

# Environmental product declaration

in accordance with ISO 14025 and EN 15804+A2

Move™ with wheels



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Varier®

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The Norwegian EPD Foundation

**Owner of the declaration:**

Varier Furniture AS

**Product:**

Move™ with wheels

**Declared unit:**

1 kg

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

CEN Standard EN 15804:2012+A2:2019 serves as core PCR  
NPCR 026:2018 Part B for furniture

**Program operator:**

The Norwegian EPD Foundation

**Declaration number:**

NEPD-4879-4131-EN

**Registration number:**

NEPD-4879-4131-EN

**Issue date:** 31.08.2023

**Valid to:** 31.08.2028

**EPD Software:**

LCA.no EPD generator ID: 69277

## General information

### Product

Move™ with wheels

### Program operator:

Post Box 5250 Majorstuen, 0303 Oslo, Norway

The Norwegian EPD Foundation

Phone: +47 23 08 80 00

web: [post@epd-norge.no](mailto:post@epd-norge.no)

**Declaration number:** NEPD-4879-4131-EN

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

CEN Standard EN 15804:2012+A2:2019 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 kg Move™ with wheels

### Declared unit (cradle to gate) with option:

A1-A3,A4,A5,B2,B3,B4,C1,C2,C3,C4,D

### Functional unit:

Gaslift L51-77 version

### 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. Verification of each EPD is made according to EPD-Norway's guidelines for verification and approval requiring that tools are i integrated into the company's environmental management system, ii the procedures for use of the EPD tool are approved by EPD-Norway, and iii the process is reviewed annually by an independent third party verifier. 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 EPD Norway's procedures and guidelines for verification and approval of EPD tools.

Third party verifier:

Elisabet Amat, GREENIZE projects

(no signature required)

### Owner of the declaration:

Varier Furniture AS

Contact person: Michal Klecz

Phone: +47 70 24 43 50

e-mail: [info@varierfurniture.com](mailto:info@varierfurniture.com)

### Manufacturer:

Varier Furniture AS

### Place of production:

Varier Furniture AS

Drammensveien 130

0277 Oslo, Norway

### Management system:

### Organisation no:

NO 989 804 804

**Issue date:** 31.08.2023

**Valid to:** 31.08.2028

### Year of study:

2022

### Comparability:

EPD of construction products may not be comparable if they not comply with EN 15804 and seen in a building context.


### Development and verification of EPD:

The declaration is created using EPD tool lca.tools ver EPD2022.03, developed by LCA.no. The EPD tool is integrated in the company's management system, and has been approved by EPD Norway.

Developer of EPD: Michal Klecz

Reviewer of company-specific input data and EPD: Bo Quist

### Approved:



Håkon Hauan, CEO EPD-Norge

## Product

### Product description:

Move™ allows for a wide range of movement, enabling seamless transitions from sitting to near standing positions. You can use it as your primary work chair or as an addition to your traditional office chair.

Move™ with wheels comes with soft wheel components, suitable for both hard and soft floors. There are three options for the wheels:

1) Brake when loaded, 2) Brake when unloaded, 3) Free rolling (no brake).

Depending on the height of the gas lift, there are three seat heights: Low, Medium, and High. Low allows a seat height ranging from 51-70 cm, Medium ranges from 58-84 cm while High ranges from 67-93 cm.

### Product specification

Designed by Per Øie in 1985. More information on Move™ here:

[www.varierfurniture.com/collection/move](http://www.varierfurniture.com/collection/move)

| Materials                     | kg   | %     | Recycled share in material (kg) | Recycled share in material (%) |
|-------------------------------|------|-------|---------------------------------|--------------------------------|
| Powder coating                | 0,02 | 0,36  | 0,00                            | 0,00                           |
| Plastic - Polyethylene (LDPE) | 0,02 | 0,40  | 0,00                            | 0,00                           |
| Metal - Steel                 | 1,96 | 37,32 | 0,00                            | 0,00                           |
| Metal - Aluminium             | 0,15 | 2,86  | 0,00                            | 0,00                           |
| Plastic - Nylon (PA)          | 0,80 | 15,24 | 0,00                            | 0,00                           |
| Plastic - Polypropylene (PP)  | 1,10 | 20,95 | 0,00                            | 0,00                           |
| Plastic - Polyurethane (PUR)  | 0,60 | 11,43 | 0,00                            | 0,00                           |
| Rubber, synthetic             | 0,00 | 0,02  | 0,00                            | 0,00                           |
| Textile - Cotton              | 0,10 | 1,90  | 0,00                            | 0,00                           |
| Wood - Plywood                | 0,50 | 9,52  | 0,00                            | 0,00                           |
| Total                         | 5,25 |       | 0,00                            |                                |

| Packaging             | kg   | %     | Recycled share in material (kg) | Recycled share in material (%) |
|-----------------------|------|-------|---------------------------------|--------------------------------|
| Packaging - Cardboard | 2,07 | 91,19 | 0,75                            | 36,00                          |
| Packaging - Plastic   | 0,20 | 8,81  | 0,00                            | 0,00                           |
| Total incl. packaging | 7,52 |       | 0,75                            |                                |

### Technical data:

Chair Measurement:

Seat Ø: 43 cm

Base Ø: 40 cm

Seat Height:

56 - 82 cm

Box Measurement:

H 23 cm x L 44 cm x W 41,5 cm

### Market:

Global, mainly Europe.

### Reference service life, product

Longevity is incorporated into Varier's core values. Upholstery and cushions can be replaced over time and Varier products can be passed on to the next generation. Varier offers an extended warranty of 7 years on wooden parts and 5 years on mechanisms. Lifetime is usually longer than 15 years.

### Reference service life, building

## LCA: Calculation rules

### Declared unit:

1 kg Move™ with wheels

### 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. Incoming energy and water and waste production in-house is allocated equally among all products through mass allocation. 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.

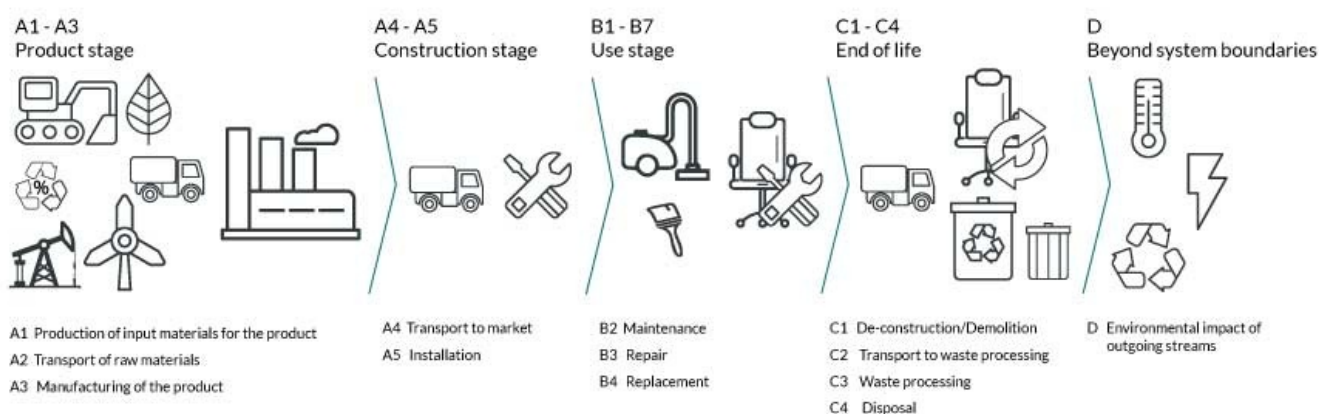
| Materials                     | Source                 | Data quality | Year |
|-------------------------------|------------------------|--------------|------|
| Metal - Aluminium             | ecoinvent 3.6          | Database     | 2019 |
| Metal - Steel                 | ecoinvent 3.6          | Database     | 2019 |
| Packaging - Cardboard         | ecoinvent 3.6          | Database     | 2019 |
| Packaging - Plastic           | ecoinvent 3.6          | Database     | 2019 |
| Plastic - Nylon (PA)          | ecoinvent 3.6          | Database     | 2019 |
| Plastic - Polyethylene (LDPE) | ecoinvent 3.6          | Database     | 2019 |
| Plastic - Polypropylene (PP)  | ecoinvent 3.6          | Database     | 2019 |
| Plastic - Polyurethane (PUR)  | ecoinvent 3.6          | Database     | 2019 |
| Powder coating                | Ecoinvent 3.6          | Database     | 2019 |
| Rubber, synthetic             | ecoinvent 3.6          | Database     | 2019 |
| Textile - Cotton              | ecoinvent 3.6          | Database     | 2019 |
| Wood - Plywood                | modified ecoinvent 3.6 | Database     | 2019 |

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

| Product stage |           |               | Construction installation stage |          | Use stage |             |        |             |               |                        | End of life stage     |                            |           |                  | Beyond the system boundaries |                                    |
|---------------|-----------|---------------|---------------------------------|----------|-----------|-------------|--------|-------------|---------------|------------------------|-----------------------|----------------------------|-----------|------------------|------------------------------|------------------------------------|
| Raw materials | Transport | Manufacturing | Transport                       | Assembly | Use       | Maintenance | Repair | Replacement | Refurbishment | Operational energy use | Operational water use | De-construction demolition | Transport | Waste processing | Disposal                     | Reuse-Recovery-Recycling-potential |
| A1            | A2        | A3            | A4                              | A5       | B1        | B2          | B3     | B4          | B5            | B6                     | B7                    | C1                         | C2        | C3               | C4                           | D                                  |
| X             | X         | X             | X                               | X        | MND       | X           | X      | X           | MND           | MND                    | MND                   | X                          | X         | X                | X                            | X                                  |

### System boundary:

A1 (raw materials) to A4 (transport) - products are transported to consumers and assembled by consumers



### Additional technical information:

## LCA: Scenarios and additional technical information

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

After manufacturing the chairs are transported to our customers, and the customers assembles the chairs themselves. The chair is sold to homes all around the globe and used for generations. Varier currently has no standard refurbishment procedures.

| Transport from production place to user (A4)   | Capacity utilisation (incl. return) % | Distance (km) | Fuel/Energy Consumption | Unit  | Value (Liter/tonne) |
|--|---------------------------------------|---------------|-------------------------|-------|---------------------|
| Truck, 16-32 tonnes, EURO 6 (km)   | 36,7 %                                | 1250          | 0,043                   | l/tkm | 53,75               |
| Assembly (A5)  |                                       |               |                         |       |                     |
|  | Unit                                  | Value         |                         |       |                     |
| Waste, packaging, corrugated board box, to average treatment (kg)  | kg                                    | 1,26          |                         |       |                     |
| Waste, packaging, plastic film (LDPE), to average treatment - A5 (kg)  | kg                                    | 0,10          |                         |       |                     |
| Transport to waste processing (C2)   |                                       |               |                         |       |                     |
|  | Capacity utilisation (incl. return) % | Distance (km) | Fuel/Energy Consumption | Unit  | Value (Liter/tonne) |
| Truck, 16-32 tonnes, EURO 6 (km)   | 36,7 %                                | 55            | 0,043                   | l/tkm | 2,37                |
| Waste processing (C3)  |                                       |               |                         |       |                     |
|  | Unit                                  | Value         |                         |       |                     |
| Waste treatment per kg Non-hazardous waste, incineration with fly ash extraction - C3 (kg)   | kg                                    | 0,02          |                         |       |                     |
| Waste treatment per kg Plastics, Mixture, municipal incineration with fly ash extraction (kg)  | kg                                    | 0,80          |                         |       |                     |
| Waste treatment per kg Polyethylene, PE, incineration with fly ash extraction - C3 (kg)  | kg                                    | 0,02          |                         |       |                     |
| Waste treatment per kg Polypropylene (PP), incineration with fly ash extraction - C3 (kg)  | kg                                    | 1,10          |                         |       |                     |
| Waste treatment per kg Polyurethane (PU), incineration (kg)  | kg                                    | 0,60          |                         |       |                     |
| Waste treatment per kg Rubber, municipal incineration with fly ash extraction (kg)   | kg                                    | 0,00          |                         |       |                     |
| Waste treatment per kg Scrap aluminium, incineration with fly ash extraction (kg)  | kg                                    | 0,15          |                         |       |                     |
| Waste treatment per kg Scrap steel, incineration with fly ash extraction (kg)  | kg                                    | 1,96          |                         |       |                     |
| Waste treatment per kg Textile, incineration with fly ash extraction (kg)  | kg                                    | 0,10          |                         |       |                     |
| Waste treatment per kg Wood, incineration with fly ash extraction (kg)   | kg                                    | 0,50          |                         |       |                     |
| Waste, materials to recycling (kg)   | kg                                    | 0,68          |                         |       |                     |
| Disposal (C4)  |                                       |               |                         |       |                     |
|  | Unit                                  | Value         |                         |       |                     |
| Landfilling of ashes and residues from incineration of Scrap aluminium (kg)  | kg                                    | 0,13          |                         |       |                     |
| Landfilling of ashes and residues from incineration of Scrap steel (kg)  | kg                                    | 1,29          |                         |       |                     |
| Landfilling of ashes from incineration of Non-hazardous waste, process per kg ashes and residues - C4 (kg)   | kg                                    | 0,00          |                         |       |                     |
| Landfilling of ashes from incineration of Plastics, Mixture, municipal incineration with fly ash extraction, process per kg ashes and residues - C4 (kg) | kg                                    | 0,03          |                         |       |                     |
| Landfilling of ashes from incineration of Polyethylene, PE, process per kg ashes and residues - C4 (kg)  | kg                                    | 0,00          |                         |       |                     |
| Landfilling of ashes from incineration of Polypropylene, PP, process per kg ashes and residues - C4 (kg)   | kg                                    | 0,03          |                         |       |                     |
| Landfilling of ashes from incineration of Polyurethane (PU), process per kg ashes and residues - C4 (kg)   | kg                                    | 0,02          |                         |       |                     |
| Landfilling of ashes from incineration of Rubber, process per kg ashes and residues - C4 (kg)  | kg                                    | 0,00          |                         |       |                     |
| Landfilling of ashes from incineration of Textile, soiled, process per kg ashes and residues (kg)  | kg                                    | 0,01          |                         |       |                     |
| Landfilling of ashes from incineration of Wood, process per kg ashes and residues (kg)   | kg                                    | 0,01          |                         |       |                     |

| Benefits and loads beyond the system boundaries (D)              | Unit | Value |  |  |  |
|--|------|-------|--|--|--|
| Substitution of electricity, in Norway (MJ)                      | MJ   | 4,35  |  |  |  |
| Substitution of primary aluminium with net scrap (kg)            | kg   | 0,02  |  |  |  |
| Substitution of primary steel with net scrap (kg)                | kg   | 0,66  |  |  |  |
| Substitution of thermal energy, district heating, in Norway (MJ) | MJ   | 65,88 |  |  |  |

## LCA: Results

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

| Environmental impact             |                        |           |          |          |    |    |  |
|----------------------------------|------------------------|-----------|----------|----------|----|----|--|
| Indicator                        | Unit                   | A1-A3     | A4       | A5       | B2 | B3 |  |
| GWP-total                        | kg CO <sub>2</sub> -eq | 3,23E+01  | 1,07E+00 | 2,17E+00 | 0  | 0  |  |
| GWP-fossil                       | kg CO <sub>2</sub> -eq | 3,65E+01  | 1,07E+00 | 2,83E-02 | 0  | 0  |  |
| GWP-biogenic                     | kg CO <sub>2</sub> -eq | -4,28E+00 | 4,42E-04 | 2,14E+00 | 0  | 0  |  |
| GWP-luluc                        | kg CO <sub>2</sub> -eq | 1,18E-01  | 3,80E-04 | 7,35E-06 | 0  | 0  |  |
| ODP                              | kg CFC11 -eq           | 1,76E-06  | 2,42E-07 | 4,78E-09 | 0  | 0  |  |
| AP                               | mol H+ -eq             | 2,17E-01  | 3,07E-03 | 1,06E-04 | 0  | 0  |  |
| EP-FreshWater                    | kg P -eq               | 2,43E-03  | 8,53E-06 | 1,84E-07 | 0  | 0  |  |
| EP-Marine                        | kg N -eq               | 5,55E-02  | 6,07E-04 | 4,09E-05 | 0  | 0  |  |
| EP-Terrestrial                   | mol N -eq              | 4,00E-01  | 6,79E-03 | 3,81E-04 | 0  | 0  |  |
| POCP                             | kg NMVOC -eq           | 1,23E-01  | 2,60E-03 | 1,11E-04 | 0  | 0  |  |
| ADP-minerals&metals <sup>1</sup> | kg Sb -eq              | 5,72E-04  | 2,95E-05 | 5,38E-07 | 0  | 0  |  |
| ADP-fossil <sup>1</sup>          | MJ                     | 5,25E+02  | 1,61E+01 | 3,18E-01 | 0  | 0  |  |
| WDP <sup>1</sup>                 | m <sup>3</sup>         | 1,33E+03  | 1,56E+01 | 4,77E-01 | 0  | 0  |  |

| Indicator                        | Unit                   | B4 | C1 | C2       | C3       | C4       | D         |
|----------------------------------|------------------------|----|----|----------|----------|----------|-----------|
| GWP-total                        | kg CO <sub>2</sub> -eq | 0  | 0  | 4,70E-02 | 7,58E+00 | 1,95E-02 | -1,27E+00 |
| GWP-fossil                       | kg CO <sub>2</sub> -eq | 0  | 0  | 4,70E-02 | 6,44E+00 | 1,95E-02 | -1,25E+00 |
| GWP-biogenic                     | kg CO <sub>2</sub> -eq | 0  | 0  | 1,95E-05 | 1,14E+00 | 1,44E-05 | -1,83E-03 |
| GWP-luluc                        | kg CO <sub>2</sub> -eq | 0  | 0  | 1,67E-05 | 2,48E-05 | 5,34E-06 | -1,61E-02 |
| ODP                              | kg CFC11 -eq           | 0  | 0  | 1,06E-08 | 1,61E-08 | 5,29E-09 | -2,78E-02 |
| AP                               | mol H+ -eq             | 0  | 0  | 1,35E-04 | 2,34E-03 | 1,25E-04 | -7,72E-03 |
| EP-FreshWater                    | kg P -eq               | 0  | 0  | 3,75E-07 | 1,52E-06 | 2,07E-07 | -8,43E-05 |
| EP-Marine                        | kg N -eq               | 0  | 0  | 2,67E-05 | 1,23E-03 | 4,39E-05 | -1,90E-03 |
| EP-Terrestrial                   | mol N -eq              | 0  | 0  | 2,99E-04 | 1,22E-02 | 4,88E-04 | -2,01E-02 |
| POCP                             | kg NMVOC -eq           | 0  | 0  | 1,15E-04 | 2,92E-03 | 1,40E-04 | -7,17E-03 |
| ADP-minerals&metals <sup>1</sup> | kg Sb -eq              | 0  | 0  | 1,30E-06 | 6,97E-07 | 2,94E-07 | -1,62E-05 |
| ADP-fossil <sup>1</sup>          | MJ                     | 0  | 0  | 7,11E-01 | 1,26E+00 | 3,96E-01 | -1,34E+01 |
| WDP <sup>1</sup>                 | m <sup>3</sup>         | 0  | 0  | 6,87E-01 | 4,64E+00 | 1,06E+00 | -1,09E+02 |

GWP-total = Global Warming Potential total; GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = 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

"Reading example: 9,0 E-03 = 9,0\*10<sup>-3</sup> = 0,009"

\*INA Indicator Not Assessed

1. 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 experienced with the indicator

## Remarks to environmental impacts



| Additional environmental impact indicators |                   |          |          |          |    |    |  |
|--|-------------------|----------|----------|----------|----|----|--|
| Indicator                                  | Unit              | A1-A3    | A4       | A5       | B2 | B3 |  |
| PM   | Disease incidence | 2,15E-06 | 6,54E-08 | 1,60E-09 | 0  | 0  |  |
| IRP <sup>2</sup>                           | kgBq U235 -eq     | 9,63E-01 | 7,06E-02 | 1,37E-03 | 0  | 0  |  |
| ETP-fw <sup>1</sup>                        | CTUe              | 1,50E+03 | 1,20E+01 | 4,11E-01 | 0  | 0  |  |
| HTP-c <sup>1</sup>                         | CTUh              | 6,73E-08 | 0,00E+00 | 1,20E-11 | 0  | 0  |  |
| HTP-nc <sup>1</sup>                        | CTUh              | 9,22E-07 | 1,31E-08 | 5,07E-10 | 0  | 0  |  |
| SQP <sup>1</sup>                           | dimensionless     | 3,36E+02 | 1,13E+01 | 2,48E-01 | 0  | 0  |  |

| Indicator           | Unit              | B4 | C1 | C2       | C3       | C4       | D         |
|---------------------|-------------------|----|----|----------|----------|----------|-----------|
| PM                  | Disease incidence | 0  | 0  | 2,88E-09 | 1,24E-08 | 2,21E-09 | -2,61E-07 |
| IRP <sup>2</sup>    | kgBq U235 -eq     | 0  | 0  | 3,11E-03 | 2,37E-03 | 1,61E-03 | -3,99E-02 |
| ETP-fw <sup>1</sup> | CTUe              | 0  | 0  | 5,27E-01 | 1,04E+01 | 2,75E-01 | -7,26E+01 |
| HTP-c <sup>1</sup>  | CTUh              | 0  | 0  | 0,00E+00 | 3,96E-10 | 1,10E-11 | -4,41E-09 |
| HTP-nc <sup>1</sup> | CTUh              | 0  | 0  | 5,75E-10 | 1,34E-08 | 3,13E-10 | 4,39E-08  |
| SQP <sup>1</sup>    | dimensionless     | 0  | 0  | 4,97E-01 | 1,74E-01 | 8,82E-01 | -3,70E+01 |

PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)

"Reading example: 9,0 E-03 = 9,0\*10<sup>-3</sup> = 0,009"

\*INA Indicator Not Assessed

1. 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 experienced with the indicator
2. This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.

| Resource use |       |                |          |          |           |    |    |  |
|--------------|-------|----------------|----------|----------|-----------|----|----|--|
| Indicator    |       | Unit           | A1-A3    | A4       | A5        | B2 | B3 |  |
|              | PERE  | MJ             | 5,56E+01 | 2,31E-01 | 5,52E-03  | 0  | 0  |  |
|              | PERM  | MJ             | 2,58E+01 | 0,00E+00 | -1,03E+01 | 0  | 0  |  |
|              | PERT  | MJ             | 7,96E+01 | 2,31E-01 | -1,03E+01 | 0  | 0  |  |
|              | PENRE | MJ             | 4,30E+02 | 1,61E+01 | 3,18E-01  | 0  | 0  |  |
|              | PENRM | MJ             | 9,51E+01 | 0,00E+00 | -4,25E+00 | 0  | 0  |  |
|              | PENRT | MJ             | 5,25E+02 | 1,61E+01 | -3,93E+00 | 0  | 0  |  |
|              | SM    | kg             | 7,45E-01 | 0,00E+00 | 0,00E+00  | 0  | 0  |  |
|              | RSF   | MJ             | 7,86E-01 | 8,27E-03 | 1,77E-04  | 0  | 0  |  |
|              | NRSF  | MJ             | 8,81E-01 | 2,96E-02 | 6,99E-04  | 0  | 0  |  |
|              | FW    | m <sup>3</sup> | 1,03E+00 | 1,73E-03 | 1,52E-04  | 0  | 0  |  |

| Indicator |       | Unit           | B4 | C1 | C2       | C3        | C4       | D         |
|-----------|-------|----------------|----|----|----------|-----------|----------|-----------|
|           | PERE  | MJ             | 0  | 0  | 1,02E-02 | 4,50E-02  | 8,65E-03 | -3,49E+01 |
|           | PERM  | MJ             | 0  | 0  | 0,00E+00 | -8,80E+00 | 0,00E+00 | 0,00E+00  |
|           | PERT  | MJ             | 0  | 0  | 1,02E-02 | -8,75E+00 | 8,65E-03 | -3,49E+01 |
|           | PENRE | MJ             | 0  | 0  | 7,11E-01 | 1,26E+00  | 3,96E-01 | -1,34E+01 |
|           | PENRM | MJ             | 0  | 0  | 0,00E+00 | -8,66E+01 | 0,00E+00 | 0,00E+00  |
|           | PENRT | MJ             | 0  | 0  | 7,11E-01 | -8,53E+01 | 3,96E-01 | -1,34E+01 |
|           | SM    | kg             | 0  | 0  | 0,00E+00 | 0,00E+00  | 0,00E+00 | 0,00E+00  |
|           | RSF   | MJ             | 0  | 0  | 3,64E-04 | 1,04E-03  | 2,26E-04 | 2,02E-02  |
|           | NRSF  | MJ             | 0  | 0  | 1,30E-03 | 0,00E+00  | 1,62E-02 | -1,23E+00 |
|           | FW    | m <sup>3</sup> | 0  | 0  | 7,60E-05 | 5,35E-03  | 3,57E-04 | -4,56E-02 |

PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non renewable primary energy resources used as raw materials; PENRT = Total use of non renewable primary energy resources; SM = Use of secondary materials; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water

"Reading example: 9,0 E-03 = 9,0\*10<sup>-3</sup> = 0,009"

\*INA Indicator Not Assessed

| End of life - Waste |      |      |          |          |          |    |    |  |
|---------------------|------|------|----------|----------|----------|----|----|--|
| Indicator           |      | Unit | A1-A3    | A4       | A5       | B2 | B3 |  |
|                     | HWD  | kg   | 1,19E-01 | 8,33E-04 | 0,00E+00 | 0  | 0  |  |
|                     | NHWD | kg   | 5,16E+00 | 7,85E-01 | 1,36E+00 | 0  | 0  |  |
|                     | RWD  | kg   | 9,47E-04 | 1,10E-04 | 0,00E+00 | 0  | 0  |  |

| Indicator |      | Unit | B4 | C1 | C2       | C3       | C4       | D         |
|-----------|------|------|----|----|----------|----------|----------|-----------|
|           | HWD  | kg   | 0  | 0  | 3,66E-05 | 0,00E+00 | 1,48E+00 | -3,48E-03 |
|           | NHWD | kg   | 0  | 0  | 3,46E-02 | 1,88E-02 | 4,39E-02 | -4,68E-01 |
|           | RWD  | kg   | 0  | 0  | 4,84E-06 | 0,00E+00 | 2,43E-06 | -3,38E-05 |

HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed

\*Reading example: 9,0 E-03 =  $9,0 \cdot 10^{-3}$  = 0,009"

\*INA Indicator Not Assessed

| End of life - Output flow |     |      |          |          |          |    |    |  |
|---------------------------|-----|------|----------|----------|----------|----|----|--|
| Indicator                 |     | Unit | A1-A3    | A4       | A5       | B2 | B3 |  |
|                           | CRU | kg   | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0  | 0  |  |
|                           | MFR | kg   | 7,75E-01 | 0,00E+00 | 1,22E+00 | 0  | 0  |  |
|                           | MER | kg   | 1,51E-06 | 0,00E+00 | 8,81E-02 | 0  | 0  |  |
|                           | EEE | MJ   | 1,16E-01 | 0,00E+00 | 7,21E-02 | 0  | 0  |  |
|                           | EET | MJ   | 1,76E+00 | 0,00E+00 | 1,09E+00 | 0  | 0  |  |

| Indicator |     | Unit | B4 | C1 | C2       | C3       | C4       | D        |
|-----------|-----|------|----|----|----------|----------|----------|----------|
|           | CRU | kg   | 0  | 0  | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 |
|           | MFR | kg   | 0  | 0  | 0,00E+00 | 6,80E-01 | 0,00E+00 | 0,00E+00 |
|           | MER | kg   | 0  | 0  | 0,00E+00 | 5,25E+00 | 0,00E+00 | 0,00E+00 |
|           | EEE | MJ   | 0  | 0  | 0,00E+00 | 4,38E+00 | 0,00E+00 | 0,00E+00 |
|           | EET | MJ   | 0  | 0  | 0,00E+00 | 6,63E+01 | 0,00E+00 | 0,00E+00 |

CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported energy electrical; EET = Exported energy thermal

\*Reading example: 9,0 E-03 =  $9,0 \cdot 10^{-3}$  = 0,009"

\*INA Indicator Not Assessed

| Biogenic Carbon Content                           |      |                     |
|---|------|---------------------|
| Indicator   | Unit | At the factory gate |
| Biogenic carbon content in product                | kg C | 2,71E-01            |
| Biogenic carbon content in accompanying packaging | kg C | 9,58E-01            |

Note: 1 kg biogenic carbon is equivalent to 44/12 kg CO<sub>2</sub>

## Additional 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                      |
|---------------------------|---------------|---------|---------------------------|
| Electricity, Poland (kWh) | ecoinvent 3.6 | 1060,47 | g CO <sub>2</sub> -eq/kWh |

### Dangerous substances

The product contains no substances on the REACH Candidate list or the Norwegian priority list at or above 100 ppm, 0,01 % by weight.

### Indoor environment

## Additional Environmental Information

| Additional environmental impact indicators required in NPCR Part A for construction products |                        |          |          |          |          |          |           |
|--|------------------------|----------|----------|----------|----------|----------|-----------|
| Indicator  | Unit                   | A1-A3    | A4       | A5       | B2       | B3       |           |
| GWPIOBC  | kg CO <sub>2</sub> -eq | 3,70E+01 | 1,07E+00 | 0,00E+00 | 0        | 0        |           |
| Indicator  | Unit                   | B4       | C1       | C2       | C3       | C4       | D         |
| GWPIOBC  | kg CO <sub>2</sub> -eq | 0        | 0        | 4,70E-02 | 6,57E+00 | 2,23E-02 | -1,62E+00 |

GWPIOBC: Global warming potential calculated according to the principle of instantaneous oxidation. In order to increase the transparency of biogenic carbon contribution to climate impact, the indicator GWP-IOBC is required as it declares climate impacts calculated according to the principle of instantaneous oxidation. GWP-IOBC is also referred to as GWP-GHG in context to Swedish public procurement legislation.

### Variants and Options






| Key environmental indicators (A1-A3) for options for this EPD |             |                                   |                               |                                  |
|---|-------------|-----------------------------------|-------------------------------|----------------------------------|
| Options   | Weight (kg) | GWPTotal (kg CO <sub>2</sub> -eq) | Total energy consumption (MJ) | Amount of recycled materials (%) |
| Move™ with wheels / Gaslift L38-58                            | 4,83        | 30,32                             | 462,38                        | 10,47                            |
| Move™ with wheels / Gaslift L44-70                            | 5,13        | 31,81                             | 480,79                        | 10,04                            |

### Key Environmental Indicators

| Indicator                    | Unit                   | A1-A3  | A4    | A1-C4  | A1-D   |
|------------------------------|------------------------|--------|-------|--------|--------|
| GWPTotal                     | kg CO <sub>2</sub> -eq | 32,31  | 1,07  | 43,19  | 41,92  |
| Total energy consumption     | MJ                     | 486,93 | 16,42 | 506,12 | 456,67 |
| Amount of recycled materials | %                      | 9,91   |       |        |        |

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