Environmental Product Declaration

In accordance with ISO 14025:2006 and EN 15804:2012+A2:2019/AC:2021 for:

CEM II AVERAGE

Programme:	The International EPD System, www.environdec.com
Programme operator:	EPD International AB
Type of EPD:	EPD of a single product from a manufacturer
EPD registration number:	EPD-IES-0025866:004
Version date:	2026-02-27
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An EPD may be updated or depublished if conditions change. To find the latest version of the EPD and to confirm its validity, see www.environdec.com

General information

Programme information

Programme:	The International EPD® System
Address:	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden
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Product category rules

CEN standard EN 15804 serves as the Core Product Category Rules (PCR)

Product Category Rules (PCR):	PCR 2019:14 Construction products (EN 15804+A2) (V.2.0.1)
PCR review was conducted by:	Rob Rouwette (chair), Noa Meron (co-chair)
c-PCR:	PCR 2019:14-c-PCR-001 Cement and building lime (EN 16908) (c-PCR to PCR 2019:14) (1.0.0)
UN CPC Code:	374

Third party verification

Independent third-party verification of the declaration and data, according to ISO 14025:2006, via:

☐ **Individual EPD verification with a pre-verified LCA/EPD tool**

Third-party verifier: Chris Foster, EuGeos

Approved by: International EPD System

Procedure for follow-up of data during EPD validity involves third party verifier:

☐ Yes ☑ No

The EPD owner has the sole ownership, liability, and responsibility for the EPD.

EPDs within the same product category but published in different EPD programmes, may not be comparable. For two EPDs to be comparable, they shall be based on the same PCR (including the same first-digit version number) or be based on fully aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical declared/functional units); have identical scope in terms of included life-cycle stages (unless the excluded life-cycle stage is demonstrated to be insignificant); apply identical impact assessment methods (including the same version of characterisation factors); and be valid at the time of comparison. For further information about comparability, see EN 15804 and ISO 14025.

Goal of the study

The aim of this study is the calculation and interpretation of cradle-to-gate LCA results for the manufacture of a weighted average of CEM II produced at two Tarmac Cement Plants. It is intended that this EPD will be verified and published to be available for customers queries and will be included in the calculations of our in-house product carbon footprints.

The purpose of conducting this LCA is to gain a comprehensive understanding of the environmental impact of our CEM II product. The findings support internal carbon footprint calculations. This approach enhances transparency and reinforces our commitment to being a responsible and accountable supplier.

Limitations of EPD use

The cement EPD, developed using averaged data from two Tarmac sites, provides a robust and transparent overview of the product's environmental impact, making it a valuable tool for industry-wide benchmarking and early-stage design decisions. However, when applied more broadly, beyond the context of Tarmac's own operations, users should be mindful that the data may not fully capture localised differences such as site-specific energy sources, transport logistics, or production efficiencies. These factors can influence carbon footprint calculations, particularly for projects targeting precise lifecycle analysis or sustainability certifications. That said, the EPD still represents a credible and proactive step toward consistent environmental reporting, offering meaningful insight for decision-makers aiming to align with low-carbon goals.

Information about EPD owner

Owner of the EPD	Tarmac Holdings Limited
Address	Ground Floor, T3 Trinity Park, Bickenhill Lane B37 7ES Birmingham United Kingdom
Website	www.tarmac.com
Contact	Rebecca Eccles, Amall Saleh
Contact information	rebecca.eccles@tarmac.com, amall.saleh@tarmac.com
Description of Organisation	Tarmac, a CRH company, is the UK's leading provider of sustainable building materials and construction solutions. With over 150 years of heritage, it operates across more than 350 sites nationwide, delivering products and services including aggregates, asphalt, cement, ready-mix concrete, and infrastructure contracting. As a wholly owned subsidiary of CRH plc, Tarmac plays a key role in supporting major infrastructure projects and advancing low-carbon construction across the UK.
Product-related or management system-related certifications	ISO 14001, ISO 9001, BES 6001

Product information

Product overview

Product Name: CEM II Average

Identification: CEM II

UN CPC Code: 374

Product Description

CEM II, also known as Portland-limestone cement (PLC), is a bulk cement product composed of clinker, limestone, and selected additives. It is supplied unpackaged and designed for versatile use across construction applications. Tarmac offers one grade of CEM II (52.5N) which is manufactured at its Tunstead and Aberthaw plants. CEM II is well-suited for a wide range of uses, including ready-mixed concrete, precast elements, mortars, and screeds, offering reliable performance.

Production Sites

Tarmac Tunstead Cement Plant, Waterswallows Road, Buxton, SK17 8TG.

Tarmac Aberthaw Cement Works, East Aberthaw, Rhoose, Barry, CF62 3DE.

Product Application

Tarmac's bulk CEM II is mainly used to produce concrete and mortar for large-scale construction projects. It's essential for building foundations, roads, bridges, tunnels, and precast concrete elements like blocks and panels. It's also used in soil stabilisation, grouting, and marine works where durability and strength are critical.

Product characteristics

This lifecycle assessment will cover a single product, representing the weighted average cement output from two production sites.; Tunstead Cement and Aberthaw Cement. The below table outlines the similarities and differences of the products across the two production sites.

Image

Tunstead CEM II

Aberthaw CEM II

Functional Characteristics

Portland Limestone Cement (PLC) is used widely in ready-mixed concrete and concrete products, civil engineering and building applications.

Technical Characteristics

PLC replaces >10% clinker with limestone while still maintaining the same quality and performance as a traditional Portland Cement (CEM I).

Areas of Use

Architectural Concrete, Concrete Block Paving, Dry Silo Mortar, Engineered Solutions and Roof Tiles.

Lifespan

The lifespan of cement, and concrete, is highly variable, but generally, well-maintained concrete can last between 50 to 100 years. However, factors like the quality of construction materials, environmental conditions, and maintenance significantly impact its longevity. Cement itself has a shorter shelf life, typically around 3 months from the date of manufacture, if stored properly.

Key Differences

The PLC production across the two production sites is where the key differences lie. There are very small variations in the fuels used during the clinker production and differences in cement fineness. These differences result in no impact on the final product performance.

Justification for Performing an Average EPD

Averaging the EPD across the two production sites is justified, as the product is manufactured using identical raw materials and processes (with only minor site-level variations), and shares consistent functional performance, lifespan, and areas of application.

Content declaration

The declared unit is 1 tonne of an average CEM II product.

In this report, numerical values are presented using the following format: the period (.) is used to denote decimal points, while the comma (,) serves as the thousands separator. The below table outlines the breakdown of components within the average CEM II product.

Product Components	Weight, kg	Post-consumer material, weight-%	Biogenic material, weight-% of product	Biogenic material, kg C/ declared unit
Clinker	820	0	<1%	<1
Gypsum	63	0	<1%	<1
Limestone	115	0	<1%	<1
Ferrous Sulphate	1.44	0	<1%	<1
Grinding Aid	0.04	0	<1%	<1
Additives	0.53	0	<1%	<1

Packaging Materials	Weight, kg	Weight-% (versus the product)	Weight biogenic carbon, %	Weight biogenic carbon, kg C/declared unit
N/A				

Hazardous substances from the candidate list of SVHC	EC No.	CAS No.	Mass-% per product or declared unit
N/A			

LCA information

LCA key information

Functional/Declared Unit	1 tonne of CEM II product
Mass per Declared Unit	1000 kg per 1 tonne
Reference Service Life	N/A
Time Representiveness	January 2024 – December 2024
Database & Software	GCCA EPD Tool (version 5.2) Ecoinvent (version 3.10)
Description of System Boundaries	Cradle-to-gate
GWP-GHG A1-A3 $kgCO_2e$/declared unit	701
GWP GHG Variability	-3% to 0.4%
Type of EPD	This is an average EPD cradle to gate, covering A1-A3

LCA modelling information

The LCA model has been developed through the GCCA Concrete Tool (v5.2) where all A1-A3 inputs were modelled to their closest available GCCA datapoints.

The following statement is made in the self-declaration output from the tool (v5.2): "The following hypotheses apply to waste streams at the end-of-life: 1) The only materials sent to recycling are the concrete itself and the reinforcement steel when applicable. Other materials (e.g. insulation, void formers) are considered to be landfilled (non-incinerable fraction).

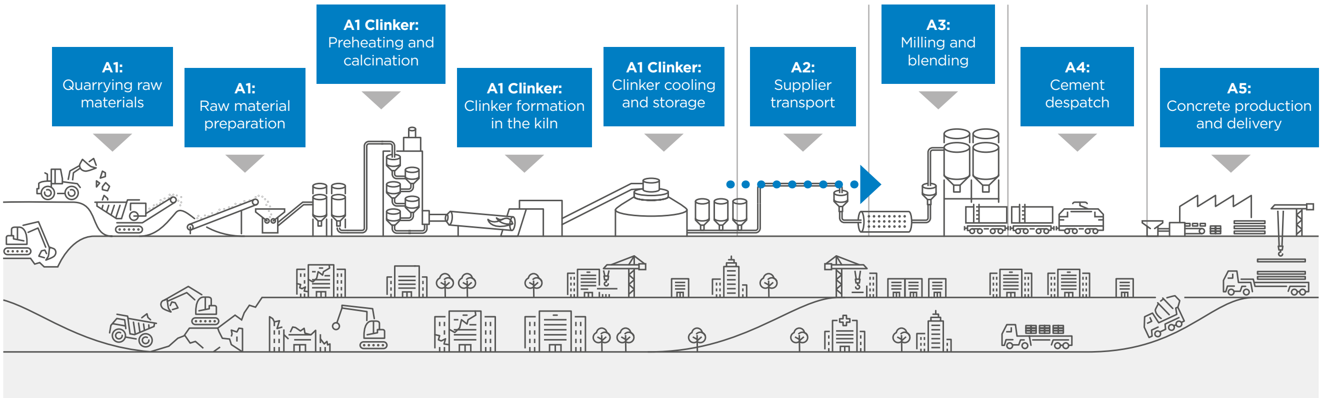
We assume the recycled materials are recycled and accounted for as recycled material. This methodological choice is consistent with the reality of the cement and concrete industry. No allocation is applied in the GCCA tool (v5.2). For instance, no allocation of impacts will be applied to excess electricity or excess heat which may result from the production of concrete or precast.

Such situations are considered to be marginal and negligible when they take place." (GCCA, 2025). Refer to Appendix B for a detailed overview of the GCCA tool (v5.2) and its application within this LCA model.

This LCA follows a Cradle-to-Gate approach, covering modules A1 to A3. Once cement is installed, it becomes part of a composite structure alongside other materials, making it inseparable at the end of life and therefore unable to be identified. As a result, conducting a standalone end-of-life analysis for cement is not feasible with meaningful accuracy.

System flow diagram

Concrete and cement manufacture, transport and use today



Cement production begins with the quarrying of limestone, shale, and sandstone (sourced near the Aberthaw and Tunstead plants) through controlled excavation and blasting. These raw materials are transported to a crushing facility, ground into a fine powder, and blended to form a chemically balanced raw meal, which is stored in silos.

The raw meal is then preheated using hot kiln gases to remove moisture and undergoes calcination at around 900°C, where calcium carbonate breaks down into lime and carbon dioxide. This material enters a rotary kiln and is heated to approximately 1500°C, forming clinker - hard nodules that are rapidly cooled to preserve their properties.

The cooled clinker is mixed with gypsum and sometimes other additives, then finely ground in cement mills to produce cement. The final product is stored in silos and dispatched in bulk or bags for use in concrete, mortar, plaster, and a wide range of infrastructure and construction projects.

Processes at each LCA stage

A1: raw material extraction

Raw materials are obtained from a mixture of external suppliers and Tarmac's owned sites. Where possible, Tarmac's own materials (i.e., clinker) were modelled using the GCCA system in order to understand their specific impact. Where this was not possible, representative datapoints were selected.

To account for waste, assumptions have been made for both the Clinker and CEM II production and has been calculated based on the supply chain depots and terminals.

A2: transport

Transport to site was modelled based on Tarmac's own understanding of internal movements. With many raw materials being supplied internally, Tarmac was able to acquire accurate information regarding the mode and distance. Where transport information was limited, a conservative default route was assumed from the supplier's location to the site address.

A3: manufacturing

Aggregates are extracted from quarries and then transported to the crushing plant via Front ended loader (FEL) (diesel) or conveyor (electricity). The crushed aggregate is then added with other materials to be grinded into a fine powder. The grinding mills are powered by electricity. The mixture is then burned at around 1500°C in a kiln, powered by coal, to create clinker.

Once cooled, the clinker is ground to a very fine cement. The additional ingredients (gypsum, grinding aid, limestone, admixtures, ferrous sulphate) are then added to the cement mill which is powered by electricity. The materials are mixed, powered by electricity, and then the final product is stored in electric powered silos.

Any waste from the process is recycled where possible. Where recycling does not take place, a landfill is assumed.

Waste Stream	kg per Declared Unit	Source
Non-Hazardous Waste	0.005	Waste carrier data
Hazardous Waste	0.0004	Waste carrier data
Recycling	0.13	Waste carrier data

Data quality assessment

The data used throughout this report is primarily sourced from internal procurement records, technical documentation, and site-level operational data. Where applicable, additional information was obtained from suppliers to ensure accuracy and alignment with current practices. This approach provides a consistent and traceable foundation for the environmental assessment, grounded in real-world inputs relevant to production and logistics. No data, from within the system boundary of the study, has been excluded. This analysis utilised Ecoinvent factors (v3.10) modelled within the GCCA tool (v5.2). While supplier-specific EPDs would have offered more tailored data, these were not available at the time of assessment. To ensure the results remained conservative, precautionary assumptions were applied when selecting representative factors. For instance, the factor for gypsum was based on mined gypsum, which typically carries a higher environmental impact than co-product gypsum.

Clinker is sourced directly from Tarmac's own production sites. Its manufacturing process was modelled using the GCCA (v5.2) system, and the resulting data was incorporated into this lifecycle analysis as an A1 material. For consistency and transparency, gross emissions figures were used to represent clinker production.

The CEM II results presented in the Environmental Performance section are reported as gross values. Gross results represent the total environmental impacts associated with the product system, without deducting any potential benefits from reuse, recovery, or recycling beyond the system boundary. In contrast, net results account for these downstream benefits, providing a reduced impact figure. Reporting gross values ensures consistency and transparency.

The share of primary data is calculated based on GWP-GHG results. It is a simplified indicator for data quality that supports the use of more primary data, to increase the representativeness of and comparability between EPDs. Note that the indicator does not capture all relevant aspects of data quality and is not comparable across product categories.

Module	Source Type	Source	Reference Year	Data Category	Share of primary data, of GWP-GHG results for A1-A3
A1 – Raw Materials	Clinker Production	LCA model	2024	Primary	>95%
A1 – Raw Materials	Internal Database	Site Specific Procurement Records, Ecoinvent datapoints	2024	Secondary	<1%
A2 – Transport	Internal Database	Procurement Records and Supplier Information, Ecoinvent datapoints	2024	Secondary	<1%
A3 – Energy	Internal Database	Site Specific Invoices, Ecoinvent datapoints	2024	Secondary	<3%
A3 – Waste	Internal Assumptions	Site Specific Waste Carrier Data and Allocation Calculations, Ecoinvent datapoints	2024	Secondary	<1%
total share of primary data for GWP A1-A3					96.5%

The data quality across modules A1–A3 is consistently high, with strong geographical, technical, and temporal representativeness based on site-specific records from 2024. This enhances the credibility and relevance of the environmental assessment, especially where localised inputs and operational consistency matter. A2 shows slightly reduced technical robustness due to reliance on assumed transport routes for some suppliers, although worst-case scenarios were used to maintain conservative estimates. Overall, the dataset offers high reliability.

Module/ Dataset	Geographical Representiveness	Technical Representiveness	Time Representiveness
A1	Representiveness is considered excellent. All material data is acquired from internal databases (production books, sales, and weighbridge data) and were validated by several departments.	Representiveness is considered excellent. The material data used is representive of production at the time of publishing this report.	Representiveness is considered excellent. All material data sourced is from January 2024 – December 2024.
A2	Representiveness is considered very good. There is a good understanding of supplier location and where goods are sourced. The transport factors used were UK specific.	Representiveness is considered fair. The assumed transport routes were built based on internal logistics data. Where this wasn't possible, a default route from suppliers, assuming a worst case scenario, was assumed.	Representiveness is considered very good. The transport routes assumed were based on 2024 data. Logistics have not changed significantly at the time of publishing this report.
A3	Representiveness is considered excellent. All manufacturing sites are located in the UK and location specific factors were used where available.	Representiveness is considered good. There is a good understanding of energy and fuels within the manufacturing process. It is understood how much waste is at each site however assumptions were made to allocate these figures between clinker and cement.	Representiveness is considered very good. The data sourced is from January 2024 – December 2024. No significant changes to manufacturing have occurred at the time of publishing this report.
Infrastructure and Capital Goods	Infrastructure and capital goods associated with Tarmac Holdings Limited are not included in the foreground system boundary. However, contributions from infrastructure are included via upstream datasets.		

Allocations, estimates, and assumptions

Where data was not readily available, assumptions and estimations had to be made. 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, any assumptions have been done in the following ways:

Module/Dataset	Assumptions
A1 – Extraction of Raw Materials	Conservative Ecoinvent (v3.10) factors were applied within the GCCA (v5.2) system.
A2 – Transport to Factory	Where international ports were not known the nearest port was assumed outside of the UK.
A3 – Manufacturing Waste	The clinker-to-cement waste split was estimated using data from supply chain depots and terminals. An average waste figure was calculated across eight operations and applied to cement plant outputs to determine the proportion attributable to cement. The remaining fraction of waste was allocated to clinker.
A3 – Electricity	Electricity consumption is separately recorded for clinker and cement production at both sites. Cement-related electricity use covers both CEM I and CEM II products, with consumption allocated to CEM II based on relative production volumes. The reported electricity figures include minor site-related operations (e.g., office usage), which are considered negligible and have minimal impact on the overall results.

Electricity declaration

The electricity datapoint was obtained from Ecoinvent (version 3.10) and is representative of residual mix electricity in the UK for 2024. The carbon impact of 1 kWh of electricity consumption is 0.45 kg CO_2e (GWP GHG). The chart below represents the different sources of residual grid electricity. This factor is used to represent the impact of electricity consumption in A3.

Source of Electricity	Percentage
Biomass	11.65%
Solar	4.75%
Wind	28.12%
Hydro	1.88%
Nuclear	13.87%
Coal and Peat	1.3%
Oil	3.69%
Gas	34.75%

Production mix of electricity in 2024 (source: DESNZ, 2024)

Scope of LCA

	Product stage			Construction process stage		Use stage							End of life stage				Resource recovery stage
	Raw material supply	Transport	Manufacturing	Transport	Construction installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Modules declared	x	x	x	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Geography	UK & GLO	UK	UK	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Specific data used	>95%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – products	0%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	-3% to 0.4%			-	-	-	-	-	-	-	-	-	-	-	-	-	-

For this analysis, Clinker production was modelled in the GCCA (v5.2) system. The resulting data was applied to module A1 for the environmental performance of CEM II. Cut-off rules were applied in accordance with the relevant standards; however, no material or process flows were excluded from the system boundaries.

Environmental performance

Results are calculated for 1 tonne of CEM II product in accordance with EN 15804:2012+A2:2019 JRC Characterisation Factors EF 3.1. The estimated impact results are only relative statements, which do not indicate the endpoints of the impact categories, exceeding threshold values, safety margins and/or risks.

Mandatory category impact indicators (EN 15804+A2)

Indicator	Unit	A1-A3
GWP-tot	kg $CO_{2\ eq.}$	7.01E+02
GWP-fos	kg $CO_{2\ eq.}$	7.00E+02
GWP-bio	kg $CO_{2\ eq.}$	1.60E-01
GWP-luc	kg $CO_{2\ eq.}$	3.18E-02
ODP	kg $CFC11_{\ eq.}$	1.52E-06
AP	mol $H+_{\ eq.}$	2.42E+00
EP-fw	kg $P_{\ eq.}$	2.22E-02
EP-mar	kg $N_{\ eq.}$	1.35E-01
EP-ter	mol $N_{\ eq.}$	6.16E+00
POCP	kg $NMVOC_{eq.}$	1.52E+00
*ADPE	kg $Sb_{eq.}$	2.51E-03
*ADPF	MJ	2.82E+03
*WDP	$m^3_{\ eq.}$	1.42E+01

Acronyms: GWP-tot = global warming potential total, GWP-fos = global warming potential fossil fuels, GWP-bio = global warming potential biogenic, GWP-luc = global warming potential land use and land use change, ODP = ozone depletion potential, AP = acidification potential, EP-fw = eutrophication potentia freshwater, EP-mar = eutrophication potential marine, EP-ter = eutrophication potential accumulated exceedance, POCP = formation potential of tropospheric ozone, ADPE = abiotic depletion potential for non-fossil resources, ADPF = abiotic depletion for fossil resources potential, WDP = water deprivation potential

Net A1–A3 results: GWP-total = 6.18E+02; GWP-fossil = 6.175E+02; GWP-biogenic = 8.17E-02; GWP-land use change = 3.18E-02.

*Disclaimer: 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.

Additional voluntary impact indicators (EN15804+A1)

Indicator	Unit	A1-A3
PM	Disease incidence	2.07E-05
IRP	kBq $U235_{\ eq.}$	1.72E+01
ETP	CTUe	5.34E+02
HTPC	CTUh	8.98E-07
HTPNC	CTUh	4.35E-05
SQP	dimensionless	1.61E+03

Acronyms: PM = potential incidence of disease due to pm emissions, IRP = potential human exposure efficiency relative to U235, ETP = potential comparative toxic unit for ecosystems, HTPC =potential comparative toxic unit for humans, HTPNC = potential comparative toxic unit for humans, SQP = potential soil quality index

Resource use indicators

Indicator	Unit	A1-A3
PERE	MJ	4.72E+02
PERM	MJ	0.00E+00
PERT	MJ	4.72E+02
PENRE	MJ	2.82E+03
PENRM	MJ	0.00E+00
PENRT	MJ	2.82E+03
SM	kg	1.22E+02
RSF	MJ	5.90E+02
NRSF	MJ	1.20E+03
NFW	m^3	3.31E-01

Acronyms: 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 material, RSF = use of renewable secondary fuels, NRSF = use of non-renewable secondary fuels, NFW = net use of fresh water

Waste Indicators

Indicator	Unit	A1-A3
HWD	kg	2.17E-03
NHWD	kg	2.39E-02
RWD	kg	3.84E-03

Acronym: HWD = hazardous waste disposed, NHWD = non-hazardous waste disposed, RWD = radioactive waste disposed

Output Flow Indicators

Indicator	Unit	A1-A3
CRU	kg	0.00E+00
MFR	kg	2.60E+00
MER	kg	0.00E+00
EE	MJ	0.00E+00

Acronyms: CRU = components for re-use, MR = materials for recycling, MER = materials for energy recovery, EE = exported energy

Additional Mandatory Indicators

Indicator	Unit	A1-A3
GWP-GHG	kg $CO_{2\ eq.}$	7.01E+02

Acronym: GWP-GHG = global warming potential greenhouse gas

Disclaimer: GWP GHG indicator accounts for all greenhouse gases except biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. As such, the indicator is identical to GWP-total except that the CF for biogenic CO2 is set to zero.

Interpretation of environmental performance

This report provides an average cradle-to-gate (A1–A3) analysis for CEM II. Modules A4 (transport to site) and A5 (installation) are excluded due to significant variability in logistics and application methods across diverse customer locations, making consistent and representative modelling unfeasible. The use stage (B modules) is not applicable to this intermediate material. End-of-life stages (C and D) are also excluded, as the product is typically integrated into larger structures and cannot be individually separated.

The overall quality of this EPD is high as the datasets are sourced entirely from 2024 operational data, validated internally, and reflect UK-specific production and transport practices, ensuring strong geographical, technical, and temporal alignment with the product's actual lifecycle. However, where data was not explicitly available conservative assumptions were applied.

When using this EPD for comparative purposes, it's important to note that it represents an average across two production sites. While variability between the sites is low (GWP GHG = <5%), results are still specific Tarmac's internal processes and datasets. As such, the EPD reflects product performance under Tarmac's operational conditions and may not align with data from other producers or regions. Consequently, comparisons with other EPDs should be approached cautiously and only when methodologies, system boundaries, and data quality are demonstrably equivalent.

To support transparency, this report outlines key assumptions, modelling scenarios, and data sources used throughout the assessment. Where applicable, site-specific values, averaging methods, and exclusions have been noted to help contextualise the declared results. Users are encouraged to consider the methodological choices and potential limitations when interpreting the findings, particularly in comparative analysis or decision-making.

Abbrevations

1. PLC: Portland Limestone Cement (CEM II)
2. PC: Portland Cement (CEM I)
3. FEL: Front ended loader
4. GCCA: Global Cement and Concrete Association

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Version history

Original Version: Published 2025-10-07

Version 2: Updated 2025-12-19: Addition of Net Values as text beneath the Mandatory Category Impact Indicators Results Table.

Version 3: Updated 2026-02-23: Edition prepared prior to the minor verification update and before submitting Version 4 for review.

Version 4: Updated 2026-02-27: Revision to the product description section.