

Environmental product declaration

in accordance with ISO 14025 and EN 15804+A2

OFFECCT Circulus 2.0



OFFECCT

Flokk

Owner of the declaration:

Flokk AS

Product:

OFFECCT Circulus 2.0

Declared unit:

1 pcs

This declaration is based on Product Category Rules:

CEN Standard EN 15804:2012+A2:2019 serves as core PCR

NPCR 026:2024 Part B for Furniture

Program operator:

EPD-Global

Declaration number:

NEPD-17449-21831

Issue date:

25.08.2026

Valid to:

25.08.2031

EPD software:

LCAno EPD generator ID: 1721113

General information

Product

OFFECCT Circulus 2.0

Program operator:

EPD-Global
Post Box 5250 Majorstuen, 0303 Oslo, Norway
Phone: +47 977 22 020
web: www.epd-global.com

Declaration number:

NEPD-17449-21831

This declaration is based on Product Category Rules:

CEN Standard EN 15804:2012+A2:2019 serves as core PCR
NPCR 026:2024 Part B for Furniture

Statement of liability:

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

Declared unit:

1 pcs OFFECCT Circulus 2.0

Declared unit (cradle to gate) with option:

A1-A3, A4, A5, B2, B3, B4, C1, C2, C3, C4, D

Functional unit:

1 pc OFFECCT Circulus 2-seater: 1-seater module with low backrest, upholstered in Xtreme/Camira and Ottoman 1-seater module, without upholstery, with Edge plywood tabletop — including packaging.

General information on verification of EPD from EPD tools:

Independent verification of data, other environmental information and the declaration according to ISO 14025:2010, § 8.1.3 and § 8.1.4. Verification of each EPD is made according to EPD-Global's guidelines for verification and approval requiring that tools are i) integrated into the company's environmental management system, ii) the procedures for use of the EPD tool are approved by EPD-Global, and iii) the process is reviewed annually by an independent third party verifier. See Appendix G of EPD-Global's General Programme Instructions for further information on EPD tools

Verification of EPD tool:

Independent third party verification of the EPD tool, background data and test-EPD in accordance with EPD-Global's procedures and guidelines for verification and approval of EPD tools.

Third party verifier:

Elisabet Amat, GREENIZE projects

(no signature required)

Owner of the declaration:

Flokk AS
Contact person: Atle Thiis-Messel
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e-mail: atle.messel@flokk.com

Manufacturer:

Flokk AS
Drammensveien 145,
0277 Oslo, Norway

Place of production:

Flokk - Turek
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62-700 Turek, Poland

Management system:

ISO 14001, ISO 9001.

Organisation no:

No 928 902 749

Issue date:

25.08.2026

Valid to:

25.08.2031

Year of study:

2025

Comparability:

EPDs of construction products may not be comparable if they do not comply with EN 15804 and are not viewed in a building context.

Development and verification of EPD:

The declaration is created using EPD generator v2025.09, developed by LCA.no. The EPD tool is integrated in the company's management system, and has been approved by EPD-Global.

Developer of EPD: Damian Bakowski

Reviewer of company-specific input data and EPD: Monika Kuczynska

Approved:



Håkon Hauan, CEO EPD-Global

Product

Product description:

Circulus 2.0 collection expands the Circulus modular sofa system with new Corner seating, Ottoman and table options, offering greater flexibility in creating adaptable configurations for a wide range of spaces. The new modules complement the existing Circulus collection and can be used to create seating, informal meeting, collaboration and touchdown areas in workplace, hospitality and public environments.

Product specification

The model analysed in detail in this declaration is the Circulus 2-seater, consisting of a 1-seater module with a low backrest, upholstered in Xtreme by Camira, and a non-upholstered 1-seater Ottoman module with an Edge plywood tabletop, including packaging. Key environmental indicators for the models and options expanding the OFFECCT Circulus 2.0 collection are presented in the tables on pages 11–12 of this declaration.

Materials	kg	%	Recycled share in material (kg)	Recycled share in material (%)
Chemical	0.04	0.08987	0.001433	3.58
Metal - Aluminium	18.62	41.84	6.97	37.41
Metal - Brass	0.012	0.02696	0.003096	25.80
Metal - Steel	16.51	37.10	3.21	19.43
Plastic - Polyamide	0.037	0.08313	0.00	0.00
Plastic - Polypropylene (PP)	0.357	0.8021	0.00	0.00
Plastic - Polyurethane (PUR)	2.00	4.49	0.00	0.00
Powder coating	0.874	1.96	0.00	0.00
Textile - Felt	0.02	0.04494	0.001296	6.48
Textile - Polyester	1.69	3.80	1.34	79.61
Wood - Plywood	3.87	8.69	0.01141	0.2949
Wood - Solid ash	0.478	1.07	0.00	0.00
Total	44.51	100.00	11.54	

Packaging	kg	%	Recycled share in material (kg)	Recycled share in material (%)
Packaging - Cardboard	3.86	30.48	0.00	0.00
Packaging - Paper	0.0052	0.04104	0.00	0.00
Packaging - Plastic	0.405	3.20	0.0001134	0.02801
Packaging - Plastic straps	0.0405	0.3196	0.00	0.00
Packaging - Wood	2.80	22.10	0.00	0.00
Recycled cardboard	5.56	43.86	5.56	100.00
Total incl. packaging	57.18	100.00	17.09	

Technical data:

Circulus 2.0 includes Corner seat modules with high or low upholstered backrests, as well as corner modules without backrests in upholstered and non-upholstered versions. The range also includes a non-upholstered Ottoman module. The new Corner seat and Ottoman modules can be complemented with Plywood Flat and Plywood Edge tabletop options. An additional Plywood Edge armrest option has also been introduced.

Market:

Worldwide.

A4 stage transportation from factory to market, is assumed to be 1.000 km.

Reference service life, product

15 years (warranty 5 years)

Reference service life, building

N/A

LCA: Calculation rules

Declared unit:

1 pcs OFFECCT Circulus 2.0

Cut-off criteria:

All major raw materials and all the essential energy are included. The production processes for raw materials and energy flows with very small amounts (less than 1%) may not be included. These cut-off criteria do not apply for hazardous materials and substances.

Allocation:

The allocation is made in accordance with the provisions of EN 15804. Incoming energy and water and waste production in-house is allocated equally among all products through mass allocation. Effects of primary production of recycled materials is allocated to the main product in which the material was used. The recycling process and transportation of the material is allocated to this analysis.

Data quality:

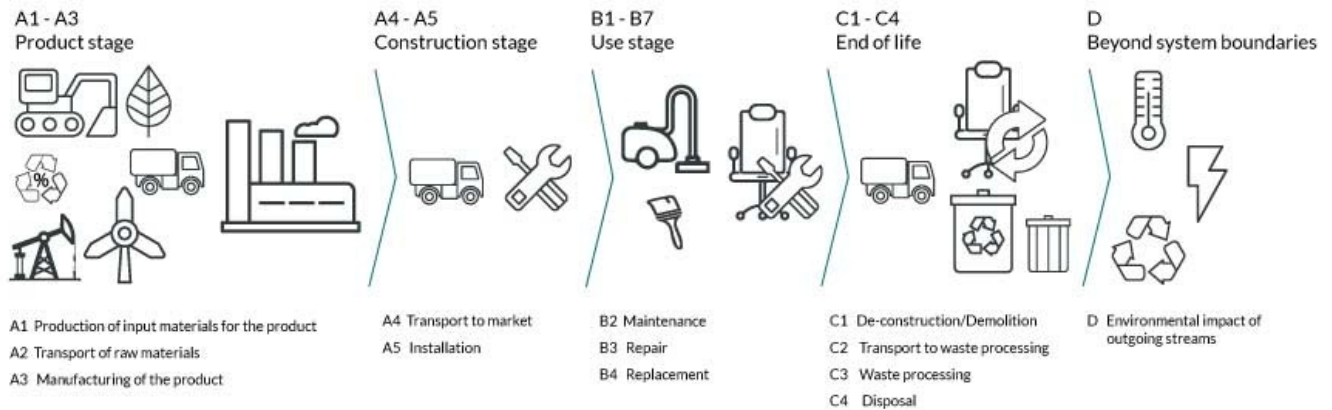
Specific data for the product composition are provided by the manufacturer. They represent the production of the declared product and were collected for EPD development in the year of study. Background data is based on registered EPDs according to EN 15804, Ostfold Research databases, ecoinvent and other LCA databases. The data quality of the raw materials in A1 is presented in the table below.

Materials	Source	Data quality	Year
Chemical	ecoinvent 3.10.1	Database	2023
Metal - Aluminium	ecoinvent 3.10.1	Database	2023
Metal - Aluminium	Modified ecoinvent 3.10.1	Database	2023
Metal - Brass	ecoinvent 3.10.1	Database	2023
Metal - Steel	ecoinvent 3.10.1	Database	2023
Metal - Steel	Modified ecoinvent 3.10.1	Database	2023
Metal - Steel	Modified ecoinvent 3.6	Database	2019
Packaging - Cardboard	Modified ecoinvent 3.10.1	Database	2023
Packaging - Paper	ecoinvent 3.10.1	Database	2023
Packaging - Plastic	ecoinvent 3.10.1	Database	2023
Packaging - Plastic	Modified ecoinvent 3.10.1	Database	2023
Packaging - Plastic straps	ecoinvent 3.10.1	Database	2023
Packaging - Wood	ecoinvent 3.10.1	Database	2023
Plastic - Polyamide	Modified ecoinvent 3.10.1	Database	2023
Plastic - Polypropylene (PP)	Modified ecoinvent 3.10.1	Database	2023
Plastic - Polyurethane (PUR)	Modified ecoinvent 3.10.1	Database	2023
Powder coating	ecoinvent 3.10.1	Database	2023
Recycled cardboard	Modified ecoinvent 3.10.1	Database	2023
Textile - Felt	ecoinvent 3.10.1	Database	2023
Textile - Polyester	ecoinvent 3.10.1	Database	2023
Wood - Plywood	ecoinvent 3.10.1	Database	2023
Wood - Solid ash	ecoinvent 3.10.1	Database	2023

System boundaries (X=included, MND=module not declared, MNR=module not relevant)

Product stage			Construction installation stage		Use stage							End of life stage				Beyond the system boundaries
Raw materials	Transport	Manufacturing	Transport	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	MND	X	X	X	MND	MND	MND	X	X	X	X	X

System boundary:



Additional technical information:

LCA: Scenarios and additional technical information

The following information describe the scenarios in the different modules of the EPD.

Transport from production place to user (A4)	Capacity utilisation (incl. return) %	Distance (km)	Fuel/Energy Consumption	Unit	Value (Liter/tonne)
Truck, over 32 tonnes, EURO 5 (km)	55.0 %	1000.00	0.023	l/tkm	23.00
Assembly (A5)	Unit	Value			
Waste, packaging, plastic film (LDPE), to average treatment - A5 (kg)	kg	0.40			
Waste, Wood, medium density fibreboard (MDF) average treatment (kg) - A5, inkl. 85 km transp.	kg	2.80			
Waste, packaging, PET straps, to average treatment - A5 (kg)	kg	0.0405			
Waste, packaging, paper printed, to average treatment (kg)	kg	0.0052			
Waste, packaging, corrugated board box, 0 % recycled, to average treatment (kg)	kg	3.86			
Waste, packaging, plastic tape, to average treatment (kg)	kg	0.005			
Waste, packaging, cardboard, 100 % recycled, to average treatment (kg)	kg	5.56			
Maintenance (B2)	Unit	Value			
Electricity, European average (kWh)	kWh	10.53			
Electricity, World average (kWh)	kWh	1.17			
Water, tap water (m3)	m3	0.78			
Repair (B3)	Unit	Value			
Electricity, European average (kWh)	kWh	0.495			
Electricity, World average (kWh)	kWh	0.055			
Transport to waste processing (C2)	Capacity utilisation (incl. return) %	Distance (km)	Fuel/Energy Consumption	Unit	Value (Liter/tonne)
Truck, 16-32 tonnes, EURO 5 (km)	38.8 %	85.00	0.045	l/tkm	3.83
Waste processing (C3)	Unit	Value			
Waste treatment per kg Wood, incineration with fly ash extraction (kg)	kg	4.35			
Waste treatment per kg Textile, incineration with fly ash extraction (kg)	kg	1.75			
Waste treatment per kg Polypropylene (PP), incineration with fly ash extraction - C3 (kg)	kg	0.357			
Waste treatment per kg Polyurethane (PU), incineration (kg)	kg	2.00			
Waste, materials to recycling (kg)	kg	7.54			
Waste treatment per kg Scrap copper, incineration with fly ash extraction (kg)	kg	0.012			
Waste treatment per kg Hazardous waste, incineration (kg)	kg	0.04			
Waste treatment per kg Non-hazardous waste, incineration with fly ash extraction - C3 (kg)	kg	0.874			
Waste treatment per kg Scrap steel, incineration with fly ash extraction (kg)	kg	16.51			
Waste treatment per kg Scrap aluminium, incineration with fly ash extraction (kg)	kg	18.62			
Benefits and loads beyond the system boundaries (D)	Unit	Value			
Substitution of electricity (MJ)	MJ	14.49			
Substitution of thermal energy, district heating (MJ)	MJ	8.59			
Substitution of primary steel with net scrap (kg)	kg	4.51			
Substitution of primary aluminium with net scrap (kg)	kg	1.21			
Substitution of primary Brass with net scrap (kg)	kg	0.001062			

LCA: Results

The LCA results are presented below for the declared unit defined on page 2 of the EPD document.

Environmental impact							
Indicator	Unit	A1-A3	A4	A5	B2	B3	
GWP-total	kg CO ₂ -eq	1.54E+02	6.13E+00	1.93E+01	4.67E+00	2.08E-01	
GWP-fossil	kg CO ₂ -eq	1.75E+02	6.13E+00	8.57E-01	4.53E+00	2.02E-01	
GWP-biogenic	kg CO ₂ -eq	-2.30E+01	3.84E-03	1.84E+01	1.29E-01	5.84E-03	
GWP-luluc	kg CO ₂ -eq	2.50E+00	2.30E-03	8.21E-05	1.27E-02	5.77E-04	
ODP	kg CFC11 -eq	1.13E-05	1.14E-07	4.95E-09	7.25E-08	3.26E-09	
AP	mol H ⁺ -eq	1.02E+00	1.98E-02	1.11E-03	2.59E-02	1.16E-03	
EP-FreshWater	kg P -eq	8.59E-02	4.13E-04	2.21E-05	3.74E-03	1.69E-04	
EP-Marine	kg N -eq	1.80E-01	6.72E-03	5.73E-04	4.25E-03	1.89E-04	
EP-Terrestrial	mol N -eq	1.72E+00	7.31E-02	4.64E-03	3.93E-02	1.74E-03	
POCP	kg NMVOC -eq	6.60E-01	3.22E-02	1.59E-03	1.27E-02	5.60E-04	
ADP-minerals&metals ¹	kg Sb-eq	1.73E-03	1.69E-05	8.00E-07	5.27E-05	2.42E-06	
ADP-fossil ¹	MJ	2.69E+03	8.87E+01	3.26E+00	9.54E+01	4.29E+00	
WDP ¹	m ³	6.93E+02	4.55E-01	1.36E-01	2.52E+00	1.13E-01	

Indicator	Unit	B4	C1	C2	C3	C4	D
GWP-total	kg CO ₂ -eq	0	0	9.41E-01	3.71E+01	0	-1.13E+01
GWP-fossil	kg CO ₂ -eq	0	0	9.40E-01	8.68E+00	0	-1.10E+01
GWP-biogenic	kg CO ₂ -eq	0	0	7.17E-04	2.84E+01	0	-8.11E-02
GWP-luluc	kg CO ₂ -eq	0	0	3.32E-04	2.64E-04	0	-2.07E-01
ODP	kg CFC11 -eq	0	0	1.94E-08	2.44E-08	0	-3.63E-03
AP	mol H ⁺ -eq	0	0	2.94E-03	1.43E-02	0	-6.53E-02
EP-FreshWater	kg P -eq	0	0	6.23E-05	3.81E-04	0	-6.02E-03
EP-Marine	kg N -eq	0	0	9.91E-04	9.40E-03	0	-9.70E-03
EP-Terrestrial	mol N -eq	0	0	1.08E-02	7.27E-02	0	-9.13E-02
POCP	kg NMVOC -eq	0	0	4.61E-03	1.91E-02	0	-3.74E-02
ADP-minerals&metals ¹	kg Sb-eq	0	0	3.08E-06	2.94E-06	0	-4.50E-05
ADP-fossil ¹	MJ	0	0	1.32E+01	1.44E+01	0	-1.68E+02
WDP ¹	m ³	0	0	6.48E-02	8.82E-01	0	-2.30E+01

GWP-total = Global Warming Potential total; 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

"Reading example: 9.0 E-03 = 9.0*10⁻³ = 0.009"

1. The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator

Remarks to environmental impacts

The LCA results in the EPD are calculated using a specific methodological approach for accounting energy resources, see the additional requirements section for more information. In this EPD the following approach was used: Location-based approach.

Additional environmental impact indicators

Indicator	Unit	A1-A3	A4	A5	B2	B3
 PM	Disease incidence	1.22E-05	6.29E-07	1.98E-08	1.24E-07	5.17E-09
 IRP ²	kgBq U235 -eq	3.35E+01	1.07E-01	4.74E-03	2.42E+00	1.10E-01
 ETP-fw ¹	CTUe	1.35E+03	1.05E+01	3.04E+00	1.53E+01	6.81E-01
 HTP-c ¹	CTUh	3.36E-07	0.00E+00	9.40E-11	1.32E-09	6.20E-11
 HTP-nc ¹	CTUh	3.39E-06	5.72E-08	6.68E-09	8.18E-08	3.22E-09
 SQP ¹	dimensionless	1.89E+03	8.94E+01	1.85E+00	2.08E+01	9.32E-01

Indicator	Unit	B4	C1	C2	C3	C4	D
 PM	Disease incidence	0	0	7.29E-08	1.38E-07	0	-9.11E-07
 IRP ²	kgBq U235 -eq	0	0	1.68E-02	2.57E-02	0	-2.94E+00
 ETP-fw ¹	CTUe	0	0	1.73E+00	4.78E+01	0	-3.43E+01
 HTP-c ¹	CTUh	0	0	0.00E+00	1.21E-09	0	-2.97E-08
 HTP-nc ¹	CTUh	0	0	9.72E-09	2.95E-08	0	-1.66E-07
 SQP ¹	dimensionless	0	0	7.86E+00	1.21E+01	0	-2.34E+01

PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)

"Reading example: 9.0 E-03 = 9.0*10⁻³ = 0.009"

1. The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator
2. 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.

Resource use							
Indicator		Unit	A1-A3	A4	A5	B2	B3
	PERE	MJ	8.88E+02	1.45E+00	6.80E-02	2.44E+01	1.11E+00
	PERM	MJ	2.11E+02	0.00E+00	-1.60E+02	0.00E+00	0.00E+00
	PERT	MJ	1.10E+03	1.45E+00	-1.60E+02	2.44E+01	1.11E+00
	PENRE	MJ	2.57E+03	8.87E+01	3.26E+00	9.54E+01	4.29E+00
	PENRM	MJ	1.51E+02	0.00E+00	-2.37E+01	0.00E+00	0.00E+00
	PENRT	MJ	2.72E+03	8.87E+01	-2.05E+01	9.54E+01	4.29E+00
	SM	kg	1.71E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	RSF	MJ	5.97E+00	4.84E-04	2.47E-05	1.26E-04	5.45E-06
	NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	FW	m ³	4.84E+00	1.31E-02	2.06E-03	8.58E-01	3.54E-03

Indicator		Unit	B4	C1	C2	C3	C4	D
	PERE	MJ	0	0	2.28E-01	4.56E-01	0	-7.91E+01
	PERM	MJ	0	0	0.00E+00	-1.34E+02	0	0.00E+00
	PERT	MJ	0	0	2.28E-01	-1.34E+02	0	-7.91E+01
	PENRE	MJ	0	0	1.32E+01	1.44E+01	0	-1.68E+02
	PENRM	MJ	0	0	0.00E+00	-6.00E+02	0	0.00E+00
	PENRT	MJ	0	0	1.32E+01	-5.86E+02	0	-1.68E+02
	SM	kg	0	0	0.00E+00	0.00E+00	0	-5.11E+00
	RSF	MJ	0	0	7.63E-05	3.53E-04	0	-1.12E-03
	NRSF	MJ	0	0	0.00E+00	0.00E+00	0	-2.60E-01
	FW	m ³	0	0	1.78E-03	2.08E-02	0	-5.26E-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 materials; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water

"Reading example: 9.0 E-03 = 9.0*10⁻³ = 0.009"

End of life - Waste							
Indicator		Unit	A1-A3	A4	A5	B2	B3
	HWD	kg	3.90E+01	1.28E-01	1.19E-02	3.02E-01	1.30E-02
	NHWD	kg	4.74E+02	2.57E+00	2.33E+00	2.53E+01	8.25E-01
	RWD	kg	8.77E-03	2.65E-05	9.27E-07	2.19E-05	0.00E+00

Indicator		Unit	B4	C1	C2	C3	C4	D
	HWD	kg	0	0	1.89E-02	4.00E-02	0	-4.00E+00
	NHWD	kg	0	0	4.00E-01	4.45E+01	0	-2.75E+01
	RWD	kg	0	0	4.18E-06	0.00E+00	0	-7.74E-04

HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed

"Reading example: 9.0 E-03 = 9.0×10^{-3} = 0.009"

End of life - Output flow							
Indicator		Unit	A1-A3	A4	A5	B2	B3
	CRU	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	MFR	kg	8.17E-01	0.00E+00	1.07E+01	0.00E+00	0.00E+00
	MER	kg	3.77E-08	0.00E+00	5.58E-09	0.00E+00	0.00E+00
	EEE	MJ	2.77E-04	0.00E+00	2.38E-04	0.00E+00	0.00E+00
	EET	MJ	2.68E-03	0.00E+00	3.72E-04	0.00E+00	0.00E+00

Indicator		Unit	B4	C1	C2	C3	C4	D
	CRU	kg	0	0	0.00E+00	0.00E+00	0	0.00E+00
	MFR	kg	0	0	0.00E+00	2.11E+01	0	0.00E+00
	MER	kg	0	0	0.00E+00	2.00E+00	0	0.00E+00
	EEE	MJ	0	0	0.00E+00	1.45E+01	0	0.00E+00
	EET	MJ	0	0	0.00E+00	8.59E+00	0	0.00E+00

CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported energy electrical; EET = Exported energy thermal

"Reading example: 9.0 E-03 = 9.0×10^{-3} = 0.009"

Biogenic Carbon Content		
Indicator	Unit	At the factory gate
Biogenic carbon content in product	kg C	1.69E+00
Biogenic carbon content in accompanying packaging	kg C	5.02E+00

Note: 1 kg biogenic carbon is equivalent to 44/12 kg CO₂

Additional requirements

Greenhouse gas emissions from the use of electricity in the manufacturing phase

The EPD presents environmental impact categories in the main results tables using a specific methodological approach for accounting energy resources. To ensure transparency and support informed interpretation, the table below explains the implications of the chosen methodology. It illustrates the GWP-total for energy resources used in the manufacturing stage, comparing the location-based and market-based approaches. In this EPD the following approach was used in main result tables: Location-based approach.

Electricity mix	Source	Amount	Unit	GWPtotal [kg CO ₂ /Unit]	SUM [kg CO ₂]
Location-based approach.					
Electricity, high voltage electricity production, hydro, run-of-river (kwh) - PL	ecoinvent 3.10.1	6.64E+00	kWh	4.39E-03	2.91E-02
Market-based approach.					
Electricity, Poland, low voltage, residual mix	ecoinvent 3.10.1	6.64E+00	kWh	1.10E+00	7.27E+00

"Reading example: 9.0 E-03 = 9.0*10⁻³ = 0.009"

Dangerous substances

The product contains no substances given by the REACH Candidate list.

Indoor environment

Greenguard Gold / EU Ecolabel

Additional Environmental Information

Key Environmental Indicators

Key environmental performance indicators	Unit	Product stage	Construction stage		Use stage			End-of-life				Net benefits and loads from reuse, recovery, and/or recycling
		A1-A3	A4	A5	B2	B3	B4	C1	C2	C3	C4	D
GWPtotal	kg CO ₂ -eq	154.18	6.13	19.26	4.67	0.21	0.00	0.00	0.94	37.05	0.00	-11.26
Total energy consumption	MJ	3463.96	90.18	3.32	119.78	5.40	0.00	0.00	13.43	14.87	0.00	-247.09
Share of recycled materials	%	29.89										

Additional environmental impact indicators required in NPCR Part A for construction products

Indicator	Unit	A1-A3	A4	A5	B2	B3
GWPIOBC	kg CO ₂ -eq	1.79E+02	6.13E+00	8.57E-01	4.55E+00	2.03E-01

Indicator	Unit	B4	C1	C2	C3	C4	D
GWPIOBC	kg CO ₂ -eq	0	0	9.41E-01	8.68E+00	0	-1.12E+01

GWP-IOBC: Global warming potential calculated according to the principle of instantaneous oxidation. In order to increase the transparency of biogenic carbon contribution to climate impact, the indicator GWP-IOBC is required as it declares climate impacts calculated according to the principle of instantaneous oxidation. GWP-IOBC is also referred to as GWP-GHG in context to Swedish public procurement legislation.

Variants and Options

Key environmental indicators (A1-A3) for variants of this EPD

Variants	Weight (kg)	GWPtotal (kg CO ₂ -eq)	Total energy consumption (MJ)	Amount of recycled materials (%)
OFFECCT Circulus — Corner seat module with high backrests, upholstered in Xtreme/Camira — No Packaging	49.80	211.31	4027.75	34.57
OFFECCT Circulus — Corner seat module with low backrests, upholstered in Xtreme/Camira — No Packaging	32.86	130.91	2426.40	31.74
OFFECCT Circulus — Corner seat module without backrests, upholstered in Xtreme/Camira — No Packaging	27.81	92.24	1552.77	23.70
OFFECCT Circulus — Corner seat module without backrests, non-upholstered — No Packaging	25.37	80.01	1334.72	23.32
OFFECCT Circulus — Ottoman, 1-seater module, non-upholstered, without table — No Packaging	15.35	59.40	1103.86	25.75

Key environmental indicators (A1-A3) for options for this EPD				
Options	Weight (kg)	GWPtotal (kg CO ₂ -eq)	Total energy consumption (MJ)	Amount of recycled materials (%)
OFFECCT Circulus — Plywood flat tabletop for non-upholstered corner module without backrests	3.17	-2.43	92.59	0.28
OFFECCT Circulus — Plywood Flat tabletop for non-upholstered 1-seater Ottoman module	3.67	-2.95	107.10	0.28
OFFECCT Circulus — Plywood Edge tabletop for non-upholstered 1-seater Ottoman module	4.61	-3.42	135.04	0.28
OFFECCT Circulus — Plywood Edge armrest, non-upholstered	3.88	7.10	146.65	33.34
OFFECCT Circulus — Corner, high backrests — Packaging	6.19	-2.67	119.76	72.91
OFFECCT Circulus — Corner, low backrests — Packaging	5.80	-2.49	111.75	71.11
OFFECCT Circulus — Corner, without backrests — Packaging	2.07	-0.27	47.99	80.12

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