

# **ENVIRONMENTAL PRODUCT DECLARATION**

in accordance with ISO 14025, ISO 21930 and EN 15804

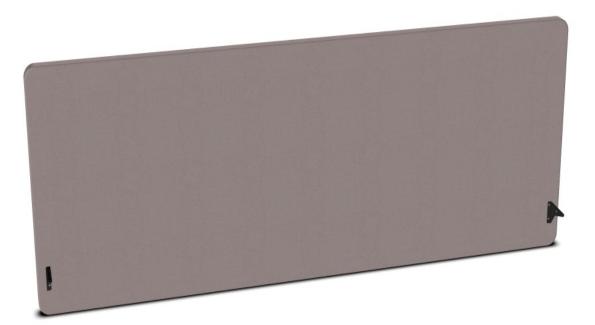
Owner of the declaration:	JSC Svenheim
Program operator:	The Norwegian EPD Foundation
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Issue date:	21.04.2022
Valid to:	21.04.2027

# Vesta tablescreener 1800x650x40

JSC Svenheim

www.epd-norge.no







# **General information**

#### **Product:**

Vesta tablescreener 1800x650x40

## Program operator:

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

## **Declaration number:**

NEPD-3443-2055-EN

## ECO Platform reference number:

#### This declaration is based on Product Category Rules:

CEN Standard EN 15804:2012+A1:2013 serves as core PCR NPCR 026:2018 Part B for furniture

### 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.

## **Declared unit:**

1 Pcs Vesta tablescreener 1800x650x40

# Declared unit with option:

A1,A2,A3,A4,A5,C2,C3

**Functional unit:** 

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

## 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.

Erik Svanes, Norsus AS

#### (no signature required)

|--|

JSC Svenheim Contact person: Linas Vosylius Phone: +370 657 52044 e-mail: linas@svenheim.lt

# Manufacturer:

JSC Svenheim

#### 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

# Organisation no:

LT100004040014

## Issue date:

21.04.2022

#### Valid to:

21.04.2027

## Year of study:

2021

## **Comparability:**

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

#### 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:

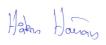
Linas Vosylius

Reviewer of company-specific input data and EPD:

**Povilas Simanavicius** 

## Approved:

Sign



# Håkon Hauan, CEO EPD-Norge

Key environmental indicators	Unit	Cradle to gate A1 - A3
Global warming	kg CO2 eqv	38,45
Total energy use	MJ	702,60
Amount of recycled materials	%	7,43



# Product

# Market:

Europe

# **Product description:**

Vesta table and wall screeners can be with various upholstery - Velito Presto, Camira Cara, Event Screen, Kvadrat remix (totally 37 variants of standard and lots of special textiles)

# **Product specification**

Transport distance for waste processing - 72km (C1) in the end of life stage. The reuse, recovery and recycling stage is beyond the system boundaries (D). It is assumed that materials are recycled.

# Technical data:

Total weight 11,42kg with packaging

Reference service life, product

15 years

Reference service life, building

Materials	kg	%	Recycled share in material (kg)	Recycled share in material (%)
Metal - Steel	0,12	0,71	0,02	20,00
Textile - Wool	1,02	6,55	0,00	0,00
Plastic - Polyurethane (PUR)	2,62	15,59	0,00	0,00
Wood - Solid pine	8,83	75,66	0,00	0,00
Glue for wood	0,25	1,49	0,00	0,00
Total:	12,84		0,02	
Packaging	kg		Recycled share in material (kg)	Recycled share in material (%)
Packaging - Cardboard	1,35		1,03	76,30
Total including packaging	14,19		1,05	

# LCA: Calculation rules

# Declared unit:

1 Pcs Vesta tablescreener 1800x650x40

# 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.

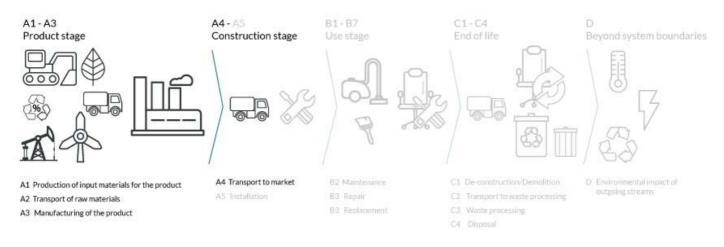
# Data quality:

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 - Polyurethane (PUR)	ecoinvent 3.4	Database	2015
Metal - Steel	ecoinvent 3.3	Database	2016
Glue for wood	ecoinvent 3.4	Database	2017
Packaging - Cardboard	ecoinvent 3.4	Database	2017
Textile - Wool	ecoinvent 3.4	Database	2017
Wood - Solid pine	ecoinvent 3.4	Database	2017



# System boundary:



# Additional technical information:

Transportation to an average customer in Norway is 1916km (A4: average European lorry > 32 tonnes 1426km and by sea coastal barge - 490km.



# LCA: Scenarios and additional technical information

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 consumption	Unit	Value (l/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)

# Assembly (A5)

Unit	Value		Unit	Value
kg		Hazardous waste disposed	kg	
m <sup>3</sup>		Collected as mixed construction waste	kg	
kWh		Reuse	kg	
MJ		Recycling	kg	0,1200
kg		Energy recovery	kg	9,9500
kg	1,3500	To landfill	kg	
kg				
kg				
	kg m <sup>3</sup> kWh MJ kg kg kg	kg m <sup>3</sup> kWh MJ kg kg 1,3500 kg	Unit Value   kg Hazardous waste disposed   m <sup>3</sup> Collected as mixed construction waste   kWh Reuse   MJ Recycling   kg 1,3500   kg Interpretation	UnitValuekgHazardous waste disposedkgm³Collected as mixed construction wastekgkWhReusekgMJRecyclingkgkg1,3500kg

# Transport to waste processing (C2)

Туре	Capacity utilisation (incl. return) %	Type of vehicle	Distance km	Fuel/Energy consumption	Unit	Value (l/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	



# 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)

Pr	oduct sta	age		uction lation Ige		User stage End of life stage						9	Beyond the system bondaries			
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De- construction demolition	Transport	W aste processing	Disposal	Reuse-Recovery- Recycling- potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	. D
Х	Х	Х	Х	Х								MNR	Х	Х	MNR	· MNR

# Environmental impact

Parameter	Unit	A1	A2	A3	A4	A5	C2	C3
GWP	kg CO <sub>2</sub> -eq	3,43E+01	3,11E-01	3,81E+00	1,62E+00	6,46E-02	1,31E-01	1,25E+01
ODP	kg CFC11 -eq	8,33E-07	5,83E-08	2,02E-07	3,16E-07	7,59E-09	2,47E-08	2,61E-08
РОСР	kg C <sub>2</sub> H <sub>4</sub> -eq	9,03E-03	4,75E-05	2,13E-03	2,54E-04	1,18E-05	1,98E-05	5,87E-05
AP	kg SO <sub>2</sub> -eq	2,47E-01	7,69E-04	1,96E-02	5,41E-03	3,49E-04	3,08E-04	1,92E-03
EP	kg PO4 <sup>3-</sup> -eq	4,87E-02	1,12E-04	3,10E-03	8,92E-04	1,04E-04	4,04E-05	6,52E-04
ADPM	kg Sb -eq	3,73E-05	9,91E-07	5,86E-06	3,36E-06	1,04E-07	4,07E-07	2,21E-07
ADPE	MJ	3,64E+02	4,69E+00	4,19E+01	2,55E+01	6,21E-01	1,98E+00	1,70E+00

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	A5	C2	C3
RPEE	MJ	7,56E+01	6,94E-02	7,50E+01	4,77E-01	2,16E+01	2,92E-02	9,89E-02
RPEM	MJ	2,63E+02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
TPE	MJ	3,39E+02	6,94E-02	7,50E+01	4,77E-01	2,16E+01	2,92E-02	9,89E-02
NRPE	MJ	4,77E+02	4,80E+00	6,99E+01	2,63E+01	6,40E-01	2,03E+00	1,88E+00
NRPM	MJ	5,27E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
TRPE	MJ	5,30E+02	4,80E+00	6,99E+01	2,63E+01	6,40E-01	2,03E+00	1,88E+00
SM	kg	1,05E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00						
NRSF	MJ	0,00E+00						
W	m <sup>3</sup>	4,04E-01	9,06E-04	3,34E-02	6,23E-03	2,33E-03	3,83E-04	1,50E-02

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 energy carrier, NRPM 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	A5	C2	C3	
HW	kg	4,97E-03	2,86E-06	8,64E-05	1,50E-05	9,25E-07	1,19E-06	4,05E-05	
NHW	kg	1,54E+01	2,54E-01	1,05E+00	2,13E+00	6,18E-02	1,08E-01	7,63E-02	
RW	kg	INA*							
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	A5	C2	C3	
CR	kg	0,00E+00							
MR	kg	0,00E+00	0,00E+00	7,77E-04	0,00E+00	0,00E+00	0,00E+00	1,20E-01	
MER	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	9,95E+00	
EEE	MJ	INA*							
ETE	MJ	INA*							
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).

Electricity mix	Data source	Amount	Unit
Energy, electricity, European average: 1 kWh	ecoinvent 3.4	594,20	g CO2-ekv/kWh

# **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.

ISO 14044:2006 Environmental management - Life cycle assessment - Requirements and guidelines.

EN 15804:2012+A1:2013 Environmental product declaration - Core rules for the product category of construction products.

ISO 21930:2017 Sustainability in buildings and civil engineering works - Core rules for environmental product declarations of construction products.

ecoinvent v3, Allocation, cut-off by classification, Swiss Centre of Life Cycle Inventories.

lversen et al., (2018) eEPD v3.0 - Background information for EPD generator system. LCA.no report number 04.18

Vold et al., (2019) EPD generator for Norsk Industri, Background information for industry application and LCA data, LCA.no report number 06.19.

NPCR Part A: Construction products and services. Ver. 1.0. April 2017, EPD-Norge.

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

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