Galletti
AIR CONDITIONING

EPD®
THE INTERNATIONAL EPD® SYSTEM

ECO PLATFORM
EPD
VERIFIED

ENVIRONMENTAL PRODUCT DECLARATION

In accordance with ISO 14025:2006 and EN 15804:2012+A2:2019/AC:2021 for:

CHILLER AND HEAT PUMP VLS - VLS 160 - 315 KW

from

Galletti S.p.A

EPD of multiple products, based on representative product.
The list of the products is available on page 6.

Programme	The International EPD® System, www.environdec.com
Programme operator	EPD International AB
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An EPD should provide current information and may be updated if conditions change.
The stated validity is therefore subject to the continued registration and publication at www.environdec.com

General Information

Programme information

Programme:	The International EPD® System
Address:	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden
Website:	www.environdec.com
E-mail:	info@environdec.com

Accountabilities for PCR, LCA and independent, third-party verification	
Product Category Rules (PCR)	
CEN standard EN 15804 serves as the Core Product Category Rules (PCR)	
Product Category Rules (PCR): Construction Products, 2019:14, version 1.3.4	
PCR review was conducted by: Techincal Committee of the International EPD System. A full list of member is available at www.environdec.com. The review panel may be contacted via info@invirondec.com. c-PCR review was conducted by: Gorka Benito Alonso	
Life Cycle Assessment (LCA)	
LCA accountability: **Spinlife S.r.l.** – Via Carlo Cerato 14, 35122, Padova (PD) **Tecno ESGS.r.l. Società Benefit** – Riviera di Chiaia, 270 – 80122 Napoli (NA)	
Third-party verification	
Independent third-party verification of the declaration and data, according to ISO 14025:2006, via:	
☒ EPD verification by accredited certification body	
Third-party verification: **SGS Italia S.p.A., Via Caldera, 21, Milano (MI),** www.it.sgs.com is an approved certification body accountable for the third-party verification	
The certification body is accredited by: **Accredia, Accreditation certification n. 0005VV**	
Procedure for follow-up of data during EPD validity involves third party verifier:	
☐ Yes	☒ No

The EPD owner has the sole ownership, liability, and responsibility for the EPD.

EPDs within the same product category but registered in different EPD programmes, or not compliant with EN 15804, may not be comparable. For two EPDs to be comparable, they must be based on the same PCR (including the same version number) or be based on fully-aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical declared/functional units); have equivalent system boundaries and descriptions of data; apply equivalent data quality requirements, methods of data collection, and allocation methods; apply identical cut-off rules and impact assessment methods (including the same version of characterisation factors); have equivalent content declarations; and be valid at the time of comparison. For further information about comparability, see EN 15804 and ISO 14025.

Company Information

Owner of the EPD: Galletti S.p.A
Contact: Riccardo Galletti – riccardo@galletti.it

Description of the organisation:
Galletti, a family brand, was founded over a hundred years ago, in **1906**, in Castel Maggiore, near Bologna, in a small ironworks and repair shop for agricultural tools and machinery.
The partial destruction of the factory during the Second World War did not prevent the small workshop from growing into a company with over two hundred employees today.
Until the 1950s, Galletti had various experiences as a subcontractor. These included an exciting foray into the world of motorcycles as a frame builder, which gave Galletti considerable expertise in working with sheet metal.
In the 1960s, Galletti entered the comfort air-conditioning sector, launching a product under its own brand name in a market that was just starting to emerge. This is how the company began manufacturing **hydronic indoor units**, which remain a key focus for the company today and are included in one of the most extensive product catalogues in the industry. Over time, the hydronic indoor units were joined by **chillers** and **heat pumps**, which have now become one of the company's most strategic business areas.

Galletti is now one of the international benchmarks in the HVAC industry and is determined to position itself in the market as an ***Advanced Design Company***. Using "advanced" highlights our forward-thinking approach. Unlike traditional design, we look far into the future, making today's decisions based on anticipated, if not inevitable, future scenarios.
Galletti is convinced that businesses are key to safeguarding our planet and future generations. As a company deeply connected to its local community, this commitment has been at the heart of our operations for over a century.
With this spirit, Galletti felt the need to first obtain the certification of the environmental management system (in 2021) and now the publication of EPDs *(Environmental Product Declarations)* for its flagship products, in this case **VLS**, empowering customers to make informed, sustainable choices.
This is an important step towards a continuously growing responsibility towards future generations. In this sense, the upcoming publication of the sustainability report will be a first milestone. The goal that Galletti wants to achieve, step by step, is to offer high-quality products that satisfy the needs of its customers while always respecting the well-being of the planet, continuously improving: critically rethinking processes and products through an innovation capacity grounded in the awareness that any possible development must be increasingly sustainable.

Company Information

Product-related or management system-related certifications:
Galletti is part of the Eurovent certification program, which is responsible for guaranteeing the thermal, aeraulic and efficiency performance of the products of the companies participating in the certification program. In addition to this certification, a guarantee of quality and reliability, Galletti holds the following certifications (certified by the accredited organization Kiwa):

- Quality system certification in accordance with UNI EN ISO 9001:2015);
- Certification of the environmental management system in accordance with UNI EN ISO 14001:2015;
- Health and safety management system certification in accordance with ISO 45001:2018.

Name and location of production site(s):
Galletti plant involved in the production of fan coils is located in:
Via L. Romagnoli, 12/A
40010 Bentivoglio (BO), ITALY

Product Information

Product name: VLS

Product description:
VLS is Galletti's new range of air-cooled packaged chillers and heat pumps for outdoor installation characterized by the use of R454B refrigerant.
The range consists of 13 models with cooling capacities ranging from 150 to 590 kW, in cooling only or reversible heat pump versions. The main strength of the range is its high seasonal efficiency, aimed at permanently reducing annual energy consumption as well as meeting the minimum efficiency requirements imposed by the ErP 2021 regulation. In order to increase efficiency at partial loads, all VLS models are equipped with tandem or trio solutions (2 or 3 compressors on a single circuit) and fitted as standard with electronic expansion valve. The use of top-quality makes VLS chiller units state-of-the-art in terms of efficiency, reliability and operating limits. Indeed, it is guaranteed to produce water from -10°C to 57°C, and operation at full load with outside air from -15°C to 46°C.
As the power range is quite wide and also having very different sizes within the family, it was decided to divide the family into two by taking two products as reference; one product with intermediate power among the 7 products with lower power, and one product with intermediate power among the 6 products with higher power range.

Regarding RSL (reference service life), there are no precise indications provided by the applicable PCR: for this reason, other standards were analysed, including PSR-0013-ed3.0-EN-2023-06-06, which suggests an RSL of 22 years.

The value found to be in line with the opinion of corporate technical experts.

VLS 160 - 315 KW

This EPD covers 7 models of the lower power range products of VLS family. To express the results, a representative product in this range was selected. This product was identified in the VLS254HS because it has an intermediate power and size in the lower range.

The chosen reference product is highlighted in bold in the table below. Products refer to the configuration without accessories.

Number	Model	Weight (kg)	Nominal Cooling capacity (kW)	Nominal heating capacity (kW)
1	VLSC162	1047	160	-
2	VLSC202	1744	210	-
3	VLSC234	1876	232	-
4	VLSC243	1797	238	-
5	VLSC254	1783	250	-
6	VLSC274	1982	274	-
7	VLSC314	1994	315	-

Number	Model	Weight (kg)	Nominal Cooling capacity (kW)	Nominal heating capacity (kW)
1	VLSH162	1155	160	167
2	VLSH202	2040	210	224
3	VLSH234	2172	232	256
4	VLSH243	2126	236	249
5	**VLSH254**	**1969**	**250**	**264**
6	VLSH274	2174	274	290
7	VLSH314	2188	310	330

TECHNICAL DATA

	VLSH162	VLSH202	VLSH234	VLSH243	VLSH254	VLSH274	VLSH314
Nominal Cooling capacity (kW)	160	210	232	236	250	274	310
EER	2,73	3,10	3,14	2,93	2,94	2,69	2,67
SEER	4,13	4,56	4,41	4,45	4,22	4,17	4,16
Nominal heating capacity (kW)	167	224	256	249	264	290	330
COP	2,96	3,28	3,29	2,98	3,20	2,92	2,95
SCOP	3,56	3,50	4,01	3,44	4,04	3,71	3,87

	VLSC162	VLSC202	VLSC234	VLSC243	VLSC254	VLSC274	VLSC314
Nominal Cooling capacity (kW)	160	210	232	238	250	274	315
EER	2,75	3,12	3,14	2,96	2,94	2,69	2,71
SEER	4,25	4,68	4,57	4,52	4,33	4,27	4,25

The conditions for these measurements are defined by EN14511:2022. The data have been certified by EUROVENT.

UN CPC code: 43913

Geographical scope:
The distribution and use phase scenario is based on production and not on sales
A1-A2 Global,
A3 European,
A4, A5, B6, C Global.

LCA INFORMATION

Methodology:
The environmental burden of the product has been calculated according to the GPI 4.0 issued by the International EPD System (Cradle to grave).
This declaration is based on the application of Life Cycle Assessment (LCA) methodology to the whole life-cycle system.
Customized LCA2 questionnaires were used to gather in-depth information about all aspects of the production system (for example, raw materials specifications, pre-treatments, process efficiencies, air emissions, waste management), ultimately providing a complete picture of the environmental burden of the system. Data quality has been assessed and validated during data collection process.
According to EN:15804 the applied cut-off criterion for mass and energy flows is 5%.
Considering that the product is installed in a building and its performance has an effect on the performance of construction works, PCR 2019:14 was deemed applicable.

Declared Unit:
To produce cooling thanks to chiller/heat exchanger of 250 kW (cooling capacity) according to an use scenario according to EN 14825 and during the 22 year reference lifetime of the product. The methods for calculating electricity consumption are in line with the guidelines of UNI EN 14825:2022, which consider a usage of 600 hours per year with outdoor air temperature of 35°C, and water temperature of 12°C/7°C. The results in this EPD is given per declared unit.

Reference service life:
The lifetime for VLS is considered to be 22 years.

Time representativeness:
The LCA study is conducted in 2024 with data relating to 2023.

Database(s) and LCA software used:
The database used is Ecoinvent v.3.9.1 (www.ecoinvent.org) and LCA software used is SimaPro 9.5.
The electricity consumption of module A3 was characterized using the ecoinvent dataset representative of the residual energy mix in medium voltage (0,619 kgCO_2eq/kWh).

Cut-off rules:
- The criteria chosen for the initial inclusion of input and output items is based on the definition of a 5% cut-off level. However, all processes for which data are available were taken into account, even if they contributed less than 5 percent.
- In this study, the inputs subjected to the cut-off are related to the packaging of raw materials entering the plant.

Allocation rules:

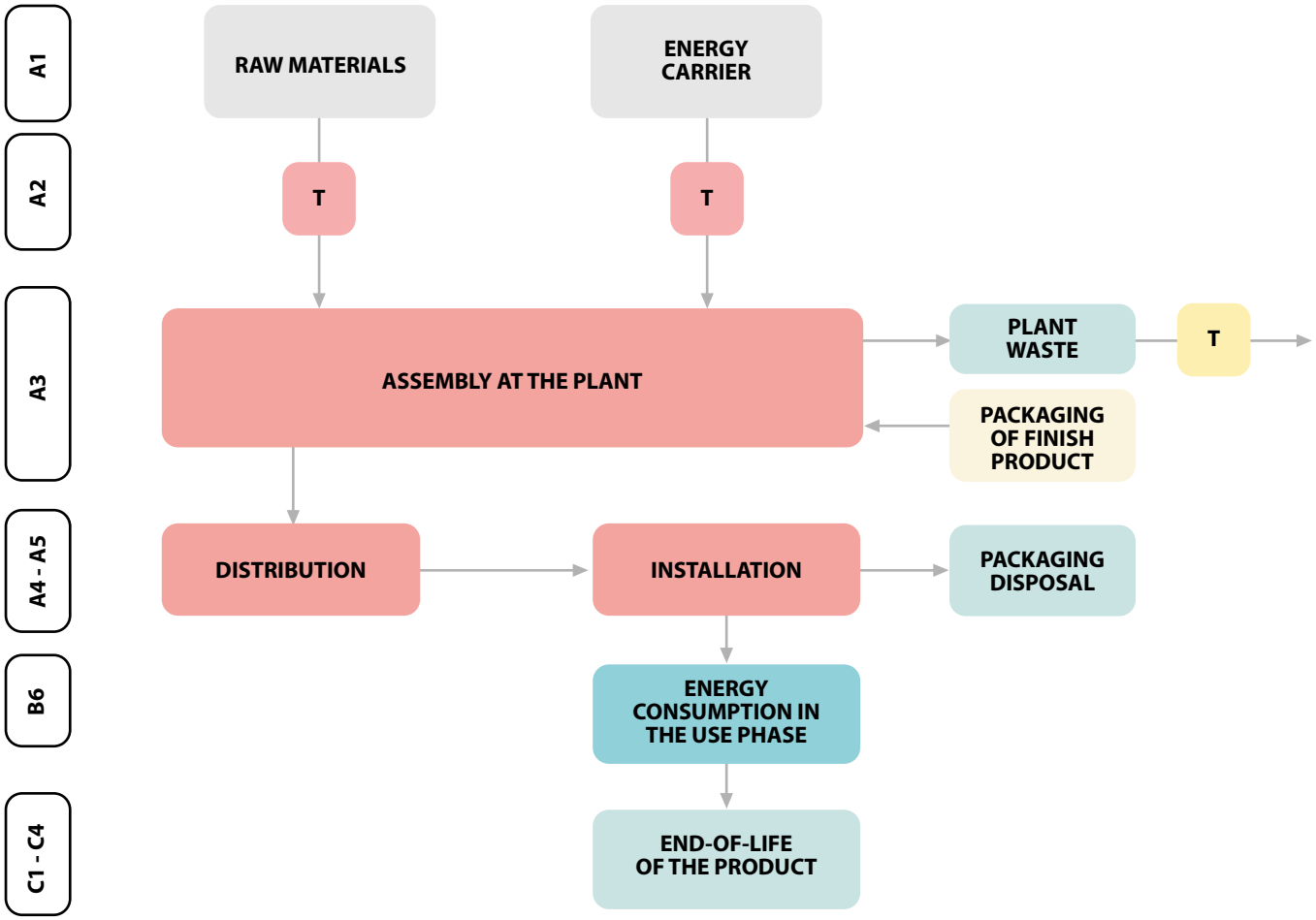
- To calculate the electrical energy required to produce VLS an allocation was made on the man-hours required.

Environmental impact method:

EN 15804 +A2 based on EF 3.1 characterization factor.

Description of system boundaries:

The detailed environmental performance (in terms of potential environmental impacts, use of resources and waste generation) is presented with an approach cradle to gate with options (modules: A1-A3, A4-A5, B6, C1-C4 and D).



Modules declared, geographical scope, share of specific data (in GWP-GHG results) and data variation (in GWP-GHG results):

System diagram:

	Product stage			Construction process stage		Use stage							End of life stage				Resource recovery stage
	Raw material supply	Transport	Manufacturing	Transport	Construction installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery Recycling-potential
Module	**A1**	**A2**	**A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
Modules declared	X	X	X	X	X	ND	ND	ND	ND	ND	X	ND	X	X	X	X	X
Geography	GLO	GLO	IT	GLO	GLO	-	-	-	-	-	GLO	-	GLO	GLO	GLO	GLO	GLO
Specific data used	1,17%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – products	-20%/0%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	0%			-	-	-	-	-	-	-	-	-	-	-	-	-	-

Description of the production process

The production process for chillers and heat exchangers begins with the assembly phase, where various components such as tanks, evaporators, electric pumps, fans, copper and iron pipes, metal panels, compressors, finned heat exchangers, and electrical panels are moved and assembled along the production line. When handling heavy parts, jib cranes are used to ensure safe and efficient movement, particularly for lifting the ventilating units of "V"-type refrigeration machines. The components are then secured during the screwing process, where self-tapping screws and pneumatic or electric screwdrivers are used to fasten them together. Next, the brazing of refrigeration components takes place, and the gas reduction units are tightened in preparation for this brazing process. Once brazing is completed, the pressurization of the refrigeration circuit follows, which involves a mechanical resistance test using nitrogen at 30 bar. A leak detection process is then carried out on the refrigeration circuit using a commercial product called ELIAZOTO10. After ensuring there are no leaks, the circuit undergoes a vacuuming phase to clean it thoroughly. This is followed by the installation of electrical wiring, after which electrical measurements are taken to ensure all connections and components are functioning correctly. The machines then undergo a final testing phase, where their overall functionality is verified. Upon successful testing, the chillers and heat exchangers are packaged for final delivery, ready for distribution to customers.

LIFE CYCLE STAGES

The groups identified for the life cycle are as follows (in line with the requirements of Standard EN 15804+A2):

A1, which includes:

- Raw Materials. This unit groups together the impacts associated with the use of raw materials and semi-finished products, e.g., steel, ABS, polystyrene, HDPE, copper cables, electronic boards, motor, etc..
- Electricity. Impacts associated with electricity consumption are grouped in this unit.

A2, which includes:

- Transportation. In this unit are grouped the impacts associated with transportation of incoming materials

A3, which includes:

- Packaging. Impacts associated with packaging to package the finished product are grouped in this unit.
- Treatment of manufactured waste. Impacts associated with other waste generated by the process and plant consumption are grouped in this unit

A4, which includes:

- Distribution. Impacts associated with transportation of finished products to destination locations are grouped in this unit.

A5, which includes:

- Installation. This unit groups together the impacts associated with the disposal of the packaging used for the finished product packaging.
- Installation. Impact associated with the installation of the product into the building.

B6, which includes:

- Use phase. Impacts associated with energy consumption during the operation of the product during its useful life are grouped in this unit.

C1, which includes:

- Deconstruction, demolition. Impact associated with energy consumption during the operation of dismantling or demolition of the product from the building.

C2, which includes:

- End-of-life transport. This unit groups together the impacts associated with the transportation of the product at end-of-life to treatment facilities for disposal

C3, which includes:

- Disassembly processes. Impacts associated with consumption due to end-of-life product disassembly processes are grouped in this unit.
- End-of-life waste treatment. Impacts associated with the processing of waste for recycling are grouped in this unit.

C4, which includes:

- End-of-life waste disposal. Impacts associated with the type of waste disposal and its management at the destination facility are grouped in this unit

D, which includes:

- Benefits beyond the boundaries of the product system. This unit groups together the net benefits that result from the use of recycled material as a secondary raw material.

CONTENT INFORMATION

Product components	Weight-% (versus product)	Post-consumer material, weight-%	Biogenic material, weight-%, kg C/kg
Steel	44,29%	0	0
Engine	28,81%	0	0
Copper Aluminium	15,82%	0	0
Copper	3,91%	0	0
Capacitor	3,18%	0	0
R454	2,33%	0	0
Pump	0,84%	0	0
Electronic board	0,51%	0	0
LDPE	0,1%	0	0
Nylon	0,07%	0	0
Lubricant oil	0,03%	0	0
Fan	0,03%	0	0
Synthetic rubber	0,03%	0	0
Labels	< 0,01%	0	0
PVC	< 0,01%	0	0
HDPE	< 0,01%	0	0
TOTAL (kg)	**1969 kg**	**0**	**0**
Packaging materials	**Weight-% (versus total packaging)**	**Weight-% (versus the product)**	**Weight biogenic carbon, kg C/kg**
Wood Packaging	93%	1,1%	0,39
PVC Packaging	7%	0,1%	0
TOTAL (kg)	**23 kg**	**1,2%**	**0,39**

None of the configurations contain substances on the "Candidate list of substances of very high concern (SVHC) for authorization."

RESULTS OF THE ENVIRONMENTAL PERFORMANCE INDICATORS

Mandatory impact category indicators according to EN 15804:2012+A2:2019/AC:2021

Indicator	Unit	A1-A3	A4	A5	B6	C1	C2	C3	C4	D
GWP-fossil	kg CO_2 eq.	2,08E+04	4,84E+02	1,01E+01	2,66E+05	8,40E+00	2,33E-02	3,22E+01	2,50E+02	-9,99E+02
GWP-biogenic	kg CO_2 eq.	3,19E+01	1,55E-01	3,24E+01	1,64E+03	1,16E-03	7,91E-06	3,40E-01	1,92E-01	1,37E-01
GWP-luluc	kg CO_2 eq.	3,15E+01	2,36E-01	9,95E-04	3,67E+02	9,36E-04	1,07E-05	6,49E-02	1,46E-01	-1,30E-01
GWP-total	kg CO_2 eq.	2,08E+04	4,84E+02	4,25E+01	2,68E+05	8,40E+00	2,33E-02	3,26E+01	2,50E+02	-9,99E+02
ODP	kg CFC 11 eq.	4,50E-02	1,06E-05	1,36E-07	8,56E-03	1,32E-07	5,11E-10	6,70E-07	8,09E-06	-2,16E-05
AP	mol H^+ eq.	3,26E+02	2,00E+00	3,47E-02	1,03E+03	3,11E-02	9,14E-05	1,42E-01	4,75E-01	-4,30E+00
EP-freshwater	kg P eq.	2,77E+01	3,41E-02	3,68E-04	1,09E+02	2,55E-04	1,62E-06	1,94E-02	5,66E-02	-4,54E-01
EP-marine	kg N eq.	5,63E+01	7,64E-01	1,96E-02	1,92E+02	1,28E-02	3,47E-05	2,48E-02	1,09E-01	-9,66E-01
EP-terrestrial	mol N eq.	3,64E+02	8,15E+00	1,58E-01	2,04E+03	1,38E-01	3,70E-04	2,49E-01	1,08E+00	-1,05E+01
POCP	kg NMVOC eq.	1,20E+02	2,93E+00	5,62E-02	7,07E+02	4,78E-02	1,34E-04	9,22E-02	3,43E-01	-5,48E+00
ADP-minerals&metals*	kg Sb eq.	4,25E+00	1,56E-03	3,20E-06	3,39E+00	2,90E-06	7,48E-08	3,99E-04	6,24E-04	-1,09E-02
ADP-fossil*	MJ	2,43E+05	6,90E+03	1,11E+02	5,21E+06	1,09E+02	3,30E-01	5,94E+02	1,28E+03	-8,98E+03
WDP*	m^3	5,73E+03	2,81E+01	2,98E-01	7,56E+04	2,35E-01	1,25E-03	1,41E+01	2,52E+01	-5,11E+01

Acronyms: 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 = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption.

** Disclaimer: The results of this environmental impact indicator shall be used with care as the uncertainties of these results are high or as there is limited experience with the indicator.*
The use of the results of module A1-A3 without considering the results of module C is discouraged.

Additional mandatory and voluntary impact category indicators

Indicator	Unit	A1-A3	A4	A5	B6	C1	C2	C3	C4	D
GWP-GHG[1]	kg CO_2 eq.	2,08E+04	4,84E+02	1,18E+01	2,68E+05	8,40E+00	2,33E-02	3,26E+01	2,50E+02	-9,99E+02

[1]This indicator accounts for all greenhouse gases except biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. As such, the indicator is identical to GWP-total except that the CF for biogenic CO_2 is set to zero.

In the analysis of the impacts of all products included in the EPD, the following changes were found to be greater than 10% in absolute terms: ODP (-17%) and ADP-minerals&metals (-11%)."

Resource use indicators

Indicator	Unit	A1-A3	A4	A5	B6	C1	C2	C3	C4	D
PERE	MJ	3,10E+04	1,07E+02	6,55E-01	1,59E+06	6,20E-01	5,75E-03	1,85E+02	1,10E+02	-7,11E+02
PERM	MJ	2,87E+02	0,00E+00	-8,89E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	3,13E+04	1,07E+02	-8,83E+01	1,59E+06	6,20E-01	5,75E-03	1,85E+02	1,10E+02	-7,11E+02
PENRE	MJ	2,43E+05	6,90E+03	1,11E+02	5,21E+06	1,09E+02	3,30E-01	5,94E+02	1,28E+03	-8,98E+03
PENRM	MJ	1,99E+02	0,00E+00	-6,88E+00	0,00E+00	0,00E+00	0,00E+00	-4,00E+01	0,00E+00	0,00E+00
PENRT	MJ	2,43E+05	6,90E+03	1,04E+02	5,21E+06	1,09E+02	3,30E-01	5,54E+02	1,28E+03	-8,98E+03
SM	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
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
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
FW	m^3	1,84E+02	9,83E-01	1,07E-02	2,85E+03	8,55E-03	4,77E-05	4,83E-01	7,88E-01	-1,28E+00

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 re-sources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water.

Waste indicators

Indicator	Unit	A1-A3	A4	A5	B6	C1	C2	C3	C4	D
Hazardous waste disposed	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
Non-hazardous waste disposed	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
Radioactive waste disposed	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

Output flow indicators

Indicator	Unit	A1-A3	A4	A5	B6	C1	C2	C3	C4	D
Components for re-use	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
Material for recycling	kg	2,62E+02	0,00E+00	2,15E+01	0,00E+00	0,00E+00	0,00E+00	7,66E+02	0,00E+00	0,00E+00
Materials for energy recovery	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
Exported energy, electricity	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
Exported energy, thermal	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

The estimated impact results are only relative statements, which do not indicate the endpoints of the impact categories, exceeding threshold values, safety margins and/or risks.

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