## **ENVIRONMENTAL PRODUCT DECLARATION**

as per /ISO 14025/ and /EN 15804/

Owner of the Declaration Egetaepper a/s

Programme holder Institut Bauen und Umwelt e.V. (IBU)

Publisher Institut Bauen und Umwelt e.V. (IBU)

Declaration number EPD-EGE-20180029-CCA1-EN

Issue date 04.03.2019
Valid to 03.03.2024

## **Epoca Rustic**

Woven broadloom carpet total pile material 450 g/m² polyamide 6.6, woven textile backing

ege®



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





## **General Information**

ege®	Epoca Rustic Woven broadloom carpet, total pile material 450 g/m² PA 6.6,
	woven textile backing
Programme holder IBU - Institut Bauen und Umwelt e.V. Panoramastr. 1 10178 Berlin Germany	Owner of the declaration egetaepper a/s Industrivej Nord 25 7400 Herning Denmark
Declaration number EPD-EGE-20180029-CCA1-EN	Declared product / declared unit  1 m² woven broadloom carpet, 'Epoca Rustic' with a pile material made of PA6.6.
This declaration is based on the product category rules: Floor coverings, 02/2018 (PCR checked and approved by the SVR)	Scope: The declaration applies to woven broadloom carpet 'Epoca Rustic' with a total pile material of 450 g/m². It is only valid in conjunction with a valid GUT-/PRODIS/ license of the product.
<b>Issue date</b> 04.03.2019	The carpet is woven at Bentzon Carpets, Roejle, Denmark and it is backcoated in the ege® manufacturing site Gram, Denmark.
<b>Valid to</b> 03.03.2024	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.
/ .	Verification
Wermanes	The standard /EN 15804/ serves as the core PCR Independent verification of the declaration and data according to /ISO 14025:2010/
Prof. DrIng. Horst J. Bossenmayer (President of Institut Bauen und Umwelt e.V.)	internally x externally
Stank Kils	Angela Schindle
Dr. Alexander Däder	Angela Schindler

## **Product**

(Head of Board IBU)

## **Product description / Product definition**

*Epoca Rustic* - woven broadloom carpet having a pile material of polyamide 6.6 and a woven textile backing out of polypropylene. The calculations refer to a total pile weight of  $450~\text{g/m}^2$ . The carpet is colored by a continuous dyeing method.

For the placing on the market of the product in the European Union/European Free Trade Association (EU/EFTA) (with the exception of Switzerland) Regulation (EU) No. 305/2011 Construction Product Regulation /CPR/ applies. The Declaration of Performance (DoP) of the products taking into consideration /EN 14041/ and the CE-marking of the products can be found on the manufacturer's technical information section.

## **Application**

(Independent verifier appointed by SVR)

According to the use class as defined in /EN 1307/ the products can be used in all professional areas which require class 33 or less.





### **Technical Data**

Name	Value	Unit
Product Form	Broadloom	-
Type of manufacture	Woven loop	
Type of manufacture	pile carpet	-
Yarn type	Polyamide	
rain type	6.6	-
	Woven	
Secondary backing	textile made	-
	of PP	
Total pile weight	450	g/m²
Total carpet weight	1975	g/m²

Additional product properties in accordance with /EN 1307/ and performance data of the product in accordance with the Declaration of Performance with respect to its Essential Characteristics according to /EN 14041/ can be found on the Product Information System /PRODIS/ using the /PRODIS/ registration number of the product (www.pro-dis.info) or on the manufacturer's technical information section (www.egecarpets.com).

## Base materials / Ancillary materials

Name	Value	Unit
Polyamide 6.6	22.8	%
Polyester	12.7	%
Polypropylen	4.6	
Limestone	19.8	%
Aluminium hydroxide	20.0	%
Polymer dispersion (solid content)	19.9	%
Additives	0.2	%

The products are registered in the GUT-/PRODIS/ Information System. The /PRODIS/ system ensures the compliance with limitations of various chemicals and Volatile Organic Compound (VOC)-emissions and a ban on use of all substances that are listed as 'Substances of Very High Concern' (SVHC) under /REACH/.

This product contains substances listed in the candidate list (27.06.2018) exceeding 0.1 percentage by mass: no

### Reference service life

A calculation of the reference service life according to /ISO 15686/ is not possible.

The service life of textile floor coverings strongly depends on the correct installation taking into account the declared use classification and the adherence to cleaning and maintenance instructions.

A minimum service life of 10 years can be assumed, technical service life can be considerably longer.

## LCA: Calculation rules

## **Declared Unit**

Name	Value	Unit
Declared unit	1	m <sup>2</sup>
Conversion factor to 1 kg	0.51	-
Mass reference	1.98	kg/m²

The declared unit refers to 1 m² produced textile floor covering. Output of module A5 'Assembly' is 1 m² installed textile floor covering.

## System boundary

Type of EPD: Cradle-to-grave

<u>System boundaries of modules A, B, C, D:</u>
Modules C3, C4 and D are indicated separately for three end-of-life scenarios:

- 1 landfill disposal
- 2 municipal waste incineration
- 3 recovery in a cement plant

## A1-A3 Production:

Energy supply and production of the basic material, processing of secondary material, auxiliary material, transport of the material to the manufacturing site, emissions, waste water treatment, packaging material and waste processing up to the landfill disposal of residual waste (except radioactive waste). Benefits for generated electricity and steam due to the incineration of production waste are aggregated.

## A4 Transport:

Transport of the packed textile floor covering from factory gate to the place of installation.

## A5 Installation:

Installation of the textile floor covering, processing of installation waste and packaging waste up to the landfill disposal of residual waste (except radioactive waste), the production of the amount of carpet that occurs as installation waste including its transport to the place of installation.

Generated electricity and steam due to the incineration of waste are listed in the result table as exported energy.



Preparing of the floor and auxiliary materials (adhesives, fixing agents, PET connectors) are beyond the system boundaries and not taken into account.

### B1 Use:

Indoor emissions during the use stage. After the first year, no product related Volatile Organic Compound (VOC) emissions are relevant due to known VOC decay curves of the product.

#### B2 Maintenance:

Cleaning of the textile floor covering for a period of 1 year:

Vacuum cleaning – electricity supply Wet cleaning – electricity, water consumption, production of the cleaning agent, waste water treatment

The declared values in this module have to be multiplied by the assumed service life of the floor covering in the building in question (see annex, chapter 'General information on use stage').

#### B3 - B7:

The modules are not relevant and therefore not declared.

## C1 De-construction:

The floor covering is de-constructed manually and no additional environmental impact is caused.

### C2 Transport:

Transport of the carpet waste to a landfill, to the municipal waste incineration plant (MWI) or to the waste collection facility for recycling.

### C3 Waste processing:

C3-1: Landfill disposal needs no waste processing. C3-2: Impact from waste incineration (plant with R1>0.6), generated electricity and steam are listed in the result table as exported energy.

C3-3: Collection of the carpet waste, waste processing (granulating).

## C4 Disposal

C4-1: Impact from landfill disposal,

C4-2: The carpet waste leaves the system in module C3-2,

C4-3: The pre-processed carpet waste leaves the system in module C3-3

## D Recycling potential:

Calculated benefits result from materials exclusive secondary materials (net materials).

D-A5: Benefits for generated energy due to incineration of packaging and installation waste (incineration plant with R1 > 0.6),

D-1: Benefits for generated energy due to landfill disposal of carpet waste at the end-of-life,

D-2: Benefits for generated energy due to incineration of carpet waste at the end-of-life (incineration plant with R1 > 0.6),

D-3: Benefits for saved fossil energy and saved inorganic material due to recovery of the carpet in a cement plant at the end-of-life, transport from the reprocessing plant to the cement kiln.

### 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 data are taken from the /GaBi database 2018/, service pack 36 and from the /ecoinvent 3.5/ database.

## LCA: Scenarios and additional technical information

The following information refer to the declared modules and are the basis for calculations or can be used for further calculations. The indicated values refer to the declared functional unit of the product.

Transport to the construction site (A4)

Transport to the constitution of	,,,,	
Name	Value	Unit
Litres of fuel (truck, EURO 0-6 mix)	0.006	l/100km
Transport distance	700	km
Capacity utilisation (including empty runs)	85	%

Installation in the building (A5)

Name	Value	Unit
Material loss	0.07	kg

Packaging waste and installation waste are considered to be incinerated in a municipal waste incineration plant.

Preparation of the floor and auxiliaries (adhesives, fixing agents, PET connectors etc.) are not taken into account.

## Maintenance (B2)

Indication per m² floor covering and per year (see annex, chapter 'General Information on use stage')

Name	Value	Unit
Maintenance cycle (wet cleaning)	1.5	1/year
Maintenance cycle (vacuum cleaning)	208	1/year
Water consumption (wet cleaning)	0.004	m³
Cleaning agent (wet cleaning)	0.09	kg
Electricity consumption	0.314	kWh

Further information on cleaning and maintenance see www.egecarpets.com

## End of Life (C1-C4)

Three different end-of-life scenarios are declared and the results are indicated separately in module C. Each scenario is calculated as a 100% scenario.

Scenario 1: 100% landfill disposal

Scenario 2: 100% municipal waste incineration (MWI)

with R1>0.6

Scenario 3: 100% recycling in the cement industry



If combinations of these scenarios have to be calculated this should be done according to the following scheme:

EOL-impact = x% impact (Scenario 1)

- + y% impact (Scenario 2)
- + z% impact (Scenario 3)

Name	Value	Unit
Collected as mixed construction waste (scenario 1 and 2)	1.98	kg
Collected separately (scenario 3)	1.98	kg
Landfilling (scenario 1)	1.98	kg
Energy recovery (scenario 2)	1.98	kg
Energy recovery (scenario 3)	1.59	kg
Recycling (scenario 3)	0.79	kg

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

Recovery or recycling potentials due to the three endof-life scenarios (module C) are indicated separately.

## Recycling in the cement industry (scenario 3) /VDZ e.V./

The organic material of the carpet is used as secondary fuel in a cement kiln. It mainly substitutes for lignite (62.2%), hard coal (27.3%) and petrol coke (10.5%).

The inorganic material is substantially integrated in the cement clinker and substitutes for original material input.



## LCA: Results

The declared result figures in module B2 have to be multiplied by the assumed service life (in years) of the floor covering in the building in question (see annex, chapter 'General Information on use stage').

Information on un-declared modules:

Modules B3 - B7 are not relevant during the service life of the carpet and are therefore not declared. Modules C1, C3/1, C4/2 and C4/3 cause no additional impact (see "LCA: Calculation rules") and are therefore not declared. Module C2 represents the transport for scenarios 1, 2 and 3. Column D represents module D/A5. The /CML/ characterisation factors version January 2016 are applied.

	DESCRIPTION OF THE SYSTEM BOUNDARY (X = INCLUDED IN LCA; MND = MODULE NOT DECLARED)																
DESC	RIPT	TION C	OF THE	SYST	EM BO	UNDA	\RY	(X = II)	NCLUD	ED IN	LCA; I	/IND =	MOD	ULE	NOT [		
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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	Reuse-	Recycling- potential
A1	A2	A3	A4	A5	B1	B2	ВЗ	B4	B5	В6	В7	C1	C2	C3	3 C4		D
X	Χ	Х	X	X	Х	Х	MNR	MNF	R MNR	MND	MND	MND	Х	Х	Х		Х
RESU	LTS	OF Th	HE LC/	4 - EN/	/IRONN	IENT/	AL II	MPAC	T: 1 m²	floor c	overir	ıg					
Param eter	ι	Jnit	A1-A3	A4	A5	B <sup>r</sup>	ı	B2	C2	C3/2	C3/3	C4/1		<b>o</b>	D/1	D/2	D/3
GWP	[kg C	O <sub>2</sub> -Eq.]	9.93E+0	0 8.47E-	2 7.75E-	1 0.00E	E+0	3.17E-1	4.62E-3	6.40E+0	1.14E-2	2 1.41E-	1 -1.89	9E-1	0.00E+0	-1.37E+0	-3.38E-1
		C11-Eq.]	4.92E-9					1.30E-8	1.27E-16		5.06E-1			_			-1.88E-13
AP EP		6O <sub>2</sub> -Eq.] O <sub>4</sub> ) <sup>3</sup> -Eq.]	2.65E-3				_	1.24E-3 3.55E-4	1.90E-5 4.87E-6	3.01E-3 7.59E-4				_	0.00E+0 0.00E+0	-2.30E-3 -2.48E-4	-1.40E-3 -1.48E-4
POCP	[kg eth	nene-Eq.]	1.73E-3	3 -1.45E-	4 5.25E-	5 6.29	E-5	1.56E-4	-7.88E-6	1.93E-4	2.02E-6	4.14E	5 -2.48	8E-5	0.00E+0	-1.80E-4	-1.48E-4
ADPE ADPF		Sb-Eq.] MJ]	4.03E-6					1.10E-6 6.61E+0	3.84E-10 6.30E-2		6.05E-9			_	0.00E+0	-3.87E-7	-2.37E-7 -3.37E+1
GWP = Global warming potential; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential of land and water; EP = Caption Eutrophication potential; POCP = Formation potential of tropospheric ozone photochemical oxidants; ADPE = Abiotic depletion potential for non-fossil resources; ADPF = Abiotic depletion potential for fossil resources																	
RESU	LTS	OF TH	HE LC/	A - RES							ential for f	ossii reso	urces				
RESU			A1-A3	A - RES							C3/3	C4/1	urces		D/1	D/2	D/3
	eter	Unit	A1-A3		OURC A5	E USE	: 1 :	m² flo	or cove	cring C3/2	C3/3	C4/1	D		<b>D/1</b> 0.00E+0		<b>D/3</b>
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Parame PERE PERN PENR PENRI PENRI PENR	E M	Unit [MJ] 2 [MJ] (MJ] 2 [MJ] 2 [MJ] 2 [MJ] 3 [MJ] 3 [MJ] 4	A1-A3 2.57E+1 0.00E+0 2.57E+1 1.57E+2 3.63E+1 1.93E+2 0.00E+0 0.00E+0	6.40E-2 0.00E+0 6.40E-2 1.16E+0 0.00E+0 1.16E+0	7.52E-1 0.00E+0 7.52E-1 5.68E+0 0.00E+0 5.68E+0	B1 0.00E+ 0.00E+ 0.00E+ 0.00E+ 0.00E+ 0.00E+ 0.00E+ 0.00E+	0 1. 0 0. 0 1. 0 7. 0 0. 0 7. 0 0. 0 0.	m² flo B2 13E+0 00E+0 13E+0 13E+0 00E+0 00E+0 00E+0 00E+0	3.49E-3 0.00E+0 3.49E-3 6.33E-2 0.00E+0 6.33E-2 0.00E+0 0.00E+0	23.26E-1 0.00E+0 3.26E-1 3.88E+1 -3.63E+1 2.51E+0	C3/3 7.81E-2 0.00E+0 7.81E-2 3.66E+1 -3.63E+1 2.08E-1	1.55E- 0.00E+ 1.55E- 2.09E+ 0.00E+ 2.09E+ 0.00E+ 0.00E+	D -6.40 0 0.00E 1 -6.40 0 -3.29 0 0.00E 0 -3.29 0 0.00E 0 0.00E	DE-1 (DE-1 (	0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0	-4.61E+0 0.00E+0 -4.61E+0 -2.39E+1 0.00E+0 -2.39E+1	-3.95E-1 0.00E+0 -3.95E-1 -3.40E+1 0.00E+0 -3.40E+1
Parame PERE PERM PENT PENRI PENRI PENRI SM RSF	E M E M ET	MJ   2   MJ   MJ	A1-A3 2.57E+1 0.00E+0 2.57E+1 1.57E+2 3.63E+1 1.93E+2 0.00E+0 0.00E+0 0.00E+0 4.40E-2	A4 6.40E-2 0.00E+0 6.40E-2 1.16E+0 0.00E+0 1.16E+0 0.00E+0 0.00E+0 1.18E-4	7.52E-1 0.00E+0 7.52E-1 5.68E+0 0.00E+0 5.68E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 2.45E-3	B1 0.00E+ 0.00E+ 0.00E+ 0.00E+ 0.00E+ 0.00E+ 0.00E+ 0.00E+ 0.00E+ 0.00E+	0 1. 0 0. 0 1. 0 7. 0 0. 0 7. 0 0. 0 0. 0 0. 0 0. 0 0	m² floo B2 13E+0 00E+0 13E+0 88E+0 00E+0 88E+0 00E+0 00E+0 00E+0 52E-3	C2 3.49E-3 0.00E+0 3.49E-3 6.33E-2 0.00E+0 6.33E-2 0.00E+0 0.00E+0 0.00E+0 6.43E-6	3.26E-1 0.00E+0 3.26E-1 3.88E+1 -3.63E+1 2.51E+0 0.00E+0 0.00E+0 1.83E-2	C3/3 7.81E-2 0.00E+0 7.81E-2 3.66E+1 -3.63E+1 0.00E+0 0.00E+0 0.00E+0 1.07E-4	C4/1  1.55E- 0.00E+ 1.55E- 2.09E+ 0.00E+ 2.09E+ 0.00E+ 0.00E+ -5.37E-	D -6.40 0 0.000 1 -6.40 0 -3.29 0 0.000 0 -3.29 0 0.000 0 0.000 0 0.000 0 0.000 0 -8.72	DE-1 (DE-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	4.61E+0 0.00E+0 4.61E+0 -2.39E+1 0.00E+0 -2.39E+1 0.00E+0 0.00E+0 0.00E+0 -6.28E-3	-3.95E-1 0.00E+0 -3.95E-1 -3.40E+1 0.00E+0 -3.40E+1 7.89E-1 0.00E+0 3.63E+1 -3.09E-3
Parame PERE PERM PENR PENR PENR SM RSF NRSF FW	eter	MJ 2 [MJ 2 [MJ 2 [MJ 2 [MJ 3 [MJ 6] [MJ 6] [MJ 6] [MJ 6] [MJ 7 [MJ 6] [MJ 7 [MJ 6] [MJ 7 [M] 7 [	A1-A3 2.57E+1 0.00E+0 2.57E+1 1.57E+2 3.63E+1 1.93E+2 0.00E+0 0.00E+0 0.00E+0 Use of rerimary erewable programary ery material	6.40E-2 0.00E+0 6.40E-2 1.16E+0 0.00E+0 1.16E+0 0.00E+0 0.00E+0 0.00E+0 1.18E-4 energy res rimary en al; RSF =	7.52E-1 0.00E+0 7.52E-1 5.68E+0 0.00E+0	B1 0.00E+ energy	0 1. 0 1. 0 0. 0 1. 0 0. 0 0.	m² flo B2 13E+0 00E+0 13E+0 00E+0 88E+0 00E+0 00E+0 00E+0 00E+0 ding rene aterials; newable aterials;	C2 3.49E-3 0.00E+0 3.49E-3 6.33E-2 0.00E+0 6.33E-2 0.00E+0 0.00E+0 0.00E+0 6.43E-6 ewable pr PERT = 1 primary e PENRT =	C3/2 3.26E-1 0.00E+0 3.26E-1 3.88E+1 -3.63E+1 2.51E+0 0.00E+0 0.00E+0 1.83E-2 imary ene Total use energy rese = Total use er	7.81E-2 0.00E+0 7.81E-2 3.63E+1 -3.63E+1 0.00E+0 0.00E+0 1.07E-4 ergy resc of renew sources is se of non-re	1.55E- 0.00E+ 1.55E- 2.09E+ 0.00E+ 0.00E+ 0.00E+ -5.37E- urces us rable prin used as r -renewal	D -6.40 0 0.006 1 -6.40 0 0.329 0 0.006 0 -3.29 0 0.006 0 0.006 0 0.006 0 -8.72 ed as ranary enaw matalle prim	DE-1 (DE-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 esources resources resources	-4.61E+0 -0.00E+0 -4.61E+0 -2.39E+1 0.00E+0 -2.39E+1 0.00E+0 0.00E+0 0.00E+0 -6.28E-3 DERM = Use of sources; \$	-3.95E-1 0.00E+0 -3.95E-1 -3.40E+1 0.00E+0 -3.40E+1 7.89E-1 0.00E+0 3.63E+1 -3.09E-3 Jse of finon-
Parame PERE PERM PERM PENR PENR SM RSF NRSF FW  Captior	eter	MJ 2 [MJ 2 [MJ 2 [MJ 2 [MJ 3 [MJ 6] [MJ 6] [MJ 6] [MJ 6] [MJ 7 [MJ 6] [MJ 7 [MJ 6] [MJ 7 [M] 7 [	A1-A3 2.57E+1 2.57E+1 1.57E+2 3.63E+1 1.57E+2 3.63E+1 0.00E+0 0.00E+0 0.00E+0 0.00E+0 Use of rerimary erewable promary erey materia	6.40E-2 0.00E+0 6.40E-2 1.16E+0 0.00E+0 1.16E+0 0.00E+0 0.00E+0 0.00E+0 1.18E-4 energy res rimary en al; RSF =	7.52E-1 0.00E+0 7.52E-1 5.68E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 2.45E-3 primary & ources us ergy exclusiources us Use of re	B1 0.00E+ energy	0 1. 0 1. 0 0. 0 1. 0 0. 0 0.	m² flo B2 13E+0 00E+0 13E+0 00E+0 88E+0 00E+0 00E+0 00E+0 00E+0 ding rene aterials; newable aterials;	C2 3.49E-3 0.00E+0 3.349E-3 6.33E-2 0.00E+0 6.33E-2 0.00E+0 0.00E+0 0.00E+0 6.43E-6 ewable pr PERT = 7 primary \( \varepsilon \) primary \( \varepsilon \) ewable swate wates wate	C3/2 3.26E-1 0.00E+0 3.26E-1 3.88E+1 -3.63E+1 2.51E+0 0.00E+0 0.00E+0 1.83E-2 imary ene Total use energy rese = Total use er	7.81E-2 0.00E+0 7.81E-2 3.63E+1 -3.63E+1 0.00E+0 0.00E+0 1.07E-4 ergy resc of renew sources is se of non-re	1.55E- 0.00E+ 1.55E- 2.09E+ 0.00E+ 0.00E+ 0.00E+ -5.37E- urces us rable prin used as r -renewal	D -6.40 0 0.006 1 -6.40 0 0.329 0 0.006 0 -3.29 0 0.006 0 0.006 0 0.006 0 -8.72 ed as ranary enaw matalle prim	DE-1 (DE-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 esources resources resources	-4.61E+0 -0.00E+0 -4.61E+0 -2.39E+1 0.00E+0 -2.39E+1 0.00E+0 0.00E+0 0.00E+0 -6.28E-3 DERM = Use of sources; \$	-3.95E-1 -0.00E+0 -3.95E-1 -3.40E+1 0.00E+0 -3.40E+1 7.89E-1 0.00E+0 3.63E+1 -3.09E-3 Jse of i = Use of f non- SM = Use
Parame PERE PERM PERM PENR PENR SM RSF NRSF FW  Captior	FE I I I I I I I I I I I I I I I I I I I	Unit  MJ 2  MJ 2  MJ 2  MJ 2  MJ 2  MJ 3  MJ 6  MJ 6  MJ 6  MJ 6  MJ 7	A1-A3 2.57E+1 2.57E+1 1.57E+2 3.63E+1 1.57E+2 3.63E+1 0.00E+0 0.00E+0 0.00E+0 0.00E+0 Use of rerimary erewable promary erey materia	6.40E-2 0.00E+0 6.40E-2 1.16E+0 0.00E+0 1.16E+0 0.00E+0 0.00E+0 0.00E+0 1.18E-4 energy res rimary en al; RSF =	7.52E-1 0.00E+0 7.52E-1 5.68E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 2.45E-3 primary & ources us ergy exclusiources us Use of re	B1 0.00E+ energy	0 1. 0 1. 0 0. 0 1. 0 0. 0 0.	m² flo B2 13E+0 00E+0 13E+0 00E+0 88E+0 00E+0 00E+0 00E+0 00E+0 ding rene aterials; newable aterials;	C2 3.49E-3 0.00E+0 3.349E-3 6.33E-2 0.00E+0 6.33E-2 0.00E+0 0.00E+0 0.00E+0 6.43E-6 ewable pr PERT = 7 primary \( \varepsilon \) primary \( \varepsilon \) ewable swate wates wate	C3/2 3.26E-1 0.00E+0 3.26E-1 3.88E+1 -3.63E+1 2.51E+0 0.00E+0 0.00E+0 1.83E-2 imary ene Total use energy rese = Total use er	7.81E-2 0.00E+0 7.81E-2 3.63E+1 -3.63E+1 0.00E+0 0.00E+0 1.07E-4 ergy resc of renew sources is se of non-re	1.55E- 0.00E+ 1.55E- 2.09E+ 0.00E+ 0.00E+ 0.00E+ -5.37E- urces us rable prin used as r -renewal	D -6.40 0 0.006 1 -6.40 0 0.329 0 0.006 0 -3.29 0 0.006 0 0.006 0 0.006 0 -8.72 ed as ranary enaw matalle prim	E-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 esources resources resources	-4.61E+0 -0.00E+0 -4.61E+0 -2.39E+1 0.00E+0 -2.39E+1 0.00E+0 0.00E+0 0.00E+0 -6.28E-3 DERM = Use of sources; \$	-3.95E-1 -0.00E+0 -3.95E-1 -3.40E+1 0.00E+0 -3.40E+1 7.89E-1 0.00E+0 3.63E+1 -3.09E-3 Jse of i = Use of f non- SM = Use
Parame PERE PERM PERM PENR PENR SM RSF NRSF FW  Caption  RESU 1 m² f  Parame HWD	E I renew of si	Unit  [MJ] 2  [MJ] 2  [MJ] 2  [MJ] 3  [MJ] 6  [MJ] 6  [MJ] 6  [MJ] 6  [MJ] 7  PERE = ewable perion-rene ewable perion-rene ewable perion of the covering that the covering the covering that the covering that the covering that the covering that the covering the covering that the covering that the covering that the covering the covering that the covering the covering the covering that the covering the coverin	A1-A3  2.57E+1  0.00E+0  2.57E+1  1.57E+2  3.63E+1  1.93E+2  0.00E+0  0.00E+0  0.00E+0  4.40E-2  Use of rerimary erewable profimary erewable erewable profimary erewable	A4 6.40E-2 0.00E+0 6.40E-2 1.16E+0 0.00E+0 1.16E+0 0.00E+0 0.00E+0 0.00E+0 1.18E-4 enewable nergy res rimary en nergy res al; RSF =	7.52E-1 0.00E+0 7.52E-1 0.00E+0 7.52E-1 5.68E+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 TPUT F	B1 0.00E+	0 1. 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	m² flo  B2  13E+0 00E+0 13E+0 88E+0 00E+0 88E+0 00E+0 00E+0 552E-3 ling reneaterials; newable aterials; pondary fr	C2 3.49E-3 0.00E+0 3.49E-3 6.33E-2 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 E-38E-2 0.00E+0 0.00E+0 0.00E+0 E-38E-2 0.00E+0 0.0	C3/2  3.26E-1 0.00E+0 3.26E-1 3.26E-1 3.26E-1 3.38E+1 2.51E+0 0.00E+0 0.00E+0 1.83E-2 Total use energy reserved as energy reserved as energy reserved.  ATEGO  C3/2  1.14E-8	C3/3  7.81E-2 0.00E+0 7.81E-2 3.66E+1 -3.63E+1 2.08E-1 0.00E+0 0.00E+0 0.00E+0 1.07E-4 ergy resc of renew sources is e of non of non-re  C3/3  9.75E-11	C4/1  1.55E- 0.00E+ 1.55E- 2.09E+ 0.00E+ 0.0	D	E-1 ( E+0 (E	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 esources c; PENRM nergy resuuels; FW	-4.61E+0 0.00E+0 -4.61E+0 -2.39E+1 0.00E+0 -2.39E+1 0.00E+0 0.00E+0 0.00E+0 -6.28E-3 PERM = Use of bources; S = Use of	3.95E-1 0.00E+0 -3.95E-1 -3.40E+1 0.00E+0 -3.40E+1 7.89E-1 0.00E+0 3.63E+1 -3.09E-3 Jse of = Use of f non- 6M = Use net fresh
Parame PERE PERM PERM PENR PENR PENR SM RSF NRSF FW  Captior  RESU 1 m² f Parame HWD NHWI	FE STATE OF	Unit  [MJ] 2  [MJ] (  [MJ] 2  [MJ] (	A1-A3  2.57E+1  0.00E+0  2.57E+1  1.57E+2  3.63E+1  1.93E+2  0.00E+0  0.00E+0  0.00E+0  4.40E-2  Use of regular of regular of the profile of	6.40E-2 0.00E+0 6.40E-2 0.00E+0 1.16E+0 0.00E+0 1.00E+0 0.00E+0 0.00E+0 1.18E-4 enewable energy resrimary en nergy res al; RSF =	7.52E-1 0.00E+0 7.52E-1 5.68E+0 0.00E+0 5.68E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00Ces usergy exclusiources usergy exclusions and the second exclusions are second exclusions and the second exclusions are second exclusions and the second exclusions are second excl	B1 0.00E+	0 1. 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	m² flo  B2  13E+0 00E+0 13E+0 88E+0 00E+0 00E+0 00E+0 52E-3 ling rene aterials; bridary fi	C2 3.49E-3 0.00E+0 3.49E-3 6.33E-2 0.00E+0 0.00E+0 0.00E+0 0.00E+0 E-2 primary e-2 personal system (as in the control of the c	C3/2 3.26E-1 0.00E+0 3.26E-1 3.26E-1 3.26E-1 3.38E+1 3.63E+1 2.51E+0 0.00E+0 0.00E+0 1.83E-2 imary energy resementary resements of the second	C3/3  7.81E-2 0.00E+0 7.81E-2 3.66E+1 -3.63E+1 0.00E+0 0.00E+0 0.00E+0 1.07E-4 ergy resc of renews sources is e of non-re DRIES  C3/3  9.75E-11 1.47E-4	C4/1  1.55E- 0.00E+ 1.55E- 2.09E+ 0.00E+ 0.00E+ 0.00E+ 0.00E+ -5.37E- urces us able primused as incremental enemals and the company of the co	D -6.40 D 0.0000 D -6.40 D 0.0000 D 0.00000 D 0.0000 D 0.00000 D 0.0000 D 0.0000 D 0.0000 D 0.0000 D 0.0000 D 0.0000 D 0.00000 D 0.0000 D 0.0000 D 0.0000 D 0.0000 D 0.0000 D 0.0000 D 0.00000 D 0.0000 D 0.0000 D 0.00000 D 0.00000 D 0.00000 D 0.000000 D 0.0000000000	E-1 ( E+0   E-1   E+0   E-1   E+0   E-1   E+0   E-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 0.00E+0 0.00E+0 0.00E+0	-4.61E+0 0.00E+0 -4.61E+0 -2.39E+1 0.00E+0 -2.39E+1 0.00E+0 0.00E+0 0.00E+0 -6.28E-3 PERM = Us; PENRE 4 Use of	3.95E-1 0.00E+0 -3.95E-1 -3.40E+1 0.00E+0 -3.40E+1 0.00E+0 3.63E+1 -3.09E-3 Jse of = Use of f non- 6M = Use net fresh D/3 -2.16E-9 -1.88E-1
Parame PERE PERM PERM PENR PENR SM RSF NRSF FW  Caption  RESU 1 m² f  Parame HWD	E M T T FEE M T T T FEE M T T T FEE M T T T T FEE M T T T T FEE M T T T T T T T T T T T T T T T T T T	Unit  [MJ] 2  [MJ] (  [MJ] 2  [MJ] 3  [MJ] 6  [MJ] 6  [MJ] 6  [MJ] 6  [MJ] 7  [MJ] 7  [MJ] 7  [MJ] 7  [MJ] 8  [MJ] 8  [MJ] 9  [MJ] 9  [MJ] 10  [MJ]	A1-A3 2.57E+1 2.57E+1 1.0.00E+0 2.57E+1 1.57E+2 3.63E+1 1.93E+2 0.00E+0 0.00E+0 0.00E+0 4.40E-2 Use of rerimary ere wable prominary ere ye materia  HE LCA ing A1-A3 1.85E-5 2.98E-1 4.66E-3	A4 6.40E-2 0.00E+0 6.40E-2 1.16E+0 0.00E+0 1.16E+0 0.00E+0 0.00E+0 0.00E+0 1.18E-4 enewable nergy res rimary en nergy res al; RSF =	7.52E-1 0.00E+0 7.52E-1 5.68E+0 0.00E+0 5.68E+0 0.00E+0 0.00E+	B1 0.00E+	0 1. 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	m² flo  B2  13E+0 00E+0 13E+0 00E+0 13E+0 00E+0 00E+0 00E+0 00E+0 ing reneaterials; pondary fr  ND WA  B2  26E-9 24E-3 95E-4	C2 3.49E-3 0.00E+0 3.49E-3 6.33E-2 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 E-3 E-4 E-4 E-4 E-4 E-5 E-4 E-5	C3/2  3.26E-1 0.00E+0 3.26E-1 3.26E-1 3.26E-1 3.38E+1 2.51E+0 0.00E+0 0.00E+0 1.83E-2 Total use energy reserved as energy reserved as energy reserved.  ATEGO  C3/2  1.14E-8	C3/3  7.81E-2 0.00E+0 7.81E-2 3.66E+1 -3.63E+1 2.08E-1 0.00E+0 0.00E+0 0.00E+0 1.07E-4 ergy resc of renew sources is e of non of non-re  C3/3  9.75E-11	C4/1  1.55E- 0.00E+ 1.55E- 2.09E+ 0.00E+ 0.00E+ 0.00E+ 0.00E+ -5.37E- urces us rable prin sed as representation of the companion of the compan	D -6.40 D -6.4	E-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 0.00E+0 0.00E+0 0.00E+0	-4.61E+0 0.00E+0 -4.61E+0 -2.39E+1 0.00E+0 -2.39E+1 0.00E+0 0.00E+0 0.00E+0 -6.28E-3 PERM = Use of bources; S = Use of	3.95E-1 0.00E+0 -3.95E-1 -3.40E+1 0.00E+0 -3.40E+1 0.00E+0 3.63E+1 -3.09E-3 Jse of = Use of f non- 6M = Use net fresh D/3 -2.16E-9 -1.88E-1
Parame PERE PERM PENR PENR PENR SM RSF FW  Captior  RESU 1 m² f Parame HWD NHWI RWD CRU MFR	E I I I I I I I I I I I I I I I I I I I	Unit  [MJ] 2  [MJ] 6  [MJ] 6  [MJ] 6  [MJ] 6  [MJ] 6  [MJ] 6  [MJ] 7  PERE = ewable peron-rene ewable perondary  OF The cover unit  [kg] [kg] 6  [kg] 6  [kg] 6  [kg] 6	A1-A3 2.57E+1 0.00E+0 2.57E+1 1.57E+2 3.63E+1 1.93E+2 0.00E+0 0.00E+0 0.00E+0 0.00E+0 Use of rerimary erewable promary ery material  HE LCA ing A1-A3 1.85E-5 2.98E-1 4.66E-3 0.00E+0 0.00E+0	6.40E-2 0.00E+0 6.40E-2 1.16E+0 0.00E+0 1.16E+0 0.00E+0 1.18E-4 enewable nergy res irimary en al; RSF =  A — OU  A4 6.71E-8 9.72E-5 0.00E+0 0.00E+0	7.52E-1 0.00E+0 7.52E-1 0.00E+0 7.52E-1 5.68E+0 0.00E+0 0.00E-0 1.45E-3 primary 6 ources us ergy exclusiources us ergy exclusiources us Use of re	B1 0.00E+	0 1. 0 0. 0 0. 0 0. 0 0. 0 0. 0 0. 0 0.	m² flo B2 13E+0 00E+0 13E+0 88E+0 00E+0 88E+0 00E+0 00E+0 00E+0 in grene aterials; newable aterials; newable 26E-9 24E-3 95E-4 00E+0	C2 3.49E-3 0.00E+0 3.49E-3 0.00E+0 6.33E-2 0.00E+0 0.00E+0 0.00E+0 0.00E+0 Example of the second of	C3/2 3.26E-1 0.00E+0 3.26E-1 3.26E-1 3.26E-1 3.363E+1 2.51E+0 0.00E+0 0.00E+0 1.183E-2 imary ene Fotal use energy reserved by the served by th	C3/3  7.81E-2 0.00E+0 7.81E-2 3.66E+1 -3.63E+1 2.08E-1 0.00E+0 0.00E+0 0.00E+0 0.00E+0 ergy rescord renewsources is early of non-rescord from the control of	C4/1  1.55E- 0.00E+ 1.55E- 1.55E- 1.55E- 1.55E- 1.00E+ 0.00E+	D -6.40 0 0.006 0 0.006 0 -3.29 0 0.006 0 -3.29 0 0.006 0 0.006 0 -8.72 ed as ranary enaw matable prim second	E-1 ( E+0 (E	0.00E+0	-4.61E+0 0.00E+0 -4.61E+0 -2.39E+1 0.00E+0 -0.00E+0 0.00E+0 0.00E+0 -6.28E-3 -2.39ERM = Use of sources; S = Use of -1.02E-2 -2.03E-3 0.00E+0 0.00E+0	3.95E-1 0.00E+0 -3.95E-1 -3.40E+1 0.00E+0 -3.40E+1 7.89E-1 -3.09E-3 Jse of = Use of f non- SM = Use net fresh  D/3 -2.16E-9 -1.88E-1 -1.31E-4 0.00E+0 0.00E+0
Parame PERE PERM PERM PENR PENR SM RSF NRSF FW  Caption  RESU 1 m² f Parame HWD NHWI RWD CRU MFR MER	rene of so	Unit  [MJ] 2  [MJ] 2  [MJ] 2  [MJ] 3  [MJ] 6  [MJ] 6  [MJ] 6  [MJ] 6  [MJ] 7  PERE = ewable peron-rene ewable perondary  OF The cover unit [kg] 8  [kg] 6  [kg] 6  [kg] 7  [kg	A1-A3 2.57E+1 0.00E+0 2.57E+1 1.57E+2 3.63E+1 1.93E+2 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 d.4.40E-2 Use of rerimary erewable prorimary erewable prorimary et y material  HE LCA ing A1-A3 1.85E-5 2.98E-1 4.66E-3 0.00E+0 0.00E+0 0.00E+0	A4 6.40E-2 0.00E+0 6.40E-2 1.16E+0 0.00E+0 1.16E+0 0.00E+0 0.00E+0 0.00E+0 1.18E-4 enewable nergy res al; RSF = 6.71E-8 9.72E-5 1.59E-6 0.00E+0 0.00E+0	7.52E-1 0.00E+0 7.52E-1 0.00E+0 7.52E-1 5.68E+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 1.45E-3 0.00E-0 1.39E-4 1.39E-4 0.00E+0 0.00E+0 0.00E+0	B1 0.00E+	0 1. 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	m² flo  B2  13E+0 00E+0 13E+0 88E+0 00E+0 88E+0 00E+0 00E+0 52E-3 ling renaterials; newable aterials; nodary fr  D WA  B2 26E-9 24E-3 95E-4 00E+0 00E+0	C2 3.49E-3 0.00E+0 3.49E-3 0.00E+0 3.49E-3 0.00E+0 6.33E-2 0.00E+0 0.00E+0 0.00E+0 0.00E+0 PERT = primary e PENRT = vels; NRS wate  C2 3.66E-9 5.30E-6 8.66E-8 0.00E+0 0.00E+0 0.00E+0	C3/2 3.26E-1 0.00E+0 3.26E-1 3.26E-1 3.26E-1 3.26E-1 3.38E+1 3.63E+1 2.51E+0 0.00E+0 0.00E+0 1.83E-2 Imary ener Total use energy reserved as a constant of the	C3/3 7.81E-2 0.00E+0 7.81E-2 3.66E+1 -3.63E+1 2.08E-1 0.00E+0 0.00E+0 0.00E+0 1.07E-4 ergy resc of renew sources is en of non of non-re  C3/3 9.75E-11 1.47E-4 3.44E-5 0.00E+0 1.19E+0	C4/1  1.55E- 0.00E+ 1.55E- 2.09E+ 0.00E+	D -6.40 0 0.006 1 -6.40 0 0.006 1 -6.40 0 0.006 0 0.006 0 0.006 0 0.006 0 0.006 0 0.006 0 0.006 0 0.006 0 0.006 0 0.006 0 0.006 0 0.006 0 0.006 0 0.006 0 0.006 0 0.006	E-1 ( E+0 ( E+0((E+0((	0.00E+0	-4.61E+0 0.00E+0 -4.61E+0 0.00E+0 -2.39E+1 0.00E+0 0.00E+0 -6.28E-3 -2.39E-1 -6.28E-3 -2.39E-1 -6.28E-3 -2.39E-1 -6.28E-3 -6.28E-3 -6.28E-3 -6.28E-3 -7.28E-9 -7.38E-9 -1.02E-2 -2.03E-3 0.00E+0 0.00E+0 0.00E+0	-3.95E-1 0.00E+0 -3.95E-1 -3.40E+1 0.00E+0 -3.40E+1 7.89E-1 -0.00E+0 3.63E+1 -3.09E-3 Jse of f non- SM = Use of f non- SM = Use net fresh  -2.16E-9 -1.88E-1 -1.31E-4 0.00E+0 0.00E+0
Parame PERE PERM PENR PENR PENR SM RSF FW  Captior  RESU 1 m² f Parame HWD NHWI RWD CRU MFR	Feeter Fe	Unit  [MJ] 2  [MJ] (1  [MJ] 2  [MJ] (2  [MJ] (2  [MJ] (3  [MJ] (4  [MJ] (4  [MJ] (7	A1-A3  2.57E+1  0.00E+0  2.57E+1  1.57E+2  3.63E+1  1.93E+2  0.00E+0  0.00E+0  0.00E+0  4.40E-2  Use of rerimary erewable profimary erewable profi	6.40E-2 0.00E+0 6.40E-2 1.16E+0 0.00E+0 1.16E+0 0.00E+0 1.18E-4 enewable nergy res irimary en al; RSF =  A — OU  A4 6.71E-8 9.72E-5 0.00E+0 0.00E+0	7.52E-1 0.00E+0 7.52E-1 0.00E+0 7.52E-1 5.68E+0 0.00E+0	B1 0.00E+	0 1. 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	m² flo  B2  13E+0 00E+0 13E+0 88E+0 00E+0 00E+0 00E+0 52E-3 Iting reneaterials; newable aterials; nodary from the second of the	C2 3.49E-3 0.00E+0 3.49E-3 6.33E-2 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 E-30E-6 E-30E-6 E-30E-6 E-30E-6 8.66E-9 5.30E-6 8.66E-8 0.00E+0 0.00E+0 0.00E+0	C3/2 3.26E-1 0.00E+0 3.26E-1 3.26E-1 3.26E-1 3.38E+1 3.63E+1 2.51E+0 0.00E+0 0.00E+0 1.83E-2 imary ener Total use energy reser Total use energy reserving rese	C3/3 7.81E-2 0.00E+0 7.81E-2 3.66E+1 -3.63E+1 2.08E-1 0.00E+0 0.00E+0 0.00E+0 1.07E-4 ergy resc of renew sources is e of non of non-re  C3/3 9.75E-11 1.47E-4 3.44E-5 0.00E+0 0.00E+0 0.00E+0 0.00E+0	C4/1  1.55E- 0.00E+ 1.55E- 1.55E- 2.09E+ 0.00E+	D	E-1 ( E+0 (E	0.00E+0	-4.61E+0 -0.00E+0 -4.61E+0 -2.39E+1 -0.00E+0 -0.00E+0 -0.00E+0 -6.28E-3 -2.39ERM = Use of -6.28E-3 -2.39ERM = Use of -6.28E-3 -2.39ERM = Use of -6.28E-3 -1.02E-2 -2.03E-3 -0.00E+0 -0.00E+0 -0.00E+0 -0.00E+0 -0.00E+0 -0.00E+0	-3.95E-1 0.00E+0 -3.95E-1 -3.40E+1 0.00E+0 -3.40E+1 7.89E-1 -3.09E-3 Jse of = Use of f non- SM = Use net fresh  D/3 -2.16E-9 -1.88E-1 -1.31E-4 0.00E+0 0.00E+0 0.00E+0
Parame PERE PERM PERM PENR PENR SM RSF NRSF FW  Captior  RESU 1 m² f  Parame HWD NHWI RWD CRU MFR MER MER EEE	FE STATE OF	Unit  [MJ] 2  [MJ] (1  [MJ] 2  [MJ] (2  [MJ] (2  [MJ] (3  [MJ] (4  [MJ] (4  [MJ] (7	A1-A3  2.57E+1  0.00E+0  2.57E+1  1.57E+2  3.63E+1  1.93E+2  0.00E+0  0.00E+0  0.00E+0  4.40E-2  Use of rerimary erewable profimary erewable profi	A4 6.40E-2 0.00E+0 6.40E-2 1.16E+0 0.00E+0 1.16E+0 0.00E+0 0.00E+0 0.00E+0 1.18E-4 energy resrimary energy resrimary energy reservable 6.71E-8 9.72E-5 1.59E-6 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0	7.52E-1 0.00E+0 7.52E-1 0.00E+0 7.52E-1 5.68E+0 0.00E+0 1.44E+0	B1 0.00E+	0 1. 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	m² flo  B2  13E+0 00E+0 13E+0 00E+0 13E+0 00E+0 00E+0 00E+0 52E-3 10Ing rene aterials; and any fi  ND WA  B2 26E-9 24E-3 95E-4 00E+0 00E+0 00E+0 00E+0	C2 3.49E-3 0.00E+0 3.49E-3 6.33E-2 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 C2 2 3.66E-9 5.30E-6 8.66E-8 0.00E+0	C3/2 3.26E-1 0.00E+0 3.26E-1 3.26E-1 3.26E-1 3.26E-1 3.38E+1 2.51E+0 0.00E+0 0.00E+0 1.83E-2 imary ener fotal use energy reser Fotal use energy reser Total use energy reserved Total	C3/3 7.81E-2 0.00E+0 7.81E-2 3.66E+1 2.08E-1 0.00E+0 0.00E+0 0.00E+0 1.07E-4 ergy resc of renews sources is e of non of non-re  C3/3 9.75E-11 1.47E-4 3.44E-5 0.00E+0 7.89E-1 1.19E+0 0.00E+0	C4/1  1.55E- 0.00E+ 1.55E- 2.09E+ 0.00E+ 0.00E+ 0.00E+ 0.00E+ 0.00E+ 1.53TE- 0.00E+	D	E-1 ( E+0	0.00E+0	-4.61E+0 0.00E+0 -4.61E+0 0.00E+0 -2.39E+1 0.00E+0 0.00E+0 -6.28E-3 -2.39E-1 -6.28E-3 -2.39E-1 -6.28E-3 -6.28E-3 -7.28E-9 -1.02E-2 -2.03E-3 0.00E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0	-3.95E-1 0.00E+0 -3.95E-1 -3.40E+1 0.00E+0 -3.40E+1 7.89E-1 -0.00E+0 3.63E+1 -3.09E-3 Jse of f non- SM = Use of f non- SM = Use net fresh  -2.16E-9 -1.88E-1 -1.31E-4 0.00E+0 0.00E+0



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