

# **ENVIRONMENTAL PRODUCT DECLARATION**

in accordance with ISO 14025, ISO 21930 and EN 15804

Owner of the declaration:

Program operator:

The Norwegian EPD Foundation

Publisher:

The Norwegian EPD Foundation

Declaration number:

Registration number:

Registration number:

ECO Platform reference number:

Issue date:

Valid to:

JSC Svenheim

The Norwegian EPD Foundation

NEPD-2649-1356-EN

NEPD-2649-1356-EN

URLPD-2649-1356-EN

# Optima conference table 4000\*1200 HPL grey

JSC Svenheim



www.epd-norge.no





## **General information**

Product:

Optima conference table 4000\*1200 HPL grey

Owner of the declaration:

JSC Svenheim

Contact person: Karolina Klimaite Phone: +370 657 52044 e-mail: info@svenheim.lt

Program operator:

The Norwegian EPD Foundation Pb. 5250 Majorstuen, 0303 Oslo Phone: +47 23 08 80 00 e-mail: post@epd-norge.no

**ECO Platform reference number:** 

Manufacturer:

JSC Svenheim

Naujoji str.132, LT-62175 Alytus

Lithuania

**Declaration number:** 

NEPD-2649-1356-EN

Place of production:

JSC Svenheim

Naujoji str.132, LT-62175 Alytus

Lithuania

Management system:

ISO 14001, Certificate No. 81858-2010-AE-LUT-FINAS ISO 9001, Certificate No. 81860-2010-AQ-LTU-FINAS Accredited unit: DNV Certification OY/AB, Finland

This declaration is based on Product Category Rules:

CEN Standard EN 15804:2012+A1:2013 serves as core PCR

Organisation no: LT100004040014

Issue date: 01.02.2021

Statement of liability:

The owner of the declaration shall be liable for the underlying information and evidence. EPD Norway shall not be liable with respect to manufacturer information, life cycle assessment data and evidences.

Valid to: 01.02.2026

**Declared unit:** 

1 Pcs Optima conference table 4000\*1200 HPL grey

Declared unit with option:

A1,A2,A3,A4,C1,C2,C3,C4,D

Year of study:

Comparability:

EPDs from programmes other than the Norwegian EPD Foundation may not be

**Functional unit:** 

**Development and verification of EPD:** 

The declaration has been developed and verified using EPD tool lca.tools ver EPD2020.11, developed by LCA.no AS. The EPD tool is integrated into the company's environmental management system, and has been approved by EPD-Norway

Developer of EPD:

Karolina Klimaite

Reviewer of company-specific input data and EPD:

Linas Vosylius

**Verification of EPD tool:** 

Independent third party verification of the EPD tool, background data and test-EPD in accordance with EPDNorway's procedures and guidelines for verification and approval of EPD tools.

General information on verification of EPD from EPD tools:

Independent verification of data, other environmental information and the declaration according to ISO 14025:2010, § 8.1.3 and § 8.1.4. Individual

the proccess is reviewed annualy. See Appendix G of EPD-Norway's General Programme Instructions for further information on EPD tools.

third party verification of each EPD is not required when the EPD tool is i) integrated into the company's environmental management system, ii) the procedures for use of the EPD tool are approved by EPDNorway, and iii)

Approved:

Sian

Erik Svanes, Norsus AS

(no signature required)

Håkon Hauan, CEO EPD-Norge

| Key environmental indicators | Unit       | Cradle to gate A1 - A3 |
|------------------------------|------------|------------------------|
| Global warming               | kg CO2 eqv | 240,00                 |
| Total energy use             | MJ         | 6574,72                |
| Amount of recycled materials | %          | 2,74                   |



## **Product**

Market:

Europe

#### **Product description:**

Meeting table Optima, rect. shape 4000\*1200\*26, grey HPL with fixed round column 735mm, Astro T-foot

#### **Product specification**

Optima conference table has core material in 25 mm MDF, with surface selection of veneer, linoleum, HT laminate, Fenix black matt HT laminate as standard. The edge is profiled 10 mm straight with 40 degrees chamfer or as straight edge with radius 2mm. Veneered surface has 5 coats of UV lacquer, which makes the surface very durable and strong. Legs has fixed or electric column, T-foot, X-foot or disk-foot. Surfaces in gray, white, black or chrome.

#### **Technical data:**

Total weight 208,89kg (with packaging)

#### Reference service life, product

15 years

Reference service life, building

| Materials                                       | kg     | %     | Recycled share in material (kg) | Recycled share in material (%) |
|---|--------|-------|---------------------------------|--------------------------------|
| Printed paper                                   | 0,63   | 0,34  | 0,00                            | 0,00                           |
| Metal - Steel                                   | 21,75  | 11,65 | 4,35                            | 20,00                          |
| Wood - Medium Density Fibreboard (MDF)          | 157,83 | 84,53 | 0,00                            | 0,00                           |
| Plastic - Acrylonitrile butadiene styrene (ABS) | 0,45   | 0,24  | 0,00                            | 0,00                           |
| Plastic - Polypropylene (PP)                    | 0,00   | 0,00  | 0,00                            | 0,00                           |
| Wood - Solid beech/birch                        | 0,02   | 0,01  | 0,00                            | 0,00                           |
| Glue for wood                                   | 1,94   | 1,04  | 0,00                            | 0,00                           |
| High pressure laminate - HPL thin               | 4,11   | 2,20  | 0,02                            | 0,39                           |

| Packaging             | kg   | Recycled share in material (kg) | Recycled share in material (%) |
|-----------------------|------|---------------------------------|--------------------------------|
| Packaging - Cardboard | 0,45 | 0,34                            | 76,30                          |
| Packaging - Cardboard | 1,33 | 1,02                            | 76,30                          |

### LCA: Calculation rules

#### Declared unit:

1 Pcs Optima conference table 4000\*1200 HPL grey

## Cut-off criteria:

All major raw materials and all the essential energy is included. The production processes for raw materials and energy flows with very small amounts (less than 1%) are not included. These cut-off criteria do not apply for hazardous materials and substances.

## Allocation:

The allocation is made in accordance with the provisions of EN 15804. Effects of primary production of recycled materials is allocated to the main product in which the material was used. The recycling process and transportation of the material is allocated to this analysis.

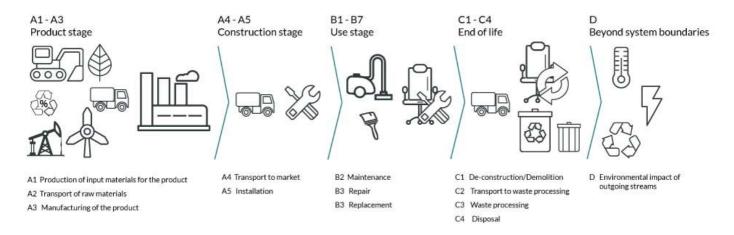
#### Data quality:

Specific data for the product composition are provided by the manufacturer. They represent the production of the declared product and were collected for EPD development in the year of study. Background data is based on registered EPDs according to EN 15804, Ostfold Research databases, ecoinvent and other LCA databases. The data quality of the raw materials in A1 is presented in the table below.

| Materials                                       | Source                   | Data quality | Year |
|---|--------------------------|--------------|------|
| Plastic - Polypropylene (PP)                    | ecoinvent 3.4            | Database     | 2015 |
| Plastic - Acrylonitrile butadiene styrene (ABS) | PlasticsEurope           | EPD          | 2015 |
| Metal - Steel                                   | ecoinvent 3.3            | Database     | 2016 |
| Glue for wood                                   | ecoinvent 3.4            | Database     | 2017 |
| Metal - Steel                                   | ecoinvent 3.4            | Database     | 2017 |
| Packaging - Cardboard                           | ecoinvent 3.4            | Database     | 2017 |
| Printed paper                                   | ecoinvent 3.4            | Database     | 2017 |
| Wood - Medium Density Fibreboard (MDF)          | ecoinvent 3.4            | Database     | 2017 |
| Wood - Solid beech/birch                        | ecoinvent 3.4            | Database     | 2017 |
| High pressure laminate - HPL thin               | EPD-ICL-20170155-CBE1-EN | EPD, IBU     | 2017 |



#### System boundary:



#### Additional technical information:

Transportation to an average customer in Norway is 1916 km (A4: average European lorry > 32 tonnes) (Transport, freight, by lorry (>32t): 1426 km and by sea transport: 490 km).

The electricity consumed is assumed to be from East pool mix in the East European countries. European mix and energy mix in Lithuania is based on data from the World bank (Based on data 2011).

Electricity mix: 0,053 kg CO2 eqv/MJ (East Europe mix).



# The following information describe the scenarios in the different modules of the EPD.

The following information describe the scenarios in the different modules of the EPD.

In the end of life stage, the transport distance for waste to waste processing is 72 km (C1). The reuse, recovery and recycling stage is beyond the system boundaries (D). It is assumed that the solution is dismantled and the materials recycled. In the table below Norwegian treatment of industrial waste is calculated. This calculation includes only CO2 emissions (GWP) in the Cmodules. The transport distance to reuse, recovery or recycling varies for each material, but the average distance is 373 km. The vehicles used and associated data are described in detail in [5].

#### Transport from production place to user (A4)

| Туре                 | Capacity utilisation (incl. return) % | Type of vehicle                        | Distance km | Fuel/Energy<br>consumption | Unit  | Value (I/t) |
|----------------------|---------------------------------------|--|-------------|----------------------------|-------|-------------|
| Truck                | 55,0 %                                | Truck, over 32 tonnes, EURO 6          | 1426        | 0,022606                   | l/tkm | 32,24       |
| Railway              |                                       |  |             |                            | l/tkm |             |
| Boat                 | 71,0 %                                | Ship, Coastal Barge (250 - 3000t load) | 490         | 0,011179                   | l/tkm | 5,48        |
| Other Transportation |                                       |  |             |                            | l/tkm |             |

#### End of Life (C1, C3, C4)

|                                       | Unit | Value    |
|---------------------------------------|------|----------|
| Hazardous waste disposed              | kg   |          |
| Collected as mixed construction waste | kg   |          |
| Reuse                                 | kg   |          |
| Recycling                             | kg   | 23,5290  |
| Energy recovery                       | kg   | 157,8300 |
| To landfill                           | kg   |          |

#### Transport to waste processing (C2)

| Туре                 | Capacity utilisation (incl. return) % | Type of vehicle             | Distance km | Fuel/Energy<br>consumption | Unit  | Value (I/t) |
|----------------------|---------------------------------------|-----------------------------|-------------|----------------------------|-------|-------------|
| Truck                | 38,8 %                                | Truck, 16-32 tonnes, EURO 6 | 72          | 0,043626                   | l/tkm | 3,14        |
| Railway              |                                       |                             |             |                            | l/tkm |             |
| Boat                 |                                       |                             |             |                            | l/tkm |             |
| Other Transportation |                                       |                             |             |                            | l/tkm |             |

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## **LCA: Results**

The LCA results are presented below for the declared unit defined on page 2 of the EPD document.

# System boundaries (X=included, MND=module not declared, MNR=module not relevant)

|   | Product stage    |           |               | instal    | uction<br>lation<br>age |     |             | ı      | Jser stag   | e             |                              |                          |                                   | End of    | life stage           | •        | Beyond the system bondaries                |
|---|------------------|-----------|---------------|-----------|-------------------------|-----|-------------|--------|-------------|---------------|------------------------------|--------------------------|-----------------------------------|-----------|----------------------|----------|--|
|   | Raw<br>materials | Transport | Manufacturing | Transport | Assembly                | Use | Maintenance | Repair | Replacement | Refurbishment | Operational<br>energy<br>use | Operational<br>water use | De-<br>construction<br>demolition | Transport | W aste<br>processing | Disposal | Reuse-Recovery-<br>Recycling-<br>potential |
| ľ | A1               | A2        | A3            | A4        | A5                      | B1  | B2          | В3     | В4          | B5            | В6                           | В7                       | C1                                | C2        | C3                   | C4       | D  |
| ſ | Χ                | Х         | Х             | Х         | MND                     | MND | MND         | MND    | MND         | MND           | MND                          | MND                      | Х                                 | Х         | Х                    | Х        | Х  |

## **Environmental impact**

| Parameter | Unit                                 | A1       | A2       | A3       | A4       | C1 | C2       | C3       | C4 | D |
|-----------|--------------------------------------|----------|----------|----------|----------|----|----------|----------|----|---|
| GWP       | kg CO <sub>2</sub> -eq               | 2,09E+02 | 1,76E+00 | 2,97E+01 | 3,66E+01 | 0  | 2,97E+00 | 1,30E+04 | 0  | 0 |
| ODP       | kg CFC11 -eq                         | 1,95E-05 | 3,46E-07 | 1,55E-06 | 7,16E-06 | 0  | 5,59E-07 | 9,45E-05 | 0  | 0 |
| POCP      | kg C <sub>2</sub> H <sub>4</sub> -eq | 1,06E-01 | 2,72E-04 | 1,88E-02 | 5,76E-03 | 0  | 4,49E-04 | 1,86E-01 | 0  | 0 |
| AP        | kg SO <sub>2</sub> -eq               | 1,01E+00 | 4,39E-03 | 1,55E-01 | 1,23E-01 | 0  | 6,98E-03 | 5,69E+00 | 0  | 0 |
| EP        | kg PO <sub>4</sub> <sup>3-</sup> -eq | 1,86E-01 | 6,02E-04 | 2,46E-02 | 2,02E-02 | 0  | 9,16E-04 | 1,83E+00 | 0  | 0 |
| ADPM      | kg Sb -eq                            | 1,25E-03 | 4,79E-06 | 4,60E-05 | 7,61E-05 | 0  | 9,22E-06 | 1,06E-03 | 0  | 0 |
| ADPE      | MJ                                   | 3,06E+03 | 2,78E+01 | 3,28E+02 | 5,78E+02 | 0  | 4,48E+01 | 8,36E+03 | 0  | 0 |

GWP Global warming potential; ODP Depletion potential of the stratospheric ozone layer, POCP Formation potential of tropospheric photochemical oxidants; AP Acidification potential of land and water; EP Eutrophication potential; ADPM Abiotic depletion potential for non fossil resources; ADPE Abiotic depletion potential for fossil resources

Reading example: 9,0 E-03 = 9,0\*10-3 = 0,009 \*INA Indicator Not Assessed



#### Resource use

| Parameter | Unit           | A1       | A2       | A3       | A4       | C1 | C2       | C3       | C4 | D |
|-----------|----------------|----------|----------|----------|----------|----|----------|----------|----|---|
| RPEE      | MJ             | 2,35E+03 | 4,64E-01 | 3,37E+02 | 1,08E+01 | 0  | 6,62E-01 | 1,75E+05 | 0  | 0 |
| RPEM      | MJ             | 1,52E+03 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0  | 0,00E+00 | 0,00E+00 | 0  | 0 |
| TPE       | MJ             | 3,87E+03 | 4,64E-01 | 3,37E+02 | 1,08E+01 | 0  | 6,62E-01 | 1,75E+05 | 0  | 0 |
| NRPE      | MJ             | 3,31E+03 | 2,86E+01 | 5,50E+02 | 5,97E+02 | 0  | 4,59E+01 | 1,25E+05 | 0  | 0 |
| NRPM      | MJ             | 5,47E+01 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0  | 0,00E+00 | 0,00E+00 | 0  | 0 |
| TRPE      | MJ             | 3,37E+03 | 2,86E+01 | 5,50E+02 | 5,97E+02 | 0  | 4,59E+01 | 1,25E+05 | 0  | 0 |
| SM        | kg             | 5,72E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0  | 0,00E+00 | 0,00E+00 | 0  | 0 |
| RSF       | MJ             | 8,18E-01 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0  | 0,00E+00 | 0,00E+00 | 0  | 0 |
| NRSF      | MJ             | 6,36E-01 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0  | 0,00E+00 | 0,00E+00 | 0  | 0 |
| W         | m <sup>3</sup> | 1,46E+00 | 6,17E-03 | 2,61E-01 | 1,41E-01 | 0  | 8,68E-03 | 4,01E+01 | 0  | 0 |

RPEE Renewable primary energy resources used as energy carrier; RPEM Renewable primary energy resources used as raw materials; TPE Total use of renewable primary energy resources; NRPE Non renewable primary energy resources used as materials; TRPE Total use of non renewable primary energy resources; SM Use of secondary materials; RSF Use of renewable secondary fuels; NRSF Use of non renewable secondary fuels; W Use of net fresh water

Reading example: 9.0 E-03 = 9.0\*10-3 = 0.009

\*INA Indicator Not Assessed

### End of life - Waste

| Parameter | Unit | A1       | A2       | A3       | A4       | C1 | C2       | C3       | C4 | D |
|-----------|------|----------|----------|----------|----------|----|----------|----------|----|---|
| HW        | kg   | 7,05E-03 | 1,59E-05 | 6,84E-04 | 3,39E-04 | 0  | 2,70E-05 | 2,57E-02 | 0  | 0 |
| NHW       | kg   | 1,24E+02 | 2,14E+00 | 7,56E+00 | 4,83E+01 | 0  | 2,46E+00 | 6,94E+03 | 0  | 0 |
| RW        | kg   | INA*     | INA*     | INA*     | INA*     | 0  | INA*     | INA*     | 0  | 0 |

HW Hazardous waste disposed; NHW Non hazardous waste disposed; RW Radioactive waste disposed

Reading example: 9.0 E-03 = 9.0\*10-3 = 0.009

\*INA Indicator Not Assessed

# End of life - Output flow

| Parameter | Unit | A1       | A2       | A3       | A4       | C1 | C2       | C3       | C4 | D |
|-----------|------|----------|----------|----------|----------|----|----------|----------|----|---|
| CR        | kg   | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0  | 0,00E+00 | 0,00E+00 | 0  | 0 |
| MR        | kg   | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0  | 0,00E+00 | 7,52E+02 | 0  | 0 |
| MER       | kg   | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0  | 0,00E+00 | 3,02E-07 | 0  | 0 |
| EEE       | MJ   | INA*     | INA*     | INA*     | INA*     | 0  | INA*     | INA*     | 0  | 0 |
| ETE       | MJ   | INA*     | INA*     | INA*     | INA*     | 0  | INA*     | INA*     | 0  | 0 |

CR Components for reuse; MR Materials for recycling; MER Materials for energy recovery; EEE Exported electric energy; ETE Exported thermal energy

Reading example: 9.0 E-03 = 9.0\*10-3 = 0.009

\*INA Indicator Not Assessed



# **Additional Norwegian requirements**

#### Greenhouse gas emissions from the use of electricity in the manufacturing phase

National production mix from import, low voltage (production of transmission lines, in addition to direct emissions and losses in grid) of applied electricity for the manufacturing process (A3).

#### **Dangerous substances**

The product contains no substances given by the REACH Candidate list or the Norwegian priority list.

#### Indoor environment

Our furniture doesn't contain any constituent parts that affect indoor climate.

## Additional environmental information

# **Bibliography**

ISO 14025:2010 Environmental labels and declarations - Type III environmental declarations - Principles and procedures.

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NPCR 026 Part B for Furniture. Ver. 2.0 October 2018, EPD-Norge.

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