ENVIRONMENTAL PRODUCT DECLARATION

as per *ISO 14025* and *EN 15804+A2*

Owner of the Declaration	Grundfos Holding A/S
Publisher	Institut Bauen und Umwelt e.V. (IBU)
Programme holder	Institut Bauen und Umwelt e.V. (IBU)
Declaration number	EPD-GRU-20250286-CBA1-EN
Issue date	03.06.2025
Valid to	02.06.2030

Sololift2 D-2

Grundfos Holding A/S

Institut Bauen und Umwelt e.V.

ECO PLATFORM EPD VERIFIED

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General Information

Grundfos Holding A/S

Programme holder

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

Declaration number

EPD-GRU-20250286-CBA1-EN

This declaration is based on the product category rules:

Pumps for liquids and liquids with solids, 01.08.2021
(PCR checked and approved by the SVR)

Issue date

03.06.2025

Valid to

02.06.2030

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

Florian Pronold
(Managing Director Institut Bauen und Umwelt e.V.)

Sololift2 D-2

Owner of the declaration

Grundfos Holding A/S
Poul Due Jensens Vej 7
8850 Bjerringbro
Denmark

Declared product / declared unit

1 piece of SOLOLIFT2 D-2 lifting pump

Scope:

The declaration applies to 1 piece of SOLOLIFT2 D-2 pump.
The product is produced in Inđjija, Serbia, and the life cycle assessment is based on data collected at the production site. Production has been modeled using annual production data from year 2023. The declaration covers the SOLOLIFT2 D-2 product for EU and UK market.
EPD of construction products may not be comparable if they do not comply with EN 15804+A2 standard.
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 ☒ externally

Mrs Kim Allbury,
(Independent verifier)

Product

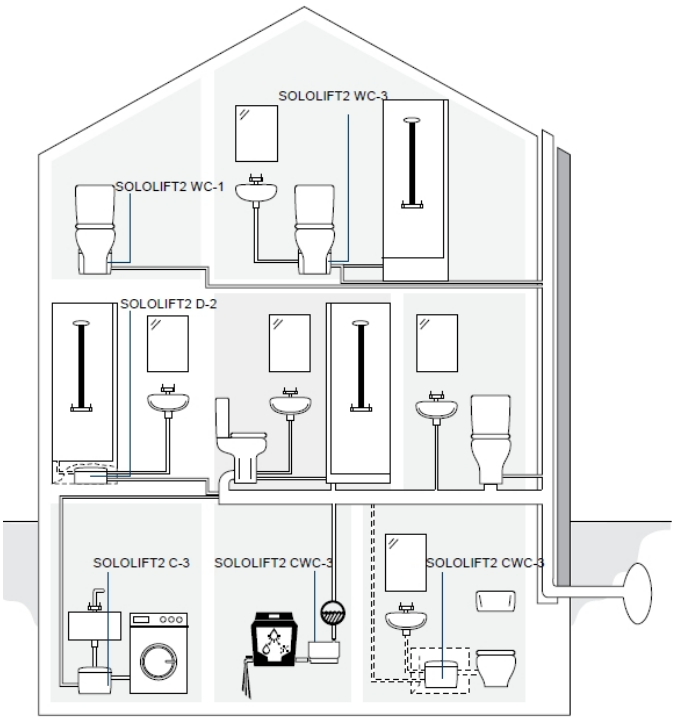
Product description/Product definition

For installations below sewer level, it is not possible to lead wastewater directly to the sewer. Grundfos SOLOLIFT2 D-2 products are designed to satisfy many domestic (household) application conditions, such as lifting grey wastewater from below sewer level. Any greywater sanitary unit positioned below sewer level (backflow level) or far away from the main soil pipe can easily be drained by a SOLOLIFT2 D-2, however, this product is not designed for lifting fecal water sourcing from WC.

The declaration represents a sales-weighted average of SOLOLIFT2 D-2 pumps from the EU and UK versions, which differs only in the plug design of their electricity power cord, therefore their hardware is identical and they can be considered as subject of a specific EPD.

Materials as well as supply chain and manufacturing processes are identical, i.e., all cradle-to-gate processes (A1-A3). The packaging is the high runner type for the included products. The products are also identical in terms of distribution, reference service life and end-of-life treatment.

The product consists of a centrifugal pump powered by an electrical motor, (having) a small tank and a floating level switch, operating with an in-built 280W electrical motor that can be connected to 230V household electrical grid. The pump is designed to have a plastic tank with 2.0 liter capacity, making able to connect 2 greywater drain low-flow inlets (sink, bidet, shower cabin). For larger flow inlets (bathtub, washing machine) a higher capacity SOLOLIFT2 product is advised. A mechanical floating level switch controls the operation of the electric motor. D-2 product can be connected to two inlet drainage wastewater source piping (like shower basin, and tap basin). The pH of the greywater media can vary between 4...10, temperature between 0...50 ºC. The product has IP 44 class protection.



For the placing on the market in the European Union/European Free Trade Association (EU/EFTA) (with the exception of Switzerland) the following legal provisions apply:

Machinery Directive (2006/42/EC)
Standard used:*EN 809:1998 + A1:2009*

Ecodesign Directive (2009/125/EC)

Low Voltage directive (2014/35/EU)
Electrical Equipment (Safety) Regulations 2016 (UK)
Standards used:
EN IEC 60335-1:2023
EN IEC 60335-2-41:2021+A11:2021

RoHS Directive 2011/65/EU and 2015/863/EU
Standard used: *EN IEC 63000:2018*

Marketing of construction products (Regulation (EU) No. 305/2011)
Standard used: *EN 12050-2:2015*
(Wastewater lifting plants for buildings and sites – Part 2: Lifting plants for faecal-free wastewater)

The CE marking takes into account the proof of conformity with the respective harmonized norms based on the legal provisions above.

Application

Wastewater from the units connected is led to the SOLOLIFT2 lifting station. The pump starts automatically when the liquid level reaches the start level and stops when the level has fallen to the stop level. The start and stop levels depend on the type of SOLOLIFT2. See technical data of the individual types.
The tank of all Grundfos SOLOLIFT2 lifting stations is made of composite with an easy-to-clean surface and inside chamfers to minimise sedimentation. Installed correctly, SOLOLIFT2 works automatically.The design offers unique features and is focused on quick installation as well as easy and clean service. The lifting stations require very little maintenance.

Technical Data

The performance data of the product according to the harmonized norms, based on the harmonization provisions above apply.
The relevant technical specifications according to the *PCR Part B* are given in the table below.
Characteristics that are the same for all product groups are only given once. Others are given individually for all products.

Constructional data

Name	Value	Unit
Frequency	50 / 60	Hz
Voltage	230	V
Flow range (max)	6.3	m^3/h
Power input nominal	0.28	kW
Pumped liquid	grey wastewater	-
Head max.	5.5	m
Duty type	S3-50% 1min	-
IP class	IP 44	-

Performance data of the product according to the harmonised standards, based on provisions for harmonisation.

Base materials/Ancillary materials

Name	Value	Unit
Carbon steel	8.76	%
Copper	8.21	%
Corrugated board	13.53	%
Electronics	3.62	%
Lubricant (oil)	0.70	%
Paper	4.46	%
Rubbers	5.78	%
Soft plastics and foams	2.22	%
Solid thermoplastics	28.20	%
Stainless steel	21.75	%
Wood	2.78	%
TOTAL	100	%

all ingredients are given rounded to 2 decimals accuracy

REACH

This product/article contains substances listed in the *ECHA candidate list* (date: 10.06.2022) exceeding 0.1 percentage by mass: **NO**

The Inđjija production has been assessed and certified as meeting the requirements in *ISO 14001, ISO 45001, ISO 50001 and ISO 9001.*

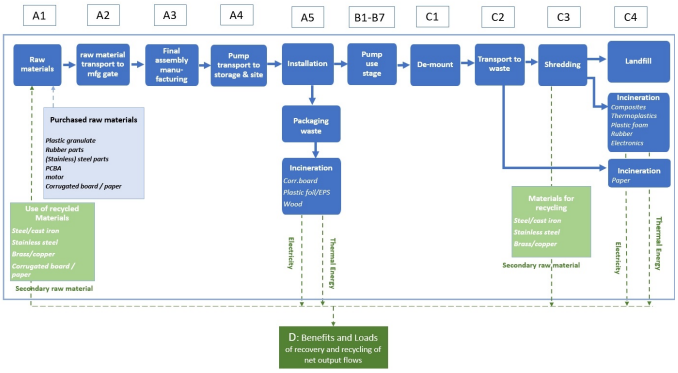
Reference service life

The use stage sub-module B6 is declared per RSL, in order to facilitate building calculations, an estimated RSL of 10 years can be used. This is an EU consensus-based estimation, referenced on page 55 in the document EuP Lot11 Water Pumps Issue 6. The text is also reproduced here: *Estimating 'average' lifetime is difficult, with the Europump figures based on the collective views of suppliers. For pumps operating under normal conditions, it is thought that these numbers are indeed reasonable, but there are sometimes exceptional circumstances which shorten this 'natural' lifetime. Taking account of all of these factors, the following table is presented as the average lifetimes and operating hours of the pumps considered in this study.* The table refers to 11 years of pump life. Product lifetime is calculated based on the assessed weakest part to be 10 years on average. The calculation is based on the performance test, knowledge of load profile and equations provided by the component supplier. Assessment is based on expert opinion.

LCA: Calculation rules

Declared Unit

The declared unit is 1 piece (pcs.) of SOLOLIFT2 D-2 lifting pump.



Declared unit

Mass includes packaging.

Name	Value	Unit
Declared unit	1	pce.
Mass reference	6.3	kg/pce
Conversion factor [Mass/Declared Unit]	6.300	-

The weighted specific product has been calculated based on the sales volumes of the included product models (EU /UK).

System boundary

This EPD is Cradle-To-Grave and Module D. The system boundaries of the EPD follow the modular approach in *EN 15804*.

Production and installation (A1-A5)

Modules A1-A3 refer to the product stage and includes raw materials extraction and processing, transportation, and the manufacturing process. The product stage is included in this study, and according to *EN 15804* the system boundary with nature is set to include those processes that provide the material and energy inputs into the system and the following manufacturing, transport up to the factory gate as well as the processing of waste arising from those processes. The assembly of the product, as well as the packaging, are also included in A1-A3. Wastes and losses are included in the modules where they occur according to the polluter pays principle and the modular approach of *EN 15804*.

Module A4 regards the transportation from the production site to the regional distribution centre, and finally to the construction and product application site. Module A5 refers to the installation process of the pump including the transportation of packaging waste to the treatment site and the waste treatment of packaging. The use of energy during installation is negligible for the selected functional unit.

Use stage (B1-B7):

In this study, all use stage modules are assessed, though B1, B2 and B7 are assessed to be zero. By decision no. 20170712-n of the *SVR*, the modules B3, B4 and B5 are by default declared as "MNR" (module not relevant).
Contributions to operational energy use during the use stage (B6) come from the electricity consumption of the product. The annual electricity consumption is calculated by multiplying the average power input, which is based on a defined load profile, with the annual running hours. For use stage (B6) European Average electricity grid mix has been used. These values are declared in *Operational energy use (B6)* table.

The End-of-Life stage (C1-C4)

The End-of-Life stage (C1-C4) Modules C1-C4 refer to the End-of-life stage. A product reaches the end-of-life of its service life when it no longer provides any functionality. This life cycle stage includes all activities from the end-of-life of the control valve until all materials and components are processed, reused, recycled, or disposed of.C1 regards the dismantling of the pump, and this module is a manual activity. C2 regards the transport to waste processing, C3 refers to the processing (shredding) of waste for recycling, and C4 refers to waste disposal: landfilling and incineration. The End-of-Life assumption is that 95% is collected as electronic waste, while

5% goes to landfill. The specific amounts are shown in the scenarios section.

Loads and benefits beyond system boundary (D):
Module D refers to the burdens and benefits beyond the system boundaries. According to *EN 15804*, module D includes the reuse, recovery and/or recycling potentials, expressed in net impacts and benefits. Contributions to module D come from waste incineration processes in A5 and C4 as well as material (metal) recycling in C3. The specific fractions and net flows are shown in the scenarios section.

Geographic Representativeness

Land or region, in which the declared product system is manufactured, used or handled at the end of the product´s lifespan: Europe

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. The primary database used for background data is *Sphera (version 2024.2)*, while *Ecoinvent (version 3.10)* served as a secondary database.

LCA: Scenarios and additional technical information

Characteristic product properties of biogenic carbon
The biogenic carbon content quantifies the amount of biogenic carbon in a construction product leaving the factory gate, and it will be separately declared for the product and for any accompanying packaging, as required from the *PCR Part A*. The carbon content of cardboard and paper is assumed to 0.43 kg C, meaning 43% of the paper and cardboard packaging is biogenic carbon. The carbon content of wood is assumed to 0.435 kg C, meaning 43.5% of the wooden packaging is biogenic carbon. Overall, there is a certain amount of biogenic Carbon in the product leaving the factory gate and has to be considered.

Information on describing the biogenic Carbon Content at factory gate

Name	Value	Unit
Biogenic carbon content in product	0.121	kg C
Biogenic carbon content in accompanying packaging	0.442	kg C

Note: 1 kg of biogenic carbon is equivalent to 44/12 kg of CO_2.

Transport from the gate to the site (A4)

Name	Value	Unit
Litres of fuel	1,7	l/100 tkm
Transport distance	1300	km
Capacity utilisation (including empty runs)	61.75	%
Gross density of products transported	294.74	kg/m^3
Wastage during distribution	-	%

Installation into the building (A5)

Name	Value	Unit
Packaging waste for incineration (LDPE film)	0.048	kg
Packaging waste for incineration (Paper/Cardboard)	0.852	kg
Packaging waste for incineration (PP stripe)	0.00675	kg
Packaging waste for incineration (Wood)	0.175	kg

An estimated RSL of 10 years can be used to facilitate building calculations. This is an EU consensus-based estimation, referenced in Appendix 6: Lot 11 – *Water pumps (in commercial buildings, drinking water pumping, food industry, agriculture), issue 6* prepared by *AEA Energy & Environment* for the European Commission in the context of the *Eco Design Directive*

Reference service life

Name	Value	Unit
Life Span according to the manufacturer	10	a

Operational energy use (B6)

Name	Value	Unit
Running time (in operation)	101.39	h/a
Standby time	8658.61	h/a
Electricity consumption (in operation)	28.389	kWh/a
Electricity consumption (standby)	25.976	kWh/a
Average power input (in operation)	0.28	kW
Average power input (standby)	0.003	kW
Total energy consumption (in RSL period)	543.65	kWh

End of life (C1-C4)

Name	Value	Unit
Collected separately waste type WEEE	5.217	kg
Transportation distance (C2)	100	km
Stainless steel for recycling	1.302	kg
Carbon steel for recycling	0.5111	kg
Copper for recycling	0.4912	kg
Plastics for incineration (incl. rubber)	1.958	kg
Electronics for incineration w/energy	0.207	kg
Paper for incineration	0.281	kg
Landfilling	0.4237	kg

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

Name	Value	Unit
A1-3, incineration w/energy recov. thermal energy	0.9312	MJ
A5, incineration w/energy recov. electric energy	2.589	MJ
A5, incineration w/energy recov. thermal energy	4.679	MJ
C3, carbon steel for recycling (net amounts)	0.4315	kg
C3, stainless steel for recycling (net amounts)	1.138	kg
C3, copper for recycling (net amounts)	0.4912	kg
C4, incineration w/energy recov. thermal energy	23.54	MJ
C4, incineration w/energy recov. electric energy	13.26	MJ

LCA: Results

Characterization model: *EN 15804:2012+A2:2019*, PEF. By Decision no. 20170712-n of the IBU SVR, the modules B3, B4, B5 are marked as MNR (module not relevant) as default. The LCA results in module B6 are given on a period of 10 years in line with RSL period, according to *PCR Part B*. The indicator results for module B6 are declared for SOLOLIFT2 D-2 average domestic usage pattern scenario.

Specific GWP index of electricity mix within A1-3: 0.902 kg CO_2eq/kWh.

DESCRIPTION OF THE SYSTEM BOUNDARY (X = INCLUDED IN LCA; MND = MODULE OR INDICATOR NOT DECLARED; MNR = MODULE NOT RELEVANT)

Product stage			Construction process stage		Use stage							End of life stage				Benefits and loads beyond the system boundaries
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-Recovery-Recycling-potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	X	X	X	MNR	MNR	MNR	X	X	X	X	X	X	X

RESULTS OF THE LCA - ENVIRONMENTAL IMPACT according to EN 15804+A2: 1PCS of Sololift2 D-2 pump

Parameter	Unit	A1-A3	A4	A5	B1	B2	B6	B7	C1	C2	C3	C4	D
GWP-total	kg CO_2 eq	2.94E+01	7.38E-01	1.67E+00	0	0	1.64E+02	0	0	4.71E-02	9.38E-02	6.79E+00	-1.2E+01
GWP-fossil	kg CO_2 eq	3.15E+01	7.24E-01	2.14E-01	0	0	1.62E+02	0	0	4.62E-02	9.3E-02	6.23E+00	-1.2E+01
GWP-biogenic	kg CO_2 eq	-2.2E+00	1.74E-03	1.46E+00	0	0	1.46E+00	0	0	1.11E-04	8.36E-04	5.62E-01	2.86E-02
GWP-luluc	kg CO_2 eq	5.66E-02	1.23E-02	1.84E-04	0	0	2.46E-02	0	0	7.83E-04	1.41E-05	1.2E-04	-2.53E-02
ODP	kg CFC11 eq	2.62E-08	1.08E-13	2.07E-13	0	0	3.68E-09	0	0	6.86E-15	2.11E-12	5.84E-13	-3.51E-11
AP	mol H^+ eq	3.47E-01	4.64E-03	4.62E-04	0	0	3.14E-01	0	0	2.96E-04	1.8E-04	1.06E-03	-7.35E-02
EP-freshwater	kg P eq	4.75E-04	3.12E-06	9.82E-08	0	0	6.73E-04	0	0	1.99E-07	3.86E-07	6.4E-06	-1.82E-05
EP-marine	kg N eq	3.14E-02	2.27E-03	1.71E-04	0	0	7.83E-02	0	0	1.45E-04	4.48E-05	3.61E-04	-8.62E-03
EP-terrestrial	mol N eq	3.28E-01	2.51E-02	2.15E-03	0	0	8.19E-01	0	0	1.6E-03	4.69E-04	5.05E-03	-9.25E-02
POCP	kg NMVOC eq	1.04E-01	4.49E-03	4.36E-04	0	0	2.07E-01	0	0	2.87E-04	1.19E-04	9.82E-04	-2.7E-02
ADPE	kg Sb eq	2.08E-03	6.37E-08	3.01E-09	0	0	3.04E-05	0	0	4.06E-09	1.74E-08	6.19E-09	-1.53E-03
ADPF	MJ	4.85E+02	9.63E+00	5.88E-01	0	0	3.41E+03	0	0	6.14E-01	1.95E+00	1.43E+00	-1.61E+02
WDP	m^3 world eq deprived	1.48E+01	1.13E-02	1.97E-01	0	0	4.49E+01	0	0	7.21E-04	2.57E-02	6.36E-01	-4E+00

GWP = Global warming potential; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential of land and water; EP = 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; WDP = Water (user) deprivation potential)

RESULTS OF THE LCA - INDICATORS TO DESCRIBE RESOURCE USE according to EN 15804+A2: 1PCS of Sololift2 D-2 pump

Parameter	Unit	A1-A3	A4	A5	B1	B2	B6	B7	C1	C2	C3	C4	D
PERE	MJ	1.16E+02	8.29E-01	1.16E+00	0	0	2.46E+03	0	0	5.29E-02	1.41E+00	4.57E+00	-3.92E+01
PERM	MJ	5.24E+00	0	-1.03E+00	0	0	0	0	0	0	0	-4.22E+00	0
PERT	MJ	1.21E+02	8.29E-01	1.38E-01	0	0	2.46E+03	0	0	5.29E-02	1.41E+00	3.59E-01	-3.92E+01
PENRE	MJ	4.06E+02	9.63E+00	1.41E+00	0	0	3.41E+03	0	0	6.14E-01	1.95E+00	7.52E+01	-1.61E+02
PENRM	MJ	7.85E+01	0	-8.21E-01	0	0	0	0	0	0	0	-7.38E+01	0
PENRT	MJ	4.85E+02	9.63E+00	5.88E-01	0	0	3.41E+03	0	0	6.14E-01	1.95E+00	1.43E+00	-1.61E+02
SM	kg	2.86E+00	0	0	0	0	0	0	0	0	0	0	0
RSF	MJ	0	0	0	0	0	0	0	0	0	0	0	0
NRSF	MJ	0	0	0	0	0	0	0	0	0	0	0	0
FW	m^3	4.39E-01	9.24E-04	4.64E-03	0	0	1.88E+00	0	0	5.89E-05	1.08E-03	1.49E-02	-1.4E-01

PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water

RESULTS OF THE LCA – WASTE CATEGORIES AND OUTPUT FLOWS according to EN 15804+A2: 1PCS of Sololift2 D-2 pump

Parameter	Unit	A1-A3	A4	A5	B1	B2	B6	B7	C1	C2	C3	C4	D
HWD	kg	4.93E-02	0	0	0	0	0	0	0	0	0	0	0

NHWD	kg	1.69E+00	3.69E-10	2.69E-10	0	0	4.92E-06	0	0	2.35E-11	2.82E-09	7.4E-10	-7.18E-04
RWD	kg	1.06E-02	1.57E-03	4.42E-02	0	0	2.81E+00	0	0	1E-04	1.61E-03	5.51E-01	1.07E+00
CRU	kg	0	1.75E-05	2.38E-05	0	0	5.44E-01	0	0	1.12E-06	3.12E-04	6.07E-05	-4.85E-03
MFR	kg	0	0	0	0	0	0	0	0	0	2.3E+00	0	0
MER	kg	0	0	0	0	0	0	0	0	0	0	0	0
EEE	MJ	0	0	2.59E+00	0	0	0	0	0	0	0	1.33E+01	0
EET	MJ	9.31E-01	0	4.68E+00	0	0	0	0	0	0	0	2.35E+01	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:
1PCS of Sololift2 D-2 pump

Parameter	Unit	A1-A3	A4	A5	B1	B2	B6	B7	C1	C2	C3	C4	D
PM	Disease incidence	3.91E-06	2.04E-08	2.53E-09	0	0	2.62E-06	0	0	1.3E-09	1.5E-09	7.5E-09	-1.14E-06
IR	kBq U235 eq	1.29E+00	2.54E-03	3.75E-03	0	0	8.96E+01	0	0	1.62E-04	5.14E-02	9.38E-03	-7.75E-01
ETP-fw	CTUe	2.19E+02	7.15E+00	2.95E-01	0	0	9.87E+02	0	0	4.56E-01	6.38E-01	9.6E-01	-6.38E+01
HTP-c	CTUh	1.1E-06	1.44E-10	1.57E-11	0	0	5.54E-08	0	0	9.21E-12	8.09E-11	6.09E-11	-9.84E-08
HTP-nc	CTUh	5.09E-07	6.48E-09	4.42E-10	0	0	8.5E-07	0	0	4.13E-10	5.14E-09	1.63E-09	-7.75E-08
SQP	SQP	2.51E+02	4.74E+00	2.04E-01	0	0	1.43E+03	0	0	3.02E-01	8.22E-01	3.94E-01	-4.24E+01

PM = Potential incidence of disease due to PM emissions; IR = Potential Human exposure efficiency relative to U235; ETP-fw = Potential comparative Toxic Unit for ecosystems; HTP-c = Potential comparative Toxic Unit for humans (cancerogenic); HTP-nc = Potential comparative Toxic Unit for humans (not cancerogenic); SQP = 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 or radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, 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 as there is limited experience with the indicator.

References

IBU 2021
Institut Bauen und Umwelt e.V.: General Instructions for the EPD programme of Institut Bauen und Umwelt e.V., Version 2.0, Berlin: Institut Bauen und Umwelt e.V., 2021www.ibu-epd.com

REGULATIONS AND DIRECTIVES:

Machinery Directive
DIRECTIVE 2006/42/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 May 2006 on machinery

Low Voltage Directive
DIRECTIVE 2014/35/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits

Ecodesign Directive
DIRECTIVE 2009/125/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products

RoHS Directive
DIRECTIVE 2011/65/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 8 June 20
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RoHS Directive Amendment
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EN 15804:2012+A2:2019, Sustainability of construction works — Environmental Product Declarations — Core rules for the product category of construction products

FURTHER REFERENCES:

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