ENVIRONMENTAL PRODUCT DECLARATION

as per ISO 14025 and EN 15804+A2

Owner of the Declaration	dormakaba International Holding GmbH
Programme holder	Institut Bauen und Umwelt e.V. (IBU)
Publisher	Institut Bauen und Umwelt e.V. (IBU)
Declaration number	EPD-DOR-20220212-CBA1-EN
Issue date	06.09.2022
Valid to	05.09.2027

BEST 47H Mortise Series dormakaba



www.ibu-epd.com | https://epd-online.com





General Information

dormakaba

Programme holder

IBU – Institut Bauen und Umwelt e.V. Hegelplatz 1 10117 Berlin Germany

Declaration number EPD-DOR-20220212-CBA1-EN

This declaration is based on the product category rules: Building Hardware products, 11.2017 (PCR checked and approved by the SVR)

Issue date

06.09.2022

Valid to

05.09.2027

Man liten

Dipl. Ing. Hans Peters (chairman of Institut Bauen und Umwelt e.V.)

Along Harly

Dr. Alexander Röder (Managing Director Institut Bauen und Umwelt e.V.))

Product

Product description/Product definition

BEST's 47H series mortise locks deliver exceptional strength, security, and durability. The robust design features and precision-engineered components make the 47H mortise lock series ideal for high traffic applications. Backed by an industry-leading limited lifetime mechanical warranty, the 47H series delivers security you can depend on.

For the use and application of the product the respective national provisions at the place of use apply. The standards which can be applied are the following:

- ANSI/BHMA A156.13
- ANSI A117.1 (Accessibility, ADA compliant)
- Florida Building Code (FBC) listed
- Miami-Dade County Code compliant
- UL listed

Application

The 47H Mortise Series can be used for following building types:

BEST 47H Mortise Series

Owner of the declaration

dormakaba International Holding GmbH DORMA Platz 1 58256 Ennepetal Germany

Declared product / declared unit

1 mortise lock (1 piece) of the BEST 47H Series.

Scope:

This Environmental Product Declaration refers to a specific lock manufactured by dormakaba. The production site is located in Indianapolis (USA).

The data represents the year 2020.

The owner of the declaration shall be liable for the underlying information and evidence; the IBU shall not be liable with respect to manufacturer information, life cycle assessment data and evidences.

The EPD was created according to the specifications of *EN 15804+A2*. In the following, the standard will be simplified as *EN 15804*.

Verification

The standard EN 15804 serves as the core PCR

Independent verification of the declaration and data according to ISO 14025:2011

internally x externally



Dr.-Ing. Wolfram Trinius (Independent verifier)

- Learning and higher education
- Healthcare
- Government
- Retail and commercial

Technical Data

The lock has following technical properties:

Certifications	ANSI/BHMA A156.13 Series1000–Grade 1 ANSI A117.1 section 404.2.6 Accessibility Code (ADA compliant) UL listed for three hours on A label doors Florida Building Code (FBC) listed Miami-Dade County Code compliant for WS option
Product Specifications	Auxiliary bolt: Stainless steel; non-handed Latch: Solid stainless steel 3/4" throw; oil-impregnated for anti-friction; reversible without opening case Strike: SI Standard: 47/8" x11/4" x 3/32" handed, curved lip; S6 Latchbolt-only: 47/8" x11/4" x 3/32" handed, curved lip; S6 Latchbolt/Deadbolt: 47/8" x11/4" x 3/32" handed, curved lip; Case: 0.095" cold rolled steel, zinc dichromate plated for corrosion protection; 57/8" x7/8" x 4/16" Door thickness: 13/4" standard; up t 5" available Faceplate: Stainless steel, brass, or bronze; 8" x 11/4" x 1/16"; automatically adjusts to proper bevel during installation Door prey: ANSI Type 86 cutout Backset: 23/4" standard

Performance data of the product with respect to its characteristics in accordance with the relevant technical provision which can be applied are mentioned above.

Base materials/Ancillary materials

The major material compositions including the packaging of the product are listed below:

Name	Value	Unit
Brass	50	%
Steel	29	%
Stainless steel	11	%
Electronics	5	%
Zinc	4	%
Plastics	1	%
Other materials	<1	%

The product/s include/s partial articles which contain substances listed in the Candidate List of *REACH*

LCA: Calculation rules

Declared Unit

The declared unit is 1 piece of the product: BEST 47H Mortise Series.

Declared unit

Name	Value	Unit
Declared unit	1	piece/pr
	I	oduct
Mass of declared Product	3.8	kg

System boundary

The type of EPD is: cradle to gate with options, modules C1–C4, and module D (A1-A3 + C + D and additional modules: A4 + A5)

Production - Module A1-A3

The product stage includes: — A1, raw material extraction, processing and mechanical treatments, processing of secondary material input (e.g. recycling processes), — A2, transport to the manufacturer, — A3, manufacturing and assembly

including provision of all materials, products and

energy, as well as waste processing up to the end-of waste state.

Construction stage - Modules A4-A5

The construction process stage includes:

Regulation 1907/2006/EC (date: 17.01.2022) exceeding 0.1 percentage by mass: yes

 Lead (Pb): 7439-92-1 (CAS-No.) is included in some of the alloys used. The concentration of lead in each individual alloy does not exceed 4.0% (by mass).

The Candidate List can be found on the ECHA website address: https://echa.europa.eu/de/home.

Reference service life

The reference service life of the 47H Mortise Series lock depends on the traffic pattern and degree of usage of the door. These locks are rated to *ANSI Grade 1*, meaning they are designed to withstand a minimum of 1,000,000 cycles. However, the 47H Mortise lock has been independently tested to surpass 10,000,000 cycles.

- A4, transport to the building site;

— A5, installation into the building; including provision of all materials, products and energy, as well as waste processing up to the end-of waste state or disposal of final residues during the construction process stage.

End-of-life stage- Modules C1-C4 and D

The end-of-life stage includes:

- C1, de-construction, demolition:
- C2, transport to waste processing;

- C3, waste processing for reuse, recovery and/or recycling;

- C4, disposal;

including provision and all transport, provision of all materials, products and related energy and water use. Module D (Benefits and loads beyond the system boundary) includes:

— D, recycling potentials, expressed as net impacts and benefits.

Comparability

Basically, a comparison or an evaluation of EPD data is only possible if all the data sets to be compared were created according to *EN 15804* and the building context, respectively the product-specific characteristics of performance, are taken into account.

Background database: GaBi, SP40.

LCA: Scenarios and additional technical information

Characteristic product properties Information on biogenic Carbon

Information on describing the biogenic Carbon Content at factory gate

Name	Value	Unit
Biogenic Carbon Content in product	0	kg C
Biogenic Carbon Content in accompanying packaging	0	kg C

Additional technical information for the declared modules.

Transport to the building site (A4)

Name	Value	Unit
Litres of fuel per 1 kg (truck)	0.00276	l/100km
Transport distance (truck)	1500	km
Capacity utilisation (including empty	55	%

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runs) average		
Transport distance (ship)	10000	km

Installation into the building (A5)

Name	Value	Unit
Output substances following waste treatment on site (packaging)	0.00017	kg

Operational energy use (B6)

Name	Value	Unit
Electricity consumption for 1 year	28.47	kWh
Power consumption "on mode"	78	W
Hours per day in use "on mode"	1	h
Power consumption "standby mode"	0	W
Hours per day in use "standby mode"	23	h

End of life (C1-C4) C1: The product dismantling from the building is done manually without environmental burden.

C2: Transport to waste treatment at end of life is 50km.

Name	Value	Unit
Collected separately	3.8	kg
Recycling	3.58	kg
Energy recovery	0.024	kg
Final desposition	0,201	kg

Reuse, recovery and/or recycling potentials (D), relevant scenario information

relevant scenario information		
Name	Value	Unit
Recycling	100	%
Collection rate is 100%		

Collection rate is 100%.

LCA: Results

Disclaimer:

EP-freshwater: This indicator has been calculated as "kg P eq" as required in the characterization model (EUTREND model, Struijs et al., 2009b, as implemented in ReCiPe; http://eplca.jrc.ec.europa.eu/LCDN/developerEF.xhtml)

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Raw material supply	Transport	Manufacturing	Transport from the gate to the site	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal		Keuse- Recovery- Recycling- potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	В5	B6	B7	C1	C2	C3	C4		D
X	X	Х	X	Х	ND	ND	MNR	MNR	MNR	ND	ND	Х	X	Х	X		Х
RESU	LTS C	OF TH	IE LCA	- EN	VIRON	MENT		PACT	accor	ding t	<u>o EN 1</u>	5804-	-A2: 1	morti	ise loci	k	
Core In	dicator	I	Jnit	A1	-A3	A4		A5		C1	С	2	C3		C4		D
GWF	P-total	[kg C	CO ₂ -Eq.]	9.94	E+0	6.23E	-1	2.41E-4	0.0	00E+0	1.70	E-2	6.30E-	2	3.00E-3		-3.28E+0
GWP	P-fossil	[kg C	<u>;O₂-Eq.]</u>	9.87	'E+0	6.01E	-1	6.04E-6	0.0	00E+0	1.60	E-2	6.30E-	2	3.00E-3		-3.29E+0
GWF-L	P-luluc	[kg C	202-Eq.] 202-Eq.]	1.15	5E-2	2.20E	-2	2.33E-4 3.97E-9	0.0	0E+0	3.77	E-4 E-7	3.58E-	6	8.78E-6		-3.00E-3
O	DP	[kg CF	C11-Eq.]	1.03	E-11	6.21E-	17	4.34E-20	0.0	00E+0	1.67	E-18	3.19E-1	7	1.13E-17		-2.37E-15
A	<u>P</u>	[mol	<u>H⁺-Eq.]</u>	5.20	DE-2	5.00E	-3	6.75E-8	0.0	00E+0	1.58	E-5	1.13E-	5	2.19E-5		-1.00E-2
EP-fres	snwater narine	[Kg	P-Eq.] N-Fa1	1.45	5E-5	1.30E	-/	2.50E-12	0.0	0E+0	3.39	E-9 E-6	2.54E-	9	5.24E-9	-	-2.95E-6 -2.00E-3
EP-ter	restrial	[mol	IN-Eq.]	7.50	DE-2	1.50E	-2	3.04E-7	0.0	00E+0	5.60	E-5	5.13E-	5	6.19E-5		-2.00E-2
PO	CP	[kg NM	IVOC-Eq.]	2.17	7E-2	4.00E	-3	6.46E-8	0.0	00E+0	1.43	E-5	7.03E-	6	1.71E-5		-6.00E-3
AD	PE	[kg S	Sb-Eq.]	2.04	4E-3	1.75E	-8	6.86E-13	0.0	00E+0	4.75	E-10	4.38E-1	0	2.74E-10		3.22E-5
AD		[m³ v	ivijj vorld-Ea	1.23		8.2/E	+0	7.01E-5	0.0	JUE+U	2.24	E-1	2.90E-	2	4.00E-2		-3.57E+1
VV	DP	dep	prived]	2.15	E+0	1.00E	-3	2.99E-5	0.0	J0E+0	3.10	E-5	6.00E-	3	3.20E-4		-8.24E-1
Captior	n Eutro	= Globa phicatio	al warming n potentia fossil re	g potent I; POCF	ial; ODP P = Form	= Deplet ation pot	tion poter tential of	ntial of the troposphe	e stratosp eric ozon	heric oz	one layer bemical (; AP = A oxidants;	cidificatio ADPF =	n poten Abiotic	itial of land	d an	nd water; EP =
RESU	ILTS C)F TH	IE LCA	- IND	s; ADPF :	= Abiotic	depletio	n potentia	l for foss	il resource	es; WDF	P = Wate	r (user) d rdina f	eprivati o EN	on potenti 15804	al +A	2: 1
RESU mortis	ILTS C se loc	DF TH k	IE LCA	- IND		= Abiotic DRS T	depletion		I for foss	il resource OURC	E USE	acco	r (user) d rding t	eprivati o EN	on potenti 15804	al +A	2: 1
RESU mortis	ILTS (se loc tor U	DF TH k nit	A1-A3	- IND	S; ADPF	= Abiotic	O DES		ll for foss RES C1	OURC	E USE	acco	r (user) d rding t C3	eprivati to EN	15804 C4	al +A	2: 1
RESU mortis	ILTS C se loc tor U E [N	DF TH k nit	A1-A3	- IND	A4	Abiotic	depletion O DES A5 2.00E-3		C1		E USE C2		r (user) d rding t C3	eprivati	C4	+A	2: 1 D -4.26E+0
RESU mortis	ILTS C se loc tor U E [M M [M	DF TH k nit 1J] 1J]	A1-A3 2.48E+1 1.50E-2 2.48E+1	- IND	s; ADPF = ICAT(A4 2.60E-2 0.00E+(2.60E-2	2 2 2 2 2	A5 2.00E-3 -2.00E-3 1.38E-5		C1 0.00E+0 0.00E+0 0.00E+0		E USE C2 7.08E-4 0.00E+0 7.08E-4		r (user) d rding t C3 .10E-2 .30E-2 .00E-3	eprivati	C4 00E-3 00E-3 00E-3	+A	2: 1 D -4.26E+0 0.00E+0 -4.26E+0
RESU mortis Indicat PERE PERM PERT PENR	ILTS C se loc tor U E [M M [M T [M E [M	DF TH k nit 1J] 1J] 1J]	A1-A3 2.48E+1 1.50E-2 2.48E+1 1.22E+2		A4 2.60E-2 0.00E+(2.60E-2 8.28E+(Abiotic DRS T	A5 2.00E-3 -2.00E-3 1.38E-5 7.61E-5		C1 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0		C2 7.08E-4 0.00E+0 7.08E-4 2.25E-1		r (user) d rding t C3 .10E-2 .30E-2 .00E-3 .41E-1	eprivati to EN	C4 5.00E-3 0.00E-3 0.00E-3 0.00E-3 0.00E-2	+A	2: 1 D -4.26E+0 0.00E+0 -4.26E+0 -3.58E+1
RESU mortis	ILTS C se loc for U E [M A [M E [M E [M] E [M]	DF TH k nit 1.0] 1.0] 1.0] 1.0] 1.0]	A1-A3 2.48E+1 1.50E-2 2.48E+1 1.22E+2 8.11E-1 1.22E-2	- IND	A4 2.60E-2 0.00E+(2.60E-2 8.28E+(0.00E+(0.00E+(0.00E+(0.00E+(Abiotic	A5 2.00E-3 -2.00E-3 1.38E-5 7.61E-5 0.00E+0		C1 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0		C2 7.08E-4 0.00E+0 7.08E-4 2.25E-1 0.00E+0 0.00E+0		r (user) d rding t .10E-2 .30E-2 .00E-3 .41E-1 .3.11E-1	eprivati O EN	C4 5.00E-3 .00E+0 5.00E-3 .00E+2 .00E+0 .00E+2	+A	2: 1 D -4.26E+0 0.00E+0 -4.26E+0 -3.58E+1 0.00E+0 2.59E-4
RESU mortis Indicat PERE PERM PERR PENR PENR SM	ILTS C se loc or U E [M M [M E [M M [M T [M T [M T [M]	DF TH k 1 nit 1 AJ] 1	A1-A3 2.48E+1 1.50E-2 2.48E+1 1.22E+2 8.11E-1 1.23E+2 2.61E+(- IND	A4 2.60E-2 0.00E+0 2.60E-2 8.28E+0 0.00E+0 8.28E+0 0.00E+0 8.28E+0 0.00E+0	Abiotic	4epletion 0 DES 45 2.00E-3 -2.00E-3 -2.00E-3 1.38E-5 7.61E-5 0.00E+0 7.61E-5 0.00E+0 7.61E-5 0.00E+0		C1 0.00E+0		C2 7.08E-4 0.00E+0 7.08E-4 2.25E-1 0.00E+0 2.25E-1 0.00E+0 2.25E-1	P = Wate acco	r (user) d rding t .10E-2 .30E-2 .00E-3 .41E-1 .90E-2 .90E-2 .00F+0	eprivati O EN 5 0 5 0 0 5 4 0 0 4 0 0	C4 .00E-3 .00E+0 .00E-2 .00E+0 .00E-2 .00E+0 .00E-2	+A	2: 1 D -4.26E+0 0.00E+0 -4.26E+0 -3.58E+1 0.00E+0 -3.58E+1 0.00E+0
RESU mortis Indicat PERE PERM PERR PENR PENR SM RSF	ILTS C se loc for U E M M M E M M M KT M KT M	DF TH k nit (J] (J] (J] (J] (J] (J] (J] (J] (J] (J]	A1-A3 2.48E+1 1.50E-2 2.48E+1 1.22E+2 8.11E-1 1.23E+2 2.61E+(0.00E+(- IND	5; ADPF = CATC 2.60E-2 0.00E+(2.60E-2 8.28E+(0.00E+(8.28E+(0.00E+(0.0E+(0.0E	Abiotic DRS T	depletio O DES 2.00E-3 -2.00E-3 -2.00E-3 -3.38E-5 7.61E-5 0.00E+C 7.61E-5 0.00E+C 0.00E+C 0.00E+C		I for foss RES(0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0		C2 7.08E-4 0.00E+0 7.08E-4 2.25E-1 0.00E+0 2.25E-1 0.00E+0 0.00E+0	P = Wate acco 2 2 2 2 2 2 2 2 2 2 2 0 0 0 0 0	r (user) d rding 1 30E-2 .30E-2 .00E-3 .41E-1 .11E-1 .90E-2 .00E+0 00E+0	eprivati O EN 5 0 5 4 0 0 4 0 0 4 0 0 0 0 0 0 0 0	C4 6.00E-3 .00E+0 .00E+2 .00E+0 .00E+0 .00E+0 .00E+0		2: 1 -4.26E+0 0.00E+0 -4.26E+0 -3.58E+1 0.00E+0 -3.58E+1 0.00E+0 0.00E+0
RESU mortis Indicat PERE PERM PERR PENR PENR SM RSF NRSF	ILTS C se loc tor U E M M M E M M M KT M KT M F M F M	DF TH k nit 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.	A1-A3 2.48E+1 1.50E-2 2.48E+1 1.22E+2 8.11E-1 1.22E+2 8.11E-1 1.23E+2 2.61E+0 0.00E+0	- IND	A4 2.60E-2 0.00E+(2.60E-2 8.28E+(0.00E+(8.28E+(0.00E+(0.00E+(0.00E+(0.00E+(0.00E+(0.00E+(0.00E+(0.00E+(0.00E+(0.00E+(0.00E+(0.00E+(0.00E+(0.00E+(0.00E+(0)	Abiotic CRS T CRS T C C C C C C C C C C C C C	depletion O DES A5 2.00E-3 -2.00E-3 1.38E-5 7.61E-5 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0		I for foss RES C1 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0		C2 C2 C2 C2 C2 C2 C2 C2 C2 C2	P = Wate acco 2 2 2 2 2 2 2 2 2 0 0 0 0 0 0	r (user) d rding t .10E-2 .30E-2 .00E-3 .41E-1 .311E-1 .90E-2 .00E+0 .00E+0 .00E+0	eprivati	C4 .00E-3 .00E+0 .00E-3 .00E+0 .00E+2 .00E+0 .00E+2 .00E+0 .00E+0 .00E+0		D -4.26E+0 0.00E+0 -4.26E+0 -3.58E+1 0.00E+0 -3.58E+1 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0
RESU mortis Indicat PERE PERM PERR PENR PENR PENR SM RSF FW Captior	LTS C se loc tor U E N M N E	DF TH k nit MJ MJ <	A1-A3 2.48E+1 1.50E-2 2.48E+1 1.22E+2 8.11E-1 1.23E+2 2.61E+(0.00E+(6.91E-2 Jse of rer imary energy e	- IND	A4 2.60E-2 0.00E+4 2.60E-2 0.00E+4	Abiotic CRS T CRS T	depletion O DES 2.00E-3 -2.00E-3 -2.00E-3 1.38E-5 7.61E-5 0.00E+C <	n potentia CRIBI	I for foss RES 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 1.00E+0 0.00E+0 1.00E+0 1.00E+0 1.00E+0 0.00E+0 1.00E+0 0.00E+0	OURC OURC OURC OURC OURC OURC OURC OURC	C2 C2 C2 C2 C2 C2 C2 C2 C2 C2	P = Wate acco acco acco acco acco acco acco acc	r (user) d rding 1 rding 1 .10E-2 .30E-2 .00E-3 .00E-3 .00E-4 .00E+0 .00	eprivati O EN 5 0 5 0 5 4 0 0 0 0 0 0 0 0 1 1 aw mate erials; ary energials; ary energials; ary energials; 1 1 1 1 1 1 1 1 1 1 1 1 1	C4 i00E-3 i00E-3 i00E-3 i00E-40 i00E-2 i00E+0 i00E-2 i00E+0 i00E+0 i00E+0 i00E+0 i00E+0 i00E+0 i00E+0 i00E+0 i00E+0 i00E+0 i00E+0 i00E+0 i00E+0 i00E+0 i00E+0 i00E+0 i00E+0 i00E+0 i00E+0 i00E-3 i00E+0 i00E-3 i00E+0 i00E-3 i00E+0 i00E-3 i00E+0 i00E-3 i00E+0 i00E-3 i00E+0 i00E-3 i00E+0 i00E-3 i00E+0 i00E-3 i00E+0 i00E-3 i00E+0 i00E-2 i00E+0 i00E-2 i00E+0 i	Al +A +A 	2: 1 -4.26E+0 0.00E+0 -4.26E+0 -3.58E+1 0.00E+0 -3.58E+1 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 -3.58E+1 0.00E+0 0.00E+0 -3.58E+1 0.00E+0 0.00E+0 -3.58E+1 -5.58E+1 0.00E+0 -5.58E+1 0.00E+0 -5.58E+1 -5
RESU mortis Indicat PERE PERN PERR PENR PENR SM RSF FW Captior RESU	LTS C se loc for U E M M M T M E M M M M T M E M M T M T M T M T M T M T M T M T M T M	DF TH k MJ MJ MJ MJ <t< td=""><td>A1-A3 2.48E+1 1.50E-2 2.48E+1 1.50E-2 2.48E+1 1.23E+2 2.61E+C 0.00E+C 0.00E+C 0.00E+C 6.91E-2 Jse of rel imary ener wable priir imary ener imary ene</td><td>- IND</td><td>A4 2.60E-2 0.00E+4 2.60E-2 8.28E+4 0.00E+4</td><td>Abiotic CATEC</td><td>depletion O DES 2.00E-3 -2.00E-3 1.38E-5 7.61E-5 0.00E+0 7.61E-5 0.00E+0 7.04E-7 excluding raw mathematical properties non-renerative properties GORIE</td><td>a potentia CRIBI</td><td>I for foss RES C1 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 1.00E+0 0.00</td><td>DURC DURC OURC OURC OURC OURC OURC OURC OURC O</td><td>C2 7.08E-4 1.00E+0 7.08E-4 2.25E-1 1.00E+0 2.25E-1 1.00E+0 1.00E+0 1.00E+0 1.27E-6 prgy resc of renew sources se of non-ro</td><td>P = Wate acco</td><td>r (user) d rding t rding t .10E-2 .30E-2 .00E-3 .41E-1 .311E-1 .311E-1 .311E-1 .30E-2 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .55E-4 sed as ra mary ener raw mat able prim e second</td><td>eprivati o EN</td><td>C4 </td><td>All All All All All All All All All All</td><td>D -4.26E+0 0.00E+0 -4.26E+0 -3.58E+1 0.00E+0 -3.58E+1 0.00E+0 -3.30E+2 M = Use of se of non- es; SM = Use of se of net fresh 2:</td></t<>	A1-A3 2.48E+1 1.50E-2 2.48E+1 1.50E-2 2.48E+1 1.23E+2 2.61E+C 0.00E+C 0.00E+C 0.00E+C 6.91E-2 Jse of rel imary ener wable priir imary ener imary ene	- IND	A4 2.60E-2 0.00E+4 2.60E-2 8.28E+4 0.00E+4	Abiotic CATEC	depletion O DES 2.00E-3 -2.00E-3 1.38E-5 7.61E-5 0.00E+0 7.61E-5 0.00E+0 7.04E-7 excluding raw mathematical properties non-renerative properties GORIE	a potentia CRIBI	I for foss RES C1 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 1.00E+0 0.00	DURC DURC OURC OURC OURC OURC OURC OURC OURC O	C2 7.08E-4 1.00E+0 7.08E-4 2.25E-1 1.00E+0 2.25E-1 1.00E+0 1.00E+0 1.00E+0 1.27E-6 prgy resc of renew sources se of non-ro	P = Wate acco	r (user) d rding t rding t .10E-2 .30E-2 .00E-3 .41E-1 .311E-1 .311E-1 .311E-1 .30E-2 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .55E-4 sed as ra mary ener raw mat able prim e second	eprivati o EN	C4 	All	D -4.26E+0 0.00E+0 -4.26E+0 -3.58E+1 0.00E+0 -3.58E+1 0.00E+0 -3.30E+2 M = Use of se of non- es; SM = Use of se of net fresh 2:
RESU mortis Indicat PERE PERM PERR PENR PENR SM RSF NRSF FW Captior RESU 1 mor Indicat	LTS C se loc sor U E M M M T M E M M T M E M T M T M E M T	DF TH k nit 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 5.2 5.2 5.2 6.2 5.2 5.2 5.2 7.1 5.2 5.2 5.2 9.2 5.2 5.2 5.2 9.2 5.2 5.2 5.2 9.2 5.2 5.2 5.2 </td <td>A1-A3 2.48E+1 1.50E-2 2.48E+1 1.50E-2 2.48E+1 1.22E+2 8.11E-1 1.23E+2 2.61E+(0.00E+(0</td> <td>- IND</td> <td>A4 2.60E-2 0.00E+(2.60E-2 0.00E+(2.60E-2 8.28E+(0.00E+(8.28E+(0.00E+(8.28E+(0.00E+(4.72E-5 e primary sources Use of f ASTE (A4</td> <td>Abiotic CATEC</td> <td>depletion O DES 2.00E-3 -2.00E-3 1.38E-5 7.61E-5 0.00E+C 7.61E-5 0.00E+C 7.04E-7 raw mathematic raw mat</td> <td>n potentia CRIBI</td> <td>I for foss RES C1 0.00E+0 0.00E</td> <td>DURC DURC OURC OURC OURC OURC OURC OURC OURC O</td> <td>C2 7.08E-4 7.08E-4 7.08E-4 2.25E-1 0.00E+0 2.25E-1 0.00E+0 0.00E+0 1.27E-6 of renew sources se of nor of ron-rr LOWS</td> <td>P = Wate acco</td> <td>r (user) d rding t rding t .10E-2 .30E-2 .00E-3 .41E-1 .11E-1 .11E-1 .90E-2 .00E+0 .00</td> <td>eprivati o EN</td> <td>C4 C4 C4 C4 C4 C2 C4 C2 C2 C2 C2 C2 C2 C2 C2 C2 C2</td> <td>All All All All All All All All All All</td> <td>D -4.26E+0 0.00E+0 -4.26E+0 -3.58E+1 0.00E+0 -3.58E+1 0.00E+0 -3.30E-2 A = Use of NRE = Use of se of non-es; SM = Use of se of non-es; SM = Use in the set of net fresh 2:</td>	A1-A3 2.48E+1 1.50E-2 2.48E+1 1.50E-2 2.48E+1 1.22E+2 8.11E-1 1.23E+2 2.61E+(0.00E+(0	- IND	A4 2.60E-2 0.00E+(2.60E-2 0.00E+(2.60E-2 8.28E+(0.00E+(8.28E+(0.00E+(8.28E+(0.00E+(4.72E-5 e primary sources Use of f ASTE (A4	Abiotic CATEC	depletion O DES 2.00E-3 -2.00E-3 1.38E-5 7.61E-5 0.00E+C 7.61E-5 0.00E+C 7.04E-7 raw mathematic raw mat	n potentia CRIBI	I for foss RES C1 0.00E+0 0.00E	DURC DURC OURC OURC OURC OURC OURC OURC OURC O	C2 7.08E-4 7.08E-4 7.08E-4 2.25E-1 0.00E+0 2.25E-1 0.00E+0 0.00E+0 1.27E-6 of renew sources se of nor of ron-rr LOWS	P = Wate acco	r (user) d rding t rding t .10E-2 .30E-2 .00E-3 .41E-1 .11E-1 .11E-1 .90E-2 .00E+0 .00	eprivati o EN	C4 C4 C4 C4 C4 C2 C4 C2 C2 C2 C2 C2 C2 C2 C2 C2 C2	All	D -4.26E+0 0.00E+0 -4.26E+0 -3.58E+1 0.00E+0 -3.58E+1 0.00E+0 -3.30E-2 A = Use of NRE = Use of se of non-es; SM = Use of se of non-es; SM = Use in the set of net fresh 2:
RESU Indicat PERE PERM PERM PENR PENR PENR SM RSF FW Captior 1 mor Indicat	LTS C se loc sor U E N M N T N E N M N T N E N M N T N E N M N T N E N M N T	DF TH k nit 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 5.2 5.2 5.2 5.3 5.2 5.2 5.4 5.2 5.2 5.5 5.2 5.2 5.5 5.2 5.2 5.5 5.2 5.2 5.5 5.2 5.2 <t< td=""><td>A1-A3 2.48E+1 1.50E-2 2.48E+1 1.50E-2 2.48E+1 1.22E+2 8.11E-1 1.23E+2 2.61E+C 0.00E+C 0.00E+C 0.00E+C 6.91E-2 Jse of rer imary end wable prin imary end material IE LCA</td><td>- IND</td><td>A4 2.60E-2 0.00E+(2.60E-2 0.00E+(2.60E-2 8.28E+(0.00E+(8.28E+(0.00E+(4.72E-5 0.00E+(4.72E-5 0.00E+(4.72E-5 0.00E+(4.72E-5 0.00E+(0.00E+(4.72E-5 0.00E+(</td><td>Abiotic DRS T 2 2 2 2 2 2 2 2 2 2 2 2 2</td><td>depletio O DES 2.00E-3 -2.00E-3 1.38E-5 0.00E+C 7.61E-5 0.00E+C 7.04E-7 excluding raw mathematication on-renersity raw mathematication SORIE A5 1.12E-13</td><td>a potentia CRIBI CRIB</td><td>I for foss RES C1 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 1.00E+0 0.00E+0 0.00E1 0.00E1 0.00E1 0.00E+0</td><td>DURC DURC OURC OURC OURC OURC OURC OURC OURC O</td><td>C2 7.08E-4 7.08E-4 2.25E-1 0.00E+0 2.25E-1 0.00E+0 2.25E-1 0.00E+0 1.27E-6 ergy resc of renev sources se of nor-ro of renev sources se of nor-ro cf non-ro cf non-ro c</td><td>P = Wate acco</td><td>r (user) d rding t rding t .10E-2 .30E-2 .30E-2 .00E-3 .41E-1 .90E-2 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .55E-4 sed as ra mary ener raw mat able prim e second rding t C3 12E-10</td><td>eprivati o EN 5 0 5 0 5 4 0 0 0 0 0 0 0 0 0 0 0 0 0</td><td>C4 00E-3 00E+0 00E-3 00E+0 00E+2 00E+0 115804- C4 10E-10</td><td>RRW PEI SRW PEI SUUCE</td><td>D -4.26E+0 0.00E+0 -4.26E+0 -3.58E+1 0.00E+0 -3.58E+1 0.00E+0 -3.30E+2 M = Use of NRE = Use of Se of non-es; SM = Use is e of net fresh 2: D -1.57E-6</td></t<>	A1-A3 2.48E+1 1.50E-2 2.48E+1 1.50E-2 2.48E+1 1.22E+2 8.11E-1 1.23E+2 2.61E+C 0.00E+C 0.00E+C 0.00E+C 6.91E-2 Jse of rer imary end wable prin imary end material IE LCA	- IND	A4 2.60E-2 0.00E+(2.60E-2 0.00E+(2.60E-2 8.28E+(0.00E+(8.28E+(0.00E+(4.72E-5 0.00E+(4.72E-5 0.00E+(4.72E-5 0.00E+(4.72E-5 0.00E+(0.00E+(4.72E-5 0.00E+(Abiotic DRS T 2 2 2 2 2 2 2 2 2 2 2 2 2	depletio O DES 2.00E-3 -2.00E-3 1.38E-5 0.00E+C 7.61E-5 0.00E+C 7.04E-7 excluding raw mathematication on-renersity raw mathematication SORIE A5 1.12E-13	a potentia CRIBI CRIB	I for foss RES C1 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 1.00E+0 0.00E+0 0.00E1 0.00E1 0.00E1 0.00E+0	DURC DURC OURC OURC OURC OURC OURC OURC OURC O	C2 7.08E-4 7.08E-4 2.25E-1 0.00E+0 2.25E-1 0.00E+0 2.25E-1 0.00E+0 1.27E-6 ergy resc of renev sources se of nor-ro of renev sources se of nor-ro cf non-ro cf non-ro c	P = Wate acco	r (user) d rding t rding t .10E-2 .30E-2 .30E-2 .00E-3 .41E-1 .90E-2 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .55E-4 sed as ra mary ener raw mat able prim e second rding t C3 12E-10	eprivati o EN 5 0 5 0 5 4 0 0 0 0 0 0 0 0 0 0 0 0 0	C4 00E-3 00E+0 00E-3 00E+0 00E+2 00E+0 115804- C4 10E-10	RRW PEI SRW PEI SUUCE	D -4.26E+0 0.00E+0 -4.26E+0 -3.58E+1 0.00E+0 -3.58E+1 0.00E+0 -3.30E+2 M = Use of NRE = Use of Se of non-es; SM = Use is e of net fresh 2: D -1.57E-6
RESU mortis Indicat PERE PERN PERR PENR PENR PENR SM RSF FW Caption Caption RESU 1 mor Indicat	LTS C se loc sor U E N M N T N E N M N T N E N M N T N E N M N T N E N C T N C C T N C T N C N C T N C T N C T N C N C T N C N C N C N C N C N C N C N C N C N C	DF TH k Image: Constraint of the second se	A1-A3 2.48E+1 1.50E-2 2.48E+1 1.50E-2 2.48E+1 1.23E+2 2.61E+C 0.00E	- IND	A4 2.60E-2 0.00E+1 2.60E-2 0.00E+1 2.60E-2 0.00E+1 2.60E-2 8.28E+1 0.00E+1 8.28E+1 0.00E+1 0.00E+1 0.00E+1 9.00E+1 0.00E+1 9.00E+1 8.05E-1 8.47E-2	Abiotic DRS T	depletion O DES 2.00E-3 -2.00E-3 1.38E-5 7.61E-5 0.00E+C 7.61E-5 0.00E+C 7.04E-7 excluding raw mathematical points points GORIE AS 1.12E-13 7.55E-6	a potentia CRIBI CRIB	I for foss RES C1 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+1 OUTI C1 .00E+0	DURC DURC OURC OURC OURC OURC OURC OURC OURC O	C2 7.08E-4 0.00E+0 7.08E-4 2.25E-1 0.00E+0 2.25E-1 0.00E+0 0.00E+0 1.27E-6 of renev sources se of nor-ro of non-ro LOWS C2 1.18E-11 2.30E-5	P = Wate acco	r (user) d rding t rding t .10E-2 .30E-2 .30E-2 .00E-3 .311E-1 .11E-1 .90E-2 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .55E-4 sed as ra mary ener raw mat able prim e second rding t C3 12E-10 .00E-3	eprivati o EN 5 0 5 0 5 0 0 5 4 0 0 0 0 0 0 0 0 0 0 0 0 0	C4 0.00E-3 .00E+0 .00E+0 .00E+2 .00E+0 .01E-5 sources; PENRM = regy resources; PENRM = 15804- .02 .04 .05 .06 .01E-5 .01E-5 .01E-50 .01E-10	All	D -4.26E+0 0.00E+0 -4.26E+0 -3.58E+1 0.00E+0 -3.58E+1 0.00E+0 -3.58E+1 0.00E+0 -3.30E-2 M = Use of se of non-es; SM = Use of se of net fresh 2: D -1.57E-6 -1.90E-2
RESU mortis Indicat PERE PERN PERR PENR PENR PENR SM RSF FW Caption Indicat HWD	LTS C se loc sor U E M M M T M E M M M T M E M M M T M T M T M T M T M T M T M T M T	DF TH k nit AJ B CRE = U AJ AJ B CRE = U AJ AJ AJ CRE = U AJ CRE = U CRE = U CRE = U CRE = U <t< td=""><td>A1-A3 2.48E+1 1.50E-2 2.48E+1 1.50E-2 2.48E+1 1.23E+2 2.61E+C 0.00E</td><td>- IND</td><td>A4 2.60E-2 0.00E+1 2.60E-2 0.00E+1 2.60E-2 0.00E+1 2.60E-2 8.28E+1 0.00E+1 8.28E+1 0.00E+1 0.00E+1 4.72E-5 concert concert sources Use of A4 8.05E-1 8.47E-2 8.95E-6 0.00E+1</td><td>Abiotic DRS T</td><td>depletion O DES 2.00E-3 -2.00E-3 1.38E-5 7.61E-5 0.00E+C 7.61E-5 0.00E+C 7.04E-7 excluding raw mathematical points points GORIE A5 1.12E-13 7.55E-6 4.00E-9</td><td>n potentia CRIBI</td><td>I for foss RES C1 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0</td><td>DURC DURC DURC C C C C C C C C C C C C C C C C C C</td><td>C2 7.08E-4 1.00E+0 7.08E-4 2.25E-1 1.00E+0 2.25E-1 1.00E+0 1.225E-1 1.00E+0 1.27E-6 of renev sources se of nor-ro of ron-ro corres se of nor-ro corres se of nor-ro co</td><td>P = Wate acco</td><td>r (user) d rding t rding t .10E-2 .30E-2 .30E-3 .30E-3 .41E-1 .311E-1 .311E-1 .311E-1 .30E-2 .00E+0 .00E+0 .00E+0 .00E+0 .55E-4 sed as ra mary ener raw mat able prim e second rding t C3 12E-10 .00E-3 .09E-6</td><td>eprivati o EN 5 0 5 0 5 4 0 0 0 0 0 0 0 0 0 0 0 0 0</td><td>C4 .00E-3 .00E+0 .00E-2 .00E+0 .00E+2 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+1 .0</td><td>RWPEI BRW PEI Usurce Usurce</td><td>D -4.26E+0 0.00E+0 -4.26E+0 -3.58E+1 0.00E+0 -3.58E+1 0.00E+0 -3.30E-2 M = Use of se of non-es; SM = Use of se of net fresh 2: D -1.57E-6 -1.90E-2 -2.93E-4</td></t<>	A1-A3 2.48E+1 1.50E-2 2.48E+1 1.50E-2 2.48E+1 1.23E+2 2.61E+C 0.00E	- IND	A4 2.60E-2 0.00E+1 2.60E-2 0.00E+1 2.60E-2 0.00E+1 2.60E-2 8.28E+1 0.00E+1 8.28E+1 0.00E+1 0.00E+1 4.72E-5 concert concert sources Use of A4 8.05E-1 8.47E-2 8.95E-6 0.00E+1	Abiotic DRS T	depletion O DES 2.00E-3 -2.00E-3 1.38E-5 7.61E-5 0.00E+C 7.61E-5 0.00E+C 7.04E-7 excluding raw mathematical points points GORIE A5 1.12E-13 7.55E-6 4.00E-9	n potentia CRIBI	I for foss RES C1 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0	DURC DURC DURC C C C C C C C C C C C C C C C C C C	C2 7.08E-4 1.00E+0 7.08E-4 2.25E-1 1.00E+0 2.25E-1 1.00E+0 1.225E-1 1.00E+0 1.27E-6 of renev sources se of nor-ro of ron-ro corres se of nor-ro corres se of nor-ro co	P = Wate acco	r (user) d rding t rding t .10E-2 .30E-2 .30E-3 .30E-3 .41E-1 .311E-1 .311E-1 .311E-1 .30E-2 .00E+0 .00E+0 .00E+0 .00E+0 .55E-4 sed as ra mary ener raw mat able prim e second rding t C3 12E-10 .00E-3 .09E-6	eprivati o EN 5 0 5 0 5 4 0 0 0 0 0 0 0 0 0 0 0 0 0	C4 .00E-3 .00E+0 .00E-2 .00E+0 .00E+2 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+1 .0	RWPEI BRW PEI Usurce Usurce	D -4.26E+0 0.00E+0 -4.26E+0 -3.58E+1 0.00E+0 -3.58E+1 0.00E+0 -3.30E-2 M = Use of se of non-es; SM = Use of se of net fresh 2: D -1.57E-6 -1.90E-2 -2.93E-4
RESU mortis Indicat PERE PERN PERR PENR PENR PENR SM RSF NRSF FW Captior Indicat HWD NHWI RWD CRU	LTS C se loc for U E N M N T N E N M N T N T N T N E N M N T N T N E N M N T N T N T N E N M N T N T N E N M N T	DF TH k M] M] M] G] M] SRE = U M] M] M] SRE = V M] M] M] M] M] M] M] M] M] SRE = V M] M] M] M]<	A1-A3 2.48E+1 1.50E-2 2.48E+1 1.50E-2 2.48E+1 1.23E+2 2.61E+C 0.00E+C 0.00E+C 0.00E+C 0.00E+C 6.91E-2 Jse of rer imary ener wable print imary ener 0.00E+C 0.00E	- IND	A4 2.60E-2 0.00E+4 2.60E-2 8.28E+4 0.00E+4 2.60E-2 8.28E+4 0.00E+4 8.28E+4 0.00E+4 0.00E+4 0.00E+4 4.72E-5 primary sources cuse of a STE C A4 8.05E-1 8.47E-2 8.95E-6 0.00E+4 0.00E+4	Abiotic DRS T Abiotic DRS T Abiotic DRS T Abiotic CRT Abiotic CATEC Abiotic Abiotic CATEC Abiotic	depletion O DES 2.00E-3 -2.00E-3 -2.00E-3 -2.00E-3 -2.00E-3 -1.38E-5 0.00E+0 7.61E-5 0.00E+0 0.00E+0 0.00E+0 0.00E+0 7.04E-7 excludii raw mathematical provides a second seco	potentia CRIBI	I for foss RES C1 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+1 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0	DURC DURC DURC C C C C C C C C C C C C C C C C C C	C2 7.08E-4 1.00E+0 7.08E-4 2.25E-1 1.00E+0 2.25E-1 1.00E+0 1.00E+0 1.00E+0 1.00E+0 1.00E+0 1.127E-6 1.	P = Wate acco	r (user) d rding t rding t .10E-2 .30E-2 .00E-3 .41E-1 .31E-1 .31E-1 .30E-2 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .55E-4 sed as ra mary end raw mat able prim e second rding t C3 12E-10 .00E-3 .09E-6 .00E+0	eprivati o EN	C4 .00E-3 .00E+0 .00E-2 .00E+0 .00E+2 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .01E-5 .00E+0 .01E-5 .00E+0 .01E-5 .00E+0 .01E-1 .56E-7 .00E+0 .0	A	D -4.26E+0 0.00E+0 -4.26E+0 -3.58E+1 0.00E+0 -3.58E+1 0.00E+0 -3.30E+2 M = Use of se of non-es; SM = Use of se of net fresh 2: D -1.57E-6 -1.90E-2 -2.93E-4 0.00E+0
RESU mortis Indicat PERE PERN PENR PENR PENR PENR SM RSF NRSF FW Captior Indicat HWD NHWI RWD CRFW	LTS C se loc for U E N M N F N E N M N T N E N M N T N E N M N T N E N C T N E N C T N C C T N C C C C C C C C C C C C C C C C C C C	PF TH nit Alj Self Alj Alj <	A1-A3 2.48E+1 1.50E-2 2.48E+1 1.50E-2 2.48E+1 1.23E+2 2.61E+C 0.00E+C 0.00E+C 6.91E-2 Jse of rel imary ener wable prii imary ener wable prii imary ener wable prii imary ener wable prii imary ener wable prii imary ener Mathematical States A1-A3 3.79E-7 9.16E-1 4.97E-3 0.00E+C 0.00	- IND	A4 2.60E-2 0.00E+1 0.00E+1 2.60E-2 0.00E+1 0.00E+1 0.00E+1 0.00E+1 0.00E+1 0.00E+1 8.05E-1 8.47E-2 0.00E+1 0.00E+1 0.00E+1 0.00E+1 0.00E+1 0.00E+1 0.00E+1 0.00E+1	Abiotic DRS T	depletio O DES 2.00E-3 -2.00E-3 -2.00E-3 -2.00E-3 -2.00E-3 -2.00E-3 -2.00E-3 -2.00E-3 -2.00E-4 0.00E+4 -	r potentia CRIBI	I for foss RES C1 0.00E+0	DURC DURC DURC C C C C C C C C C C C C C C C C C C	C2 7.08E-4 1.00E+0 7.08E-4 2.25E-1 1.00E+0 2.25E-1 1.00E+0 1.00E+0 1.00E+0 1.00E+0 1.00E+0 1.00E+0 1.00E+0 1.00E+0 1.00WS C2 1.18E-11 2.30E-5 2.41E-7 1.000E+0 1.00E+0	P = Wate acco	r (user) d rding t rding t .10E-2 .30E-2 .00E-3 .41E-1 .31E-1 .31E-1 .30E-2 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 rding t rding t rding t rding t c3 .09E-6 .00E+0 .00E+0 .00E+0 .00E+0	eprivati o EN	C4 C4 C4 C4 C4 C0E-3 .00E+0 .00E-3 .00E+0 .00E-2 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .01E-5 sources; PENRM = rgy resources; PENRM = rgy resources; PENR	All +A	D -4.26E+0 0.00E+0 -4.26E+0 -3.58E+1 0.00E+0 -3.58E+1 0.00E+0 -3.58E+1 0.00E+0 -3.30E+2 M = Use of NRE = Use of se of non-es; SM = Use of se of net fresh 2: D -1.57E-6 -1.90E-2 -2.93E-4 0.00E+0 0.00E+0
RESU mortis Indicat PERI PERI PENR PENR PENR SM RSF NRSF NRSF NRSF TW Captior Indicat HWD NHWI RWD CRU MFR MER EEE	LTS C se loc tor U E N M N F N E N M N F N E N M N T N F	PF TH k nit 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 50 50 60 61 91 92 93 93 93 93	A1-A3 2.48E+1 1.50E-2 2.48E+1 1.50E-2 2.48E+1 1.23E+2 2.61E+C 0.00E	- IND	x; ADPF ICATC A4 2.60E-2 0.00E+4 0.00E+4 2.60E-2 8.28E+4 0.00E+4	Abiotic DRS T	depletio O DES 2.00E-3 -2.00E-3 -2.00E-3 -2.00E-3 1.38E-5 7.61E-5 0.00E+C 7.61E-5 0.00E+C 0	r potentia CRIBI CRIB	I for foss RES C1 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+1 0.00E+0 0.00	DURC DURC DURC C C C C C C C C C C C C C C C C C C	C2 7.08E-4 7.08E-4 2.25E-1 2.00E+0 2.25E-1 2.00E+0 2.25E-1 2.00E+0 2.25E-1 2.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 2.24E-11 2.30E-5 2.41E-7 2.41E-7 0.00E+0 00	P = Wate acco	r (user) d rding t rding t .10E-2 .30E-2 .00E-3 .41E-1 .30E-2 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E-6 .00E+0 .00	eprivati o EN 5 0 5 0 5 0 5 0 0 0 0 0 0 0 0 0 0 0 0 0	C4 C4 C4 C4 C4 C0E-3 .00E+0 .00E-2 .00E+0 .00E-2 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+0 .00E+1 .56E-7 .00E+0 .00	All +A	D -4.26E+0 0.00E+0 -4.26E+0 -3.58E+1 0.00E+0 -3.58E+1 0.00E+0 -3.30E+2 A = Use of NRE = Use of se of non-es; SM = Use of se of net fresh 2: D -1.57E-6 -1.90E-2 -2.93E-4 0.00E+0 0.00E+0 0.00E+0

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

RESULTS OF THE LCA – additional impact categories according to EN 15804+A2-optional: 1 mortise lock											
Indicator	· Unit	A1-A3	A4	A5	C1	C2	C3	C4	D		
PM	[Disease Incidence]	5.96E-7	8.08E-8	3.74E-13	0.00E+0	8.33E-11	1.44E-10	2.71E-10	-2.07E-7		
IRP	[kBq U235- Eq.]	6.77E-1	1.00E-3	6.19E-7	0.00E+0	3.45E-5	9.81E-5	4.69E-5	-2.30E-2		
ETP-fw	[CTUe]	6.60E+1	5.86E+0	3.61E-5	0.00E+0	1.59E-1	1.10E-2	2.30E-2	-1.10E+1		
HTP-c	[CTUh]	5.90E-7	1.10E-10	1.91E-15	0.00E+0	2.99E-12	9.53E-13	3.39E-12	-1.40E-9		
HTP-nc	[CTUh]	2.46E-7	4.81E-9	8.28E-14	0.00E+0	1.28E-10	9.65E-11	3.74E-10	2.03E-7		
SQP	[-]	2.83E+1	2.10E-2	2.02E-5	0.00E+0	5.77E-4	9.00E-3	8.00E-3	-1.47E+0		
Caption	PM = Potential incidence of disease due to PM emissions; IR = Potential Human exposure efficiency relative to U235; ETP-fw = Potential comparative Toxic Unit for humans (cancerogenic); HTP-nc = Potential comparative Toxic Unit for humans (cancerogenic); SOP = Potential soil quality index										

Disclaimer 1 – for the indicator "Potential Human exposure efficiency relative to U235". 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.

Disclaimer 2 – for the indicators "abiotic depletion potential for non-fossil resources", "abiotic depletion potential for fossil resources", "water (user) deprivation potential, deprivation-weighted water consumption", "potential comparative toxic unit for ecosystems", "potential comparative toxic unit for humans – cancerogenic", "Potential comparative toxic unit for humans – not cancerogenic", "potential soil quality index". The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.

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