

Environmental Product Declaration

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

QBUS Storage Cabinet 2 shelves, 1252x800x420 mm



AJ Produkter

Programme:

Programme operator:

EPD registration number:

Version date:

Validity date:

EPD type:

The International EPD® System, www.environdec.com

EPD International AB

EPD-IES-0020346

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2030-03-16

EPD of multiple products, results based on a representative product, see included products in table 1.

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.





General information

Programme information

Programme:	The International EPD® System
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PCR: The CEN standard EN 15804 serves as the PCR. In addition, the International EPD System PCR 2019:14 Construction products, version 1.3.4, valid until 20.12.2024.

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: Claudia A. Peña, University of Concepción, Chile. The review panel may be contacted via the Secretariat www.environdec.com/contact.

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

☒ EPD verification through an individual EPD verification

Third party verifier:

Viktor Hakkarainen, CHM-Analytics, www.CHM-analytics.com

Individual verifier approved by The International EPD® System

Procedure for follow-up of data during EPD validity involves third party verifier:

☐ Yes ☒ No

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



Company information

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Description of the organization

AJ Products is a Swedish company specializing in manufacturing and retailing workspace solutions for offices, schools, industries, and warehouses. Founded in 1975, we aim to be a leading player in our product categories.

We design work environments that promote well-being, focusing on innovation, sustainability, and self-designed products. Operating in 19 European countries, we employ about 1,100 people and run three factories. Annually, we enhance 330,000 workplaces across Europe with over 14,500 products.

Our goal is to provide high-quality, functional, and safe products that are durable and environmentally friendly. We are committed to sustainability and high standards, holding ISO 14001 and ISO 9001 certifications since 2011.

Product information

The EPD applies to AJ Produkter's Cabinet 2 shelves, 1252x800x420 mm. The cabinet features melamine-faced chipboard as the core material together with MDF. All products are equipped with either a steel leg frame or a wooden base frame and are certified according to EN 1729-1:2015, EN 1729-2:2012+A1:2015, and EN 15372:2016

It comes in colours such as birch, grey, oak and white. Is made for both schools, pre-schools and offices and modular with the rest of the QBUS series.



Cabinet 2 shelves, leg frame, handles, 1252x800x420 mm



Cabinet 2 shelves, base frame, handles, 1252x800x420 mm

Table 1. Included colours for the QBUS Cabinet 2 shelves, base frame, handles, 1252x800x420 mm.

Name	Birch	Oak	White	Light grey
Cabinet 2 shelves, base frame, handles, 1252x800x420 mm	170132	170136	170133	170135
Cabinet 2 shelves, leg frame, handles, 1252x800x420 mm	171132	171136	171133	171135



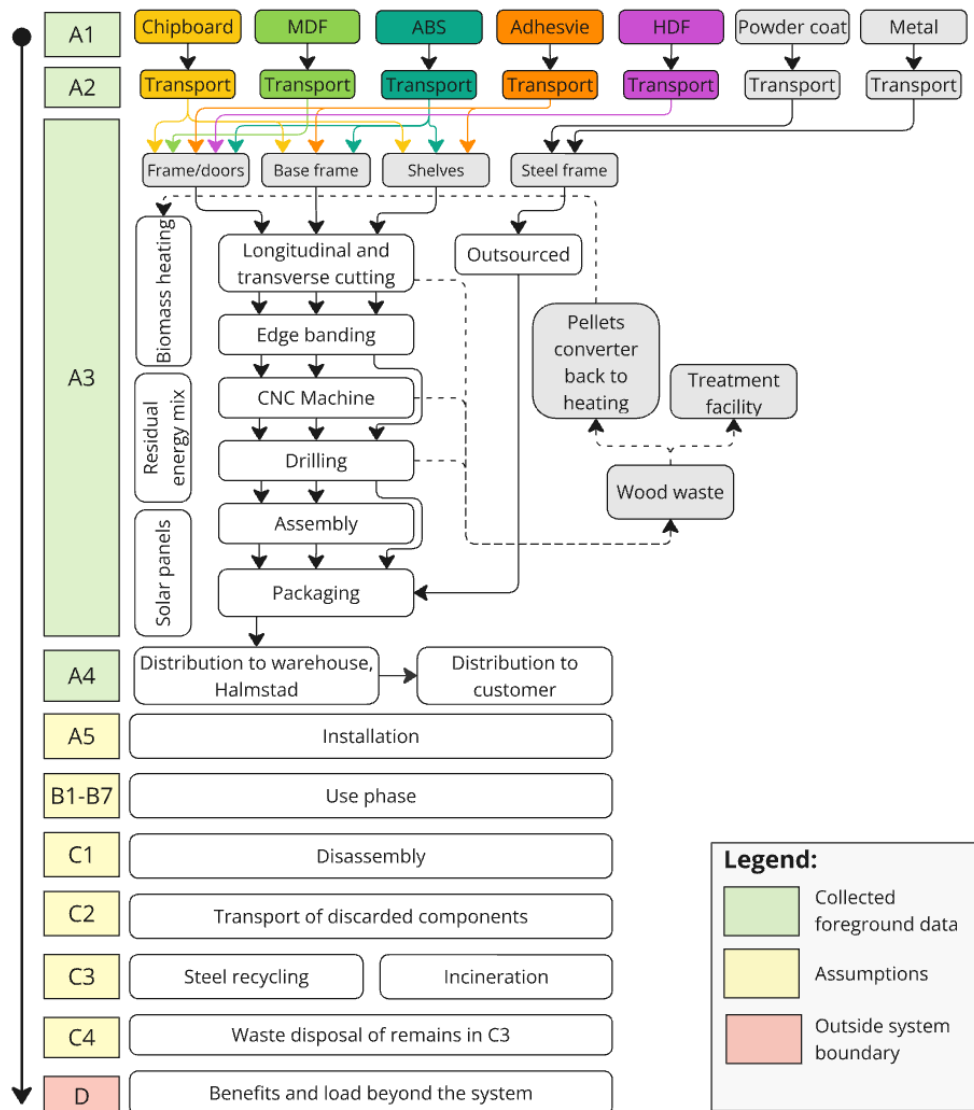
LCA information

Functional Unit	1 piece of QBUS Cabinet 2 shelves, 1252x800x420 mm. The total weight is 44.97 kg.
Product group classification	CPC 3814 – Other furniture (excluding those for medical, surgical, dental, or veterinary purposes)
Manufacturing location	Poland
Geographical scope	Europe
Compliant with	<p>In accordance with ISO 14025, ISO 14040-14044 and GPI 4.0 (EPD International, 2024).</p> <p>EPD also follows International's EPD System PCR 2019:14 Construction products, version 1.3.4 (2024.04.30) and PCR 2019:14-c-NPCR-021:2024 Furniture (c-PCR to PCR 2019:14) (Adopted from EPD Norway).</p>
Estimated Service Life (ESL) and Reference Service Life (RSL)	<p>The declared Reference Service Life (RSL) for the Qbus storage systems is 15 years, in line with the requirements set forth in c-PCR-021 Furniture 2.0 and NPCR 026 Furniture. This lifespan is based on compliance with the EN 16121:2013+A1:2018 standard, which specifies rigorous testing protocols for safety, strength, durability, and stability of non-domestic storage furniture.</p> <p>Approved according to EN 16121 – Non-domestic storage furniture – Requirements for safety, strength, durability, and stability, demonstrating a lifespan that can reasonably be expected to be at least 15 years.</p>
Background data	The data quality is considered high. All site-specific data for raw materials, auxiliary materials, as well as energy use during the manufacturing process are from 2023 and have been represented using Ecoinvent datasets. All other relevant environmental aspects have been modelled with generic Ecoinvent data for the end-of-life processes. The data in Ecoinvent covers the specific geographical regions relevant to this study.
Cut-Off Rules	<p>The cut-off criteria are in accordance with the EN 15804 standard, meaning that max 1% of the renewable and non-renewable primary energy use and max 1% of the total mass input of a specific unit process are allowed to be cut-off (excluded). Particular care should be taken to include material and energy flows known to have the potential to cause significant emissions into air and water or soil related to the environmental indicators of EN 15804+A2.</p> <p>Cut-offs for consumables used in production have been applied in this study.</p>
Allocations	Allocation has been done in this study. See allocation procedure, page 6.
Description of system boundaries	Cradle to grave and module D (A + B + C + D).
LCA accountability	Richard Eklund, AJ Produkter AB
Software and database	The database used is Ecoinvent 3.10. SimaPro Analyst ver. 9.6.0.1.
Characterization Factors (CF)	The Characterization Factors used in this report is based on Environmental Footprint (EF) 3.1.

Product Life Cycle

System diagram

System diagram and detailed life cycle stages are shown below.



Module Description

A1 – Raw Material Extraction: Extraction and production of raw materials and energy resources used in the product's manufacturing process. It also includes the environmental impact from the pre-treatment of recycled materials.

A2 – Transport: Transport of raw materials and semi-finished products from their original location to the production facility. It covers the energy use and emissions related to transportation.

A3 – Manufacturing: Energy use, waste management, and emissions occurring during the manufacturing process. Also, production of by-products and any emissions related to the manufacturing site.

A4 – Transport to customer: Impact from the transport of the finished product from the manufacturing site to the end-user. The modelling assumptions and parameters is shown below.

A5 – Assembly: The assembly process, covering energy use and waste management of potentially packaging materials during assembly or installation. The modelling assumptions and parameters is shown below.

	Module	Amount	Unit	Activity description
A4	Distribution of components to customer	915	km	The cabinet is transported to a Swedish and EU customer.
A5	Installation (waste)	2.21	kg	The packaging waste from installation is assumed to be treated by municipal incineration or similar.

B1-B7 – Use Phase: The product's use, maintenance, repair, replacement, and operation, as well as any energy consumption during its lifetime. B1 & B3-B7 does not have any activity.

	Module	Amount	Unit	Activity description
B2	Use phase (cleaning soluble)	2.07	ml	Cleaning soluble is assumed to be used for cleaning
B2	Use phase (tap water)	3.46	ml	Water is assumed to be used for cleaning

C1 – Deconstruction/Demolition: Energy and emissions involved in dismantling the product at the end of its life.

C2 – Transport of Waste: Environmental impact from transporting the product as waste to treatment facilities.

C3 – Waste Processing: Emissions and energy use from processing waste for recycling or energy recovery.

C4 – Final Disposal: Environmental impact from disposing of non-recyclable materials, typically in landfill. The modelling assumptions and parameters for the C modules are shown below.

	Module	Amount	Unit	Activity description
C1	Disassembly	-	-	The cabinet is assumed to be manually dismantled.
C2	Transport of discarded components	50	km	Assumed distance to a treatment facility, 50% load capacity.
C3	Amount of product assumed for recycling	2.64	kg	85% of the total steel in the product is assumed to reach the recycling process.
C3	Amount assumed for incineration	41.81	kg	Once the steel is removed from the cabinet, 100% of the remaining product is assumed to go to incineration.
C4	Amount assumed for landfill	0.53	kg	15% of the total steel in the product is assumed to reach landfill.

D – Benefits and Loads Beyond the System Boundary: Potential benefits from recycling, reuse, and energy recovery from the product's materials and energy after its lifecycle ends.

	Module	Amount	Unit	Activity description
D	Amount of material exiting the system boundary	2.64	kg	Amount of steel potentially reaching a new lifecycle

Energy source

Scenario parameter	Value	Dataset
Electricity, Poland, residual mix	0.910 kg CO ₂ e/ kWh	Electricity, medium voltage {PL} electricity, medium voltage, residual mix Cut-off, U
Biomass usage for thermal heating, Poland, kg CO ₂ e/kWh	0.063 kg CO ₂ e / kWh	Heat, central or small-scale, other than natural gas {RoW} heat production, wood pellet, at furnace 300kW Cut-off, U
Electricity, solar panels	0.091 kg CO ₂ e/ kWh	Electricity, low voltage {PL} electricity production, photovoltaic, 3kWp slanted-roof installation, multi-Si, panel, mounted Cut-off, S

Allocation procedures:

Allocation is required if some material, energy, and waste data cannot be measured separately for the product under investigation. In this study, as per EN 15804, allocation is conducted in the following order;

1. Allocation should be avoided.
2. Allocation should be based on physical properties (e.g. mass, volume) when the difference in revenue is small.
3. Allocation should be based on economic values.

This LCA study is conducted in accordance with all methodological considerations, such as performance, system boundaries, data quality, allocation procedures, and decision rules to evaluate inputs and outputs.

All data used for the bookcase is provided by technicians directly from the factories. There are no data gaps which should be filled with estimates and conservative assumptions with average or generic data. The allocation is performed in which the product output fixed to 1 functional unit and the corresponding amount of product is used in the calculations.

All the raw material type, weights and packaging materials used in this study are precise weights, taken from business system.

The raw material distances to the manufacturing site are based on averages from google maps. Energy usage in the factory are based on economic allocation. The distances out to the customer from the factory based on sales from the business system and weighted based on Swedish and the rest of EU.



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

	Product stage			Construction process stage		Use stage							End of life stage				Resource recovery stage
	Raw material supply	Transport	Manufacturing	Transport	Construction installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Modules declared	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Geography	EU	EU	PL	EU	EU	EU	EU	EU	EU	EU	EU	EU	EU	EU	EU	EU	EU
Share of specific data	7%					-	-	-	-	-	-	-	-	-	-	-	-
Variation products	<10% variation*																-
Variation – sites	Not relevant					-	-	-	-	-	-	-	-	-	-	-	-

* This EPD declares two products, which differ in the base frame. One product has a base frame made of chipboard with melamine, while the other features a metal frame with a powder coating. The product weight-% difference is 2%.

Additional information

The manufacturing process for the QBUS series uses wood-based materials like particleboard, MDF, and HDF. These are cut lengthwise and crosswise to prepare parts such as; top, bottom, sides, and back wall, for assembly. Initial cutting shapes the parts, followed by milling and adjustments for stability and fit. The factory machines are always optimizing to reduce production waste and to always work as efficient as possible.

Assembly involves joining these processed parts step by step with fasteners such as screws or glue, depending on the design. The completed product is then packaged with protective cardboard and plastic tape to ensure safety during transport. AI Produkter sources materials like melamine-coated chipboard, MDF, HDF, adhesives, ABS edge tape, and a metal base frame (purchased as a complete component from an EU supplier). The QBUS series is shipped from the AI factory to AI Produkter's warehouse in Halmstad, Sweden, then transported to the customer by lorries and sea freight depending on location.

Content information

Product components	Weight, kg	Post-consumer material, weight-%	Biogenic material, weight of DU	Biogenic material, kg C/DU
Chipboard	27.30	0	22.66	11.33
Medium Density Fibreboard (MDF)	6.37	0	5.02	2.51
Melamine	7.15	0	0	0
ABS	0.85	0	0	0
Adhesive	0.15	0	0	0
Metal	3.10	0	0	0
Powder coating	0.06	0	0	0
TOTAL	44.97	0	27.68	13.84
Packaging materials	Weight, kg	Weight-% (versus the product)	Weight biogenic carbon, kg C/DU	
Cardboard	2.66	6%	0.90	
Plastic tape	0.05	0%	0	
TOTAL	2.71	6%	0.90	

Dangerous substances from the candidate list of SVHC for Authorization	EC No.	CAS No.	Weight-% per functional or declared unit
No dangerous substances included in the product			



Results of the environmental performance indicators

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. Do not use results in A1-A3 without considering impacts in C1-C4.

Mandatory impact category indicators according to EN 15804+A2

Results per 1 unit of Cabinet 2 shelves, 1252x800x420																
Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-fossil	kg CO ₂ eq.	8,72E+01	2,80E+00	1,97E-01	0,00E+00	8,53E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,49E-01	1,97E+01	4,21E-03	-4,55E+00
GWP-Biogenic	kg CO ₂ eq.	-3,24E+01	9,17E-04	3,41E+00	0,00E+00	2,57E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,14E-04	4,93E+01	4,15E-02	-1,21E-03
GWP-LULUC	kg CO ₂ eq.	5,24E-02	6,88E-05	1,20E-05	0,00E+00	7,16E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,57E-06	1,26E-04	7,72E-07	-6,39E-04
GWP-total	kg CO ₂ eq.	5,49E+01	2,80E+00	3,61E+00	0,00E+00	9,27E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,49E-01	6,90E+01	4,57E-02	-4,56E+00
ODP	kg CFC 11 eq.	1,67E-06	5,71E-08	1,26E-09	0,00E+00	2,15E-08	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	7,12E-09	1,12E-08	3,78E-11	-1,78E-08
AP	mol H ⁺ eq.	3,96E-01	3,27E-03	6,16E-04	0,00E+00	5,58E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,69E-04	9,03E-03	2,12E-05	-1,52E-02
EP-freshwater	kg P eq.	2,49E-03	2,35E-06	5,13E-07	0,00E+00	5,95E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,93E-07	6,55E-06	7,95E-07	-2,22E-04
EP-marine	kg N eq.	7,60E-02	7,24E-04	2,76E-04	0,00E+00	1,78E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,33E-04	4,48E-03	5,99E-05	-3,26E-03
EP-terrestrial	mol N eq.	1,10E+00	7,92E-03	2,86E-03	0,00E+00	1,22E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,65E-03	4,69E-02	8,81E-05	-3,83E-02
POCP	kg NMVOC eq.	3,27E-01	7,08E-03	7,44E-04	0,00E+00	3,67E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,52E-03	1,16E-02	3,70E-05	-1,34E-02
ADP-minerals & metals ^{1,2}	kg Sb eq.	2,50E-05	9,25E-08	3,28E-08	0,00E+00	3,33E-06	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,15E-08	3,99E-07	3,02E-10	-6,88E-07
ADP-fossil ¹	MJ	1,38E+03	3,70E+01	6,37E-01	0,00E+00	1,41E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,61E+00	6,18E+00	3,43E-02	-4,69E+01
WDP ¹	m ³	8,98E+01	1,57E-02	7,24E-02	0,00E+00	1,10E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,96E-03	7,72E-01	-9,77E-03	-2,67E-01
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals & metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption															

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

² **Disclaimer 2:** The results of the impact categories abiotic depletion of minerals and metals, land use, human toxicity (cancer), human toxicity, noncancer and ecotoxicity (freshwater) may be highly uncertain in LCAs that include capital goods/infrastructure in generic datasets, in case infrastructure/capital goods contribute greatly to the total results. This is because the LCI data of infrastructure/capital goods used to quantify these indicators in currently available generic datasets sometimes lack temporal, technological and geographical representativeness. Caution should be exercised when using the results of these indicators for decision-making purposes.



Additional mandatory and voluntary impact category indicators

Results per 1 unit of Cabinet 2 shelves, 1252x800x420

Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-GHG ³	kg CO ₂ e	8,72E+01	2,80E+00	1,97E-01	0,00E+00	8,53E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,49E-01	1,97E+01	4,21E-03	-4,55E+00
Particulate matter	disease inc.	6,24E-06	1,66E-07	5,22E-09	0,00E+00	6,02E-08	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,29E-08	6,48E-08	4,52E-10	-3,04E-07
Ionising radiation ²	kBq U-235 eq	1,98E+00	5,04E-03	3,11E-04	0,00E+00	1,97E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	6,28E-04	2,77E-03	1,80E-05	-1,72E-02
Ecotoxicity, freshwater ^{1,4}	CTUe	1,05E+03	1,26E+00	3,96E+00	0,00E+00	1,22E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,56E-01	4,14E+01	5,98E-01	-3,95E+02
Human toxicity, cancer ^{1,4}	CTUh	3,19E-06	1,95E-10	2,54E-10	0,00E+00	3,25E-09	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,62E-11	3,78E-09	2,72E-12	-1,50E-06
Human toxicity, non-cancer ^{1,4}	CTUh	4,23E-07	1,86E-08	7,39E-09	0,00E+00	5,97E-09	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,30E-09	1,21E-07	2,84E-10	-1,38E-08
Land use ¹	Pt	1,73E+03	8,28E-02	5,69E-02	0,00E+00	1,33E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,03E-02	6,94E-01	5,25E-02	-4,34E+00

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

² **Disclaimer 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.

³ **Disclaimer 3:** This indicator accounts for all greenhouse gases except biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. As such, the indicator is identical to GWP-total except that the CF for biogenic CO₂ is set to zero.

⁴ **Disclaimer 4:** The results of the impact categories abiotic depletion of minerals and metals, land use, human toxicity (cancer), human toxicity, noncancer and ecotoxicity (freshwater) may be highly uncertain in LCAs that include capital goods/infrastructure in generic datasets, in case infrastructure/capital goods contribute greatly to the total results. This is because the LCI data of infrastructure/capital goods used to quantify these indicators in currently available generic datasets sometimes lack temporal, technological and geographical representativeness. Caution should be exercised when using the results of these indicators for decision-making purposes.

Resource use indicators

Option B from EN 15804, ANNEX 3 describes the use of primary energy used in this study such as: The energy used as raw material shall be declared as an input to the module where it enters the product system (often in module A1) and as an output from the product system if it exits the product system as useful energy (often from modules A5 or C3). Energy content that is wasted (e.g. in landfill or in incineration), remains as part of the indicator for energy used for raw materials, and shall not (in contrast to option A) be reported as an input of energy used for energy carriers. The rationale behind this option is that the indicator for energy used as raw materials shall reflect the energy used for the purpose of being raw material in the product or packaging, that is not subsequently transferred in useable form to another product system. In this option, energy used as raw material will often not be zero over the product life cycle.

Results per 1 unit of Cabinet 2 shelves, 1252x800x420

Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
PERE	MJ	3,45E+02	1,31E-01	1,51E-02	0,00E+00	5,05E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,63E-02	1,47E-01	5,54E-04	-5,66E-01
PERM	MJ	5,84E+02	0,00E+00	-2,37E+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	0,00E+00	-2,91E+02	0,00E+00	0,00E+00
PERT	MJ	9,29E+02	1,31E-01	-2,36E+01	0,00E+00	5,05E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,63E-02	-2,91E+02	5,54E-04	-5,66E-01
PENRE	MJ	3,44E+02	3,81E-01	8,46E-02	0,00E+00	5,06E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,75E-02	9,88E-01	3,90E-03	-4,18E+01
PENRM	MJ	1,60E+02	0,00E+00	-7,88E-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	0,00E+00	-1,34E+02	0,00E+00	0,00E+00
PENRT	MJ	5,03E+02	3,81E-01	-7,04E-01	0,00E+00	5,06E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,75E-02	-1,33E+02	3,90E-03	-4,18E+01
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	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	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	0,00E+00	0,00E+00	0,00E+00
FW	m ³	3,55E-01	6,40E-04	3,74E-03	0,00E+00	4,79E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	7,98E-05	3,86E-02	1,59E-05	-1,55E-02

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



Waste indicators

Results per 1 unit of Cabinet 2 shelves, 1252x800x420

Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste disposed	Kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Non-hazardous waste disposed	Kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Radioactive waste disposed	Kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

Output flow indicators

Results per 1 unit of Cabinet 2 shelves, 1252x800x420

Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Components for re-use	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Material for recycling	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	2,64E+00	0,00E+00	0,00E+00
Materials for energy recovery	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy, electricity	MJ	0,00E+00	0,00E+00	3,68E+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	7,05E+01	0,00E+00	0,00E+00
Exported energy, thermal	MJ	0,00E+00	0,00E+00	2,08E+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	0,00E+00	3,97E+02	0,00E+00	0,00E+00

VERSION HISTORY

2025-03-17 Original version of the EPD

2025-03-17 The original version date of the EPD was incorrect and has been updated from 2024 to 2025



References

Eklund, R. (2024). No. 8 Life Cycle Assessment of 69 QBUS storage variations. Report date 2025-01-08.

EN 15804+A2 Sustainability in construction works – Environmental product declarations – Core rules for the product category of construction products.

International Organization for Standardization [ISO]. (2006). *Environmental labels and declarations - Type III environmental declarations - Principles and procedures (ISO 14025:2010)*.

International Organization for Standardization [ISO]. (2006a). *Environmental management - Life cycle assessment - Principles and framework (ISO 14040:2006)*.

International Organization for Standardization [ISO]. (2006b). *Environmental labels and declarations - Type III environmental declarations - Requirements and guidelines (ISO 14044:2006)*.

The International EPD System. (2024). *GENERAL PROGRAMME INSTRUCTIONS FOR THE INTERNATIONAL EPD® SYSTEM version 4.0*

The International EPD system. (2024). *PCR 2019:14-c-PCR-021 Furniture (c-PCR to PCR 2019:14)* (Adopted from EPD Norway). Stockholm: EPD International.
<https://www.epd-norge.no/>

The International EPD system. (2022). *Product category rules 2019:14 of construction products version 1.3.4, valid until 2025-06-20*.
<https://www.environdec.com/>



Abbreviations

EPD: Environmental Product Declaration
ISO: International Organization for Standardization
EN: European Norm
RSL: Reference Service Life
ESL: Estimated Service Life
PCR: Product Category Rules
LCA: Life Cycle Assessment
CF: Characterization Factors
GWP: 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: Ozone Depletion Potential
AP: Acidification Potential
EP: Eutrophication Potential
EP-freshwater: Eutrophication Potential freshwater
EP-marine: Eutrophication Potential marine
EP-terrestrial: Eutrophication Potential terrestrial
POCP: Photochemical Ozone Creation Potential
ADP: Abiotic Depletion Potential
ADP-minerals & metals: Abiotic Depletion Potential for minerals and metals
ADP-fossil: Abiotic Depletion Potential for fossil resources
WDP: Water Deprivation Potential
EAF: Electric Arc Furnace
BOF: Basic Oxygen Furnace
SVHC: Substances of Very High Concern
CTUh: Comparative Toxic Unit human
CTUe: Comparative Toxic Unit ecological

