

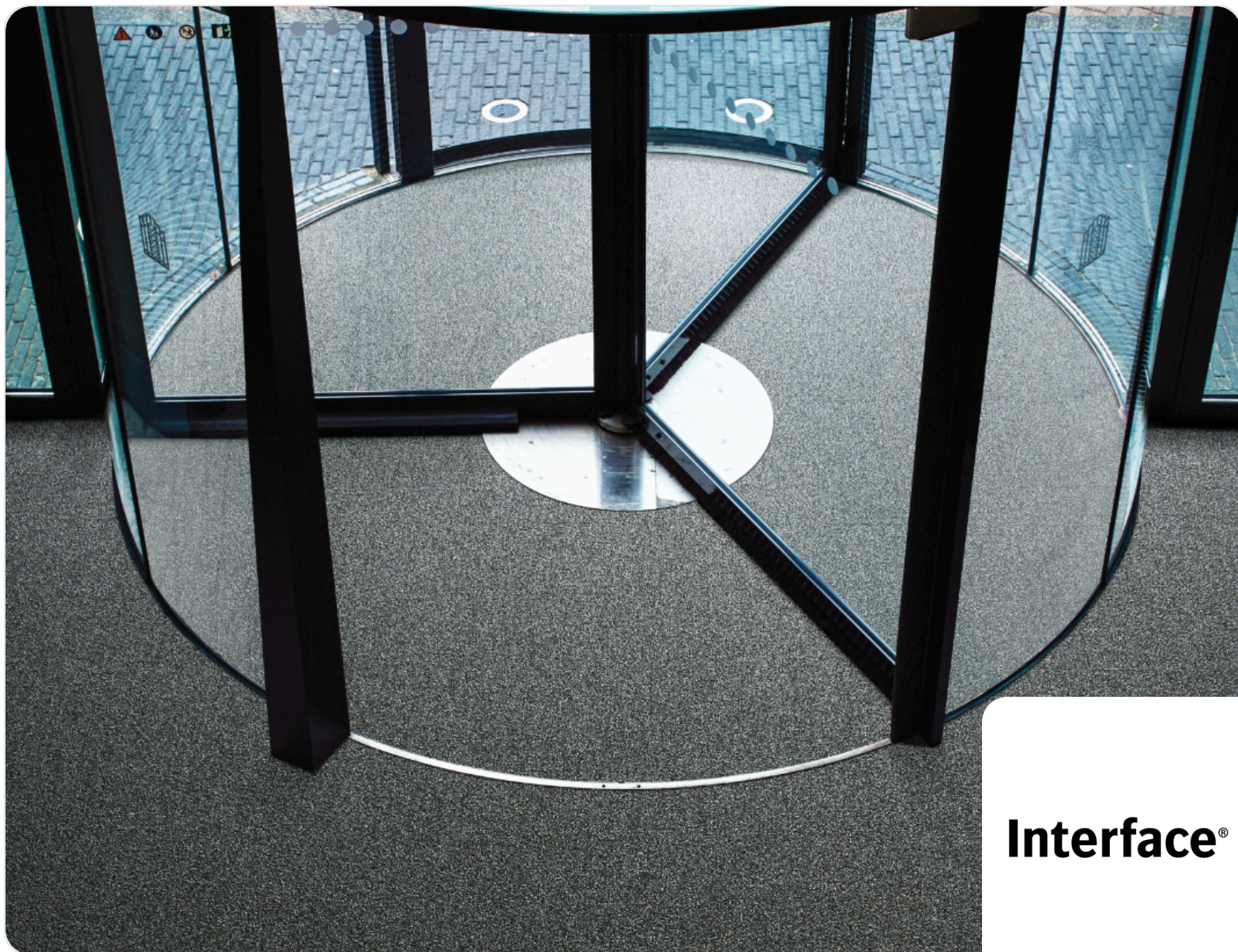


## Environmental Product Declaration

Program Operator: Smart EPD®

[www.smartepd.com](http://www.smartepd.com)

IN ACCORDANCE WITH EN 15804+A2 AND EN 16810



**Interface®**

SmartEPD-2026-125-1003-01

## Interface EU - Barricade Two - Carpet on CQuest™ Bio Backing

Date of Issue

**Aug 03, 2026**

Expiration Date

**Aug 03, 2031**

Last Updated

**Aug 03, 2026**



Refer to the EPD Library at [www.smartepd.com](http://www.smartepd.com) for the latest EPD listing information

## General Information

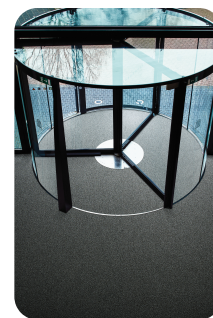
### Interface, Inc.

📍 1503 Orchard Hill Road, Lagrange, GA 30240

☎ +1 (770) 437-6800

✉ sustainability@interface.com

🌐 [interface.com](https://www.interface.com)



|                             |                                                                      |
|-----------------------------|----------------------------------------------------------------------|
| Product Name:               | Interface EU - Barricade Two - Carpet on CQuest™ Bio Backing         |
| Functional Unit:            | 1 m2                                                                 |
| Declaration Number:         | SmartEPD-2026-125-1003-01                                            |
| Date of Issue:              | August 03, 2026                                                      |
| Expiration:                 | August 03, 2031                                                      |
| Last updated:               | August 03, 2026                                                      |
| EPD Scope:                  | Cradle to gate with other options<br>A1 - A3, A4, A5, B2, C2 - C4, D |
| Market(s) of Applicability: | United Kingdom of Great Britain and Northern Ireland, Europe         |

## General Organization Information

Interface, Inc. is a global flooring solutions company and sustainability leader, offering an integrated portfolio of carpet tile and resilient flooring products that includes Interface® carpet tile and LVT, nora® rubber flooring, and FLOR® premium area rugs for commercial and residential spaces. Made with purpose and without compromise, Interface flooring brings more sophisticated design, more performance, more innovation, and more climate progress to interior spaces. A decades-long pioneer in sustainability, Interface remains “all in” on becoming a restorative business. Today, the company is focusing on carbon reductions, not offsets, as it works toward achieving its verified science-based targets by 2030 and its goal to become a carbon negative enterprise by 2040.

Further information can be found at: [Interface.com](https://www.interface.com)

## Limitations, Liability and Ownership

### Limitations

**Exclusions:** EPDs do not indicate that any environmental or social performance benchmarks are met, and there may be impacts that they do not encompass. LCAs do not typically address the site-specific environmental impacts of raw material extraction, nor are they meant to assess human health toxicity. EPDs can complement but cannot replace tools and certifications that are designed to address these impacts and/or set performance thresholds – e.g. Type 1 certifications, health assessments and declarations, environmental impact assessments, etc.

**Accuracy of Results:** EPDs regularly rely on estimations of impacts; the level of accuracy in estimation of effect differs for any particular product line and reported impact.

**Comparability:** EPDs from different programs may not be comparable. Full conformance with a PCR allows EPD comparability only when all stages of a life cycle have been considered. However, variations and deviations are possible”. Example of variations: Different LCA software and background LCI datasets may lead to differences results for upstream or downstream of the life cycle stages declared.

Liability and Ownership  
Interface is the owner of this EPD and is responsible for the accuracy of the data.

Reference Standards

|                                |                                                                                                                                            |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Standard(s):                   | EN 15804+A2 and EN 16810                                                                                                                   |
| Core PCR:                      | UL Part A PCR for Building-Related Products and Services v.4                                                                               |
|                                | Date of issue: March 01, 2022                                                                                                              |
| Sub-category PCR:              | UL Part B: Flooring v.2                                                                                                                    |
|                                | Date of issue: September 28, 2018                                                                                                          |
|                                | Valid until: September 30, 2026                                                                                                            |
| Sub-category PCR review panel: |  Contact Smart EPD for more information.                  |
| General Program Instructions:  |  Smart EPD General Program Instructions v.2.0, March 2025 |

Verification Information

|                       |                                                                                                                                                                                                                          |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LCA Author/Creator:   |  Gydo Kersbergen                                                                                                                        |
|                       |  Interface                                                                                                                              |
|                       |  gydo.kersbergen@interface.com                                                                                                         |
| EPD Program Operator: |  Smart EPD                                                                                                                            |
|                       |  info@smartepd.com                                                                                                                    |
|                       |  www.smartepd.com                                                                                                                     |
|                       |  585 Grove St., Ste. 145, Herndon, VA 20170, USA                                                                                      |
| Verification:         | Independent critical review of the LCA and data, according to ISO 14044 and ISO 14071:                                                                                                                                   |
|                       |  Thomas P Gloria    Industrial Ecology Consultants |
|                       |  t.gloria@industrial-ecology.com                                                                                                      |
|                       | Independent external verification of EPD, according to ISO 14025 and reference PCR(s):                                                                                                                                   |
|                       |  Thomas P Gloria    Industrial Ecology Consultants |
|                       |  t.gloria@industrial-ecology.com                                                                                                      |

External

External

Product Information

|                             |                                                                                                      |
|-----------------------------|------------------------------------------------------------------------------------------------------|
| Functional Unit:            | 1 m2                                                                                                 |
| Mass:                       | 4.08 kg                                                                                              |
| Reference Service Life:     | 15 Years                                                                                             |
| Product Specificity:        |  Product Average  |
|                             |  Product Specific |
| Supply Chain Specific Data: | 36 %                                                                                                 |

## Product Description

This Environmental Product Declaration covers Barricade Two modular carpet on CQuest™ Bio backing with 100% Recycled Solution Dyed (SD) PA6 yarn. The product is tufted externally in the Netherlands and backed at Interface in Scherpenzeel, Netherlands. The products yarn weight is 726 gsm.

Further information can be found at: [Interface.com](https://www.interface.com)

## Product Specifications

Product SKU(s):

- Product Classification Codes: UNSPSC - 301617
- Flooring type: Carpet
- Product thickness: Variable mm
- Product weight: 4.08 kg/m2
- Recycled content: 78%
- Material composition: The product is produced through tufting nylon yarn into a primary fleece then adhering the yarn and nonwoven fleece to a backing for added dimensional stability and modularity.
- Material composition of primary backing type: Polyester
- Material composition of secondary backing type: Interface's CQuest™ Bio is a non-vinyl bio-composite backing made with bio-resins, bio-fillers, and bio-oils, which is net carbon negative
- CRI rating: 3.5 Severe
- Yarn weight: 726 g/m2

Product Classification Codes:

UNSPSC - 30161700

Flooring type:

Carpet Tile

Product Composition Diagram

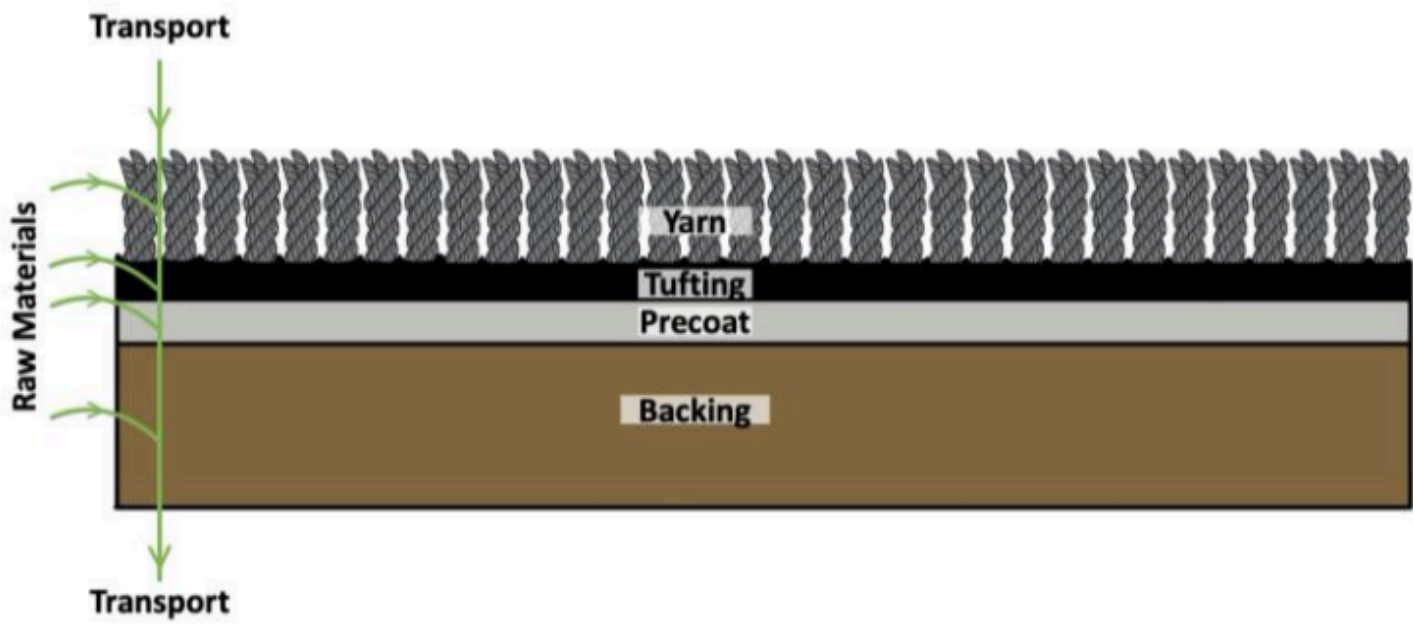


Table 1. Material Composition

| Material/Component Category | Origin                   | % Mass |
|-----------------------------|--------------------------|--------|
| Yarn                        | Slovenia                 | 18     |
| Tufting Primary             | Germany                  | 3      |
| Precoat                     | Netherlands              | 26     |
| Stabilisation Layer         | Finland/Germany          | 1      |
| CQuest™ Bio Backing         | Europe/South Korea/China | 51     |
| Secondary fleece            | Germany                  | 1      |

| Packaging Material | Origin | kg Mass |
|--------------------|--------|---------|
| Cardboard          | Europe | 0.078   |
| PE film            | Europe | 0.001   |

| Biogenic Carbon Content                           |  | kg C per m2 |
|---------------------------------------------------|--|-------------|
| Biogenic carbon content in product                |  | 0.33        |
| Biogenic carbon content in accompanying packaging |  | 0.03        |

Hazardous Materials

No regulated hazardous or dangerous substances are included in this product.

EPD Data Specificity

- Primary Data Year:

2025
- Manufacturing Specificity:

✗ Industry Average

✗ Manufacturer Average

✓ Facility Specific

Averaging:  
Averaging was not conducted for this EPD.

Table 2. System Boundary

|              |    |                        |    |
|--------------|----|------------------------|----|
| Production   | A1 | Raw material supply    | ✓  |
|              | A2 | Transport              | ✓  |
|              | A3 | Manufacturing          | ✓  |
| Construction | A4 | Transport to site      | ✓  |
|              | A5 | Assembly / Install     | ✓  |
| Use          | B1 | Use                    | ND |
|              | B2 | Maintenance            | ✓  |
|              | B3 | Repair                 | ND |
|              | B4 | Replacement            | ND |
|              | B5 | Refurbishment          | ND |
|              | B6 | Operational Energy Use | ND |
|              | B7 | Operational Water Use  | ND |
| End of Life  | C1 | Deconstruction         | ND |
|              | C2 | Transport              | ✓  |
|              | C3 | Waste Processing       | ✓  |
|              | C4 | Disposal               | ✓  |

|                                         |   |                                     |   |
|-----------------------------------------|---|-------------------------------------|---|
| Benefits & Loads Beyond System Boundary | D | Recycling, Reuse Recovery Potential | ✓ |
|-----------------------------------------|---|-------------------------------------|---|

Note:

ND = Module not declared

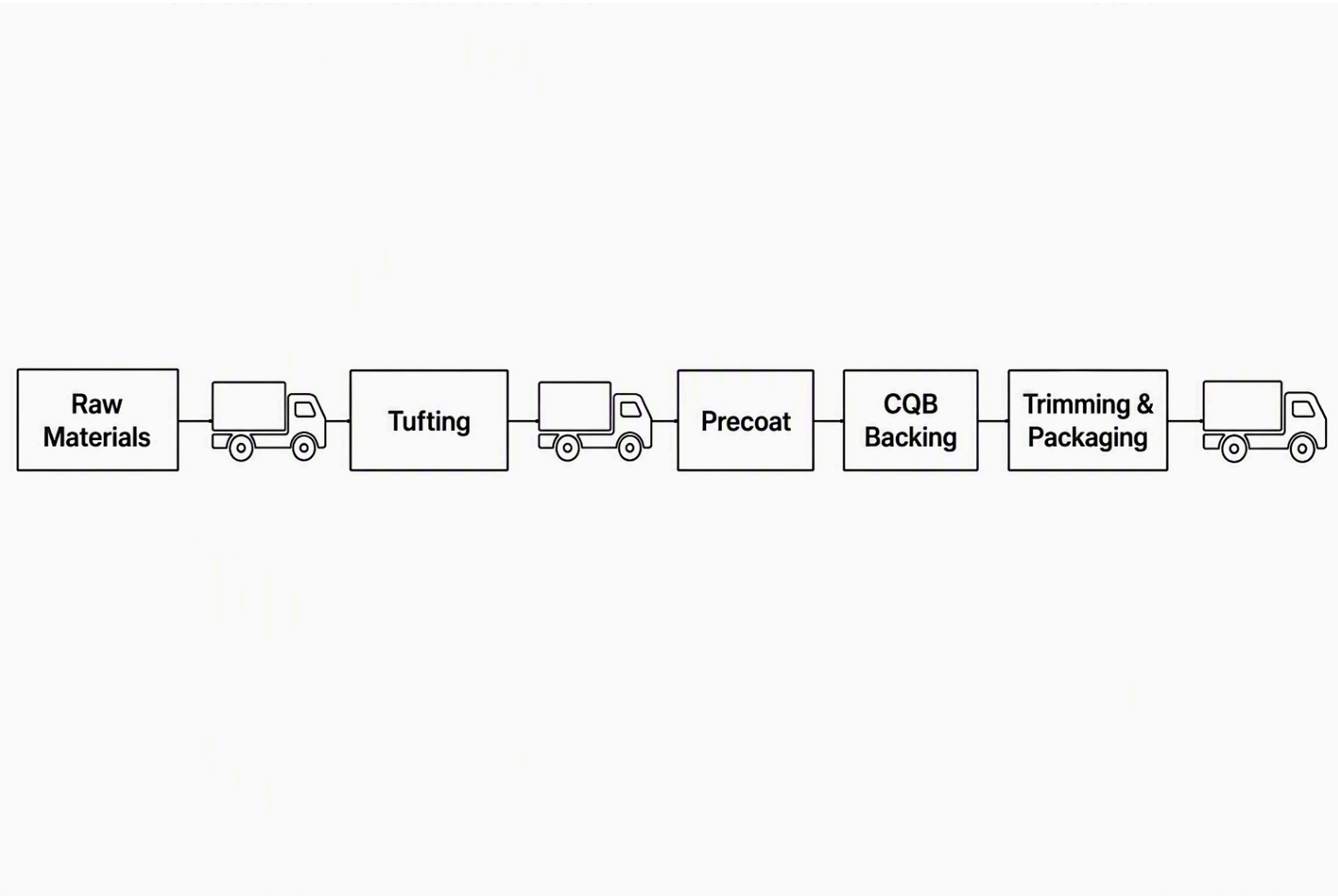
Product Composition Diagram

|          | PRODUCT STAGE       |           |               | CONSTRUCTION PROCESS STAGE  |                  | USE STAGE |             |        |             |               |                                                    |                                                   | END OF LIFE STAGE |           |                  |          | BENEFITS AND LOADS BEYOND THE SYSTEM BOUNDARY |
|----------|---------------------|-----------|---------------|-----------------------------|------------------|-----------|-------------|--------|-------------|---------------|----------------------------------------------------|---------------------------------------------------|-------------------|-----------|------------------|----------|-----------------------------------------------|
|          | A1                  | A2        | A3            | A4                          | A5               | B1        | B2          | B3     | B4          | B5            | B6                                                 | B7                                                | C1                | C2        | C3               | C4       | D                                             |
|          | Raw material supply | Transport | Manufacturing | Transport from gate to site | Assembly/Install | Use       | Maintenance | Repair | Replacement | Refurbishment | Building operational energy use during product use | Building operational water use during product use | Deconstruction    | Transport | Waste processing | Disposal | Reuse, Recovery, Recycling Potential          |
| EPD Type | X                   |           |               | X                           | X                | ND        | X           | ND     | ND          | ND            | ND                                                 | ND                                                | ND                | X         | X                | X        | X                                             |

Plants

 Scherpenzeel, the Netherlands Industrielaan 15, Scherpenzeel, Nederland

## Product Flow Diagram



Interface modular carpet on CQuest™ Bio backing is manufactured in Scherpenzeel, Netherlands. The product is produced through tufting nylon yarns into a primary backing fabric. A precoat backing is applied to the reverse side of the tufted face cloth to fix the yarns in place then a secondary backing which includes a stabilization layer. The product is then cut into tiles and packaged.

## Software And Database

- LCA Software:
- Sphera LCA for Experts (formerly GaBi) v. 10.9
- LCI Foreground Database(s):
- Sphera Managed LCA Content (formerly GaBi Professional Database) v. 2025.1
- LCI Background Database(s):
- Sphera Managed LCA Content (formerly GaBi Professional Database) v. 2025.1

A foreground LCI database is the database used to model the primary, site-specific data collected for this EPD. A background LCI database is the database used to model generic or non-specific data.

## Data Quality

The data quality ranges from good to very good. The temporal quality of the data is very good with both the manufacturing specific data and the LCA FE background data being from 2025.

## Life Cycle Module Description

### A1–A3: Product Stage

- A1: Raw material extraction and processing, including recycled materials
- A2: Transport of raw and processed materials to manufacturing sites
- A3: Manufacturing at site, including materials, packaging, energy, and waste disposal or recycling. All energy purchased at manufacturing sites is allocated per square meter produced, including offices and warehouses. 100% renewable electricity and thermal energy credits are used for all sites. Including a waste factor in production.

### A4–A5: Construction Stage

- A4: Transport of finished product to building site
- A5: Installation includes ancillary materials (TacTiles™), trim waste disposal, and packaging waste. Assumed 2% installation waste for all flooring types. Installation waste sent to incineration or landfill, with energy recovery benefits accounted for in Module D.

### B1–B7: Use Stage

- B2: Maintenance effort declared for one year, repeated over the Reference Service Life (RSL). Cleaning includes daily vacuuming, biweekly wet extraction cleaning.
- Other Use Modules (B1, B3–B7): Not relevant or not declared for these flooring products

### C1–C4: End of Life

- C2: Transport of waste to local disposal using diesel truck datasets
- C3: Waste processing for reuse, recovery, or recycling
- C3/1: 100% scenario for incineration with Energy recovery processing which includes an incineration process with an R1-value >0.6
- C3/2: 100% scenario for waste processing through landfill
- C4: Disposal of post-consumer carpet tile, incineration with energy recovery or landfill
- C4/1: 100% scenario for disposal through the incineration with energy recover
- C4/2: 100% scenario for disposal through landfill

### Module D: Benefits and Loads Beyond the System Boundary

- Two end-of-life scenarios are modelled, resulting in two Module D scenarios: Module D/1 and Module D/2
- In Module D/1, the avoided benefits and loads associated with 100% incineration with energy recovery scenario are calculated using RER: Electricity grid mix and RER: Process steam from natural gas as substituted energy sources
- In Module D/2, the avoided benefits and loads associated with 100% landfill scenario are set to zero, as the landfilling of plastics does not result in energy recovery.
- Both Module D scenarios include avoided benefits and loads from A5, these include recycling and incineration with energy recovery of packaging waste, as well as incineration with energy recovery of installation waste

## LCA Discussion

### Allocation Procedure

Co-product allocation:

No co-products are produced in the manufacturing process for CQuest™ Bio Europe modular carpet tiles, so allocation between co-products is not required.

Recycled and secondary raw materials:

Allocation for recycled content (such as recycled nylon, recycled polyester) is performed according to the “cut-off” approach. Only the impacts from collection and processing of recycled materials up to their entry into the product system are included. No upstream burdens from previous product life cycles are assigned to the recycled content.

Energy, ancillary, and operating materials:

Energy, ancillary materials, and operating materials are allocated to individual products based on production volumes and process-specific consumption data. Where direct measurement is not possible, allocation is performed using mass or area-based proxies. In-plant waste is assigned to the product and not allocated to other products, as there are no co-products.

Factory-wide allocation:

For facilities producing multiple products, shared energy and utilities are allocated according to the proportion of production output (mass or area) attributable to each product. No credits are taken for recycling of production waste; all relevant impacts are assigned to the declared product.

Cut-off Procedure

In the Life Cycle Assessment (LCA) for Interface CQuest™ Bio Europe, modular flooring product, cut-off criteria were rigorously applied to determine which material and energy flows should be included or excluded from the analysis. The objective was to ensure the study was both thorough and practical, focusing on flows that could meaningfully affect the environmental results.

The cut-off criteria were based on thresholds for mass and energy. Specifically:

- Any flow representing less than one percent of the total mass or energy for a given process could be excluded, provided it was not considered environmentally significant.
- If a flow met the exclusion threshold but was thought to have a notable environmental impact, it was included regardless of its size.
- The total sum of all excluded flows does not exceed five percent of the overall mass or energy for the product system.

In practice, this meant that all relevant flows—such as raw materials, processing, transportation, manufacturing, packaging, installation, maintenance, disposal, and recycling—were considered in the assessment. Flows that were excluded typically involved capital goods and equipment, or human labor and commuting, as these were not expected to contribute significantly to the results. Where specific data from suppliers was unavailable, conservative proxy datasets were used to ensure that any potentially important flows were still represented.

Renewable Electricity

|                                                                                                                                                                      |              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| Energy Attribute Certificates (EACs) such as Renewable Energy Certificates (RECs) or Power Purchase Agreements (PPAs) are included in the baseline reported results: | ✓ Yes        |
| Electricity Source:                                                                                                                                                  | Offsite      |
| Renewable type(s):                                                                                                                                                   | Wind, Solar  |
| Percent of EPD Owner's product-related electricity covered:                                                                                                          | 100 %        |
| Commitment pledged for entire EPD validity period:                                                                                                                   | ✓ Yes        |
| Electricity accounting methodology:                                                                                                                                  | Market-based |

## Scenarios

### Transport to the building/construction site (A4)

#### A4 Module

|                                        |                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fuel Type:                             | Diesel                                                                                                                                                                                                                                                                                                                                                                                                             |
| Liters of Fuel:                        | 0.00844 l/100km                                                                                                                                                                                                                                                                                                                                                                                                    |
| Vehicle Type:                          | Truck                                                                                                                                                                                                                                                                                                                                                                                                              |
| Transport Distance:                    | 805 km                                                                                                                                                                                                                                                                                                                                                                                                             |
| Capacity Utilization:                  | 85 %                                                                                                                                                                                                                                                                                                                                                                                                               |
| Packaging Mass:                        | 0.08 kg                                                                                                                                                                                                                                                                                                                                                                                                            |
| Gross density of products transported: | 640 kg/m <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                              |
| Capacity utilization volume factor:    | =1                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Assumptions for scenario development:  | Transport is from the factory gate to the place of installation assuming a thickness of 6.37 mm and 0.014 kg diesel per 805 km per kg of product. All values refer to the declared functional unit (1 m <sup>2</sup> ). Packaging waste and installation waste are considered in subsequent modules (A5, C1–C4). Preparation of the floor and auxiliaries (adhesives, fixing agents, PET connectors) are included. |

### Installation in to the building/construction site (A5)

#### A5 Module

|                                                                   |            |
|-------------------------------------------------------------------|------------|
| Installation Scrap Rate Assumed:                                  | 2 %        |
| Ancillary Materials:                                              | 0.00424 kg |
| Product Lost per Declared/Functional Unit:                        | 0.08 kg    |
| Waste Materials at the Construction Site Before Waste Processing: | 0.08 kg    |
| Mass of Packaging Waste Specified by Type:                        | 0.08 kg    |
| Biogenic Carbon Contained in Packaging (kg C):                    | 0.03 kg    |

### Maintenance (B2)

#### B2 Module

|                                                                 |                                                                                                                                                                                                                                                         |
|-----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Maintenance Cycle:                                              | 5490 Cycles/RSL<br>27450 Cycles/ESL                                                                                                                                                                                                                     |
| Net Fresh Water Consumption Specified by Water Source and Fate: | 0.00193 m <sup>3</sup>                                                                                                                                                                                                                                  |
| Ancillary Materials Specified by Type:                          | 0.00682 kg                                                                                                                                                                                                                                              |
| Energy Input:                                                   | 0.448 kWh                                                                                                                                                                                                                                               |
| Waste Materials from Maintenance:                               | 1.93 kg                                                                                                                                                                                                                                                 |
| Maintenance Process Information:                                | Maintenance Process Information: see Interface Maintenance Guide for details<br><a href="https://www.interface.com/">https://www.interface.com/</a> This information is based on vacuum cleaning 7 times a week and extraction cleaning 2 times a year. |
| Further assumptions for scenario development:                   | Further Assumptions: Service life depends on correct installation, use class, and adherence to cleaning instructions Use class 33 (heavy commercial) ESL for a building is set to 75 years                                                              |

## End of Life (C1 - C4)

C1 - C4 Modules

### C3/1 & C4/1: 100% Energy Recovery

#### Collection Process

Collected Separately: 4.08 kg

#### Recovery

Incineration with Energy Recovery: 4.08 kg

#### Assumptions for scenario development:

C3/1 – Waste processing (incineration with energy recovery end-of-life): Waste processing by incineration with energy recovery; 100% of the waste mass is treated by incineration in an installation with an R1-value > 0.6. C4/1 – Waste disposal (incineration with energy recovery end-of-life): Final disposal of 100% of the incineration residues in accordance with current disposal practices.

### C3/2 & C4/2: 100% Landfill

#### Collection Process

Collected Separately: 4.08 kg

#### Recovery

Landfill: 4.08 kg

#### Disposal

Product or Material for Final Disposal: 4.08 kg

#### Assumptions for scenario development:

C3/2 – Waste processing (landfill end-of-life): No waste processing is assumed; 100% of the waste mass is sent directly to landfill as the end-of-life scenario. C4/2 – Waste disposal (landfill end-of-life): Final disposal of 100% of the waste mass through landfilling, including landfill operation and management, in accordance with current disposal practices. Deconstruction: The modular aspect of the product along with TacTiles™ installation as opposed to glue-down methods allows for easy reuse of the product. All products are designed for modular removal, typically done manually, with minimal environmental impact. Collection: Products can be collected separately or with mixed construction waste, depending on local practices and regulations. Recovery & Recycling: Interface intends for products to be recycled through the ReEntry program. For more information please visit: <https://www.interface.com/GB/en-GB/sustainability/recycling.html> Disposal: If not recycled, products are disposed of in landfill or incineration facilities, following local regulations. End of Life Scenarios are representative of national statistics. Transport: Typical transport distances 32 km.

## Reuse, Recovery and / or Recycling Potentials & Relevant Scenario Information (D)

D Module

Net Energy Benefit from Energy Recovery from  
Waste Treatment Declared as Export Energy in  
C3: 5.72 MJ

Net Energy Benefit from Thermal Energy Due to  
Treatment of Waste Declared as Exported Energy  
in C4: 10.7 MJ

Process and Conversion Efficiencies: The assumed scenario in Module D/1 represents 100% incineration with energy recovery processing including an efficiency rate with an R1-value >0.6 In Module D/2, the avoided benefits and loads associated with 100% landfill scenario are set to zero, as the landfilling of plastics

Further assumptions for scenario development:

does not result in energy recovery. However, both Module D/1 and Module D/2 scenarios account for avoided benefits and loads from A5, which include recycling, incineration with energy recovery of packaging waste, and incineration with energy recovery of installation waste

The end-of-life scenarios modeled in Module C and Module D are based on national statistics for flooring to represent real-world scenarios. Interface intends for its products to be recycled or reused at end-of-life. At the end-of-life the product should be returned to Interface through Interface's ReEntry process. For more information visit: <https://www.interface.com> Disposal in municipal landfill or commercial incineration facilities is permissible in accordance with local regulations.

## Results

**Table 3. Environmental Impact Assessment Results**

EF3.1, IPCC AR6 GWP 100, TRACI 2.2, CML 2016 v4.8

per 1 m2 of product.

LCIA results are relative expressions and do not predict impacts on category endpoints, the exceeding of thresholds, safety margins or risks.

| Impact Category           | Unit                    | Method           | A1 - A3  | A4       | A5       | B2       | C2       | C3/1     | C3/2 | C4/1 | C4/2     | D/1       | D/2       | D/3 |
|---------------------------|-------------------------|------------------|----------|----------|----------|----------|----------|----------|------|------|----------|-----------|-----------|-----|
| GWP- total                | kg CO2 eq               | EF3.1            | 2.29e+0  | 2.16e-1  | 2.29e-1  | 3.27e-1  | 8.40e-3  | 6.35e+0  | 0    | 0    | 1.31e+0  | -1.47e+0  | -5.66e-2  | ND  |
| GWP- fossil               | kg CO2 eq               | EF3.1            | 3.60e+0  | 2.13e-1  | 9.76e-2  | 3.25e-1  | 8.30e-3  | 5.16e+0  | 0    | 0    | 1.19e-1  | -1.47e+0  | -5.63e-2  | ND  |
| GWP-biogenic              | kg CO2 eq               | EF3.1            | -1.32e+0 | 1.68e-3  | 1.32e-1  | 1.33e-3  | 6.55e-5  | 1.19e+0  | 0    | 0    | 1.19e+0  | 0         | 0         | ND  |
| GWP-luluc                 | kg CO2 eq               | EF3.1            | 1.14e-2  | 9.22e-4  | 2.33e-4  | 4.43e-4  | 3.60e-5  | 2.74e-4  | 0    | 0    | 1.58e-4  | -1.93e-3  | -3.34e-4  | ND  |
| ODP                       | kg CFC11 eq             | EF3.1            | 1.95e-6  | 1.02e-13 | 3.90e-8  | 1.50e-9  | 3.98e-15 | 1.87e-12 | 0    | 0    | 7.56e-13 | -2.35e-11 | -3.78e-13 | ND  |
| AP                        | mol H+ eq               | EF3.1            | 2.43e-2  | 1.28e-3  | 5.85e-4  | 8.71e-4  | 4.99e-5  | 2.76e-3  | 0    | 0    | 7.29e-4  | -1.87e-3  | -1.68e-4  | ND  |
| PM                        | disease incidence       | EF3.1            | 1.23e-1  | 8.49e-9  | 2.47e-3  | 5.40e-9  | 3.31e-10 | 1.93e-8  | 0    | 0    | 7.60e-9  | -1.61e-8  | -1.96e-9  | ND  |
| IRP                       | kBq U235 eq             | EF3.1            | 1.67e-1  | 5.78e-4  | 4.10e-3  | 6.06e-2  | 2.26e-5  | 1.15e-2  | 0    | 0    | 2.74e-3  | -2.12e-1  | -3.28e-3  | ND  |
| POCP                      | kg NMVOC eq             | EF3.1            | 1.85e-2  | 1.19e-3  | 4.31e-4  | 5.89e-4  | 4.63e-5  | 2.80e-3  | 0    | 0    | 4.96e-4  | -1.49e-3  | -1.52e-4  | ND  |
| EP-fw                     | kg P eq                 | EF3.1            | 5.68e-4  | 5.47e-7  | 1.34e-5  | 1.88e-7  | 2.14e-8  | 3.75e-7  | 0    | 0    | 6.88e-5  | -1.66e-6  | -1.07e-6  | ND  |
| EP-marine                 | kg N eq                 | EF3.1            | 8.29e-3  | 6.28e-4  | 1.88e-4  | 2.57e-4  | 2.45e-5  | 1.08e-3  | 0    | 0    | 1.58e-4  | -5.87e-4  | -7.79e-5  | ND  |
| EP-terrestrial            | mol N eq                | EF3.1            | 8.48e-2  | 6.85e-3  | 1.89e-3  | 2.48e-3  | 2.67e-4  | 1.23e-2  | 0    | 0    | 1.74e-3  | -6.58e-3  | -7.14e-4  | ND  |
| SQI                       | dimensionless           | EF3.1            | 1.77e+2  | 7.55e-1  | 3.55e+0  | 1.16e+0  | 2.95e-2  | 6.11e-1  | 0    | 0    | 4.45e-1  | -6.63e+0  | -2.49e+0  | ND  |
| WDP                       | m3 world eq deprived    | EF3.1            | 4.67e+0  | 8.76e-4  | 1.05e-1  | 5.51e-2  | 3.42e-5  | 6.43e-1  | 0    | 0    | 1.49e-2  | -1.12e-1  | -7.84e-3  | ND  |
| ADP-fossil                | MJ, net calorific value | EF3.1            | 5.13e+1  | 2.82e+0  | 1.42e+0  | 3.95e+0  | 1.10e-1  | 2.45e+0  | 0    | 0    | 1.96e+0  | -2.47e+1  | -8.17e-1  | ND  |
| ADP-minerals&metals       | kg Sb eq                | EF3.1            | 5.97e-6  | 1.56e-8  | 1.22e-7  | 1.27e-7  | 6.10e-10 | 1.73e-8  | 0    | 0    | 9.54e-9  | -1.92e-7  | -3.37e-8  | ND  |
| ETP-fwio                  | CTUe                    | EF3.1            | 1.83e+1  | 2.04e+0  | 4.46e-1  | 6.55e-1  | 7.97e-2  | 8.53e-1  | 0    | 0    | 1.28e+0  | -2.09e+0  | -1.67e-1  | ND  |
| ETP-fwo                   | CTUe                    | EF3.1            | 1.10e+1  | 3.80e-1  | 2.90e-1  | 1.87e-1  | 1.49e-2  | 4.52e-1  | 0    | 0    | 3.20e+0  | -7.62e-1  | -9.56e-2  | ND  |
| HTP-cio                   | CTUh                    | EF3.1            | 8.31e-10 | 4.67e-11 | 1.93e-11 | 2.44e-11 | 1.82e-12 | 6.00e-11 | 0    | 0    | 5.81e-11 | -5.57e-11 | -8.34e-12 | ND  |
| HTP-co                    | CTUh                    | EF3.1            | 1.22e-9  | 1.41e-12 | 2.47e-11 | 3.55e-11 | 5.50e-14 | 2.65e-11 | 0    | 0    | 5.03e-12 | -1.82e-10 | -2.93e-12 | ND  |
| HTP-ncio                  | CTUh                    | EF3.1            | 7.15e-8  | 2.43e-9  | 1.47e-9  | 1.46e-9  | 9.49e-11 | 6.73e-9  | 0    | 0    | 7.56e-10 | -5.70e-9  | -8.16e-10 | ND  |
| HTP-nco                   | CTUh                    | EF3.1            | 1.74e-9  | 6.29e-11 | 6.48e-11 | 4.11e-11 | 2.46e-12 | 9.62e-11 | 0    | 0    | 4.04e-10 | -2.52e-10 | -1.46e-11 | ND  |
| GWP-total (incl biogenic) | kg CO2 eq               | IPCC AR6 GWP 100 | 2.29e+0  | 2.15e-1  | 8.31e-2  | 3.27e-1  | 8.40e-3  | 5.16e+0  | 0    | 0    | 1.20e-1  | -1.38e+0  | 3.67e-2   | ND  |
| GWP-fossil                | kg CO2 eq               | IPCC AR6 GWP 100 | 3.61e+0  | 2.13e-1  | 1.06e-1  | 3.26e-1  | 8.31e-3  | 5.16e+0  | 0    | 0    | 1.20e-1  | -1.48e+0  | -5.65e-2  | ND  |
| GWP-biogenic              | kg CO2 eq               | IPCC AR6 GWP 100 | -1.33e+0 | 1.08e-3  | -2.31e-2 | 5.57e-4  | 5.40e-5  | -2.74e-4 | 0    | 0    | -1.58e-4 | 0         | 0         | ND  |
| GWP-luluc                 | kg CO2 eq               | IPCC AR6 GWP 100 | 1.15e-2  | 9.22e-4  | 2.35e-4  | 4.43e-4  | 3.60e-5  | 2.74e-4  | 0    | 0    | 1.58e-4  | -1.93e-3  | -3.34e-4  | ND  |
| ODP                       | kg CFC 11 eq            | TRACI 2.2        | 1.76e-6  | 1.30e-13 | 3.52e-8  | 2.13e-9  | 5.07e-15 | 2.29e-12 | 0    | 0    | 9.33e-13 | -2.91e-11 | -4.68e-13 | ND  |
| AP                        | kg SO2 eq               | TRACI 2.2        | 2.06e-2  | 1.18e-3  | 4.93e-4  | 7.44e-4  | 4.60e-5  | 2.54e-3  | 0    | 0    | 6.20e-4  | -1.62e-3  | -1.42e-4  | ND  |

| Impact Category | Unit         | Method        | A1 - A3 | A4       | A5      | B2      | C2       | C3/1     | C3/2 | C4/1 | C4/2     | D/1       | D/2       | D/3 |
|-----------------|--------------|---------------|---------|----------|---------|---------|----------|----------|------|------|----------|-----------|-----------|-----|
| EP-freshwater   | kg P eq      | TRACI 2.2     | 4.74e-4 | 2.47e-7  | 1.06e-5 | 8.74e-8 | 9.64e-9  | 1.70e-7  | 0    | 0    | 3.74e-5  | -7.52e-7  | -4.80e-7  | ND  |
| EP-marine       | kg N eq      | TRACI 2.2     | 1.12e-2 | 1.07e-3  | 2.54e-4 | 3.64e-4 | 4.17e-5  | 1.88e-3  | 0    | 0    | 2.70e-4  | -9.19e-4  | -9.91e-5  | ND  |
| POCP            | kg O3 eq     | TRACI 2.2     | 3.25e-1 | 2.63e-2  | 7.40e-3 | 1.27e-2 | 1.03e-3  | 6.69e-2  | 0    | 0    | 9.73e-3  | -3.11e-2  | -3.16e-3  | ND  |
| ODP             | kg CFC-11 eq | CML 2016 v4.8 | 1.32e-6 | 1.30e-13 | 2.64e-8 | 1.95e-9 | 5.07e-15 | 2.29e-12 | 0    | 0    | 9.33e-13 | -2.91e-11 | -4.68e-13 | ND  |
| AP              | kg SO2 eq    | CML 2016 v4.8 | 1.83e-2 | 8.72e-4  | 4.48e-4 | 6.98e-4 | 3.40e-5  | 2.06e-3  | 0    | 0    | 6.04e-4  | -1.44e-3  | -1.18e-4  | ND  |
| EP              | kg PO4 eq    | CML 2016 v4.8 | 8.83e-3 | 2.26e-4  | 2.18e-4 | 1.89e-4 | 8.80e-6  | 3.88e-4  | 0    | 0    | 8.12e-4  | -2.69e-4  | -4.15e-5  | ND  |
| POCP            | kg C2H4 eq   | CML 2016 v4.8 | 1.56e-3 | -3.30e-4 | 4.29e-5 | 4.99e-5 | -1.29e-5 | 1.23e-4  | 0    | 0    | 5.32e-5  | -1.60e-4  | -9.78e-6  | ND  |
| ADP-fossil      | MJ           | CML 2016 v4.8 | 5.79e+1 | 2.80e+0  | 1.52e+0 | 2.80e+0 | 1.09e-1  | 2.22e+0  | 0    | 0    | 1.90e+0  | -2.08e+1  | -7.51e-1  | ND  |

Note:

Not all abbreviated indicators listed below may be present in the results above. The inclusion of indicators varies based on PCR requirements.

Abbreviations:

GWP = Global Warming Potential, 100 years (may also be denoted as GWP-total, GWP-fossil (fossil fuels), GWP-biogenic (biogenic sources), GWP-luluc (land use and land use change)), ODP = Ozone Depletion Potential, AP = Acidification Potential, EP = Eutrophication Potential, SFP = Smog Formation Potential, POCP = Photochemical oxidant creation potential, ADP-Fossil = Abiotic depletion potential for fossil resources, ADP-Minerals&Metals = Abiotic depletion potential for non-fossil resources, WDP = Water deprivation potential, PM = Particular Matter Emissions, IRP = Ionizing radiation, human health, ETP-fw = Eco-toxicity (freshwater), HTP-c = Human toxicity (cancer), HTP-nc = Human toxicity (non-cancer), SQP = Soil quality index.

Comparisons cannot be made between product-specific or industry average EPDs at the design stage of a project, before a building has been specified. Comparisons may be made between product-specific or industry average EPDs at the time of product purchase when product performance and specifications have been established and serve as a functional unit for comparison. Environmental impact results shall be converted to a functional unit basis before any comparison is attempted. Any comparison of EPDs shall be subject to the requirements of ISO 21930 or EN 15804. EPDs are not comparative assertions and are either not comparable or have limited comparability when they have different system boundaries, are based on different product category rules or are missing relevant environmental impacts. Such comparison can be inaccurate, and could lead to erroneous selection of materials or products which are higher-impact, at least in some impact categories.

## Table 4. Resource Use Indicator

per 1 m2 of product.

| Indicator | Unit | A1 - A3 | A4      | A5       | B2      | C2      | C3/1     | C3/2 | C4/1 | C4/2    | D/1      | D/2      | D/3 |
|-----------|------|---------|---------|----------|---------|---------|----------|------|------|---------|----------|----------|-----|
| PERE      | MJ   | 2.09e+1 | 2.00e-1 | 3.57e+0  | 2.15e+0 | 7.82e-3 | 4.02e+1  | 0    | 0    | 3.54e-1 | -7.60e+0 | -1.00e-2 | ND  |
| PERM      | MJ   | 4.19e+1 | 0       | -2.30e+0 | 0       | 0       | -3.96e+1 | 0    | 0    | 0       | -1.41e+0 | -1.41e+0 | ND  |
| PERT      | MJ   | 6.28e+1 | 2.00e-1 | 1.27e+0  | 2.15e+0 | 7.82e-3 | 6.36e-1  | 0    | 0    | 3.54e-1 | -9.01e+0 | -1.42e+0 | ND  |
| PENRE     | MJ   | 2.23e+0 | 2.82e+0 | 3.80e+0  | 3.95e+0 | 1.10e-1 | 4.50e+1  | 0    | 0    | 1.96e+0 | -2.39e+1 | -2.70e-2 | ND  |
| PENRM     | MJ   | 4.50e+1 | 0       | -2.47e+0 | 0       | 0       | -4.25e+1 | 0    | 0    | 0       | -7.90e-1 | -7.90e-1 | ND  |
| PENRT     | MJ   | 4.72e+1 | 2.82e+0 | 1.33e+0  | 3.95e+0 | 1.10e-1 | 2.45e+0  | 0    | 0    | 1.96e+0 | -2.47e+1 | -8.17e-1 | ND  |
| SM        | kg   | 3.16e+0 | 0       | 0        | 0       | 0       | 0        | 0    | 0    | 0       | 0        | 0        | ND  |
| RSF       | MJ   | 0       | 0       | 0        | 0       | 0       | 0        | 0    | 0    | 0       | 0        | 0        | ND  |
| NRSF      | MJ   | 0       | 0       | 0        | 0       | 0       | 0        | 0    | 0    | 0       | 0        | 0        | ND  |
| FW        | m3   | 1.12e-1 | 6.26e-5 | 2.51e-3  | 1.95e-3 | 2.44e-6 | 1.52e-2  | 0    | 0    | 4.30e-4 | -5.25e-3 | -4.31e-4 | ND  |
| RE        | MJ   | 0       | 0       | 1.62e-2  | 0       | 0       | 1.64e+1  | 0    | 0    | 0       | 0        | 0        | ND  |

**Note:**

Not all abbreviated indicators listed below may be present in the results above. The inclusion of indicators varies based on PCR requirements.

**Abbreviations:**

RPRE or PERE = Renewable primary resources used as energy carrier (fuel), RPRM or PERM = Renewable primary resources with energy content used as material, RPRT or PERT = Total use of renewable primary resources with energy content, NRPRE or PENRE = Non-renewable primary resources used as an energy carrier (fuel), NRPRM or PENRM = Non-renewable primary resources with energy content used as material, NRPRT or PENRT = Total non-renewable primary resources with energy content, SM = Secondary materials, RSF = Renewable secondary fuels, NRSF = Non-renewable secondary fuels, RE = Recovered energy, ADPF = Abiotic depletion potential, FW = Use of net freshwater resources, VOCs = Volatile Organic Compounds.

## Table 5. Waste and Output Flow Indicators

per 1 m2 of product.

| Indicator | Unit | A1 - A3 | A4       | A5      | B2      | C2       | C3/1    | C3/2 | C4/1 | C4/2     | D/1      | D/2      | D/3 |
|-----------|------|---------|----------|---------|---------|----------|---------|------|------|----------|----------|----------|-----|
| HWD       | kg   | 2.25e-2 | 1.30e-10 | 4.51e-4 | 4.20e-9 | 5.08e-12 | 1.29e-9 | 0    | 0    | 4.99e-10 | -2.52e-8 | -9.97e-9 | ND  |
| NHWD      | kg   | 3.33e-1 | 5.42e-4  | 1.02e-1 | 3.03e-3 | 2.12e-5  | 7.05e-1 | 0    | 0    | 4.07e+0  | -1.36e-2 | -1.90e-3 | ND  |
| RWD       | kg   | 7.53e-4 | 4.43e-6  | 1.67e-5 | 4.03e-4 | 1.73e-7  | 7.99e-5 | 0    | 0    | 2.11e-5  | -1.39e-3 | -2.16e-5 | ND  |
| CRU       | kg   | 0       | 0        | 0       | 0       | 0        | 0       | 0    | 0    | 0        | 0        | 0        | ND  |
| MFR       | kg   | 0       | 0        | 6.03e-2 | 0       | 0        | 0       | 0    | 0    | 0        | 0        | 0        | ND  |
| MER       | kg   | 0       | 0        | 0       | 0       | 0        | 0       | 0    | 0    | 0        | 0        | 0        | ND  |
| EEE       | MJ   | 0       | 0        | 5.63e-3 | 0       | 0        | 5.72e+0 | 0    | 0    | 0        | 0        | 0        | ND  |
| EET       | MJ   | 0       | 0        | 1.06e-2 | 0       | 0        | 1.07e+1 | 0    | 0    | 0        | 0        | 0        | ND  |

**Note:**

Not all abbreviated indicators listed below may be present in the results above. The inclusion of indicators varies based on PCR requirements.

**Abbreviations:**

HWD = Hazardous waste disposed, NHWD = Non-hazardous waste disposed, RWD = Radioactive waste disposed, HLRW = High-level radioactive waste, ILLRW = Intermediate- and low-level radioactive waste, CRU = Components for re-use, MFR or MR = Materials for recycling, MER = Materials for energy recovery, MNER = Materials for incineration, no energy recovery, EE or EEE = Recovered energy exported from the product system, EET = Exported thermal energy.

## Table 6. Carbon Emissions and Removals

per 1 m2 of product.

| Indicator | Unit   | A1 - A3 | A4 | A5      | B2 | C2 | C3/1    | C3/2 | C4/1 | C4/2    | D/1 | D/2 | D/3 |
|-----------|--------|---------|----|---------|----|----|---------|------|------|---------|-----|-----|-----|
| BCRP      | kg CO2 | 1.22e+0 | 0  | 0       | 0  | 0  | 0       | 0    | 0    | 0       | 0   | 0   | ND  |
| BCEP      | kg CO2 | 0       | 0  | 2.43e-2 | 0  | 0  | 1.19e+0 | 0    | 0    | 1.19e+0 | 0   | 0   | ND  |
| BCRK      | kg CO2 | 1.22e-1 | 0  | 0       | 0  | 0  | 0       | 0    | 0    | 0       | 0   | 0   | ND  |
| BCEK      | kg CO2 | 0       | 0  | 1.22e-1 | 0  | 0  | 0       | 0    | 0    | 0       | 0   | 0   | ND  |

**Note:**

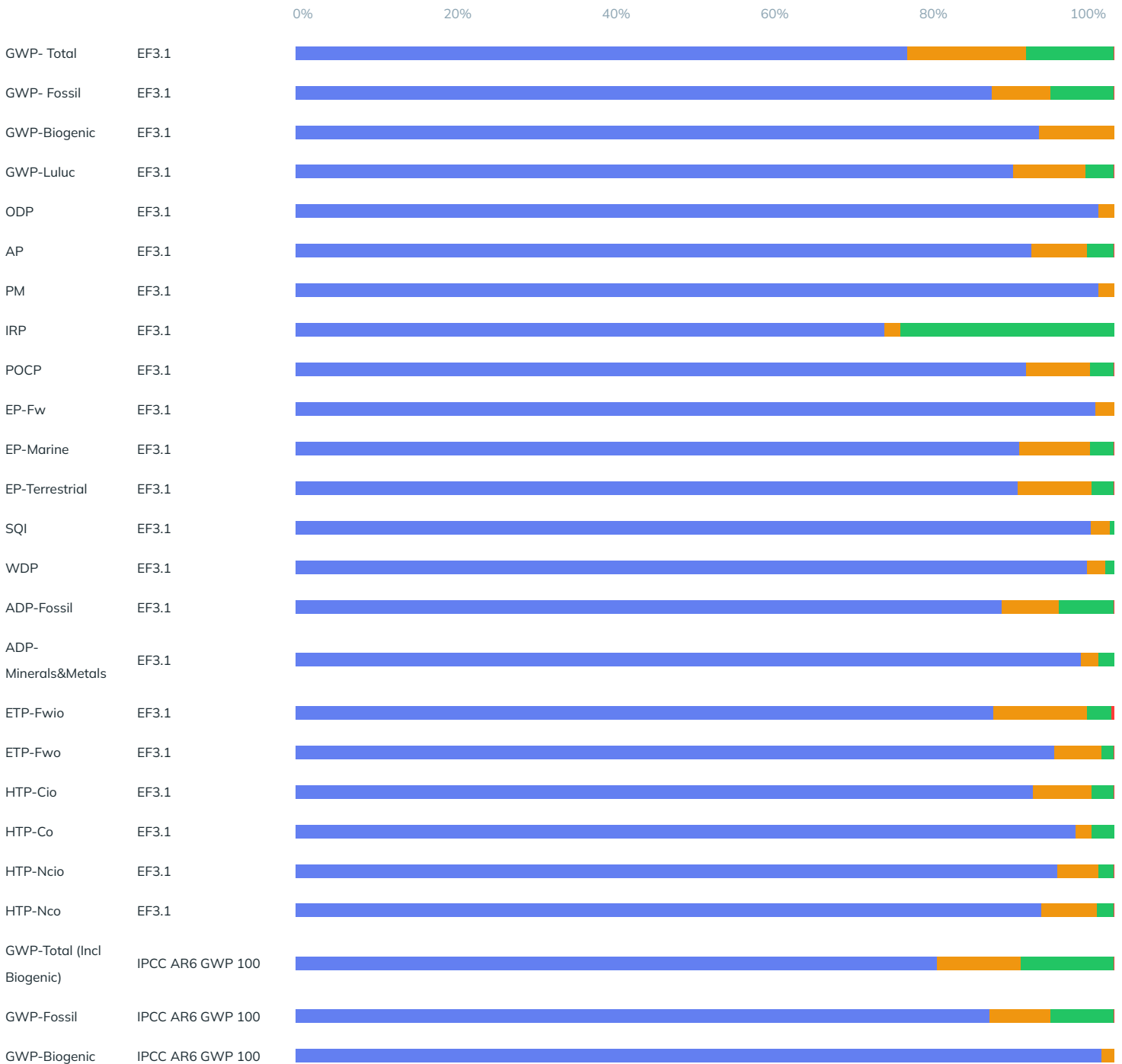
Not all abbreviated indicators listed below may be present in the results above. The inclusion of indicators varies based on PCR requirements.

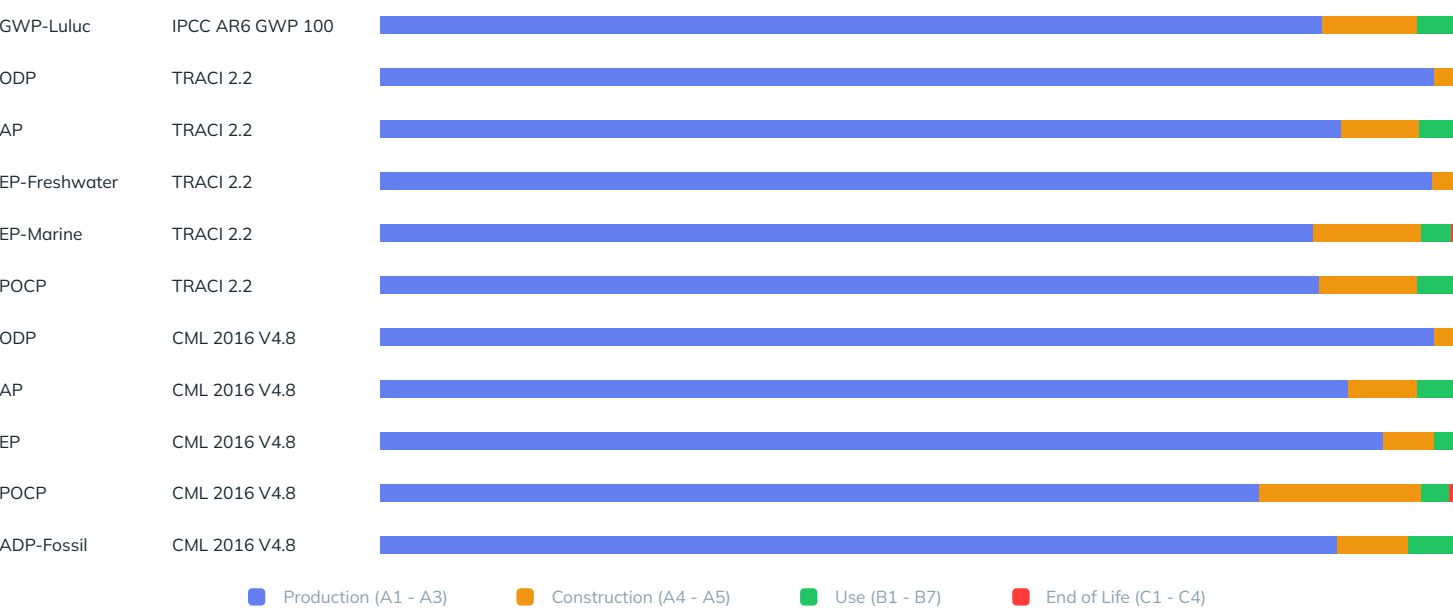
**Abbreviations:**

BCRP = Biogenic Carbon Removal from Product, BCEP = Biogenic Carbon Emission from Product, BCRK = Biogenic Carbon Removal from Packaging, BCEK = Biogenic Carbon Emission from Packaging, BCEW = Biogenic Carbon Emission from Combustion of Waste from Renewable Sources Used in Production Processes, CCE = Calcination Carbon Emissions, CCR = Carbonation Carbon Removals, CWNR = Carbon Emissions from Combustion of Waste from Non-Renewable Sources used in Production Processes, GWP-luc = Carbon Emissions from Land-use Change.

## Interpretation

The life cycle impacts of Interface modular carpet flooring with carbon negative CQB backing is driven by the Product Stage (A1-A3). Raw materials like yarn comprise the majority of the potential impacts. The increased inclusion of biobased, recycled and carbon captured materials help in reducing the impacts as compared to virgin petrochemical-based materials. Interface is 'all in' on achieving its SBTi goal of being carbon negative by 2040 without offsets and prioritizes product innovations that reduce impacts.





## References

ISO 14025 Environmental labels and declarations – Type III environmental declarations – Principles and procedures

ISO 14040 Environmental management – Life cycle assessment – Principles and framework

ISO 14044:2006 + Amendments Environmental management – Life cycle assessment – Requirements and guidelines

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

EN 15804:2019 + A2 Sustainability of construction works – Environmental product declarations – Core rules for the product category of construction products

EN 16810:2017 Resilient, textile and laminate floor coverings – Environmental product declarations – Product category rules

EN ISO 23997 Specifies weight per unit area for flooring products

EN ISO 24346 Specifies thickness for flooring products

EN ISO 10874 Classification of floor coverings for heavy traffic areas

ISO 15686 Reference Service Life calculation (not applied for rubber flooring)

ISO/IEC 25010 Software Product Quality

ISO/IEC 27001 Information Security Management

OWASP SAMM Software Assurance Maturity Model

UL Environment Part A Life Cycle Assessment Calculation Rules and Report Requirements according to ISO 21930:2017, version 4.0

PCR Guidance for Building-Related Products and Services – Part B UL Flooring EPD Requirements, UL 10010-7, v.2, September 2018, Extended to March 31, 2026

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