# Environmental Product Declaration





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

# OAS Big table, Diameter 1500 mm, Desktop linoleum, 3 legs H730 in ash

from

Lundbergs Möbler AB



Programme: The International EPD® System, <u>www.environdec.com</u>

Programme operator: EPD International AB

EPD registration number: IES-0015214

Date of publication: 2024-07-04
Date of validity: 2029-07-04

An EPD should provide current information and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at 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:    | info@environdec.com  |

| Accountabilities for PCR, LCA and independent, third-party verification   |
|---|
| Product Category Rules (PCR)  |
| CEN standard EN 15804 serves as the Core Product Category Rules (PCR)   |
| Product Category Rules (PCR): PCR 2019:14. Construction products (EN 15804+A2) 1.3.4 c-PCR-021 Furniture version 2.0 (c-PCR to PCR 2019:14) (Adopted from EPD Norway) and UN CPC code(s) 38140  |
| PCR review was conducted by: The Technical Committee of the International EPD System. See www.environdec.com for a list of members. Review chair: Claudia A. Peña, University of Concepción, Chile. The review panel may be contacted via the Secretariat <a href="https://www.environdec.com/contact">www.environdec.com/contact</a> |
| Life Cycle Assessment (LCA)   |
| LCA accountability: Daniel Böckin, Miljögiraff AB   |
| Third-party verification  |
| Independent third-party verification of the declaration and data, according to ISO 14025:2006, via:   |
| ⊠ EPD verification by individual verifier   |
| Third-party verifier: Kristian Jelse, Greendesk   |
| 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 characterisation factors); have equivalent content declarations; and be valid at the time of comparison. For further information about comparability, see EN 15804 and ISO 14025.





# **Product information**

Owner of the EPD: Lundbergs Möbler AB

Contact: Stefan Lundberg, https://www.lundbergs-mobler.se/

<u>Description of the organisation:</u> Lundbergs Möbler is a supplier and manufacturer of circular table solutions in wood. Our own table factory is in Tibro, Sweden, where all the production of our tables takes place. Our ambition is to offer the Scandinavian market a wide range of table solutions, which can be easily customized for each individual project without sacrificing quality and product safety. We hope that our way of designing and building tables will mean that in the future they can be part of a circular furniture flow.

### Product-related or management system-related certifications

Lundbergs Möbler works with Möbelfakta as our guideline in choosing material, suppliers and quality requirements. Möbelfakta is a sustainability label for furniture owned by IVL and Trä- och Möbelföretagen (TMF). Möbelfakta's requirements cover quality, environment and responsible supply chains. It covers also the laws and legal aspects of the product when it comes to security, working conditions and sustainability. Our work to fulfill Möbelfaktas requirements is regularly reviewed and approved by an independent reviewer.

Name and location of production site(s): Tidavadsgatan 2, 543 52 Tibro, Sweden

<u>Product name:</u> OAS Big table, Diameter 1500 mm, Desktop linoleum, 3 legs H730 in ash

<u>Product description:</u> Diameter 1500 mm, Height 730 mm.

Tabletop with core and edge in birchplywood and surface in Desktop linoleum. Three legs in solid ashwood, coated with clear laquer containing 0,5% white pigments and integrated metal fittings. The fittings is attached to the tabletop with both screws and bolts

attached to ramp sleeves up the tabletop. The table is packed and delivered in a corrugated cardboard box.

The OAS table also comes in different measures, surface-materials and wood species.

UN CPC code: 38140

Geographical scope: Manufactured, sold and used in Sweden

<u>Functional unit:</u> The production of one unit of the declared product provided and maintained for an estimated service life (ESL) for the product declared.

Conversion factor to 1 kg of product is to divide by the product weight, 47,1 kg.

Reference service life: 15 years Time representativeness: 2023

Database(s) and LCA software used: SimaPro 9.6 with Ecoinvent 3.10 (cut-off system model)

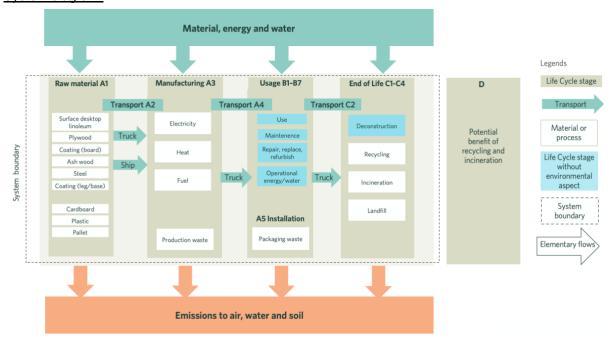
**Description of system boundaries:** 

Type c) Cradle to grave and module D (A + B + C + D)





# System diagram:



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

|                      | Pro                 | duct sta  | age           | prod      | ruction<br>cess<br>ige    |     |             | Us     | se sta      | ge            |                        |                       | Er                         | nd of li  | fe sta           | ge       | 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-<br>potential |
| Module               | <b>A</b> 1          | A2        | А3            | A4        | A5                        | B1  | B2          | В3     | В4          | В5            | В6                     | В7                    | C1                         | C2        | С3               | C4       | D                                      |
| Modules<br>declared  | Х                   | Х         | Х             | Х         | Х                         | Х   | Х           | х      | Х           | Х             | Х                      | Х                     | Х                          | х         | Х                | Х        | Х                                      |
| Geography            | GLO                 | GLO       | SE            | SE        | SE                        | SE  | SE          | SE     | SE          | SE            | SE                     | SE                    | SE                         | SE        | SE               | SE       | SE                                     |
| Specific data used   |                     | 8%        |               | -         | -                         | -   | -           | -      | -           | -             | -                      | -                     | -                          | -         | -                | -        | -                                      |
| Variation – products |                     | 0%        |               | -         | -                         | -   | -           | -      | -           | -             | -                      | -                     | -                          | -         | -                | -        | -                                      |
| Variation – sites    |                     | 0%        |               | -         | -                         | -   | -           | -      | -           | -             | -                      | -                     | -                          | -         | -                | -        | -                                      |





#### Documentation of scenario settings:

Infrastructure/capital goods are excluded in all modules except for energy and transport processes (according to PCR and c-PCR).

EN 15804 reference package 3.1 has been used.

#### A list of cut off processes are listed here:

| Excluded processes                            | Reason  |
|---|---|
| Transportation of sawdust to production of DT | This was excluded for simplicity, since it was below the cut-off levels, as demonstrated in LCA report  |
| Inbound packaging                             | Lundbergs purchase materials mostly in bulk so the packaging per required unit of packaging per product is low, meaning that the environmental impact contribution is negligible. |
| Direct emissions at manufacturing             | All products are certified according to Möbelfakta, which includes requirements that emissions of e.g. VOC in the facilities are insignificant.                                   |
| Consumables at manufacturing                  | Estimated to have a negligible environmental impact once allocated to the thousands of products manufactured by Lundbergs every year, as demonstrated in LCA report               |
| Internal transports at manufacturing          | Estimated to have a negligible environmental impact once allocated to the thousands of products manufactured by Lundbergs every year, as demonstrated in LCA report.              |
| Losses during transports to customer          | Negligible according to Lundbergs.  |
| Emissions of VOC during use                   | Negligible according to Möbelfakta certification  |

Reference Service Life: The products are certified according to Möbelfakta, including tests for durability in public environments of at least level 4. Additionally, Lundbergs' experience is that their tables stay on the market significantly longer than the estimated service life (ESL) for tables of 15 years listed as a default in the PCR. Consequently, an ESL of 15 years according to the PCR is used as a conservative estimate. It is not applicable to declare table 13 from section 7.3.3.2 in EN15804+A2.

Module A1-A2: The majority of the product weight comes from the plywood in the tabletop and the wood in the legs/base. Note that the precise composition of the scrap input to the steel is unknown, why it was modelled generically with the process "Steel, low-alloyed {RER}| steel production, converter, low-alloyed | Cut-off, U", which contains an input of 20% post-consumer material and the remaining 80% is virgin material. This is assumed to be representative since it reflects a conservative market average (because the process represents steel production by converter (i.e. BOF) and not electric arc furnace (EAF) which has a significantly higher input of scrap inputs. Following the same logic, cardboard is modelled with "Corrugated board box {RER}| market for corrugated board box | Cut-off, U" which is modelled by ecoinvent with a scrap input of 62%, which is also assumed to be a representative market average.

Module A3: At Lundberg's facilities in Tibro, Sweden, the raw materials are cut and shaped into tabletops and legs (or a base). The energy consumption for manufacturing was estimated based on yearly energy use and total production of tables and stools. The energy includes heating from district





heating and non-fossil electricity from the grid (certified with a Guarantee of Origin for 14% hydro power, 20% biomass, 7% wind, 59% nuclear with a climate impact (GWP-GHG) of 0,05 kg CO2-eq./kWh.). Lundbergs Möbler commit to purchase the specific electricity during the entire validity of the EPD.

Module A4: These parts are packaged in cardboard and plastic film and sent on a pallet to a customer in Sweden, the distance was calculated as an average to the three largest cities in Sweden, weighted according to their relative market share, namely 315 km. The transportation was modelled with a generic market mix for European diesel trucks, since no specific vehicle data for A4 was collected. Other mandatory information from table 10 from section 7.3.2.1 in EN15804+A2 is declared here:

- Fuel type and amount: diesel, 0,0289 kg diesel per tkm
- Capacity utilization: ca 45%
- Bulk density of transported goods: ca 400 kg/m3
- Volume capacity utilization factor: <1

Module A5: At the end customer, the table is assembled and used until it's end of life. No relevant processes with an environmental impact takes place during installation, since it entails only manual labour, except the waste management of packaging (see amounts in content declaration). Consequently, the mandatory information to declare from table 11 from section 7.3.2.2 in EN15804+A2 are all zero, including ancillary materials, water use, other resource use, energy use, waste materials, output materials and direct emissions.

The amount of materials (in kg) collected for re-use corresponds to the weight of the pallet (see content declaration).

Module B: No relevant processes with an environmental impact take place during use of the products, which includes cleaning of the table in module B2 which is estimated to be done with a microfibre cloth, meaning that it requires no energy or water use. The products are certified according to Möbelfakta, including tests for durability in public environments of at least level 4, why any repairs or maintenance during the 15 year ESL are assumed to be negligible. Additionally, Möbelfakta includes requirements on low emissions like VOC during use, which is thus also estimated to have an insignificant environmental contribution. Consequently, all information to be declared from table 12 from section 7.3.3.1 or table 14 from section 7.3.3.3 in EN15804+A2 is zero.

End of life (module C-D): Waste management at end of life is modelled as a Swedish waste scenario, where Lundbergs' main market is located, according to post-consumer non-packaging recycling rates (R2) used in the Circular footprint formula of PEF, as found in Annex C (available at https://eplca.jrc.ec.europa.eu/LCDN/developerEF.xhtml). The remaining waste is assumed to be incinerated (99%) and landfilled (1%), according to the Swedish average scenario stated in PEF Annex C (meaning that the efficiency of incineration can be estimated to be higher than 60%, which is why incineration impacts are allocated to module C3). Instead of declaring table 15 from section 7.3.4 in EN15804+A2, the relevant information is included here:

The amount of waste collected separately is the entire weight of the product (see content declaration). The amount of materials (in kg) collected for recycling can be found in the indicator "Materials for recycling" in module C3 under the Output flow indicators under the section for Environmental performance.

The amount of materials (in kg) collected for energy recovery is 40,0 kg. The amount of materials (in kg) collected for disposal (sanitary landfill) is 0,561 kg. Transport to waste management (C2) is modelled as an assumed 50 km transport to the nearest waste management facility.





# **Content declaration (including packaging)**

|                                     | Weight, | Post-consumer      | Biogenic material |              |
|-------------------------------------|---------|--------------------|-------------------|--------------|
| Product components                  | kg      | material, weight-% | Weight            | Kg C/product |
| Surface material (desktop linoleum) | 6,27    | 0%                 | 80%               | 2,21         |
| Plywood                             | 24,7    | 0%                 | 100%              | 10,89        |
| Coating (board)                     | 0,0495  | 0%                 | 0%                | 0,00         |
| Ash wood                            | 9,00    | 0%                 | 100%              | 3,96         |
| Steel                               | 3,00    | 0%                 | 0%                | 0,00         |
| Coating (legs/base)                 | 0,0306  | 0%                 | 0%                | 0,00         |
| TOTAL                               | 43,1    | 0%                 | 90%               | 17,1         |
| Packaging materials                 |         |                    |                   |              |
| Cardboard                           | 5,33    | 0%                 | 100%              | 2,40         |
| Plastic                             | 0,128   | 0%                 | 0%                | 0,00         |
| Pallet                              | 8,33    | 96%*               | 100%              | 3,67         |
| TOTAL                               | 13,8    | 58%                | 99%               | 6,07         |

<sup>\*</sup>The pallet has been modeled as 96% post-consumer recycled based on the estimation that the pallets are to be reused 25 times over their lifetime and therefore 4% (one use) of the pallet is allocated to this product.

No Substances of Very High Concern (SVHC)<sup>1</sup> exceed 0.1%.

<sup>&</sup>lt;sup>1</sup> SVHC and the Candidate List of SVHC are available via the European Chemicals Agency <u>Candidate</u> <u>List of substances of very high concern for Authorisation - ECHA (europa.eu)</u>





# **Environmental performance**

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 use of the results of modules A1-A3 without considering the results of module C is discouraged.

# Mandatory impact category indicators according to EN 15804

| Results per functional or declared unit |                           |                   |              |              |    |    |    |    |    |    |    |    |              |              |              |                   |
|---|---------------------------|-------------------|--------------|--------------|----|----|----|----|----|----|----|----|--------------|--------------|--------------|-------------------|
| Indicator                               | Unit                      | A1-<br>A3         | A4           | A5           | B1 | B2 | В3 | B4 | В5 | В6 | В7 | C1 | C2           | С3           | C4           | D                 |
| GWP-<br>fossil                          | kg CO <sub>2</sub> eq.    | 5,69<br>E+01      | 2,53<br>E+00 | 2,32<br>E-01 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 3,58<br>E-01 | 1,20<br>E+01 | 9,77<br>E-03 | 7,60<br>E+00      |
| GWP-<br>biogenic                        | kg CO <sub>2</sub> eq.    | -<br>2,92<br>E+01 | 1,55<br>E-03 | 1,95<br>E+00 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 2,20<br>E-04 | 2,87<br>E+01 | 4,31<br>E-02 | 0,00<br>E+00      |
| GWP-<br>luluc                           | kg CO <sub>2</sub><br>eq. | 1,90<br>E+00      | 8,75<br>E-04 | 3,03<br>E-06 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1,24<br>E-04 | 3,47<br>E-05 | 4,54<br>E-07 | 2,77<br>E-01      |
| GWP-<br>total                           | kg CO <sub>2</sub> eq.    | 2,96<br>E+01      | 2,54<br>E+00 | 2,18<br>E+00 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 3,59<br>E-01 | 4,06<br>E+01 | 5,29<br>E-02 | 7,88<br>E+00      |
| ODP                                     | kg CFC<br>11 eq.          | 1,38<br>E-06      | 5,14<br>E-08 | 4,07<br>E-10 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 7,27<br>E-09 | 6,31<br>E-09 | 1,93<br>E-10 | -<br>1,26<br>E-07 |
| AP                                      | mol H <sup>+</sup><br>eq. | 5,81<br>E-01      | 5,52<br>E-03 | 3,08<br>E-04 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 7,81<br>E-04 | 5,15<br>E-03 | 3,62<br>E-05 | -<br>4,93<br>E-02 |
| EP-<br>freshwater                       | kg P eq.                  | 5,35<br>E-02      | 2,04<br>E-05 | 1,91<br>E-07 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 2,88<br>E-06 | 3,09<br>E-06 | 2,81<br>E-08 | -<br>4,72<br>E-04 |
| EP-<br>marine                           | kg N eq.                  | 2,19<br>E-01      | 1,33<br>E-03 | 1,57<br>E-04 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1,89<br>E-04 | 2,63<br>E-03 | 2,99<br>E-05 | -<br>1,26<br>E-02 |
| EP-<br>terrestrial                      | mol N<br>eq.              | 2,09<br>E+00      | 1,48<br>E-02 | 1,52<br>E-03 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 2,09<br>E-03 | 2,74<br>E-02 | 1,72<br>E-04 | -<br>1,83<br>E-01 |
| POCP                                    | kg<br>NMVOC<br>eq.        | 3,96<br>E-01      | 9,33<br>E-03 | 3,81<br>E-04 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1,32<br>E-03 | 6,72<br>E-03 | 7,88<br>E-05 | 4,37<br>E-02      |
| ADP-<br>minerals&<br>metals* **         | kg Sb<br>eq.              | 1,41<br>E-04      | 8,06<br>E-06 | 5,83<br>E-09 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1,14<br>E-06 | 7,97<br>E-08 | 2,54<br>E-09 | 9,10<br>E-06      |
| ADP-<br>fossil*                         | MJ                        | 1,80<br>E+03      | 3,66<br>E+01 | 1,73<br>E-01 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 5,17<br>E+00 | 2,74<br>E+00 | 1,33<br>E-01 | 3,93<br>E+02      |
| WDP*                                    | m³                        | 1,13<br>E+02      | 1,61<br>E-01 | 5,01<br>E-03 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 2,27<br>E-02 | 7,32<br>E-02 | 3,45<br>E-03 | 4,86<br>E+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

<sup>\*</sup> Disclaimer: 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.

<sup>\*\*</sup> The results of this impact category 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

The results of the impact categories, 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

|                     | Results per functional or declared unit |              |              |              |    |    |    |    |    |    |    |    |              |              |              |                   |
|---------------------|---|--------------|--------------|--------------|----|----|----|----|----|----|----|----|--------------|--------------|--------------|-------------------|
| Indicator           | Unit                                    | A1-<br>A3    | A4           | A5           | B1 | B2 | В3 | B4 | В5 | В6 | В7 | C1 | C2           | СЗ           | C4           | D                 |
| GWP-<br>GHG*        | kg CO <sub>2</sub> eq.                  | 5,96<br>E+01 | 2,53<br>E+00 | 2,45<br>E-01 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 3,58<br>E-01 | 1,20<br>E+01 | 4,37<br>E-02 | 7,90<br>E+00      |
| PM                  | disease inc.                            | 8,30<br>E-06 | 2,02<br>E-07 | 2,08<br>E-09 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 2,85<br>E-08 | 3,54<br>E-08 | 9,13<br>E-10 | 9,98<br>E-07      |
| IR**                | kBq U-<br>235 eq                        | 4,55<br>E+01 | 1,75<br>E-02 | 2,09<br>E-04 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 2,48<br>E-03 | 2,36<br>E-03 | 6,66<br>E-05 | -<br>1,19<br>E+01 |
| ETP –<br>FW***      | CTUe                                    | 4,74<br>E+03 | 9,59<br>E+00 | 2,22<br>E+00 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1,36<br>E+00 | 2,69<br>E+01 | 2,54<br>E-02 | -<br>4,01<br>E+02 |
| HTP –<br>C***       | CTUh                                    | 2,44<br>E-06 | 1,71<br>E-08 | 6,85<br>E-11 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 2,42<br>E-09 | 1,07<br>E-09 | 6,41<br>E-12 | -<br>1,48<br>E-06 |
| HTP –<br>NC***      | CTUh                                    | 3,37<br>E-07 | 2,29<br>E-08 | 3,07<br>E-09 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 3,24<br>E-09 | 5,72<br>E-08 | 1,15<br>E-10 | 1,10<br>E-07      |
| Land use,<br>SQP*** | Pt                                      | 1,21<br>E+04 | 2,73<br>E+01 | 2,43<br>E-02 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 3,87<br>E+00 | 3,21<br>E-01 | 3,31<br>E-01 | -<br>6,09<br>E+02 |

<sup>\*</sup> Disclaimer: 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.

#### Resource use indicators

|           |      |              |              |                   | Res | sults pe | er funct | ional o | r decla | red un | it |    |              |                   |              |              |
|-----------|------|--------------|--------------|-------------------|-----|----------|----------|---------|---------|--------|----|----|--------------|-------------------|--------------|--------------|
| Indicator | Unit | A1-A3        | A4           | A5                | B1  | B2       | В3       | B4      | В5      | В6     | В7 | C1 | C2           | C3                | C4           | D            |
| PERE      | MJ   | 2,63E+<br>03 | 6,42E-<br>01 | 9,76E-<br>03      | 0   | 0        | 0        | 0       | 0       | 0      | 0  | 0  | 9,08E-<br>02 | 1,11E-<br>01      | 3,18E-<br>03 | 3,73E+<br>02 |
| PERM      | MJ   | 1,27E+<br>03 | 0,00E+<br>00 | -<br>2,42E+<br>02 | 0   | 0        | 0        | 0       | 0       | 0      | 0  | 0  | 0,00E+<br>00 | -<br>1,02E+<br>03 | 0,00E+<br>00 | 0,00E+<br>00 |
| PERT      | MJ   | 3,89E+<br>03 | 6,42E-<br>01 | -<br>2,42E+<br>02 | 0   | 0        | 0        | 0       | 0       | 0      | 0  | 0  | 9,08E-<br>02 | 1,02E+<br>03      | 3,18E-<br>03 | 3,73E+<br>02 |

<sup>\*\*</sup> Disclaimer: The indicator lonising radiation 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.

<sup>\*\*\*</sup> Disclaimer: 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.





| PENRE | MJ | 1,80E+<br>03 | 3,89E+<br>01 | 1,89E-<br>01 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,50E+<br>00 | 3,01E+<br>00      | 1,41E-<br>01 | -<br>3,98E+<br>02 |
|-------|----|--------------|--------------|--------------|---|---|---|---|---|---|---|---|--------------|-------------------|--------------|-------------------|
| PENRM | MJ | 5,57E+<br>01 | 0,00E+<br>00 | 3,98E+<br>00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00E+<br>00 | -<br>5,17E+<br>01 | 0,00E+<br>00 | 0,00E+<br>00      |
| PENRT | MJ | 1,86E+<br>03 | 3,89E+<br>01 | 3,79E+<br>00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,50E+<br>00 | -<br>4,87E+<br>01 | 1,41E-<br>01 | 3,98E+<br>02      |
| SM    | kg | 8,00E+<br>00 | 0,00E+<br>00 | 0,00E+<br>00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00E+<br>00 | 0,00E+<br>00      | 0,00E+<br>00 | 0,00E+<br>00      |
| RSF   | MJ | 0,00E+<br>00 | 0,00E+<br>00 | 0,00E+<br>00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00E+<br>00 | 0,00E+<br>00      | 0,00E+<br>00 | 0,00E+<br>00      |
| NRSF  | MJ | 0,00E+<br>00 | 0,00E+<br>00 | 0,00E+<br>00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00E+<br>00 | 0,00E+<br>00      | 0,00E+<br>00 | 0,00E+<br>00      |
| FW    | m³ | 3,99E+<br>00 | 6,01E-<br>03 | 1,89E-<br>03 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8,50E-<br>04 | 2,30E-<br>02      | 1,42E-<br>04 | -<br>1,11E-<br>01 |

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**

|  |      |           |    |    | Result | s per f | unctio | nal or o | declare | ed unit |    |    |    |            |    |   |
|--|------|-----------|----|----|--------|---------|--------|----------|---------|---------|----|----|----|------------|----|---|
| Indicator                              | Unit | A1-<br>A3 | A4 | A5 | B1     | B2      | В3     | B4       | В5      | В6      | В7 | C1 | C2 | <b>C</b> 3 | C4 | D |
| Hazardous<br>waste<br>disposed         | kg   | 0         | 0  | 0  | 0      | 0       | 0      | 0        | 0       | 0       | 0  | 0  | 0  | 0          | 0  | 0 |
| Non-<br>hazardous<br>waste<br>disposed | kg   | 0         | 0  | 0  | 0      | 0       | 0      | 0        | 0       | 0       | 0  | 0  | 0  | 0          | 0  | 0 |
| Radioactive<br>waste<br>disposed       | kg   | 0         | 0  | 0  | 0      | 0       | 0      | 0        | 0       | 0       | 0  | 0  | 0  | 0          | 0  | 0 |

# **Output flow indicators**

|                               | Results per functional or declared unit |           |    |      |    |    |    |    |    |    |    |    |    |      |    |   |
|-------------------------------|---|-----------|----|------|----|----|----|----|----|----|----|----|----|------|----|---|
| Indicator                     | Unit                                    | A1-<br>A3 | A4 | A5   | B1 | B2 | В3 | В4 | В5 | В6 | В7 | C1 | C2 | C3   | C4 | D |
| Components for re-use         | kg                                      | 0         | 0  | 8,00 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0    | 0  | 0 |
| Material for recycling        | kg                                      | 0         | 0  | 4,00 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 2,55 | 0  | 0 |
| Materials for energy recovery | kg                                      | 0         | 0  | 0    | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0    | 0  | 0 |





| Exported energy, electricity | MJ | 0 | 0 | 43,5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 256 | 0 | 0 |
|------------------------------|----|---|---|------|---|---|---|---|---|---|---|---|---|-----|---|---|
| Exported energy, thermal     | MJ | 0 | 0 | 102  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 597 | 0 | 0 |

# Additional environmental information

The materials we use and how we design our tables are conscious choices made based on the ambition that it should be easy to circulate the tables in the future. Our consistent use of plywood table cores, extra thick veneers and the way the tables are assembled with ramp socket and screw bolt are examples of choices made to increase the circularity of the tables.

Read more about our work in building circular and sustainable table solutions on our website, lundbergs-mobler.se

On the day the table is to be sorted, it is good to know that the table can be dismantled in different sorting categories. This is thanks to the fact that materials that are to be sorted differently are not glued together but can be easily distinguished and separated.

**The OAS Big table** is certified by Möbelfakta and meets its requirements for quality, environment and social responsibility, declaration no. 120180524, for public environments Information on a suitable method of reuse of the product (or parts of the products) and procedures for who to sort the different materials are to be found on our website.

# Additional social and economic information

Lundbergs Möbler work actively with supply chain management. This is through clear codes of conduct, both internally in the company and externally in our supplier network. Our Code of conduct for suppliers must be signed by the supplier and we carry out risk assessments of our supply chain every year. This work is regularly revised by Swedish Möbelfakta.

Our internal Code of conduct is to be read on our website, https://www.lundbergs-mobler.se/.

# References

General Programme Instructions of the International EPD® System. Version 4.0. PCR 2019:14. Construction products (EN 15804+A2). 1.3.4 c-PCR-021 Furniture version 2.0 (c-PCR to PCR 2019:14) (Adopted from EPD Norway)

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