



# ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

## Roof hoods in zinc magnesium - painted and metal finish

FJ, GH-Family, H-Family, JET, KH, S-Family, TH-Family, TREND-Family and VF in zinc magnesium

Swegon Group AB



## EPD HUB, HUB-6612

Published on 07.06.2026, last updated on 07.06.2026, valid until 06.06.2031

Life Cycle Assessment study has been performed in accordance with the requirements of EN 15804, EPD Hub PCR version 1.2 (24 Mar 2025) and JRC characterization factors EF 3.1.



Created with One Click LCA



## GENERAL INFORMATION

### MANUFACTURER

|                 |  |
|-----------------|--|
| Manufacturer    | Swegon Group AB  |
| Address         | JA Wettergrens gata 7, 421 30, Västra Frölunda, Sweden |
| Contact details | info@swegon.se   |
| Website         | www.swegon.com   |

This EPD is intended for business-to-business and/or business-to-consumer communication. The manufacturer has the sole ownership, liability, and responsibility for the EPD. EPDs within the same product category but from different programs may not be comparable. EPDs of construction products may not be comparable if they do not comply with EN 15804 and if they are not compared in a building context.

### EPD STANDARDS, SCOPE AND VERIFICATION

|                    |  |
|--------------------|--|
| Program operator   | EPD Hub, hub@epdhub.com  |
| Reference standard | EN 15804:2012+A2:2019/AC:2021 and ISO 14025  |
| PCR                | EPD Hub Core PCR Version 1.2, 24 Mar 2025  |
| Sector             | Construction product   |
| Category of EPD    | Sister EPD   |
| Parent EPD number  | HUB-2896   |
| Scope of the EPD   | Cradle to gate with options, A4-A5, and modules C1-C4, D   |
| EPD author         | Heloise Hedbom, Swegon   |
| EPD verification   | Independent verification of this EPD and data, according to ISO 14025:<br><input type="checkbox"/> Internal verification <input checked="" type="checkbox"/> External verification |
| EPD verifier       | Vera Durão, as an authorised verifier acting for EPD Hub Limited   |

## PRODUCT

|                                       |   |
|---------------------------------------|---|
| Product name                          | Roof hoods in zinc magnesium - painted and metal finish                     |
| Additional labels                     | FJ, GH-family, H-family, JET, KH, S-family, TH-family, TREND-family and VF. |
| Product reference                     | -   |
| Place(s) of raw material origin       | Europe & Asia   |
| Place of production                   | Borås, Sweden   |
| Place(s) of installation and use      | Global  |
| Period for data                       | Calendar year 2025  |
| Averaging in EPD                      | Multiple products   |
| Variation in GWP-fossil for A1-A3 (%) | +35,5% / -0%  |
| A1-A3 Specific data (%)               | 93,7%   |

## ENVIRONMENTAL DATA SUMMARY

|  |                   |
|--|-------------------|
| <b>Declared unit</b>                             | 1 kg of roof hood |
| <b>Declared unit mass</b>                        | 1 kg              |
| <b>Mass of packaging</b>                         | 0,19 kg           |
| <b>GWP-fossil, A1-A3 (kgCO<sub>2</sub>e)</b>     | 1,80              |
| <b>GWP-total, A1-A3 (kgCO<sub>2</sub>e)</b>      | 1,59              |
| <b>Secondary material, inputs (%)</b>            | 100               |
| <b>Total energy use, A1-A3 (kWh)</b>             | 16,6              |
| <b>Net freshwater use, A1-A3 (m<sup>3</sup>)</b> | 0,03              |

# PRODUCT AND MANUFACTURER

## ABOUT THE MANUFACTURER

People spend most of their time indoors, which is why we need a sound indoor climate for our health, well-being, and happiness. Swegon’s ambition is to achieve the world’s best indoor environment with the least possible impact on the external environment. Our business models, services, products, and systems are all designed to provide the right solution for each individual project.

Swegon Group AB is a market leading supplier in the field of indoor environment, offering solutions for ventilation, heating, cooling, and climate optimization, as well as connected services and expert technical support. Swegon has subsidiaries and distributors all over the world and 21 production plants in Europe, North America and India.

## PRODUCT DESCRIPTION

Our extensive range of roof hoods is engineered and manufactured not only to meet but to exceed expectations for performance and energy efficiency. With optimised designs and lightweight construction, they support efficient handling and installation across a wide range of projects. Versatile and adaptable, our roof hoods are suitable for both industrial and residential applications.

This EPD covers roof hoods manufactured using innovative material options, including European zinc magnesium steel with high levels of recycled content and produced using renewable electricity. This EPD includes products with both metal finish but also post-coating treatments, ensuring colour customisation to suit specific needs.

The included product families are intended for roof-mounted air intake and/or exhaust air handling, providing weather-protected ventilation solutions. Configurations are available for outdoor air, exhaust air, or

combined airflow applications, with selected models also offered with reverse dampers.

The H-, S-, Trend- and GH-families are developed for comfort ventilation, while the VF-, KH- and TH-families are primarily designed for residential ventilation systems. The FJ- and JET-families are produced for industrial ventilation applications. The environmental impacts of the products primarily vary because of inclusion of a reverse damper in the modelled extreme case.

TREND CH600, the representative product, is a rectangular combination hood for comfort ventilation integrating outdoor air intake and exhaust air discharge in one unit, designed for low pressure losses and easy maintenance.

Please visit <https://www.swegon.com/sv/produkter-och-tjanster/luftdistribution/takhuvar/> for more information on the product. Further information can be found at: [www.swegon.com](http://www.swegon.com)

## PRODUCT RAW MATERIAL MAIN COMPOSITION

| Raw material category | Amount, mass % | Material origin |
|-----------------------|----------------|-----------------|
| Metals                | 99% - 100%     | Europe, Asia    |
| Minerals              | -              | -               |
| Fossil materials      | 0 - 1%         | Europe          |
| Bio-based materials   | -              | -               |

## BIOGENIC CARBON CONTENT

Product’s biogenic carbon content at the factory gate

|  |       |
|--|-------|
| Biogenic carbon content in product, kg C   | -     |
| Biogenic carbon content in packaging, kg C | 0,064 |

### FUNCTIONAL UNIT AND SERVICE LIFE

|                        |                   |
|------------------------|-------------------|
| Declared unit          | 1 kg of roof hood |
| Mass per declared unit | 1 kg              |
| Functional unit        | -                 |
| Reference service life | -                 |

### SUBSTANCES, REACH - VERY HIGH CONCERN

The product does not contain any REACH SVHC substances in amounts greater than 0,1 % (1000 ppm).

## PRODUCT LIFE-CYCLE

### SYSTEM BOUNDARY

This EPD covers the life-cycle modules listed in the following table.

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

Not declared = ND.

### MANUFACTURING AND PACKAGING (A1-A3)

The environmental impacts considered for the product stage cover the manufacturing of raw materials used in the production as well as packaging materials and other ancillary materials. Also, fuels used by machines, and handling of waste formed in the production processes at the manufacturing facility are included in this stage. The study also considers the material losses occurring during the manufacturing processes as well as losses during electricity transmission.

A market-based approach is used in modelling the electricity mix utilized in the factory. The Borås facility operates on electricity sourced from renewable sources including hydropower and on-site solar panels. The use of green energy in manufacturing is demonstrated through contractual instruments (GOs, RECs, etc.), and its use is ensured throughout the validity period of this EPD.

Swegon roof hoods in zinc magnesium steel primarily consists of steel with a high recycled content sourced from Europe. The steel arrives as pre-cut sheets, which are processed at Swegon's facility involving punching, bending, assembling and optional powder coating according to the customers' requirement. The finished product is then packaged on pallets and secured with plastic wrapping.

Waste streams from the manufacturing process includes metal scrap which is sent off for recycling at a nearby facility.

### **TRANSPORT AND INSTALLATION (A4-A5)**

Transportation impacts occurring from the final products delivery to construction site (A4) cover fuel direct exhaust emissions, environmental impacts of fuel production, as well as related infrastructure emissions.

Transportation distance to construction site is calculated based on a weighted average of sales in 2025. The product is sold ready to be installed and no raw material waste is generated from installation (A5).

The end of life treatment of product packaging is declared and average global scenario per packaging material has been applied with different ratios of recycling, incineration and disposal in landfill. For the wood pallet it is assumed 85% is landfilled and 15% is incinerated. For the cardboard packaging it is assumed 66% is recycled, 10% incinerated and that 24 % is landfilled.

### **PRODUCT USE AND MAINTENANCE (B1-B7)**

This EPD does not cover the use phase.

Air, soil, and water impacts during the use phase have not been studied.

### **PRODUCT END OF LIFE (C1-C4, D)**

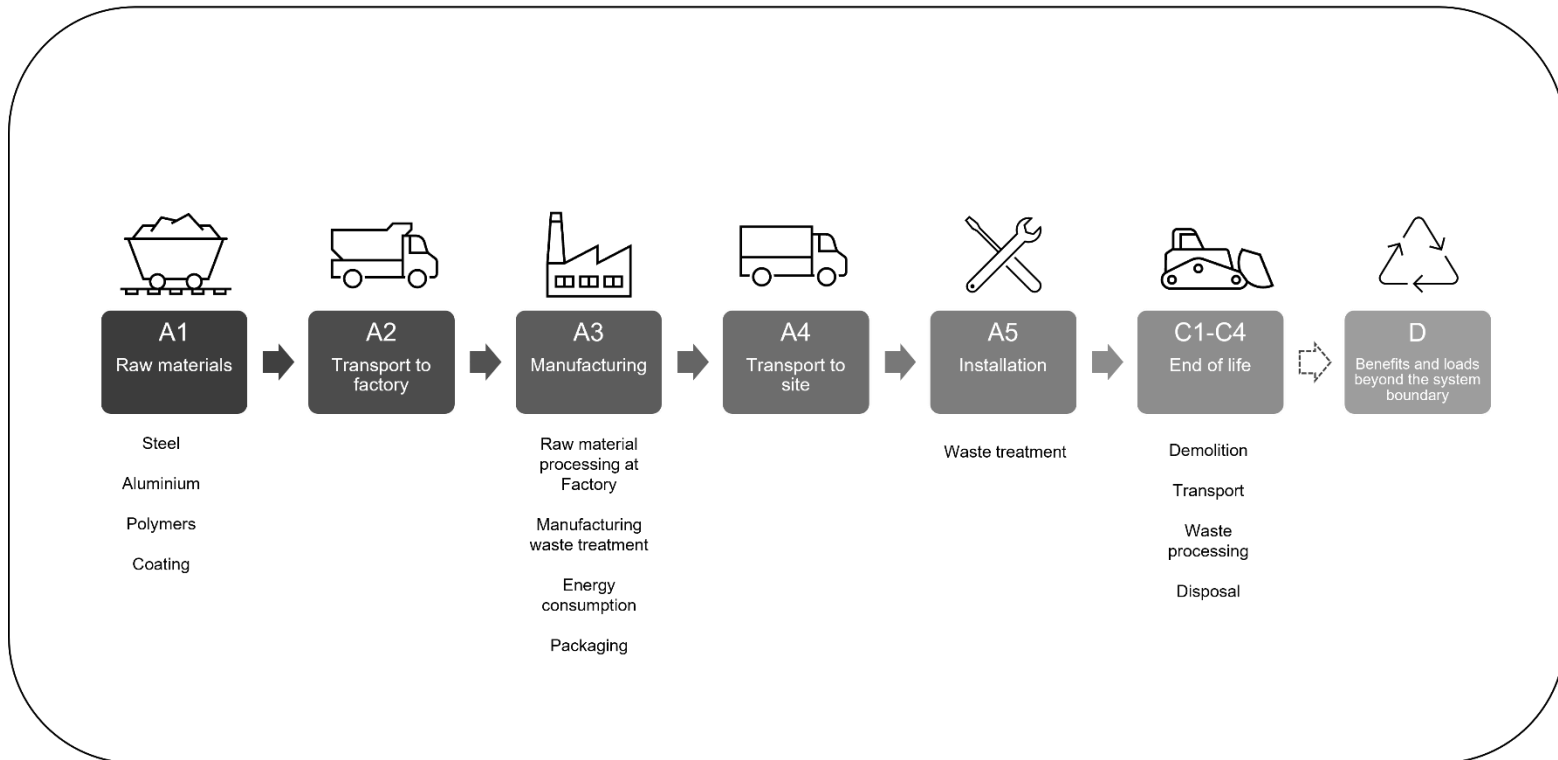
At the end of the product's service life, the roof hoods are assumed to be demolished. The environmental impact of deconstruction (Module C1) is modelled using literature data, assuming an energy consumption per kilogram of product removed.

Transport of waste materials to end-of-life treatment facilities (Module C2) is modelled using assumed average distances of 250 km to recycling facilities, and 50 km to landfill sites. All transportation is modelled using a 16-32 metric ton freight lorry compliant with EURO 5 standards. It is assumed that materials intended for recycling are collected separately.

Waste processing (Module C3) and final disposal (Module C4) are modelled using literature based scenarios representing typical end-of-life treatment routes. For the primary material steel, it is assumed that 85% is recycled and 15% is disposed of in landfill (World steel Association).

Due to the material and energy recovery potential of the product components, the end-of-life treatment can result in the production of secondary raw materials through recycling or energy recovery through incineration. The potential environmental benefits and burdens associated with these processes beyond the system boundary are accounted for in Module D. The recycled content in the produced product is removed to not double count the benefits in the D module.

# FLOW DIAGRAM



# LIFE-CYCLE ASSESSMENT

## CUT-OFF CRITERIA

The study does not exclude any modules or processes which are stated mandatory in the reference standard and the applied PCR. The study does not exclude any hazardous materials or substances. The study includes all major raw material and energy consumption. All inputs and outputs of the unit processes, for which data is available for, are included in the calculation. There is no neglected unit process more than 1% of total mass or energy flows. The module specific total neglected input and output flows also do not exceed 5% of energy usage or mass.

The production of capital equipment, construction activities, and infrastructure, maintenance and operation of capital equipment, personnel-related activities, energy and water use related to company management and sales activities are excluded.

## VALIDATION OF DATA

Data collection for production, transport, and packaging was conducted using time and site-specific information, as defined in the general information section on page 1 and 2. Upstream process calculations rely on generic data as defined in the Bibliography section. Manufacturer-provided specific and generic data were used for the product's manufacturing stage. The analysis was performed in One Click LCA EPD Generator, with the 'Cut-Off, EN 15804+A2' allocation method, and characterization factors according to EN 15804:2012+A2:2019/AC:2021 and JRC EF 3.1.

## ALLOCATION, ESTIMATES AND ASSUMPTIONS

Allocation is required if some material, energy, and waste data cannot be measured separately for the product under investigation. All allocations are done as per the reference standards and the applied PCR. In this study, allocation has been done in the following ways:

| Data type                      | Allocation                  |
|--------------------------------|-----------------------------|
| Raw materials                  | No allocation               |
| Packaging material             | Allocated by mass or volume |
| Ancillary materials            | Not applicable              |
| Manufacturing energy and waste | Allocated by mass or volume |

## PRODUCT & MANUFACTURING SITES GROUPING

|                                      |                                   |
|--------------------------------------|-----------------------------------|
| Type of grouping                     | Multiple products                 |
| Grouping method                      | Based on a representative product |
| Variation in GWP-fossil for A1-A3, % | +35,5%/-0%                        |

To investigate variations in environmental impact, two extreme cases were modelled and analysed. Based on these models, a representative product was selected: the high-volume TREND CH600.

For modules A1-A3, the GWP-fossil of the product variation with the highest environmental impact is 35,5% higher than that of the representative product, while the variation with the lowest impact is the same, consisting mostly of zinc magnesium. Differences in environmental performance between the products are mainly related to the inclusion of a reverse damper and whether the product is post-coated to meet specific customer requirements. All included roof hoods are produced in Borås.

## LCA SOFTWARE AND BIBLIOGRAPHY

This EPD has been created using One Click LCA EPD Generator for EPD Hub V3 and EPD Process Certification v3.2.3. The LCA and EPD have been prepared according to the reference standards and ISO 14040/14044. The EPD Generator uses Ecoinvent v3.10.1/3.11 and One Click LCA databases as sources of environmental data. Allocation used in Ecoinvent 3.10.1/3.11 environmental data sources follow the methodology 'allocation, Cut-off, EN 15804+A2'.

# ENVIRONMENTAL IMPACT DATA

The estimated impact results are only relative statements which do not indicate the end points of the impact categories, exceeding threshold values, safety margins or risks.

## CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, EF 3.1

| Impact category                     | Unit                   | A1       | A2       | A3        | A1-A3     | A4       | A5       | B1 | B2 | B3 | B4 | B5 | B6 | B7 | C1       | C2       | C3        | C4       | D         |
|-------------------------------------|------------------------|----------|----------|-----------|-----------|----------|----------|----|----|----|----|----|----|----|----------|----------|-----------|----------|-----------|
| GWP – total <sup>1)</sup>           | kg CO <sub>2</sub> e   | 1,45E+00 | 2,14E-01 | -7,87E-02 | 1,59E+00  | 7,23E-02 | 2,50E-01 | ND | ND | ND | ND | ND | ND | ND | 6,94E-03 | 4,30E-02 | 2,21E-02  | 9,39E-04 | -3,64E-02 |
| GWP – fossil                        | kg CO <sub>2</sub> e   | 1,45E+00 | 2,14E-01 | 1,33E-01  | 1,80E+00  | 7,23E-02 | 7,14E-03 | ND | ND | ND | ND | ND | ND | ND | 6,88E-03 | 4,30E-02 | 2,26E-02  | 9,38E-04 | -4,39E-03 |
| GWP – biogenic                      | kg CO <sub>2</sub> e   | 1,52E-03 | 4,56E-05 | -2,31E-01 | -2,29E-01 | 1,45E-05 | 2,43E-01 | ND | ND | ND | ND | ND | ND | ND | 3,98E-05 | 9,38E-06 | -5,26E-04 | 4,21E-07 | -3,20E-02 |
| GWP – LULUC                         | kg CO <sub>2</sub> e   | 8,54E-04 | 8,35E-05 | 1,91E-02  | 2,01E-02  | 2,59E-05 | 6,33E-06 | ND | ND | ND | ND | ND | ND | ND | 1,47E-05 | 1,90E-05 | 2,78E-05  | 5,38E-07 | -8,09E-06 |
| Ozone depletion pot.                | kg CFC-11e             | 1,41E-10 | 4,43E-09 | 4,25E-09  | 8,83E-09  | 1,44E-09 | 1,08E-10 | ND | ND | ND | ND | ND | ND | ND | 4,88E-11 | 6,01E-10 | 2,42E-10  | 2,61E-11 | -3,03E-11 |
| Acidification potential             | mol H <sup>+</sup> e   | 5,39E-03 | 6,09E-04 | 1,01E-03  | 7,00E-03  | 1,50E-04 | 3,37E-05 | ND | ND | ND | ND | ND | ND | ND | 3,65E-05 | 1,43E-04 | 2,46E-04  | 6,57E-06 | -2,67E-05 |
| EP-freshwater <sup>2)</sup>         | kg Pe                  | 2,07E-06 | 1,48E-05 | 4,48E-05  | 6,16E-05  | 4,87E-06 | 1,97E-06 | ND | ND | ND | ND | ND | ND | ND | 3,49E-06 | 3,34E-06 | 1,30E-05  | 8,21E-08 | -1,48E-06 |
| EP-marine                           | kg Ne                  | 1,46E-03 | 1,58E-04 | 3,87E-04  | 2,00E-03  | 3,61E-05 | 6,26E-05 | ND | ND | ND | ND | ND | ND | ND | 7,03E-06 | 4,64E-05 | 5,49E-05  | 2,52E-06 | -5,37E-06 |
| EP-terrestrial                      | mol Ne                 | 1,59E-02 | 1,72E-03 | 4,08E-03  | 2,17E-02  | 3,90E-04 | 1,23E-04 | ND | ND | ND | ND | ND | ND | ND | 7,07E-05 | 5,05E-04 | 6,18E-04  | 2,76E-05 | -5,60E-05 |
| POCP (“smog”) <sup>3)</sup>         | kg NMVOCe              | 4,09E-03 | 9,45E-04 | 1,20E-03  | 6,24E-03  | 2,50E-04 | 4,94E-05 | ND | ND | ND | ND | ND | ND | ND | 2,10E-05 | 1,99E-04 | 1,82E-04  | 9,95E-06 | -1,73E-05 |
| ADP-minerals & metals <sup>4)</sup> | kg Sbe                 | 5,66E-05 | 6,05E-07 | 1,36E-06  | 5,86E-05  | 2,41E-07 | 2,51E-08 | ND | ND | ND | ND | ND | ND | ND | 4,22E-08 | 1,41E-07 | 1,35E-06  | 1,40E-09 | -5,49E-09 |
| ADP-fossil resources                | MJ                     | 1,81E+01 | 3,19E+00 | 1,96E+00  | 2,33E+01  | 1,02E+00 | 1,07E-01 | ND | ND | ND | ND | ND | ND | ND | 9,26E-02 | 6,03E-01 | 2,72E-01  | 2,30E-02 | -5,29E-02 |
| Water use <sup>5)</sup>             | m <sup>3</sup> e depr. | 3,56E-01 | 1,62E-02 | 6,27E-01  | 9,99E-01  | 5,05E-03 | 2,15E-03 | ND | ND | ND | ND | ND | ND | ND | 1,84E-03 | 2,80E-03 | 4,67E-03  | 1,01E-03 | -7,02E-04 |

1) GWP = Global Warming Potential; 2) EP = Eutrophication potential. Required characterisation method and data are in kg P-eq. Multiply by 3,07 to get PO4e; 3) POCP = Photochemical ozone formation; 4) ADP = Abiotic depletion potential; 5) EN 15804+A2 disclaimer for Abiotic depletion and Water use and optional indicators except Particulate matter and Ionizing radiation, human health. The results of these environmental impact indicators shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.

### ADDITIONAL (OPTIONAL) ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, EF 3.1

| Impact category                  | Unit          | A1       | A2       | A3       | A1-A3    | A4       | A5       | B1 | B2 | B3 | B4 | B5 | B6 | B7 | C1       | C2       | C3       | C4       | D         |
|----------------------------------|---------------|----------|----------|----------|----------|----------|----------|----|----|----|----|----|----|----|----------|----------|----------|----------|-----------|
| Particulate matter               | Incidence     | 0,00E+00 | 2,05E-08 | 1,89E-08 | 3,93E-08 | 5,33E-09 | 8,33E-10 | ND | ND | ND | ND | ND | ND | ND | 3,21E-10 | 3,41E-09 | 3,48E-09 | 1,51E-10 | -4,23E-10 |
| Ionizing radiation <sup>6)</sup> | kBq<br>11235e | 0,00E+00 | 3,82E-03 | 1,00E-02 | 1,39E-02 | 1,31E-03 | 1,64E-04 | ND | ND | ND | ND | ND | ND | ND | 9,71E-04 | 4,88E-04 | 9,64E-04 | 1,38E-05 | -3,24E-04 |
| Ecotoxicity (freshwater)         | CTUe          | 0,00E+00 | 3,75E-01 | 1,72E+01 | 1,76E+01 | 1,35E-01 | 1,01E+00 | ND | ND | ND | ND | ND | ND | ND | 2,13E-01 | 9,53E-02 | 1,38E+00 | 1,54E-02 | -1,30E-01 |
| Human toxicity, cancer           | CTUh          | 0,00E+00 | 3,57E-11 | 2,77E-10 | 3,13E-10 | 1,21E-11 | 3,13E-12 | ND | ND | ND | ND | ND | ND | ND | 1,20E-12 | 7,31E-12 | 1,83E-11 | 1,70E-13 | -8,80E-13 |
| Human tox. non-cancer            | CTUh          | 0,00E+00 | 2,04E-09 | 1,88E-09 | 3,92E-09 | 6,43E-10 | 1,70E-10 | ND | ND | ND | ND | ND | ND | ND | 6,74E-11 | 3,77E-10 | 1,18E-09 | 3,83E-12 | -3,02E-11 |
| SQP <sup>7)</sup>                | -             | 0,00E+00 | 3,15E+00 | 2,33E+01 | 2,65E+01 | 6,15E-01 | 1,23E-01 | ND | ND | ND | ND | ND | ND | ND | 1,62E-02 | 3,60E-01 | 5,09E-01 | 4,52E-02 | -2,41E-02 |

6) EN 15804+A2 disclaimer for Ionizing radiation, human health. 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; 7) SQP = Land use related impacts/soil quality.

### USE OF NATURAL RESOURCES

| Impact category                    | Unit           | A1       | A2       | A3       | A1-A3    | A4       | A5        | B1 | B2 | B3 | B4 | B5 | B6 | B7 | C1       | C2       | C3       | C4       | D         |
|------------------------------------|----------------|----------|----------|----------|----------|----------|-----------|----|----|----|----|----|----|----|----------|----------|----------|----------|-----------|
| Renew. PER as energy <sup>8)</sup> | MJ             | 3,25E+01 | 5,16E-02 | 4,15E+00 | 3,67E+01 | 1,78E-02 | -2,96E+00 | ND | ND | ND | ND | ND | ND | ND | 1,46E-02 | 8,27E-03 | 4,21E-02 | 2,15E-04 | 2,14E-01  |
| Renew. PER as material             | MJ             | 0,00E+00 | 0,00E+00 | 2,73E+00 | 2,73E+00 | 0,00E+00 | -2,73E+00 | ND | ND | ND | ND | ND | ND | ND | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 2,70E-01  |
| Total use of renew. PER            | MJ             | 3,25E+01 | 5,16E-02 | 6,88E+00 | 3,94E+01 | 1,78E-02 | -5,70E+00 | ND | ND | ND | ND | ND | ND | ND | 1,46E-02 | 8,27E-03 | 4,21E-02 | 2,15E-04 | 4,84E-01  |
| Non-re. PER as energy              | MJ             | 1,81E+01 | 3,19E+00 | 1,82E+00 | 2,31E+01 | 1,02E+00 | 1,07E-01  | ND | ND | ND | ND | ND | ND | ND | 9,26E-02 | 6,03E-01 | 2,72E-01 | 2,30E-02 | -5,29E-02 |
| Non-re. PER as material            | MJ             | 0,00E+00 | 0,00E+00 | 1,48E-01 | 1,48E-01 | 0,00E+00 | -1,48E-01 | ND | ND | ND | ND | ND | ND | ND | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 1,80E-02  |
| Total use of non-re. PER           | MJ             | 1,81E+01 | 3,19E+00 | 1,97E+00 | 2,33E+01 | 1,02E+00 | -4,05E-02 | ND | ND | ND | ND | ND | ND | ND | 9,26E-02 | 6,03E-01 | 2,72E-01 | 2,30E-02 | -3,49E-02 |
| Secondary materials                | kg             | 1,53E+00 | 1,38E-03 | 4,87E-02 | 1,58E+00 | 4,72E-04 | 6,00E-05  | ND | ND | ND | ND | ND | ND | ND | 1,36E-05 | 2,71E-04 | 3,15E-04 | 5,72E-06 | -1,32E-05 |
| Renew. secondary fuels             | MJ             | 0,00E+00 | 1,72E-05 | 7,84E-02 | 7,84E-02 | 5,97E-06 | 7,21E-07  | ND | ND | ND | ND | ND | ND | ND | 9,34E-08 | 3,45E-06 | 1,45E-05 | 1,19E-07 | -1,17E-06 |
| Non-ren. secondary fuels           | MJ             | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00  | ND | ND | ND | ND | ND | ND | ND | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00  |
| Use of net fresh water             | m <sup>3</sup> | 1,01E-02 | 4,67E-04 | 1,45E-02 | 2,50E-02 | 1,39E-04 | -4,80E-04 | ND | ND | ND | ND | ND | ND | ND | 4,31E-05 | 7,99E-05 | 1,10E-04 | 2,38E-05 | -1,64E-05 |

8) PER = Primary energy resources.

### END OF LIFE – WASTE

| Impact category     | Unit | A1       | A2       | A3       | A1-A3    | A4       | A5       | B1 | B2 | B3 | B4 | B5 | B6 | B7 | C1       | C2       | C3       | C4       | D         |
|---------------------|------|----------|----------|----------|----------|----------|----------|----|----|----|----|----|----|----|----------|----------|----------|----------|-----------|
| Hazardous waste     | kg   | 7,15E-07 | 4,61E-03 | 7,85E-03 | 1,25E-02 | 1,48E-03 | 4,44E-04 | ND | ND | ND | ND | ND | ND | ND | 6,56E-04 | 1,05E-03 | 2,19E-03 | 2,62E-05 | -3,42E-04 |
| Non-hazardous waste | kg   | 1,58E-01 | 9,20E-02 | 2,08E-01 | 4,58E-01 | 3,12E-02 | 3,64E-01 | ND | ND | ND | ND | ND | ND | ND | 1,68E-02 | 1,97E-02 | 6,48E-02 | 6,05E-04 | -7,68E-03 |
| Radioactive waste   | kg   | 6,00E-04 | 9,44E-07 | 2,57E-06 | 6,04E-04 | 3,26E-07 | 4,05E-08 | ND | ND | ND | ND | ND | ND | ND | 2,37E-07 | 1,20E-07 | 2,37E-07 | 3,35E-09 | -7,93E-08 |

### END OF LIFE – OUTPUT FLOWS

| Impact category               | Unit | A1       | A2       | A3       | A1-A3    | A4       | A5       | B1 | B2 | B3 | B4 | B5 | B6 | B7 | C1       | C2       | C3       | C4       | D        |
|-------------------------------|------|----------|----------|----------|----------|----------|----------|----|----|----|----|----|----|----|----------|----------|----------|----------|----------|
| Components for re-use         | kg   | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | ND | ND | ND | ND | ND | ND | ND | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 |
| Materials for recycling       | kg   | 0,00E+00 | 0,00E+00 | 6,17E-01 | 6,17E-01 | 0,00E+00 | 4,90E-02 | ND | ND | ND | ND | ND | ND | ND | 0,00E+00 | 0,00E+00 | 8,50E-01 | 0,00E+00 | 0,00E+00 |
| Materials for energy rec      | kg   | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 4,10E-03 | ND | ND | ND | ND | ND | ND | ND | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 |
| Exported energy               | MJ   | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 2,24E-02 | ND | ND | ND | ND | ND | ND | ND | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 |
| Exported energy – Electricity | MJ   | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 9,40E-03 | ND | ND | ND | ND | ND | ND | ND | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 |
| Exported energy – Heat        | MJ   | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 1,30E-02 | ND | ND | ND | ND | ND | ND | ND | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 |

### ENVIRONMENTAL IMPACTS – EN 15804+A1, CML

| Impact category      | Unit                               | A1       | A2       | A3       | A1-A3    | A4       | A5       | B1 | B2 | B3 | B4 | B5 | B6 | B7 | C1       | C2       | C3       | C4       | D         |
|----------------------|------------------------------------|----------|----------|----------|----------|----------|----------|----|----|----|----|----|----|----|----------|----------|----------|----------|-----------|
| Global Warming Pot.  | kg CO <sub>2</sub> e               | 1,44E+00 | 2,12E-01 | 1,55E-01 | 1,81E+00 | 7,18E-02 | 2,47E-02 | ND | ND | ND | ND | ND | ND | ND | 6,88E-03 | 4,27E-02 | 2,26E-02 | 9,30E-04 | -4,38E-03 |
| Ozone depletion Pot. | kg CFC <sub>11</sub> e             | 1,67E-10 | 3,52E-09 | 3,88E-09 | 7,57E-09 | 1,14E-09 | 8,74E-11 | ND | ND | ND | ND | ND | ND | ND | 4,25E-11 | 4,80E-10 | 2,11E-10 | 2,08E-11 | -2,51E-11 |
| Acidification        | kg SO <sub>2</sub> e               | 4,25E-03 | 4,83E-04 | 7,24E-04 | 5,46E-03 | 1,21E-04 | 2,56E-05 | ND | ND | ND | ND | ND | ND | ND | 3,04E-05 | 1,10E-04 | 1,98E-04 | 4,86E-06 | -2,21E-05 |
| Eutrophication       | kg PO <sub>4</sub> <sup>3</sup> e  | 5,13E-04 | 1,08E-04 | 2,07E-03 | 2,69E-03 | 3,05E-05 | 1,98E-05 | ND | ND | ND | ND | ND | ND | ND | 3,73E-06 | 2,67E-05 | 2,88E-05 | 1,61E-06 | -3,35E-06 |
| POCP (“smog”)        | kg C <sub>2</sub> H <sub>4</sub> e | 2,46E-04 | 4,45E-05 | 7,55E-05 | 3,66E-04 | 1,28E-05 | 6,08E-06 | ND | ND | ND | ND | ND | ND | ND | 1,62E-06 | 9,83E-06 | 1,16E-05 | 4,62E-07 | -1,32E-06 |
| ADP-elements         | kg Sbe                             | 5,66E-05 | 5,91E-07 | 1,35E-06 | 5,85E-05 | 2,35E-07 | 2,44E-08 | ND | ND | ND | ND | ND | ND | ND | 4,20E-08 | 1,38E-07 | 1,35E-06 | 1,37E-09 | -5,35E-09 |
| ADP-fossil           | MJ                                 | 1,59E+01 | 3,13E+00 | 1,78E+00 | 2,08E+01 | 9,95E-01 | 1,05E-01 | ND | ND | ND | ND | ND | ND | ND | 7,71E-02 | 5,95E-01 | 2,57E-01 | 2,28E-02 | -4,77E-02 |

## ENVIRONMENTAL IMPACTS

| Impact category            | Unit | A1       | A2       | A3       | A1-A3    | A4       | A5       | B1 | B2 | B3 | B4 | B5 | B6 | B7 | C1       | C2       | C3       | C4       | D         |
|----------------------------|------|----------|----------|----------|----------|----------|----------|----|----|----|----|----|----|----|----------|----------|----------|----------|-----------|
| Radioactive waste, high    | kg   | 0,00E+00 | 2,42E-07 | 6,25E-07 | 8,67E-07 | 8,07E-08 | 1,15E-08 | ND | ND | ND | ND | ND | ND | ND | 6,60E-08 | 3,56E-08 | 7,55E-08 | 9,64E-10 | -2,19E-08 |
| Radioactive waste, int/low | kg   | 0,00E+00 | 7,02E-07 | 1,95E-06 | 2,65E-06 | 2,45E-07 | 2,89E-08 | ND | ND | ND | ND | ND | ND | ND | 1,71E-07 | 8,39E-08 | 1,61E-07 | 2,39E-09 | -5,74E-08 |

## ADDITIONAL INDICATOR – GWP-GHG

| Impact category       | Unit                 | A1       | A2       | A3       | A1-A3    | A4       | A5       | B1 | B2 | B3 | B4 | B5 | B6 | B7 | C1       | C2       | C3       | C4       | D         |
|-----------------------|----------------------|----------|----------|----------|----------|----------|----------|----|----|----|----|----|----|----|----------|----------|----------|----------|-----------|
| GWP-GHG <sup>9)</sup> | kg CO <sub>2</sub> e | 1,45E+00 | 2,14E-01 | 1,52E-01 | 1,82E+00 | 7,23E-02 | 7,15E-03 | ND | ND | ND | ND | ND | ND | ND | 6,90E-03 | 4,30E-02 | 2,27E-02 | 9,39E-04 | -4,39E-03 |

9) This indicator includes all greenhouse gases excluding biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. In addition, the characterisation factors for the flows – CH<sub>4</sub> fossil, CH<sub>4</sub> biogenic and Dinitrogen monoxide – were updated. This indicator is identical to the GWP-total of EN 15804:2012+A2:2019 except that the characterisation factor for biogenic CO<sub>2</sub> is set to zero.

## SCENARIO DOCUMENTATION

### Manufacturing energy scenario documentation

| Scenario parameter                       | Value  |
|--|--|
| Electricity data source and quality      | Electricity production, hydro, reservoir, non-alpine region, Sweden, Ecoinvent 3.11 and Electricity production, photovoltaic, 3kWp slanted-roof installation, multi-Si, panel, mounted, Sweden, Ecoinvent 3.11 |
| Electricity kg CO2e / kWh                | 0,062 kg CO2eq/kWh   |
| District heating data source and quality | Heat and power co-generation, wood chips; Sweden; Ecoinvent 3.11   |
| District heating kg CO2e / kWh           | 0,009 kg CO2eq/kWh   |

### Transport scenario documentation A4

| Scenario parameter  | Value   |
|---|---|
| Fuel and vehicle type. Eg, electric truck, diesel powered truck | Transport, freight, lorry 16-32 metric ton, EURO6 |
| Average transport distance, km                                  | 320 km  |
| Capacity utilization (including empty return) %                 | 50%   |
| Bulk density of transported products                            | -   |
| Volume capacity utilization factor                              | 1   |

### Installation scenario documentation A5

| Scenario information   | Value  |
|--|--|
| Ancillary materials for installation (specified by material) / kg or other units as appropriate  | -  |
| Water use / m <sup>3</sup>   | -  |
| Other resource use / kg  | -  |
| Quantitative description of energy type (regional mix) and consumption during the installation process / kWh or MJ   | -  |
| Waste materials on the building site before waste processing, generated by the product's installation (specified by type) / kg   | Cardboard packaging: 0,04 kg<br>Wood pallets: 0,15 kg  |
| Output materials (specified by type) as result of waste processing at the building site e.g. collection for recycling, for energy recovery, disposal (specified by route) / kg | Cardboard packaging: Recycled 66%, Incinerated 10% & Landfilled 24%.<br>Wood pallets: Recycled 15% and Landfilled 85%. |
| Direct emissions to ambient air, soil and water / kg   | 0  |

**End of life scenario documentation**

| Scenario information                               | Value  |
|--|--|
| Collection process – kg collected separately       | 0,85 kg  |
| Collection process – kg collected with mixed waste | 0,15 kg  |
| Recovery process – kg for re-use                   | 0 kg   |
| Recovery process – kg for recycling                | 0,85 kg  |
| Recovery process – kg for energy recovery          | 0 kg   |
| Disposal (total) – kg for final deposition         | 0,15 kg  |
| Scenario assumptions e.g. transportation           | Truck, 16-32 tons, EURO5 (km).<br>Landfill: 50 km<br>Recycling: 250 km |

## THIRD-PARTY VERIFICATION STATEMENT

EPD Hub declares that this EPD is verified in accordance with ISO 14025 by an independent, third-party verifier. The project report on the Life Cycle Assessment and the report(s) on features of environmental relevance are filed at EPD Hub. EPD Hub PCR and ECO Platform verification checklist are used.

EPD Hub is not able to identify any unjustified deviations from the PCR and EN 15804+A2 in the Environmental Product Declaration and its project report.

EPD Hub maintains its independence as a third-party body; it was not involved in the execution of the LCA or in the development of the declaration and has no conflicts of interest regarding this verification.

The company-specific data and upstream and downstream data have been examined as regards plausibility and consistency. The publisher is responsible for ensuring the factual integrity and legal compliance of this declaration.

The software used in creation of this LCA and EPD is verified by EPD Hub to conform to the procedural and methodological requirements outlined in ISO 14025:2010, ISO 14040/14044, EN 15804+A2, and EPD Hub Core Product Category Rules and General Program Instructions.

### Verified tools

Tool verifier: Magaly Gonzalez Vazquez

Tool verification validity: 27 March 2025 - 26 March 2028

Vera Durão, as an authorised verifier acting for EPD Hub Limited

07.06.2026



## APPENDIX 1

This EPD concerns Swegon's roof hoods in zinc magnesium steel produced in Borås with TREND CH600 representing the environmental performance for several product families as listed below:

- FJ
- GH-family
- H-family
- JET
- KH
- S-family
- TH-family
- TREND-family
- VF

The environmental impact of a product is calculated by multiplying the product's weight by the relevant Global Warming Potential (GWP) factors:

- **GWP-fossil:** 1,80 kg CO<sub>2</sub>-eq per kg of product
- **GWP-GHG:** 1,82 kg CO<sub>2</sub>-eq per kg of product

The most up-to-date product weights are available through our webpage [www.swegon.com](http://www.swegon.com) at specific product pages.