Environmental Product Declaration

EPD of multiple products based on a representative product

In accordance with ISO 14025:2006, EN 15804:2012+A2:2019/AC:2021 and EN 16485 for:

Oak lacquered moulding, oak whitetoned moulding, oak natural moulding

from

Combiwood Group

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-0026584:001
Version date:	2025-11-10
Validity date:	2030-11-09
	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
Address:	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden
Website:	www.environdec.com
E-mail:	support@environdec.com

Product Category Rules (PCR)
CEN standard EN 15804 serves as the Core Product Category Rules (PCR)
Product Category Rules (PCR): ***Construction products, 2019:14, version 2.0.1, and UN CPC 313***
PCR review was conducted by: ***Rob Rouwette, support@environdec.com***
c-PCR, if applicable: ***Wood and wood-based products for use in construction, c-PCR-006, version 1.0.0***

Third-party Verification
Independent third-party verification of the declaration and data, according to ISO 14025:2006, via: ☒ **Individual EPD verification without a pre-verified LCA/EPD tool** Third-party verifier: *Joanna Zhuravlova, joanna@cradle-metrics.eu* Approved by: International EPD System
Procedure for follow-up of data during EPD validity involves a third-party verifier: ☐ Yes ☒ No

The EPD owner has 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.
For further information about comparability, see EN 15804 and ISO 14025.

INFORMATION ABOUT EPD OWNER

Owner of the EPD: Combiwood Group
Address: Leigola OÜ, Vilja 15, 71012 Viljandi, Estonia
Contact: Kathrine Anvik-Krogstad (kathrine@combiwood.no) and Marten Jõgi (marten@vindor.ee)
Address and contact information of the LCA practitioner commissioned by the EPD owner:
Riccardo Paoli, Bureau Veritas Eesti OÜ, tallinn@bureauveritas.com
Description of the organisation: Combiwood Group is a network of 17 woodworking companies with production units in Estonia and sales units in several European countries. The group operates sawmills, component factories, and further processing production units, and manufactures interior wood products such as door frames, thresholds, mouldings, panels, edge-glued boards, and MDF products. All raw materials are sourced from FSC®/PEFC™ certified forests, with main export markets in Scandinavia, Central Europe, and the USA.
Product-related or management system-related certifications:

- PEFC ST 2001:2020; PEFC ST 2002:2020 (registration code PBN-PEFC-COC-009099)
- FSC-STD-40-003 V2-1; FSC-STD-40-004 V3-1; FSC-STD-40-005 V3-1; FSCSTD-50-001 V2-1 EN (registration code NC-COC-009099; NC-CW-009099)

PRODUCT INFORMATION

Product names: Oak lacquered moulding, oak whitetoned moulding, and oak natural moulding
Representative product name: Oak lacquered moulding. Chosen as the representative product based on production volumes for the year 2024.
Differences among the products included:
The three oak mouldings can be considered very similar products, as they share the same wood type (oak) and the dimensions are customer-tailored within the same range (06x12 to 21x195 mm).
The main differences lie in the type of surface finish, which is summarized in the table below.

	Oak lacquered moulding	Oak whitetoned moulding	Oak natural moulding
Type of finishing	Lacquer	Lacquer + white toning	Natural
Dimension (mm) - average	12 x 58	12 x 58	12 x 58
Weight (kg)	0.52	0.52	0.52

Product identification:



UN CPC code: 313

Product description: High-quality interior oak wood, planed into various profiles such as mouldings, skirting boards, thresholds, window sills, and panels. Solid, durable hardwood with high density. Available untreated, lacquered, or white-toned.
Name and location of production site(s): Leigola OÜ, Vilja 15, 71012 Viljandi, Estonia

CONTENT DECLARATION

Product

Product content	Mass, kg	Post-consumer recycled material, mass-% of product	Biogenic material, mass-% of product	Biogenic material, kg C/product or declared unit
Oak boards	0.52	0%	50%	0.26
Lacquer	0.0015	0%	0%	0
TOTAL	0.5215	0%	50%	0.26

Packaging materials	Mass, kg	Mass-% (versus the product)	Biogenic material, kg C/product or declared unit
Shrinking foil (PE)	0.0026	0.50%	0
PET band	0.0001	0.02%	0
Wood sideboards	0.0072	1.38%	0.0036
TOTAL	0.0099	1.90%	0.0036

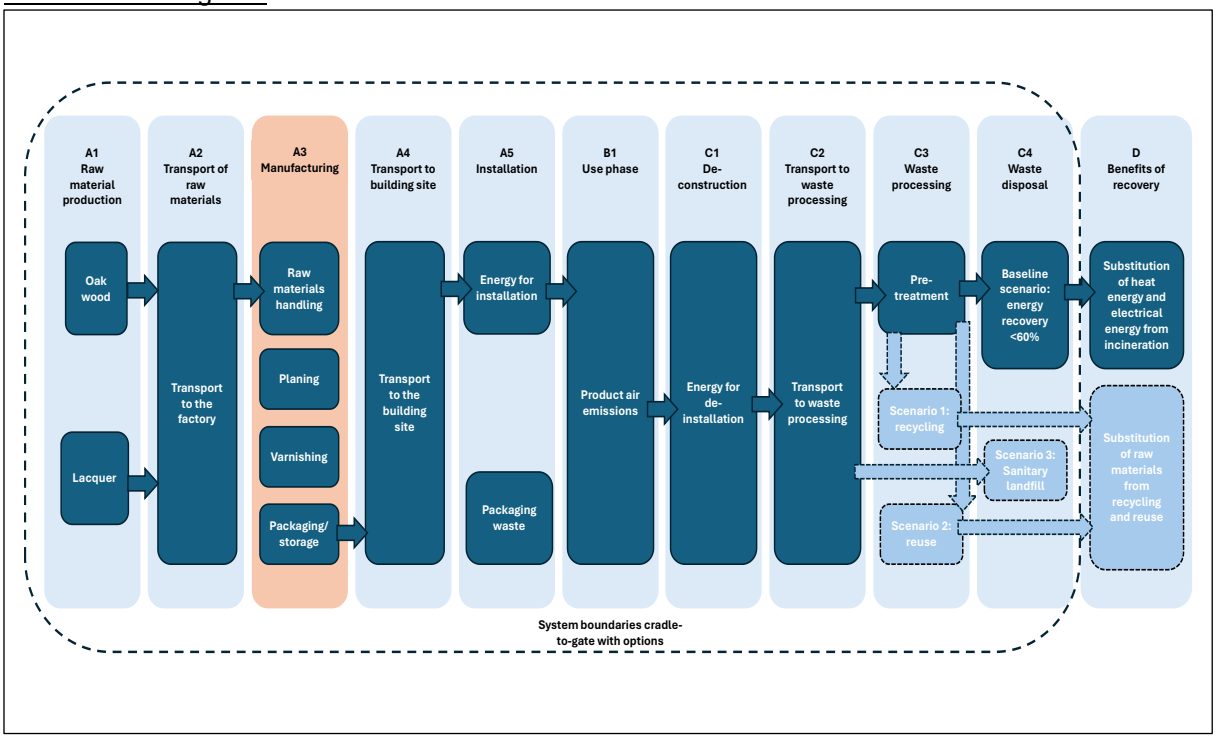
1 kg of biogenic carbon in the product/packaging is equivalent to the uptake of 44/12 kg of CO_2.

The product does not contain any hazardous substances from the Candidate List of SVHCs under REACH.

LCA INFORMATION

Declared unit: 1 running meter of the oak lacquered moulding. With an average dimension of 12 x 58 mm, a weight of 0.52 kg, a density of 750 kg/m2, and a moisture content of around 10%.
Reference service life: n.a.
Time representativeness: 2024
Geographical scope: Modules A1-A3: Estonia. Modules A4, A5, B1, C1-C4: Estonia and Norway
Database(s) and LCA software used: Ecoinvent 3.10 EN 15804 on SimaPro software v 10.1.
Description of system boundaries:
The system boundaries are settled as cradle to gate with options, modules C1–C4, module D, and with optional modules. The additional modules are A4, A5, and B1.

Process flow diagram:



Note that different end-of-life scenarios have been accounted for in the modeling of the product, in accordance with PCR 2019:14. The baseline scenario assumes final incineration of the product with an energy efficiency below 60% and is therefore allocated to module C4. The alternative scenarios (i.e., Scenario 1, Scenario 2, Scenario 3) are also illustrated in the process flow diagram and are distinguished using different shades of blue.

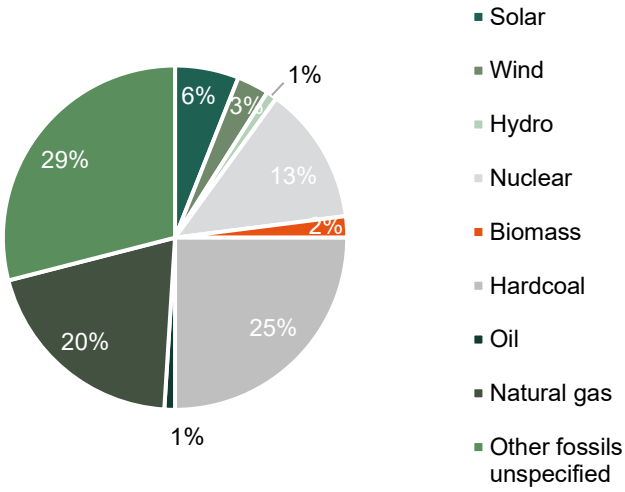
More information: In this LCA, the polluter pays, and modularity principles have been applied, ensuring that double counting is avoided. This EPD represents a representative product, reflecting the production volumes of the listed Combiwood Group products. Processes related to infrastructure, construction, and the manufacturing of equipment and tools not directly consumed in production have been excluded. Additionally, personnel-related activities, such as transportation to and from work, have been omitted.

Data quality: The foreground data was collected internally, considering the latest available average production amounts and measures during the year 2024. Data regarding waste processes and scenarios were taken from waste scenarios for Europe contained in Ecoinvent 3.10.
The quality level is very good according to the UN Environment Global Guidance criteria on LCA database development. Data for electricity mix consumption is geographically representative as it comes from the area of study. It is technically representative as it comes from processes and products under study using the same state of technology defined in the goal and scope. According to the documentation, it is also time-representative as data was collected in less than three years between the reference years. A data quality rating was performed using a rating system where one means excellent, and five means poor. An average for each criterion is presented as follows:

TeR	GeR	TiR	P	DQR average
1.85	2.63	2.50	1.93	2.23

Climate impact of energy sources: The energy sources behind the electricity grid in the manufacturing stage present on Ecoinvent 3.10 (*Electricity, medium voltage {EE}| electricity, medium voltage, residual*

mix | *EN15804, U*) are shown below. The total GWP associated with 1 kWh of the selected electricity is equal to 0.612 kgCO2 eq.



Description of downstream stages: Referring to the process flow diagram, the table below presents the scenarios included for the downstream stages and Module D. This approach is in line with the requirements of PCR 2019:14, which mandates the reporting of all relevant end-of-life scenarios.

EoL scenario	Description EoL	Module D assumption
Baseline - Incineration	It is assumed that once the product is dismantled and transported to the incineration facility, it is directly incinerated without requiring any special pre-treatment. As the energy efficiency of the incineration process is below 60%, the associated impacts are allocated to Module C4, in accordance with the PCR 2019:14 guidelines.	Benefits from the electrical and heating energy produced by the incineration.
Recycling	It is assumed that after dismantling and transportation to the recycling facility, the product waste undergoes pre-treatment involving sanding to remove any remaining paint. Following this, the material is chipped into small pieces to enable recycling.	Benefits of substituting virgin raw wood chips.
Reuse	It is assumed that after dismantling and transportation to the waste treatment facility, the product undergoes sanding to remove any residual paint, after which it is considered ready for reuse.	Benefits of substituting virgin wood boards.
Sanitary landfill	It is assumed that after dismantling and transportation to the waste treatment facility, the product is directly disposed of in a sanitary landfill, with no pre-treatment required.	No benefits assumed in the sanitary landfill case.

LCIA method used: EN 15804 + A2 with characterization, normalization, and weighting values from EF 3.1.

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

	Product stage			Distribution/ installation stage		Use stage							End-of-life stage				Beyond product life cycle
	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	ND	ND	ND	ND	ND	ND	X	X	X	X	X
Geography	EE	Global	EE	EE, NO	EE, NO	EE, NO	-	-	-	-	-	-	EE, NO	EE, NO	EE, NO	EE, NO	EE, NO
Share of primary data	36%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – products	Worst case: oak whitetoned moulding (+2%) Best case: oak natural moulding (-33%)			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	0%			-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: ND stands for "not-declared".

Share of primary data:

Process	Source type	Source	Reference year	Data category	Share of primary data, of GWP-GHG results for A1-A3
Raw materials production	Database	Ecoinvent 3.10	2024	Secondary data	0%
Transport of raw materials	Database	Ecoinvent 3.10	2024	Secondary data	0%
The generation of electricity used in the manufacturing of a product	Database	Ecoinvent 3.10	2024	Primary data	36%
Other manufacturing processes	Database	Ecoinvent 3.10	2024	Secondary data	0%
Total share of primary data, of GWP-GHG results for A1-A3					36%

ENVIRONMENTAL PERFORMANCE

LCA results of the product - main environmental performance results

Note:

- 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).

Mandatory impact category indicators according to EN 15804+A2

Results per declared unit										
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**B1**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	kg CO_2 eq.	-7.05E-01	1.06E-01	2.51E-02	0.00E+00	3.42E-04	1.43E-02	3.17E-04	9.63E-01	-3.01E-01
GWP-fossil	kg CO_2 eq.	2.60E-01	1.06E-01	1.18E-02	0.00E+00	3.42E-04	1.43E-02	3.17E-04	1.00E-02	-3.01E-01
GWP-biogenic	kg CO_2 eq.	-9.66E-01	3.96E-06	1.32E-02	0.00E+00	6.11E-08	5.39E-07	1.37E-08	9.53E-01	-3.34E-05
GWP-luluc	kg CO_2 eq.	9.84E-04	2.65E-06	3.62E-08	0.00E+00	1.96E-08	3.52E-07	1.09E-08	3.25E-07	-1.31E-05
ODP	kg CFC 11 eq.	4.04E-09	2.09E-09	1.28E-11	0.00E+00	4.19E-12	2.92E-10	4.99E-12	1.11E-10	-8.15E-09
AP	mol H^+ eq.	2.52E-03	5.32E-04	4.04E-06	2.10E-13	9.58E-07	3.56E-05	2.97E-06	7.60E-05	-5.24E-04
EP-freshwater	kg P eq.	2.08E-05	8.81E-08	1.47E-08	0.00E+00	1.35E-08	1.20E-08	3.00E-10	4.55E-08	-6.39E-06
EP-marine	kg N eq.	7.90E-04	1.38E-04	1.66E-06	6.40E-15	1.93E-07	1.37E-05	1.39E-06	3.80E-05	-1.19E-04
EP-terrestrial	mol N eq.	8.68E-03	1.52E-03	1.80E-05	9.38E-13	2.17E-06	1.50E-04	1.53E-05	4.03E-04	-1.32E-03
POCP	kg NMVOC eq.	2.71E-03	5.66E-04	5.04E-06	1.91E-13	6.52E-07	6.22E-05	4.54E-06	1.01E-04	-5.37E-04
ADP-minerals&metals*	kg Sb eq.	8.86E-09	3.21E-09	3.65E-11	0.00E+00	5.24E-12	4.73E-10	1.33E-11	6.91E-10	-3.31E-09
ADP-fossil*	MJ	3.55E+00	1.38E+00	9.85E-03	0.00E+00	4.77E-03	1.89E-01	4.18E-03	5.69E-02	-4.48E+00
WDP*	m^3	6.20E-02	1.41E-03	3.01E-04	0.00E+00	1.67E-04	1.98E-04	5.44E-06	3.68E-03	-7.89E-02
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									

** Disclaimer: 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.*

Additional mandatory and voluntary impact category indicators

Results per declared unit										
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**B1**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-GHG[1]	kg CO_2 eq.	2.61E-01	1.06E-01	1.18E-02	0.00E+00	3.42E-04	1.43E-02	3.17E-04	1.00E-02	-3.01E-01

Resource use indicators

Results per declared unit										
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**B1**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	MJ	8.04E+00	4.65E-03	1.33E-01	0.00E+00	3.50E-04	6.69E-04	9.36E-06	9.43E+00	-9.88E-02
PERM	MJ	9.56E+00	0.00E+00	-1.33E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-9.43E+00	0.00E+00
PERT	MJ	1.76E+01	4.65E-03	3.87E-04	0.00E+00	3.50E-04	6.69E-04	9.36E-06	7.73E-04	-9.88E-02
PENRE	MJ	3.48E+00	1.38E+00	7.03E-02	0.00E+00	4.77E-03	1.89E-01	4.18E-03	7.23E-02	-4.48E+00
PENRM	MJ	7.59E-02	0.00E+00	-6.04E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-1.54E-02	0.00E+00
PENRT	MJ	3.55E+00	1.38E+00	9.85E-03	0.00E+00	4.77E-03	1.89E-01	4.18E-03	5.69E-02	-4.48E+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
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
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
FW	m^3	1.49E-03	3.46E-05	7.06E-06	0.00E+00	3.92E-06	4.85E-06	1.31E-07	8.59E-05	-1.86E-03
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									

[1] 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 CO_2 is set to zero.

Waste indicators

Results per declared unit										
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**B1**	**C1**	**C2**	**C3**	**C4**	**D**
Hazardous waste disposed	kg	1.10E-02	7.63E-05	1.22E-04	0.00E+00	3.12E-05	9.38E-06	4.52E-07	2.18E-03	-1.46E-02
Non-hazardous waste disposed	kg	3.09E-01	5.41E-03	1.19E-02	0.00E+00	5.55E-04	7.57E-04	1.52E-05	5.35E-01	-2.66E-01
Radioactive waste disposed	kg	6.55E-06	1.22E-07	1.57E-08	0.00E+00	1.48E-08	1.78E-08	2.13E-10	1.60E-08	-7.07E-06

Output flow indicators

Results per declared unit									
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**B1**	**C1**	**C2**	**C3**	**C4**
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
Material for recycling	kg	2.99E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+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
Exported energy, electricity	MJ	0.00E+00	0.00E+00	2.60E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.07E-01
Exported energy, thermal	MJ	0.00E+00	0.00E+00	5.12E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E+00

Additional LCA results

Alternative end-of-life scenarios results

- Recycling scenario

Results per declared unit										
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**B1**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	kg CO_2 eq.	-7.05E-01	1.06E-01	1.38E-02	0.00E+00	3.42E-04	8.81E-03	9.55E-01	0.00E+00	-2.34E-02
GWP-fossil	kg CO_2 eq.	2.60E-01	1.06E-01	5.61E-04	0.00E+00	3.42E-04	8.81E-03	1.37E-03	0.00E+00	-2.31E-02
GWP-biogenic	kg CO_2 eq.	-9.66E-01	3.96E-06	1.32E-02	0.00E+00	6.11E-08	3.32E-07	9.53E-01	0.00E+00	-9.26E-05
GWP-luluc	kg CO_2 eq.	9.84E-04	2.65E-06	2.56E-08	0.00E+00	1.96E-08	2.16E-07	4.35E-08	0.00E+00	-1.82E-04
ODP	kg CFC 11 eq.	4.04E-09	2.09E-09	8.43E-12	0.00E+00	4.19E-12	1.80E-10	2.13E-11	0.00E+00	-2.00E-09
AP	mol H^+ eq.	2.52E-03	5.32E-04	1.71E-06	2.10E-13	9.58E-07	2.19E-05	1.62E-05	0.00E+00	-1.73E-04
EP-freshwater	kg P eq.	2.08E-05	8.81E-08	1.42E-08	0.00E+00	1.35E-08	7.38E-09	1.41E-09	0.00E+00	-3.44E-06
EP-marine	kg N eq.	7.90E-04	1.38E-04	4.95E-07	6.40E-15	1.93E-07	8.41E-06	7.56E-06	0.00E+00	-6.08E-05
EP-terrestrial	mol N eq.	8.68E-03	1.52E-03	5.49E-06	9.38E-13	2.17E-06	9.21E-05	8.27E-05	0.00E+00	-6.80E-04
POCP	kg NMVOC eq.	2.71E-03	5.66E-04	1.84E-06	1.91E-13	6.52E-07	3.83E-05	2.34E-05	0.00E+00	-2.37E-04
ADP-minerals&metals*	kg Sb eq.	8.86E-09	3.21E-09	1.23E-11	0.00E+00	5.24E-12	2.91E-10	4.97E-11	0.00E+00	-5.78E-09
ADP-fossil*	MJ	3.55E+00	1.38E+00	7.67E-03	0.00E+00	4.77E-03	1.16E-01	1.79E-02	0.00E+00	-4.45E-01
WDP*	m^3	6.20E-02	1.41E-03	1.77E-04	0.00E+00	1.67E-04	1.22E-04	2.51E-05	0.00E+00	-2.47E-02
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									

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- Reuse scenario

Results per declared unit										
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**B1**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	kg CO_2 eq.	-7.05E-01	1.06E-01	1.36E-02	0.00E+00	3.42E-04	8.81E-03	9.54E-01	0.00E+00	-4.92E-02
GWP-fossil	kg CO_2 eq.	2.60E-01	1.06E-01	3.49E-04	0.00E+00	3.42E-04	8.81E-03	3.25E-04	0.00E+00	-4.80E-02
GWP-biogenic	kg CO_2 eq.	-9.66E-01	3.96E-06	1.32E-02	0.00E+00	6.11E-08	3.32E-07	9.53E-01	0.00E+00	-2.16E-04
GWP-luluc	kg CO_2 eq.	9.84E-04	2.65E-06	1.98E-08	0.00E+00	1.96E-08	2.16E-07	1.14E-08	0.00E+00	-9.55E-04
ODP	kg CFC 11 eq.	4.04E-09	2.09E-09	4.29E-12	0.00E+00	4.19E-12	1.80E-10	5.09E-12	0.00E+00	-8.68E-10
AP	mol H^+ eq.	2.52E-03	5.32E-04	1.02E-06	2.10E-13	9.58E-07	2.19E-05	2.99E-06	0.00E+00	-3.89E-04
EP-freshwater	kg P eq.	2.08E-05	8.81E-08	1.35E-08	0.00E+00	1.35E-08	7.38E-09	5.97E-10	0.00E+00	-1.61E-05
EP-marine	kg N eq.	7.90E-04	1.38E-04	2.22E-07	6.40E-15	1.93E-07	8.41E-06	1.40E-06	0.00E+00	-1.61E-04
EP-terrestrial	mol N eq.	8.68E-03	1.52E-03	2.49E-06	9.38E-13	2.17E-06	9.21E-05	1.53E-05	0.00E+00	-1.73E-03
POCP	kg NMVOC eq.	2.71E-03	5.66E-04	7.47E-07	1.91E-13	6.52E-07	3.83E-05	4.56E-06	0.00E+00	-7.61E-04
ADP-minerals& metals*	kg Sb eq.	8.86E-09	3.21E-09	5.52E-12	0.00E+00	5.24E-12	2.91E-10	1.34E-11	0.00E+00	-3.76E-09
ADP-fossil*	MJ	3.55E+00	1.38E+00	4.86E-03	0.00E+00	4.77E-03	1.16E-01	4.28E-03	0.00E+00	-7.95E-01
WDP*	m^3	6.20E-02	1.41E-03	1.67E-04	0.00E+00	1.67E-04	1.22E-04	9.10E-06	0.00E+00	-1.67E-02
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									

** Disclaimer: 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.*

- Sanitary landfill scenario

Results per declared unit										
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**B1**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	kg CO_2 eq.	-7.05E-01	1.06E-01	1.46E-02	0.00E+00	3.42E-04	8.81E-03	3.17E-04	9.90E-01	0.00E+00
GWP-fossil	kg CO_2 eq.	2.60E-01	1.06E-01	9.24E-04	0.00E+00	3.42E-04	8.81E-03	3.17E-04	4.91E-03	0.00E+00
GWP-biogenic	kg CO_2 eq.	-9.66E-01	3.96E-06	1.37E-02	0.00E+00	6.11E-08	3.32E-07	1.37E-08	9.85E-01	0.00E+00
GWP-luluc	kg CO_2 eq.	9.84E-04	2.65E-06	3.24E-08	0.00E+00	1.96E-08	2.16E-07	1.09E-08	3.95E-07	0.00E+00
ODP	kg CFC 11 eq.	4.04E-09	2.09E-09	1.14E-11	0.00E+00	4.19E-12	1.80E-10	4.99E-12	1.65E-10	0.00E+00
AP	mol H^+ eq.	2.52E-03	5.32E-04	2.13E-06	2.10E-13	9.58E-07	2.19E-05	2.97E-06	3.09E-05	0.00E+00
EP-freshwater	kg P eq.	2.08E-05	8.81E-08	1.41E-08	0.00E+00	1.35E-08	7.38E-09	3.00E-10	2.47E-08	0.00E+00
EP-marine	kg N eq.	7.90E-04	1.38E-04	1.08E-06	6.40E-15	1.93E-07	8.41E-06	1.39E-06	2.30E-05	0.00E+00
EP-terrestrial	mol N eq.	8.68E-03	1.52E-03	7.47E-06	9.38E-13	2.17E-06	9.21E-05	1.53E-05	1.47E-04	0.00E+00
POCP	kg NMVOC eq.	2.71E-03	5.66E-04	2.94E-06	1.91E-13	6.52E-07	3.83E-05	4.54E-06	6.74E-05	0.00E+00
ADP-minerals& metals*	kg Sb eq.	8.86E-09	3.21E-09	5.68E-11	0.00E+00	5.24E-12	2.91E-10	1.33E-11	2.18E-09	0.00E+00
ADP-fossil*	MJ	3.55E+00	1.38E+00	9.63E-03	0.00E+00	4.77E-03	1.16E-01	4.18E-03	1.14E-01	0.00E+00
WDP*	m^3	6.20E-02	1.41E-03	-1.92E-03	0.00E+00	1.67E-04	1.22E-04	5.44E-06	-1.01E-01	0.00E+00
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									

** Disclaimer: 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.*

Variations among the different products included in this EPD

The variation information is presented in the table below for the mandatory list of environmental impact indicators, in accordance with the reporting requirements.

LCA result of one declared unit product (A-C)	Unit	Min (oak natural moulding) - %	Representative	Max (oak whitetoned moulding) - %
GWP-fossil	kg CO_2 eq.	-17.25%	4.03E-01	0.00%
GWP-biogenic	kg CO_2 eq.	-7.29%	2.70E-04	0.00%
GWP-luluc	kg CO_2 eq.	-1.22%	9.87E-04	0.00%
GWP-total	kg CO_2 eq.	-16.91%	4.04E-01	0.49%
ODP	kg CFC 11 eq.	-13.01%	6.55E-09	0.46%
AP	mol H^+ eq.	-6.16%	3.18E-03	0.31%
EP-freshwater	kg P eq.	-10.53%	2.10E-05	0.00%
EP- marine	kg N eq.	-3.84%	9.82E-04	0.10%
EP-terrestrial	mol N eq.	-3.77%	1.08E-02	0.00%
POCP	kg NMVOC eq.	-4.14%	3.45E-03	0.00%
ADP-minerals&metals	kg Sb eq.	-14.52%	1.33E-08	1.49%
ADP-fossil	MJ	-16.22%	5.20E+00	0.38%
WDP	m^3	-35.62%	6.78E-02	0.88%
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			

ADDITIONAL ENVIRONMENTAL INFORMATION

The environmental impact of the other products included in the EPD, namely the oak whitetoned moulding and the oak natural moulding, can be estimated by multiplying the LCA results for each impact category and EPD module (as reported in the environmental impact table) by the corresponding adjustment factors provided in the tables below.

- Oak whitetoned moulding

Indicator	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
GWP-total	0.999	1.000	1.012	1.000	1.000	1.000	1.000	1.000	1.001
GWP-fossil	1.003		1.026					1.036	
GWP-biogenic	1.000		1.000					1.000	
GWP-luluc	1.001		1.007					1.019	
ODP	1.006		1.008					1.022	
AP	1.004		1.011					1.003	
EP-freshwater	1.002		1.001					1.005	
EP-marine	1.001		1.012					1.001	
EP-terrestrial	1.001		1.012					1.001	
POCP	1.001		1.012					1.003	
ADP-minerals&metals	1.020		1.012					1.008	
ADP-fossil	1.004		1.006					1.028	
WDP	1.011		1.008					1.001	
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								

- Oak natural moulding

Indicator	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
GWP-total	1.078		1.000					0.992	0.990
GWP-fossil	0.780		1.000					0.458	0.990
GWP-biogenic	0.997		1.001					0.997	0.993
GWP-luluc	0.988		0.997					0.706	0.992
ODP	0.813		0.998					0.669	0.986
AP	0.930		0.999					0.952	0.993
EP-freshwater	0.899	0.994	0.995	0.000	0.994	0.994	0.994	0.922	0.995
EP-marine	0.955		0.999					0.982	0.992
EP-terrestrial	0.954		0.999					0.982	0.992
POCP	0.952		0.999					0.951	0.990
ADP-minerals&metals	0.813		0.999					0.884	0.992
ADP-fossil	0.789		0.997					0.576	0.989
WDP	0.672		0.997					0.976	0.995
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								

ABBREVIATIONS

Abbreviation	Definition
General Abbreviations	
ADP-fossil	Abiotic depletion for fossil resources potential
ADP-minerals&metals	Abiotic depletion potential for non-fossil resources
AP	Acidification potential, Accumulated Exceedance
CEN	European Committee for Standardization
CPC	Central product classification
c-PCR	Complementary product category rules
DQR	Data quality rating
EN	European Norm (Standard)
EF	Environmental Footprint
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
FW	Use of net fresh water
GeR	Geographical representativeness
GWP-biogenic	Global Warming Potential biogenic
GWP-fossil	Global Warming Potential fossil fuels
GWP-luluc	Global Warming Potential land use and land use change
LCA	Life cycle assessment
ISO	International Organization for Standardization
ND	Not Declared
NRSF	Use of non-renewable secondary fuels
ODP	Depletion potential of the stratospheric ozone layer
P	Precision
PCR	Product category rules
PE	Polyethylene
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
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
PET	Polyethylene terephthalate
POCP	Formation potential of tropospheric ozone
RSF	Use of renewable secondary fuels
SM	Use of secondary material
SVHC	Substances of Very High Concern
WDP	Water (user) deprivation potential, deprivation-weighted water consumption
TeR	Technological representativeness
TiR	Time representativeness

REFERENCES

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