

# Environmental Product Declaration



## DEVIreg™ InControl

<b>EPD owner</b>	Danfoss A/S
<b>EPD registration number</b>	EPD-IES-0025765:001
<b>Programme</b>	The International EPD® System, <a href="http://www.environdec.com">www.environdec.com</a>
<b>Programme operator</b>	EDP International AB
<b>EPD Type</b>	Cradle to gate with options, modules A4-A5, module B6, modules C1-C4, and module D, EPD of a single product.
<b>Version date</b>	2026-01-30
<b>Validity date</b>	2031-01-30

Environmental Product Declaration in accordance with EN 15804:2012+A2:2019/AC:2021 and ISO 14025:2006

*An EPD may be updated or depublished if conditions change. To find the latest version of the EPD and to confirm its validity, see [www.environdec.com](http://www.environdec.com)*



# General information

<b>EPD author</b>	Danfoss Climate Solutions
<b>EPD type</b>	Cradle to gate with options, modules A4-A5, module B6, modules C1-C4, and module D,
<b>Declared unit</b>	One product over its Reference Service Life
<b>Product included</b>	DEVlreg™ InControl (140F1170)
<b>Manufacturing Location</b>	Thailand
<b>Use Location</b>	Denmark
<b>Application</b>	Thermostat for indoor use. For electric heating as combi, room or floor only up to 16A. Fixed installation fitting Danish frames.
<b>Mass</b>	0,14 kg without packaging 0,21 kg with packaging
<b>Dimensions (H×W×D)</b>	71 x 44 x 21 mm without packaging
<b>Verification</b>	[X] External [ ] Internal [ ] None
<b>Produced to</b>	PCR 2019:14 version 2.0.1
<b>External verifier</b>	Bureau Veritas Certification Sweden, accredited by SWEDAC accr. No. 1236

## Programme information

<b>Programme</b>	The International EPD® System
<b>Address</b>	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden
<b>E-mail</b>	support@environdec.com



# General information

## Product Category Rules (PCR)

CEN standard EN 15804 serves as the Core Product Category Rules (PCR)

Product Category Rules (PCR): Construction products PCR 2019:14 v. 2.0.1, CPC code: 463

PCR review was conducted by: The Technical Committee of the International EPD® System. Rob Rouwette (chair), Noa Meron (co-chair)

## Verification

External and independent ('third-party') verification of the declaration and data, according to ISO 14025:2006, via:

✓ EPD verification through an EPD process certification without a pre-verified LCA/EPD tool

Third-party verifier: Odyssefs Papagiannidis, EPD Lead verifier under Bureau Veritas Certification Sweden

Accredited by: SWEDAC with accreditation number 1236

\*EPD Process Certification involves an accredited certification body certifying and periodically auditing the EPD process and conducting external and independent verification of EPDs that are regularly published. More information can be found in the General Programme Instructions on [www.envrondec.com](http://www.envrondec.com). International EPD System

Procedure for follow-up of data during EPD validity involves third-party verifier:  Yes  No

## Ownership and limitations on use of the EPD

EPDs within the same product category but published in different EPD programmes, may not be comparable. For two EPDs to be comparable, they shall be based on the same PCR (including the same first-digit 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 identical scope in terms of included life-cycle stages (unless the excluded life-cycle stage is demonstrated to be insignificant); apply identical impact assessment methods (including the same version of characterisation factors); and be valid at the time of comparison

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





# Company Information

## EPD owner information

EPD owner	Danfoss A/S
Address	Nordborgvej 81 6430 Nordborg Denmark
E-mail	epd_danfoss@danfoss.com

Danfoss is empowering its customers to make decisions in favor of decarbonization by providing an EPD on its products

By providing transparency in our products, Environmental Product Declarations support data driven decision-making for customers wishing to drive the green transition. Compliant with wide-reaching regulations, EPDs support the credibility of our products footprint through verification.

### Find more on our annual report:

[Danfoss annual report 2024](#) | [Download the latest annual report](#) | [Danfoss](#)

# Product information

The reference product used for this EPD is representative of **DEVIreg™ InControl**. The production location is the external vendor's plant in Bangkok, Thailand. See more information about the reference product and any substances from the Candidate List of Substances of Very High Concern for Authorisation of the European Union's REACH Regulation (EC 1907/2006) above the threshold of 0.1% weight/weight at [Danfoss Product Store](#).

The DEVIreg™ InControl is an intuitive programmable timer thermostat, with both Bluetooth and Zigbee connectivity option for combined, room or floor temperature.

The thermostat has a packaging that is the [World's first Cradle to Cradle Gold-certified packaging for DEVI by Danfoss – KLS PurePrint](#). Amongst the features, the packaging:

- Does not contain harmful, banned chemicals;
- Is recyclable, biodegradable and compostable;
- Is easy to disassemble and all components can be reused;

## Product information

UNCPC code

463

This Environmental Product Declaration (EPD) follows the PCR 2.0.1 Construction products. These rules provide a consistent framework for calculating and reporting the environmental performance of Danfoss' product and is aligned with relevant standards, particularly ISO 14025:2006, EN 15804+A2: 2019 and EN 50598-3:2015.

This document has been produced by Danfoss A/S and an external third-party verification is conducted.



Figure 1.1: The exploded illustration of the thermostat with front cover and electronics including power supply unit



Figure 1.2: Picture of the packaging

# Content declaration

Table 1: Product composition

Material	Mass (kg)	%	Post-consumer scrap (%)
<b>Plastics</b>	<b>2,7E-02</b>	<b>18 %</b>	<b>0%</b>
Polycarbonate, mix	2,7E-02	18 %	0%
<b>Electrical/electronic</b>	<b>1,2E-01</b>	<b>82 %</b>	<b>0%</b>
Cables	3,9E-02	26%	0%
PCBA	8,2E-02	56%	0%
<b>Product Total</b>	<b>1,4E-01</b>	<b>100%</b>	<b>0%</b>

Table 2: Packaging composition

Material	Mass (kg)	Mass versus product (%)
Paper and cardboard	6,5E-02	45 %
<b>Packaging Total</b>	<b>6,5E-02</b>	<b>45 %</b>
<b>Total (Product + Packaging)</b>	<b>2,1E-01</b>	

Figure 2: Product material composition overview

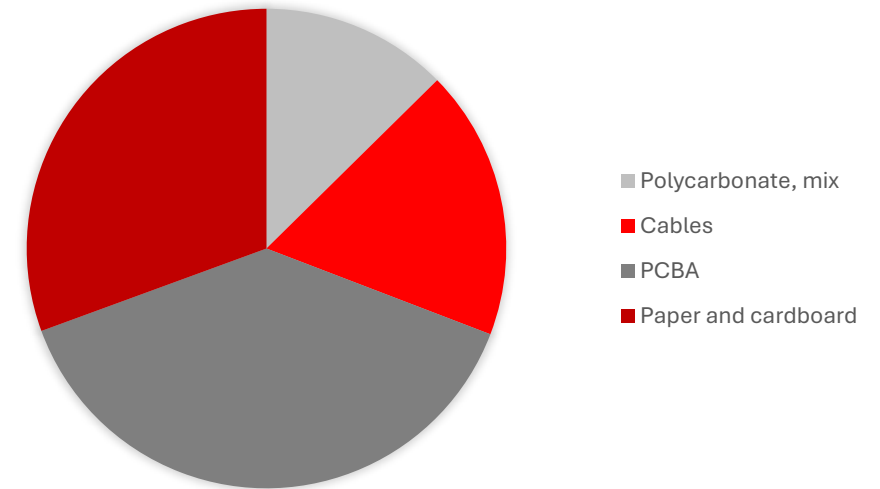


Table 3: Biogenic and recycled content overview

Biogenic content in the product [kg]	/
Biogenic content in the packaging [kg]	2,80E-02

# LCA Information

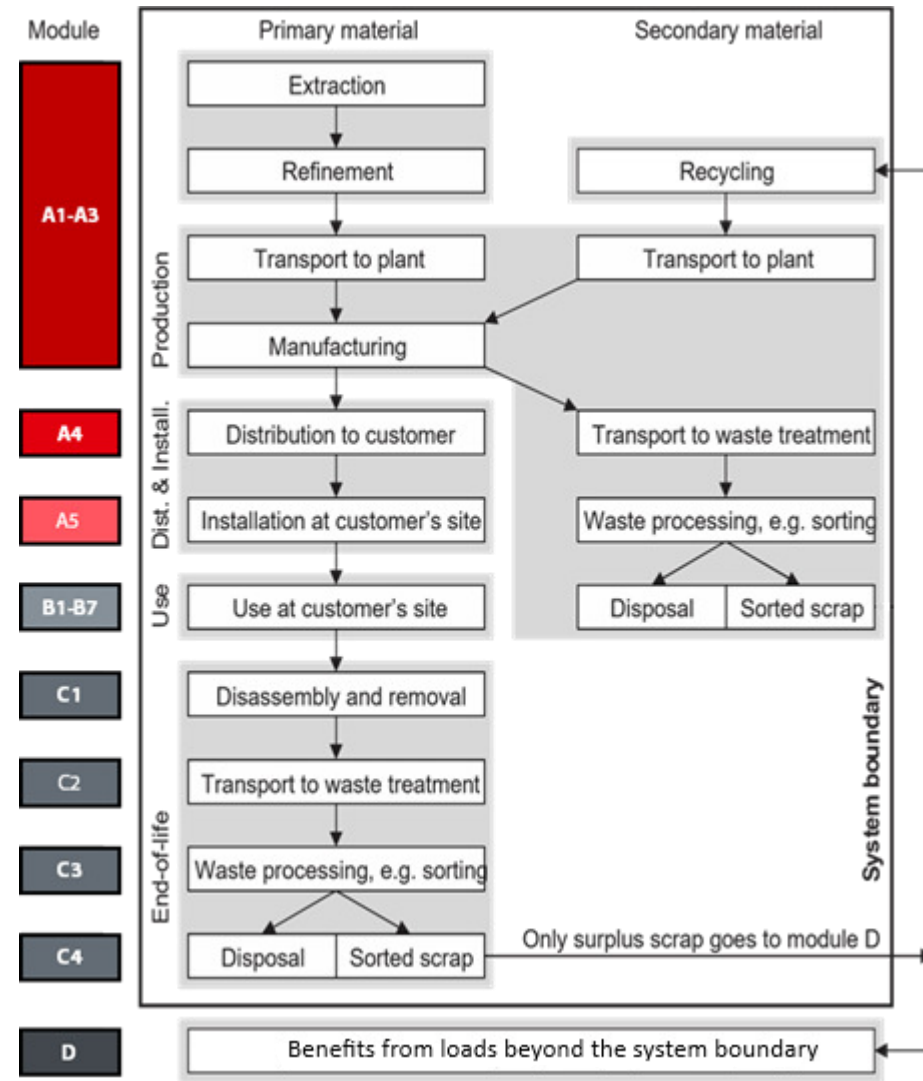
An EPD is a document used to communicate transparently, the quantified environmental impacts of a product over its lifecycle stages. This quantification is done by performing a Life Cycle Assessment (LCA) in line with a consistent set of rules known as a PCR (Product Category Rules).

This EPD is of the type 'cradle-to-gate with options' and includes all relevant modules: production (A1-A3), shipping (A4) and installation (A5); operational energy use (B6); deconstruction (C1), waste collection and transport (C2), treatment (C3) and disposal (C4). It also includes potential net benefits to future products from recycling or reusing post-consumer waste (D). The codes in brackets are the module labels from EN 15804+A2. Modules concerning use, maintenance, repair, replacement, refurbishment (B1-B5) and operational water use (B7) are excluded, following the cut-off rules from EN 15804.

Table 4: Module of the product's life cycle included in the EPD

	Production stage		Installation		Use stage					End-of-life-stage				Benefits			
	Raw materials	Transport	Manufacture	Transport	Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Optional energy use	Optional water use	De-installation	Transport	Waste processing	Disposal	Benefits and loads outside system boundaries
Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Module declared	X	X	X	X	X	ND	ND	ND	ND	ND	X	ND	X	X	X	X	X
Geography	Global	Global	CN	DK	DK	-	-	-	-	-	DK	-	DK	DK	DK	DK	DK
Share of Primary data	19 %			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation products	0 %			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation sites	0 %			-	-	-	-	-	-	-	-	-	-	-	-	-	-

Figure 3: Modular structure used in this EPD (EN15804+A2)



# LCA Information

## Product and packaging (A1-A3)

Final manufacturing occurs in Bangkok, Thailand at external vendor. The product is shipped with the packaging to Nordborg, Denmark, where the documentation added to it before distribution to customers. Where waste generated on-site is recyclable, it is separated and recycled. The product is shipped in the packaging. All packaging materials can be safely recycled or incinerated if appropriate local facilities are available. The on-site data was gathered for 2025. The site uses China electricity grid mix with GWPT of 7,53E-01 kgCO<sub>2</sub>eq/kWh.

## Shipping and installation (A4-A5)

Distribution is assumed to occur to customers within Denmark. Transportation at 150 km distance by truck is assumed between the factory and the final customer. This assumption was made as an average distance within Denmark.

Module A5 includes disposal of packaging materials only. The product is assumed to be installed by hand. Energy use in handheld tools during installation is not included as it falls under the cut-off criteria.

Table 5: Overview of LCA study

Assumptions	
<b>Reference service life</b>	10 years
<b>Intended market</b>	Denmark. The baseline scenario involves the distribution, installation, and end-of-life in Denmark.
<b>Use-phase</b>	One average factor has been applied, representing a conservative scenario as the grid will decarbonize over time
<b>Proxy &amp; Secondary data</b>	No supplier specific data was used. Datasets from Sphera LCA software were used for this LCA.
<b>Data</b>	LCA for Experts (Sphera) database version 2025.2.
<b>Data quality</b>	A data quality assessment that complies with EN 15941 and EN15804 annex E, was performed and reported in the LCA report per dataset. Data quality of the selected datasets is generally assessed as good and very good in terms of geographical, time and technology representativeness and applicability. The data was collected for a period from January to December 2024.
<b>Allocation and cut-off criteria</b>	The allocation is done in accordance with EN 15804+A2. All major raw materials and essential energy are included. All hazardous materials and substances are considered in the inventory. Data sets within the system boundary are complete and fulfil the criteria for the exclusion of inputs and output criteria.

# LCA Information

Table 6: Share of primary data, of GWP-GHG in A1-A3

Process	Source type	Source	Reference year	Data category	Primary data share (%)
Generation of electricity used in manufacturing of product	Database	Sphera my professional database 2025.2	2024	Primary data	15%
Transport of raw materials to manufacturing site	Database	Sphera my professional database 2025.2	2024	Primary data	4%
Other processes	Database	Sphera my professional database 2025.2	2024	Secondary	0%
<b>Total share of primary data, of GWP-GHG results for A1-A3</b>					<b>19%</b>

The share of primary data is calculated based on GWP-GHG results. It is a simplified indicator for data quality that supports the use of more primary data, to increase the representativeness of and comparability between EPDs. Note that the indicator does not capture all relevant aspects of data quality and is not comparable across product categories.

# LCA Information

## Use phase (B1-B7)

The electricity consumption by the thermostats during the use phase (B6) is regulated by the *Eco-design Lot 20* directive. The use scenario considered here is an average scenario to represent a range of applications, depending on external and environmental conditions. The estimated electricity consumption is provided by product experts at Danfoss Climate Solutions.

The energy consumption is calculated considering 10 years of Reference Service Life in stand-alone mode (Bluetooth). The daily operation during the year is estimated to be around 100 days. The thermostat is in active mode on average 3 hours per day, the majority of the operation is in standby mode with an average of 19 hours per day, and the rest of the 2 hours the thermostat is in idle mode.

Power consumption was measured using a Rohde & Schwarz NPA 701. The device is connected directly to the main power input and provides accurate readings of power consumption. The measurements were done by a Danfoss electrical engineer.

The scope of this study is targeted for the Danish market; therefore, the product under study is sold and used in Denmark. Sales also occur outside of Denmark, which is important to note considering the impact the electricity grid mix can have on the emissions in the use phase. The impact in other countries can differ, depending on the country's share of renewables and fossil energy sources in its local electricity grid.

The major limitation of the impact calculations for the use phase is that the electricity grid mix in use is assumed to remain at the same carbon intensity over time. Following the plans for the decarbonization of the grid across EU, the environmental impacts are expected to decrease over time within the course of the next 10 years. However, as decarbonization will occur in the future and as the pace of decarbonization is uncertain, the use of the emission intensity of today's grid should prove to be a "worst-case", conservative assumption.

For the purpose of this assessment, use within Denmark is assumed and an average Denmark CO<sub>2</sub> factor from LCA for Experts database (2025.2) is applied. Sales also occur outside of Denmark, which is important to note considering the impact the electricity grid mix can have on the emissions in the use phase. This factor will differ, depending on the country and share of renewables and fossil energy sources in the corresponding local electricity grid.

# LCA Information

## End-of-life (C1-C4)

The standard end-of-life procedure from EN 50598-3 has been applied. In line with EN 15804+A2, only the 'net scrap' (i.e., the leftover recyclable materials remaining after inputs of recycled content required in the manufacturing phase are first satisfied) is used to calculate the benefits and loads beyond the system boundary (Module D). For this EPD the 100% recycling scenario has been applied, due to being the most conservative in comparison to 100% landfill (based on sensitivity analysis). This is due to the composition of the product, that results in lower GWPT from landfill in comparison to recycling (processing of waste).

## Benefits and loads beyond the system boundary (D)

Module D considers the net benefit of recycling of materials in the product and packaging, taking account of losses in the recycling process and the recycled material used in the production of the product. Module D covers the end-of-life scenario, as described above.

Table 7: Characterization methods of environmental performance

Environmental impact indicators	Characterization methods
<b>GWPT</b>	Carbon footprint-total, GWP100, EN 15804. Version: August 2021
<b>GWPF</b>	Carbon footprint-fossil, GWP100, EN 15804. Version: August 2021
<b>GWPB</b>	Carbon footprint-biogenic, GWP100, EN 15804. Version: August 2021
<b>GWPLULUC</b>	Carbon footprint-land use and land use change, GWP100, EN 15804. Version: August 2021
<b>ODP</b>	Depletion potential of the stratospheric ozone layer, ODP, EN 15804. Version: August 2021
<b>AP</b>	Acidification potential, AP, CML 2001 non baseline (fate not included). Version: January 2016
<b>EPfw</b>	Eutrophication potential- aquatic freshwater, Ep, aquatic marine, EUTREND model EN 15804. Version: August 2021
<b>Epmar</b>	Eutrophication potential- aquatic marine, EP, aquatic marine, EUTREND model EN 15804. Version: August 2021
<b>Epter</b>	Eutrophication potential- terrestrial, EP, aquatic marine, EUTREND model EN 15804. Version: August 2021
<b>POCP</b>	Photochemical ozone creation potential, POPCP, LOTOS-EUROS as applied in ReCiPe, EN15804. Version: August 2021
<b>ADPE</b>	Depletion of abiotic resources – minerals and metals, EPD minerals & metals, EN 15804, Version: August 2021.
<b>ADPF</b>	Depletion of abiotic resources – fossil fuels, EPD fossil resources, EN 15804, Version: August 2021.
<b>WDP</b>	Water deprivation potential (deprivation-weighted water consumption), Water deprivation (Available water remaining (AWARE), EN 15804

# Environmental performance

This section presents the environmental performance of one-unit DEVIreg™ InControl. Figure 4 presents the environmental impact of the DEVIreg™ InControl across a number of environmental impact categories (following EN 15804+A2:2019) per life cycle stage, over its full 10 years of life cycle, including Global Warming Potential.

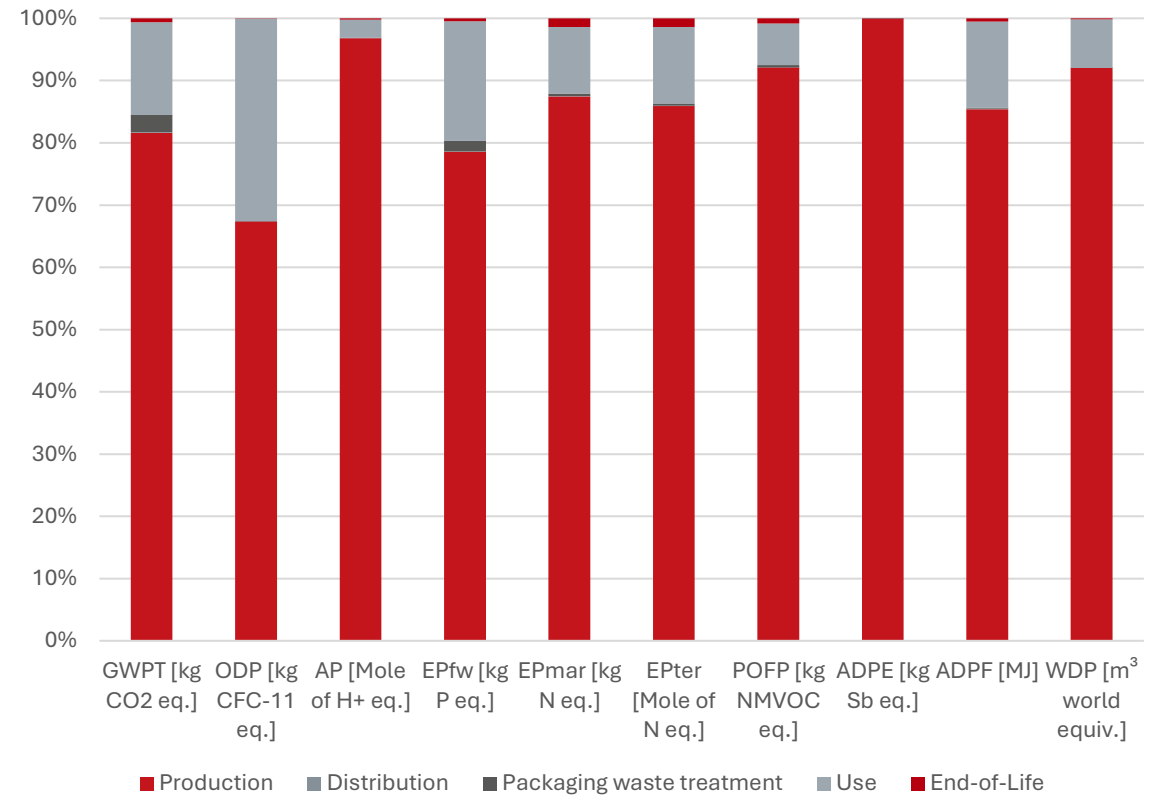
The environmental performance results are relative expressions and do not predict impacts on category endpoints, the exceeding of thresholds, safety margins or risks. The results of the end-of-life stage (module C) should be considered when using the results of the production stage (modules A1-A3).

Table 8: Environmental impact indicators results per declared unit

Acronym	Indicator
<b>GWPT</b>	Carbon footprint (Global Warming Potential) – total
<b>ODP</b>	Depletion potential of the stratospheric ozone layer
<b>AP</b>	Acidification potential
<b>EPfw</b>	Eutrophication potential – aquatic freshwater
<b>EPmar</b>	Eutrophication potential – aquatic marine
<b>EPter</b>	Eutrophication potential – terrestrial
<b>POFP</b>	Summer smog (photochemical ozone formation potential)
<b>ADPE*</b>	Depletion of abiotic resources – minerals and metals
<b>ADPF*</b>	Depletion of abiotic resources – fossil fuels
<b>WDP*</b>	Water deprivation potential (deprivation-weighted water consumption)

**\*Disclaimer for ADPE, ADPF, WDP:** The results of these environmental impact indicators shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.

Figure 4: Breakdown of environmental impacts by life cycle stages with Module D is not included. (See Table 6 for descriptions of environmental impact indicators)



# Environmental performance

Of one-unit DEVreg™ InControl

Production	Distribution	Packaging waste treatment	Use	End-of-Life				Benefits & Loads
A1-A3	A4	A5	B6	C1	C2	C3	C4	D
Manufacture of the product from 'cradle-to-gate'	Transport of the product to the customer	Installation of the product and disposal of used packaging	Use of the product over its lifetime e.g. 10 years	Deinstallation of the product from the site	Transport of the product to waste treatment	Processing waste for recycling	Disposal of waste that cannot be recycled (through landfill and incineration)	Potential benefits and loads beyond the system boundary due to reuse, recycling, and energy recovery

Impact category	Environmental Impact indicators	Unit									
Global Warming Potential	<b>Total (GWPT)</b>	kg CO <sub>2</sub> eq.	3,1E+00	2,7E-03	1,1E-01	3,9E-01	0,0E+00	1,5E-03	2,7E-02	0,0E+00	-2,8E-01
	<b>Fossil (GWPF)</b>	kg CO <sub>2</sub> eq.	3,2E+00	2,7E-03	6,8E-03	3,8E-01	0,0E+00	1,5E-03	2,7E-02	0,0E+00	-2,8E-01
	<b>Biogenic (GWPB)</b>	kg CO <sub>2</sub> eq.	-1,0E-01	0,0E+00	1,0E-01	1,1E-02	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00
	<b>Land use &amp; change (GWPLULUC)</b>	kg CO <sub>2</sub> eq.	8,1E-03	2,8E-05	3,7E-06	7,4E-03	0,0E+00	3,5E-08	1,8E-04	0,0E+00	-1,2E-04
	<b>Carbon footprint – greenhouse gases (GWP-GHG)***</b>	kg CO <sub>2</sub> eq.	3,2E+00	2,7E-03	6,8E-03	3,8E-01	0,0E+00	1,5E-03	2,7E-02	0,0E+00	-2,8E-01
Ozone Depletion Potential	<b>ODP</b>	kg CFC-11 eq.	3,3E-11	4,5E-16	1,4E-15	1,1E-11	0,0E+00	1,7E-19	2,5E-14	0,0E+00	-2,3E-12
Acidification of soils and water	<b>AP</b>	Mole of H <sup>+</sup> eq.	5,5E-02	5,2E-06	4,0E-05	1,1E-03	0,0E+00	2,1E-06	1,3E-04	0,0E+00	-9,4E-03
Eutrophication	<b>Freshwater (EPfw)</b>	kg P eq.	1,2E-05	7,3E-09	1,3E-08	2,1E-06	0,0E+00	3,2E-10	5,0E-08	0,0E+00	-8,1E-08
	<b>Marine (EPmar)</b>	kg N eq.	3,6E-03	2,2E-06	2,0E-05	3,0E-04	0,0E+00	8,0E-07	6,1E-05	0,0E+00	-4,4E-04
	<b>Terrestrial (EPter)</b>	Mole of N eq.	3,9E-02	2,4E-05	2,2E-04	3,8E-03	0,0E+00	9,0E-06	6,6E-04	0,0E+00	-4,8E-03
Photochemical ozone formation	<b>POFP (POFP)</b>	kg NMVOC eq.	1,3E-02	4,7E-06	3,7E-05	6,5E-04	0,0E+00	1,9E-06	1,2E-04	0,0E+00	-1,7E-03
Depletion of abiotic resources	<b>Minerals, metals (ADPE)</b>	kg Sb eq.	3,8E-04	1,8E-10	1,1E-09	1,8E-07	0,0E+00	5,2E-11	1,5E-09	0,0E+00	-9,5E-05
	<b>Fossil fuels (ADPF)</b>	MJ	4,4E+01	3,5E-02	9,0E-02	4,9E+00	0,0E+00	2,1E-02	2,6E-01	0,0E+00	-3,8E+00
Water deprivation	<b>WDP</b>	m <sup>3</sup> world equiv.	7,7E-01	1,3E-05	9,4E-05	4,5E-02	0,0E+00	2,5E-06	1,9E-03	0,0E+00	-5,4E-02

Table 9: Environmental impact indicators results per declared unit

# Environmental performance

Of one-unit DEVIreg™ InControl

Resource Use indicator	Unit	Production	Distribution	Packaging waste treatment	Use	End-of-Life				Benefits & Loads
		A1-A3	A4	A5	B6	C1	C2	C3	C4	D
<b>Use of renewable primary energy excluding renewable primary energy resources used as raw materials (PERE)</b>	MJ	1,3E+01	2,6E-03	3,7E-03	1,6E+01	0,0E+00	7,0E-05	4,6E-02	0,0E+00	-3,7E-01
<b>Use of renewable primary energy resources used as raw materials (PERM)</b>	MJ	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00
<b>Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials) (PERT)</b>	MJ	1,3E+01	2,6E-03	3,7E-03	1,6E+01	0,0E+00	7,0E-05	4,6E-02	0,0E+00	-3,7E-01
<b>Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials (PENRE)</b>	MJ	4,3E+01	3,5E-02	9,0E-02	4,9E+00	0,0E+00	2,1E-02	2,6E-01	0,0E+00	-3,8E+00
<b>Use of non-renewable primary energy resources used as raw materials (PENRM)</b>	MJ	1,2E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00
<b>Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials) (PENRT)</b>	MJ	4,4E+01	3,5E-02	9,0E-02	4,9E+00	0,0E+00	2,1E-02	2,6E-01	0,0E+00	-3,8E+00
<b>Use of secondary material (SM)</b>	kg	4,3E-02	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00
<b>Use of renewable secondary fuels (RSF)</b>	MJ	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00
<b>Use of non-renewable secondary fuels (NRSF)</b>	MJ	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00
<b>Net use of fresh water (FW)</b>	m <sup>3</sup>	2,4E-02	1,3E-06	3,9E-06	5,7E-03	0,0E+00	1,1E-07	5,9E-05	0,0E+00	-1,6E-03
<b>Waste categories and output flows indicators</b>	<b>Unit</b>									
<b>Hazardous waste disposed (HWD)</b>	kg	3,8E-08	1,4E-12	1,5E-11	3,5E-08	0,0E+00	1,5E-13	7,0E-11	0,0E+00	1,8E-09
<b>Non-hazardous waste disposed (NHWD)</b>	kg	2,3E-01	4,9E-06	9,1E-06	2,2E-02	0,0E+00	2,1E-06	1,3E-01	0,0E+00	-3,4E-02
<b>Radioactive waste disposed (RWD)</b>	kg	1,2E-03	6,6E-08	2,7E-07	4,9E-04	0,0E+00	2,3E-08	1,7E-06	0,0E+00	-3,3E-05
<b>Components for reuse (CRU)</b>	kg	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00
<b>Materials for recycling (MFR)</b>	kg	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	1,4E-01	0,0E+00	0,0E+00
<b>Materials for energy recovery (MER)</b>	kg	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00
<b>Exported energy (electrical) (EEE)</b>	MJ	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00
<b>Exported energy (thermal) (EET)</b>	MJ	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00

Table 10: Resource use, waste categories, and output flows result per declared unit.

# Environmental performance

Of one-unit DEVIreg™ InControl

Additional indicators	Unit	Production	Distribution	Packaging waste treatment	Use	End-of-Life				Benefits & Loads
		A1-A3	A4	A5	B6	C1	C2	C3	C4	D
Potential incidence of disease due to particulate matter emissions (PM)	Disease incidences	4,8E-07	4,4E-11	2,4E-10	9,2E-09	0,0E+00	1,2E-11	9,6E-10	0,0E+00	-7,7E-08
Potential human exposure efficiency relative to U235 (IRP)**	kBq U235 eq.	1,3E-01	9,5E-06	2,3E-05	5,6E-02	0,0E+00	3,2E-06	2,1E-04	0,0E+00	-1,8E-03
Potential Comparative Toxic Unit for ecosystems (fresh water) (ETPfw)*	[CTUe]	2,1E+01	4,5E-02	6,4E-02	1,0E+00	0,0E+00	1,6E-02	3,0E-01	0,0E+00	-1,6E+00
Potential Comparative Toxic Unit for humans (cancer) (HTPc)*	CTUh	1,1E-09	6,1E-13	1,0E-12	3,1E-10	0,0E+00	2,9E-13	5,1E-12	0,0E+00	-1,3E-10
Potential Comparative Toxic Unit for humans (non-cancer) (HTPnc)*	CTUh	4,6E-08	3,4E-11	3,3E-11	6,7E-09	0,0E+00	9,3E-12	2,6E-10	0,0E+00	-4,6E-09
Potential soil quality index (SQP)*	Dimensionless	1,1E+01	1,5E-02	1,3E-02	1,3E+01	0,0E+00	5,4E-05	1,2E-01	0,0E+00	-3,3E-01

Table 11: Additional indicators\* results per declared unit.

\***Disclaimer for ADPE, ADPF, WDP, ETPfw, HTPc, HTPnc, SQP:** The results of these environmental impact indicators shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.

\*\***Disclaimer for ionizing radiation:** 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

\*\*\***GWP-GHG** environmental indicator is calculated without the biogenic global warming potential (GWPB), the formula is  $GWP-GHG = GWP + GWPLULUC$



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# Abbreviations

## Abbreviation

EPD

LCA

EoL

GHG

GWP

ISO

PCR

## Definition

Environmental Product Declaration

Life Cycle Assessment

End-of-Life

Greenhouse Gas

Global Warming Potential

International Organization for  
Standardization

Product Category Rule



SUMMARY



INTRO



PRODUCT



LCA



RESULTS



ADDITIONAL INFORMATION



REFERENCES





# Version history

**Original version of the EPD, 2026-01-30**

