,46E-04	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-2,25E-03
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 14)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	2,60E-08	3,13E-09	1,28E-08	3,82E-09	2,97E-10	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-1,20E-09
IRP[2]	[kBq U235 eq.]	4,48E-02	1,84E-04	3,27E-02	2,25E-04	4,53E-05	0,00E+00	4,03E-05	1,95E-03	1,11E-05	-1,12E-03
ETP-fw[1]	[CTUe]	9,25E+00	5,23E-02	2,11E+00	6,39E-02	3,90E-02	0,00E+00	1,18E-02	1,29E+00	3,32E-03	-4,13E-02
HTP-c[1]	[CTUh]	3,37E-10	4,98E-12	1,15E-10	6,08E-12	1,96E-12	0,00E+00	1,59E-12	2,79E-10	1,72E-13	-7,28E-12
HTP-nc[1]	[CTUh]	1,20E-08	2,87E-10	5,76E-09	3,51E-10	6,82E-11	0,00E+00	6,27E-11	2,85E-09	2,46E-11	-2,51E-10
SQP[1]	-	6,49E+00	4,49E-01	4,27E+00	5,48E-01	1,39E-02	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-2,30E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 14)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	2,89E+00	6,89E-03	1,06E+00	8,41E-03	1,58E-03	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-5,63E-01
PERM	[MJ]	1,43E-01	0,00E+00	2,17E+00	0,00E+00	-2,32E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	3,03E+00	6,89E-03	3,24E+00	8,41E-03	-2,31E+00	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-5,63E-01
PENRE	[MJ]	9,20E+00	4,46E-01	1,28E+01	5,45E-01	3,60E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-1,81E-01
PENRM	[MJ]	4,26E+01	0,00E+00	-5,92E-02	0,00E+00	-1,13E-01	0,00E+00	0,00E+00	-3,95E+01	-2,97E+00	0,00E+00
PENRT	[MJ]	5,18E+01	4,46E-01	1,27E+01	5,45E-01	-7,66E-02	0,00E+00	9,01E-02	-3,73E+01	-2,96E+00	-1,81E-01
SM	[kg]	9,80E-01	0,00E+00	1,59E-01	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
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
FW	[m^3]	9,28E+00	5,32E-02	2,56E+00	6,49E-02	1,13E-02	0,00E+00	1,14E-02	8,82E-01	5,36E-03	-2,61E-01
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 14)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	2,45E-02	9,77E-06	3,03E-03	1,19E-05	2,90E-04	0,00E+00	1,78E-06	1,05E-03	1,49E-06	-6,77E-05
NHWD	[kg]	1,82E-01	3,85E-02	4,17E-02	4,70E-02	1,12E-03	0,00E+00	5,60E-03	7,38E-02	7,01E-02	-2,00E-03
RWD	[kg]	3,22E-05	1,23E-07	2,44E-05	1,50E-07	3,52E-08	0,00E+00	2,75E-08	1,31E-06	6,22E-09	-6,08E-07
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,18E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	3,81E-02	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	3,01E-01	0,00E+00	5,68E-02	0,00E+00	0,00E+00	7,22E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,29E+00	0,00E+00	2,44E-01	0,00E+00	0,00E+00	3,10E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 14)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	6,98E-02
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 15:

Representative for the following article numbers: 10837. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 15)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	4,67E+00	2,66E-02	1,02E+00	3,57E-02	2,05E-01	0,00E+00	6,24E-03	2,11E-01	6,45E-03	-1,55E+00
GWP-fossil	[kg CO_2 eq.]	4,68E+00	2,66E-02	1,20E+00	3,57E-02	7,21E-03	0,00E+00	6,24E-03	2,11E-01	6,45E-03	-1,55E+00
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-1,81E-01	0,00E+00	1,98E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	6,04E-04	9,61E-06	5,29E-04	1,29E-05	1,08E-06	0,00E+00	2,17E-06	1,76E-04	1,58E-07	2,96E-04
ODP	[kg CFC 11 eq.]	5,63E-09	1,34E-11	8,85E-10	1,80E-11	2,52E-12	0,00E+00	3,25E-12	1,67E-10	6,45E-13	-7,78E-10
AP	[mol H^+ eq.]	1,76E-02	1,09E-04	3,57E-03	1,46E-04	1,57E-05	0,00E+00	2,87E-05	7,08E-04	4,81E-06	-7,07E-03
EP-freshwater	[kg P eq.]	7,30E-05	2,03E-07	5,95E-05	2,73E-07	3,97E-08	0,00E+00	4,74E-08	4,29E-06	5,61E-09	-2,29E-05
EP-marine	[kg N eq.]	2,92E-03	4,02E-05	7,47E-04	5,41E-05	6,14E-06	0,00E+00	1,12E-05	2,19E-04	7,07E-06	-1,17E-03
EP-terrestrial	[mol N eq.]	2,87E-02	4,42E-04	8,14E-03	5,95E-04	6,61E-05	0,00E+00	1,23E-04	2,32E-03	2,14E-05	-1,12E-02
POCP	[kg NMVOC eq.]	1,34E-02	1,67E-04	2,53E-03	2,25E-04	2,24E-05	0,00E+00	4,31E-05	8,63E-04	9,20E-06	-5,76E-03
ADPm[1]	[kg Sb eq.]	2,99E-06	7,52E-08	2,04E-06	1,01E-07	1,17E-08	0,00E+00	2,04E-08	9,95E-07	1,40E-09	8,26E-07
ADPf[1]	[MJ]	9,50E+01	3,91E-01	1,62E+01	5,26E-01	3,21E-02	0,00E+00	9,01E-02	2,15E+00	1,63E-02	-4,59E+01
WDP[1]	[m^3 world eq. deprived]	2,52E+00	1,78E-03	1,68E-01	2,39E-03	2,17E-04	0,00E+00	3,73E-04	3,51E-02	-3,68E-04	-1,25E+00
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 15)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	2,38E-07	2,74E-09	2,12E-08	3,69E-09	2,67E-10	0,00E+00	6,14E-10	1,44E-08	1,13E-10	-1,11E-07
IRP[2]	[kBq U235 eq.]	8,46E-03	1,61E-04	3,10E-02	2,17E-04	3,96E-05	0,00E+00	4,03E-05	1,96E-03	1,25E-05	2,25E-02
ETP-fw[1]	[CTUe]	1,28E+01	4,59E-02	2,38E+00	6,17E-02	3,51E-02	0,00E+00	1,18E-02	1,34E+00	1,88E-02	-3,61E+00
HTP-c[1]	[CTUh]	8,43E-10	4,37E-12	1,35E-10	5,87E-12	1,72E-12	0,00E+00	1,59E-12	2,80E-10	2,53E-13	-1,77E-10
HTP-nc[1]	[CTUh]	6,95E-09	2,52E-10	5,56E-09	3,39E-10	6,05E-11	0,00E+00	6,27E-11	2,88E-09	3,78E-11	2,12E-09
SQP[1]	-	2,66E+00	3,94E-01	3,76E+00	5,29E-01	1,21E-02	0,00E+00	6,72E-02	1,92E+00	3,98E-02	-8,96E-01
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 15)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	7,77E-01	6,04E-03	9,08E-01	8,12E-03	1,39E-03	0,00E+00	1,50E-03	1,21E-01	4,89E-04	4,47E-02
PERM	[MJ]	1,43E-01	0,00E+00	1,64E+00	0,00E+00	-1,78E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	9,20E-01	6,04E-03	2,55E+00	8,12E-03	-1,78E+00	0,00E+00	1,50E-03	1,21E-01	4,89E-04	4,47E-02
PENRE	[MJ]	9,50E+01	3,91E-01	1,62E+01	5,26E-01	3,21E-02	0,00E+00	9,01E-02	2,15E+00	1,63E-02	-4,59E+01
PENRM	[MJ]	3,59E+01	0,00E+00	-9,16E-02	0,00E+00	-8,02E-02	0,00E+00	0,00E+00	-3,32E+01	-2,50E+00	0,00E+00
PENRT	[MJ]	1,31E+02	3,91E-01	1,61E+01	5,26E-01	-4,81E-02	0,00E+00	9,01E-02	-3,11E+01	-2,48E+00	-4,59E+01
SM	[kg]	0,00E+00	0,00E+00	8,41E-02	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
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
FW	[m^3]	2,39E+00	4,66E-02	2,22E+00	6,27E-02	9,86E-03	0,00E+00	1,14E-02	8,83E-01	6,03E-03	3,79E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 15)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	2,02E-03	8,57E-06	1,88E-03	1,15E-05	2,53E-04	0,00E+00	1,78E-06	1,01E-03	1,31E-06	4,23E-03
NHWD	[kg]	1,85E-01	3,38E-02	4,00E-02	4,54E-02	9,95E-04	0,00E+00	5,60E-03	7,39E-02	7,01E-02	8,56E-02
RWD	[kg]	6,34E-06	1,08E-07	2,31E-05	1,45E-07	3,07E-08	0,00E+00	2,75E-08	1,31E-06	6,94E-09	1,84E-05
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,41E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	3,47E-02	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	2,53E-01	0,00E+00	4,68E-02	0,00E+00	0,00E+00	6,07E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,09E+00	0,00E+00	2,01E-01	0,00E+00	0,00E+00	2,61E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 15)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	5,41E-02
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 16:

Representative for the following article numbers: 10722. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 16)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	3,77E+00	3,11E-02	9,85E-01	3,68E-02	2,54E-01	0,00E+00	6,24E-03	2,19E-01	8,51E-03	-2,09E+00
GWP-fossil	[kg CO_2 eq.]	3,79E+00	3,11E-02	1,21E+00	3,68E-02	8,91E-03	0,00E+00	6,24E-03	2,19E-01	8,51E-03	-2,09E+00
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-2,28E-01	0,00E+00	2,45E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	5,04E-04	1,12E-05	6,22E-04	1,33E-05	1,34E-06	0,00E+00	2,17E-06	1,76E-04	1,57E-07	6,57E-04
ODP	[kg CFC 11 eq.]	1,53E-09	1,56E-11	7,38E-10	1,85E-11	3,12E-12	0,00E+00	3,25E-12	1,66E-10	6,41E-13	2,14E-10
AP	[mol H^+ eq.]	1,67E-02	1,27E-04	3,58E-03	1,50E-04	1,94E-05	0,00E+00	2,87E-05	7,07E-04	4,64E-06	-8,72E-03
EP-freshwater	[kg P eq.]	1,32E-05	2,37E-07	5,79E-05	2,81E-07	4,91E-08	0,00E+00	4,74E-08	4,29E-06	5,57E-09	2,12E-05
EP-marine	[kg N eq.]	2,54E-03	4,71E-05	7,52E-04	5,56E-05	7,59E-06	0,00E+00	1,12E-05	2,18E-04	3,53E-06	-1,31E-03
EP-terrestrial	[mol N eq.]	2,74E-02	5,18E-04	8,26E-03	6,12E-04	8,17E-05	0,00E+00	1,23E-04	2,31E-03	2,10E-05	-1,42E-02
POCP	[kg NMVOC eq.]	1,16E-02	1,96E-04	2,52E-03	2,31E-04	2,77E-05	0,00E+00	4,31E-05	8,61E-04	9,65E-06	-6,39E-03
ADPm[1]	[kg Sb eq.]	1,45E-06	8,80E-08	2,03E-06	1,04E-07	1,45E-08	0,00E+00	2,04E-08	9,94E-07	1,38E-09	3,09E-06
ADPf[1]	[MJ]	8,53E+01	4,58E-01	1,60E+01	5,41E-01	3,97E-02	0,00E+00	9,01E-02	2,15E+00	1,63E-02	-5,33E+01
WDP[1]	[m^3 world eq. deprived]	2,29E+00	2,08E-03	1,65E-01	2,46E-03	2,68E-04	0,00E+00	3,73E-04	3,50E-02	-3,68E-04	-1,53E+00
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 16)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	1,71E-07	3,21E-09	1,91E-08	3,79E-09	3,30E-10	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-1,01E-07
IRP[2]	[kBq U235 eq.]	6,52E-03	1,89E-04	3,13E-02	2,23E-04	4,90E-05	0,00E+00	4,03E-05	1,95E-03	1,15E-05	4,66E-02
ETP-fw[1]	[CTUe]	3,11E+00	5,37E-02	1,98E+00	6,34E-02	4,34E-02	0,00E+00	1,18E-02	1,31E+00	6,73E-03	1,47E+00
HTP-c[1]	[CTUh]	3,96E-10	5,11E-12	1,21E-10	6,03E-12	2,12E-12	0,00E+00	1,59E-12	2,79E-10	1,95E-13	2,30E-11
HTP-nc[1]	[CTUh]	5,21E-09	2,95E-10	5,67E-09	3,48E-10	7,48E-11	0,00E+00	6,27E-11	2,87E-09	2,50E-11	2,91E-09
SQP[1]	-	2,28E+00	4,61E-01	4,30E+00	5,44E-01	1,50E-02	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-8,50E-01
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 16)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	6,87E-01	7,06E-03	1,01E+00	8,35E-03	1,72E-03	0,00E+00	1,50E-03	1,20E-01	4,57E-04	6,43E-01
PERM	[MJ]	1,43E-01	0,00E+00	2,06E+00	0,00E+00	-2,21E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	8,30E-01	7,06E-03	3,08E+00	8,35E-03	-2,20E+00	0,00E+00	1,50E-03	1,20E-01	4,57E-04	6,43E-01
PENRE	[MJ]	8,53E+01	4,58E-01	1,60E+01	5,41E-01	3,97E-02	0,00E+00	9,01E-02	2,15E+00	1,63E-02	-5,33E+01
PENRM	[MJ]	3,90E+01	0,00E+00	-7,27E-02	0,00E+00	-9,92E-02	0,00E+00	0,00E+00	-3,61E+01	-2,71E+00	0,00E+00
PENRT	[MJ]	1,24E+02	4,58E-01	1,59E+01	5,41E-01	-5,95E-02	0,00E+00	9,01E-02	-3,39E+01	-2,70E+00	-5,33E+01
SM	[kg]	0,00E+00	0,00E+00	1,04E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
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
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
FW	[m^3]	1,83E+00	5,46E-02	2,29E+00	6,45E-02	1,22E-02	0,00E+00	1,14E-02	8,82E-01	5,58E-03	7,91E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 16)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	1,78E-03	1,00E-05	2,06E-03	1,18E-05	3,12E-04	0,00E+00	1,78E-06	1,03E-03	1,28E-06	8,83E-03
NHWD	[kg]	1,24E-01	3,95E-02	4,06E-02	4,67E-02	1,23E-03	0,00E+00	5,60E-03	7,38E-02	7,01E-02	4,90E-02
RWD	[kg]	4,84E-06	1,26E-07	2,34E-05	1,49E-07	3,80E-08	0,00E+00	2,75E-08	1,31E-06	6,46E-09	3,81E-05
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,04E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	4,29E-02	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	2,75E-01	0,00E+00	5,79E-02	0,00E+00	0,00E+00	6,59E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,18E+00	0,00E+00	2,49E-01	0,00E+00	0,00E+00	2,83E-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: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 16)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	6,69E-02
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 17:

Representative for the following article numbers: 10800. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 17)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	2,44E+00	3,54E-02	8,14E-01	3,50E-02	1,68E-01	0,00E+00	6,24E-03	2,49E+00	1,93E-03	-4,79E-01
GWP-fossil	[kg CO_2 eq.]	2,45E+00	3,54E-02	9,59E-01	3,50E-02	5,88E-03	0,00E+00	6,24E-03	2,49E+00	1,93E-03	-4,79E-01
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-1,46E-01	0,00E+00	1,63E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	3,28E-03	1,28E-05	3,88E-04	1,26E-05	7,90E-07	0,00E+00	2,17E-06	5,10E-05	3,56E-08	1,29E-04
ODP	[kg CFC 11 eq.]	1,97E-08	1,78E-11	6,27E-10	1,76E-11	1,79E-12	0,00E+00	3,25E-12	1,70E-10	1,45E-13	-6,55E-11
AP	[mol H^+ eq.]	1,04E-02	1,45E-04	2,91E-03	1,43E-04	1,12E-05	0,00E+00	2,87E-05	4,99E-04	1,05E-06	-2,02E-03
EP-freshwater	[kg P eq.]	8,75E-05	2,70E-07	5,55E-05	2,67E-07	2,87E-08	0,00E+00	4,74E-08	1,52E-06	1,26E-09	4,45E-06
EP-marine	[kg N eq.]	1,98E-03	5,36E-05	6,11E-04	5,29E-05	4,36E-06	0,00E+00	1,12E-05	1,82E-04	8,01E-07	-3,09E-04
EP-terrestrial	[mol N eq.]	1,96E-02	5,89E-04	6,87E-03	5,82E-04	4,70E-05	0,00E+00	1,23E-04	1,99E-03	4,75E-06	-3,40E-03
POCP	[kg NMVOC eq.]	1,09E-02	2,23E-04	1,99E-03	2,20E-04	1,59E-05	0,00E+00	4,31E-05	5,70E-04	2,19E-06	-1,49E-03
ADPm[1]	[kg Sb eq.]	3,10E-05	1,00E-07	1,86E-06	9,89E-08	8,33E-09	0,00E+00	2,04E-08	3,18E-07	3,14E-10	6,72E-07
ADPf[1]	[MJ]	5,43E+01	5,21E-01	1,28E+01	5,15E-01	2,29E-02	0,00E+00	9,01E-02	8,39E-01	3,69E-03	-1,22E+01
WDP[1]	[m^3 world eq. deprived]	1,59E+00	2,37E-03	7,78E-02	2,34E-03	1,57E-04	0,00E+00	3,73E-04	8,06E-04	-8,35E-05	-3,47E-01
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 17)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	1,09E-07	3,65E-09	1,21E-08	3,61E-09	1,89E-10	0,00E+00	6,14E-10	4,95E-09	2,54E-11	-2,34E-08
IRP[2]	[kBq U235 eq.]	5,98E-02	2,15E-04	3,02E-02	2,12E-04	2,88E-05	0,00E+00	4,03E-05	8,97E-04	2,62E-06	1,01E-02
ETP-fw[1]	[CTUe]	3,57E+01	6,11E-02	1,57E+00	6,04E-02	2,48E-02	0,00E+00	1,18E-02	4,33E+00	1,53E-03	3,15E-01
HTP-c[1]	[CTUh]	1,61E-09	5,81E-12	9,42E-11	5,74E-12	1,25E-12	0,00E+00	1,59E-12	9,08E-11	4,42E-14	2,00E-12
HTP-nc[1]	[CTUh]	1,94E-08	3,36E-10	4,93E-09	3,31E-10	4,34E-11	0,00E+00	6,27E-11	1,34E-09	5,68E-12	5,47E-10
SQP[1]	-	8,33E+00	5,24E-01	3,04E+00	5,18E-01	8,82E-03	0,00E+00	6,72E-02	5,48E-01	9,01E-03	-1,15E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 17)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	2,94E+00	8,04E-03	7,57E-01	7,95E-03	1,01E-03	0,00E+00	1,50E-03	4,69E-02	1,04E-04	-9,43E-02
PERM	[MJ]	1,43E-01	0,00E+00	1,33E+00	0,00E+00	-1,47E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	3,08E+00	8,04E-03	2,09E+00	7,95E-03	-1,47E+00	0,00E+00	1,50E-03	4,69E-02	1,04E-04	-9,43E-02
PENRE	[MJ]	5,43E+01	5,21E-01	1,28E+01	5,15E-01	2,29E-02	0,00E+00	9,01E-02	8,39E-01	3,69E-03	-1,22E+01
PENRM	[MJ]	2,99E+01	0,00E+00	-1,00E-01	0,00E+00	-7,15E-02	0,00E+00	0,00E+00	-2,91E+01	-6,15E-01	0,00E+00
PENRT	[MJ]	8,42E+01	5,21E-01	1,27E+01	5,15E-01	-4,87E-02	0,00E+00	9,01E-02	-2,83E+01	-6,12E-01	-1,22E+01
SM	[kg]	6,57E-01	0,00E+00	7,50E-02	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
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
FW	[m^3]	1,39E+01	6,21E-02	2,02E+00	6,14E-02	7,16E-03	0,00E+00	1,14E-02	3,65E-01	1,27E-03	1,68E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 17)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	1,23E-03	1,14E-05	8,38E-04	1,13E-05	1,84E-04	0,00E+00	1,78E-06	1,87E-02	2,91E-07	1,97E-03
NHWD	[kg]	1,57E-01	4,50E-02	2,84E-02	4,44E-02	7,13E-04	0,00E+00	5,60E-03	4,87E-02	1,59E-02	1,03E-02
RWD	[kg]	5,12E-05	1,43E-07	2,25E-05	1,42E-07	2,23E-08	0,00E+00	2,75E-08	6,64E-07	1,47E-09	8,37E-06
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	7,50E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	2,42E-02	0,00E+00	0,00E+00	2,09E-01	0,00E+00	0,00E+00
MER	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	[MJ]	0,00E+00	0,00E+00	6,23E-02	0,00E+00	3,61E-02	0,00E+00	0,00E+00	3,57E+00	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	2,67E-01	0,00E+00	1,55E-01	0,00E+00	0,00E+00	1,53E+01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 17)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	4,44E-02
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 18:

Representative for the following article numbers: 10801. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 18)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	2,05E+00	3,67E-02	-4,02E-02	3,34E-02	9,27E-02	0,00E+00	6,24E-03	3,16E+00	0,00E+00	-4,99E-03
GWP-fossil	[kg CO_2 eq.]	2,06E+00	3,67E-02	3,21E-02	3,34E-02	3,25E-03	0,00E+00	6,24E-03	3,16E+00	0,00E+00	-4,97E-03
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-7,25E-02	0,00E+00	8,94E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	4,10E-03	1,33E-05	1,87E-04	1,21E-05	4,87E-07	0,00E+00	2,17E-06	1,44E-05	0,00E+00	-2,30E-05
ODP	[kg CFC 11 eq.]	2,50E-08	1,84E-11	5,49E-11	1,68E-11	1,14E-12	0,00E+00	3,25E-12	1,71E-10	0,00E+00	-1,31E-10
AP	[mol H^+ eq.]	8,59E-03	1,50E-04	1,18E-04	1,36E-04	7,07E-06	0,00E+00	2,87E-05	4,38E-04	0,00E+00	-5,00E-05
EP-freshwater	[kg P eq.]	1,09E-04	2,80E-07	1,72E-06	2,55E-07	1,79E-08	0,00E+00	4,74E-08	7,09E-07	0,00E+00	-4,06E-07
EP-marine	[kg N eq.]	1,81E-03	5,55E-05	4,75E-05	5,05E-05	2,77E-06	0,00E+00	1,12E-05	1,71E-04	0,00E+00	-1,35E-05
EP-terrestrial	[mol N eq.]	1,74E-02	6,10E-04	4,05E-04	5,55E-04	2,98E-05	0,00E+00	1,23E-04	1,89E-03	0,00E+00	-2,04E-04
POCP	[kg NMVOC eq.]	1,07E-02	2,31E-04	1,24E-04	2,10E-04	1,01E-05	0,00E+00	4,31E-05	4,85E-04	0,00E+00	-4,27E-05
ADPm[1]	[kg Sb eq.]	3,97E-05	1,04E-07	1,11E-07	9,44E-08	5,29E-09	0,00E+00	2,04E-08	1,19E-07	0,00E+00	-3,22E-08
ADPf[1]	[MJ]	4,53E+01	5,40E-01	4,18E-01	4,91E-01	1,45E-02	0,00E+00	9,01E-02	4,56E-01	0,00E+00	-8,39E-02
WDP[1]	[m^3 world eq. deprived]	1,38E+00	2,45E-03	1,23E-02	2,23E-03	9,77E-05	0,00E+00	3,73E-04	-9,22E-03	0,00E+00	-9,33E-04
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 18)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	9,05E-08	3,78E-09	1,31E-09	3,44E-09	1,20E-10	0,00E+00	6,14E-10	2,19E-09	0,00E+00	-5,95E-10
IRP[2]	[kBq U235 eq.]	7,54E-02	2,23E-04	8,60E-04	2,03E-04	1,79E-05	0,00E+00	4,03E-05	5,87E-04	0,00E+00	-5,73E-04
ETP-fw[1]	[CTUe]	4,53E+01	6,33E-02	2,20E-01	5,76E-02	1,58E-02	0,00E+00	1,18E-02	5,21E+00	0,00E+00	-2,00E-02
HTP-c[1]	[CTUh]	1,97E-09	6,02E-12	1,10E-11	5,48E-12	7,74E-13	0,00E+00	1,59E-12	3,55E-11	0,00E+00	-3,65E-12
HTP-nc[1]	[CTUh]	2,35E-08	3,48E-10	3,76E-10	3,16E-10	2,73E-11	0,00E+00	6,27E-11	8,90E-10	0,00E+00	-1,28E-10
SQP[1]	-	1,01E+01	5,43E-01	1,07E+00	4,94E-01	5,48E-03	0,00E+00	6,72E-02	1,46E-01	0,00E+00	-1,07E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 18)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	3,60E+00	8,33E-03	2,13E-01	7,58E-03	6,26E-04	0,00E+00	1,50E-03	2,53E-02	0,00E+00	-2,71E-01
PERM	[MJ]	1,43E-01	0,00E+00	6,62E-01	0,00E+00	-8,05E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	3,74E+00	8,33E-03	8,75E-01	7,58E-03	-8,04E-01	0,00E+00	1,50E-03	2,53E-02	0,00E+00	-2,71E-01
PENRE	[MJ]	4,53E+01	5,40E-01	4,18E-01	4,91E-01	1,45E-02	0,00E+00	9,01E-02	4,56E-01	0,00E+00	-8,39E-02
PENRM	[MJ]	2,72E+01	0,00E+00	-1,36E-01	0,00E+00	-3,62E-02	0,00E+00	0,00E+00	-2,71E+01	0,00E+00	0,00E+00
PENRT	[MJ]	7,25E+01	5,40E-01	2,82E-01	4,91E-01	-2,17E-02	0,00E+00	9,01E-02	-2,66E+01	0,00E+00	-8,39E-02
SM	[kg]	8,50E-01	0,00E+00	3,79E-02	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
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
FW	[m^3]	1,75E+01	6,43E-02	1,89E-01	5,85E-02	4,45E-03	0,00E+00	1,14E-02	2,14E-01	0,00E+00	-1,33E-01
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 18)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	1,07E-03	1,18E-05	2,97E-04	1,08E-05	1,14E-04	0,00E+00	1,78E-06	2,38E-02	0,00E+00	-3,53E-05
NHWD	[kg]	1,67E-01	4,66E-02	6,42E-03	4,24E-02	4,49E-04	0,00E+00	5,60E-03	4,14E-02	0,00E+00	-9,61E-04
RWD	[kg]	6,47E-05	1,49E-07	6,74E-07	1,35E-07	1,39E-08	0,00E+00	2,75E-08	4,76E-07	0,00E+00	-3,08E-07
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,79E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	1,56E-02	0,00E+00	0,00E+00	0,00E+00	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
EEE	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,11E-02	0,00E+00	0,00E+00	4,60E+00	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	9,07E-02	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: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 18)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	2,44E-02
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 19:

Representative for the following article numbers: 10821, 10803. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 19)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	3,60E+00	5,35E-02	9,61E-01	3,67E-02	2,52E-01	0,00E+00	6,24E-03	2,14E-01	7,32E-03	-1,19E+00
GWP-fossil	[kg CO_2 eq.]	3,62E+00	5,35E-02	1,19E+00	3,67E-02	8,84E-03	0,00E+00	6,24E-03	2,14E-01	7,32E-03	-1,19E+00
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-2,26E-01	0,00E+00	2,43E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	8,34E-04	1,93E-05	6,32E-04	1,33E-05	1,32E-06	0,00E+00	2,17E-06	1,76E-04	1,57E-07	1,00E-04
ODP	[kg CFC 11 eq.]	6,01E-09	2,69E-11	9,26E-10	1,85E-11	3,09E-12	0,00E+00	3,25E-12	1,66E-10	6,43E-13	-1,55E-09
AP	[mol H^+ eq.]	1,29E-02	2,18E-04	3,43E-03	1,50E-04	1,92E-05	0,00E+00	2,87E-05	7,07E-04	4,70E-06	-4,87E-03
EP-freshwater	[kg P eq.]	5,99E-05	4,08E-07	5,98E-05	2,80E-07	4,87E-08	0,00E+00	4,74E-08	4,29E-06	5,58E-09	-1,40E-05
EP-marine	[kg N eq.]	2,23E-03	8,09E-05	7,41E-04	5,56E-05	7,52E-06	0,00E+00	1,12E-05	2,19E-04	4,89E-06	-8,89E-04
EP-terrestrial	[mol N eq.]	2,26E-02	8,90E-04	8,08E-03	6,11E-04	8,10E-05	0,00E+00	1,23E-04	2,32E-03	2,11E-05	-8,88E-03
POCP	[kg NMVOC eq.]	1,32E-02	3,37E-04	2,59E-03	2,31E-04	2,74E-05	0,00E+00	4,31E-05	8,62E-04	9,37E-06	-6,31E-03
ADPm[1]	[kg Sb eq.]	7,54E-06	1,51E-07	2,28E-06	1,04E-07	1,44E-08	0,00E+00	2,04E-08	9,95E-07	1,39E-09	-1,38E-06
ADPf[1]	[MJ]	8,57E+01	7,87E-01	1,60E+01	5,40E-01	3,93E-02	0,00E+00	9,01E-02	2,15E+00	1,63E-02	-4,37E+01
WDP[1]	[m^3 world eq. deprived]	1,95E+00	3,58E-03	1,51E-01	2,46E-03	2,66E-04	0,00E+00	3,73E-04	3,50E-02	-3,68E-04	-9,89E-01
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 19)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	1,50E-07	5,52E-09	1,83E-08	3,79E-09	3,27E-10	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-6,81E-08
IRP[2]	[kBq U235 eq.]	2,43E-02	3,24E-04	3,21E-02	2,23E-04	4,86E-05	0,00E+00	4,03E-05	1,95E-03	1,18E-05	1,49E-02
ETP-fw[1]	[CTUe]	9,96E+00	9,22E-02	2,28E+00	6,33E-02	4,31E-02	0,00E+00	1,18E-02	1,32E+00	1,14E-02	-2,41E+00
HTP-c[1]	[CTUh]	6,76E-10	8,78E-12	1,32E-10	6,03E-12	2,11E-12	0,00E+00	1,59E-12	2,79E-10	2,14E-13	-1,33E-10
HTP-nc[1]	[CTUh]	1,05E-08	5,07E-10	5,85E-09	3,48E-10	7,42E-11	0,00E+00	6,27E-11	2,86E-09	3,15E-11	-4,34E-10
SQP[1]	-	4,67E+00	7,92E-01	4,39E+00	5,44E-01	1,49E-02	0,00E+00	6,72E-02	1,92E+00	3,98E-02	-2,41E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 19)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	1,36E+00	1,21E-02	1,04E+00	8,34E-03	1,70E-03	0,00E+00	1,50E-03	1,21E-01	4,66E-04	-1,54E-01
PERM	[MJ]	1,43E-01	0,00E+00	2,04E+00	0,00E+00	-2,19E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	1,51E+00	1,21E-02	3,08E+00	8,34E-03	-2,19E+00	0,00E+00	1,50E-03	1,21E-01	4,66E-04	-1,54E-01
PENRE	[MJ]	8,57E+01	7,87E-01	1,60E+01	5,40E-01	3,93E-02	0,00E+00	9,01E-02	2,15E+00	1,63E-02	-4,37E+01
PENRM	[MJ]	3,91E+01	0,00E+00	-7,35E-02	0,00E+00	-9,83E-02	0,00E+00	0,00E+00	-3,62E+01	-2,73E+00	0,00E+00
PENRT	[MJ]	1,25E+02	7,87E-01	1,60E+01	5,40E-01	-5,90E-02	0,00E+00	9,01E-02	-3,41E+01	-2,71E+00	-4,37E+01
SM	[kg]	3,35E-01	0,00E+00	1,17E-01	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
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
FW	[m^3]	5,49E+00	9,38E-02	2,44E+00	6,44E-02	1,21E-02	0,00E+00	1,14E-02	8,82E-01	5,71E-03	2,01E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 19)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	1,40E-03	1,72E-05	2,05E-03	1,18E-05	3,10E-04	0,00E+00	1,78E-06	1,03E-03	1,39E-06	3,65E-03
NHWD	[kg]	1,62E-01	6,79E-02	4,33E-02	4,66E-02	1,22E-03	0,00E+00	5,60E-03	7,38E-02	7,01E-02	9,14E-02
RWD	[kg]	1,85E-05	2,17E-07	2,40E-05	1,49E-07	3,77E-08	0,00E+00	2,75E-08	1,31E-06	6,60E-09	1,28E-05
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,03E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	4,25E-02	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	2,76E-01	0,00E+00	5,74E-02	0,00E+00	0,00E+00	6,62E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,18E+00	0,00E+00	2,47E-01	0,00E+00	0,00E+00	2,84E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 19)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	6,63E-02
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 20:

Representative for the following article numbers: 10835. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 20)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	2,41E+00	7,81E-02	7,68E-01	4,12E-02	4,61E-01	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-5,47E-01
GWP-fossil	[kg CO_2 eq.]	2,42E+00	7,81E-02	1,20E+00	4,11E-02	1,61E-02	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-5,47E-01
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-4,28E-01	0,00E+00	4,45E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	1,42E-03	2,82E-05	9,42E-04	1,49E-05	2,16E-06	0,00E+00	2,17E-06	1,76E-04	1,57E-07	-1,07E-04
ODP	[kg CFC 11 eq.]	6,10E-09	3,93E-11	1,02E-09	2,07E-11	4,91E-12	0,00E+00	3,25E-12	1,66E-10	6,41E-13	-1,78E-09
AP	[mol H^+ eq.]	8,02E-03	3,19E-04	3,41E-03	1,68E-04	3,06E-05	0,00E+00	2,87E-05	7,07E-04	4,59E-06	-1,71E-03
EP-freshwater	[kg P eq.]	4,68E-05	5,96E-07	6,20E-05	3,14E-07	7,86E-08	0,00E+00	4,74E-08	4,29E-06	5,56E-09	-3,44E-06
EP-marine	[kg N eq.]	1,48E-03	1,18E-04	7,81E-04	6,23E-05	1,20E-05	0,00E+00	1,12E-05	2,18E-04	2,49E-06	-4,13E-04
EP-terrestrial	[mol N eq.]	1,59E-02	1,30E-03	8,42E-03	6,85E-04	1,29E-04	0,00E+00	1,23E-04	2,32E-03	2,08E-05	-4,51E-03
POCP	[kg NMVOC eq.]	1,35E-02	4,92E-04	2,80E-03	2,59E-04	4,35E-05	0,00E+00	4,31E-05	8,61E-04	9,57E-06	-4,73E-03
ADPm[1]	[kg Sb eq.]	1,26E-05	2,21E-07	2,67E-06	1,16E-07	2,28E-08	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-2,62E-06
ADPf[1]	[MJ]	7,51E+01	1,15E+00	1,63E+01	6,05E-01	6,27E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-2,80E+01
WDP[1]	[m^3 world eq. deprived]	1,57E+00	5,23E-03	1,56E-01	2,75E-03	4,29E-04	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-4,73E-01
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 20)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	5,31E-08	8,06E-09	1,63E-08	4,25E-09	5,17E-10	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-1,44E-08
IRP[2]	[kBq U235 eq.]	5,70E-02	4,74E-04	3,48E-02	2,50E-04	7,89E-05	0,00E+00	4,03E-05	1,95E-03	1,11E-05	3,66E-03
ETP-fw[1]	[CTUe]	6,73E+00	1,35E-01	2,38E+00	7,10E-02	6,78E-02	0,00E+00	1,18E-02	1,29E+00	3,32E-03	-7,62E-01
HTP-c[1]	[CTUh]	4,87E-10	1,28E-11	1,40E-10	6,76E-12	3,41E-12	0,00E+00	1,59E-12	2,79E-10	1,72E-13	-6,08E-11
HTP-nc[1]	[CTUh]	1,45E-08	7,40E-10	6,53E-09	3,90E-10	1,19E-10	0,00E+00	6,27E-11	2,85E-09	2,46E-11	-2,35E-09
SQP[1]	-	7,19E+00	1,16E+00	6,33E+00	6,09E-01	2,41E-02	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-4,40E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 20)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	2,35E+00	1,77E-02	1,44E+00	9,35E-03	2,76E-03	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-6,32E-01
PERM	[MJ]	1,43E-01	0,00E+00	3,89E+00	0,00E+00	-4,03E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,49E+00	1,77E-02	5,33E+00	9,35E-03	-4,03E+00	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-6,32E-01
PENRE	[MJ]	7,51E+01	1,15E+00	1,63E+01	6,05E-01	6,27E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-2,80E+01
PENRM	[MJ]	4,26E+01	0,00E+00	2,41E-02	0,00E+00	-1,96E-01	0,00E+00	0,00E+00	-3,95E+01	-2,97E+00	0,00E+00
PENRT	[MJ]	1,18E+02	1,15E+00	1,63E+01	6,05E-01	-1,33E-01	0,00E+00	9,01E-02	-3,73E+01	-2,96E+00	-2,80E+01
SM	[kg]	6,80E-01	0,00E+00	2,34E-01	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
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
FW	[m^3]	1,21E+01	1,37E-01	3,02E+00	7,22E-02	1,96E-02	0,00E+00	1,14E-02	8,82E-01	5,36E-03	-1,32E-01
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^{2}$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 20)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	7,75E-04	2,52E-05	2,45E-03	1,33E-05	5,04E-04	0,00E+00	1,78E-06	1,05E-03	1,49E-06	1,99E-03
NHWD	[kg]	1,51E-01	9,91E-02	5,41E-02	5,22E-02	1,95E-03	0,00E+00	5,60E-03	7,38E-02	7,01E-02	6,47E-02
RWD	[kg]	3,84E-05	3,16E-07	2,59E-05	1,67E-07	6,12E-08	0,00E+00	2,75E-08	1,31E-06	6,22E-09	4,15E-06
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,05E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	6,63E-02	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	3,01E-01	0,00E+00	9,88E-02	0,00E+00	0,00E+00	7,22E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,29E+00	0,00E+00	4,24E-01	0,00E+00	0,00E+00	3,10E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^{2}$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 20)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	1,22E-01
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 21:

Representative for the following article numbers: 10833. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 21)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	2,41E+00	7,19E-02	7,47E-01	4,18E-02	4,91E-01	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-5,45E-01
GWP-fossil	[kg CO_2 eq.]	2,42E+00	7,19E-02	1,20E+00	4,18E-02	1,71E-02	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-5,45E-01
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-4,57E-01	0,00E+00	4,74E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	1,82E-03	2,60E-05	1,01E-03	1,51E-05	2,30E-06	0,00E+00	2,17E-06	1,76E-04	1,57E-07	-2,91E-04
ODP	[kg CFC 11 eq.]	6,04E-09	3,61E-11	1,03E-09	2,10E-11	5,23E-12	0,00E+00	3,25E-12	1,66E-10	6,41E-13	-1,41E-09
AP	[mol H^+ eq.]	8,04E-03	2,94E-04	3,44E-03	1,71E-04	3,25E-05	0,00E+00	2,87E-05	7,07E-04	4,59E-06	-1,86E-03
EP-freshwater	[kg P eq.]	4,97E-05	5,49E-07	6,26E-05	3,19E-07	8,37E-08	0,00E+00	4,74E-08	4,29E-06	5,56E-09	-1,04E-05
EP-marine	[kg N eq.]	1,51E-03	1,09E-04	7,95E-04	6,32E-05	1,27E-05	0,00E+00	1,12E-05	2,18E-04	2,49E-06	-4,38E-04
EP-terrestrial	[mol N eq.]	1,61E-02	1,20E-03	8,53E-03	6,95E-04	1,37E-04	0,00E+00	1,23E-04	2,32E-03	2,08E-05	-4,72E-03
POCP	[kg NMVOC eq.]	1,42E-02	4,53E-04	2,86E-03	2,63E-04	4,63E-05	0,00E+00	4,31E-05	8,61E-04	9,57E-06	-5,54E-03
ADPm[1]	[kg Sb eq.]	1,27E-05	2,03E-07	2,70E-06	1,18E-07	2,43E-08	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-2,66E-06
ADPf[1]	[MJ]	7,55E+01	1,06E+00	1,65E+01	6,15E-01	6,67E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-2,84E+01
WDP[1]	[m^3 world eq. deprived]	1,82E+00	4,81E-03	1,69E-01	2,79E-03	4,56E-04	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-7,89E-01
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 21)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	5,33E-08	7,42E-09	1,67E-08	4,31E-09	5,51E-10	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-1,36E-08
IRP[2]	[kBq U235 eq.]	7,42E-02	4,36E-04	3,58E-02	2,54E-04	8,40E-05	0,00E+00	4,03E-05	1,95E-03	1,11E-05	-9,49E-03
ETP-fw[1]	[CTUe]	7,27E+00	1,24E-01	2,46E+00	7,21E-02	7,22E-02	0,00E+00	1,18E-02	1,29E+00	3,32E-03	-9,08E-01
HTP-c[1]	[CTUh]	5,01E-10	1,18E-11	1,44E-10	6,86E-12	3,63E-12	0,00E+00	1,59E-12	2,79E-10	1,72E-13	-6,01E-11
HTP-nc[1]	[CTUh]	1,48E-08	6,82E-10	6,63E-09	3,96E-10	1,26E-10	0,00E+00	6,27E-11	2,85E-09	2,46E-11	-2,67E-09
SQP[1]	-	7,56E+00	1,07E+00	6,65E+00	6,19E-01	2,57E-02	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-4,73E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 21)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	2,75E+00	1,63E-02	1,52E+00	9,49E-03	2,94E-03	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-9,93E-01
PERM	[MJ]	1,43E-01	0,00E+00	4,15E+00	0,00E+00	-4,29E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,90E+00	1,63E-02	5,67E+00	9,49E-03	-4,29E+00	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-9,93E-01
PENRE	[MJ]	7,55E+01	1,06E+00	1,65E+01	6,15E-01	6,67E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-2,84E+01
PENRM	[MJ]	4,26E+01	0,00E+00	3,68E-02	0,00E+00	-2,09E-01	0,00E+00	0,00E+00	-3,95E+01	-2,97E+00	0,00E+00
PENRT	[MJ]	1,18E+02	1,06E+00	1,65E+01	6,15E-01	-1,42E-01	0,00E+00	9,01E-02	-3,73E+01	-2,96E+00	-2,84E+01
SM	[kg]	6,42E-01	0,00E+00	2,46E-01	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
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
FW	[m^3]	1,58E+01	1,26E-01	3,23E+00	7,33E-02	2,09E-02	0,00E+00	1,14E-02	8,82E-01	5,36E-03	-2,36E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 21)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	8,19E-04	2,32E-05	2,51E-03	1,35E-05	5,37E-04	0,00E+00	1,78E-06	1,05E-03	1,49E-06	1,92E-03
NHWD	[kg]	1,53E-01	9,13E-02	5,56E-02	5,30E-02	2,08E-03	0,00E+00	5,60E-03	7,38E-02	7,01E-02	6,09E-02
RWD	[kg]	4,61E-05	2,91E-07	2,64E-05	1,69E-07	6,51E-08	0,00E+00	2,75E-08	1,31E-06	6,22E-09	-6,57E-06
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,19E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	7,06E-02	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	3,01E-01	0,00E+00	1,05E-01	0,00E+00	0,00E+00	7,22E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,29E+00	0,00E+00	4,52E-01	0,00E+00	0,00E+00	3,10E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 21)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	1,29E-01
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 22:

Representative for the following article numbers: 12437. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 22)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	3,74E+00	3,13E-02	6,81E-01	5,32E-02	1,08E+00	0,00E+00	6,24E-03	2,19E-01	8,51E-03	-2,18E+00
GWP-fossil	[kg CO_2 eq.]	3,76E+00	3,13E-02	1,60E+00	5,32E-02	1,43E-01	0,00E+00	6,24E-03	2,19E-01	8,51E-03	-2,18E+00
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-9,22E-01	0,00E+00	9,39E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	4,12E-04	1,13E-05	2,51E-03	1,92E-05	8,38E-06	0,00E+00	2,17E-06	1,76E-04	1,57E-07	5,12E-04
ODP	[kg CFC 11 eq.]	1,07E-09	1,57E-11	1,53E-09	2,68E-11	1,73E-11	0,00E+00	3,25E-12	1,66E-10	6,41E-13	-6,34E-10
AP	[mol H^+ eq.]	1,59E-02	1,28E-04	5,13E-03	2,17E-04	1,07E-04	0,00E+00	2,87E-05	7,07E-04	4,64E-06	-9,27E-03
EP-freshwater	[kg P eq.]	8,94E-06	2,39E-07	7,84E-05	4,06E-07	2,82E-07	0,00E+00	4,74E-08	4,29E-06	5,57E-09	1,87E-05
EP-marine	[kg N eq.]	2,50E-03	4,74E-05	1,28E-03	8,06E-05	4,23E-05	0,00E+00	1,12E-05	2,18E-04	3,56E-06	-1,44E-03
EP-terrestrial	[mol N eq.]	2,70E-02	5,21E-04	1,30E-02	8,86E-04	4,56E-04	0,00E+00	1,23E-04	2,31E-03	2,10E-05	-1,59E-02
POCP	[kg NMVOC eq.]	1,14E-02	1,97E-04	4,37E-03	3,35E-04	1,49E-04	0,00E+00	4,31E-05	8,61E-04	9,66E-06	-6,95E-03
ADPm[1]	[kg Sb eq.]	1,02E-06	8,86E-08	3,64E-06	1,51E-07	7,92E-08	0,00E+00	2,04E-08	9,94E-07	1,38E-09	2,88E-06
ADPf[1]	[MJ]	8,50E+01	4,61E-01	2,38E+01	7,83E-01	2,11E-01	0,00E+00	9,01E-02	2,15E+00	1,63E-02	-5,57E+01
WDP[1]	[m^3 world eq. deprived]	2,27E+00	2,10E-03	3,64E-01	3,56E-03	1,83E-03	0,00E+00	3,73E-04	3,50E-02	-3,68E-04	-1,58E+00
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 22)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	1,69E-07	3,23E-09	3,53E-08	5,49E-09	1,70E-09	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-1,07E-07
IRP[2]	[kBq U235 eq.]	3,29E-03	1,90E-04	4,37E-02	3,23E-04	2,43E-04	0,00E+00	4,03E-05	1,95E-03	1,16E-05	4,36E-02
ETP-fw[1]	[CTUe]	2,03E+00	5,40E-02	4,68E+00	9,18E-02	2,28E-01	0,00E+00	1,18E-02	1,31E+00	6,80E-03	1,34E+00
HTP-c[1]	[CTUh]	3,52E-10	5,14E-12	2,36E-10	8,74E-12	1,49E-11	0,00E+00	1,59E-12	2,79E-10	1,95E-13	-2,18E-12
HTP-nc[1]	[CTUh]	4,54E-09	2,97E-10	9,84E-09	5,04E-10	4,63E-10	0,00E+00	6,27E-11	2,88E-09	2,51E-11	2,09E-09
SQP[1]	-	1,80E+00	4,64E-01	1,44E+01	7,88E-01	9,38E-02	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-9,11E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 22)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	5,58E-01	7,11E-03	3,11E+00	1,21E-02	9,34E-03	0,00E+00	1,50E-03	1,20E-01	4,57E-04	-1,30E+00
PERM	[MJ]	1,43E-01	0,00E+00	8,26E+00	0,00E+00	-8,40E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	7,00E-01	7,11E-03	1,14E+01	1,21E-02	-8,40E+00	0,00E+00	1,50E-03	1,20E-01	4,57E-04	-1,30E+00
PENRE	[MJ]	8,50E+01	4,61E-01	2,38E+01	7,83E-01	2,11E-01	0,00E+00	9,01E-02	2,15E+00	1,63E-02	-5,57E+01
PENRM	[MJ]	3,89E+01	0,00E+00	2,19E+00	0,00E+00	-2,36E+00	0,00E+00	0,00E+00	-3,60E+01	-2,71E+00	0,00E+00
PENRT	[MJ]	1,24E+02	4,61E-01	2,60E+01	7,83E-01	-2,15E+00	0,00E+00	9,01E-02	-3,38E+01	-2,69E+00	-5,57E+01
SM	[kg]	0,00E+00	0,00E+00	3,63E-01	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
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
FW	[m^3]	1,05E+00	5,49E-02	5,10E+00	9,33E-02	6,74E-02	0,00E+00	1,14E-02	8,82E-01	5,59E-03	7,16E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^{2}$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 22)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	1,73E-03	1,01E-05	4,25E-03	1,71E-05	2,37E-03	0,00E+00	1,78E-06	1,03E-03	1,28E-06	8,83E-03
NHWD	[kg]	9,77E-02	3,98E-02	1,05E-01	6,76E-02	6,72E-03	0,00E+00	5,60E-03	7,38E-02	7,01E-02	4,45E-02
RWD	[kg]	2,42E-06	1,27E-07	3,29E-05	2,16E-07	1,85E-07	0,00E+00	2,75E-08	1,31E-06	6,47E-09	3,67E-05
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,63E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	2,02E-01	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	2,74E-01	0,00E+00	4,82E-01	0,00E+00	0,00E+00	6,58E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,18E+00	0,00E+00	2,07E+00	0,00E+00	0,00E+00	2,83E-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: $1,95*10^{2}$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 22)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	2,56E-01
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 23:

Representative for the following article numbers: 12128. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 23)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	2,67E+00	6,38E-02	7,58E-01	3,98E-02	3,87E-01	0,00E+00	6,24E-03	2,16E-01	7,85E-03	-9,80E-01
GWP-fossil	[kg CO_2 eq.]	2,68E+00	6,38E-02	1,11E+00	3,98E-02	1,31E-02	0,00E+00	6,24E-03	2,16E-01	7,85E-03	-9,80E-01
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-3,57E-01	0,00E+00	3,74E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	1,49E-03	2,31E-05	2,04E-04	1,44E-05	6,16E-07	0,00E+00	2,17E-06	1,76E-04	1,57E-07	-2,48E-04
ODP	[kg CFC 11 eq.]	6,34E-09	3,21E-11	8,38E-10	2,00E-11	7,03E-13	0,00E+00	3,25E-12	1,66E-10	6,40E-13	-2,38E-09
AP	[mol H^+ eq.]	8,68E-03	2,60E-04	3,05E-03	1,62E-04	4,53E-06	0,00E+00	2,87E-05	7,06E-04	4,59E-06	-2,91E-03
EP-freshwater	[kg P eq.]	5,52E-05	4,87E-07	5,59E-05	3,04E-07	1,80E-08	0,00E+00	4,74E-08	4,29E-06	5,56E-09	-9,24E-06
EP-marine	[kg N eq.]	1,68E-03	9,66E-05	6,20E-04	6,02E-05	1,73E-06	0,00E+00	1,12E-05	2,18E-04	2,45E-06	-6,62E-04
EP-terrestrial	[mol N eq.]	1,82E-02	1,06E-03	7,13E-03	6,62E-04	1,87E-05	0,00E+00	1,23E-04	2,31E-03	2,08E-05	-7,13E-03
POCP	[kg NMVOC eq.]	1,33E-02	4,02E-04	2,42E-03	2,50E-04	5,72E-06	0,00E+00	4,31E-05	8,61E-04	9,45E-06	-7,39E-03
ADPm[1]	[kg Sb eq.]	1,42E-05	1,80E-07	2,38E-06	1,13E-07	3,10E-09	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-4,95E-06
ADPf[1]	[MJ]	7,74E+01	9,39E-01	1,52E+01	5,85E-01	9,86E-03	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-4,47E+01
WDP[1]	[m^3 world eq. deprived]	1,09E+00	4,27E-03	9,48E-02	2,66E-03	9,73E-05	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-7,11E-01
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 23)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	7,96E-08	6,58E-09	1,34E-08	4,10E-09	5,96E-11	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-2,24E-08
IRP[2]	[kBq U235 eq.]	4,01E-02	3,87E-04	3,12E-02	2,41E-04	2,04E-05	0,00E+00	4,03E-05	1,95E-03	1,10E-05	-2,16E-03
ETP-fw[1]	[CTUe]	1,51E+01	1,10E-01	1,98E+00	6,86E-02	6,54E-03	0,00E+00	1,18E-02	1,29E+00	3,20E-03	-1,62E+00
HTP-c[1]	[CTUh]	5,15E-10	1,05E-11	1,16E-10	6,53E-12	8,42E-13	0,00E+00	1,59E-12	2,79E-10	1,69E-13	-1,28E-10
HTP-nc[1]	[CTUh]	1,61E-08	6,05E-10	5,27E-09	3,77E-10	2,17E-11	0,00E+00	6,27E-11	2,85E-09	2,34E-11	-4,65E-09
SQP[1]	-	7,48E+00	9,45E-01	2,96E+00	5,89E-01	6,04E-03	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-2,82E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 23)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	1,89E+00	1,45E-02	7,40E-01	9,04E-03	6,84E-04	0,00E+00	1,50E-03	1,20E-01	4,36E-04	-3,27E-01
PERM	[MJ]	1,43E-01	0,00E+00	3,34E+00	0,00E+00	-3,48E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,03E+00	1,45E-02	4,08E+00	9,04E-03	-3,48E+00	0,00E+00	1,50E-03	1,20E-01	4,36E-04	-3,27E-01
PENRE	[MJ]	7,74E+01	9,39E-01	1,52E+01	5,85E-01	9,86E-03	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-4,47E+01
PENRM	[MJ]	3,90E+01	0,00E+00	6,43E-02	0,00E+00	-2,36E-01	0,00E+00	0,00E+00	-3,61E+01	-2,72E+00	0,00E+00
PENRT	[MJ]	1,16E+02	9,39E-01	1,53E+01	5,85E-01	-2,26E-01	0,00E+00	9,01E-02	-3,40E+01	-2,70E+00	-4,47E+01
SM	[kg]	4,46E-01	0,00E+00	2,66E-01	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
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
FW	[m^3]	9,97E+00	1,12E-01	2,30E+00	6,98E-02	4,88E-03	0,00E+00	1,14E-02	8,82E-01	5,30E-03	-1,54E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 23)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	7,80E-04	2,06E-05	1,46E-03	1,28E-05	1,36E-04	0,00E+00	1,78E-06	1,03E-03	1,45E-06	3,42E-03
NHWD	[kg]	1,58E-01	8,10E-02	3,36E-02	5,05E-02	3,59E-04	0,00E+00	5,60E-03	7,38E-02	7,01E-02	5,44E-02
RWD	[kg]	2,93E-05	2,58E-07	2,32E-05	1,61E-07	1,58E-08	0,00E+00	2,75E-08	1,31E-06	6,15E-09	-2,25E-07
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,48E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	3,07E-03	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	2,75E-01	0,00E+00	5,37E-02	0,00E+00	0,00E+00	6,60E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,18E+00	0,00E+00	2,31E-01	0,00E+00	0,00E+00	2,84E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 23)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	1,02E-01
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 24:

Representative for the following article numbers: 10865, 10866. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 24)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	2,59E+00	6,90E-02	8,35E-01	3,79E-02	2,99E-01	0,00E+00	6,24E-03	2,17E-01	7,95E-03	-9,48E-01
GWP-fossil	[kg CO_2 eq.]	2,60E+00	6,90E-02	1,11E+00	3,79E-02	1,01E-02	0,00E+00	6,24E-03	2,16E-01	7,95E-03	-9,48E-01
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-2,72E-01	0,00E+00	2,89E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	1,26E-03	2,49E-05	1,82E-04	1,37E-05	4,76E-07	0,00E+00	2,17E-06	1,76E-04	1,57E-07	-2,12E-04
ODP	[kg CFC 11 eq.]	6,09E-09	3,47E-11	8,17E-10	1,90E-11	5,44E-13	0,00E+00	3,25E-12	1,66E-10	6,41E-13	-2,38E-09
AP	[mol H^+ eq.]	8,44E-03	2,82E-04	3,02E-03	1,55E-04	3,50E-06	0,00E+00	2,87E-05	7,07E-04	4,59E-06	-2,82E-03
EP-freshwater	[kg P eq.]	5,12E-05	5,27E-07	5,55E-05	2,89E-07	1,39E-08	0,00E+00	4,74E-08	4,29E-06	5,56E-09	-8,04E-06
EP-marine	[kg N eq.]	1,60E-03	1,04E-04	6,12E-04	5,74E-05	1,33E-06	0,00E+00	1,12E-05	2,18E-04	2,46E-06	-6,48E-04
EP-terrestrial	[mol N eq.]	1,74E-02	1,15E-03	7,04E-03	6,31E-04	1,45E-05	0,00E+00	1,23E-04	2,31E-03	2,08E-05	-6,97E-03
POCP	[kg NMVOC eq.]	1,31E-02	4,34E-04	2,39E-03	2,38E-04	4,43E-06	0,00E+00	4,31E-05	8,61E-04	9,48E-06	-7,36E-03
ADPm[1]	[kg Sb eq.]	1,37E-05	1,95E-07	2,34E-06	1,07E-07	2,40E-09	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-4,74E-06
ADPf[1]	[MJ]	7,66E+01	1,02E+00	1,50E+01	5,57E-01	7,63E-03	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-4,45E+01
WDP[1]	[m^3 world eq. deprived]	1,14E+00	4,62E-03	9,41E-02	2,54E-03	7,53E-05	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-7,17E-01
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 24)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	7,22E-08	7,12E-09	1,28E-08	3,91E-09	4,61E-11	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-2,20E-08
IRP[2]	[kBq U235 eq.]	3,93E-02	4,19E-04	3,10E-02	2,30E-04	1,58E-05	0,00E+00	4,03E-05	1,95E-03	1,10E-05	3,78E-05
ETP-fw[1]	[CTUe]	1,26E+01	1,19E-01	1,85E+00	6,54E-02	5,06E-03	0,00E+00	1,18E-02	1,29E+00	3,23E-03	-1,51E+00
HTP-c[1]	[CTUh]	4,91E-10	1,13E-11	1,11E-10	6,22E-12	6,51E-13	0,00E+00	1,59E-12	2,79E-10	1,70E-13	-1,18E-10
HTP-nc[1]	[CTUh]	1,55E-08	6,54E-10	5,21E-09	3,59E-10	1,67E-11	0,00E+00	6,27E-11	2,85E-09	2,36E-11	-4,34E-09
SQP[1]	-	7,17E+00	1,02E+00	2,65E+00	5,61E-01	4,67E-03	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-2,62E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 24)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	1,85E+00	1,57E-02	6,81E-01	8,61E-03	5,29E-04	0,00E+00	1,50E-03	1,20E-01	4,37E-04	-2,27E-01
PERM	[MJ]	1,43E-01	0,00E+00	2,55E+00	0,00E+00	-2,69E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	1,99E+00	1,57E-02	3,23E+00	8,61E-03	-2,69E+00	0,00E+00	1,50E-03	1,20E-01	4,37E-04	-2,27E-01
PENRE	[MJ]	7,66E+01	1,02E+00	1,50E+01	5,57E-01	7,63E-03	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-4,45E+01
PENRM	[MJ]	3,98E+01	0,00E+00	1,08E-02	0,00E+00	-1,83E-01	0,00E+00	0,00E+00	-3,69E+01	-2,78E+00	0,00E+00
PENRT	[MJ]	1,16E+02	1,02E+00	1,51E+01	5,57E-01	-1,75E-01	0,00E+00	9,01E-02	-3,47E+01	-2,76E+00	-4,45E+01
SM	[kg]	5,14E-01	0,00E+00	2,13E-01	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
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
FW	[m^3]	9,38E+00	1,21E-01	2,23E+00	6,65E-02	3,78E-03	0,00E+00	1,14E-02	8,82E-01	5,31E-03	-1,14E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 24)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	7,60E-04	2,22E-05	1,46E-03	1,22E-05	1,05E-04	0,00E+00	1,78E-06	1,04E-03	1,46E-06	3,37E-03
NHWD	[kg]	1,56E-01	8,76E-02	3,24E-02	4,81E-02	2,78E-04	0,00E+00	5,60E-03	7,38E-02	7,01E-02	6,60E-02
RWD	[kg]	2,90E-05	2,80E-07	2,30E-05	1,53E-07	1,23E-08	0,00E+00	2,75E-08	1,31E-06	6,17E-09	1,53E-06
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,92E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	2,37E-03	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	2,81E-01	0,00E+00	4,15E-02	0,00E+00	0,00E+00	6,74E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,21E+00	0,00E+00	1,78E-01	0,00E+00	0,00E+00	2,90E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 24)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	7,89E-02
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 25:

Representative for the following article numbers: 12129. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 25)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	1,46E+00	2,80E-02	8,04E-01	3,75E-02	2,79E-01	0,00E+00	6,24E-03	2,17E-01	7,97E-03	-3,50E-01
GWP-fossil	[kg CO_2 eq.]	1,48E+00	2,80E-02	1,06E+00	3,75E-02	9,44E-03	0,00E+00	6,24E-03	2,16E-01	7,97E-03	-3,50E-01
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-2,53E-01	0,00E+00	2,70E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	2,05E-03	1,01E-05	2,12E-04	1,35E-05	4,45E-07	0,00E+00	2,17E-06	1,76E-04	1,57E-07	-1,56E-04
ODP	[kg CFC 11 eq.]	1,14E-07	1,41E-11	5,32E-09	1,88E-11	5,08E-13	0,00E+00	3,25E-12	1,66E-10	6,41E-13	-7,82E-10
AP	[mol H^+ eq.]	5,91E-03	1,14E-04	2,90E-03	1,53E-04	3,27E-06	0,00E+00	2,87E-05	7,07E-04	4,59E-06	-1,05E-03
EP-freshwater	[kg P eq.]	4,56E-05	2,14E-07	5,52E-05	2,86E-07	1,30E-08	0,00E+00	4,74E-08	4,29E-06	5,56E-09	-5,23E-06
EP-marine	[kg N eq.]	1,15E-03	4,24E-05	5,89E-04	5,67E-05	1,25E-06	0,00E+00	1,12E-05	2,18E-04	2,46E-06	-2,29E-04
EP-terrestrial	[mol N eq.]	1,24E-02	4,67E-04	6,79E-03	6,23E-04	1,35E-05	0,00E+00	1,23E-04	2,31E-03	2,08E-05	-2,54E-03
POCP	[kg NMVOC eq.]	6,19E-03	1,76E-04	2,08E-03	2,36E-04	4,13E-06	0,00E+00	4,31E-05	8,61E-04	9,48E-06	-2,24E-03
ADPm[1]	[kg Sb eq.]	9,25E-06	7,93E-08	2,14E-06	1,06E-07	2,24E-09	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-1,88E-06
ADPf[1]	[MJ]	3,16E+01	4,13E-01	1,31E+01	5,51E-01	7,12E-03	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-1,36E+01
WDP[1]	[m^3 world eq. deprived]	3,71E-01	1,88E-03	6,13E-02	2,51E-03	7,03E-05	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-1,96E-01
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 25)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	6,18E-08	2,89E-09	1,21E-08	3,87E-09	4,31E-11	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-7,76E-09
IRP[2]	[kBq U235 eq.]	3,62E-02	1,70E-04	3,08E-02	2,27E-04	1,47E-05	0,00E+00	4,03E-05	1,95E-03	1,10E-05	-5,22E-03
ETP-fw[1]	[CTUe]	1,37E+01	4,84E-02	1,88E+00	6,46E-02	4,72E-03	0,00E+00	1,18E-02	1,29E+00	3,23E-03	-7,01E-01
HTP-c[1]	[CTUh]	4,70E-10	4,60E-12	1,08E-10	6,15E-12	6,08E-13	0,00E+00	1,59E-12	2,79E-10	1,70E-13	-5,90E-11
HTP-nc[1]	[CTUh]	1,14E-08	2,66E-10	5,01E-09	3,55E-10	1,56E-11	0,00E+00	6,27E-11	2,85E-09	2,37E-11	-2,03E-09
SQP[1]	-	7,84E+00	4,15E-01	2,59E+00	5,55E-01	4,36E-03	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-1,63E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 25)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	2,56E+00	6,37E-03	6,97E-01	8,51E-03	4,94E-04	0,00E+00	1,50E-03	1,20E-01	4,37E-04	-4,26E-01
PERM	[MJ]	1,43E-01	0,00E+00	2,37E+00	0,00E+00	-2,52E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,71E+00	6,37E-03	3,07E+00	8,51E-03	-2,52E+00	0,00E+00	1,50E-03	1,20E-01	4,37E-04	-4,26E-01
PENRE	[MJ]	3,16E+01	4,13E-01	1,31E+01	5,51E-01	7,12E-03	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-1,36E+01
PENRM	[MJ]	4,00E+01	0,00E+00	-1,25E-03	0,00E+00	-1,71E-01	0,00E+00	0,00E+00	-3,71E+01	-2,79E+00	0,00E+00
PENRT	[MJ]	7,17E+01	4,13E-01	1,31E+01	5,51E-01	-1,63E-01	0,00E+00	9,01E-02	-3,49E+01	-2,77E+00	-1,36E+01
SM	[kg]	6,66E-01	0,00E+00	2,07E-01	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
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
FW	[m^3]	9,32E+00	4,92E-02	2,22E+00	6,57E-02	3,53E-03	0,00E+00	1,14E-02	8,82E-01	5,31E-03	-1,30E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 25)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	2,34E-02	9,03E-06	2,41E-03	1,21E-05	9,81E-05	0,00E+00	1,78E-06	1,04E-03	1,46E-06	1,05E-03
NHWD	[kg]	1,92E-01	3,56E-02	3,14E-02	4,76E-02	2,60E-04	0,00E+00	5,60E-03	7,38E-02	7,01E-02	-6,62E-03
RWD	[kg]	2,43E-05	1,14E-07	2,28E-05	1,52E-07	1,14E-08	0,00E+00	2,75E-08	1,31E-06	6,17E-09	-3,61E-06
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,79E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	2,21E-03	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	2,82E-01	0,00E+00	3,88E-02	0,00E+00	0,00E+00	6,77E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,21E+00	0,00E+00	1,67E-01	0,00E+00	0,00E+00	2,91E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 25)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	7,37E-02
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 26:

Representative for the following article numbers: 12006. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 26)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	2,76E+00	6,38E-02	5,42E-01	4,51E-02	6,33E-01	0,00E+00	6,24E-03	2,17E-01	7,94E-03	-8,89E-01
GWP-fossil	[kg CO_2 eq.]	2,77E+00	6,38E-02	1,14E+00	4,51E-02	2,14E-02	0,00E+00	6,24E-03	2,16E-01	7,94E-03	-8,89E-01
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-5,95E-01	0,00E+00	6,12E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	2,80E-03	2,31E-05	2,89E-04	1,63E-05	1,01E-06	0,00E+00	2,17E-06	1,76E-04	1,57E-07	-2,23E-04
ODP	[kg CFC 11 eq.]	7,75E-09	3,21E-11	9,26E-10	2,27E-11	1,15E-12	0,00E+00	3,25E-12	1,66E-10	6,41E-13	-2,30E-09
AP	[mol H^+ eq.]	9,21E-03	2,61E-04	3,14E-03	1,84E-04	7,41E-06	0,00E+00	2,87E-05	7,07E-04	4,59E-06	-2,67E-03
EP-freshwater	[kg P eq.]	6,36E-05	4,87E-07	5,68E-05	3,44E-07	2,94E-08	0,00E+00	4,74E-08	4,29E-06	5,56E-09	-8,07E-06
EP-marine	[kg N eq.]	1,84E-03	9,66E-05	6,44E-04	6,83E-05	2,83E-06	0,00E+00	1,12E-05	2,18E-04	2,46E-06	-6,12E-04
EP-terrestrial	[mol N eq.]	1,97E-02	1,06E-03	7,37E-03	7,51E-04	3,07E-05	0,00E+00	1,23E-04	2,31E-03	2,08E-05	-6,63E-03
POCP	[kg NMVOC eq.]	1,37E-02	4,02E-04	2,53E-03	2,84E-04	9,37E-06	0,00E+00	4,31E-05	8,61E-04	9,47E-06	-6,84E-03
ADPm[1]	[kg Sb eq.]	1,42E-05	1,81E-07	2,46E-06	1,28E-07	5,07E-09	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-4,46E-06
ADPf[1]	[MJ]	7,84E+01	9,39E-01	1,56E+01	6,64E-01	1,61E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-4,12E+01
WDP[1]	[m^3 world eq. deprived]	1,19E+00	4,27E-03	1,07E-01	3,02E-03	1,59E-04	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-6,62E-01
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 26)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	8,42E-08	6,59E-09	1,44E-08	4,65E-09	9,77E-11	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-2,08E-08
IRP[2]	[kBq U235 eq.]	4,65E-02	3,87E-04	3,19E-02	2,74E-04	3,34E-05	0,00E+00	4,03E-05	1,95E-03	1,10E-05	-1,07E-03
ETP-fw[1]	[CTUe]	1,63E+01	1,10E-01	2,12E+00	7,78E-02	1,07E-02	0,00E+00	1,18E-02	1,29E+00	3,23E-03	-1,44E+00
HTP-c[1]	[CTUh]	5,95E-10	1,05E-11	1,31E-10	7,41E-12	1,38E-12	0,00E+00	1,59E-12	2,79E-10	1,70E-13	-1,14E-10
HTP-nc[1]	[CTUh]	1,65E-08	6,05E-10	5,42E-09	4,27E-10	3,55E-11	0,00E+00	6,27E-11	2,85E-09	2,36E-11	-4,19E-09
SQP[1]	-	8,80E+00	9,45E-01	3,87E+00	6,68E-01	9,89E-03	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-2,95E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 26)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	2,34E+00	1,45E-02	9,23E-01	1,02E-02	1,12E-03	0,00E+00	1,50E-03	1,20E-01	4,37E-04	-3,90E-01
PERM	[MJ]	1,43E-01	0,00E+00	5,56E+00	0,00E+00	-5,71E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,48E+00	1,45E-02	6,49E+00	1,02E-02	-5,70E+00	0,00E+00	1,50E-03	1,20E-01	4,37E-04	-3,90E-01
PENRE	[MJ]	7,84E+01	9,39E-01	1,56E+01	6,64E-01	1,61E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-4,12E+01
PENRM	[MJ]	3,99E+01	0,00E+00	2,15E-01	0,00E+00	-3,87E-01	0,00E+00	0,00E+00	-3,69E+01	-2,78E+00	0,00E+00
PENRT	[MJ]	1,18E+02	9,39E-01	1,59E+01	6,64E-01	-3,71E-01	0,00E+00	9,01E-02	-3,48E+01	-2,76E+00	-4,12E+01
SM	[kg]	4,54E-01	0,00E+00	4,24E-01	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
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
FW	[m^3]	1,15E+01	1,12E-01	2,48E+00	7,91E-02	8,00E-03	0,00E+00	1,14E-02	8,82E-01	5,31E-03	-1,27E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 26)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	8,38E-04	2,06E-05	1,50E-03	1,45E-05	2,22E-04	0,00E+00	1,78E-06	1,04E-03	1,46E-06	3,10E-03
NHWD	[kg]	1,59E-01	8,10E-02	3,76E-02	5,73E-02	5,89E-04	0,00E+00	5,60E-03	7,38E-02	7,01E-02	5,70E-02
RWD	[kg]	3,40E-05	2,59E-07	2,37E-05	1,83E-07	2,59E-08	0,00E+00	2,75E-08	1,31E-06	6,17E-09	6,46E-07
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,05E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	5,02E-03	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	2,81E-01	0,00E+00	8,79E-02	0,00E+00	0,00E+00	6,75E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,21E+00	0,00E+00	3,78E-01	0,00E+00	0,00E+00	2,90E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 26)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	1,67E-01
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 27:

Representative for the following article numbers: 10864. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 27)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	1,47E+00	3,29E-02	7,99E-01	3,76E-02	2,86E-01	0,00E+00	6,24E-03	2,17E-01	7,96E-03	-3,59E-01
GWP-fossil	[kg CO_2 eq.]	1,49E+00	3,29E-02	1,06E+00	3,76E-02	9,67E-03	0,00E+00	6,24E-03	2,16E-01	7,96E-03	-3,58E-01
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-2,60E-01	0,00E+00	2,77E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	1,28E-03	1,19E-05	1,81E-04	1,36E-05	4,56E-07	0,00E+00	2,17E-06	1,76E-04	1,57E-07	-1,59E-04
ODP	[kg CFC 11 eq.]	1,03E-07	1,66E-11	4,84E-09	1,89E-11	5,21E-13	0,00E+00	3,25E-12	1,66E-10	6,41E-13	-7,98E-10
AP	[mol H^+ eq.]	5,48E-03	1,34E-04	2,89E-03	1,54E-04	3,35E-06	0,00E+00	2,87E-05	7,07E-04	4,59E-06	-1,08E-03
EP-freshwater	[kg P eq.]	3,97E-05	2,51E-07	5,50E-05	2,87E-07	1,33E-08	0,00E+00	4,74E-08	4,29E-06	5,56E-09	-5,35E-06
EP-marine	[kg N eq.]	1,06E-03	4,99E-05	5,86E-04	5,69E-05	1,28E-06	0,00E+00	1,12E-05	2,18E-04	2,46E-06	-2,34E-04
EP-terrestrial	[mol N eq.]	1,16E-02	5,48E-04	6,76E-03	6,26E-04	1,39E-05	0,00E+00	1,23E-04	2,31E-03	2,08E-05	-2,60E-03
POCP	[kg NMVOC eq.]	6,74E-03	2,07E-04	2,10E-03	2,37E-04	4,24E-06	0,00E+00	4,31E-05	8,61E-04	9,48E-06	-2,30E-03
ADPm[1]	[kg Sb eq.]	9,12E-06	9,31E-08	2,14E-06	1,06E-07	2,29E-09	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-1,93E-06
ADPf[1]	[MJ]	3,51E+01	4,85E-01	1,33E+01	5,53E-01	7,30E-03	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-1,40E+01
WDP[1]	[m^3 world eq. deprived]	4,88E-01	2,20E-03	6,65E-02	2,52E-03	7,20E-05	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-2,01E-01
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 27)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	5,55E-08	3,40E-09	1,19E-08	3,88E-09	4,41E-11	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-7,94E-09
IRP[2]	[kBq U235 eq.]	3,76E-02	2,00E-04	3,09E-02	2,28E-04	1,51E-05	0,00E+00	4,03E-05	1,95E-03	1,10E-05	-5,33E-03
ETP-fw[1]	[CTUe]	1,17E+01	5,68E-02	1,80E+00	6,49E-02	4,84E-03	0,00E+00	1,18E-02	1,29E+00	3,23E-03	-7,18E-01
HTP-c[1]	[CTUh]	4,08E-10	5,41E-12	1,06E-10	6,18E-12	6,23E-13	0,00E+00	1,59E-12	2,79E-10	1,70E-13	-6,04E-11
HTP-nc[1]	[CTUh]	1,11E-08	3,12E-10	5,01E-09	3,56E-10	1,60E-11	0,00E+00	6,27E-11	2,85E-09	2,37E-11	-2,08E-09
SQP[1]	-	6,94E+00	4,88E-01	2,58E+00	5,57E-01	4,47E-03	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-1,66E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 27)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	2,34E+00	7,48E-03	6,92E-01	8,54E-03	5,06E-04	0,00E+00	1,50E-03	1,20E-01	4,37E-04	-4,32E-01
PERM	[MJ]	1,43E-01	0,00E+00	2,44E+00	0,00E+00	-2,58E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,48E+00	7,48E-03	3,13E+00	8,54E-03	-2,58E+00	0,00E+00	1,50E-03	1,20E-01	4,37E-04	-4,32E-01
PENRE	[MJ]	3,51E+01	4,85E-01	1,33E+01	5,53E-01	7,30E-03	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-1,40E+01
PENRM	[MJ]	4,00E+01	0,00E+00	2,98E-03	0,00E+00	-1,75E-01	0,00E+00	0,00E+00	-3,70E+01	-2,79E+00	0,00E+00
PENRT	[MJ]	7,51E+01	4,85E-01	1,33E+01	5,53E-01	-1,68E-01	0,00E+00	9,01E-02	-3,49E+01	-2,77E+00	-1,40E+01
SM	[kg]	6,71E-01	0,00E+00	2,11E-01	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
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
FW	[m^3]	9,25E+00	5,78E-02	2,22E+00	6,60E-02	3,61E-03	0,00E+00	1,14E-02	8,82E-01	5,31E-03	-1,33E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^{2}$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 27)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	2,12E-02	1,06E-05	2,32E-03	1,21E-05	1,01E-04	0,00E+00	1,78E-06	1,04E-03	1,46E-06	1,08E-03
NHWD	[kg]	1,80E-01	4,18E-02	3,13E-02	4,78E-02	2,66E-04	0,00E+00	5,60E-03	7,38E-02	7,01E-02	-6,77E-03
RWD	[kg]	2,41E-05	1,33E-07	2,28E-05	1,52E-07	1,17E-08	0,00E+00	2,75E-08	1,31E-06	6,17E-09	-3,69E-06
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,83E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	2,27E-03	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	2,82E-01	0,00E+00	3,98E-02	0,00E+00	0,00E+00	6,76E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,21E+00	0,00E+00	1,71E-01	0,00E+00	0,00E+00	2,90E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^{2}$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 27)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	7,55E-02
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 28:

Representative for the following article numbers: 12565, 10863, 12586, 10862. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 28)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	1,26E+00	2,84E-02	8,00E-01	3,74E-02	2,75E-01	0,00E+00	6,24E-03	2,17E-01	7,97E-03	-3,44E-01
GWP-fossil	[kg CO_2 eq.]	1,27E+00	2,84E-02	1,05E+00	3,74E-02	9,29E-03	0,00E+00	6,24E-03	2,16E-01	7,97E-03	-3,44E-01
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-2,49E-01	0,00E+00	2,66E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	1,22E-03	1,03E-05	1,77E-04	1,35E-05	4,38E-07	0,00E+00	2,17E-06	1,76E-04	1,57E-07	-1,54E-04
ODP	[kg CFC 11 eq.]	1,22E-07	1,43E-11	5,63E-09	1,88E-11	5,00E-13	0,00E+00	3,25E-12	1,66E-10	6,41E-13	-7,71E-10
AP	[mol H^+ eq.]	5,01E-03	1,16E-04	2,86E-03	1,53E-04	3,22E-06	0,00E+00	2,87E-05	7,07E-04	4,59E-06	-1,04E-03
EP-freshwater	[kg P eq.]	3,69E-05	2,17E-07	5,49E-05	2,85E-07	1,28E-08	0,00E+00	4,74E-08	4,29E-06	5,56E-09	-5,15E-06
EP-marine	[kg N eq.]	9,54E-04	4,30E-05	5,80E-04	5,66E-05	1,23E-06	0,00E+00	1,12E-05	2,18E-04	2,46E-06	-2,25E-04
EP-terrestrial	[mol N eq.]	1,04E-02	4,72E-04	6,70E-03	6,22E-04	1,33E-05	0,00E+00	1,23E-04	2,31E-03	2,08E-05	-2,50E-03
POCP	[kg NMVOC eq.]	5,24E-03	1,79E-04	2,04E-03	2,35E-04	4,07E-06	0,00E+00	4,31E-05	8,61E-04	9,48E-06	-2,21E-03
ADPm[1]	[kg Sb eq.]	8,20E-06	8,03E-08	2,10E-06	1,06E-07	2,20E-09	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-1,85E-06
ADPf[1]	[MJ]	2,68E+01	4,18E-01	1,29E+01	5,50E-01	7,01E-03	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-1,34E+01
WDP[1]	[m^3 world eq. deprived]	2,74E-01	1,90E-03	5,72E-02	2,50E-03	6,91E-05	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-1,93E-01
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 28)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	5,26E-08	2,93E-09	1,17E-08	3,86E-09	4,24E-11	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-7,64E-09
IRP[2]	[kBq U235 eq.]	3,10E-02	1,72E-04	3,06E-02	2,27E-04	1,45E-05	0,00E+00	4,03E-05	1,95E-03	1,10E-05	-5,14E-03
ETP-fw[1]	[CTUe]	1,13E+01	4,90E-02	1,78E+00	6,45E-02	4,65E-03	0,00E+00	1,18E-02	1,29E+00	3,23E-03	-6,90E-01
HTP-c[1]	[CTUh]	3,93E-10	4,66E-12	1,05E-10	6,13E-12	5,98E-13	0,00E+00	1,59E-12	2,79E-10	1,70E-13	-5,81E-11
HTP-nc[1]	[CTUh]	1,02E-08	2,69E-10	4,96E-09	3,54E-10	1,54E-11	0,00E+00	6,27E-11	2,85E-09	2,37E-11	-2,00E-09
SQP[1]	-	6,86E+00	4,20E-01	2,53E+00	5,53E-01	4,29E-03	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-1,62E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 28)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	2,31E+00	6,45E-03	6,83E-01	8,49E-03	4,86E-04	0,00E+00	1,50E-03	1,20E-01	4,37E-04	-4,22E-01
PERM	[MJ]	1,43E-01	0,00E+00	2,33E+00	0,00E+00	-2,48E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,46E+00	6,45E-03	3,02E+00	8,49E-03	-2,48E+00	0,00E+00	1,50E-03	1,20E-01	4,37E-04	-4,22E-01
PENRE	[MJ]	2,68E+01	4,18E-01	1,29E+01	5,50E-01	7,01E-03	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-1,34E+01
PENRM	[MJ]	4,01E+01	0,00E+00	-4,03E-03	0,00E+00	-1,68E-01	0,00E+00	0,00E+00	-3,71E+01	-2,79E+00	0,00E+00
PENRT	[MJ]	6,69E+01	4,18E-01	1,29E+01	5,50E-01	-1,61E-01	0,00E+00	9,01E-02	-3,50E+01	-2,78E+00	-1,34E+01
SM	[kg]	7,19E-01	0,00E+00	2,06E-01	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
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
FW	[m^3]	7,87E+00	4,98E-02	2,16E+00	6,55E-02	3,47E-03	0,00E+00	1,14E-02	8,82E-01	5,31E-03	-1,28E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 28)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	2,52E-02	9,15E-06	2,48E-03	1,20E-05	9,65E-05	0,00E+00	1,78E-06	1,04E-03	1,46E-06	1,04E-03
NHWD	[kg]	1,87E-01	3,60E-02	3,12E-02	4,74E-02	2,55E-04	0,00E+00	5,60E-03	7,38E-02	7,01E-02	-6,52E-03
RWD	[kg]	2,05E-05	1,15E-07	2,26E-05	1,51E-07	1,13E-08	0,00E+00	2,75E-08	1,31E-06	6,17E-09	-3,56E-06
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,76E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	2,18E-03	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	2,83E-01	0,00E+00	3,82E-02	0,00E+00	0,00E+00	6,78E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,21E+00	0,00E+00	1,64E-01	0,00E+00	0,00E+00	2,91E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 28)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	7,25E-02
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 29:

Representative for the following article numbers: 12008, 12428, 12429, 12433, 12430, 11717. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 29)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	2,46E+00	7,90E-02	5,45E-01	5,25E-02	1,03E+00	0,00E+00	6,24E-03	2,17E-01	8,16E-03	-8,98E-01
GWP-fossil	[kg CO_2 eq.]	2,47E+00	7,89E-02	1,44E+00	5,25E-02	1,14E-01	0,00E+00	6,24E-03	2,17E-01	8,16E-03	-8,98E-01
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-8,99E-01	0,00E+00	9,16E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	1,10E-03	2,85E-05	1,96E-03	1,90E-05	6,61E-06	0,00E+00	2,17E-06	1,76E-04	1,57E-07	-2,75E-04
ODP	[kg CFC 11 eq.]	6,02E-09	3,97E-11	1,52E-09	2,64E-11	1,33E-11	0,00E+00	3,25E-12	1,66E-10	6,41E-13	-3,10E-09
AP	[mol H^+ eq.]	7,54E-03	3,22E-04	4,37E-03	2,14E-04	8,26E-05	0,00E+00	2,87E-05	7,07E-04	4,59E-06	-2,89E-03
EP-freshwater	[kg P eq.]	4,56E-05	6,03E-07	7,40E-05	4,01E-07	2,21E-07	0,00E+00	4,74E-08	4,29E-06	5,56E-09	-7,99E-06
EP-marine	[kg N eq.]	1,49E-03	1,20E-04	1,09E-03	7,95E-05	3,26E-05	0,00E+00	1,12E-05	2,18E-04	2,48E-06	-6,93E-04
EP-terrestrial	[mol N eq.]	1,61E-02	1,31E-03	1,12E-02	8,74E-04	3,51E-04	0,00E+00	1,23E-04	2,31E-03	2,08E-05	-7,75E-03
POCP	[kg NMVOC eq.]	1,29E-02	4,97E-04	3,98E-03	3,30E-04	1,15E-04	0,00E+00	4,31E-05	8,61E-04	9,53E-06	-7,49E-03
ADPm[1]	[kg Sb eq.]	1,26E-05	2,23E-07	3,71E-06	1,48E-07	6,09E-08	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-4,40E-06
ADPf[1]	[MJ]	7,55E+01	1,16E+00	2,15E+01	7,72E-01	1,63E-01	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-4,38E+01
WDP[1]	[m^3 world eq. deprived]	1,24E+00	5,28E-03	2,69E-01	3,51E-03	1,42E-03	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-7,33E-01
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 29)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	5,74E-08	8,15E-09	2,66E-08	5,42E-09	1,30E-09	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-2,44E-08
IRP[2]	[kBq U235 eq.]	3,95E-02	4,79E-04	4,19E-02	3,19E-04	1,93E-04	0,00E+00	4,03E-05	1,95E-03	1,10E-05	1,20E-03
ETP-fw[1]	[CTUe]	8,33E+00	1,36E-01	4,11E+00	9,06E-02	1,74E-01	0,00E+00	1,18E-02	1,29E+00	3,29E-03	-1,37E+00
HTP-c[1]	[CTUh]	4,68E-10	1,30E-11	2,13E-10	8,62E-12	1,16E-11	0,00E+00	1,59E-12	2,79E-10	1,71E-13	-1,16E-10
HTP-nc[1]	[CTUh]	1,45E-08	7,48E-10	8,98E-09	4,97E-10	3,58E-10	0,00E+00	6,27E-11	2,85E-09	2,43E-11	-4,37E-09
SQP[1]	-	6,80E+00	1,17E+00	1,21E+01	7,77E-01	7,35E-02	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-9,87E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 29)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	1,90E+00	1,79E-02	2,63E+00	1,19E-02	7,36E-03	0,00E+00	1,50E-03	1,20E-01	4,39E-04	-1,83E+00
PERM	[MJ]	1,43E-01	0,00E+00	8,13E+00	0,00E+00	-8,27E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,04E+00	1,79E-02	1,08E+01	1,19E-02	-8,27E+00	0,00E+00	1,50E-03	1,20E-01	4,39E-04	-1,83E+00
PENRE	[MJ]	7,55E+01	1,16E+00	2,15E+01	7,72E-01	1,63E-01	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-4,38E+01
PENRM	[MJ]	4,17E+01	0,00E+00	1,73E+00	0,00E+00	-1,90E+00	0,00E+00	0,00E+00	-3,86E+01	-2,91E+00	0,00E+00
PENRT	[MJ]	1,17E+02	1,16E+00	2,33E+01	7,72E-01	-1,74E+00	0,00E+00	9,01E-02	-3,65E+01	-2,89E+00	-4,38E+01
SM	[kg]	6,47E-01	0,00E+00	4,40E-01	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
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
FW	[m^3]	8,72E+00	1,38E-01	4,67E+00	9,21E-02	5,31E-02	0,00E+00	1,14E-02	8,82E-01	5,34E-03	-1,09E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 29)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	6,98E-04	2,54E-05	3,59E-03	1,69E-05	1,85E-03	0,00E+00	1,78E-06	1,05E-03	1,48E-06	3,03E-03
NHWD	[kg]	1,32E-01	1,00E-01	9,15E-02	6,66E-02	5,22E-03	0,00E+00	5,60E-03	7,38E-02	7,01E-02	8,35E-02
RWD	[kg]	2,98E-05	3,20E-07	3,15E-05	2,13E-07	1,48E-07	0,00E+00	2,75E-08	1,31E-06	6,20E-09	3,27E-06
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,13E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	1,53E-01	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	2,94E-01	0,00E+00	3,91E-01	0,00E+00	0,00E+00	7,06E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,26E+00	0,00E+00	1,68E+00	0,00E+00	0,00E+00	3,03E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 29)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	2,50E-01
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 30:

Representative for the following article numbers: 10867. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 30)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	2,49E+00	6,00E-02	9,01E-01	3,62E-02	2,22E-01	0,00E+00	6,24E-03	2,17E-01	8,03E-03	-9,10E-01
GWP-fossil	[kg CO_2 eq.]	2,50E+00	5,99E-02	1,10E+00	3,62E-02	7,50E-03	0,00E+00	6,24E-03	2,17E-01	8,03E-03	-9,10E-01
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-1,98E-01	0,00E+00	2,15E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	2,08E-03	2,17E-05	2,07E-04	1,31E-05	3,54E-07	0,00E+00	2,17E-06	1,76E-04	1,57E-07	-3,96E-04
ODP	[kg CFC 11 eq.]	5,54E-09	3,01E-11	7,85E-10	1,82E-11	4,04E-13	0,00E+00	3,25E-12	1,66E-10	6,41E-13	-1,91E-09
AP	[mol H^+ eq.]	8,22E-03	2,45E-04	2,99E-03	1,48E-04	2,60E-06	0,00E+00	2,87E-05	7,07E-04	4,59E-06	-2,89E-03
EP-freshwater	[kg P eq.]	5,31E-05	4,58E-07	5,54E-05	2,76E-07	1,03E-08	0,00E+00	4,74E-08	4,29E-06	5,56E-09	-1,52E-05
EP-marine	[kg N eq.]	1,58E-03	9,08E-05	6,05E-04	5,48E-05	9,91E-07	0,00E+00	1,12E-05	2,18E-04	2,47E-06	-6,58E-04
EP-terrestrial	[mol N eq.]	1,70E-02	9,98E-04	6,96E-03	6,03E-04	1,08E-05	0,00E+00	1,23E-04	2,31E-03	2,08E-05	-6,98E-03
POCP	[kg NMVOC eq.]	1,45E-02	3,77E-04	2,41E-03	2,28E-04	3,29E-06	0,00E+00	4,31E-05	8,61E-04	9,50E-06	-8,23E-03
ADPm[1]	[kg Sb eq.]	1,35E-05	1,70E-07	2,31E-06	1,02E-07	1,78E-09	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-4,56E-06
ADPf[1]	[MJ]	7,61E+01	8,82E-01	1,49E+01	5,33E-01	5,66E-03	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-4,43E+01
WDP[1]	[m^3 world eq. deprived]	1,76E+00	4,01E-03	1,18E-01	2,42E-03	5,59E-05	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-1,09E+00
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 30)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	6,54E-08	6,19E-09	1,22E-08	3,74E-09	3,42E-11	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-2,03E-08
IRP[2]	[kBq U235 eq.]	7,73E-02	3,64E-04	3,24E-02	2,20E-04	1,17E-05	0,00E+00	4,03E-05	1,95E-03	1,10E-05	-1,37E-02
ETP-fw[1]	[CTUe]	1,11E+01	1,03E-01	1,76E+00	6,25E-02	3,75E-03	0,00E+00	1,18E-02	1,29E+00	3,25E-03	-1,57E+00
HTP-c[1]	[CTUh]	4,80E-10	9,84E-12	1,06E-10	5,95E-12	4,83E-13	0,00E+00	1,59E-12	2,79E-10	1,70E-13	-1,06E-10
HTP-nc[1]	[CTUh]	1,54E-08	5,68E-10	5,16E-09	3,43E-10	1,24E-11	0,00E+00	6,27E-11	2,85E-09	2,39E-11	-4,40E-09
SQP[1]	-	7,73E+00	8,88E-01	2,40E+00	5,37E-01	3,47E-03	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-2,60E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 30)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	2,74E+00	1,36E-02	6,66E-01	8,23E-03	3,93E-04	0,00E+00	1,50E-03	1,20E-01	4,38E-04	-5,24E-01
PERM	[MJ]	1,43E-01	0,00E+00	1,86E+00	0,00E+00	-2,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,88E+00	1,36E-02	2,52E+00	8,23E-03	-2,00E+00	0,00E+00	1,50E-03	1,20E-01	4,38E-04	-5,24E-01
PENRE	[MJ]	7,62E+01	8,82E-01	1,49E+01	5,33E-01	5,66E-03	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-4,43E+01
PENRM	[MJ]	4,06E+01	0,00E+00	-3,62E-02	0,00E+00	-1,36E-01	0,00E+00	0,00E+00	-3,76E+01	-2,83E+00	0,00E+00
PENRT	[MJ]	1,17E+02	8,82E-01	1,49E+01	5,33E-01	-1,30E-01	0,00E+00	9,01E-02	-3,54E+01	-2,81E+00	-4,43E+01
SM	[kg]	4,95E-01	0,00E+00	1,63E-01	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
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
FW	[m^3]	1,72E+01	1,05E-01	2,52E+00	6,35E-02	2,80E-03	0,00E+00	1,14E-02	8,82E-01	5,32E-03	-3,43E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 30)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	8,35E-04	1,93E-05	1,47E-03	1,17E-05	7,80E-05	0,00E+00	1,78E-06	1,04E-03	1,47E-06	3,22E-03
NHWD	[kg]	1,60E-01	7,61E-02	3,09E-02	4,60E-02	2,06E-04	0,00E+00	5,60E-03	7,38E-02	7,01E-02	7,09E-02
RWD	[kg]	4,59E-05	2,43E-07	2,36E-05	1,47E-07	9,10E-09	0,00E+00	2,75E-08	1,31E-06	6,18E-09	-9,72E-06
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,42E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	1,76E-03	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	2,86E-01	0,00E+00	3,08E-02	0,00E+00	0,00E+00	6,87E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,23E+00	0,00E+00	1,32E-01	0,00E+00	0,00E+00	2,95E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 30)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	5,86E-02
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 31:

Representative for the following article numbers: 10698. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 31)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	2,61E+00	6,48E-02	7,44E-01	4,01E-02	3,99E-01	0,00E+00	6,24E-03	2,16E-01	7,83E-03	-1,01E+00
GWP-fossil	[kg CO_2 eq.]	2,62E+00	6,48E-02	1,11E+00	4,00E-02	1,35E-02	0,00E+00	6,24E-03	2,16E-01	7,83E-03	-1,01E+00
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-3,69E-01	0,00E+00	3,86E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	1,28E-03	2,34E-05	1,96E-04	1,45E-05	6,35E-07	0,00E+00	2,17E-06	1,76E-04	1,57E-07	-2,55E-04
ODP	[kg CFC 11 eq.]	5,86E-09	3,26E-11	8,20E-10	2,01E-11	7,26E-13	0,00E+00	3,25E-12	1,66E-10	6,40E-13	-2,43E-09
AP	[mol H^+ eq.]	7,63E-03	2,64E-04	3,01E-03	1,63E-04	4,67E-06	0,00E+00	2,87E-05	7,06E-04	4,59E-06	-2,98E-03
EP-freshwater	[kg P eq.]	5,10E-05	4,94E-07	5,57E-05	3,06E-07	1,85E-08	0,00E+00	4,74E-08	4,29E-06	5,56E-09	-9,50E-06
EP-marine	[kg N eq.]	1,61E-03	9,81E-05	6,18E-04	6,06E-05	1,78E-06	0,00E+00	1,12E-05	2,18E-04	2,45E-06	-6,79E-04
EP-terrestrial	[mol N eq.]	1,75E-02	1,08E-03	7,11E-03	6,66E-04	1,93E-05	0,00E+00	1,23E-04	2,31E-03	2,08E-05	-7,32E-03
POCP	[kg NMVOC eq.]	1,31E-02	4,08E-04	2,42E-03	2,52E-04	5,90E-06	0,00E+00	4,31E-05	8,61E-04	9,44E-06	-7,58E-03
ADPm[1]	[kg Sb eq.]	1,39E-05	1,83E-07	2,38E-06	1,13E-07	3,20E-09	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-5,09E-06
ADPf[1]	[MJ]	7,70E+01	9,53E-01	1,52E+01	5,89E-01	1,02E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-4,59E+01
WDP[1]	[m^3 world eq. deprived]	1,03E+00	4,33E-03	9,30E-02	2,68E-03	1,00E-04	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-7,29E-01
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 31)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	7,44E-08	6,68E-09	1,32E-08	4,13E-09	6,15E-11	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-2,30E-08
IRP[2]	[kBq U235 eq.]	3,72E-02	3,93E-04	3,11E-02	2,43E-04	2,11E-05	0,00E+00	4,03E-05	1,95E-03	1,09E-05	-2,26E-03
ETP-fw[1]	[CTUe]	1,42E+01	1,12E-01	1,95E+00	6,91E-02	6,75E-03	0,00E+00	1,18E-02	1,29E+00	3,20E-03	-1,67E+00
HTP-c[1]	[CTUh]	4,68E-10	1,06E-11	1,14E-10	6,57E-12	8,69E-13	0,00E+00	1,59E-12	2,79E-10	1,69E-13	-1,31E-10
HTP-nc[1]	[CTUh]	1,56E-08	6,14E-10	5,26E-09	3,80E-10	2,23E-11	0,00E+00	6,27E-11	2,85E-09	2,33E-11	-4,77E-09
SQP[1]	-	6,97E+00	9,59E-01	2,99E+00	5,93E-01	6,23E-03	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-2,88E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 31)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	1,74E+00	1,47E-02	7,42E-01	9,10E-03	7,06E-04	0,00E+00	1,50E-03	1,20E-01	4,36E-04	-3,33E-01
PERM	[MJ]	1,43E-01	0,00E+00	3,45E+00	0,00E+00	-3,60E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	1,88E+00	1,47E-02	4,19E+00	9,10E-03	-3,59E+00	0,00E+00	1,50E-03	1,20E-01	4,36E-04	-3,33E-01
PENRE	[MJ]	7,70E+01	9,53E-01	1,52E+01	5,89E-01	1,02E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-4,59E+01
PENRM	[MJ]	3,89E+01	0,00E+00	7,18E-02	0,00E+00	-2,44E-01	0,00E+00	0,00E+00	-3,60E+01	-2,71E+00	0,00E+00
PENRT	[MJ]	1,16E+02	9,53E-01	1,53E+01	5,89E-01	-2,34E-01	0,00E+00	9,01E-02	-3,39E+01	-2,70E+00	-4,59E+01
SM	[kg]	4,55E-01	0,00E+00	2,74E-01	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
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
FW	[m^3]	9,25E+00	1,14E-01	2,27E+00	7,02E-02	5,04E-03	0,00E+00	1,14E-02	8,82E-01	5,29E-03	-1,58E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 31)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	6,96E-04	2,09E-05	1,45E-03	1,29E-05	1,40E-04	0,00E+00	1,78E-06	1,03E-03	1,45E-06	3,51E-03
NHWD	[kg]	1,31E-01	8,22E-02	3,27E-02	5,08E-02	3,71E-04	0,00E+00	5,60E-03	7,38E-02	7,01E-02	5,55E-02
RWD	[kg]	2,70E-05	2,62E-07	2,31E-05	1,62E-07	1,63E-08	0,00E+00	2,75E-08	1,31E-06	6,15E-09	-2,70E-07
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,55E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	3,16E-03	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	2,74E-01	0,00E+00	5,54E-02	0,00E+00	0,00E+00	6,58E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,18E+00	0,00E+00	2,38E-01	0,00E+00	0,00E+00	2,83E-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: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 31)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	1,05E-01
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 32:

Representative for the following article numbers: 12585. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 32)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	1,09E+00	2,82E-02	8,58E-01	3,59E-02	2,04E-01	0,00E+00	6,24E-03	2,17E-01	8,05E-03	-2,57E-01
GWP-fossil	[kg CO_2 eq.]	1,11E+00	2,82E-02	1,04E+00	3,58E-02	6,91E-03	0,00E+00	6,24E-03	2,17E-01	8,05E-03	-2,57E-01
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-1,81E-01	0,00E+00	1,98E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	1,21E-03	1,02E-05	1,68E-04	1,30E-05	3,25E-07	0,00E+00	2,17E-06	1,76E-04	1,57E-07	-1,20E-04
ODP	[kg CFC 11 eq.]	1,32E-07	1,42E-11	6,06E-09	1,80E-11	3,72E-13	0,00E+00	3,25E-12	1,66E-10	6,41E-13	-6,09E-10
AP	[mol H^+ eq.]	4,67E-03	1,15E-04	2,83E-03	1,46E-04	2,39E-06	0,00E+00	2,87E-05	7,07E-04	4,59E-06	-7,82E-04
EP-freshwater	[kg P eq.]	3,41E-05	2,15E-07	5,46E-05	2,74E-07	9,49E-09	0,00E+00	4,74E-08	4,29E-06	5,56E-09	-3,92E-06
EP-marine	[kg N eq.]	8,64E-04	4,26E-05	5,72E-04	5,43E-05	9,12E-07	0,00E+00	1,12E-05	2,18E-04	2,47E-06	-1,71E-04
EP-terrestrial	[mol N eq.]	9,43E-03	4,69E-04	6,61E-03	5,97E-04	9,90E-06	0,00E+00	1,23E-04	2,31E-03	2,08E-05	-1,91E-03
POCP	[kg NMVOC eq.]	4,47E-03	1,77E-04	1,98E-03	2,26E-04	3,02E-06	0,00E+00	4,31E-05	8,61E-04	9,50E-06	-1,65E-03
ADPm[1]	[kg Sb eq.]	7,45E-06	7,97E-08	2,05E-06	1,01E-07	1,64E-09	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-1,38E-06
ADPf[1]	[MJ]	2,19E+01	4,15E-01	1,26E+01	5,27E-01	5,21E-03	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-9,99E+00
WDP[1]	[m^3 world eq. deprived]	2,45E-01	1,89E-03	5,36E-02	2,40E-03	5,14E-05	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-1,44E-01
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 32)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	4,67E-08	2,91E-09	1,13E-08	3,70E-09	3,15E-11	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-5,82E-09
IRP[2]	[kBq U235 eq.]	3,05E-02	1,71E-04	3,04E-02	2,18E-04	1,08E-05	0,00E+00	4,03E-05	1,95E-03	1,10E-05	-3,97E-03
ETP-fw[1]	[CTUe]	9,71E+00	4,86E-02	1,69E+00	6,19E-02	3,46E-03	0,00E+00	1,18E-02	1,29E+00	3,26E-03	-5,17E-01
HTP-c[1]	[CTUh]	3,79E-10	4,63E-12	1,01E-10	5,89E-12	4,45E-13	0,00E+00	1,59E-12	2,79E-10	1,70E-13	-4,41E-11
HTP-nc[1]	[CTUh]	9,50E-09	2,67E-10	4,90E-09	3,40E-10	1,14E-11	0,00E+00	6,27E-11	2,85E-09	2,40E-11	-1,52E-09
SQP[1]	-	6,79E+00	4,17E-01	2,29E+00	5,31E-01	3,19E-03	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-1,36E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 32)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	2,39E+00	6,40E-03	6,40E-01	8,14E-03	3,62E-04	0,00E+00	1,50E-03	1,20E-01	4,38E-04	-3,65E-01
PERM	[MJ]	1,43E-01	0,00E+00	1,70E+00	0,00E+00	-1,84E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,53E+00	6,40E-03	2,34E+00	8,14E-03	-1,84E+00	0,00E+00	1,50E-03	1,20E-01	4,38E-04	-3,65E-01
PENRE	[MJ]	2,19E+01	4,15E-01	1,26E+01	5,27E-01	5,21E-03	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-9,99E+00
PENRM	[MJ]	4,07E+01	0,00E+00	-4,70E-02	0,00E+00	-1,25E-01	0,00E+00	0,00E+00	-3,77E+01	-2,84E+00	0,00E+00
PENRT	[MJ]	6,26E+01	4,15E-01	1,25E+01	5,27E-01	-1,20E-01	0,00E+00	9,01E-02	-3,56E+01	-2,82E+00	-9,99E+00
SM	[kg]	7,84E-01	0,00E+00	1,64E-01	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
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
FW	[m^3]	7,54E+00	4,94E-02	2,11E+00	6,29E-02	2,58E-03	0,00E+00	1,14E-02	8,82E-01	5,32E-03	-9,85E-01
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 32)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	2,74E-02	9,08E-06	2,58E-03	1,15E-05	7,18E-05	0,00E+00	1,78E-06	1,04E-03	1,47E-06	7,61E-04
NHWD	[kg]	1,90E-01	3,58E-02	3,01E-02	4,55E-02	1,90E-04	0,00E+00	5,60E-03	7,38E-02	7,01E-02	-5,02E-03
RWD	[kg]	2,02E-05	1,14E-07	2,25E-05	1,45E-07	8,37E-09	0,00E+00	2,75E-08	1,31E-06	6,18E-09	-2,72E-06
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,31E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	1,62E-03	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	2,87E-01	0,00E+00	2,84E-02	0,00E+00	0,00E+00	6,89E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,23E+00	0,00E+00	1,22E-01	0,00E+00	0,00E+00	2,96E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 32)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	5,39E-02
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 33:

Representative for the following article numbers: 10697, 12432, 12431. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 33)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	2,46E+00	6,73E-02	7,93E-01	4,31E-02	5,73E-01	0,00E+00	6,24E-03	2,17E-01	8,14E-03	-6,63E-01
GWP-fossil	[kg CO_2 eq.]	2,47E+00	6,73E-02	1,28E+00	4,31E-02	6,35E-02	0,00E+00	6,24E-03	2,17E-01	8,14E-03	-6,62E-01
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-4,92E-01	0,00E+00	5,09E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	1,82E-03	2,43E-05	1,18E-03	1,56E-05	3,68E-06	0,00E+00	2,17E-06	1,76E-04	1,57E-07	-3,63E-04
ODP	[kg CFC 11 eq.]	5,90E-09	3,38E-11	1,19E-09	2,17E-11	7,43E-12	0,00E+00	3,25E-12	1,66E-10	6,41E-13	-1,80E-09
AP	[mol H^+ eq.]	7,75E-03	2,75E-04	3,73E-03	1,76E-04	4,60E-05	0,00E+00	2,87E-05	7,07E-04	4,59E-06	-2,24E-03
EP-freshwater	[kg P eq.]	5,07E-05	5,13E-07	6,56E-05	3,29E-07	1,23E-07	0,00E+00	4,74E-08	4,29E-06	5,56E-09	-1,23E-05
EP-marine	[kg N eq.]	1,54E-03	1,02E-04	8,68E-04	6,53E-05	1,81E-05	0,00E+00	1,12E-05	2,18E-04	2,48E-06	-5,20E-04
EP-terrestrial	[mol N eq.]	1,65E-02	1,12E-03	9,27E-03	7,18E-04	1,96E-04	0,00E+00	1,23E-04	2,31E-03	2,08E-05	-5,70E-03
POCP	[kg NMVOC eq.]	1,41E-02	4,23E-04	3,27E-03	2,72E-04	6,40E-05	0,00E+00	4,31E-05	8,61E-04	9,53E-06	-6,15E-03
ADPm[1]	[kg Sb eq.]	1,31E-05	1,90E-07	3,06E-06	1,22E-07	3,39E-08	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-3,32E-06
ADPf[1]	[MJ]	7,60E+01	9,90E-01	1,84E+01	6,35E-01	9,09E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-3,23E+01
WDP[1]	[m^3 world eq. deprived]	1,68E+00	4,50E-03	2,07E-01	2,89E-03	7,92E-04	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-8,16E-01
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 33)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	5,90E-08	6,94E-09	1,98E-08	4,45E-09	7,25E-10	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-1,66E-08
IRP[2]	[kBq U235 eq.]	6,98E-02	4,08E-04	3,81E-02	2,62E-04	1,08E-04	0,00E+00	4,03E-05	1,95E-03	1,10E-05	-1,17E-02
ETP-fw[1]	[CTUe]	9,45E+00	1,16E-01	3,03E+00	7,44E-02	9,71E-02	0,00E+00	1,18E-02	1,29E+00	3,28E-03	-1,17E+00
HTP-c[1]	[CTUh]	4,90E-10	1,10E-11	1,62E-10	7,08E-12	6,48E-12	0,00E+00	1,59E-12	2,79E-10	1,71E-13	-8,54E-11
HTP-nc[1]	[CTUh]	1,50E-08	6,37E-10	7,24E-09	4,09E-10	1,99E-10	0,00E+00	6,27E-11	2,85E-09	2,42E-11	-3,50E-09
SQP[1]	-	7,47E+00	9,96E-01	7,47E+00	6,39E-01	4,09E-02	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-6,19E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 33)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	2,60E+00	1,53E-02	1,71E+00	9,80E-03	4,10E-03	0,00E+00	1,50E-03	1,20E-01	4,39E-04	-1,39E+00
PERM	[MJ]	1,43E-01	0,00E+00	4,46E+00	0,00E+00	-4,60E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,74E+00	1,53E-02	6,16E+00	9,80E-03	-4,59E+00	0,00E+00	1,50E-03	1,20E-01	4,39E-04	-1,39E+00
PENRE	[MJ]	7,60E+01	9,90E-01	1,84E+01	6,35E-01	9,09E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-3,23E+01
PENRM	[MJ]	4,15E+01	0,00E+00	8,86E-01	0,00E+00	-1,06E+00	0,00E+00	0,00E+00	-3,84E+01	-2,89E+00	0,00E+00
PENRT	[MJ]	1,18E+02	9,90E-01	1,93E+01	6,35E-01	-9,67E-01	0,00E+00	9,01E-02	-3,63E+01	-2,88E+00	-3,23E+01
SM	[kg]	5,71E-01	0,00E+00	2,53E-01	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
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
FW	[m^3]	1,53E+01	1,18E-01	3,79E+00	7,57E-02	2,96E-02	0,00E+00	1,14E-02	8,82E-01	5,34E-03	-2,90E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 33)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	7,87E-04	2,17E-05	2,65E-03	1,39E-05	1,03E-03	0,00E+00	1,78E-06	1,04E-03	1,48E-06	2,19E-03
NHWD	[kg]	1,43E-01	8,54E-02	6,28E-02	5,48E-02	2,91E-03	0,00E+00	5,60E-03	7,38E-02	7,01E-02	5,24E-02
RWD	[kg]	4,33E-05	2,72E-07	2,81E-05	1,75E-07	8,21E-08	0,00E+00	2,75E-08	1,31E-06	6,20E-09	-8,00E-06
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,29E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	8,50E-02	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	2,93E-01	0,00E+00	2,18E-01	0,00E+00	0,00E+00	7,03E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,26E+00	0,00E+00	9,34E-01	0,00E+00	0,00E+00	3,02E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 33)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	1,39E-01
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 34:

Representative for the following article numbers: 12435, 12438. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 34)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	6,91E-01	2,74E-02	5,43E-01	5,36E-02	1,10E+00	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-5,82E-02
GWP-fossil	[kg CO_2 eq.]	7,07E-01	2,74E-02	1,48E+00	5,36E-02	1,45E-01	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-5,80E-02
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-9,37E-01	0,00E+00	9,54E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	9,61E-04	9,91E-06	2,57E-03	1,94E-05	8,51E-06	0,00E+00	2,17E-06	1,76E-04	1,57E-07	-2,10E-04
ODP	[kg CFC 11 eq.]	1,60E-07	1,38E-11	8,16E-09	2,69E-11	1,76E-11	0,00E+00	3,25E-12	1,66E-10	6,41E-13	-1,13E-09
AP	[mol H^+ eq.]	3,38E-03	1,12E-04	4,63E-03	2,19E-04	1,09E-04	0,00E+00	2,87E-05	7,07E-04	4,59E-06	-4,85E-04
EP-freshwater	[kg P eq.]	2,76E-05	2,09E-07	7,95E-05	4,09E-07	2,86E-07	0,00E+00	4,74E-08	4,29E-06	5,56E-09	-3,87E-06
EP-marine	[kg N eq.]	6,34E-04	4,15E-05	1,21E-03	8,11E-05	4,30E-05	0,00E+00	1,12E-05	2,18E-04	2,49E-06	-1,31E-04
EP-terrestrial	[mol N eq.]	6,85E-03	4,56E-04	1,22E-02	8,91E-04	4,63E-04	0,00E+00	1,23E-04	2,32E-03	2,08E-05	-1,90E-03
POCP	[kg NMVOC eq.]	2,53E-03	1,73E-04	4,03E-03	3,37E-04	1,52E-04	0,00E+00	4,31E-05	8,61E-04	9,57E-06	-5,23E-04
ADPm[1]	[kg Sb eq.]	5,44E-06	7,76E-08	3,86E-06	1,51E-07	8,04E-08	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-3,50E-07
ADPf[1]	[MJ]	9,61E+00	4,04E-01	2,08E+01	7,88E-01	2,14E-01	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-1,46E+00
WDP[1]	[m^3 world eq. deprived]	1,60E-01	1,84E-03	2,79E-01	3,58E-03	1,86E-03	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-2,83E-02
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 34)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	2,96E-08	2,83E-09	2,98E-08	5,53E-09	1,72E-09	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-5,64E-09
IRP[2]	[kBq U235 eq.]	3,10E-02	1,66E-04	4,51E-02	3,25E-04	2,47E-04	0,00E+00	4,03E-05	1,95E-03	1,11E-05	-5,12E-03
ETP-fw[1]	[CTUe]	5,91E+00	4,73E-02	4,81E+00	9,24E-02	2,32E-01	0,00E+00	1,18E-02	1,29E+00	3,32E-03	-2,08E-01
HTP-c[1]	[CTUh]	3,72E-10	4,50E-12	2,37E-10	8,79E-12	1,52E-11	0,00E+00	1,59E-12	2,79E-10	1,72E-13	-3,37E-11
HTP-nc[1]	[CTUh]	7,61E-09	2,60E-10	9,94E-09	5,08E-10	4,70E-10	0,00E+00	6,27E-11	2,85E-09	2,46E-11	-1,16E-09
SQP[1]	-	6,50E+00	4,06E-01	1,48E+01	7,93E-01	9,53E-02	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-1,09E+01
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 34)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	2,61E+00	6,23E-03	3,23E+00	1,22E-02	9,48E-03	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-2,60E+00
PERM	[MJ]	1,43E-01	0,00E+00	8,39E+00	0,00E+00	-8,53E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,75E+00	6,23E-03	1,16E+01	1,22E-02	-8,52E+00	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-2,60E+00
PENRE	[MJ]	9,61E+00	4,04E-01	2,08E+01	7,88E-01	2,14E-01	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-1,46E+00
PENRM	[MJ]	4,26E+01	0,00E+00	2,23E+00	0,00E+00	-2,40E+00	0,00E+00	0,00E+00	-3,95E+01	-2,97E+00	0,00E+00
PENRT	[MJ]	5,22E+01	4,04E-01	2,30E+01	7,88E-01	-2,18E+00	0,00E+00	9,01E-02	-3,73E+01	-2,96E+00	-1,46E+00
SM	[kg]	9,55E-01	0,00E+00	4,09E-01	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
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
FW	[m^3]	7,06E+00	4,81E-02	5,40E+00	9,39E-02	6,84E-02	0,00E+00	1,14E-02	8,82E-01	5,36E-03	-1,19E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 34)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	3,32E-02	8,84E-06	5,69E-03	1,73E-05	2,41E-03	0,00E+00	1,78E-06	1,05E-03	1,49E-06	-2,51E-04
NHWD	[kg]	1,84E-01	3,48E-02	1,09E-01	6,80E-02	6,82E-03	0,00E+00	5,60E-03	7,38E-02	7,01E-02	-7,87E-03
RWD	[kg]	2,06E-05	1,11E-07	3,38E-05	2,17E-07	1,88E-07	0,00E+00	2,75E-08	1,31E-06	6,22E-09	-2,83E-06
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,69E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	2,05E-01	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	3,01E-01	0,00E+00	4,90E-01	0,00E+00	0,00E+00	7,22E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,29E+00	0,00E+00	2,10E+00	0,00E+00	0,00E+00	3,10E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 34)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	2,60E-01
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 35:

Representative for the following article numbers: 12007. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 35)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	1,90E+00	4,13E-02	4,58E-01	4,62E-02	6,85E-01	0,00E+00	6,24E-03	2,16E-01	7,92E-03	-4,14E-01
GWP-fossil	[kg CO_2 eq.]	1,92E+00	4,13E-02	1,10E+00	4,62E-02	2,31E-02	0,00E+00	6,24E-03	2,16E-01	7,92E-03	-4,14E-01
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-6,45E-01	0,00E+00	6,62E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	1,71E-03	1,49E-05	2,50E-04	1,67E-05	1,09E-06	0,00E+00	2,17E-06	1,76E-04	1,57E-07	-1,94E-04
ODP	[kg CFC 11 eq.]	6,49E-08	2,08E-11	3,31E-09	2,32E-11	1,25E-12	0,00E+00	3,25E-12	1,66E-10	6,41E-13	-9,90E-10
AP	[mol H^+ eq.]	6,07E-03	1,69E-04	3,02E-03	1,89E-04	8,02E-06	0,00E+00	2,87E-05	7,07E-04	4,59E-06	-1,26E-03
EP-freshwater	[kg P eq.]	4,57E-05	3,15E-07	5,61E-05	3,53E-07	3,18E-08	0,00E+00	4,74E-08	4,29E-06	5,56E-09	-6,35E-06
EP-marine	[kg N eq.]	1,28E-03	6,26E-05	6,22E-04	7,00E-05	3,06E-06	0,00E+00	1,12E-05	2,18E-04	2,46E-06	-2,75E-04
EP-terrestrial	[mol N eq.]	1,40E-02	6,88E-04	7,15E-03	7,69E-04	3,32E-05	0,00E+00	1,23E-04	2,31E-03	2,08E-05	-3,09E-03
POCP	[kg NMVOC eq.]	9,64E-03	2,60E-04	2,38E-03	2,91E-04	1,01E-05	0,00E+00	4,31E-05	8,61E-04	9,47E-06	-2,66E-03
ADPm[1]	[kg Sb eq.]	1,04E-05	1,17E-07	2,31E-06	1,31E-07	5,49E-09	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-2,23E-06
ADPf[1]	[MJ]	5,15E+01	6,08E-01	1,46E+01	6,80E-01	1,75E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-1,61E+01
WDP[1]	[m^3 world eq. deprived]	8,74E-01	2,77E-03	9,59E-02	3,09E-03	1,72E-04	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-2,32E-01
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 35)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	6,20E-08	4,26E-09	1,36E-08	4,77E-09	1,06E-10	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-9,41E-09
IRP[2]	[kBq U235 eq.]	4,93E-02	2,51E-04	3,21E-02	2,81E-04	3,62E-05	0,00E+00	4,03E-05	1,95E-03	1,10E-05	-6,44E-03
ETP-fw[1]	[CTUe]	1,28E+01	7,13E-02	1,99E+00	7,98E-02	1,16E-02	0,00E+00	1,18E-02	1,29E+00	3,22E-03	-8,33E-01
HTP-c[1]	[CTUh]	4,28E-10	6,79E-12	1,27E-10	7,59E-12	1,49E-12	0,00E+00	1,59E-12	2,79E-10	1,70E-13	-7,11E-11
HTP-nc[1]	[CTUh]	1,26E-08	3,92E-10	5,28E-09	4,38E-10	3,84E-11	0,00E+00	6,27E-11	2,85E-09	2,36E-11	-2,46E-09
SQP[1]	-	7,24E+00	6,12E-01	3,97E+00	6,85E-01	1,07E-02	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-2,28E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 35)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	2,41E+00	9,39E-03	9,60E-01	1,05E-02	1,21E-03	0,00E+00	1,50E-03	1,20E-01	4,37E-04	-6,11E-01
PERM	[MJ]	1,43E-01	0,00E+00	6,03E+00	0,00E+00	-6,17E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,55E+00	9,39E-03	6,99E+00	1,05E-02	-6,17E+00	0,00E+00	1,50E-03	1,20E-01	4,37E-04	-6,11E-01
PENRE	[MJ]	5,15E+01	6,08E-01	1,46E+01	6,80E-01	1,75E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-1,61E+01
PENRM	[MJ]	3,97E+01	0,00E+00	2,47E-01	0,00E+00	-4,18E-01	0,00E+00	0,00E+00	-3,67E+01	-2,77E+00	0,00E+00
PENRT	[MJ]	9,12E+01	6,08E-01	1,48E+01	6,80E-01	-4,01E-01	0,00E+00	9,01E-02	-3,46E+01	-2,75E+00	-1,61E+01
SM	[kg]	5,65E-01	0,00E+00	4,62E-01	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
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
FW	[m^3]	1,18E+01	7,25E-02	2,51E+00	8,11E-02	8,65E-03	0,00E+00	1,14E-02	8,82E-01	5,31E-03	-1,59E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 35)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	1,33E-02	1,33E-05	2,02E-03	1,49E-05	2,41E-04	0,00E+00	1,78E-06	1,04E-03	1,45E-06	1,22E-03
NHWD	[kg]	1,55E-01	5,25E-02	3,71E-02	5,87E-02	6,37E-04	0,00E+00	5,60E-03	7,38E-02	7,01E-02	-7,96E-03
RWD	[kg]	3,04E-05	1,67E-07	2,36E-05	1,87E-07	2,81E-08	0,00E+00	2,75E-08	1,31E-06	6,16E-09	-4,41E-06
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,39E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	5,43E-03	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	2,80E-01	0,00E+00	9,51E-02	0,00E+00	0,00E+00	6,72E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,20E+00	0,00E+00	4,09E-01	0,00E+00	0,00E+00	2,88E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 35)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	1,81E-01
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 36:

Representative for the following article numbers: 12436. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 36)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	2,31E+00	6,81E-02	7,46E-01	4,74E-02	7,95E-01	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-8,49E-01
GWP-fossil	[kg CO_2 eq.]	2,33E+00	6,81E-02	1,42E+00	4,74E-02	1,05E-01	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-8,48E-01
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-6,73E-01	0,00E+00	6,90E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	2,08E-03	2,46E-05	1,94E-03	1,71E-05	6,15E-06	0,00E+00	2,17E-06	1,76E-04	1,57E-07	-4,99E-04
ODP	[kg CFC 11 eq.]	5,26E-09	3,42E-11	1,45E-09	2,38E-11	1,27E-11	0,00E+00	3,25E-12	1,66E-10	6,41E-13	-2,47E-09
AP	[mol H^+ eq.]	7,12E-03	2,78E-04	4,27E-03	1,94E-04	7,87E-05	0,00E+00	2,87E-05	7,07E-04	4,59E-06	-2,97E-03
EP-freshwater	[kg P eq.]	4,67E-05	5,20E-07	7,32E-05	3,62E-07	2,07E-07	0,00E+00	4,74E-08	4,29E-06	5,56E-09	-1,69E-05
EP-marine	[kg N eq.]	1,44E-03	1,03E-04	1,06E-03	7,18E-05	3,11E-05	0,00E+00	1,12E-05	2,18E-04	2,49E-06	-7,03E-04
EP-terrestrial	[mol N eq.]	1,54E-02	1,13E-03	1,10E-02	7,89E-04	3,35E-04	0,00E+00	1,23E-04	2,32E-03	2,08E-05	-7,71E-03
POCP	[kg NMVOC eq.]	1,45E-02	4,29E-04	3,93E-03	2,99E-04	1,10E-04	0,00E+00	4,31E-05	8,61E-04	9,57E-06	-8,61E-03
ADPm[1]	[kg Sb eq.]	1,25E-05	1,93E-07	3,61E-06	1,34E-07	5,81E-08	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-4,16E-06
ADPf[1]	[MJ]	7,47E+01	1,00E+00	2,10E+01	6,98E-01	1,55E-01	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-4,38E+01
WDP[1]	[m^3 world eq. deprived]	2,04E+00	4,56E-03	2,92E-01	3,17E-03	1,34E-03	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-1,21E+00
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 36)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	4,72E-08	7,03E-09	2,52E-08	4,89E-09	1,25E-09	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-2,22E-08
IRP[2]	[kBq U235 eq.]	8,73E-02	4,13E-04	4,33E-02	2,88E-04	1,79E-04	0,00E+00	4,03E-05	1,95E-03	1,11E-05	-1,59E-02
ETP-fw[1]	[CTUe]	5,93E+00	1,18E-01	3,89E+00	8,19E-02	1,68E-01	0,00E+00	1,18E-02	1,29E+00	3,32E-03	-1,44E+00
HTP-c[1]	[CTUh]	4,43E-10	1,12E-11	2,00E-10	7,79E-12	1,10E-11	0,00E+00	1,59E-12	2,79E-10	1,72E-13	-1,01E-10
HTP-nc[1]	[CTUh]	1,43E-08	6,46E-10	8,79E-09	4,50E-10	3,40E-10	0,00E+00	6,27E-11	2,85E-09	2,46E-11	-4,39E-09
SQP[1]	-	7,39E+00	1,01E+00	1,12E+01	7,03E-01	6,89E-02	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-9,57E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 36)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	2,99E+00	1,55E-02	2,50E+00	1,08E-02	6,86E-03	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-2,12E+00
PERM	[MJ]	1,43E-01	0,00E+00	6,03E+00	0,00E+00	-6,17E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	3,14E+00	1,55E-02	8,53E+00	1,08E-02	-6,17E+00	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-2,12E+00
PENRE	[MJ]	7,47E+01	1,00E+00	2,10E+01	6,98E-01	1,55E-01	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-4,38E+01
PENRM	[MJ]	4,26E+01	0,00E+00	1,56E+00	0,00E+00	-1,74E+00	0,00E+00	0,00E+00	-3,95E+01	-2,97E+00	0,00E+00
PENRT	[MJ]	1,17E+02	1,00E+00	2,26E+01	6,98E-01	-1,58E+00	0,00E+00	9,01E-02	-3,73E+01	-2,96E+00	-4,38E+01
SM	[kg]	6,32E-01	0,00E+00	2,93E-01	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
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
FW	[m^3]	1,85E+01	1,19E-01	4,94E+00	8,32E-02	4,95E-02	0,00E+00	1,14E-02	8,82E-01	5,36E-03	-3,93E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 36)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	7,82E-04	2,19E-05	3,55E-03	1,53E-05	1,74E-03	0,00E+00	1,78E-06	1,05E-03	1,49E-06	2,87E-03
NHWD	[kg]	1,35E-01	8,65E-02	8,65E-02	6,02E-02	4,93E-03	0,00E+00	5,60E-03	7,38E-02	7,01E-02	9,15E-02
RWD	[kg]	5,08E-05	2,76E-07	3,19E-05	1,92E-07	1,36E-07	0,00E+00	2,75E-08	1,31E-06	6,22E-09	-1,08E-05
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,67E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	1,48E-01	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	3,01E-01	0,00E+00	3,54E-01	0,00E+00	0,00E+00	7,22E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,29E+00	0,00E+00	1,52E+00	0,00E+00	0,00E+00	3,10E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 36)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	1,88E-01
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 37:

Representative for the following article numbers: 12434. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 37)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	1,78E+00	5,53E-02	8,22E-01	4,29E-02	5,71E-01	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-5,83E-01
GWP-fossil	[kg CO_2 eq.]	1,80E+00	5,53E-02	1,30E+00	4,29E-02	7,54E-02	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-5,83E-01
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-4,79E-01	0,00E+00	4,96E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	1,71E-03	2,00E-05	1,43E-03	1,55E-05	4,42E-06	0,00E+00	2,17E-06	1,76E-04	1,57E-07	-3,53E-04
ODP	[kg CFC 11 eq.]	5,45E-08	2,78E-11	3,30E-09	2,16E-11	9,16E-12	0,00E+00	3,25E-12	1,66E-10	6,41E-13	-1,76E-09
AP	[mol H^+ eq.]	5,15E-03	2,26E-04	3,80E-03	1,75E-04	5,66E-05	0,00E+00	2,87E-05	7,07E-04	4,59E-06	-2,06E-03
EP-freshwater	[kg P eq.]	3,94E-05	4,22E-07	6,77E-05	3,28E-07	1,49E-07	0,00E+00	4,74E-08	4,29E-06	5,56E-09	-1,18E-05
EP-marine	[kg N eq.]	1,16E-03	8,37E-05	9,17E-04	6,50E-05	2,23E-05	0,00E+00	1,12E-05	2,18E-04	2,49E-06	-4,88E-04
EP-terrestrial	[mol N eq.]	1,24E-02	9,20E-04	9,66E-03	7,15E-04	2,41E-04	0,00E+00	1,23E-04	2,32E-03	2,08E-05	-5,38E-03
POCP	[kg NMVOC eq.]	1,06E-02	3,48E-04	3,32E-03	2,70E-04	7,89E-05	0,00E+00	4,31E-05	8,61E-04	9,57E-06	-5,92E-03
ADPm[1]	[kg Sb eq.]	1,02E-05	1,56E-07	3,12E-06	1,21E-07	4,18E-08	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-2,87E-06
ADPf[1]	[MJ]	5,41E+01	8,13E-01	1,83E+01	6,32E-01	1,11E-01	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-3,00E+01
WDP[1]	[m^3 world eq. deprived]	1,41E+00	3,70E-03	2,18E-01	2,87E-03	9,66E-04	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-8,32E-01
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 37)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	3,87E-08	5,70E-09	2,07E-08	4,43E-09	8,96E-10	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-1,55E-08
IRP[2]	[kBq U235 eq.]	6,88E-02	3,36E-04	3,95E-02	2,61E-04	1,29E-04	0,00E+00	4,03E-05	1,95E-03	1,11E-05	-1,12E-02
ETP-fw[1]	[CTUe]	5,76E+00	9,54E-02	3,20E+00	7,41E-02	1,21E-01	0,00E+00	1,18E-02	1,29E+00	3,32E-03	-9,95E-01
HTP-c[1]	[CTUh]	4,08E-10	9,08E-12	1,68E-10	7,05E-12	7,89E-12	0,00E+00	1,59E-12	2,79E-10	1,72E-13	-7,06E-11
HTP-nc[1]	[CTUh]	1,19E-08	5,24E-10	7,62E-09	4,07E-10	2,44E-10	0,00E+00	6,27E-11	2,85E-09	2,46E-11	-3,07E-09
SQP[1]	-	6,91E+00	8,19E-01	8,48E+00	6,36E-01	4,96E-02	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-7,00E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 37)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	2,84E+00	1,26E-02	1,94E+00	9,75E-03	4,93E-03	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-1,57E+00
PERM	[MJ]	1,43E-01	0,00E+00	4,30E+00	0,00E+00	-4,44E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,98E+00	1,26E-02	6,23E+00	9,75E-03	-4,43E+00	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-1,57E+00
PENRE	[MJ]	5,41E+01	8,14E-01	1,83E+01	6,32E-01	1,11E-01	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-3,00E+01
PENRM	[MJ]	4,26E+01	0,00E+00	1,08E+00	0,00E+00	-1,25E+00	0,00E+00	0,00E+00	-3,95E+01	-2,97E+00	0,00E+00
PENRT	[MJ]	9,68E+01	8,14E-01	1,94E+01	6,32E-01	-1,14E+00	0,00E+00	9,01E-02	-3,73E+01	-2,96E+00	-3,00E+01
SM	[kg]	7,36E-01	0,00E+00	2,23E-01	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
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
FW	[m^3]	1,47E+01	9,70E-02	4,09E+00	7,53E-02	3,56E-02	0,00E+00	1,14E-02	8,82E-01	5,36E-03	-2,76E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 37)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	1,10E-02	1,78E-05	3,40E-03	1,38E-05	1,25E-03	0,00E+00	1,78E-06	1,05E-03	1,49E-06	1,94E-03
NHWD	[kg]	1,26E-01	7,02E-02	6,87E-02	5,45E-02	3,55E-03	0,00E+00	5,60E-03	7,38E-02	7,01E-02	6,22E-02
RWD	[kg]	4,07E-05	2,24E-07	2,91E-05	1,74E-07	9,79E-08	0,00E+00	2,75E-08	1,31E-06	6,22E-09	-7,54E-06
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,92E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	1,07E-01	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	3,01E-01	0,00E+00	2,55E-01	0,00E+00	0,00E+00	7,22E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,29E+00	0,00E+00	1,09E+00	0,00E+00	0,00E+00	3,10E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 37)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	1,35E-01
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 38:

Representative for the following article numbers: 12439, 11716. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 38)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	2,40E+00	6,45E-02	8,31E-01	3,99E-02	4,04E-01	0,00E+00	6,24E-03	2,17E-01	8,17E-03	-8,61E-01
GWP-fossil	[kg CO_2 eq.]	2,42E+00	6,45E-02	1,18E+00	3,98E-02	3,39E-02	0,00E+00	6,24E-03	2,17E-01	8,17E-03	-8,60E-01
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-3,53E-01	0,00E+00	3,70E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	2,08E-03	2,33E-05	6,62E-04	1,44E-05	1,91E-06	0,00E+00	2,17E-06	1,76E-04	1,57E-07	-4,15E-04
ODP	[kg CFC 11 eq.]	5,39E-09	3,24E-11	9,58E-10	2,00E-11	3,67E-12	0,00E+00	3,25E-12	1,66E-10	6,41E-13	-2,03E-09
AP	[mol H^+ eq.]	7,91E-03	2,63E-04	3,33E-03	1,63E-04	2,28E-05	0,00E+00	2,87E-05	7,07E-04	4,59E-06	-2,84E-03
EP-freshwater	[kg P eq.]	5,03E-05	4,92E-07	6,01E-05	3,04E-07	6,30E-08	0,00E+00	4,74E-08	4,29E-06	5,56E-09	-1,54E-05
EP-marine	[kg N eq.]	1,51E-03	9,77E-05	7,25E-04	6,03E-05	8,96E-06	0,00E+00	1,12E-05	2,18E-04	2,48E-06	-6,58E-04
EP-terrestrial	[mol N eq.]	1,62E-02	1,07E-03	8,02E-03	6,63E-04	9,67E-05	0,00E+00	1,23E-04	2,31E-03	2,08E-05	-7,03E-03
POCP	[kg NMVOC eq.]	1,45E-02	4,06E-04	2,82E-03	2,51E-04	3,15E-05	0,00E+00	4,31E-05	8,61E-04	9,54E-06	-8,32E-03
ADPm[1]	[kg Sb eq.]	1,27E-05	1,82E-07	2,64E-06	1,13E-07	1,67E-08	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-4,25E-06
ADPf[1]	[MJ]	7,54E+01	9,49E-01	1,65E+01	5,86E-01	4,53E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-4,36E+01
WDP[1]	[m^3 world eq. deprived]	1,93E+00	4,32E-03	1,68E-01	2,67E-03	3,99E-04	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-1,15E+00
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 38)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	5,63E-08	6,66E-09	1,55E-08	4,11E-09	3,55E-10	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-2,03E-08
IRP[2]	[kBq U235 eq.]	8,35E-02	3,92E-04	3,54E-02	2,42E-04	5,69E-05	0,00E+00	4,03E-05	1,95E-03	1,10E-05	-1,40E-02
ETP-fw[1]	[CTUe]	8,37E+00	1,11E-01	2,27E+00	6,88E-02	4,70E-02	0,00E+00	1,18E-02	1,29E+00	3,29E-03	-1,45E+00
HTP-c[1]	[CTUh]	4,69E-10	1,06E-11	1,32E-10	6,54E-12	3,28E-12	0,00E+00	1,59E-12	2,79E-10	1,71E-13	-9,65E-11
HTP-nc[1]	[CTUh]	1,48E-08	6,11E-10	6,11E-09	3,78E-10	9,94E-11	0,00E+00	6,27E-11	2,85E-09	2,43E-11	-4,17E-09
SQP[1]	-	7,64E+00	9,56E-01	4,81E+00	5,90E-01	2,10E-02	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-4,39E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 38)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	2,90E+00	1,47E-02	1,17E+00	9,05E-03	2,13E-03	0,00E+00	1,50E-03	1,20E-01	4,39E-04	-9,36E-01
PERM	[MJ]	1,43E-01	0,00E+00	3,24E+00	0,00E+00	-3,38E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	3,05E+00	1,47E-02	4,41E+00	9,05E-03	-3,38E+00	0,00E+00	1,50E-03	1,20E-01	4,39E-04	-9,36E-01
PENRE	[MJ]	7,54E+01	9,49E-01	1,65E+01	5,86E-01	4,53E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-4,36E+01
PENRM	[MJ]	4,18E+01	0,00E+00	4,00E-01	0,00E+00	-5,72E-01	0,00E+00	0,00E+00	-3,87E+01	-2,91E+00	0,00E+00
PENRT	[MJ]	1,17E+02	9,49E-01	1,69E+01	5,86E-01	-5,27E-01	0,00E+00	9,01E-02	-3,66E+01	-2,90E+00	-4,36E+01
SM	[kg]	5,72E-01	0,00E+00	2,20E-01	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
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
FW	[m^3]	1,80E+01	1,13E-01	3,19E+00	6,99E-02	1,54E-02	0,00E+00	1,14E-02	8,82E-01	5,34E-03	-3,49E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 38)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	8,29E-04	2,08E-05	2,03E-03	1,28E-05	5,23E-04	0,00E+00	1,78E-06	1,05E-03	1,48E-06	3,05E-03
NHWD	[kg]	1,55E-01	8,19E-02	4,61E-02	5,06E-02	1,47E-03	0,00E+00	5,60E-03	7,38E-02	7,01E-02	8,39E-02
RWD	[kg]	4,91E-05	2,61E-07	2,59E-05	1,61E-07	4,35E-08	0,00E+00	2,75E-08	1,31E-06	6,20E-09	-9,79E-06
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,96E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	4,02E-02	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	2,95E-01	0,00E+00	1,20E-01	0,00E+00	0,00E+00	7,07E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,27E+00	0,00E+00	5,13E-01	0,00E+00	0,00E+00	3,04E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 38)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	1,01E-01
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 39:

Representative for the following article numbers: 10699. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 39)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	2,16E+00	4,77E-02	7,70E-01	3,90E-02	3,50E-01	0,00E+00	6,24E-03	2,16E-01	7,89E-03	-8,14E-01
GWP-fossil	[kg CO_2 eq.]	2,18E+00	4,77E-02	1,09E+00	3,90E-02	1,18E-02	0,00E+00	6,24E-03	2,16E-01	7,89E-03	-8,14E-01
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-3,21E-01	0,00E+00	3,38E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	1,71E-03	1,72E-05	2,07E-04	1,41E-05	5,57E-07	0,00E+00	2,17E-06	1,76E-04	1,57E-07	-3,49E-04
ODP	[kg CFC 11 eq.]	3,89E-08	2,40E-11	2,19E-09	1,96E-11	6,36E-13	0,00E+00	3,25E-12	1,66E-10	6,41E-13	-1,70E-09
AP	[mol H^+ eq.]	6,49E-03	1,95E-04	2,95E-03	1,59E-04	4,09E-06	0,00E+00	2,87E-05	7,07E-04	4,59E-06	-2,53E-03
EP-freshwater	[kg P eq.]	4,75E-05	3,64E-07	5,55E-05	2,98E-07	1,62E-08	0,00E+00	4,74E-08	4,29E-06	5,56E-09	-1,30E-05
EP-marine	[kg N eq.]	1,40E-03	7,22E-05	6,05E-04	5,90E-05	1,56E-06	0,00E+00	1,12E-05	2,18E-04	2,46E-06	-5,66E-04
EP-terrestrial	[mol N eq.]	1,52E-02	7,94E-04	6,97E-03	6,49E-04	1,69E-05	0,00E+00	1,23E-04	2,31E-03	2,08E-05	-6,07E-03
POCP	[kg NMVOC eq.]	1,16E-02	3,00E-04	2,33E-03	2,45E-04	5,18E-06	0,00E+00	4,31E-05	8,61E-04	9,46E-06	-6,65E-03
ADPm[1]	[kg Sb eq.]	1,22E-05	1,35E-07	2,29E-06	1,10E-07	2,80E-09	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-4,17E-06
ADPf[1]	[MJ]	6,23E+01	7,02E-01	1,45E+01	5,74E-01	8,92E-03	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-3,71E+01
WDP[1]	[m^3 world eq. deprived]	1,15E+00	3,19E-03	9,63E-02	2,61E-03	8,80E-05	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-8,04E-01
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 39)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	6,45E-08	4,92E-09	1,26E-08	4,02E-09	5,39E-11	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-1,80E-08
IRP[2]	[kBq U235 eq.]	5,70E-02	2,89E-04	3,18E-02	2,37E-04	1,85E-05	0,00E+00	4,03E-05	1,95E-03	1,10E-05	-1,20E-02
ETP-fw[1]	[CTUe]	1,28E+01	8,23E-02	1,87E+00	6,73E-02	5,91E-03	0,00E+00	1,18E-02	1,29E+00	3,21E-03	-1,48E+00
HTP-c[1]	[CTUh]	4,27E-10	7,83E-12	1,10E-10	6,40E-12	7,61E-13	0,00E+00	1,59E-12	2,79E-10	1,69E-13	-1,08E-10
HTP-nc[1]	[CTUh]	1,39E-08	4,52E-10	5,16E-09	3,69E-10	1,96E-11	0,00E+00	6,27E-11	2,85E-09	2,35E-11	-4,16E-09
SQP[1]	-	7,15E+00	7,06E-01	2,81E+00	5,77E-01	5,46E-03	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-2,60E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 39)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	2,38E+00	1,08E-02	7,36E-01	8,85E-03	6,19E-04	0,00E+00	1,50E-03	1,20E-01	4,36E-04	-5,69E-01
PERM	[MJ]	1,43E-01	0,00E+00	3,01E+00	0,00E+00	-3,15E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,52E+00	1,08E-02	3,74E+00	8,85E-03	-3,15E+00	0,00E+00	1,50E-03	1,20E-01	4,36E-04	-5,69E-01
PENRE	[MJ]	6,23E+01	7,02E-01	1,45E+01	5,74E-01	8,92E-03	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-3,71E+01
PENRM	[MJ]	3,94E+01	0,00E+00	4,18E-02	0,00E+00	-2,14E-01	0,00E+00	0,00E+00	-3,64E+01	-2,74E+00	0,00E+00
PENRT	[MJ]	1,02E+02	7,02E-01	1,46E+01	5,74E-01	-2,05E-01	0,00E+00	9,01E-02	-3,43E+01	-2,73E+00	-3,71E+01
SM	[kg]	5,04E-01	0,00E+00	2,45E-01	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
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
FW	[m^3]	1,34E+01	8,37E-02	2,42E+00	6,84E-02	4,42E-03	0,00E+00	1,14E-02	8,82E-01	5,30E-03	-3,01E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 39)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	7,80E-03	1,54E-05	1,75E-03	1,26E-05	1,23E-04	0,00E+00	1,78E-06	1,03E-03	1,45E-06	2,76E-03
NHWD	[kg]	1,43E-01	6,06E-02	3,15E-02	4,95E-02	3,25E-04	0,00E+00	5,60E-03	7,38E-02	7,01E-02	3,75E-02
RWD	[kg]	3,44E-05	1,93E-07	2,33E-05	1,58E-07	1,43E-08	0,00E+00	2,75E-08	1,31E-06	6,16E-09	-8,50E-06
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,24E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	2,77E-03	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	2,78E-01	0,00E+00	4,86E-02	0,00E+00	0,00E+00	6,66E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,19E+00	0,00E+00	2,09E-01	0,00E+00	0,00E+00	2,86E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 39)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	9,23E-02
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 40:

Representative for the following article numbers: 12595, 12596. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 40)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	2,50E+00	5,78E-02	8,26E-01	3,80E-02	3,05E-01	0,00E+00	6,24E-03	2,17E-01	7,94E-03	-9,62E-01
GWP-fossil	[kg CO_2 eq.]	2,51E+00	5,78E-02	1,10E+00	3,80E-02	1,03E-02	0,00E+00	6,24E-03	2,16E-01	7,94E-03	-9,62E-01
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-2,77E-01	0,00E+00	2,94E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	1,98E-03	2,09E-05	2,13E-04	1,37E-05	4,85E-07	0,00E+00	2,17E-06	1,76E-04	1,57E-07	-4,14E-04
ODP	[kg CFC 11 eq.]	5,30E-09	2,91E-11	7,85E-10	1,91E-11	5,54E-13	0,00E+00	3,25E-12	1,66E-10	6,41E-13	-2,00E-09
AP	[mol H^+ eq.]	7,18E-03	2,36E-04	2,97E-03	1,55E-04	3,56E-06	0,00E+00	2,87E-05	7,07E-04	4,59E-06	-3,02E-03
EP-freshwater	[kg P eq.]	5,15E-05	4,41E-07	5,55E-05	2,90E-07	1,41E-08	0,00E+00	4,74E-08	4,29E-06	5,56E-09	-1,58E-05
EP-marine	[kg N eq.]	1,56E-03	8,75E-05	6,10E-04	5,75E-05	1,36E-06	0,00E+00	1,12E-05	2,18E-04	2,46E-06	-6,85E-04
EP-terrestrial	[mol N eq.]	1,69E-02	9,62E-04	7,02E-03	6,32E-04	1,47E-05	0,00E+00	1,23E-04	2,31E-03	2,08E-05	-7,28E-03
POCP	[kg NMVOC eq.]	1,42E-02	3,64E-04	2,43E-03	2,39E-04	4,51E-06	0,00E+00	4,31E-05	8,61E-04	9,47E-06	-8,38E-03
ADPm[1]	[kg Sb eq.]	1,36E-05	1,63E-07	2,34E-06	1,07E-07	2,44E-09	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-4,86E-06
ADPf[1]	[MJ]	7,64E+01	8,51E-01	1,50E+01	5,59E-01	7,76E-03	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-4,57E+01
WDP[1]	[m^3 world eq. deprived]	1,61E+00	3,87E-03	1,14E-01	2,54E-03	7,66E-05	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-1,07E+00
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 40)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	6,57E-08	5,96E-09	1,25E-08	3,92E-09	4,70E-11	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-2,14E-08
IRP[2]	[kBq U235 eq.]	7,18E-02	3,51E-04	3,23E-02	2,31E-04	1,61E-05	0,00E+00	4,03E-05	1,95E-03	1,10E-05	-1,43E-02
ETP-fw[1]	[CTUe]	1,21E+01	9,98E-02	1,83E+00	6,56E-02	5,15E-03	0,00E+00	1,18E-02	1,29E+00	3,23E-03	-1,69E+00
HTP-c[1]	[CTUh]	4,50E-10	9,49E-12	1,09E-10	6,24E-12	6,63E-13	0,00E+00	1,59E-12	2,79E-10	1,70E-13	-1,18E-10
HTP-nc[1]	[CTUh]	1,52E-08	5,48E-10	5,20E-09	3,60E-10	1,70E-11	0,00E+00	6,27E-11	2,85E-09	2,36E-11	-4,74E-09
SQP[1]	-	7,36E+00	8,56E-01	2,67E+00	5,63E-01	4,75E-03	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-2,81E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 40)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	2,54E+00	1,31E-02	7,13E-01	8,63E-03	5,39E-04	0,00E+00	1,50E-03	1,20E-01	4,37E-04	-5,79E-01
PERM	[MJ]	1,43E-01	0,00E+00	2,60E+00	0,00E+00	-2,74E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,68E+00	1,31E-02	3,31E+00	8,63E-03	-2,74E+00	0,00E+00	1,50E-03	1,20E-01	4,37E-04	-5,79E-01
PENRE	[MJ]	7,64E+01	8,51E-01	1,50E+01	5,59E-01	7,76E-03	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-4,57E+01
PENRM	[MJ]	3,98E+01	0,00E+00	1,41E-02	0,00E+00	-1,86E-01	0,00E+00	0,00E+00	-3,68E+01	-2,77E+00	0,00E+00
PENRT	[MJ]	1,16E+02	8,51E-01	1,51E+01	5,59E-01	-1,78E-01	0,00E+00	9,01E-02	-3,47E+01	-2,76E+00	-4,57E+01
SM	[kg]	4,56E-01	0,00E+00	2,14E-01	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
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
FW	[m^3]	1,63E+01	1,01E-01	2,52E+00	6,67E-02	3,84E-03	0,00E+00	1,14E-02	8,82E-01	5,31E-03	-3,58E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 40)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	7,48E-04	1,86E-05	1,46E-03	1,22E-05	1,07E-04	0,00E+00	1,78E-06	1,04E-03	1,46E-06	3,36E-03
NHWD	[kg]	1,28E-01	7,34E-02	3,07E-02	4,83E-02	2,83E-04	0,00E+00	5,60E-03	7,38E-02	7,01E-02	6,31E-02
RWD	[kg]	4,24E-05	2,34E-07	2,36E-05	1,54E-07	1,25E-08	0,00E+00	2,75E-08	1,31E-06	6,17E-09	-1,02E-05
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,95E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	2,41E-03	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	2,81E-01	0,00E+00	4,23E-02	0,00E+00	0,00E+00	6,74E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,21E+00	0,00E+00	1,82E-01	0,00E+00	0,00E+00	2,89E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 40)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	8,03E-02
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 41:

Representative for the following article numbers: 12360, 12362. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 41)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	2,37E+00	8,47E-02	8,75E-01	3,90E-02	3,64E-01	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-8,23E-01
GWP-fossil	[kg CO_2 eq.]	2,39E+00	8,46E-02	1,19E+00	3,90E-02	2,87E-02	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-8,23E-01
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-3,18E-01	0,00E+00	3,35E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	9,96E-04	3,06E-05	7,53E-04	1,41E-05	2,04E-06	0,00E+00	2,17E-06	1,76E-04	1,57E-07	-1,31E-04
ODP	[kg CFC 11 eq.]	5,99E-09	4,25E-11	1,00E-09	1,96E-11	4,28E-12	0,00E+00	3,25E-12	1,66E-10	6,41E-13	-2,55E-09
AP	[mol H^+ eq.]	7,17E-03	3,45E-04	3,34E-03	1,59E-04	2,65E-05	0,00E+00	2,87E-05	7,07E-04	4,59E-06	-2,53E-03
EP-freshwater	[kg P eq.]	4,19E-05	6,46E-07	6,07E-05	2,97E-07	7,00E-08	0,00E+00	4,74E-08	4,29E-06	5,56E-09	-4,65E-06
EP-marine	[kg N eq.]	1,41E-03	1,28E-04	7,49E-04	5,90E-05	1,04E-05	0,00E+00	1,12E-05	2,18E-04	2,49E-06	-6,07E-04
EP-terrestrial	[mol N eq.]	1,53E-02	1,41E-03	8,18E-03	6,48E-04	1,12E-04	0,00E+00	1,23E-04	2,32E-03	2,08E-05	-6,58E-03
POCP	[kg NMVOC eq.]	1,27E-02	5,33E-04	2,77E-03	2,45E-04	3,72E-05	0,00E+00	4,31E-05	8,61E-04	9,57E-06	-7,12E-03
ADPm[1]	[kg Sb eq.]	1,23E-05	2,39E-07	2,65E-06	1,10E-07	1,96E-08	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-3,93E-06
ADPf[1]	[MJ]	7,47E+01	1,25E+00	1,65E+01	5,73E-01	5,31E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-4,23E+01
WDP[1]	[m^3 world eq. deprived]	1,30E+00	5,66E-03	1,45E-01	2,61E-03	4,27E-04	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-7,19E-01
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 41)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	4,92E-08	8,73E-09	1,57E-08	4,02E-09	4,28E-10	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-2,10E-08
IRP[2]	[kBq U235 eq.]	3,92E-02	5,14E-04	3,39E-02	2,37E-04	6,46E-05	0,00E+00	4,03E-05	1,95E-03	1,11E-05	6,23E-03
ETP-fw[1]	[CTUe]	5,70E+00	1,46E-01	2,25E+00	6,72E-02	5,69E-02	0,00E+00	1,18E-02	1,29E+00	3,32E-03	-1,12E+00
HTP-c[1]	[CTUh]	4,48E-10	1,39E-11	1,33E-10	6,40E-12	3,46E-12	0,00E+00	1,59E-12	2,79E-10	1,72E-13	-8,72E-11
HTP-nc[1]	[CTUh]	1,40E-08	8,02E-10	6,29E-09	3,69E-10	1,11E-10	0,00E+00	6,27E-11	2,85E-09	2,46E-11	-3,41E-09
SQP[1]	-	6,57E+00	1,25E+00	5,25E+00	5,77E-01	2,27E-02	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-4,43E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 41)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	1,91E+00	1,92E-02	1,22E+00	8,85E-03	2,38E-03	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-4,78E-01
PERM	[MJ]	1,43E-01	0,00E+00	2,89E+00	0,00E+00	-3,03E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,05E+00	1,92E-02	4,11E+00	8,85E-03	-3,03E+00	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-4,78E-01
PENRE	[MJ]	7,47E+01	1,25E+00	1,65E+01	5,73E-01	5,31E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-4,23E+01
PENRM	[MJ]	4,26E+01	0,00E+00	2,84E-01	0,00E+00	-4,56E-01	0,00E+00	0,00E+00	-3,95E+01	-2,97E+00	0,00E+00
PENRT	[MJ]	1,17E+02	1,25E+00	1,68E+01	5,73E-01	-4,03E-01	0,00E+00	9,01E-02	-3,73E+01	-2,96E+00	-4,23E+01
SM	[kg]	7,23E-01	0,00E+00	1,85E-01	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
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
FW	[m^3]	8,22E+00	1,48E-01	2,84E+00	6,83E-02	1,71E-02	0,00E+00	1,14E-02	8,82E-01	5,36E-03	-4,16E-02
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 41)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	6,70E-04	2,73E-05	2,22E-03	1,26E-05	5,39E-04	0,00E+00	1,78E-06	1,05E-03	1,49E-06	3,06E-03
NHWD	[kg]	1,24E-01	1,07E-01	4,86E-02	4,95E-02	1,68E-03	0,00E+00	5,60E-03	7,38E-02	7,01E-02	1,00E-01
RWD	[kg]	2,99E-05	3,43E-07	2,54E-05	1,58E-07	4,96E-08	0,00E+00	2,75E-08	1,31E-06	6,22E-09	6,67E-06
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,55E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	5,19E-02	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	3,01E-01	0,00E+00	1,12E-01	0,00E+00	0,00E+00	7,22E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,29E+00	0,00E+00	4,81E-01	0,00E+00	0,00E+00	3,10E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 41)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	9,14E-02
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 42:

Representative for the following article numbers: 12359, 12361. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 42)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	4,95E-01	2,78E-02	7,49E-01	4,05E-02	4,36E-01	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-1,87E-02
GWP-fossil	[kg CO_2 eq.]	5,11E-01	2,78E-02	1,13E+00	4,05E-02	3,44E-02	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-1,86E-02
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-3,85E-01	0,00E+00	4,02E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	7,74E-04	1,00E-05	8,66E-04	1,46E-05	2,45E-06	0,00E+00	2,17E-06	1,76E-04	1,57E-07	-7,41E-05
ODP	[kg CFC 11 eq.]	1,66E-07	1,40E-11	7,73E-09	2,03E-11	5,13E-12	0,00E+00	3,25E-12	1,66E-10	6,41E-13	-4,09E-10
AP	[mol H^+ eq.]	2,12E-03	1,13E-04	3,21E-03	1,65E-04	3,18E-05	0,00E+00	2,87E-05	7,07E-04	4,59E-06	-1,67E-04
EP-freshwater	[kg P eq.]	1,97E-05	2,12E-07	6,10E-05	3,09E-07	8,39E-08	0,00E+00	4,74E-08	4,29E-06	5,56E-09	-1,34E-06
EP-marine	[kg N eq.]	4,71E-04	4,20E-05	7,38E-04	6,13E-05	1,25E-05	0,00E+00	1,12E-05	2,18E-04	2,49E-06	-4,51E-05
EP-terrestrial	[mol N eq.]	5,25E-03	4,62E-04	8,01E-03	6,73E-04	1,35E-04	0,00E+00	1,23E-04	2,32E-03	2,08E-05	-6,67E-04
POCP	[kg NMVOC eq.]	1,60E-03	1,75E-04	2,40E-03	2,55E-04	4,46E-05	0,00E+00	4,31E-05	8,61E-04	9,57E-06	-1,65E-04
ADPm[1]	[kg Sb eq.]	4,67E-06	7,85E-08	2,42E-06	1,14E-07	2,35E-08	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-1,16E-07
ADPf[1]	[MJ]	5,14E+00	4,09E-01	1,40E+01	5,95E-01	6,37E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-4,16E-01
WDP[1]	[m^3 world eq. deprived]	6,05E-02	1,86E-03	1,04E-01	2,71E-03	5,11E-04	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-7,12E-03
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 42)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	2,11E-08	2,86E-09	1,53E-08	4,18E-09	5,14E-10	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-1,96E-09
IRP[2]	[kBq U235 eq.]	2,54E-02	1,69E-04	3,40E-02	2,46E-04	7,75E-05	0,00E+00	4,03E-05	1,95E-03	1,11E-05	-1,83E-03
ETP-fw[1]	[CTUe]	3,60E+00	4,79E-02	2,32E+00	6,98E-02	6,82E-02	0,00E+00	1,18E-02	1,29E+00	3,32E-03	-6,96E-02
HTP-c[1]	[CTUh]	2,79E-10	4,56E-12	1,33E-10	6,64E-12	4,15E-12	0,00E+00	1,59E-12	2,79E-10	1,72E-13	-1,18E-11
HTP-nc[1]	[CTUh]	6,45E-09	2,63E-10	6,20E-09	3,83E-10	1,33E-10	0,00E+00	6,27E-11	2,85E-09	2,46E-11	-4,12E-10
SQP[1]	-	5,85E+00	4,11E-01	5,91E+00	5,99E-01	2,72E-02	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-3,65E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 42)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	2,43E+00	6,31E-03	1,39E+00	9,19E-03	2,85E-03	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-8,95E-01
PERM	[MJ]	1,43E-01	0,00E+00	3,49E+00	0,00E+00	-3,64E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,58E+00	6,31E-03	4,88E+00	9,19E-03	-3,63E+00	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-8,95E-01
PENRE	[MJ]	5,14E+00	4,09E-01	1,40E+01	5,95E-01	6,37E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-4,16E-01
PENRM	[MJ]	4,26E+01	0,00E+00	3,75E-01	0,00E+00	-5,47E-01	0,00E+00	0,00E+00	-3,95E+01	-2,97E+00	0,00E+00
PENRT	[MJ]	4,78E+01	4,09E-01	1,44E+01	5,95E-01	-4,83E-01	0,00E+00	9,01E-02	-3,73E+01	-2,96E+00	-4,16E-01
SM	[kg]	1,00E+00	0,00E+00	2,27E-01	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
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
FW	[m^3]	5,63E+00	4,87E-02	2,88E+00	7,10E-02	2,05E-02	0,00E+00	1,14E-02	8,82E-01	5,36E-03	-4,26E-01
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 42)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	3,46E-02	8,94E-06	3,78E-03	1,30E-05	6,46E-04	0,00E+00	1,78E-06	1,05E-03	1,49E-06	-9,92E-05
NHWD	[kg]	1,62E-01	3,53E-02	5,14E-02	5,14E-02	2,02E-03	0,00E+00	5,60E-03	7,38E-02	7,01E-02	-2,89E-03
RWD	[kg]	1,63E-05	1,12E-07	2,53E-05	1,64E-07	5,95E-08	0,00E+00	2,75E-08	1,31E-06	6,22E-09	-9,97E-07
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,85E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	6,22E-02	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	3,01E-01	0,00E+00	1,34E-01	0,00E+00	0,00E+00	7,22E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,29E+00	0,00E+00	5,77E-01	0,00E+00	0,00E+00	3,10E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 42)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	1,10E-01
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 43:

Representative for the following article numbers: 10809, 10871, 10872, 10877, 10879, 10875, 10819, 10817, 10815, 10813, 10810, 10881. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 43)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	2,40E+00	8,41E-02	7,60E-01	4,18E-02	4,92E-01	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-8,15E-01
GWP-fossil	[kg CO_2 eq.]	2,42E+00	8,40E-02	1,22E+00	4,17E-02	1,72E-02	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-8,15E-01
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-4,58E-01	0,00E+00	4,75E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	1,03E-03	3,04E-05	1,10E-03	1,51E-05	2,54E-06	0,00E+00	2,17E-06	1,76E-04	1,57E-07	-1,35E-04
ODP	[kg CFC 11 eq.]	6,15E-09	4,22E-11	1,06E-09	2,10E-11	5,89E-12	0,00E+00	3,25E-12	1,66E-10	6,41E-13	-2,53E-09
AP	[mol H^+ eq.]	7,94E-03	3,43E-04	3,50E-03	1,70E-04	3,66E-05	0,00E+00	2,87E-05	7,07E-04	4,59E-06	-2,51E-03
EP-freshwater	[kg P eq.]	4,40E-05	6,41E-07	6,34E-05	3,19E-07	9,30E-08	0,00E+00	4,74E-08	4,29E-06	5,56E-09	-4,70E-06
EP-marine	[kg N eq.]	1,45E-03	1,27E-04	8,20E-04	6,32E-05	1,43E-05	0,00E+00	1,12E-05	2,18E-04	2,49E-06	-6,04E-04
EP-terrestrial	[mol N eq.]	1,56E-02	1,40E-03	8,73E-03	6,95E-04	1,54E-04	0,00E+00	1,23E-04	2,32E-03	2,08E-05	-6,55E-03
POCP	[kg NMVOC eq.]	1,29E-02	5,29E-04	2,86E-03	2,63E-04	5,23E-05	0,00E+00	4,31E-05	8,61E-04	9,57E-06	-7,05E-03
ADPm[1]	[kg Sb eq.]	1,24E-05	2,38E-07	2,75E-06	1,18E-07	2,74E-08	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-3,89E-06
ADPf[1]	[MJ]	7,48E+01	1,24E+00	1,66E+01	6,14E-01	7,50E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-4,19E+01
WDP[1]	[m^3 world eq. deprived]	1,33E+00	5,62E-03	1,55E-01	2,79E-03	5,07E-04	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-7,09E-01
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 43)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	5,26E-08	8,67E-09	1,73E-08	4,31E-09	6,23E-10	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-2,10E-08
IRP[2]	[kBq U235 eq.]	4,05E-02	5,10E-04	3,48E-02	2,53E-04	9,29E-05	0,00E+00	4,03E-05	1,95E-03	1,11E-05	6,13E-03
ETP-fw[1]	[CTUe]	6,19E+00	1,45E-01	2,53E+00	7,20E-02	8,19E-02	0,00E+00	1,18E-02	1,29E+00	3,32E-03	-1,12E+00
HTP-c[1]	[CTUh]	4,72E-10	1,38E-11	1,46E-10	6,85E-12	4,03E-12	0,00E+00	1,59E-12	2,79E-10	1,72E-13	-8,72E-11
HTP-nc[1]	[CTUh]	1,43E-08	7,96E-10	6,82E-09	3,96E-10	1,42E-10	0,00E+00	6,27E-11	2,85E-09	2,46E-11	-3,39E-09
SQP[1]	-	6,83E+00	1,24E+00	7,13E+00	6,18E-01	2,85E-02	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-5,39E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 43)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	1,96E+00	1,91E-02	1,59E+00	9,48E-03	3,25E-03	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-6,45E-01
PERM	[MJ]	1,43E-01	0,00E+00	4,13E+00	0,00E+00	-4,28E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,11E+00	1,91E-02	5,72E+00	9,48E-03	-4,27E+00	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-6,45E-01
PENRE	[MJ]	7,48E+01	1,24E+00	1,66E+01	6,14E-01	7,50E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-4,19E+01
PENRM	[MJ]	4,26E+01	0,00E+00	2,33E-02	0,00E+00	-1,95E-01	0,00E+00	0,00E+00	-3,95E+01	-2,97E+00	0,00E+00
PENRT	[MJ]	1,17E+02	1,24E+00	1,66E+01	6,14E-01	-1,20E-01	0,00E+00	9,01E-02	-3,73E+01	-2,96E+00	-4,19E+01
SM	[kg]	7,16E-01	0,00E+00	2,34E-01	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
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
FW	[m^3]	8,55E+00	1,47E-01	3,02E+00	7,32E-02	2,31E-02	0,00E+00	1,14E-02	8,82E-01	5,36E-03	-4,99E-02
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 43)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	7,28E-04	2,71E-05	2,66E-03	1,34E-05	5,93E-04	0,00E+00	1,78E-06	1,05E-03	1,49E-06	3,03E-03
NHWD	[kg]	1,46E-01	1,07E-01	5,90E-02	5,30E-02	2,33E-03	0,00E+00	5,60E-03	7,38E-02	7,01E-02	9,83E-02
RWD	[kg]	3,10E-05	3,40E-07	2,61E-05	1,69E-07	7,20E-08	0,00E+00	2,75E-08	1,31E-06	6,22E-09	6,57E-06
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,05E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	8,08E-02	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	3,01E-01	0,00E+00	1,11E-01	0,00E+00	0,00E+00	7,22E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,29E+00	0,00E+00	4,76E-01	0,00E+00	0,00E+00	3,10E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 43)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	1,30E-01
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 44:

Representative for the following article numbers: 12800. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 44)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	2,22E+00	4,36E-02	8,07E-01	3,98E-02	3,98E-01	0,00E+00	6,24E-03	2,18E-01	8,35E-03	-9,21E-01
GWP-fossil	[kg CO_2 eq.]	2,23E+00	4,36E-02	1,17E+00	3,98E-02	1,39E-02	0,00E+00	6,24E-03	2,18E-01	8,35E-03	-9,21E-01
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-3,67E-01	0,00E+00	3,84E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	1,27E-03	1,58E-05	8,25E-04	1,44E-05	1,86E-06	0,00E+00	2,17E-06	1,76E-04	1,57E-07	2,04E-05
ODP	[kg CFC 11 eq.]	5,54E-08	2,19E-11	3,04E-09	2,00E-11	4,23E-12	0,00E+00	3,25E-12	1,66E-10	6,41E-13	-7,74E-10
AP	[mol H^+ eq.]	9,00E-03	1,78E-04	3,38E-03	1,62E-04	2,63E-05	0,00E+00	2,87E-05	7,07E-04	4,61E-06	-3,61E-03
EP-freshwater	[kg P eq.]	3,17E-05	3,33E-07	6,03E-05	3,04E-07	6,77E-08	0,00E+00	4,74E-08	4,29E-06	5,56E-09	1,93E-07
EP-marine	[kg N eq.]	1,51E-03	6,60E-05	7,54E-04	6,02E-05	1,03E-05	0,00E+00	1,12E-05	2,18E-04	2,79E-06	-6,35E-04
EP-terrestrial	[mol N eq.]	1,62E-02	7,26E-04	8,18E-03	6,62E-04	1,11E-04	0,00E+00	1,23E-04	2,31E-03	2,09E-05	-6,87E-03
POCP	[kg NMVOC eq.]	9,77E-03	2,75E-04	2,57E-03	2,51E-04	3,75E-05	0,00E+00	4,31E-05	8,61E-04	9,59E-06	-5,02E-03
ADPm[1]	[kg Sb eq.]	6,99E-06	1,23E-07	2,37E-06	1,13E-07	1,97E-08	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-6,14E-07
ADPf[1]	[MJ]	5,64E+01	6,42E-01	1,53E+01	5,86E-01	5,40E-02	0,00E+00	9,01E-02	2,15E+00	1,63E-02	-3,16E+01
WDP[1]	[m^3 world eq. deprived]	1,50E+00	2,92E-03	1,45E-01	2,66E-03	3,69E-04	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-8,93E-01
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 44)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	7,91E-08	4,50E-09	1,65E-08	4,11E-09	4,46E-10	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-3,73E-08
IRP[2]	[kBq U235 eq.]	4,56E-02	2,65E-04	3,38E-02	2,42E-04	6,80E-05	0,00E+00	4,03E-05	1,95E-03	1,12E-05	8,05E-03
ETP-fw[1]	[CTUe]	5,38E+00	7,53E-02	2,22E+00	6,87E-02	5,84E-02	0,00E+00	1,18E-02	1,30E+00	4,31E-03	-9,16E-02
HTP-c[1]	[CTUh]	4,19E-10	7,16E-12	1,32E-10	6,53E-12	2,94E-12	0,00E+00	1,59E-12	2,79E-10	1,79E-13	-2,83E-11
HTP-nc[1]	[CTUh]	9,57E-09	4,13E-10	6,13E-09	3,77E-10	1,02E-10	0,00E+00	6,27E-11	2,86E-09	2,47E-11	-6,97E-10
SQP[1]	-	5,72E+00	6,46E-01	5,60E+00	5,89E-01	2,08E-02	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-3,23E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 44)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	2,22E+00	9,91E-03	1,31E+00	9,04E-03	2,38E-03	0,00E+00	1,50E-03	1,20E-01	4,45E-04	-4,52E-01
PERM	[MJ]	1,43E-01	0,00E+00	3,33E+00	0,00E+00	-3,47E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,36E+00	9,91E-03	4,64E+00	9,04E-03	-3,47E+00	0,00E+00	1,50E-03	1,20E-01	4,45E-04	-4,52E-01
PENRE	[MJ]	5,64E+01	6,42E-01	1,53E+01	5,86E-01	5,40E-02	0,00E+00	9,01E-02	2,15E+00	1,63E-02	-3,16E+01
PENRM	[MJ]	4,16E+01	0,00E+00	-3,03E-03	0,00E+00	-1,69E-01	0,00E+00	0,00E+00	-3,85E+01	-2,90E+00	0,00E+00
PENRT	[MJ]	9,80E+01	6,42E-01	1,53E+01	5,86E-01	-1,15E-01	0,00E+00	9,01E-02	-3,63E+01	-2,88E+00	-3,16E+01
SM	[kg]	5,51E-01	0,00E+00	2,00E-01	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
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
FW	[m^3]	9,97E+00	7,65E-02	2,82E+00	6,98E-02	1,69E-02	0,00E+00	1,14E-02	8,82E-01	5,42E-03	9,33E-01
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 44)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	1,18E-02	1,40E-05	2,75E-03	1,28E-05	4,34E-04	0,00E+00	1,78E-06	1,04E-03	1,43E-06	3,65E-03
NHWD	[kg]	1,57E-01	5,54E-02	4,89E-02	5,05E-02	1,68E-03	0,00E+00	5,60E-03	7,38E-02	7,01E-02	4,85E-02
RWD	[kg]	2,79E-05	1,77E-07	2,50E-05	1,61E-07	5,27E-08	0,00E+00	2,75E-08	1,31E-06	6,29E-09	7,31E-06
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,77E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	5,71E-02	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	2,93E-01	0,00E+00	8,51E-02	0,00E+00	0,00E+00	7,04E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,26E+00	0,00E+00	3,65E-01	0,00E+00	0,00E+00	3,02E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 44)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	1,05E-01
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 45:

Representative for the following article numbers: 13142, 13140, 15611, 13136, 13138, 13144. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 45)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	6,94E-01	3,40E-02	7,38E-01	3,99E-02	4,03E-01	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-1,33E-02
GWP-fossil	[kg CO_2 eq.]	7,09E-01	3,40E-02	1,11E+00	3,99E-02	1,40E-02	0,00E+00	6,24E-03	2,18E-01	8,28E-03	-1,32E-02
GWP-biogenic	[kg CO_2 eq.]	-1,69E-02	0,00E+00	-3,72E-01	0,00E+00	3,89E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	1,26E-03	1,23E-05	8,34E-04	1,44E-05	1,89E-06	0,00E+00	2,17E-06	1,76E-04	1,57E-07	-5,84E-05
ODP	[kg CFC 11 eq.]	5,13E-08	1,71E-11	2,87E-09	2,01E-11	4,29E-12	0,00E+00	3,25E-12	1,66E-10	6,41E-13	-3,12E-10
AP	[mol H^+ eq.]	3,10E-03	1,39E-04	3,14E-03	1,63E-04	2,67E-05	0,00E+00	2,87E-05	7,07E-04	4,59E-06	-1,27E-04
EP-freshwater	[kg P eq.]	2,40E-04	2,59E-07	6,91E-05	3,05E-07	6,86E-08	0,00E+00	4,74E-08	4,29E-06	5,56E-09	-1,05E-06
EP-marine	[kg N eq.]	2,70E-03	5,15E-05	8,05E-04	6,04E-05	1,04E-05	0,00E+00	1,12E-05	2,18E-04	2,49E-06	-3,49E-05
EP-terrestrial	[mol N eq.]	7,15E-03	5,66E-04	7,81E-03	6,64E-04	1,12E-04	0,00E+00	1,23E-04	2,32E-03	2,08E-05	-5,16E-04
POCP	[kg NMVOC eq.]	2,16E-03	2,14E-04	2,25E-03	2,51E-04	3,80E-05	0,00E+00	4,31E-05	8,61E-04	9,57E-06	-1,15E-04
ADPm[1]	[kg Sb eq.]	6,75E-06	9,61E-08	2,36E-06	1,13E-07	1,99E-08	0,00E+00	2,04E-08	9,94E-07	1,38E-09	-8,36E-08
ADPf[1]	[MJ]	9,78E+00	5,00E-01	1,33E+01	5,87E-01	5,47E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-2,41E-01
WDP[1]	[m^3 world eq. deprived]	2,29E-01	2,27E-03	9,26E-02	2,67E-03	3,74E-04	0,00E+00	3,73E-04	3,50E-02	-3,69E-04	-3,14E-03
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 45)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	2,55E-08	3,51E-09	1,43E-08	4,12E-09	4,52E-10	0,00E+00	6,14E-10	1,44E-08	1,12E-10	-1,54E-09
IRP[2]	[kBq U235 eq.]	6,46E-02	2,06E-04	3,47E-02	2,42E-04	6,89E-05	0,00E+00	4,03E-05	1,95E-03	1,11E-05	-1,40E-03
ETP-fw[1]	[CTUe]	1,43E+01	5,87E-02	2,58E+00	6,89E-02	5,92E-02	0,00E+00	1,18E-02	1,29E+00	3,32E-03	-5,46E-02
HTP-c[1]	[CTUh]	3,23E-10	5,58E-12	1,28E-10	6,55E-12	2,98E-12	0,00E+00	1,59E-12	2,79E-10	1,72E-13	-9,31E-12
HTP-nc[1]	[CTUh]	1,82E-08	3,22E-10	6,47E-09	3,78E-10	1,04E-10	0,00E+00	6,27E-11	2,85E-09	2,46E-11	-3,15E-10
SQP[1]	-	6,77E+00	5,04E-01	5,69E+00	5,91E-01	2,11E-02	0,00E+00	6,72E-02	1,92E+00	3,97E-02	-3,18E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 45)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	3,33E+00	7,72E-03	1,36E+00	9,06E-03	2,41E-03	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-7,51E-01
PERM	[MJ]	1,43E-01	0,00E+00	3,37E+00	0,00E+00	-3,52E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	3,47E+00	7,72E-03	4,74E+00	9,06E-03	-3,51E+00	0,00E+00	1,50E-03	1,20E-01	4,40E-04	-7,51E-01
PENRE	[MJ]	9,77E+00	5,00E-01	1,33E+01	5,87E-01	5,47E-02	0,00E+00	9,01E-02	2,15E+00	1,62E-02	-2,41E-01
PENRM	[MJ]	4,26E+01	0,00E+00	-8,18E-04	0,00E+00	-1,71E-01	0,00E+00	0,00E+00	-3,95E+01	-2,97E+00	0,00E+00
PENRT	[MJ]	5,24E+01	5,00E-01	1,33E+01	5,87E-01	-1,16E-01	0,00E+00	9,01E-02	-3,73E+01	-2,96E+00	-2,41E-01
SM	[kg]	1,00E+00	0,00E+00	2,21E-01	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
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
FW	[m^3]	1,26E+01	5,96E-02	2,94E+00	7,00E-02	1,71E-02	0,00E+00	1,14E-02	8,82E-01	5,36E-03	-3,26E-01
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 45)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	1,29E-02	1,10E-05	2,83E-03	1,29E-05	4,40E-04	0,00E+00	1,78E-06	1,05E-03	1,49E-06	-8,35E-05
NHWD	[kg]	2,02E-01	4,32E-02	5,06E-02	5,07E-02	1,71E-03	0,00E+00	5,60E-03	7,38E-02	7,01E-02	-2,70E-03
RWD	[kg]	4,89E-05	1,38E-07	2,60E-05	1,62E-07	5,34E-08	0,00E+00	2,75E-08	1,31E-06	6,22E-09	-7,66E-07
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,79E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	1,33E-02	0,00E+00	5,79E-02	0,00E+00	0,00E+00	9,20E-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
EEE	[MJ]	0,00E+00	0,00E+00	3,01E-01	0,00E+00	8,62E-02	0,00E+00	0,00E+00	7,22E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,29E+00	0,00E+00	3,70E-01	0,00E+00	0,00E+00	3,10E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 45)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	1,06E-01
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

LCA results for Group 46:

Representative for the following article numbers: 15615, 15613. Please refer to page 3-6 for an overview of all article numbers and products.

ENVIRONMENTAL IMPACTS PER KG (GROUP 46)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	3,47E-01	1,70E-02	3,47E-01	2,06E-02	2,32E-01	0,00E+00	3,12E-03	1,09E-01	4,14E-03	-7,32E-03
GWP-fossil	[kg CO_2 eq.]	3,55E-01	1,70E-02	5,62E-01	2,06E-02	8,09E-03	0,00E+00	3,12E-03	1,09E-01	4,14E-03	-7,28E-03
GWP-biogenic	[kg CO_2 eq.]	-8,46E-03	0,00E+00	-2,15E-01	0,00E+00	2,24E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-luluc	[kg CO_2 eq.]	6,32E-04	6,14E-06	4,69E-04	7,44E-06	1,09E-06	0,00E+00	1,08E-06	8,79E-05	7,83E-08	-3,20E-05
ODP	[kg CFC 11 eq.]	2,56E-08	8,54E-12	1,45E-09	1,04E-11	2,47E-12	0,00E+00	1,62E-12	8,30E-11	3,20E-13	-1,69E-10
AP	[mol H^+ eq.]	1,55E-03	6,94E-05	1,60E-03	8,41E-05	1,54E-05	0,00E+00	1,44E-05	3,53E-04	2,30E-06	-6,96E-05
EP-freshwater	[kg P eq.]	1,20E-04	1,30E-07	3,50E-05	1,57E-07	3,95E-08	0,00E+00	2,37E-08	2,14E-06	2,78E-09	-5,76E-07
EP-marine	[kg N eq.]	1,35E-03	2,57E-05	4,15E-04	3,12E-05	6,01E-06	0,00E+00	5,59E-06	1,09E-04	1,24E-06	-1,92E-05
EP-terrestrial	[mol N eq.]	3,57E-03	2,83E-04	4,02E-03	3,43E-04	6,47E-05	0,00E+00	6,14E-05	1,16E-03	1,04E-05	-2,82E-04
POCP	[kg NMVOC eq.]	1,08E-03	1,07E-04	1,16E-03	1,30E-04	2,19E-05	0,00E+00	2,16E-05	4,31E-04	4,78E-06	-6,37E-05
ADPm[1]	[kg Sb eq.]	3,38E-06	4,81E-08	1,21E-06	5,82E-08	1,15E-08	0,00E+00	1,02E-08	4,97E-07	6,90E-10	-4,59E-08
ADPf[1]	[MJ]	4,89E+00	2,50E-01	6,79E+00	3,03E-01	3,15E-02	0,00E+00	4,51E-02	1,07E+00	8,12E-03	-1,34E-01
WDP[1]	[m^3 world eq. deprived]	1,14E-01	1,14E-03	4,98E-02	1,38E-03	2,15E-04	0,00E+00	1,87E-04	1,75E-02	-1,84E-04	-1,77E-03
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.									
Disclaimer	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.									

ADDITIONAL ENVIRONMENTAL IMPACTS PER KG (GROUP 46)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	1,28E-08	1,75E-09	7,51E-09	2,13E-09	2,60E-10	0,00E+00	3,07E-10	7,18E-09	5,61E-11	-8,44E-10
IRP[2]	[kBq U235 eq.]	3,23E-02	1,03E-04	1,76E-02	1,25E-04	3,96E-05	0,00E+00	2,01E-05	9,76E-04	5,54E-06	-7,64E-04
ETP-fw[1]	[CTUe]	7,15E+00	2,93E-02	1,35E+00	3,55E-02	3,41E-02	0,00E+00	5,92E-03	6,47E-01	1,66E-03	-3,02E-02
HTP-c[1]	[CTUh]	1,61E-10	2,79E-12	6,68E-11	3,38E-12	1,71E-12	0,00E+00	7,97E-13	1,39E-10	8,59E-14	-5,11E-12
HTP-nc[1]	[CTUh]	9,12E-09	1,61E-10	3,34E-09	1,95E-10	5,97E-11	0,00E+00	3,13E-11	1,43E-09	1,23E-11	-1,71E-10
SQP[1]	-	3,39E+00	2,52E-01	3,16E+00	3,05E-01	1,21E-02	0,00E+00	3,36E-02	9,60E-01	1,99E-02	-1,78E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										
Disclaimers	[1] The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										
	[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER KG (GROUP 46)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	1,66E+00	3,86E-03	7,43E-01	4,68E-03	1,39E-03	0,00E+00	7,49E-04	6,02E-02	2,20E-04	-4,17E-01
PERM	[MJ]	7,13E-02	0,00E+00	1,95E+00	0,00E+00	-2,03E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	1,73E+00	3,86E-03	2,70E+00	4,68E-03	-2,02E+00	0,00E+00	7,49E-04	6,02E-02	2,20E-04	-4,17E-01
PENRE	[MJ]	4,89E+00	2,50E-01	6,79E+00	3,03E-01	3,15E-02	0,00E+00	4,51E-02	1,07E+00	8,12E-03	-1,34E-01
PENRM	[MJ]	2,13E+01	0,00E+00	1,25E-02	0,00E+00	-9,85E-02	0,00E+00	0,00E+00	-1,97E+01	-1,49E+00	0,00E+00
PENRT	[MJ]	2,62E+01	2,50E-01	6,80E+00	3,03E-01	-6,70E-02	0,00E+00	4,51E-02	-1,87E+01	-1,48E+00	-1,34E-01
SM	[kg]	5,00E-01	0,00E+00	1,24E-01	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
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
FW	[m^3]	6,31E+00	2,98E-02	1,52E+00	3,61E-02	9,85E-03	0,00E+00	5,68E-03	4,41E-01	2,68E-03	-1,77E-01
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER KG (GROUP 46)											
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	6,45E-03	5,48E-06	1,48E-03	6,63E-06	2,53E-04	0,00E+00	8,91E-07	5,25E-04	7,45E-07	-4,52E-05
NHWD	[kg]	1,01E-01	2,16E-02	2,70E-02	2,61E-02	9,82E-04	0,00E+00	2,80E-03	3,69E-02	3,50E-02	-1,50E-03
RWD	[kg]	2,45E-05	6,89E-08	1,32E-05	8,34E-08	3,07E-08	0,00E+00	1,37E-08	6,54E-07	3,11E-09	-4,18E-07
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,03E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	0,00E+00	0,00E+00	6,65E-03	0,00E+00	3,33E-02	0,00E+00	0,00E+00	4,60E-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
EEE	[MJ]	0,00E+00	0,00E+00	1,50E-01	0,00E+00	4,96E-02	0,00E+00	0,00E+00	3,61E-02	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	6,46E-01	0,00E+00	2,13E-01	0,00E+00	0,00E+00	1,55E-01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER KG (GROUP 46)		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	1,27E-01
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

Additional information

LCA interpretation

The contribution of each life cycle phase to the overall GWP-fossil impact per product group can be seen in Figure 1. For all products the most contributing phases are A1 (raw materials) and A3 (production). In A1 the contribution comes from the main raw materials used in the products and in A3 the contribution mainly comes from electricity consumption.

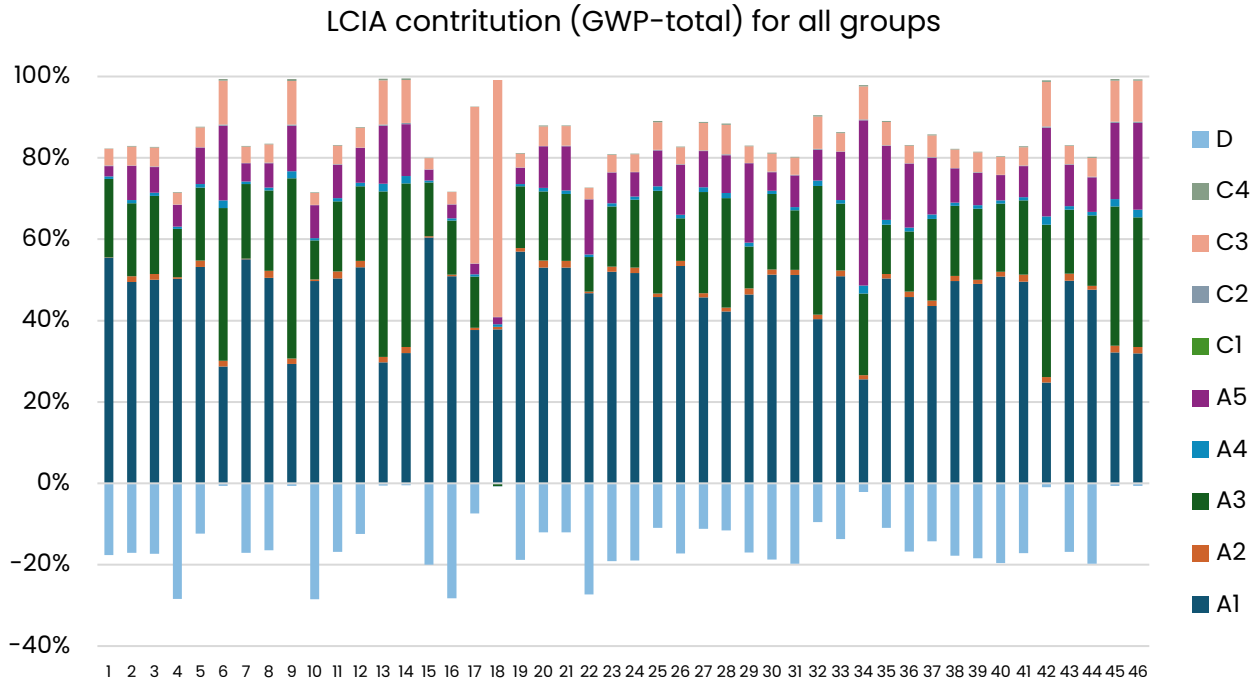


Figure 1 – Contribution of each life cycle stage to the overall GWP-fossil impact for all groups.

The variation among products in the average results for each group has been evaluated for the GWP-total indicator for the sum of A1-A5 and the sum of C1-C4:

- The maximum observed variability within each declared average group is 95,1-105,2% of the average declared GWP-total for A1-A5
- The maximum observed variability within each declared average group is 99,4-100,3% of the average declared GWP-total for C1-C4.

This means that the product averages are within the EPD Denmark rules for allowed variability when declaring average products (+/- 10%).

Technical information on scenarios

Transport to the building site (A4)

Scenario information	Value	Unit
Fuel type	Diesel	-
Vehicle type	Freight lorry >32 t	-
Transport distance	300	km
Capacity utilisation (including empty runs)	50%	%
Gross density of products transported	-	kg/m^3
Capacity utilisation volume factor	-	-

Installation of the product in the building (A5)

Product group	Ancillary materials	Water use	Other resource use	Energy type and consumption	Euro pallet waste	Cardboard box waste	Plastic packaging waste	Output materials	Direct emissions to air, soil or water
1					6,08E-02	2,56E-02	1,31E-03		
2					1,76E-01	7,43E-02	1,17E-02		
3					1,26E-01	6,74E-02	2,71E-03		
4					1,71E-01	9,28E-02	3,70E-03		
5					1,87E-01	7,89E-02	4,03E-03		
6					1,71E-01	7,22E-02	3,69E-03		
7					9,51E-02	4,83E-02	1,05E-02		
8					1,15E-01	5,93E-02	1,30E-02		
9					9,35E-02	4,55E-02	9,27E-03		
10					2,83E-01	1,19E-01	6,09E-03		
11					1,78E-01	7,89E-02	3,84E-03		
12					1,79E-01	7,54E-02	3,85E-03		
13					1,33E-01	5,62E-02	2,87E-03		
14					1,23E-01	5,19E-02	2,65E-03		
15					8,76E-02	4,74E-02	1,89E-03		
16					1,08E-01	5,86E-02	2,34E-03		
17					7,81E-02	3,30E-02	1,68E-03		
18					3,95E-02	2,14E-02	8,52E-04		
19					1,07E-01	5,81E-02	2,32E-03		
20					2,14E-01	9,03E-02	4,61E-03		
21					2,28E-01	9,61E-02	4,91E-03		
22					3,78E-01	2,59E-01	5,56E-02		
23					2,58E-01	2,09E-03	5,56E-03		
24					1,99E-01	1,62E-03	4,30E-03		
25					1,86E-01	1,51E-03	4,02E-03		
26					4,22E-01	3,43E-03	9,11E-03		
27					1,91E-01	1,55E-03	4,12E-03		
28					1,83E-01	1,49E-03	3,95E-03		
29					4,31E-01	1,95E-01	4,47E-02		
30					1,48E-01	1,20E-03	3,19E-03		
31					2,66E-01	2,16E-03	5,74E-03		
32					1,36E-01	1,11E-03	2,94E-03		
33					2,39E-01	1,08E-01	2,49E-02		
34					3,84E-01	2,63E-01	5,65E-02		
35					4,57E-01	3,71E-03	9,85E-03		
36					2,78E-01	1,90E-01	4,09E-02		
37					2,00E-01	1,37E-01	2,94E-02		
38					2,04E-01	5,06E-02	1,35E-02		
39					2,33E-01	1,89E-03	5,03E-03		
40					2,03E-01	1,65E-03	4,38E-03		
41					1,61E-01	6,79E-02	1,07E-02		
42					1,93E-01	8,14E-02	1,29E-02		
43					2,13E-01	1,10E-01	4,59E-03		
44					1,84E-01	7,78E-02	3,98E-03		
45					1,87E-01	7,88E-02	4,03E-03		
46					2,23E-01	9,41E-02	4,81E-03		

End of life (C1-C4)

Scenario information	Value	Unit
Collected separately	1	kg/declared unit
Collected with mixed waste	0	kg/declared unit
For reuse	0	kg/declared unit
For recycling	0,92	kg/declared unit
For energy recovery	0,01	kg/declared unit
For final disposal	0,07	kg/declared unit
Assumptions for scenario development	Based on DST (2025) - average for 2021-2023 for Denmark	-

Re-use, recovery and recycling potential (D)

Product group	Substituted electricity (MJ)	Substituted heat (MJ)	substituted HDPE (kg)	Substituted LDPE (kg)	Substituted PP (kg)	Substituted PS (kg)	Substituted TPE (kg)	Substituted sulphate pulp (kg)
1	6,71E-02	2,88E-01		2,90E-04	5,10E-01			2,97E-03
2	1,95E-01	8,36E-01		6,40E-01				8,61E-03
3	1,39E-01	5,97E-01		6,41E-01				7,81E-03
4	1,57E-01	6,76E-01		8,17E-04		7,22E-01		1,08E-02
5	1,59E-01	6,81E-01		4,38E-01				9,15E-03
6	1,51E-01	6,49E-01		8,17E-04				8,37E-03
7	1,32E-01	5,68E-01		2,32E-03	5,00E-01			5,60E-03
8	1,87E-01	8,02E-01	6,28E-01	2,88E-03				6,87E-03
9	1,57E-01	6,73E-01		2,05E-03				5,27E-03
10	1,96E-01	8,42E-01		1,35E-03		7,30E-01		1,38E-02
11	1,57E-01	6,73E-01	6,37E-01	8,50E-04				9,14E-03
12	1,55E-01	6,64E-01		4,38E-01				8,74E-03
13	1,34E-01	5,74E-01		6,35E-04				6,51E-03
14	1,29E-01	5,54E-01		5,87E-04				6,02E-03
15	1,08E-01	4,62E-01		4,18E-04			5,27E-01	5,50E-03
16	1,24E-01	5,32E-01		5,17E-04		7,15E-01		6,80E-03
17	8,66E-02	3,72E-01		3,73E-04		1,62E-01		3,82E-03
18	6,71E-02	2,88E-01		1,88E-04				2,48E-03
19	1,24E-01	5,31E-01	3,01E-01	5,12E-04			2,77E-01	6,74E-03
20	1,71E-01	7,34E-01	4,27E-01	1,02E-03				1,05E-02
21	1,77E-01	7,62E-01		4,26E-01				1,11E-02
22	5,48E-01	2,35E+00		1,23E-02		7,30E-01		3,00E-02
23	1,20E-01	5,14E-01	3,99E-01	1,23E-03	2,64E-01			2,43E-04
24	1,09E-01	4,68E-01	4,61E-01	9,51E-04	2,04E-01			1,88E-04
25	1,07E-01	4,58E-01		8,89E-04	1,90E-01			1,75E-04
26	1,55E-01	6,68E-01	4,06E-01	2,01E-03	2,06E-01			3,98E-04
27	1,07E-01	4,61E-01		9,11E-04	1,95E-01			1,80E-04
28	1,06E-01	4,55E-01		8,74E-04	1,87E-01			1,73E-04
29	4,61E-01	1,98E+00	5,79E-01	9,89E-03	7,23E-02			2,26E-02
30	9,95E-02	4,27E-01		5,07E-01	1,51E-01			1,39E-04
31	1,21E-01	5,21E-01	4,08E-01	1,27E-03	2,72E-01			2,50E-04
32	9,73E-02	4,18E-01		6,50E-04	1,39E-01			1,28E-04
33	2,88E-01	1,24E+00		3,94E-01	8,34E-02			1,26E-02
34	5,62E-01	2,41E+00		1,25E-02				3,05E-02
35	1,62E-01	6,97E-01		2,18E-03	2,23E-01			4,30E-04
36	4,26E-01	1,83E+00		6,55E-01				2,21E-02
37	3,27E-01	1,40E+00		4,49E-01				1,59E-02
38	1,90E-01	8,17E-01		5,87E-01	6,43E-02			5,86E-03
39	1,15E-01	4,95E-01		3,04E-01	2,39E-01			2,20E-04
40	1,10E-01	4,71E-01		4,67E-01	2,08E-01			1,91E-04
41	1,84E-01	7,91E-01	6,48E-01	2,37E-03				7,87E-03
42	2,07E-01	8,87E-01		2,85E-03				9,44E-03
43	1,83E-01	7,86E-01	6,42E-01	1,02E-03				1,28E-02
44	1,55E-01	6,68E-01		2,42E-01		2,09E-01		9,02E-03
45	1,58E-01	6,80E-01		8,91E-04				9,14E-03
46	1,75E-01	7,52E-01		1,06E-03				1,09E-02

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.

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

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General programme instructions
General Programme Instructions, version 3.0, spring 2025
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Technical Rules and Guidelines
Technical Rules and Guidelines, version 1.0, spring 2025
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EN 15804
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DS/EN 15942:2011 – " Sustainability of construction works – Environmental product declarations – Communication format business-to-business"

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ISO 14040
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ISO 14044
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