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# Prospective Environmental product declaration

in accordance with ISO 14025 and EN 15804+A2

## evoBuild Low carbon Standardsement FA, Brevik - CEM II/B-M (V-L) 42,5R

**Owner of the declaration**
Heidelberg Materials Sement Norge AS

**Product**
evoBuild Low carbon Standardsement FA, Brevik - CEM II/B-M (V-L) 42,5R

**Declared unit**
1 tonne

**This declaration is based on Product Category Rules**
EN 15804:2012+A2:2019 serves as core PCR
EN 16908:2022 Cement and building lime

**Program operator**
EPD-Global

**Declaration number**
NEPD-18594-22842

**Issue date**
16.10.2026

**Valid to**
16.10.2027

**EPD software:**
LCA.no EPD generator ID: 1708089

EPD-Global

## General information

### Product
evoBuild Low carbon Standardsement FA, Brevik - CEM II/B-M (V-L) 42,5R

### Owner of the declaration
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### Program operator
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### Manufacturer
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Contact person: Vetle Houg
e-mail: vetle.houg@heidelbergmaterials.com
Phone:

### Declaration number
NEPD-18594-22842

### Place of production
Pr. Site Heidelberg Materials - Brevik
Setreveien 2
3950 Brevik, Norway

### This declaration is based on Product Category Rules
EN 15804:2012+A2:2019 serves as core PCR
EN 16908:2022 Cement and building lime

### Management system
ISO 14001, ISO 9001

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

### Organisation no
934 949 145

### Declared unit
1 tonne evoBuild Low carbon Standardsement FA, Brevik - CEM II/B-M (V-L) 42,5R

### Issue date
16.10.2026

### Declared unit with option
A1-A3, A4

### Valid to
16.10.2027

### Year of study
2025

### Functional unit
-

### Comparability
EPDs of construction products may not be comparable if they do not comply with EN 15804 and are not viewed in a building context.

### The EPD has been worked out by:
Ingrid Vik Jondahl

Julianne Sundklakk

### Verification
Independent verification of the declaration and data, according to ISO14025:2010

Third party verifier

Martin Erlandsson, CarbonZero AB

### Approved
Håkon Hauan, CEO EPD-Global

# Product

### Product description

Cement is a hydraulic binder and is used in the production of e.g. concrete and mortar. It comprises a blend of finely ground, non-metallic inorganic substances. Upon mixing with water, a cement suspension (cement paste) is formed, which hardens and sets both in air and under water through hydration reactions, resulting in a permanently solid structure.

The declared product is a cement in accordance with EN 197-1. For its marketability within the EU/EFTA (excluding Switzerland), Regulation (EU) No. 305/2011 (CPR) is applicable. The product necessitates a Declaration of Performance in accordance with EN 197-2:2020, Cement – Part 2: Assessment and verification of constancy of performance.

The declared product is adapted to Norwegian conditions and can be used for concrete in most exposure, durability and strength classes. It provides durable concrete even in combination with alkali-reactive aggregate.

### Product specification

The declared product is evoBuild Low carbon Standardsement FA, a CEM II/B-M (V-L) 42,5 R conforming to the EN 197 standard. Under the global evoBuild brand, Heidelberg Materials delivers products designed with a strong emphasis on sustainable resource use and significantly reduced $CO_2$ emissions.

evoBuild Low carbon Standardsement FA is produced at Heidelberg Materials' Brevik cement plant, home to the world's first full-scale carbon capture installation in the cement industry. This innovative technology removes $CO_2$ directly from the flue gas during production - without altering the product's technical performance, and is considered in the LCA for this P-EPD.

Performance data of the product are in accordance with the declaration of performance with respect to its essential characteristics according to EN 197-1

| Material | Value | Unit |
|---|---|---|
| Clinker | 65-79 | % |
| Flyash and Limestone | 21-35 | % |
| Minor constituent | 0-5 | % |
| Gyspum | 0-7 | % |

### Technical data

CEM II/B-M (V-L) 42,5 R.
Further information is available at https://www.sement.heidelbergmaterials.no/en

### Market

Norway, Europe

### Reference service life, product

No reference service life is declared as cement is an intermediate building product. A reference service life could be declared for downstream products such as ready-mix concrete, precast concrete, screed, plasters, masonry mortars or other building products in which cement is used.

### Reference service life, building or construction works

For cement the reference service life of the building is not relevant.

# LCA Calculation rules

### Declared unit

1 tonne evoBuild Low carbon Standardsement FA, Brevik - CEM II/B-M (V-L) 42,5R

### Cut-off criteria

All major raw materials and all the essential energy are included. The production processes for raw materials and energy flows with very small amounts (less than 1%) may not be included. These cut-off criteria do not apply for hazardous materials and substances. It is assumed that there will be no leakage of CO2 from storage over 100 years, but losses in transport chain that is accounted for.

### Allocation

Allocation is carried out in accordance with the provisions of EN 15804. Incoming energy, water consumption, and in-house waste generation are distributed equally among all products using mass allocation as first choice. For co-products with very low market value, like slag and fly ash, economical allocation is applied. This also applies to the clinker production process, where impacts are allocated between clinker as the main product and bypass dust as a by-product. Additionally, where relevant, the processing and transportation of co-products are included in the analysis. Gross and net values are included in the result, where GWP from waste fuels are deducted in the net values. In this LCA study, the CO2 stored is allocated equally to all the clinker produced.

### Data quality

This is a prospective P-EPD where the manufacturing data is based on a traditional cement production complemented with the CCS operation. Spesific data for the manufacturing are provided by the manufacturer. The considered data from CCS are calculated based on design, considering capture rates valid in the first year of operations. Background data are derived from EPDs according to EN 15804 and the ecoinvent database using EF 3.1 CFs.
The economic allocation factor for fly ash is calculated in 2026 by using market prices 2022-2024 and datasets from ecoinvent v3.10.1.
LCI data used with fair, poor or very poor contributes to less than the required <30% in the assessment of relevant data using EN 15804:2012+A2:2019, Annex E, only E.1.

| Materials | Source | Data quality | Year |
|---|---|---|---|
| Additives | ecoinvent 3.10.1 | Database | 2023 |
| Additives | NEPD-18013-18013-1 | EPD | 2025 |
| Chemical | ecoinvent 3.10.1 | Database | 2023 |
| Concrete | NEPD-9667-9353 | EPD | 2023 |
| Concrete | NEPD-6771-6093 | EPD | 2023 |
| Concrete | S-P-04518 | EPD | 2020 |
| Electronic - Cable | S-P-05723 | EPD | 2020 |
| Emissions and waste streams | LCA.no | Database | 2024 |
| Explosives | ecoinvent 3.10.1 | Database | 2023 |
| Glass fibre | Modified ecoinvent 3.10.1 | Database | 2023 |
| Gypsum | ecoinvent 3.10.1 | Database | 2023 |
| Limestone | ecoinvent 3.10.1 | Database | 2023 |
| Limestone | LCA.no | Database | 2024 |
| Materials | LCA.no | Database | 2024 |
| Metal - Scrap steel | LCA.no | Database | 2024 |
| Metal - Steel | ecoinvent 3.10.1 | Database | 2023 |
| Mineral | ecoinvent 3.10.1 | Database | 2023 |
| Other Co-products | ecoinvent 3.10.1 | Database | 2023 |
| Others | LCA.no | Database | 2024 |
| Raw materials, Mineral | Supplier | Project EPD | 2021 |
| Reinforcement | ecoinvent 3.10.1 | Database | 2023 |
| Supplementary cementitious material (SCM) | ecoinvent 3.10.1 | Database | 2024 |
| Water | ecoinvent 3.10.1 | Database | 2023 |

## 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 | MND | MND | MND | MND | MND | MND | MND | MND | MND | MND | MND | MND | MND |

### System boundary

Type of the EPD: cradle to gate (A1 – A3) with option A4.
The applied system boundaries cover the production of cement including carbon capture and storage up to the finished product at the factory gate.

The product stage includes:
- Module A1: Extraction and processing of raw materials
- Module A2: Transport of raw materials to the factory gate
- Module A3: Clinker and cement production including carbon capture and storage

The construction process stage includes:
- Module A4: Transport

The impact of the carbon capture and storage (CCS) process is detailed in the table titled "Additional environmental impacts CCS", located in the "Additional Environmental Information" section.

**module A1**
**Raw material extraction and processing**

EXTRACTION OF FUEL
PROCESSING OF FUEL
EXTRACTION OF RAW MATERIAL
PROCESSING OF RAW MATERIAL
ELECTRICITY PRODUCTION
ALLOCATED IMPACT OF CO-PRODUCT

**module A2**
**Transport to manufacturer**

UPSTREAM TRANSPORT OF FUEL
UPSTREAM TRANSPORT OF RAW MATERIAL

**module A3**
**Manufacturing**

PREPARATION OF ANCILLARY MATERIAL OR PRE-PRODUCT
RAW MATERIAL GRINDING
PROCESSING OF CEMENT CONSTITUENT
PRODUCTION OF CLINKER
PRODUCTION OF CEMENT
WASTE PROCESSING

MANUFACTURING WITH CCS:
INFRASTRUCTURE
CO2 CAPTURE AND STORAGE

**module A4**
**Transport to customer**

TRANSPORT OF PRODUCT

### Additional technical information

No further technical information is relevant.

## LCA Scenarios and additional technical information

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

The transport scenario presented in A4 refers to a transport with cement boat over a distance of 100 km.
Different distances can be deviated from this scenario by a proportional conversion, all transport distances from the plant to the different silos are published under https://www.sement.heidelbergmaterials.no/no/Bruksbetingelser#ankertransport

| Transport from production place to user (A4) | Capacity utilisation, incl. return (%) | Distance (km) | Fuel/Energy Consumption | Unit | Value (l/t) |
|---|---|---|---|---|---|
| Transport\|Ship, Cement boat\|km\|GLO | 53.0 % | 100.00 | 0.002 | l/tkm | 0.20 |

## LCA Results

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

| Environmental impact | | | | |
|---|---|---|---|---|
| Indicator | | Unit | A1-A3 | A4 |
| | GWP-total | kg $CO_2$ -eq | 2.38E+02 | 7.14E-01 |
| | GWP-fossil | kg $CO_2$ -eq | 2.38E+02 | 7.14E-01 |
| | GWP-biogenic | kg $CO_2$ -eq | 1.92E-01 | 1.41E-04 |
| | GWP-luluc | kg $CO_2$ -eq | 3.85E-02 | 4.75E-04 |
| | ODP | kg CFC11 -eq | 4.52E-07 | 0.00E+00 |
| | AP | mol H+ -eq | 1.09E+00 | 1.87E-02 |
| | EP-FreshWater | kg P -eq | 1.67E-02 | 2.65E-05 |
| | EP-Marine | kg N -eq | 3.11E-01 | 4.27E-03 |
| | EP-Terrestial | mol N -eq | 3.58E+00 | 4.75E-02 |
| | POCP | kg NMVOC -eq | 9.27E-01 | 1.32E-02 |
| | ADP-minerals&metals[1] | kg Sb-eq | 2.00E-03 | 8.00E-07 |
| | ADP-fossil[1] | MJ | 1.07E+03 | 8.72E+00 |
| | WDP[1] | $m^3$ | 3.58E+02 | 2.82E-02 |

GWP-total = Global Warming Potential total; GWP-fossil = Global Warming Potential fossil; 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*10-3 = 0.009"

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

The LCA results in the EPD are calculated using a specific methodological approach for accounting energy resources, see the additional requirements section for more information. In this EPD the following approach was used: Location-based approach.

All legal classified waste used as fuel in the cement kiln are treated as having no economical value and is therefore interpreted as not fulfilling EoW according to the cPCR. This is equal to the default setting used in the LCA results and referred to as net LCA results. The GWP indicators including the emissions from waste fuels (GWP, gross) are reported separately in this EPD under "Additional environmental information"

Since this is a prospective EPD, the results are inherently subject to uncertainty. Cement production without CCS relies on primary data from 2025. The inventory data for the CCS facility have been updated based on design specifications, performance requirements, and available operational and product-related data. These requirements include a minimum capture rate for a specific operational time which will be representative for the first years of operation.

Additionally, there is some uncertainty regarding the quantities and data related to the CCS infrastructure. However, as infrastructure contributes only a minor share to the overall results, its influence on the final outcomes is considered limited. Doubling the input used in the infrastructure calculation results in a reduction less than 1 kg of $CO_2$ considered as stored per tonne clinker.

In the clinker production process associated with this cement product, 27 kg of biogenic $CO_2$ per tonne of cement is captured at the Brevik CCS facility and permanently stored. This amount reflects the net quantity permanently stored after accounting for losses, leakages and the environmental burdens associated with the capture, transport, and permanent storage of the $CO_2$. In accordance with EN 15804, this permanent storage of biogenic $CO_2$ is not included in the reported life cycle assessment results and environmental indicators.

Carbon Capture and Storage Project Description:
The product detailed in this P-EPD incorporates emissions reductions achieved through the capture and permanent storage of $CO_2$ generated during clinker production at Brevik. Captured $CO_2$ is transported to and permanently stored at the Aurora storage site, operated by Northern Lights JV DA. The storage site is located offshore Norway on license No. EL001 (issued by Norwegian Ministry of Energy) and operates under permit from the Norwegian Environment Agency. The storage site is operated in accordance with applicable Norwegian $CO_2$ storage regulations, which implement the requirements of the EU CCS Directive (Directive 2009/31/EC).

The storage operator is responsible for $CO_2$ injection, monitoring, reporting, verification, site stewardship, and regulatory compliance in accordance with the applicable storage permit and long-term liability framework. Storage quantities are monitored and verified under the Northern Lights' third-party verified MRV plan.

Emissions related to the construction and operation of both the Brevik carbon capture facility and Northern Lights transport and storage infrastructure have been accounted for within the cradle-to-gate life cycle inventory. Transport losses and fugitive emissions have are reflected in the net CCS benefit reported in this EPD.

CCS related emission reductions detailed in this EPD shall be claimed only within the cement value chain and are not sold separately as carbon capture credits.

| Additional environmental impact indicators | | | | |
|---|---|---|---|---|
| Indicator | | Unit | A1-A3 | A4 |
| | PM | Disease incidence | 5.47E-06 | 0.00E+00 |
| | IRP[2] | kgBq U235 -eq | 2.61E+00 | 4.65E-03 |
| | ETP-fw[1] | CTUe | 1.31E+03 | 6.98E-01 |
| | HTP-c[1] | CTUh | 1.34E-08 | 0.00E+00 |
| | HTP-nc[1] | CTUh | 5.89E-07 | 0.00E+00 |
| | SQP[1] | dimensionless | 1.86E+02 | 7.11E-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 = Potential Soil Quality Index (dimensionless)

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

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 |
| | PERE | MJ | 9.23E+02 | 7.96E-02 |
| | PERM | MJ | 2.83E-08 | 0.00E+00 |
| | PERT | MJ | 9.23E+02 | 7.96E-02 |
| | PENRE | MJ | 1.07E+03 | 8.72E+00 |
| | PENRM | MJ | 4.06E+00 | 0.00E+00 |
| | PENRT | MJ | 1.07E+03 | 8.72E+00 |
| | SM | kg | 1.14E-01 | 0.00E+00 |
| | RSF | MJ | 7.49E+02 | 1.05E-05 |
| | NRSF | MJ | 1.32E+03 | 0.00E+00 |
| | FW | $m^3$ | 6.56E+00 | 6.75E-04 |

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*10-3 = 0.009"

| End of life - Waste | | | | |
|---|---|---|---|---|
| Indicator | | Unit | A1-A3 | A4 |
| | HWD | kg | 1.39E+01 | 1.36E-02 |
| | NHWD | kg | 8.73E+01 | 1.84E-01 |
| | RWD | kg | 1.34E-02 | 1.10E-06 |

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

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

| End of life - Output flow | | | | |
|---|---|---|---|---|
| Indicator | | Unit | A1-A3 | A4 |
| | CRU | kg | 0.00E+00 | 0.00E+00 |
| | MFR | kg | 9.15E-05 | 0.00E+00 |
| | MER | kg | 1.73E-05 | 0.00E+00 |
| | EEE | MJ | 1.21E-04 | 0.00E+00 |
| | EET | MJ | 2.85E-04 | 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*10-3 = 0.009"

| Biogenic Carbon Content | | |
|---|---|---|
| Indicator | Unit | At the factory gate |
| Biogenic carbon content in product | kg C | 0.00E+00 |
| Biogenic carbon content in accompanying packaging | kg C | 0.00E+00 |

Note: 1 kg biogenic carbon is equivalent to 44/12 kg CO2

## Additional requirements

### Transparent reporting of energy

The table below presents GWPtotal values for energy resources used in the manufacturing phase (A3), calculated with both the location-based and market-based approach. This information is provided for transparency, allowing EPD users to understand the impact of these methodological choices. In this EPD, the following methodology was used in the main results: Location-based approach.

| Electricity mix | Source | Amount | Unit | GWPtotal [kg CO2/Unit] | SUM [kg CO2] |
|---|---|---|---|---|---|
| **Location-based approach.** | | | | | |
| Electricity, Norway, medium voltage | ecoinvent 3.10.1 | 5.66E+01 | kWh | 1.83E-02 | 1.03E+00 |
| **Market-based approach.** | | | | | |
| Electricity, Norway, medium voltage, residual mix | ecoinvent 3.10.1 | 5.66E+01 | kWh | 6.20E-01 | 3.51E+01 |

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

### Dangerous substances

The product does not contain substances in a concentration above 0.1 mass percent, which are specified in the Candidate List of Substances of Very High Concern (SVHC) for Authorization.

### Indoor environment

As a component of downstream materials, cement does not release any harmful substances to indoor environment.

## Additional Environmental Information

| Additional environmental impact indicators required in NPCR Part A for construction products (net) | | | |
|---|---|---|---|
| **Indicator** | **Unit** | A1-A3 | A4 |
| GWPIOBC | kg $CO_2$ -eq | 2.38E+02 | 7.14E-01 |

GWP-IOBC: 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. The results do not include emissions from the combustion of waste fuels (GWP, net).

| Additional GWP indicators in accordance with cPCR and more transparent reporting related to CCS | | |
|---|---|---|
| **Indicator** | **Unit** | **A1-A3** |
| GWP-total, gross | kg $CO_2$ -eq | 3.47E+02 |
| GWP-fossil, gross | kg $CO_2$ -eq | 3.46E+02 |
| GWP-biogenic, gross | kg $CO_2$ -eq | 1.92E-01 |
| GWP-luluc, gross | kg $CO_2$ -eq | 3.85E-02 |
| GWP-total, net | kg $CO_2$ -eq | 2.38E+02 |
| GWP-fossil, net | kg $CO_2$ -eq | 2.38E+02 |
| GWP-biogenic, net | kg $CO_2$ -eq | 1.92E-01 |
| GWP-luluc, net | kg $CO_2$ -eq | 3.85E-02 |
| CWRS | kg $CO_2$ -eq | -1.45E-05 |
| CWNRS | kg $CO_2$ -eq | 1.09E+02 |
| CC | kg $CO_2$ | 3.53E+02 |
| CCS | kg $CO_2$ | -2.21E+02 |

GWP-total, gross = Global Warming Potential total, gross (GWP-fossil, gross + GWP-biogenic, gross + GWP-luluc); GWP-total, net = Global Warming Potential total, net (GWP-fossil, net + GWP-biogenic, net + GWP-luluc); GWP-fossil, gross = Global Warming Potential fossil fuels, gross (includes emissions from combustion of waste fuels from non-renewable sources); GWP-fossil, net = Global Warming Potential fossil fuels, net (excludes emissions from combustion of waste fuels from non-renewable sources); GWP-biogenic, gross = Global Warming Potential biogenic, gross (includes emissions from combustion of waste fuels from renewable sources); GWP-biogenic, net = Global Warming Potential biogenic, net (excludes emissions from combustion of waste fuels from renewable sources); GWP-luluc = Global Warming Potential land use and land use change; CWRS = Emissions from combustion of waste from renewable sources; CWNRS = Emissions from combustion of waste from non-renewable sources; CC = Emissions from decarbonization of limestone in clinkering (process emissions, clinker); CCS = Amount of carbon reductions from carbon capture and storage considered in the main results of the EPD

| GWPtotal indicators net/gross and with/without economic allocation | | |
|---|---|---|
| **Indicator** | **Unit** | **A1-A3** |
| GWPtotal, gross with economic allocation | kg $CO_2$-eq | 3.47E+02 |
| GWPtotal, gross without economic allocation | kg $CO_2$-eq | 3.37E+02 |
| GWPtotal, net with economic allocation | kg $CO_2$-eq | 2.38E+02 |
| GWPtotal, net without economic allocation | kg $CO_2$-eq | 2.28E+02 |

The GWPtotal indicators shall be used to document compliance with the different versions of Norsk Betongforenings publication number 37 Lavkarbonbetong:

- GWPtotal, gross with economic allocation

- GWPtotal, gross without economic allocation (NB37:24, Lavkarbon B, A, Pluss, Ekstrem)

- GWPtotal, net with economic allocation. (NB37:26, Lavkarbon 10 - 80)

- GWPtotal, net without economic allocation (NB37:25, Lavkarbon 10 - 90)

| Transparent reporting of co-product emission intensity | | |
|---|---|---|
| **Material** | **GWPtotal kg $CO_2$ per kg material** | **GWPIOBC kg $CO_2$ per kg material** |
| Fly ash, Brevik | 5.49E-02 | 5.49E-02 |
| Other Co-products | 4.80E-03 | 4.77E-03 |

The emission intensity of all co-products used in the product recipe are reported as kg CO2-eq per kg material for the indicators GWP-total and GWP-IOBC . The emission intensity per co-product is the same for GWPtotal gross and net indicators.

| Additional environmental impacts CCS | | | | | |
|---|---|---|---|---|---|
| **Indicator** | **Unit** | **I. A1-A3 Cement excl. 95% direct kiln emissions** | **II. A3 95% Direct kiln emissions** | **III. Carbon capture and storage (CCS)** | **IV. evoBuild** |
| GWPtotal, gross with economic allocation | kg $CO_2$ -eq | 7.07E+01 | 4.97E+02 | -2.21E+02 | 3.47E+02 |
| GWPtotal, gross without economic allocation | kg $CO_2$ -eq | 6.09E+01 | 4.97E+02 | -2.21E+02 | 3.37E+02 |
| GWPtotal, net with economic allocation | kg $CO_2$ -eq | 6.52E+01 | 3.94E+02 | -2.21E+02 | 2.38E+02 |
| GWPtotal, net without economic allocation | kg $CO_2$ -eq | 5.54E+01 | 3.94E+02 | -2.21E+02 | 2.28E+02 |

The EPD applies to evoBuild Carbon Captured Brevik. The table above provides a transparent breakdown by production modules. The cement is offered in three variants:
* Cement without CCS: GWP A1-A3 is represented by the sum of columns I and II in the table.
* evoBuild: GWP A1-A3 is represented by the sum of columns I, II, and III in the table.
* evoZero: GWP A1-A3 is represented by column I in the table.
The sale of these cements is subject to independent third-party assurance, which audits the deposit, withdrawal and allocation of emission reductions generated at the Brevik cement plant in Norway. For more information, please visit: www.evozero.com/assurance.
Verified permanent storage of CO2 is recorded as carbon reduction in the Heidelberg Materials carbon bank. When CCS-reduced cements are sold, carbon reductions are deducted from the carbon bank. Further information on the verification of carbon capture, carbon bank, and distribution of reduction on products can be found on our website. The attribution of the CCS impact on direct kiln emissions aligns with technical feasibility as described in ISO 22095-2:2026.

## Bibliography


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