

Owner: TCM Group
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Issued: 16-05-2024
Valid to: 16-05-2029

3rd PARTY VERIFIED

EPD

VERIFIED ENVIRONMENTAL PRODUCT DECLARATION | ISO 14025 & EN 15804



Owner of declaration

TCM Group
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CVR: 37291269



Issued:
16-05-2024

Valid to:
16-05-2029

Programme

EPD Danmark
www.epddanmark.dk



- Industry EPD
- Product EPD

Basis of calculation

This EPD is developed and verified in accordance with the European standard EN 15804+A2.

Comparability

EPDs of construction products may not be comparable if they do not comply with the requirements in EN 15804. EPD data may not be comparable if the datasets used are not developed in accordance with EN 15804 and if the background systems are not based on the same database.

Validity

This EPD has been verified in accordance with ISO 14025 and is valid for 5 years from the date of issue.

Use

The intended use of an EPD is to communicate scientifically based environmental information for construction products, for the purpose of assessing the environmental performance of buildings.

EPD type

- Cradle-to-gate with modules C1-C4 and D
- Cradle-to-gate with options, modules C1-C4 and D
- Cradle-to-grave and module D
- Cradle-to-gate
- Cradle-to-gate with options

Declared product(s)

Kitchen cabinet corpus sold under the name AUBO:
- Chipboard corpus with melamine surface

Kitchen cabinet front sold under the name AUBO:

- Chipboard front with melamine surface
- MDF front with melamine surface
- MDF front with lacquered surface
- MDF front with PVC foil surface

Number of declared datasets/product variations: 5

Production site

Vævervej 19-23, 7490 Aulum, Denmark

Use of Guarantees of Origin

- No certificates used
- Electricity covered by GoO
- Biogas covered by GoO

Functional unit

1 piece of kitchen cabinet corpus or 1 piece of kitchen cabinet front with a reference service life of 30 years.

Year of production site data (A3)

[2023]

EPD version

Version 1

CEN standard EN 15804 serves as the core PCR

Independent verification of the declaration and data, according to EN ISO 14025

- internal
- external

Third party verifier:

David Althoff Palm, Dalemarken AB

Martha Katrine Sørensen
EPD Danmark

Life cycle stages and modules (MND = module not declared)

Product			Construction process		Use							End of life			Beyond the system boundary	
Raw material supply	Transport	Manufacturing	Transport	Installation process	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Re-use, recovery and recycling potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Product information

Product description

The main product components presented in the table below are representative of a typical 60 cm wide kitchen cabinet.

Material weight % of declared product					
	Chipboard corpus	Chipboard with melamine front	MDF with melamine front	MDF with lacquer front	MDF with PVC foil front
Chipboard with melamine	92	96			
MDF with melamine			96		
MDF				96	96
HDF	4				
Travers	3				
Lacquer				2	
PVC foil					2
Edge band	<1	1	1		
Glue	<1	<1	<1		
Screws	<1	<1	<1	<1	<1
Shelf brackets	<1				
Dowels	<1				
Hinges	<1	3	3	2	2
Cabinet bumpers	<1	<1	<1	<1	<1

Product packaging:

The composition of the sales- and transport packaging of 1 cabinet (1 corpus with 1 front) is shown in the table below.

Material	Weight of packaging [kg]	Weight-% of packaging
Single-use pallet	2.50E+00	98
Cardboard	5.40E-02	2
Stretch foil	3.43E-03	<1
PP straps	1.50E-03	<1
Total	2.56E+00	100

Representativity

This declaration, including data collection and the modelled foreground system including results, represents the production of the kitchen cabinets described as the declared product with the product descriptions presented above on the

production site located in Aulum, and sold under the name AUBO. Product specific data are based on average values collected in 2023. Background data are based on ecoinvent v3.10 and are less than 10 years old. Generally, the used background datasets are of high quality, and the majority of the datasets are only a couple of years old. The EPD is geographically representative for products used in Denmark and Norway.

Hazardous substances

The kitchen cabinets do not contain substances listed on the "Candidate List of Substances of Very High Concern for authorisation"

(<http://echa.europa.eu/candidate-list-table>)

Product(s) use

Furniture for kitchens, bathrooms, and storage. Primary use as kitchen cabinets.

Essential characteristics

This EPD is representative of a typical 60 cm wide kitchen cabinet. The results can be converted to m² floor area or m² front based on the dimensions illustrated in the figure below.

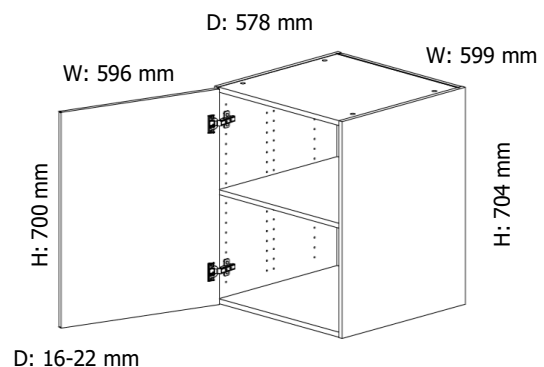
Further technical information can be obtained by contacting the manufacturer or on the manufacturer's website:

<https://www.tcmgroup.dk/>

Reference Service Life (RSL)

The reference service life is 30 years.

Picture of product(s)



LCA background

Functional unit

The LCI and LCIA results in this EPD relates to 1 piece of corpus or 1 piece of front of a typical 60 cm wide kitchen cabinet.

The functional unit is 1 piece of product with a reference service life of 30 years. The RSL is a standard service life for kitchen cabinets constructed from laminated wood and veneer and based on data from BUILD. This is in alignment with the c-PCR from EPD Norway, which specifies how to develop EPDs for furniture products.

The EPD is a product-specific EPD and the LCI and LCIA results relate to the specific products.

Name	Value	Unit
Functional unit	1	piece

Name	Thickness [mm]	Density [kg/piece]	Conversion factor to 1 kg
Chipboard corpus	16	20.6	0.049
Chipboard with melamine front	16	4.9	0.202
MDF with melamine front	16	5.2	0.191
MDF with lacquer front	22	7.0	0.142
MDF with PVC foil front	22	7.9	0.126

PCR

This EPD is developed according to the core rules for the product category of construction products in EN 15804, and NPCR 026:2022 – Part B for Furniture version 2.0 (related to EN 15804 + A2), valid until 01.07.2024.

Energy modelling principles

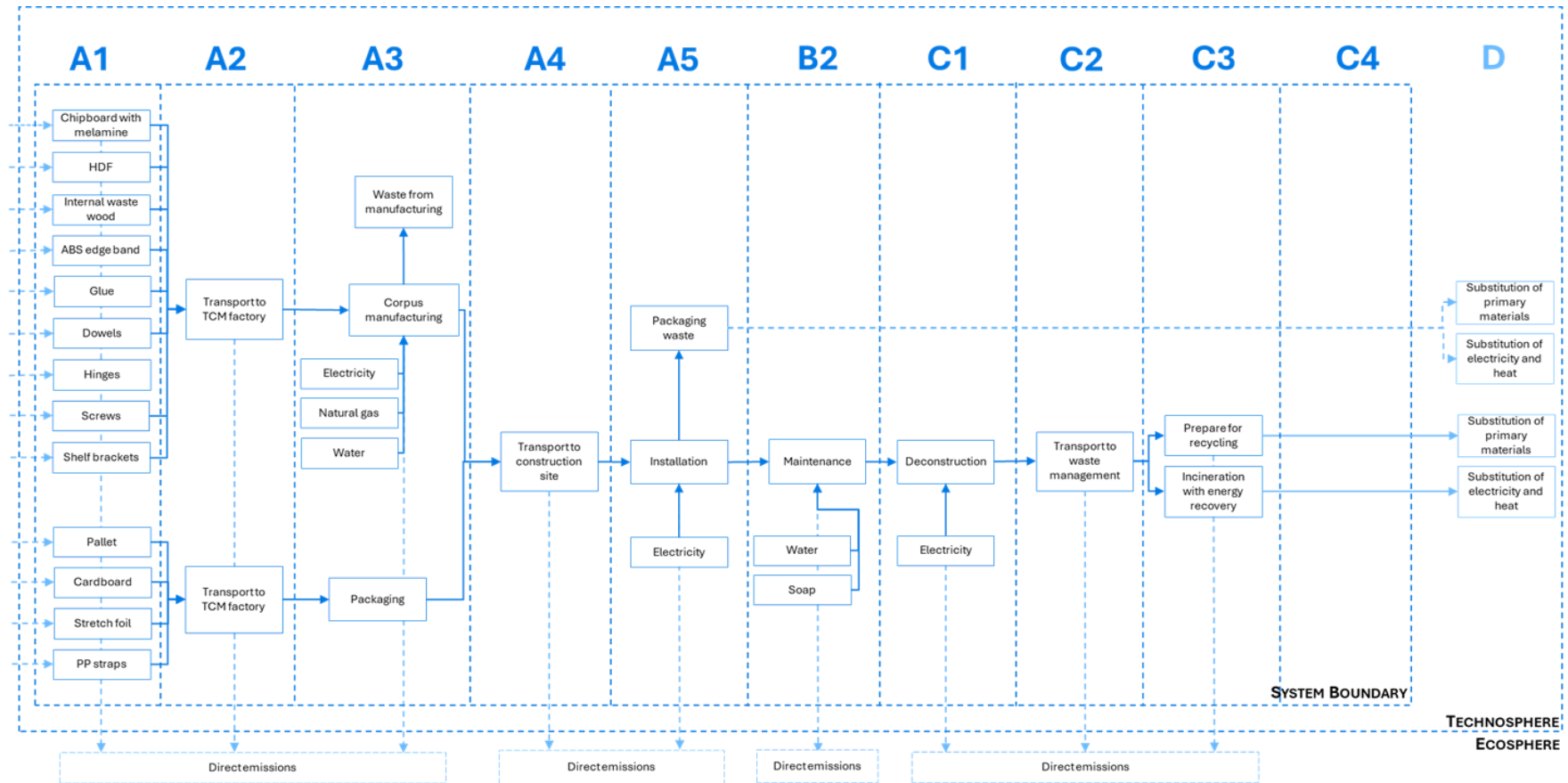
Foreground system:

The product is produced using 85.3% wind power and 14.7% solar power in production.

Background system:

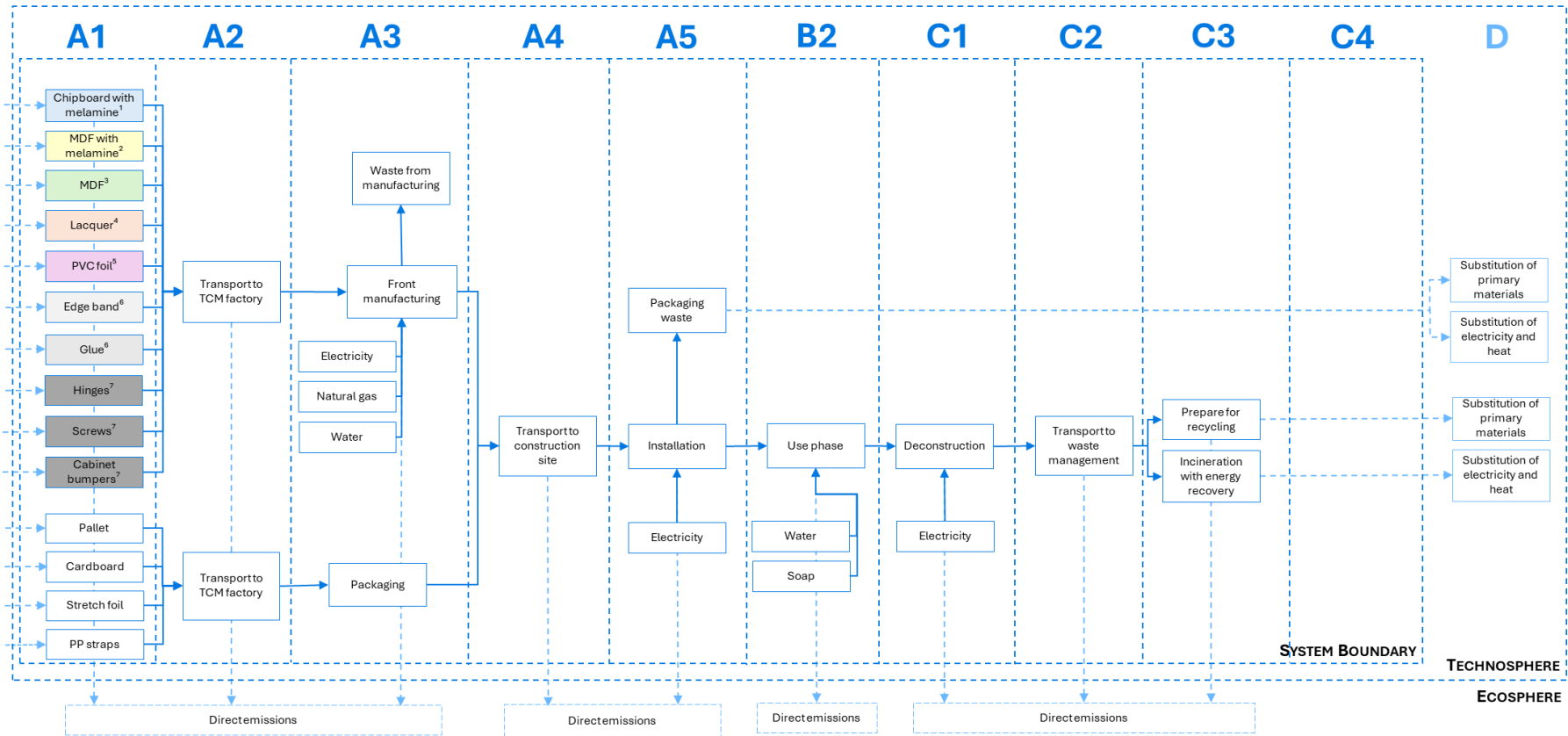
Upstream and downstream processes are modelled using electricity grid mix.

Flowdiagram for kitchen cabinet corpus



NOTE: Modules B1 and B3-B7 are excluded from the flowdiagram, as no environmental impacts are associated to them.

Flowdiagram for kitchen cabinet fronts



¹ Blue inputs are only related to the chipboard with melamine front
² Yellow inputs are only related to the MDF with melamine fronts
³ Green inputs are only related to the MDF with lacquer and MDF with PVC foil fronts
⁴ Orange inputs are only related to the MDF with lacquer front
⁵ Purple inputs are only related to the MDF with PVC foil front
⁶ Light grey inputs are only related to the chipboard with melamine and MDF with melamine fronts
⁷ Dark grey inputs are related to all four fronts

NOTE: Modules B1, B3-B7 are excluded from flowdiagram, as no environmental impacts are associated to them.

System boundary

This EPD is based on a cradle-to-grave LCA, in which 100 weight-% has been accounted for.

The general rules for the exclusion of inputs and outputs follows the requirements in EN 15804, 6.3.5, where the total of neglected input flows per module shall be a maximum of 5 % of energy usage and mass and 1 % of energy usage and mass for unit processes.

Product stage (A1-A3) includes:

A1 – Extraction and processing of raw materials

A2 – Transport to the production site

A3 – Manufacturing processes

The modules A1-A3 are aggregated and comprise the acquisition of all raw materials including forestry and collection of pre- and post-consumer wood, products and energy, transport to the production site, packaging, and waste processing of both waste from manufacturing and treatment of raw material packaging waste up to the “end-of-waste” state or final disposal. The production waste from manufacturing is sent to recycling.

The chipboard inputs consist of 30% recycled wood.

No benefits from recycling of waste or energy recovery from A3 is credited in module D.

The production process of fronts consists of the following steps: cutting and gluing of edge bands (not relevant for MDF with lacquer and MDF with PVC foil fronts), drilling and assembly. The production process of the corpus consists of an assembly step.

Construction process stage (A4-A5) includes:

The products are transported to the consumer by truck and ferry. An average distance of 562 km

by truck and 93 km by ferry to consumers in Scandinavia is used.

There is no waste associated with installation. It is assumed that there is consumption of electricity associated with the installation.

After installation, the product packaging materials are disposed through recycling and incineration.

Use stage (B1-B7) includes:

All use stages are included, but there are only environmental impacts associated with module B2 where soap and water are consumed for cleaning of surfaces. It is assumed a kitchen cabinet is cleaned with 1 g of soap and 0.1 L of water per m² of interior and exposed exterior surfaces 2 times per year which is modelled for the 30-year reference service life.

End of Life (C1-C4) includes:

It is assumed that there is electricity consumption associated with the deconstruction of the product. The product is assumed to be transported 50 km by truck to a waste management facility in Scandinavia.

Metal components are assumed to be recycled and wood and plastic components are incinerated with energy recovery. LCA standards for wood dictate that an uptake in A1 must be emitted in C3 irrespective of whether the wood is recycled or not, which has been implemented accordingly.

Re-use, recovery and recycling potential (D) includes:

Module D includes material credits and thermal and electrical energy credits from waste handling of product packaging and product waste from the modules A5 and C3.

Because the wood products contain a high share of additives, only the wood content of the wood products is credited in module D, and water and additives are excluded.

LCA results

ENVIRONMENTAL IMPACTS PER FU (PIECE, 30 years) – Chipboard corpus											
Parameter	Unit	A1-A3	A4	A5	B2	B1, B3-B7	C1	C2	C3	C4	D
GWP-total	[kg CO ₂ eq.]	-1.95E+01	2.66E+00	3.01E+00	1.14E+00	0.00E+00	2.03E-03	1.96E-01	2.93E+01	0.00E+00	2.85E-03
GWP-fossil	[kg CO ₂ eq.]	1.21E+01	2.66E+00	7.71E-02	4.64E-01	0.00E+00	2.02E-03	1.96E-01	6.22E-01	0.00E+00	-6.61E-01
GWP-biogenic	[kg CO ₂ eq.]	-3.16E+01	0.00E+00	2.94E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.87E+01	0.00E+00	6.68E-01
GWP-luluc	[kg CO ₂ eq.]	3.00E-02	9.21E-04	7.79E-05	6.78E-01	0.00E+00	9.01E-06	6.51E-05	4.57E-05	0.00E+00	-4.39E-03
ODP	[kg CFC 11 eq.]	1.14E-07	5.16E-08	1.05E-09	1.20E-08	0.00E+00	4.01E-11	3.89E-09	3.87E-09	0.00E+00	-7.06E-08
AP	[mol H ⁺ eq.]	3.73E-02	1.25E-02	4.22E-04	5.14E-03	0.00E+00	9.07E-06	4.08E-04	3.22E-03	0.00E+00	-1.69E-02
EP-freshwater	[kg P eq.]	1.41E-03	1.71E-04	1.84E-05	7.53E-03	0.00E+00	1.29E-06	1.33E-05	9.87E-05	0.00E+00	-2.77E-04
EP-marine	[kg N eq.]	1.18E-02	3.09E-03	1.84E-04	6.33E-03	0.00E+00	2.07E-06	9.80E-05	1.76E-03	0.00E+00	-4.88E-03
EP-terrestrial	[mol N eq.]	1.12E-01	3.39E-02	1.82E-03	1.87E-02	0.00E+00	2.47E-05	1.06E-03	1.68E-02	0.00E+00	-7.98E-02
POCP	[kg NMVOC eq.]	3.63E-02	1.40E-02	5.22E-04	3.08E-03	0.00E+00	5.98E-06	6.78E-04	4.19E-03	0.00E+00	-1.44E-02
ADPm ¹	[kg Sb eq.]	2.95E-05	8.25E-06	2.50E-07	5.19E-06	0.00E+00	1.83E-08	6.51E-07	5.79E-07	0.00E+00	-4.13E-06
ADPf ¹	[MJ]	2.26E+02	3.70E+01	8.30E-01	4.97E+00	0.00E+00	3.31E-02	2.75E+00	2.25E+00	0.00E+00	-7.91E+00
WDP ¹	[m ³ world eq. deprived]	1.70E+00	1.74E-01	6.58E-02	2.23E+00	0.00E+00	3.78E-03	1.35E-02	6.90E-01	0.00E+00	-4.44E+00
Caption	GWP-total = Globale 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 = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.										
Disclaimer	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										

ADDITIONAL ENVIRONMENTAL IMPACTS PER FU (PIECE, 30 years) – Chipboard corpus											
Parameter	Unit	A1-A3	A4	A5	B2	B1, B3-B7	C1	C2	C3	C4	D
PM	[Disease incidence]	5.89E-07	1.85E-07	6.18E-09	8.35E-08	0.00E+00	7.06E-11	1.44E-08	3.47E-08	0.00E+00	-2.41E-07
IRP ²	[kBq U235 eq.]	5.59E-01	4.53E-02	4.04E-03	2.89E-02	0.00E+00	7.63E-04	3.57E-03	4.53E-03	0.00E+00	-7.02E-02
ETP-fw ¹	[CTUe]	7.85E+01	9.73E+00	8.08E-01	5.77E+01	0.00E+00	9.58E-03	7.50E-01	4.33E+00	0.00E+00	-1.43E+01
HTP-c ¹	[CTUh]	7.51E-08	1.81E-08	1.77E-09	4.10E-09	0.00E+00	8.57E-12	1.39E-09	5.23E-09	0.00E+00	-3.61E-08
HTP-nc ¹	[CTUh]	1.19E-07	2.27E-08	3.07E-09	2.35E-08	0.00E+00	3.34E-11	1.78E-09	3.37E-08	0.00E+00	-4.85E-08
SQP ¹	-	1.29E+03	2.07E+01	5.11E-01	4.26E+01	0.00E+00	5.92E-02	1.66E+00	6.27E-01	0.00E+00	-3.49E+02
Caption	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)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.										
Disclaimers	¹ The results of this environmental 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 PER FU (PIECE, 30 years) – Chipboard corpus

Parameter	Unit	A1-A3	A4	A5	B2	B1, B3-B7	C1	C2	C3	C4	D
PERE	[MJ]	2.19E+02	6.03E-01	1.17E-01	1.64E+01	0.00E+00	5.05E-02	4.73E-02	5.11E-03	0.00E+00	-9.12E+01
PERM	[MJ]	3.13E+02	0.00E+00	-2.75E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-2.86E+02	0.00E+00	0.00E+00
PERT	[MJ]	5.32E+02	6.03E-01	-2.74E+01	1.64E+01	0.00E+00	5.05E-02	4.73E-02	-2.86E+02	0.00E+00	-9.12E+01
PENRE	[MJ]	1.83E+02	3.70E+01	8.29E-01	5.79E+00	0.00E+00	3.31E-02	2.75E+00	2.20E+00	0.00E+00	-7.86E+00
PENRM	[MJ]	4.74E+00	0.00E+00	-1.40E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-4.60E+00	0.00E+00	0.00E+00
PENRT	[MJ]	1.88E+02	3.70E+01	6.89E-01	5.79E+00	0.00E+00	3.31E-02	2.75E+00	-2.40E+00	0.00E+00	-7.86E+00
SM	[kg]	9.01E+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]	2.14E+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
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
FW	[m ³]	6.04E-02	4.75E-03	7.91E-04	5.07E-02	0.00E+00	1.91E-04	3.68E-04	4.54E-03	0.00E+00	-4.20E-02
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non renewable primary energy excluding non renewable primary energy resources used as raw materials; PENRM = Use of non renewable primary energy resources used as raw materials; PENRT = Total use of non renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER FU (PIECE, 30 years) – Chipboard corpus

Parameter	Unit	A1-A3	A4	A5	B2	B1, B3-B7	C1	C2	C3	C4	D
HWD	[kg]	3.12E-01	5.32E-02	1.17E-02	1.13E-01	0.00E+00	1.86E-04	4.02E-03	1.02E-01	0.00E+00	-8.79E-02
NHWD	[kg]	1.11E+01	1.10E+00	1.74E+00	3.65E+01	0.00E+00	6.38E-03	8.49E-02	2.14E+01	0.00E+00	-1.35E+00
RWD	[kg]	2.85E-03	2.80E-06	2.24E-07	1.97E-06	0.00E+00	3.21E-08	2.20E-07	2.77E-07	0.00E+00	-3.62E-06
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
MFR	[kg]	1.02E+00	0.00E+00	3.78E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.00E-02	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
EEE	[MJ]	0.00E+00	0.00E+00	1.33E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E+01	0.00E+00	0.00E+00
EET	[MJ]	0.00E+00	0.00E+00	1.85E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E+02	0.00E+00	0.00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,000000000112.										

BIOGENIC CARBON CONTENT PER FU (PIECE, 30 years) – Chipboard corpus

Parameter	Unit	At the factory gate
Biogenic carbon content in product	[kg C]	7.82E+00
Biogenic carbon content in accompanying packaging	[kg C]	8.01E-01
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO ₂	

ENVIRONMENTAL IMPACTS PER FU (PIECE, 30 years) – Chipboard front melamine surface											
Parameter	Unit	A1-A3	A4	A5	B2	B1, B3-B7	C1	C2	C3	C4	D
GWP-total	[kg CO ₂ eq.]	-3.94E+00	6.54E-01	9.17E-01	2.48E-01	0.00E+00	4.06E-03	4.70E-02	6.86E+00	0.00E+00	-2.36E-01
GWP-fossil	[kg CO ₂ eq.]	3.57E+00	6.54E-01	2.00E-02	1.01E-01	0.00E+00	4.05E-03	4.70E-02	2.34E-01	0.00E+00	-4.46E-01
GWP-biogenic	[kg CO ₂ eq.]	-7.52E+00	0.00E+00	8.97E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.62E+00	0.00E+00	2.11E-01
GWP-luluc	[kg CO ₂ eq.]	5.25E-03	2.26E-04	1.68E-05	1.47E-01	0.00E+00	1.80E-05	1.56E-05	1.32E-05	0.00E+00	-1.17E-03
ODP	[kg CFC 11 eq.]	3.85E-08	1.27E-08	2.73E-10	2.62E-09	0.00E+00	8.02E-11	9.34E-10	9.43E-10	0.00E+00	-1.84E-08
AP	[mol H ⁺ eq.]	1.07E-02	3.07E-03	1.14E-04	1.12E-03	0.00E+00	1.81E-05	9.78E-05	7.77E-04	0.00E+00	-5.19E-03
EP-freshwater	[kg P eq.]	4.48E-04	4.19E-05	3.79E-06	1.64E-03	0.00E+00	2.57E-06	3.18E-06	2.42E-05	0.00E+00	-1.98E-04
EP-marine	[kg N eq.]	3.23E-03	7.59E-04	5.29E-05	1.38E-03	0.00E+00	4.13E-06	2.35E-05	4.24E-04	0.00E+00	-1.42E-03
EP-terrestrial	[mol N eq.]	3.10E-02	8.33E-03	5.18E-04	4.06E-03	0.00E+00	4.95E-05	2.53E-04	4.01E-03	0.00E+00	-2.18E-02
POCP	[kg NMVOC eq.]	1.04E-02	3.43E-03	1.49E-04	6.70E-04	0.00E+00	1.20E-05	1.63E-04	1.00E-03	0.00E+00	-4.36E-03
ADPm ¹	[kg Sb eq.]	1.27E-05	2.02E-06	4.78E-08	1.13E-06	0.00E+00	3.65E-08	1.56E-07	1.91E-07	0.00E+00	-3.30E-06
ADPf ¹	[MJ]	6.40E+01	9.09E+00	2.05E-01	1.08E+00	0.00E+00	6.62E-02	6.61E-01	5.55E-01	0.00E+00	-4.87E+00
WDP ¹	[m ³ world eq. deprived]	6.62E-01	4.26E-02	1.70E-02	4.85E-01	0.00E+00	7.56E-03	3.23E-03	1.66E-01	0.00E+00	-1.13E+00
Caption	GWP-total = Globale 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 = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.										
Disclaimer	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										

ADDITIONAL ENVIRONMENTAL IMPACTS PER FU (PIECE, 30 years) – Chipboard front melamine surface											
Parameter	Unit	A1-A3	A4	A5	B2	B1, B3-B7	C1	C2	C3	C4	D
PM	[Disease incidence]	1.66E-07	4.54E-08	1.69E-09	1.81E-08	0.00E+00	1.41E-10	3.46E-09	8.34E-09	0.00E+00	-7.91E-08
IRP ²	[kBq U235 eq.]	1.72E-01	1.11E-02	5.45E-04	6.28E-03	0.00E+00	1.53E-03	8.57E-04	1.40E-03	0.00E+00	-2.67E-02
ETP-fw ¹	[CTUe]	4.34E+01	2.39E+00	1.46E-01	1.25E+01	0.00E+00	1.92E-02	1.80E-01	1.23E+00	0.00E+00	-2.07E+01
HTP-c ¹	[CTUh]	9.30E-08	4.44E-09	1.99E-10	8.91E-10	0.00E+00	1.71E-11	3.34E-10	1.25E-09	0.00E+00	-7.30E-08
HTP-nc ¹	[CTUh]	3.60E-08	5.58E-09	8.86E-10	5.11E-09	0.00E+00	6.68E-11	4.28E-10	8.09E-09	0.00E+00	-1.54E-08
SQP ¹	-	3.04E+02	5.09E+00	1.09E-01	9.26E+00	0.00E+00	1.18E-01	3.99E-01	2.59E-01	0.00E+00	-8.54E+01
Caption	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)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.										
Disclaimers	¹ The results of this environmental 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 PER FU (PIECE, 30 years) – Chipboard front melamine surface

Parameter	Unit	A1-A3	A4	A5	B2	B1, B3-B7	C1	C2	C3	C4	D
PERE	[MJ]	5.52E+01	1.48E-01	1.40E-03	3.56E+00	0.00E+00	1.01E-01	1.13E-02	5.98E-03	0.00E+00	-2.20E+01
PERM	[MJ]	7.46E+01	0.00E+00	-8.39E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-6.62E+01	0.00E+00	0.00E+00
PERT	[MJ]	1.30E+02	1.48E-01	-8.38E+00	3.56E+00	0.00E+00	1.01E-01	1.13E-02	-6.62E+01	0.00E+00	-2.20E+01
PENRE	[MJ]	5.23E+01	9.09E+00	2.05E-01	1.26E+00	0.00E+00	6.62E-02	6.61E-01	5.30E-01	0.00E+00	-4.86E+00
PENRM	[MJ]	2.24E+00	0.00E+00	-4.27E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-2.20E+00	0.00E+00	0.00E+00
PENRT	[MJ]	5.45E+01	9.09E+00	1.62E-01	1.26E+00	0.00E+00	6.62E-02	6.61E-01	-1.67E+00	0.00E+00	-4.86E+00
SM	[kg]	2.03E+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]	5.13E+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
FW	[m ³]	1.78E-02	1.17E-03	1.31E-04	1.10E-02	0.00E+00	3.83E-04	8.88E-05	1.16E-03	0.00E+00	-1.18E-02
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non renewable primary energy excluding non renewable primary energy resources used as raw materials; PENRM = Use of non renewable primary energy resources used as raw materials; PENRT = Total use of non renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER FU (PIECE, 30 years) – Chipboard front melamine surface

Parameter	Unit	A1-A3	A4	A5	B2	B1, B3-B7	C1	C2	C3	C4	D
HWD	[kg]	2.31E-01	1.31E-02	2.73E-03	2.45E-02	0.00E+00	3.72E-04	9.64E-04	2.49E-02	0.00E+00	-1.44E-01
NHWD	[kg]	4.68E+00	2.69E-01	5.13E-01	7.94E+00	0.00E+00	1.28E-02	2.04E-02	5.02E+00	0.00E+00	-1.05E+00
RWD	[kg]	6.86E-04	6.88E-07	3.54E-08	4.29E-07	0.00E+00	6.42E-08	5.28E-08	8.49E-08	0.00E+00	-1.54E-06
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
MFR	[kg]	2.91E-01	0.00E+00	1.15E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.44E-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	0.00E+00	0.00E+00
EEE	[MJ]	0.00E+00	0.00E+00	4.07E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.47E+00	0.00E+00	0.00E+00
EET	[MJ]	0.00E+00	0.00E+00	5.63E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.41E+01	0.00E+00	0.00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER FU (PIECE, 30 years) – Chipboard front melamine surface

Parameter	Unit	At the factory gate
Biogenic carbon content in product	[kg C]	1.81E+00
Biogenic carbon content in accompanying packaging	[kg C]	2.45E-01
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO ₂	

ENVIRONMENTAL IMPACTS PER FU (PIECE, 30 years) – MDF front with melamine surface											
Parameter	Unit	A1-A3	A4	A5	B2	B1, B3-B7	C1	C2	C3	C4	D
GWP-total	[kg CO ₂ eq.]	-2.28E+00	6.88E-01	9.17E-01	2.48E-01	0.00E+00	4.06E-03	4.97E-02	7.01E+00	0.00E+00	-2.80E-01
GWP-fossil	[kg CO ₂ eq.]	5.38E+00	6.88E-01	2.00E-02	1.01E-01	0.00E+00	4.05E-03	4.97E-02	2.38E-01	0.00E+00	-4.89E-01
GWP-biogenic	[kg CO ₂ eq.]	-7.67E+00	0.00E+00	8.97E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.78E+00	0.00E+00	2.11E-01
GWP-luluc	[kg CO ₂ eq.]	1.66E-02	2.38E-04	1.72E-05	1.47E-01	0.00E+00	1.80E-05	1.65E-05	1.38E-05	0.00E+00	-1.53E-03
ODP	[kg CFC 11 eq.]	4.59E-08	1.33E-08	2.74E-10	2.62E-09	0.00E+00	8.02E-11	9.89E-10	9.96E-10	0.00E+00	-2.46E-08
AP	[mol H ⁺ eq.]	1.73E-02	3.23E-03	1.15E-04	1.12E-03	0.00E+00	1.81E-05	1.04E-04	8.22E-04	0.00E+00	-6.63E-03
EP-freshwater	[kg P eq.]	4.58E-04	4.41E-05	3.79E-06	1.64E-03	0.00E+00	2.57E-06	3.37E-06	2.56E-05	0.00E+00	-2.13E-04
EP-marine	[kg N eq.]	6.19E-03	7.98E-04	5.29E-05	1.38E-03	0.00E+00	4.13E-06	2.49E-05	4.48E-04	0.00E+00	-1.84E-03
EP-terrestrial	[mol N eq.]	6.14E-02	8.77E-03	5.18E-04	4.06E-03	0.00E+00	4.95E-05	2.68E-04	4.25E-03	0.00E+00	-2.87E-02
POCP	[kg NMVOC eq.]	1.91E-02	3.61E-03	1.49E-04	6.70E-04	0.00E+00	1.20E-05	1.72E-04	1.06E-03	0.00E+00	-5.58E-03
ADPm ¹	[kg Sb eq.]	1.33E-05	2.13E-06	4.78E-08	1.13E-06	0.00E+00	3.65E-08	1.65E-07	1.98E-07	0.00E+00	-3.55E-06
ADPf ¹	[MJ]	9.16E+01	9.56E+00	2.05E-01	1.08E+00	0.00E+00	6.62E-02	6.99E-01	5.86E-01	0.00E+00	-5.39E+00
WDP ¹	[m ³ world eq. deprived]	7.45E-01	4.49E-02	1.70E-02	4.85E-01	0.00E+00	7.56E-03	3.42E-03	1.76E-01	0.00E+00	-1.53E+00
Caption	GWP-total = Globale 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 = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.										
Disclaimer	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										

ADDITIONAL ENVIRONMENTAL IMPACTS PER FU (PIECE, 30 years) – MDF front with melamine surface											
Parameter	Unit	A1-A3	A4	A5	B2	B1, B3-B7	C1	C2	C3	C4	D
PM	[Disease incidence]	1.26E-07	4.78E-08	1.69E-09	1.81E-08	0.00E+00	1.41E-10	3.66E-09	8.83E-09	0.00E+00	-9.92E-08
IRP ²	[kBq U235 eq.]	1.02E-01	1.17E-02	5.45E-04	6.28E-03	0.00E+00	1.53E-03	9.07E-04	1.46E-03	0.00E+00	-3.18E-02
ETP-fw ¹	[CTUe]	3.50E+01	2.51E+00	1.46E-01	1.25E+01	0.00E+00	1.92E-02	1.91E-01	1.28E+00	0.00E+00	-2.12E+01
HTP-c ¹	[CTUh]	9.20E-08	4.68E-09	1.99E-10	8.91E-10	0.00E+00	1.71E-11	3.53E-10	1.33E-09	0.00E+00	-7.35E-08
HTP-nc ¹	[CTUh]	2.00E-08	5.87E-09	8.86E-10	5.11E-09	0.00E+00	6.68E-11	4.53E-10	8.55E-09	0.00E+00	-1.95E-08
SQP ¹	-	9.66E+01	5.35E+00	1.09E-01	9.26E+00	0.00E+00	1.18E-01	4.22E-01	2.67E-01	0.00E+00	-1.15E+02
Caption	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)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.										
Disclaimers	¹ The results of this environmental 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 PER FU (PIECE, 30 years) – MDF front with melamine surface

Parameter	Unit	A1-A3	A4	A5	B2	B1, B3-B7	C1	C2	C3	C4	D
PERE	[MJ]	2.49E+01	1.56E-01	1.40E-03	3.56E+00	0.00E+00	1.01E-01	1.20E-02	5.98E-03	0.00E+00	-3.02E+01
PERM	[MJ]	7.86E+01	0.00E+00	-8.39E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-7.02E+01	0.00E+00	0.00E+00
PERT	[MJ]	1.04E+02	1.56E-01	-8.38E+00	3.56E+00	0.00E+00	1.01E-01	1.20E-02	-7.02E+01	0.00E+00	-3.02E+01
PENRE	[MJ]	7.55E+01	9.56E+00	2.05E-01	1.26E+00	0.00E+00	6.62E-02	7.00E-01	5.61E-01	0.00E+00	-5.37E+00
PENRM	[MJ]	2.24E+00	0.00E+00	-4.27E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-2.20E+00	0.00E+00	0.00E+00
PENRT	[MJ]	7.78E+01	9.56E+00	1.62E-01	1.26E+00	0.00E+00	6.62E-02	7.00E-01	-1.64E+00	0.00E+00	-5.37E+00
SM	[kg]	2.78E-04	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]	5.44E+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
FW	[m ³]	2.51E-02	1.23E-03	1.31E-04	1.10E-02	0.00E+00	3.83E-04	9.40E-05	1.22E-03	0.00E+00	-1.54E-02
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non renewable primary energy excluding non renewable primary energy resources used as raw materials; PENRM = Use of non renewable primary energy resources used as raw materials; PENRT = Total use of non renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER FU (PIECE, 30 years) – MDF front with melamine surface

Parameter	Unit	A1-A3	A4	A5	B2	B1, B3-B7	C1	C2	C3	C4	D
HWD	[kg]	2.32E-01	1.38E-02	2.73E-03	2.45E-02	0.00E+00	3.72E-04	1.02E-03	2.63E-02	0.00E+00	-1.47E-01
NHWD	[kg]	4.66E+00	2.83E-01	5.13E-01	7.94E+00	0.00E+00	1.28E-02	2.16E-02	5.32E+00	0.00E+00	-1.12E+00
RWD	[kg]	6.39E-06	7.24E-07	3.54E-08	4.29E-07	0.00E+00	6.42E-08	5.59E-08	8.86E-08	0.00E+00	-1.79E-06
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
MFR	[kg]	2.96E-01	0.00E+00	1.15E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.44E-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	0.00E+00	0.00E+00
EEE	[MJ]	0.00E+00	0.00E+00	4.07E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.55E+00	0.00E+00	0.00E+00
EET	[MJ]	0.00E+00	0.00E+00	5.63E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.90E+01	0.00E+00	0.00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER FU (PIECE, 30 years) – MDF front with melamine surface

Parameter	Unit	At the factory gate
Biogenic carbon content in product	[kg C]	1.85E+00
Biogenic carbon content in accompanying packaging	[kg C]	2.45E-01
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO ₂	

ENVIRONMENTAL IMPACTS PER FU (PIECE, 30 years) – MDF front with lacquered surface											
Parameter	Unit	A1-A3	A4	A5	B2	B1, B3-B7	C1	C2	C3	C4	D
GWP-total	[kg CO ₂ eq.]	-2.20E-01	9.02E-01	9.17E-01	2.26E-01	0.00E+00	4.06E-03	6.69E-02	9.71E+00	0.00E+00	-3.32E-01
GWP-fossil	[kg CO ₂ eq.]	9.98E+00	9.02E-01	2.00E-02	9.17E-02	0.00E+00	4.05E-03	6.69E-02	3.91E-01	0.00E+00	-5.41E-01
GWP-biogenic	[kg CO ₂ eq.]	-1.02E+01	0.00E+00	8.97E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.32E+00	0.00E+00	2.11E-01
GWP-luluc	[kg CO ₂ eq.]	1.40E-02	3.12E-04	1.68E-05	1.34E-01	0.00E+00	1.80E-05	2.23E-05	1.80E-05	0.00E+00	-1.97E-03
ODP	[kg CFC 11 eq.]	2.50E-07	1.75E-08	2.73E-10	2.38E-09	0.00E+00	8.02E-11	1.33E-09	1.36E-09	0.00E+00	-3.20E-08
AP	[mol H ⁺ eq.]	5.07E-02	4.23E-03	1.14E-04	1.02E-03	0.00E+00	1.81E-05	1.39E-04	1.12E-03	0.00E+00	-8.36E-03
EP-freshwater	[kg P eq.]	2.82E-03	5.78E-05	3.79E-06	1.49E-03	0.00E+00	2.57E-06	4.53E-06	3.43E-05	0.00E+00	-2.31E-04
EP-marine	[kg N eq.]	1.31E-02	1.05E-03	5.29E-05	1.25E-03	0.00E+00	4.13E-06	3.35E-05	6.12E-04	0.00E+00	-2.34E-03
EP-terrestrial	[mol N eq.]	1.53E-01	1.15E-02	5.18E-04	3.69E-03	0.00E+00	4.95E-05	3.61E-04	5.79E-03	0.00E+00	-3.71E-02
POCP	[kg NMVOC eq.]	5.47E-02	4.74E-03	1.49E-04	6.09E-04	0.00E+00	1.20E-05	2.32E-04	1.45E-03	0.00E+00	-7.04E-03
ADPm ¹	[kg Sb eq.]	6.54E-05	2.79E-06	4.78E-08	1.03E-06	0.00E+00	3.65E-08	2.23E-07	2.52E-07	0.00E+00	-3.86E-06
ADPf ¹	[MJ]	1.65E+02	1.25E+01	2.05E-01	9.82E-01	0.00E+00	6.62E-02	9.41E-01	7.94E-01	0.00E+00	-6.00E+00
WDP ¹	[m ³ world eq. deprived]	6.56E+00	5.88E-02	1.70E-02	4.41E-01	0.00E+00	7.56E-03	4.60E-03	2.42E-01	0.00E+00	-2.00E+00
Caption	GWP-total = Globale 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 = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.										
Disclaimer	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										

ADDITIONAL ENVIRONMENTAL IMPACTS PER FU (PIECE, 30 years) – MDF front with lacquered surface											
Parameter	Unit	A1-A3	A4	A5	B2	B1, B3-B7	C1	C2	C3	C4	D
PM	[Disease incidence]	9.73E-07	6.26E-08	1.69E-09	1.65E-08	0.00E+00	1.41E-10	4.93E-09	1.19E-08	0.00E+00	-1.23E-07
IRP ²	[kBq U235 eq.]	7.57E-01	1.53E-02	5.45E-04	5.72E-03	0.00E+00	1.53E-03	1.22E-03	1.89E-03	0.00E+00	-3.79E-02
ETP-fw ¹	[CTUe]	1.18E+02	3.29E+00	1.46E-01	1.14E+01	0.00E+00	1.92E-02	2.56E-01	1.87E+00	0.00E+00	-2.19E+01
HTP-c ¹	[CTUh]	2.42E-07	6.13E-09	1.99E-10	8.10E-10	0.00E+00	1.71E-11	4.75E-10	1.79E-09	0.00E+00	-7.42E-08
HTP-nc ¹	[CTUh]	1.19E-07	7.69E-09	8.86E-10	4.65E-09	0.00E+00	6.68E-11	6.09E-10	1.17E-08	0.00E+00	-2.45E-08
SQP ¹	-	6.27E+02	7.01E+00	1.09E-01	8.42E+00	0.00E+00	1.18E-01	5.68E-01	3.20E-01	0.00E+00	-1.51E+02
Caption	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)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.										
Disclaimers	¹ The results of this environmental 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 PER FU (PIECE, 30 years) – MDF front with lacquered surface

Parameter	Unit	A1-A3	A4	A5	B2	B1, B3-B7	C1	C2	C3	C4	D
PERE	[MJ]	1.32E+01	2.04E-01	1.40E-03	3.23E+00	0.00E+00	1.01E-01	1.62E-02	7.20E-03	0.00E+00	-4.01E+01
PERM	[MJ]	1.03E+02	0.00E+00	-8.39E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-9.48E+01	0.00E+00	0.00E+00
PERT	[MJ]	1.16E+02	2.04E-01	-8.38E+00	3.23E+00	0.00E+00	1.01E-01	1.62E-02	-9.48E+01	0.00E+00	-4.01E+01
PENRE	[MJ]	1.46E+02	1.25E+01	2.05E-01	1.14E+00	0.00E+00	6.62E-02	9.41E-01	7.49E-01	0.00E+00	-5.99E+00
PENRM	[MJ]	3.95E+00	0.00E+00	-4.27E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-3.91E+00	0.00E+00	0.00E+00
PENRT	[MJ]	1.50E+02	1.25E+01	1.62E-01	1.14E+00	0.00E+00	6.62E-02	9.41E-01	-3.16E+00	0.00E+00	-5.99E+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	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
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
FW	[m ³]	1.68E-01	1.61E-03	1.31E-04	1.00E-02	0.00E+00	3.83E-04	1.27E-04	1.72E-03	0.00E+00	-1.97E-02
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non renewable primary energy excluding non renewable primary energy resources used as raw materials; PENRM = Use of non renewable primary energy resources used as raw materials; PENRT = Total use of non renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER FU (PIECE, 30 years) – MDF front with lacquered surface

Parameter	Unit	A1-A3	A4	A5	B2	B1, B3-B7	C1	C2	C3	C4	D
HWD	[kg]	7.30E-01	1.80E-02	2.73E-03	2.22E-02	0.00E+00	3.72E-04	1.37E-03	3.63E-02	0.00E+00	-1.50E-01
NHWD	[kg]	2.15E+01	3.71E-01	5.13E-01	7.22E+00	0.00E+00	1.28E-02	2.90E-02	7.20E+00	0.00E+00	-1.22E+00
RWD	[kg]	5.18E-05	9.49E-07	3.54E-08	3.90E-07	0.00E+00	6.42E-08	7.52E-08	1.15E-07	0.00E+00	-2.09E-06

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
MFR	[kg]	1.87E+00	0.00E+00	1.15E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.44E-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	0.00E+00	0.00E+00
EEE	[MJ]	0.00E+00	0.00E+00	4.07E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.84E+00	0.00E+00	0.00E+00
EET	[MJ]	0.00E+00	0.00E+00	5.63E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.70E+01	0.00E+00	0.00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER FU (PIECE, 30 years) – MDF front with lacquered surface

Parameter	Unit	At the factory gate
Biogenic carbon content in product	[kg C]	2.54E+00
Biogenic carbon content in accompanying packaging	[kg C]	2.45E-01
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO ₂	

ENVIRONMENTAL IMPACTS PER FU (PIECE, 30 years) – MDF front with PVC foil surface											
Parameter	Unit	A1-A3	A4	A5	B2	B1, B3-B7	C1	C2	C3	C4	D
GWP-total	[kg CO ₂ eq.]	-6.52E-01	1.01E+00	9.17E-01	2.26E-01	0.00E+00	4.06E-03	7.55E-02	1.10E+01	0.00E+00	-1.35E+00
GWP-fossil	[kg CO ₂ eq.]	1.08E+01	1.01E+00	2.00E-02	9.17E-02	0.00E+00	4.05E-03	7.55E-02	4.88E-01	0.00E+00	-1.55E+00
GWP-biogenic	[kg CO ₂ eq.]	-1.14E+01	0.00E+00	8.97E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E+01	0.00E+00	2.11E-01
GWP-luluc	[kg CO ₂ eq.]	1.35E-02	3.49E-04	1.68E-05	1.34E-01	0.00E+00	1.80E-05	2.51E-05	2.01E-05	0.00E+00	-2.15E-03
ODP	[kg CFC 11 eq.]	3.83E-07	1.95E-08	2.73E-10	2.38E-09	0.00E+00	8.02E-11	1.50E-09	1.55E-09	0.00E+00	-5.09E-08
AP	[mol H ⁺ eq.]	5.43E-02	4.72E-03	1.14E-04	1.02E-03	0.00E+00	1.81E-05	1.57E-04	1.27E-03	0.00E+00	-1.18E-02
EP-freshwater	[kg P eq.]	3.00E-03	6.46E-05	3.79E-06	1.49E-03	0.00E+00	2.57E-06	5.11E-06	3.86E-05	0.00E+00	-5.82E-04
EP-marine	[kg N eq.]	1.43E-02	1.17E-03	5.29E-05	1.25E-03	0.00E+00	4.13E-06	3.77E-05	6.95E-04	0.00E+00	-3.22E-03
EP-terrestrial	[mol N eq.]	1.67E-01	1.28E-02	5.18E-04	3.69E-03	0.00E+00	4.95E-05	4.07E-04	6.58E-03	0.00E+00	-4.76E-02
POCP	[kg NMVOC eq.]	6.00E-02	5.29E-03	1.49E-04	6.09E-04	0.00E+00	1.20E-05	2.61E-04	1.65E-03	0.00E+00	-9.70E-03
ADPm ¹	[kg Sb eq.]	6.54E-05	3.12E-06	4.78E-08	1.03E-06	0.00E+00	3.65E-08	2.51E-07	2.80E-07	0.00E+00	-4.22E-06
ADPf ¹	[MJ]	1.79E+02	1.40E+01	2.05E-01	9.82E-01	0.00E+00	6.62E-02	1.06E+00	8.99E-01	0.00E+00	-2.16E+01
WDP ¹	[m ³ world eq. deprived]	7.17E+00	6.57E-02	1.70E-02	4.41E-01	0.00E+00	7.56E-03	5.19E-03	2.76E-01	0.00E+00	-5.08E-01
Caption	GWP-total = Globale 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 = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.										
Disclaimer	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										

ADDITIONAL ENVIRONMENTAL IMPACTS PER FU (PIECE, 30 years) – MDF front with PVC foil surface											
Parameter	Unit	A1-A3	A4	A5	B2	B1, B3-B7	C1	C2	C3	C4	D
PM	[Disease incidence]	1.07E-06	7.00E-08	1.69E-09	1.65E-08	0.00E+00	1.41E-10	5.56E-09	1.34E-08	0.00E+00	-1.44E-07
IRP ²	[kBq U235 eq.]	8.16E-01	1.71E-02	5.45E-04	5.72E-03	0.00E+00	1.53E-03	1.38E-03	2.12E-03	0.00E+00	-2.49E-01
ETP-fw ¹	[CTUe]	8.93E+01	3.68E+00	1.46E-01	1.14E+01	0.00E+00	1.92E-02	2.89E-01	2.20E+00	0.00E+00	-2.38E+01
HTP-c ¹	[CTUh]	2.53E-07	6.85E-09	1.99E-10	8.10E-10	0.00E+00	1.71E-11	5.36E-10	2.02E-09	0.00E+00	-7.53E-08
HTP-nc ¹	[CTUh]	1.23E-07	8.60E-09	8.86E-10	4.65E-09	0.00E+00	6.68E-11	6.87E-10	1.33E-08	0.00E+00	-3.47E-08
SQP ¹	-	6.96E+02	7.84E+00	1.09E-01	8.42E+00	0.00E+00	1.18E-01	6.41E-01	3.47E-01	0.00E+00	-1.71E+02
Caption	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)										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.										
Disclaimers	¹ The results of this environmental 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 PER FU (PIECE, 30 years) – MDF front with PVC foil surface											
Parameter	Unit	A1-A3	A4	A5	B2	B1, B3-B7	C1	C2	C3	C4	D
PERE	[MJ]	1.29E+01	2.28E-01	1.40E-03	3.23E+00	0.00E+00	1.01E-01	1.82E-02	7.99E-03	0.00E+00	-3.95E+01
PERM	[MJ]	1.15E+02	0.00E+00	-8.39E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-1.07E+02	0.00E+00	0.00E+00
PERT	[MJ]	1.28E+02	2.28E-01	-8.38E+00	3.23E+00	0.00E+00	1.01E-01	1.82E-02	-1.07E+02	0.00E+00	-3.95E+01
PENRE	[MJ]	1.59E+02	1.40E+01	2.05E-01	1.14E+00	0.00E+00	6.62E-02	1.06E+00	8.42E-01	0.00E+00	-2.16E+01
PENRM	[MJ]	5.06E+00	0.00E+00	-4.27E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-5.02E+00	0.00E+00	0.00E+00
PENRT	[MJ]	1.64E+02	1.40E+01	1.62E-01	1.14E+00	0.00E+00	6.62E-02	1.06E+00	-4.18E+00	0.00E+00	-2.16E+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
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
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
FW	[m ³]	1.84E-01	1.80E-03	1.31E-04	1.00E-02	0.00E+00	3.83E-04	1.43E-04	2.00E-03	0.00E+00	-2.19E-02
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non renewable primary energy excluding non renewable primary energy resources used as raw materials; PENRM = Use of non renewable primary energy resources used as raw materials; PENRT = Total use of non renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non renewable secondary fuels; FW = Net use of fresh water										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.										

WASTE CATEGORIES AND OUTPUT FLOWS PER FU (PIECE, 30 years) – MDF front with PVC foil surface											
Parameter	Unit	A1-A3	A4	A5	B2	B1, B3-B7	C1	C2	C3	C4	D
HWD	[kg]	7.64E-01	2.01E-02	2.73E-03	2.22E-02	0.00E+00	3.72E-04	1.55E-03	4.15E-02	0.00E+00	-2.49E-01
NHWD	[kg]	2.83E+01	4.15E-01	5.13E-01	7.22E+00	0.00E+00	1.28E-02	3.27E-02	8.14E+00	0.00E+00	-2.98E+00
RWD	[kg]	5.58E-05	1.06E-06	3.54E-08	3.90E-07	0.00E+00	6.42E-08	8.48E-08	1.28E-07	0.00E+00	-1.26E-05

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
MFR	[kg]	2.10E+00	0.00E+00	1.15E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.44E-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	0.00E+00	0.00E+00
EEE	[MJ]	0.00E+00	0.00E+00	4.07E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.49E+00	0.00E+00	0.00E+00
EET	[MJ]	0.00E+00	0.00E+00	5.63E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.60E+01	0.00E+00	0.00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy										
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.										

BIOGENIC CARBON CONTENT PER FU (PIECE, 30 years) – MDF front with PVC foil surface		
Parameter	Unit	At the factory gate
Biogenic carbon content in product	[kg C]	2.87E+00
Biogenic carbon content in accompanying packaging	[kg C]	2.45E-01
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO ₂	

Additional information

LCA interpretation

The results of the current EPD refer to the functional unit of 1 piece of kitchen cabinet corpus or front. The calculated environmental impacts show that module A1 is the largest contributor to at least 13 out of 19 environmental impact categories. In particular, the production of the main wood material of each product (chipboard and MDF) is generally the process with the highest contribution.

Technical information on scenarios

Transport to the building site (A4)

Scenario information	Value	Unit
Road transport		
Fuel type	Diesel	-
Vehicle type	EURO 6	-
Transport distance	562	km
Capacity utilisation (including empty runs)	16-32t GVW Utilization factor 37%	%
Sea transport		
Fuel type	Diesel	-
Transport distance	93	km
Capacity utilisation (including empty runs)	1200t payload Utilization factor 50%	-
Gross density of products transported		
Front average (min – max)	790 (741-866)	kg/m ³
Corpus	825	kg/m ³

Installation of the product in the building (A5)

Scenario information	Value	Unit
Ancillary materials	0	kg
Water use	0	m ³
Other resource use	0	kg
Energy type and consumption	0.098	kWh
Waste materials	0	kg
Output materials	0	kg
Direct emissions to air, soil or water	0	kg

Reference service life

RSL information	Value	Unit
Reference service Life	30	Years

Use (B1-B7)

Scenario information	Value	Unit
B2 - Maintenance		
Maintenance process	Cleaning with detergent and water	-
Maintenance cycle	2	times/year
Ancillary materials for maintenance (specify which)	0.001	kg/m ² /cycle
Waste materials resulting from maintenance (specify which)	0.101	kg/m ² /cycle
Net freshwater consumption during maintenance	0.100	L/m ² /cycle
Energy input during maintenance	0	kWh

End of life (C1-C4)

Scenario information	Chipboard corpus	Chipboard with melamine front	MDF with melamine front	Lacquer on MDF front	PVC foil on MDF front	Unit
Collected separately	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	kg
Collected with mixed waste	2.06E+01	4.95E+00	5.24E+00	7.05E+00	7.95E+00	kg
For reuse	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	kg
For recycling	6.00E-02	1.44E-01	1.44E-01	1.44E-01	1.44E-01	kg
For energy recovery	2.06E+01	4.80E+00	5.09E+00	6.78E+00	7.64E+00	kg
For final disposal	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	kg

Re-use, recovery and recycling potential (D)

Scenario information/Material	Chipboard corpus	MDF with melamine front	Chipboard with melamine front	MDF with lacquer front	MDF with PVC foil front
From installation (A5)					
Plastic waste from packaging					
MFR (kg)	1.56E-03	4.77E-04	4.77E-04	4.77E-04	4.77E-04
EET (MJ)	8.37E-02	2.55E-02	2.55E-02	2.55E-02	2.55E-02
EEE (MJ)	6.05E-03	1.85E-03	1.85E-03	1.85E-03	1.85E-03
Cardboard waste from packaging					
MFR (kg)	3.22E-02	9.84E-03	9.84E-03	9.84E-03	9.84E-03
EET (MJ)	1.20E-01	3.67E-02	3.67E-02	3.67E-02	3.67E-02
EEE (MJ)	8.69E-03	2.65E-03	2.65E-03	2.65E-03	2.65E-03
Wood waste from packaging					
MFR (kg)	3.45E-01	1.05E-01	1.05E-01	1.05E-01	1.05E-01
EET (MJ)	1.83E+01	5.57E+00	5.57E+00	5.57E+00	5.57E+00
EEE (MJ)	1.32E+00	4.03E-01	4.03E-01	4.03E-01	4.03E-01
Product credits, end-of-life (C3)					
Wood					
MFR (kg)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EET (MJ)	1.44E+02	3.23E+01	4.72E+01	6.37E+01	7.18E+01
EEE (MJ)	1.04E+01	2.33E+00	3.41E+00	4.61E+00	5.19E+00
Plastic					
MFR (kg)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EET (MJ)	3.81E+00	1.83E+00	1.83E+00	3.24E+00	4.16E+00
EEE (MJ)	2.76E-01	1.32E-01	1.32E-01	2.34E-01	3.01E-01
Metal					
MFR (kg)	6.00E-02	1.44E-01	1.44E-01	1.44E-01	1.44E-01
EET (MJ)	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


Indoor air

The EPD does not give information on release of dangerous substances to indoor air because the horizontal standards on the relevant measurements are not available. Read more in EN15804+A1 chapter 7.4.1.

Soil and water

The EPD does not give information on release of dangerous substances to soil and water because the horizontal standards on the relevant measurements are not available. Read more in EN15804+A1 chapter 7.4.2.

References

<p>Publisher</p>	<p> epddanmark</p> <p>www.epddanmark.dk Template version 2023.2</p>
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<p>LCA software /background data</p>	<p>ecoinvent 3.10 EN 15804 reference package 3.1</p>
<p>3rd party verifier</p>	<p>David Althoff Palm Dalemarken AB Beryllvägen 25 442 60 Kode Sweden</p>

General programme instructions

General Programme Instructions, version 2.0, spring 2020
www.epddanmark.dk

EN 15804

DS/EN 15804 + A2:2019 – “Sustainability of construction works – Environmental product declarations – Core rules for the product category of construction products”

cPCR

NPCR 026:2022 Part B for Furniture version 2.0, valid until 01.07.2024

EN 15942

DS/EN 15942:2011 – “ Sustainability of construction works – Environmental product declarations – Communication format business-to-business”

ISO 14025

DS/EN ISO 14025:2010 – “ Environmental labels and declarations – Type III environmental declarations – Principles and procedures”

ISO 14040

DS/EN ISO 14040:2008 – “ Environmental management – Life cycle assessment – Principles and framework”

ISO 14044

DS/EN ISO 14044:2008 – “ Environmental management – Life cycle assessment – Requirements and guidelines”

BUILD service life table: Version 2021 <https://vbn.aau.dk/da/publications/build-levetidstabel-version-2021>