Environmental Product Declaration

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

EPD for multiple Paperbins with model Byarum as a representative product



Byarums Bruk AB

Programme	The International EPD System, www.environdec.com
Programme operator	EPD International AB
Type of EPD	EPD of multiple products from a company
EPD registration number	EPD-IES-0034014:001
Version date	2026-10-19
Validity date	2031-10-18

An EPD should provide current information and may be updated or unpublished if conditions change. To find the latest version of the EPD and to confirm its validity, see 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	support@environdec.com

PCR and verification

Product Category Rules (PCR)	CEN standard EN 15804 serves as the Core Product Category Rules (PCR) CEN standard EN 15804 serves as the Core Product Category Rules (PCR) PCR 2019:14, version 2.0.1, Construction products c-PCR-021, version 2.0.1, Furniture and components of furniture PCR review was conducted by the Technical Committee of the International EPD System. See https://environdec.com/about-us/the-international-epd-system-about-the-system for a list of members. Review chair: Review chair: Rob Rouwette (chair), Noa Meron (co chair. The review panel may be contacted via the Secretariat www.environdec.com/contact.
Third-party verification:	External and independent "third-party" verification of the declaration and data, according to ISO14025:2006, via EPD verification through: ☑ Individual EPD verification without a pre-verified LCA/EPD tool Third-party verifier: Callum Hill, CEO , JCH Industrial Ecology Ltd JCH INDUSTRIAL ECOLOGY LTD Approved by: The International EPD System
Procedure for follow-up of data during EPD validity involves third party verifier: ● Yes ○ No	

Ownership and limitations on use of EPD

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

Information about EPD owner

Owner details	
EPD owner	Byarums Bruk AB
Contact	Joakim Ståhl , CEO of Byarums Bruk
Contact details	joakim@byarumsbruk.se
Address	Kränghultsvägen 2, 567 92 Vaggeryd
Description of the organisation	Byarums Bruk is a Swedish foundry based in Byarum, Småland, founded in 1947 by the Bokinge brothers. From the very start, the company broke new ground by casting in aluminium rather than the cast iron that dominated the industry at the time. Today, Byarums Bruk manufactures products for parks and gardens sofas, armchairs, chairs, tables, benches, planters, sculptures and more all through circular production using sand-shaped castings with 100% recycled aluminium and exclusively artisanal methods. The ancient technique of raw sand moulding, using only natural sand and water without chemical binders, means that each moulded detail is unique. Years of collaboration with designers have built Byarums Bruk's collection of outdoor furniture, and sustainability is central to the business philosophy: when a product has finally finished its purpose, the material goes back into the cycle, melts down and reappears in a new form generation after generation. A proud representative of Swedish craftsmanship and long-term thinking.
Product-related or management system-related certifications:	
Life Cycle Assessment (LCA)	Joakim Ståhl

Product Information

Product details	
Product name(s)	Byarum is the reference products and other product are Minior and Monolit

Product details	
Product description:	Monolit is designed as a contemporary peperbin for urban environments, Monolit is characterized by a distinctive form that transitions from a rounded base to a more geometric upper section. The design combines ease of handling with a strong architectural presence. The bin is manufactured from sand-cast aluminium and is available with or without a roof. Monolit offers waste disposal access from two sides and can be customized with cast-in emblems or municipal coats of arms. Minior is a compact litter bin designed for locations where space efficiency and flexible installation are required. It can be mounted on a wall or pole, making it suitable for both existing and new outdoor environments. Manufactured from sand-cast aluminium. Minior features a compact footprint while maintaining the same emphasis on durability and craftsmanship as the larger models. The product is available with or without a roof and can be customized with a cast emblem on the front. Minior is considered the smaller sibling of the Monolit litter bin. The reference product Byarum paperbin is one of the company's most established products and has been supplied throughout Scandinavia for more than twenty years. The design provides access from two directions and can be equipped with an integrated ashtray in the lid. Each side is sand-cast individually, allowing the incorporation of custom emblems or municipal coats of arms. The product is designed to offer stability, ease of use and durability in public outdoor settings. Standard equipment includes a galvanized steel bag holder and stainless-steel locking mechanism, and the unit is prepared for ground anchoring. Across the product family, the litter bins are manufactured primarily from cast aluminium and are intended for long-term outdoor use. They are available in natural aluminium, black lacquered finishes, and custom colours upon request. The products are designed to withstand exposure to varying climatic conditions and can be customized through a range of optional features, including cast emblems, ashtrays, bird protection systems, and other site-specific adaptations
UN CPC code	UN CPC 42999
Name and location of production site(s):	Byarums Bruk AB Kränghultsvägen 1 597 62 Vaggeryd
Technical or actual lifespan	Byarums Bruk estimates that a typical lifetime of their sand-cast aluminium chairs is in excess of 25 years under normal outdoor conditions in a Nordic climate.

Product image



Manufacturing process

All products are manufactured at Byarums Bruk's own foundry located in Byarum, Vaggeryd municipality, Sweden. Production is carried out entirely in house using artisanal foundry methods that have remained consistent since the company's founding in 1947.
The primary manufacturing process for aluminium components is raw sand moulding (green sand casting). In this process, individual moulds are formed by hand from natural sand and water, without the use of chemical binders. Molten recycled aluminium is poured into the sand mould to form the cast component. As each mould is formed individually, every cast detail is unique. Following casting, components are cleaned and finished.
For models incorporating cold-drawn round iron elements (Ø 10 mm), structural frame components are fabricated through cold-drawing and welding prior to assembly.
Surface treatment is applied depending on product specification and includes lacquering (white, black or other colours) or hot-dip galvanising for metal components. The entire manufacturing process from casting to surface treatment and assembly is
carried out at a single site in Sweden.

Product Table

Product Name	Mass in kg	Unit
P-korg Minior / tak:ja / emblem:nej / g:natur	40,980	pc
P-korg Monolit / tak:ja / emblem:nej / g:svart	74,120	pc
P-korg Byarum / emblem:nej / askkopp:ja / g:svart	71,090	pc
P-korg Monolit / tak:ja / emblem:nej / g:natur	74,120	pc
P-korg Minior / tak:ja / emblem:nej / g:svart	40,980	pc
P-korg Monolit / tak:nej / emblem:nej / g:natur	59,120	pc
P-korg Monolit / tak:nej / emblem:nej / g:svart	59,120	pc
P-korg Minior / tak:nej / emblem:nej / g:svart	35,980	pc
P-korg Byarum / emblem:nej / askkopp:ja / g:natur	71,090	pc
P-korg Minior / tak:nej / emblem:nej / g:natur	35,980	pc

Content declaration

Product Components	Mass, kg	Post-consumer recycled material, mass-% of products	Biogenic material, mass-% of product	Biogenic material, kg C / declared unit
Metal	7,10E+01	64,78%	0,00%	0,00E+00
Paints and finishes	6,30E-02	0,00%	0,00%	0,00E+00
Total	7,11E+01	64,78%	0,00%	0,00E+00

Packaging Materials	Mass, kg	Mass-% (versus the product)	Biogenic material kg C/declared unit
Plastic	6,18E-02	0,09%	0,00E+00
Paper	2,47E+00	3,48%	9,90E-01
Engineered Wood Products	3,65E+00	5,13%	1,38E+00
Total	6,18E+00	8,70%	2,37E+00

Note: Some totals may not correspond exactly to the sum of separate figures due to rounding.

Dangerous substances from the candidate list of SVHC for Authorisation	EC No.	CAS No.	Weight-% per functional or declared unit
No hazardous materials			

At the date of issue of this declaration, there is no “Substance of Very High Concern” (SVHC) in concentration above 0.1% by weight, and neither does the packaging, following the European REACH regulation (Registration, Evaluation, Authorization and Restriction of Chemicals)

LCA information

Field	Value
Functional Unit / Declared Unit	One paperbin Byraum
Conversion Factor to Mass	71,09 kg
Time Representativeness	Data obtained refers to the year 2025
Geographical Scope	Sweden
System Boundary	Cradle to gate with options, A1-A3, A4, A5, C1, C2, C3, C4, D
Excluded Modules	B1, B2, B3, B4, B5, B6, B7
Database(s) and LCA Software Used	Ecoinvent 3.11 and EandoX version 1.01
Reference Service Life (RSL)	N/A
Characterisation Factors Used	The characterization factors used in this study refer to PCR 2019:14 and EN 15804+A2 (based on EF 3.1).
Allocation Procedures Used	Allocation of energy, auxiliaries, and waste at Byarums Bruk's manufacturing site has been performed based on production volumes by mass. No allocation between aluminium casting and other foundry activities has been required, as all casting operations at the Byarum site are dedicated to the declared product category.
Cut-off criteria	The general rules for exclusion of inputs and outputs in the LCA follow the rules of EN 15804:2012+A2:2019, section 6.3.6, where the cut-off criterion is 1% of renewable and non-renewable primary energy usage and 1% of the total mass input of that unit process. The total of neglected input flows per module shall be a maximum of 5% of energy usage and mass. In addition to the processes explicitly excluded from the system boundary by EN 15804 and PCR 2019:14, the following exclusions have been made based on the cut-off criteria: Production and waste management of some incoming packaging materials used for raw material deliveries to Byarums Bruk's production site in Byarum. This is assessed to fall well within the cut-off rules. Sand used in the raw sand moulding process is reused across multiple casting cycles. Due to a lack of specific data on sand replacement rates and waste volumes, the waste management of spent foundry sand has been excluded from the modelling. This omission is assessed to fall well within the cut-off criteria.

Energy Breakdown

Electricity used in the manufacturing

Energy Source	Data Source	Year	Geography	GWP excl. biogenic [kg CO2-eq/kWh]
Electricity from Wind Power	Ecoinvent 3.11	2024	SE	1,60E-02

Breakdown of electricity usage



A1	A2	A3	A4	A5	B1-7	C1-4
Extraction and processing of raw materials	Transport of raw materials	Manufact-uring	Transport to end user	Installation on site	User	End of life
						
		Waste		Waste		Waste

D Benefits and loads beyond the system boundary

A1	Raw material supply	The product stage comprises the acquisition of all raw materials, products and energy, transport to the production site, production processes, packaging, and waste processing up to the end-of-waste state or final disposal. For the extraction and processing of raw materials in Module A1, a combination of generic data from Ecoinvent version 3.11, primary data from Byarums Bruk's production records, and supplier data is used. The primary materials are recycled aluminium (sand-cast), cold-drawn iron, together with surface treatment materials such as lacquer and zinc used in hot-dip galvanising.
A2	Transport to the manufacturer	Module A2 covers the impacts from transporting raw materials to the Byarums Bruk production site in Byarum, Sweden. This includes the extraction and production of fuels as well as fuel combustion during transportation
A3	Manufacturing	Module A3 includes the manufacturing of the final paperbins, the production of outgoing packaging, and the end-of-life treatment of waste generated during manufacturing. Production is carried out entirely in-house at Byarums Bruk's foundry in Byarum using artisanal methods. The primary manufacturing process for aluminium components is raw sand moulding (green sand casting), in which individual moulds are formed by hand from natural sand and water without chemical binders. Molten recycled aluminium is poured into the sand mould, and following casting, components are cleaned and finished. For models incorporating cold-drawn iron elements, frame components are fabricated through cold-drawing and welding.
A4	Transport	Module A4 covers the impacts from transporting the finished product to an assumed installation site. The total distance in A4 is modelled as the distance from the manufacturing site in Byarum to the customer, with 200 km estimated as the average transport distance by truck. Truck: 200km truck: 200km

A5	Construction installation	Module A5 represents the installation of the product at the installation site. Since no installation process is required for the paperbins, the impacts in A5 arise only from the waste treatment of the product packaging. The packaging waste consists of plastic, paper and engineered wood products. Plastic packaging is partly sent to recycling and partly to incineration. Paper and engineered wood product packaging are sent to incineration. Impacts from transport to the waste treatment facility and from the treatment processes are included in Module A5, while potential loads and benefits are reported in Module D
B1-B7	Use stage	B modules are not included in the system boundary
C1	Deconstruction/Demolition	Module C1 covers the removal of the peperbins at end of life. The collection process involves manual deconstruction of metal and other materials, with energy modelled as diesel consumption at a rate of 1.1 kWh per tonne.
C2	Transport	Module C2 comprises the impacts from transporting the discarded paperbins to a waste processing or disposal facility. Metal components not destined for incineration are transported 80 km. Transportation is modelled using the same truck specifications as in Module A4.
C3	Waste processing	Module C3 includes waste pre-treatment for material recovery. Metal components are processed for recycling, with approximately 4.28 kg of metal per declared unit sent for recycling.
C4	Final disposal	Module C4 consists of waste disposal. A portion of metal (approximately 0.48 kg per declared unit) is sent to final disposal in landfill. Wood components (approximately 1.40 kg per declared unit) are sent for energy recovery through incineration. As the energy efficiency of incineration is assumed to be less than 60%, all impacts from incineration are reported in module C4.
D	Benefits	In general, module D encompasses the potential for reuse, recovery and recycling, expressed as net impacts and benefits. The environmental loads and benefits recorded in Module D are based on the specific quantities of materials defined in the bill of materials. The recycling of metal components at end of life is assumed to displace the future production of virgin materials, thereby reducing the long-term impact of raw material extraction. Additionally, the incineration of wood components facilitates resource efficiency through heat recovery; the resulting exported electricity (EEE) and thermal energy (EET) serve as a credit by reducing future demand for external energy sources. Benefits from material recycling arise primarily from the recovery of iron and aluminium, which substitute for virgin metal production. The use of 100% recycled aluminium in production, combined with the high recyclability of aluminium at end of life, contributes significantly to the net environmental benefit reported in this module.

System boundaries

	Product stage			Assembly stage		Use stage							End of life stage				Benefits & loads beyond system boundary
	Raw material supply	Transport to manufacturer	Manufacturing	Transport to building site	Installation into building	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Demolition	Transport to waste processing	Waste processing for reuse, recovery, recycling	Disposal	Reuse, recovery, recycling potential
	A1	**A2**	**A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
Declared	X	X	X	X	X	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X
Geography	SE	SE	SE	SE	SE	-	-	-	-	-	-	-	SE	SE	SE	SE	SE
Specific data used	3,18%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation-Products	+4% / -64%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation-Sites	+0% / -0%			-	-	-	-	-	-	-	-	-	-	-	-	-	-

X - declared, ND - Not Declared

The results presented for modules A1-A3 alone shall not be used for comparisons unless all relevant life cycle stages, particularly end-of-life (C1-C4), are included. This ensures a more accurate and representative environmental impact assessment over the full product life cycle.

Declaration of data sources, reference years, and share of primary data

Process	Source type	Source	Reference year	Data category	Share of primary data, of GWP-GHG results for A1-A3
Manufacturing of product	Collected data	Ecoinvent 3.11	2024	Primary data, secondary data	1,98%
Transportation of raw materials to manufacturing site	Collected data	Ecoinvent 3.11	2024	Primary data	0,00%
Production of raw materials and components	Collected data	Ecoinvent 3.11	2024	Primary data, secondary data	1,20%
Production of packaging	Collected data	Ecoinvent 3.11, CarbonZero	2023-2024	Secondary data	0,00%
Total share of primary data, of GWP-GHG results A1-A3					3,18%

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.

Data quality notes

Process	Source type	Source	Reference year	Data category	Share of primary data, of GWP-GHG results A1-A3	Technical	Geographical	Time
Manufacturing of product	Collected data	Ecoinvent 3.11	2024	Primary data, secondary data	20.07%	Good	Good	Good
Transportation of raw materials to manufacturing site	Collected data	Ecoinvent 3.11	2024	Primary data	0.00%	Good	Good	Good
Production of raw materials and components	Collected data	Ecoinvent 3.11	2024	Primary data, secondary data	19.92%	Good	Good	Good
Production of packaging	Collected data	Ecoinvent 3.11, CarbonZero	2023–2024	Secondary data	0.00%	Good	Good	Good
Total share of primary data, of GWP-GHG results A1-A3					**39.99%**			

Transport to the building site (A4)

Vehicle type	Distance (km)	Capacity utilization* (%)	Bulk density of transported products (kg/m3)	Volume capacity utilisation factor**
Truck-Trailer 40 tonne	200	50,8%	as product density	1,00

*Including empty returns
**Factor =1 or <1 or >1 for compressed or nested packaged products

Installation of the product in the building (A5)

Scenario Information	Unit (expressed per functional unit or per declared unit)
Ancilliary materials for installation (specified by material)	None
Water use	None
Other resource use	None
Quantitative description of energy type (regional mix) and consumption during the installation process	Not applicable
Direct emissions at ambient air, soil and water	None

A5 Waste materials on the building site before waste processing, generated by the product's installation (specified by type)

Name	Type	Weight	Unit (expressed per functional unit or per declared unit)
Plastic	packaging	6,18E-02	kg
Paper	packaging	2,47E+00	kg
Engineered Wood Products	packaging	3,65E+00	kg

A5 Output materials

Name	Type	Route	Weight	Unit (expressed per functional unit or per declared unit)
Plastic	packaging	recycling waste	3,40E-02	kg
Plastic	packaging	incineration waste	2,78E-02	kg
Paper	packaging	incineration waste	2,47E+00	kg
Engineered Wood Products	packaging	incineration waste	3,65E+00	kg

End-of-life (C1-C4)

Scenario information	Unit (expressed per functional unit or per declared unit)
C1: Collection process specified by type	7,11E+01 kg demolition/deconstruction of steel, wood and other materials. Energy carrier: Diesel. Quantity: 1,1 kWh/tonne
C2: Waste transport specified by type	7,10E+01 kg materials not to be incinerated transported for 80 km 0,00E+00 kg materials to be incinerated transported for 130 km
C3: Recovery system specified by type	6,39E+01 kg Metal for recycling
C4: Disposal specified by type	7,10E+00 kg Metal for final disposal 6,30E-02 kg Paints and finishes for energy recovery
Assumptions for scenario development, e.g. transportation	The transportation is modelled with the same specifications as the truck transportation in module A4, except the transportation distance is assumed to be 80 km for materials not to be incinerated and 130 km for materials to be incinerated.

Reuse-Recovery-Recycling-potential (D)

Scenario information
The environmental loads and benefits recorded in Module D are based on the specific quantities of materials defined in the bill of materials. This accounting reflects the product's recovery potential at its end-of-life, where the recycling of materials is assumed to displace the future production of virgin materials, thereby reducing the long-term impact of raw material extraction. Additionally, the incineration of materials facilitate resource efficiency through heat recovery; the resulting exported electricity (EEE) and thermal energy (EET) serve as a credit by reducing the future demand for external energy sources.

Environmental performance

EPD INTERNATIONAL EPD SYSTEM

Potential environmental impact – indicators according to EN 15804+A2

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. The results of the end-of-life stage (modules C1-C4) should be considered when using the results of the product stage (modules A1-A3).

Results per declared unit: One paperbin Byraum

Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP-total	kg CO2 eq	1,80E+02	2,71E+00	9,06E+00	2,83E-02	1,08E+00	4,52E+01	1,55E-01	-4,63E+01
GWP-fossil	kg CO2 eq	1,83E+02	2,70E+00	3,87E-01	2,83E-02	1,08E+00	4,47E+01	1,55E-01	-4,50E+01
GWP-biogenic	kg CO2 eq	-6,43E+00	5,70E-04	8,68E+00	3,15E-06	2,28E-04	4,30E-01	6,94E-05	-5,17E-01
GWP-luluc	kg CO2 eq	3,35E+00	8,96E-04	1,00E-04	2,90E-06	3,58E-04	4,68E-02	3,05E-05	-7,72E-01
ODP	kg CFC11 eq	3,24E-06	5,89E-08	5,07E-09	4,21E-10	2,36E-08	7,12E-07	2,94E-09	-6,50E-07
AP	mol H+ eq	1,10E+00	8,68E-03	1,84E-03	2,53E-04	3,48E-03	5,89E-01	6,41E-04	-2,63E-01
EP-freshwater	kg P eq	1,05E-01	1,85E-04	5,61E-05	9,13E-07	7,39E-05	4,49E-02	1,60E-05	-2,63E-02
EP-marine	kg N eq	1,70E-01	2,94E-03	9,13E-04	1,18E-04	1,18E-03	5,17E-02	3,04E-04	-4,13E-02
EP-terrestrial	mol N eq	1,59E+00	3,18E-02	8,35E-03	1,29E-03	1,27E-02	6,16E-01	2,81E-03	-3,92E-01
POCP	kg NMVOC eq	6,44E-01	1,32E-02	2,38E-03	3,86E-04	5,27E-03	1,92E-01	9,43E-04	-1,58E-01
ADP-minerals & metals[1]	kg Sb-Eq	8,27E-04	9,12E-06	9,36E-07	1,04E-08	3,65E-06	6,00E-03	3,27E-07	-1,96E-04
ADP-fossil[1]	MJ	2,77E+03	3,85E+01	3,35E+00	3,73E-01	1,54E+01	5,39E+02	2,36E+00	-6,58E+02
WDP[1]	m³	2,94E+02	2,06E-01	2,58E-01	9,51E-04	8,23E-02	1,35E+01	1,32E-01	-6,93E+01
Acronyms	**GWP-total**: Total Global Warming Potential; **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								

[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 experience with the indicator.*

Use of resources

Option A has been selected in calculating the primary energy indicators. Under this option, the energy is recorded as an input in the module where it enters the product system (A1–A3) and as an equivalent output in the module where it exits the system (A5 for packaging content and C3 and/or C4 for product content), whether it is transferred to another product system or treated as waste.

Results per declared unit: One paperbin Byraum

Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
PERE	MJ	1,77E+03	1,48E+01	7,87E+01	2,30E-03	5,94E+00	8,20E+01	2,15E-01	-2,18E+02
PERM	MJ	7,77E+01	0,00E+00	-7,77E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	1,85E+03	1,48E+01	1,00E+00	2,30E-03	5,94E+00	8,20E+01	2,15E-01	-2,18E+02
PENRE	MJ	2,67E+03	5,27E+01	6,89E+00	3,73E-01	2,11E+01	5,39E+02	4,44E+00	-6,58E+02
PENRM	MJ	4,81E+00	0,00E+00	-2,73E+00	0,00E+00	0,00E+00	0,00E+00	-2,08E+00	0,00E+00
PENRT	MJ	2,67E+03	5,27E+01	4,16E+00	3,73E-01	2,11E+01	5,39E+02	2,36E+00	-6,58E+02
SM	kg	4,60E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-1,14E+01
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
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
FW	m^3	6,36E+00	4,79E-03	2,54E-03	2,60E-05	1,92E-03	9,13E-01	-2,70E-02	-1,51E+00
Acronyms	**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								

Additional mandatory and voluntary impact category indicators

Results per declared unit: One paperbin Byraum

Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP-GHG	kg CO2 eq	1,87E+02	2,71E+00	3,88E-01	2,83E-02	1,08E+00	4,52E+01	1,55E-01	-4,60E+01
PM	Disease incidence	3,84E-05	1,75E-07	2,19E-08	7,23E-09	7,02E-08	3,08E-06	1,34E-08	-9,40E-06
IRP[2]	kBq U235 eq.	1,27E+02	4,58E-02	1,11E-02	1,57E-04	1,83E-02	3,65E+00	1,42E-02	-2,95E+01
ETP-fw[1]	CTUe	1,22E+03	5,04E+00	2,09E+00	2,00E-02	2,02E+00	5,86E+02	4,07E+02	-3,18E+02
HTP-c[1]	CTUh	9,84E-07	4,88E-10	2,86E-10	2,89E-12	1,95E-10	5,76E-08	4,54E-11	-2,38E-07
HTP-nc[1]	CTUh	6,39E-06	2,08E-08	1,37E-08	4,56E-11	8,34E-09	5,00E-06	5,12E-09	-1,57E-06
SQP[1]	Dimensionless	1,71E+03	2,27E+01	1,65E+00	2,45E-02	9,07E+00	4,42E+02	4,04E+00	-1,61E+02
Acronyms	**GWP-GHG**: global warming potential - greenhouse gases; **PM**: particulate matter; **IRP**: ionizing radiation potential; **ETP-fw**: ecotoxicity potential - freshwater; **HTP-c**: human toxicity potential - cancer; **HTP-nc**: human toxicity potential - non-cancer; **SQP**: smog formation potential								

The GWP-GHG indicator is identical to GWP-total except that the characterisation factor (CF) for biogenic CO2 is set to zero. This means that the uptake and emissions of biogenic CO2 are "balanced out already in modules A1 and A3, instead of in modules A5 (for packaging) or modules C3 and/or C4 (for the product). The results over the entire product life cycle, from module A to C, are thus identical for GWP-GHG and GWP-total unless some of the uptake of biogenic CO2 is released as another greenhouse gas (e.g., CH4). In the context of Norwegian public procurement legislation, GWP-GHG is also referred to as GWP-IOBC.

[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 experience 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.*

Waste indicators

Results per declared unit: One paperbin Byraum									
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	kg	1,24E+02	3,87E-02	6,26E-02	3,27E-04	1,55E-02	3,25E+00	2,88E-02	-3,16E+01
NHWD	kg	1,39E+02	4,17E-01	2,35E-02	2,42E-03	1,67E-01	0,00E+00	7,08E+00	-4,99E+01
RWD	kg	3,27E-02	0,00E+00	2,16E-06	3,86E-08	0,00E+00	9,23E-04	3,20E-06	-7,83E-03
Acronyms	**HWD**: Hazardous waste disposed; **NHWD**: Non-hazardous waste disposed; **RWD**: Radioactive waste disposed								

Output flow indicators

Results per declared unit: One paperbin Byraum									
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
CRU	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
MFR	kg	0,00E+00	0,00E+00	3,40E-02	0,00E+00	0,00E+00	6,39E+01	0,00E+00	0,00E+00
MER	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
EEE	MJ	0,00E+00	0,00E+00	1,08E+01	0,00E+00	0,00E+00	0,00E+00	8,69E-02	0,00E+00
EET	MJ	0,00E+00	0,00E+00	2,17E+01	0,00E+00	0,00E+00	0,00E+00	1,80E-01	0,00E+00
Acronyms	**CRU**: Components for reuse; **MFR**: Materials for recycling; **MER**: Materials for energy recovery; **EEE**: Exported electric energy; **EET**: Exported thermal energy								

Information on biogenic carbon content

Parameter	Unit	Value
Biogenic carbon content in product	kg C	0,00E+00
Biogenic carbon content in the accompanying packaging	kg C	2,37E+00

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

Environmental impact performance from 100% scenarios

Potential environmental impact – indicators according to EN 15804+A2

Results per declared unit: One paperbin Byraum													
Indicator	**Unit**	**C2 100% RC**	**C2 100% INC**	**C2 100% LF**	**C3 100% RC**	**C3 100% INC**	**C3 100% LF**	**C4 100% RC**	**C4 100% INC**	**C4 100% LF**	**D 100% RC**	**D 100% INC**	**D 100% LF**
GWP-total	kg CO2 eq	1,08E+00	1,76E+00	1,08E+00	5,03E+01	0,00E+00	0,00E+00	0,00E+00	1,32E+00	1,16E+00	-5,18E+01	-1,72E-02	0,00E+00
GWP-fossil	kg CO2 eq	1,08E+00	1,76E+00	1,08E+00	4,97E+01	0,00E+00	0,00E+00	0,00E+00	1,31E+00	1,13E+00	-5,03E+01	-1,71E-02	0,00E+00
GWP-biogenic	kg CO2 eq	2,28E-04	3,70E-04	2,28E-04	4,79E-01	0,00E+00	0,00E+00	0,00E+00	1,45E-03	3,93E-02	-5,75E-01	-9,34E-06	0,00E+00
GWP-luluc	kg CO2 eq	3,58E-04	5,82E-04	3,58E-04	5,20E-02	0,00E+00	0,00E+00	0,00E+00	8,04E-04	2,98E-04	-8,58E-01	-1,30E-05	0,00E+00
ODP	kg CFC-11 eq	2,36E-08	3,83E-08	2,36E-08	7,92E-07	0,00E+00	0,00E+00	0,00E+00	2,60E-08	2,89E-08	-7,32E-07	-2,11E-10	0,00E+00
AP	mole H+ eq	3,47E-03	5,64E-03	3,47E-03	6,54E-01	0,00E+00	0,00E+00	0,00E+00	7,18E-03	6,07E-03	-2,95E-01	-1,08E-04	0,00E+00
EP-freshwater	kg P eq	7,39E-05	1,20E-04	7,39E-05	4,99E-02	0,00E+00	0,00E+00	0,00E+00	9,43E-04	1,19E-04	-2,93E-02	-6,13E-06	0,00E+00
EP-marine	kg N eq	1,18E-03	1,91E-03	1,18E-03	5,74E-02	0,00E+00	0,00E+00	0,00E+00	2,77E-03	2,67E-03	-4,62E-02	-1,56E-05	0,00E+00
EP-terrestrial	mole N eq	1,27E-02	2,07E-02	1,27E-02	6,85E-01	0,00E+00	0,00E+00	0,00E+00	2,99E-02	2,63E-02	-4,38E-01	-1,63E-04	0,00E+00
POCP	kg NMVOC eq	5,27E-03	8,56E-03	5,27E-03	2,13E-01	0,00E+00	0,00E+00	0,00E+00	1,02E-02	9,00E-03	-1,77E-01	-5,06E-05	0,00E+00
ADP-minerals & metals[1]	kg Sb eq	3,65E-06	5,93E-06	3,65E-06	6,67E-03	0,00E+00	0,00E+00	0,00E+00	3,80E-06	3,18E-06	-2,21E-04	-2,28E-08	0,00E+00
ADP-fossil[1]	MJ	1,54E+01	2,50E+01	1,54E+01	5,98E+02	0,00E+00	0,00E+00	0,00E+00	2,11E+01	2,34E+01	-7,37E+02	-3,53E-01	0,00E+00
WDP[1]	m3	8,23E-02	1,34E-01	8,23E-02	1,50E+01	0,00E+00	0,00E+00	0,00E+00	6,08E-01	1,27E+00	-7,72E+01	-3,00E-03	0,00E+00
Acronyms	**GWP-total**: Total Global Warming Potential; **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; **RC**: Recycling; **INC**: Incineration; **LF**: Landfill												

[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 experience with the indicator.

Use of resources 100% scenarios

Results per declared unit: One paperbin Byraum													
Indicator	**Unit**	**C2 100% RC**	**C2 100% INC**	**C2 100% LF**	**C3 100% RC**	**C3 100% INC**	**C3 100% LF**	**C4 100% RC**	**C4 100% INC**	**C4 100% LF**	**D 100% RC**	**D 100% INC**	**D 100% LF**
PERE	MJ	5,94E+00	9,65E+00	5,94E+00	9,11E+01	0,00E+00	0,00E+00	0,00E+00	4,13E-01	2,13E+00	-2,43E+02	-3,97E-02	0,00E+00
PERM	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	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	5,94E+00	9,65E+00	5,94E+00	9,11E+01	0,00E+00	0,00E+00	0,00E+00	4,13E-01	2,13E+00	-2,43E+02	-3,97E-02	0,00E+00
PENRE	MJ	2,11E+01	3,42E+01	2,11E+01	6,00E+02	0,00E+00	0,00E+00	0,00E+00	2,32E+01	2,55E+01	-7,35E+02	-3,53E-01	0,00E+00
PENRM	MJ	0,00E+00	0,00E+00	0,00E+00	-2,08E+00	0,00E+00	0,00E+00	0,00E+00	-2,08E+00	-2,08E+00	-1,87E+00	0,00E+00	0,00E+00
PENRT	MJ	2,11E+01	3,42E+01	2,11E+01	5,98E+02	0,00E+00	0,00E+00	0,00E+00	2,11E+01	2,34E+01	-7,37E+02	-3,53E-01	0,00E+00
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	-1,27E+01	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	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	0,00E+00	0,00E+00	0,00E+00
FW	m3	1,92E-03	3,11E-03	1,92E-03	1,01E+00	0,00E+00	0,00E+00	0,00E+00	1,39E-02	-2,71E-01	-1,68E+00	-7,33E-05	0,00E+00
Acronyms	**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; **LF**: Landfill; **RC**: Recycling; **INC**: Incineration												

Additional voluntary indicators 100% scenarios

Results per declared unit: One paperbin Byraum

Indicator	Unit	C2 100% RC	C2 100% INC	C2 100% LF	C3 100% RC	C3 100% INC	C3 100% LF	C4 100% RC	C4 100% INC	C4 100% LF	D 100% RC	D 100% INC	D 100% LF
GWP-GHG	kg CO2 eq	1,08E+00	1,76E+00	1,08E+00	5,03E+01	0,00E+00	0,00E+00	0,00E+00	1,32E+00	1,16E+00	-5,14E+01	-1,72E-02	0,00E+00
PM	Disease incidence	7,01E-08	1,14E-07	7,01E-08	3,42E-06	0,00E+00	0,00E+00	0,00E+00	2,35E-07	1,32E-07	-1,05E-05	-1,15E-09	0,00E+00
IRP[2]	kBq U235 eq.	1,83E-02	2,98E-02	1,83E-02	4,05E+00	0,00E+00	0,00E+00	0,00E+00	2,41E-02	1,42E-01	-3,29E+01	-9,75E-03	0,00E+00
ETP-fw[1]	CTUe	2,02E+00	3,28E+00	2,02E+00	6,51E+02	0,00E+00	0,00E+00	0,00E+00	1,90E+01	4,07E+03	-3,58E+02	-2,38E-02	0,00E+00
HTP-c[1]	CTUh	1,95E-10	3,17E-10	1,95E-10	6,40E-08	0,00E+00	0,00E+00	0,00E+00	1,50E-09	3,98E-10	-2,65E-07	-2,84E-12	0,00E+00
HTP-nc[1]	CTUh	8,34E-09	1,35E-08	8,34E-09	5,56E-06	0,00E+00	0,00E+00	0,00E+00	1,06E-08	4,94E-08	-1,75E-06	-1,06E-10	0,00E+00
SQP[1]	Dimensionless	9,07E+00	1,47E+01	9,07E+00	4,91E+02	0,00E+00	0,00E+00	0,00E+00	2,38E+01	4,03E+01	-1,80E+02	-1,04E-01	0,00E+00
Acronyms	**GWP-GHG**: global warming potential - greenhouse gases; **PM**: particulate matter; **IRP**: ionizing radiation potential; **ETP-fw**: ecotoxicity potential - freshwater; **HTP-c**: human toxicity potential - cancer; **HTP-nc**: human toxicity potential - non-cancer; **SQP**: smog formation potential; **LF**: Landfill; **RC**: Recycling; **INC**: Incineration												

The GWP-GHG indicator is identical to GWP-total except that the characterisation factor (CF) for biogenic CO2 is set to zero. This means that the uptake and emissions of biogenic CO2 are "balanced out already in modules A1 and A3, instead of in modules A5 (for packaging) or modules C3 and/or C4 (for the product). The results over the entire product life cycle, from module A to C, are thus identical for GWP-GHG and GWP-total unless some of the uptake of biogenic CO2 is released as another greenhouse gas (e.g., CH4). In the context of Norwegian public procurement legislation, GWP-GHG is also referred to as GWP-IOBC.

[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 experience 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.*

Waste indicators 100% scenarios

Results per declared unit: One paperbin Byraum													
Indicator	**Unit**	**C2 100% RC**	**C2 100% INC**	**C2 100% LF**	**C3 100% RC**	**C3 100% INC**	**C3 100% LF**	**C4 100% RC**	**C4 100% INC**	**C4 100% LF**	**D 100% RC**	**D 100% INC**	**D 100% LF**
HWD	kg	1,55E-02	2,52E-02	1,55E-02	3,61E+00	0,00E+00	0,00E+00	0,00E+00	6,49E-02	2,64E-01	-3,51E+01	-3,74E-04	0,00E+00
NHWD	kg	1,67E-01	2,71E-01	1,67E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	7,08E+01	-5,68E+01	-1,50E-03	0,00E+00
RWD	kg	0,00E+00	0,00E+00	0,00E+00	1,03E-03	0,00E+00	0,00E+00	0,00E+00	5,94E-06	3,18E-05	-8,71E-03	-2,35E-06	0,00E+00
Acronyms	**HWD**: Hazardous waste disposed; **NHWD**: Non-hazardous waste disposed; **RWD**: Radioactive waste disposed; **LF**: Landfill; **RC**: Recycling; **INC**: Incineration												

Output flow indicators 100% scenarios

Results per declared unit: One paperbin Byraum													
Indicator	**Unit**	**C2 100% RC**	**C2 100% INC**	**C2 100% LF**	**C3 100% RC**	**C3 100% INC**	**C3 100% LF**	**C4 100% RC**	**C4 100% INC**	**C4 100% LF**	**D 100% RC**	**D 100% INC**	**D 100% LF**
CRU	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	0,00E+00	0,00E+00	0,00E+00
MFR	kg	0,00E+00	0,00E+00	0,00E+00	7,11E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	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	0,00E+00	0,00E+00	0,00E+00
EEE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,69E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EET	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,80E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Acronyms	**CRU**: Components for reuse; **MFR**: Materials for recycling; **MER**: Materials for energy recovery; **EEE**: Exported electric energy; **EET**: Exported thermal energy; **LF**: Landfill; **RC**: Recycling; **INC**: Incineration												

Impact Indicators Variation

LCA result of one declared unit product (A-C)	Unit	Min	Max
GWP-total	kg CO2 eq.	-65%	+4%
GWP-fossil	kg CO2 eq.	-64%	+4%
GWP-GHG	kg CO2 eq.	-65%	+4%
GWP-biogenic	kg CO2 eq.	-65%	+7%
GWP-luluc	kg CO2 eq.	-65%	+8%
ODP	kg CFC-11 eq.	-65%	+6%
AP	Mole of H+ eq.	-64%	+6%
EP-freshwater	kg P eq.	-63%	+5%
EP-marine	kg N eq.	-64%	+4%
EP-terrestial	Mole of N eq.	-64%	+4%
POCP	kg NMVOC eq.	-65%	+4%
ADP-M&M	kg Sb eq.	-64%	+7%
ADP-fossil	MJ	-65%	+5%
WDP	m^3 world equiv.	-65%	+6%

Additional environmental information - Conversion factors A1-A3 GWP-GHG

Product Name	Conversion factors
P-korg Minior / tak:ja / emblem:nej / g:natur	0,58
P-korg Monolit / tak:ja / emblem:nej / g:svart	1,04
P-korg Byarum / emblem:nej / askkopp:ja / g:svart	1,00
P-korg Monolit / tak:ja / emblem:nej / g:natur	1,03
P-korg Minior / tak:ja / emblem:nej / g:svart	0,58
P-korg Monolit / tak:nej / emblem:nej / g:natur	0,83
P-korg Monolit / tak:nej / emblem:nej / g:svart	0,83
P-korg Minior / tak:nej / emblem:nej / g:svart	0,51
P-korg Byarum / emblem:nej / askkopp:ja / g:natur	1,00
P-korg Minior / tak:nej / emblem:nej / g:natur	0,51

Abbreviations

General Abbreviations

EN	European Norm (Standard)
EF	Environmental Footprint
ISO	International Organization for Standardization
PCR	Product Category Rules
CEN	European Committee for Standardization
CPC	Central Product Classification
GRI	Global Reporting Initiative
EPD	Environmental Product Declaration
GPI	General Programme Instructions
LCA	Life Cycle Assessment
c-PCR	Complementary Product Category Rules
CLC	Co-location centre
GHS	Globally harmonized system of classification and labelling of chemicals

Environmental Impact Indicators (EN 15804)

GWP-GHG	Greenhouse gas
GWP-fossil	Global Warming Potential fossil fuels
GWP-luluc	Global Warming Potential land use and land use change
GWP-GHG	Global Warming Potential for greenhouse gases
AP	Acidification potential, Accumulated Exceedance
EP-freshwater	Eutrophication potential, fraction of nutrients reaching freshwater end compartment
EP-terrestrial	Eutrophication potential, Accumulated Exceedance
ADP	Abiotic Depletion Potential
ADP-fossil	Abiotic depletion for fossil resources potential
GWP	Global Warming Potential
GWP-biogenic	Global Warming Potential biogenic
GWP-total	Total Global Warming Potential
ODP	Depletion potential of the stratospheric ozone layer
EP	Eutrophication Potential
EP-marine	Eutrophication potential, fraction of nutrients reaching freshwater end compartment
POCP	Formation potential of tropospheric ozone
ADP-minerals&metals	Abiotic depletion potential for non-fossil resources
WDP	Water (user) deprivation potential, deprivation-weighted water consumption

Resource Use Indicators

PERE	Use of renewable primary energy excluding renewable primary energy resources used as raw materials (MJ)
PERT	Total use of renewable primary energy resources (MJ)
PENRM	Use of non-renewable primary energy resources used as raw materials (MJ)
SM	Use of secondary material (kg)
NRSF	Use of non-renewable secondary fuels (MJ)
PERM	Use of renewable primary energy resources used as raw materials (MJ)
PENRE	Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials (MJ)
PENRT	Total use of non-renewable primary energy resources (MJ)
RSF	Use of renewable secondary fuels (MJ)
FW	Use of net fresh water (m^3)

Abbreviations continued

Waste Indicators

HWD Hazardous Waste (disposed) (kg)

NHWD Non-Hazardous Waste (disposed) (kg)

RWD Radioactive Waste (disposed) (kg)

Output Flow Indicators

CRU Components for Reuse (kg)

MFR Material for Recycling (kg)

MER Materials for Energy Recovery (kg)

EEE Exported Energy, Electricity (MJ)

EET Exported Energy, Thermal (MJ)

Lifecycle Stages / Modules

A1 Raw material supply

A2 Transport

A3 Manufacturing

A4 Transport to site

A5 Construction/Installation

B1 Use

B2 Maintenance

B3 Repair

B4 Replacement

B5 Refurbishment

B6 Operational energy use

B7 Operational water use

C1 Deconstruction/Demolition

C2 Transport to waste processing

C3 Waste processing

C4 Disposal

D Reuse-Recovery-Recycling potential

Other Relevant Terms

SVHC	Substances of Very High Concern	EC No.	European Community Number
CAS No.	Chemical Abstracts Service Number	MJ	Megajoule
kg	Kilogram	m^3	Cubic Meter
NMVOC	Non-Methane Volatile Organic Compounds	Sb eq.	Antimony Equivalents
RC	Recycling	LF	Landfill
P eq.	Phosphorus Equivalents	N eq.	Nitrogen Equivalents
CFC-11 eq.	Chlorofluorocarbon-11 Equivalents	CO2 eq.	Carbon Dioxide Equivalents
kg C	Kilograms of Carbon	kg CO2 eq.	Kilograms of Carbon Dioxide Equivalent
ND	Not Declared	INC	Incineration
MND	Module not declared		

References

- EN 15804:2012+A2:2019/AC:2021
  Sustainability of construction works – Environmental product declarations – Core rules for the product category of construction products
- EPD International (2024)
  General Programme Instructions of the International EPD System, version 5.0.1
- ISO 14020:2022
  International Standard ISO 14020 – Environmental statements and programmes for products – Principles and general requirements
- ISO 14025:2006
  International Standard ISO 14025 – Environmental labels and declarations — Type III environmental declarations — Principles and procedures
- ISO 14040:2006
  International Standard ISO 14040: Environmental Management – Life cycle assessment – Principles and framework. Second edition 2006-07-01.
- ISO 14044:2006
  - International Standard ISO 14044: Environmental Management – Life cycle assessment – Requirements and Guidelines.
- PCR 2019:14, version 2.0.1, Construction products
  c-PCR-021, version 2.0.1, Furniture and components of furniture

Version history

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