Rebuilt® Verified
Product Carbon Footprint
Limited Assurance

ISO 14067
ISO 14064-3
EN 15804+A2
rebuilt.eco/pcf

Baines Masonry All Products
Independently Verified Product Carbon Footprint (PCF) Full Report

14 October 2025

Rebuilt

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Document overview

This Product Carbon Footprint (PCF) report provides a transparent and verified account of the greenhouse gas (GHG) emissions associated with Baines Masonry All Products.

This report has been prepared by the declaration owner using primary and secondary data. The report conforms to international standard ISO 14067 and it is compiled using a range of high quality data sources. The results of this report has been reviewed by a suitably qualified Rebuilt LCA professional and verified in accordance to ISO 14064-3. This report demonstrates the declaration owner's commitment to transparency, sustainability excellence and continuous improvement.

Users of this PCF are responsible for evaluating the applicability of the data for their intended purposes.

Benefits of using this Product Carbon Footprint

This document can be used to:

- Inform your customers about the embodied emissions in your products
- Meet procurement and tender requirements
- Identify hot spots and opportunities for making improvements in carbon intensity over time
- Input into mandatory corporate carbon disclosure reporting.

PCFs and EPDs: making comparisons

Both Product Carbon Footprints (PCFs) and Environmental Product Declarations (EPDs) are based on lifecycle assessment methodologies (ISO 14044), so their results are technically interoperable. However, comparisons should be approached with care:

- Data sources differ. Even within the same product category, PCFs and EPDs may draw on different reference datasets, assumptions, or cut-off rules, leading to variation in results.
- Rules matter. Results are only directly comparable if they apply the same Product Category Rules (PCRs), which set the boundaries and methods for assessment.
- Timing matters. PCFs and EPDs last for five years. Assessments carried out at different times may reflect changes in datasets, methodologies, or manufacturing processes.
- Lifecycle stages vary. Not all PCFs and EPDs cover the same modules (e.g. raw materials, manufacturing, transport, use, end-of-life). Different system boundaries can significantly affect results. Use the breakdown tables to compare like-for-like.
- Detail drives accuracy. Expert interpretation is often needed to judge whether results are genuinely comparable and to avoid misleading conclusions.
- Project context is key. The most meaningful comparison comes from assessing products in the context of the whole project or structure, not in isolation.

Results at a glance

Baines Masonry All Products

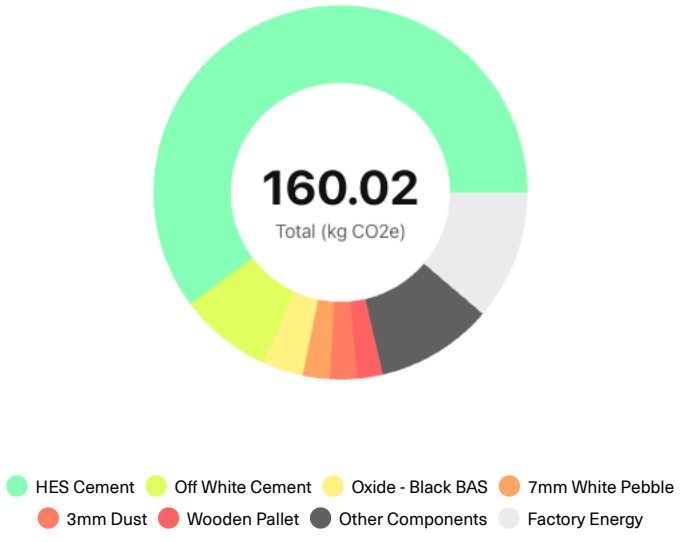
BAINES MASONRY BLOCKS PTY LTD

Total upfront carbon (Fossil)
(A1-A3)

160.02 Carbon Footprint
kg CO2e /tonne

Carbon impact (Fossil)

Relative carbon impact of the components of the product



Component name	Weight (kg)	kg CO2e	% of total kg CO2e
Oxide - Black BAS	1.69	5.68	3.55
Oxide - Yellow	0.16	0.42	0.26
Tertiary Limestone	70.03	1.69	1.05
Off White Cement	15.29	12.85	8.03
HES Cement	107.05	96.28	60.17
Mittagong Sand G31M	66.41	0.66	0.41
Penrose Sand	178.61	2.35	1.47
3mm Dust	189.13	3.74	2.34
Water	28.14	0.01	< 0.01
Eraring Ash	116.12	2.97	1.85
Quantec PL-433	0.49	0.83	0.52
Tech Dry - Block Emulsion	0.41	2.50	1.56
5mm w/fines	146.27	2.89	1.81
7mm White Pebble	79.82	3.76	2.35
Oxide - White	0.35	0.19	0.12
Oxide - Red	0.03	0.08	0.05
Wooden Pallet	10.04	3.56	2.23
Polyester Strap	0.02	0.17	0.10
Stretchwrap	0.14	1.18	0.74
Topsheet	0.03	0.23	0.14
Packaging Tape	< 0.01	< 0.01	< 0.01
Factory Energy	0.00	17.99	11.24
	Total (kg)	Total (kg CO2e)	
	1,010.23	160.02	

Carbon intensity by life cycle stage

Carbon impact from raw materials (A1), transport to factory (A2), production activities (A3), transport to site (A4), and installation (A5).

Type	A1 (kgCO2e)	A2 (kgCO2e)	A3 (kgCO2e)
Fossil	122.43	14.46	23.13
Biogenic	0.04	0.00	-15.90
Luluc	0.05	0.00	0.01
	Total (kgCO2e)	Total (kgCO2e)	Total (kgCO2e)
	122.51	14.46	7.24

Report information

Publication date	October 14, 2025
Valid until	October 14, 2030
Independently verified	Declaration owner generated report Reviewed and verified by Rebuilt
Verifier contact	www.rebuilt.eco verified@rebuilt.eco
Geographic scope	This claim covers production in Australia
Data collection period	1 July 2024 - 30 June 2025
Standards compliance	ISO 14040, ISO 14044, ISO 14064-3, ISO 14067, ISO 14071
Product Category Rules (PCR)	EN 15804+A2:2019

This PCF report has been created and verified in accordance with:

ISO 14067 ISO 14064 GREENHOUSE GAS PROTOCOL International Standard on Sustainability Assurance (ISSA 5000)

Company information

Declaration owner	BAINES MASONRY BLOCKS PTY LTD
Company description	-
Company location	Appin, Australia
Manufacturing facility	Baines Masonry Blocks
Manufacturing location	Appin, Australia

Product information

Product name	Baines Masonry All Products
SKU	Average of all Products: 020-144, 020-146, 10-01, 10-03, 10-109, 10-121, 10-31, 11-076, 15-01, 15-43, 15-12, 15-41, 15-48, 20-01, 20-01/02, 20-12, 20-121/142, 20-139, 20-41/20, 20-42, 20-42/01, 20-43, 20-45, 20-48, 20-71, 225-01, 225-34, 30-142, 30-41, 30-42, 30-45, 30-48, 50-31, 50-31 NAT, 50-33, 60-200, 60-230, 60-240, GSC, LB 20-91
Description	Baines Masonry is an Australian company that manufactures a range of concrete masonry products. Baines Masonry products including retaining wall systems, structural concrete blocks, pavers and landscaping solutions are engineered to meet Australian Standards, and are noted for their durability, versatility, and fire resistance. Baines Masonry has a strong focus on sustainability in its manufacturing processes. As a family-owned and operated business, they have integrated environmentally conscious practices into our operations, a commitment that has evolved over three generations. Our primary approach to sustainability is through the use of recycled materials. Baines Masonry incorporates industrial waste products, such as bottom ash from power stations, into their concrete mixes. This practice serves a dual purpose: it diverts waste from landfills and reduces the need for virgin raw materials. By utilizing these by-products, they significantly decrease their environmental footprint and contribute to a circular economy. So this report includes the average PCF for all Baines Masonry Products. The company's products are not only engineered for durability and longevity, but they are also designed to be environmentally friendly. Their concrete masonry units are a low-maintenance, fire-resistant, and thermally efficient building material, which can help reduce a building's energy consumption over its lifespan. In addition to their material choices, Baines Masonry is also committed to minimizing water usage and reusing water in their manufacturing processes. This responsible water management further solidifies their position as a company

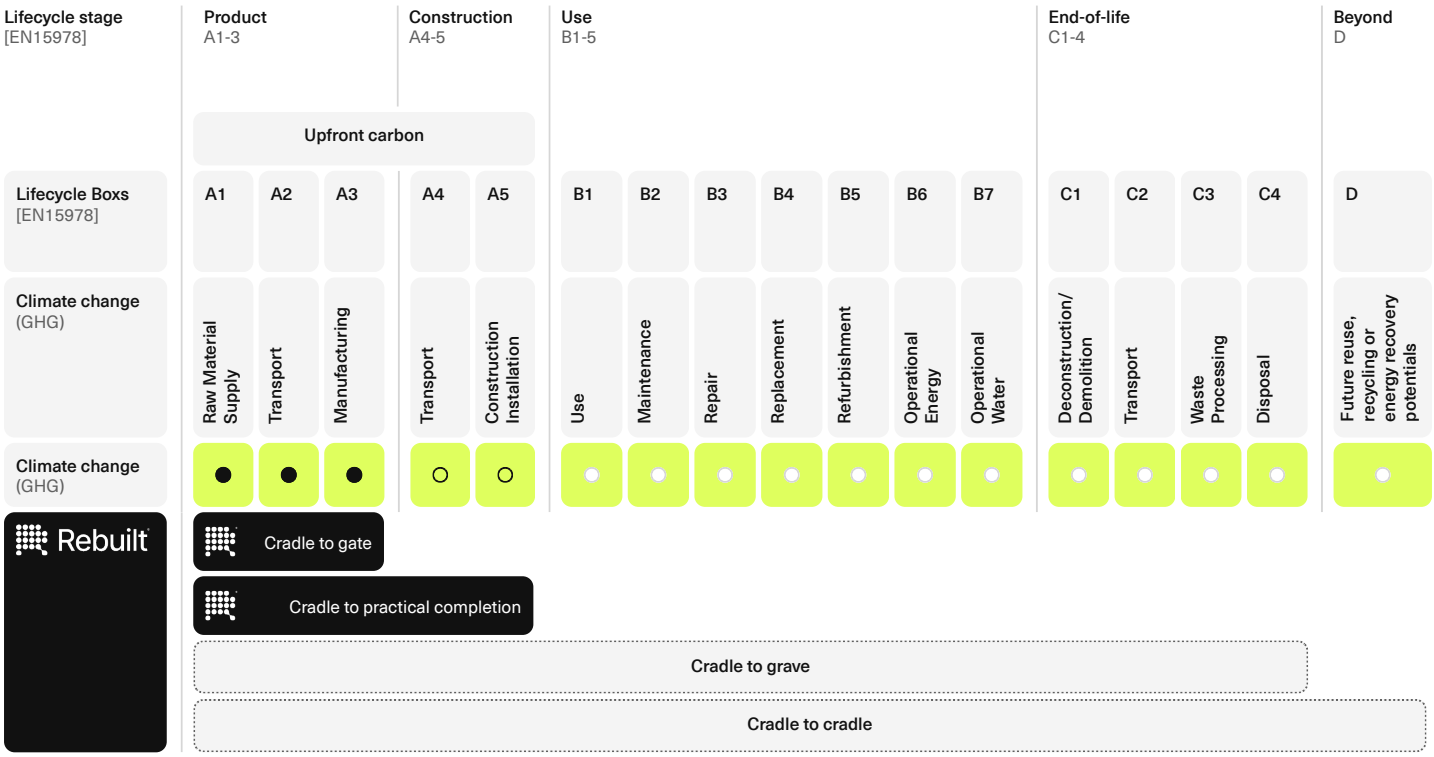
	dedicated to sustainable and ethical practices within the building and construction industry.
Net weight (kg) per declared unit	1,000.00
Declared unit	1 tonne For the purposes of this report, declared unit is taken to be an individual unit as sold.
Recycled content	-
ANZSIC	2034
UNICLASS code	Pr_20_93_52_01

Technical information

Report boundary

This declaration shows the global warming potential (GWP) of the greenhouse gases embodied in this product, expressed in kilograms of carbon dioxide and equivalent gasses with global warming potential (kgCO2-e) and is based on the results of a pre-verified LCA performed in accordance with ISO14067 process and procedure as well as ISO14025 and nominated PCR EN15804.

NOTE: This declaration is limited to the life cycle stages shown in the table below.



A1 - Raw Material Extraction

The raw materials stage also called background or upstream covers the extraction and production of the raw materials needed to manufacture the product. It includes the processing of the extracted raw material to the point where it can be made into a recognisable part.

A2 - Transport Raw Material to Factory

This stage outlines the calculation of CO_2 emissions (Stage A2) for transporting raw materials to the factory. It considers transport modes, distances travelled, and material weights to calculate emissions.

A3 - Manufacturing

Converting raw materials into parts and made into the final product. It considers energy usage, packaging, process emissions and production waste.

A4 - Transport to Site

Not reported as part of this scope

A5 - Construction & Installation

Not reported as part of this scope

B - Use Phase

Not reported as part of this scope

C - End of Life

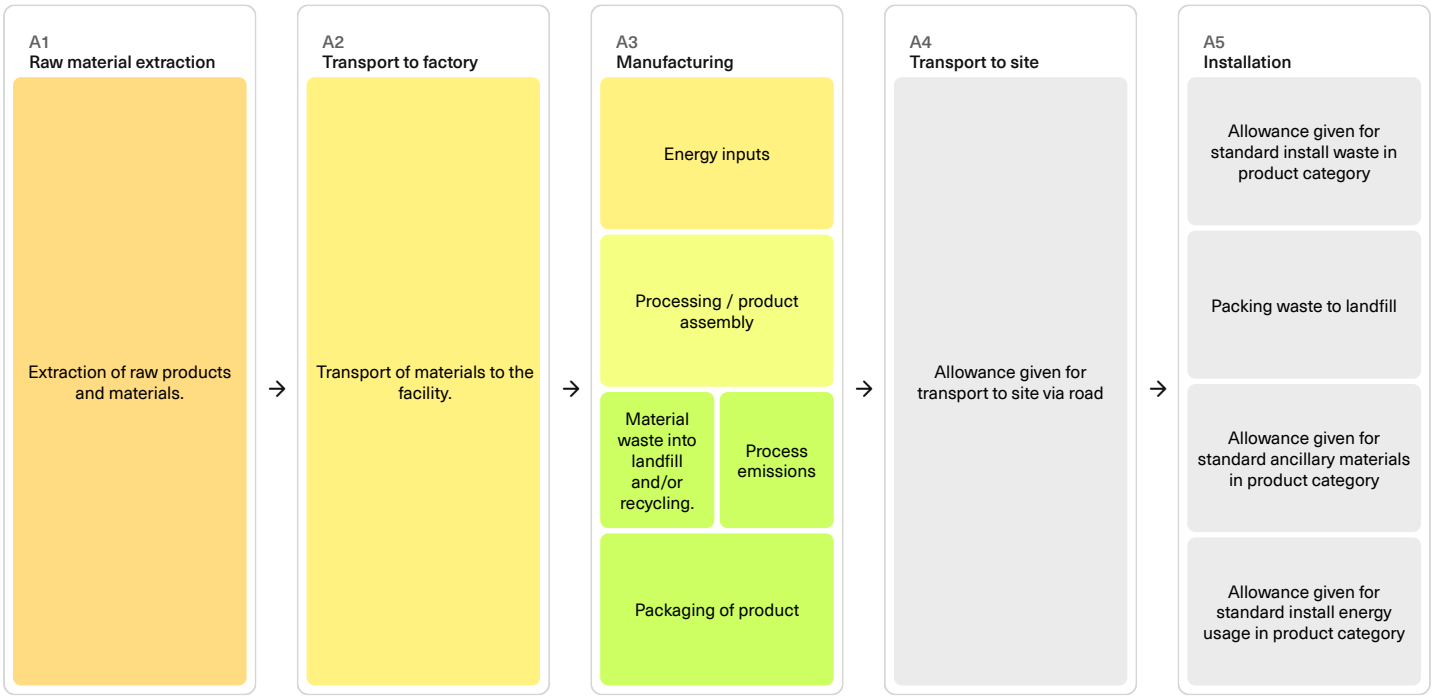
Not reported as part of this scope

D - Beyond

Not reported as part of this scope

Technical information (continued)

Process flow diagram



Exclusions from A1
None

Exclusions from A2
None

Exclusions from A3
None

Exclusions from A4
Not reported as part of this scope

Exclusions from A5
Not reported as part of this scope

Cut-off criteria

Individual processes may be excluded if their contributions to the total system's environmental impact are less than 1%. The aggregate cut-off criteria of this PCF follows PCR 2019:14 guideline where a minimum of 95% of total input (mass and energy) for each life cycle stage are included. Exclusions from the PCF is outlined in "Data Assumptions, Choices and Limitations".

The use stage is excluded from the study due to the uncertainty related to the multiple possible applications of the products assessed.

The following processes were left out of the system boundaries, in conformity to usual practices in carbon footprinting: labor, commuting of workers and administrative work.

Allocation procedures

The allocation method for this PCF is based on a physical (mass) basis. The energy used by the product is allocated by normalising the total energy used in the factory to the total mass of the product to the total production mass output from the same factory.

Results

Total upfront carbon (Fossil)
(A1-A3)

160.02 Carbon Footprint
kg CO2e /tonne

Carbon intensity by life cycle stage

Type	A1 (kgCO2e)	A2 (kgCO2e)	A3 (kgCO2e)
Fossil	122.43	14.46	23.13
Biogenic	0.04	0.00	-15.90
Luluc	0.05	0.00	0.01
	Total (kgCO2e)	Total (kgCO2e)	Total (kgCO2e)
	122.51	14.46	7.24

Carbon intensity by raw material

Material	GWP Fossil (kgCO2e)	GWP Biogenic (kgCO2e)	GWP Luluc (kgCO2e)	GWP Total (kgCO2e)
Oxide - Black BAS	5.42	-0.00	0.04	5.47
Oxide - Yellow	0.40	-0.00	< 0.01	0.40
Tertiary Limestone	0.79	0.00	0.00	0.79
Off White Cement	12.80	0.00	0.00	12.80
HES Cement	95.60	0.00	0.00	95.60
Mittagong Sand G31M	0.24	< 0.01	< 0.01	0.24
Penrose Sand	0.64	< 0.01	< 0.01	0.64
3mm Dust	1.32	< 0.01	< 0.01	1.32
Water	0.01	< 0.01	< 0.01	0.01
Eraring Ash	0.00	0.00	0.00	0.00
Quantec PL-433	0.83	< 0.01	< 0.01	0.83
Tech Dry - Block Emulsion	2.46	0.03	< 0.01	2.49
5mm w/fines	1.02	< 0.01	< 0.01	1.02
7mm White Pebble	0.69	< 0.01	< 0.01	0.70
Oxide - White	0.13	< 0.01	< 0.01	0.13
Oxide - Red	0.07	-0.00	< 0.01	0.07
	Total (kgCO2e)	Total (kgCO2e)	Total (kgCO2e)	Total (kgCO2e)
	122.43	0.04	0.05	122.51

Results (Continue)

Carbon intensity by transport type

Material	Transport mode	GWP Fossil (kgCO2e)	GWP Biogenic (kgCO2e)	GWP Luluc (kgCO2e)	GWP Total (kgCO2e)
Wooden Pallet	By road, diesel truck, 16 to 28t, fleet average	0.13	0.00	0.00	0.13
Oxide - Black BAS	Multi-leg transport	0.25	0.00	0.00	0.25
Oxide - Yellow	Multi-leg transport	0.02	0.00	0.00	0.02
Polyester Strap	By road, diesel truck, 16 to 28t, fleet average	< 0.01	0.00	0.00	< 0.01
Tertiary Limestone	By road, diesel truck, 16 to 28t, fleet average	0.90	0.00	0.00	0.90
Stretchwrap	By road, diesel truck, 16 to 28t, fleet average	< 0.01	0.00	0.00	< 0.01
Off White Cement	By road, diesel truck, 16 to 28t, fleet average	0.05	0.00	0.00	0.05
HES Cement	By road, diesel truck, 16 to 28t, fleet average	0.68	0.00	0.00	0.68
Mittagong Sand G31M	By road, diesel truck, 16 to 28t, fleet average	0.42	0.00	0.00	0.42
Penrose Sand	By road, diesel truck, 16 to 28t, fleet average	1.71	0.00	0.00	1.71
Topsheet	By road, diesel truck, 16 to 28t, fleet average	< 0.01	0.00	0.00	< 0.01
Packaging Tape	By road, diesel truck, 16 to 28t, fleet average	< 0.01	0.00	0.00	< 0.01
3mm Dust	By road, diesel truck, 16 to 28t, fleet average	2.42	0.00	0.00	2.42
Water	N/A	0.00	0.00	0.00	0.00
Eraring Ash	By road, diesel truck, 16 to 28t, fleet average	2.97	0.00	0.00	2.97
Quantec PL-433	By road, diesel truck, 16 to 28t, fleet average	< 0.01	0.00	0.00	< 0.01
Tech Dry - Block Emulsion	By road, diesel truck, 16 to 28t, fleet average	0.05	0.00	0.00	0.05
5mm w/fines	By road, diesel truck, 16 to 28t, fleet average	1.87	0.00	0.00	1.87
7mm White Pebble	By road, diesel truck, 16 to 28t, fleet average	3.06	0.00	0.00	3.06
Oxide - White	Multi-leg transport	0.05	0.00	0.00	0.05
Oxide - Red	Multi-leg transport	< 0.01	0.00	0.00	< 0.01
		Total (kgCO2e)	Total (kgCO2e)	Total (kgCO2e)	Total (kgCO2e)
		14.59	0.00	0.00	14.59

Carbon intensity by energy source

Energy type	GWP Fossil (kgCO2e)	GWP Biogenic (kgCO2e)	GWP Luluc (kgCO2e)	GWP Total (kgCO2e)
Diesel oil, Euro iv or higher, heavy vehicles	2.45	0.00	0.00	2.45
Natural gas from grid	6.08	0.00	0.00	6.08
Purchased from grid (high voltage)	9.46	0.00	0.00	9.46
	Total (kgCO2e)	Total (kgCO2e)	Total (kgCO2e)	Total (kgCO2e)
	17.99	0.00	0.00	17.99

Carbon intensity by packaging material

Material	GWP Fossil (kgCO2e)	GWP Biogenic (kgCO2e)	GWP Luluc (kgCO2e)	GWP Total (kgCO2e)
Wooden Pallet	3.56	-15.92	0.01	-12.35

Results (Continue)

Polyester Strap	0.17	0.02	< 0.01	0.19
Stretchwrap	1.18	< 0.01	0.00	1.19
Topsheet	0.23	-0.00	< 0.01	0.22
Packaging Tape	< 0.01	0.00	< 0.01	< 0.01
	Total (kgCO2e)	Total (kgCO2e)	Total (kgCO2e)	Total (kgCO2e)
	5.14	-15.90	0.01	-10.75

Carbon intensity by process emissions

Material	GWP Fossil (kgCO2e)	GWP Biogenic (kgCO2e)	GWP Luluc (kgCO2e)	GWP Total (kgCO2e)
	Total (kgCO2e)	Total (kgCO2e)	Total (kgCO2e)	Total (kgCO2e)
	0.00	0.00	0.00	0.00

Carbon intensity by waste treatment

Material	Waste treatment type	GWP Fossil (kgCO2e)	GWP Biogenic (kgCO2e)	GWP Luluc (kgCO2e)	GWP Total (kgCO2e)
Oxide - Black BAS	N/A	0.00	0.00	0.00	0.00
Oxide - Yellow	N/A	0.00	0.00	0.00	0.00
Tertiary Limestone	N/A	0.00	0.00	0.00	0.00
Off White Cement	N/A	0.00	0.00	0.00	0.00
HES Cement	N/A	0.00	0.00	0.00	0.00
Mittagong Sand G31M	N/A	0.00	0.00	0.00	0.00
Penrose Sand	N/A	0.00	0.00	0.00	0.00
3mm Dust	N/A	0.00	0.00	0.00	0.00
Water	N/A	0.00	0.00	0.00	0.00
Eraring Ash	N/A	0.00	0.00	0.00	0.00
Quantec PL-433	N/A	0.00	0.00	0.00	0.00
Tech Dry - Block Emulsion	N/A	0.00	0.00	0.00	0.00
5mm w/fines	N/A	0.00	0.00	0.00	0.00
7mm White Pebble	N/A	0.00	0.00	0.00	0.00
Oxide - White	N/A	0.00	0.00	0.00	0.00
Oxide - Red	N/A	0.00	0.00	0.00	0.00
		Total (kgCO2e)	Total (kgCO2e)	Total (kgCO2e)	Total (kgCO2e)
		0.00	0.00	0.00	0.00

References

- ISO 14040:2006+A1:2020 - Environmental management - Life cycle assessment - Principles and framework
- ISO 14044:2006+A2:2020 - Environmental management - Life cycle assessment - Requirements and guidelines
- ISO 14067:2018 (First Edition) - Greenhouse gases - Carbon footprint of products - Requirements and guidelines for quantification
- EN 15804:2012+A2:2019 - Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products
- Australian National Life Cycle Inventory Database (AusLCI) version 1.42 (May 2023)
- ecoinvent database v3.11 (November 2024)
- Australian National Greenhouse Accounts Factors 2024