



PUBLIC DISCLOSURE STATEMENT


AUSTRAL BRICKS (TAS) PTY LTD

PRODUCT CERTIFICATION

FY2024-25

Australian Government
Climate Active
Public Disclosure Statement



NAME OF CERTIFIED ENTITY	Austral Bricks (TAS) Pty Ltd
REPORTING PERIOD	1 July 2024 – 30 June 2025 Arrears report
DECLARATION	<p><i>To the best of my knowledge, the information provided in this public disclosure statement is true and correct and meets the requirements of the Climate Active Carbon Neutral Standard.</i></p>  <p>Matthew Gordon Business Manager Tasmania 30th April 2025</p>



Australian Government
**Department of Climate Change, Energy,
the Environment and Water**

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Version 10.

1.CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	6372 tCO ₂ -e
CARBON OFFSETS USED	47% ACCUs, 53% VCUs
RENEWABLE ELECTRICITY	N/A
CARBON ACCOUNT	Prepared by: Brickworks Building Products
TECHNICAL ASSESSMENT	21 December 2023 Energetics Next technical assessment due: FY 2026

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2. CERTIFICATION INFORMATION

Description of product certification

This product certification is for bricks and pavers manufactured at Austral Bricks (Tas) Pty Ltd's Longford site (Figure 1). At this site Austral Bricks produces a range of bricks and pavers for the Tasmanian, other Australian markets and overseas markets.

- Functional unit: tonne of bricks or pavers manufactured in Longford and used in various applications throughout Tasmania, interstate and overseas.
- Offered as: full coverage product
- Life cycle: cradle-to-grave

Bricks manufactured at other sites are excluded from this certification.

The responsible entity for this product certification is Austral Bricks (Tas) Pty Ltd, ABN 83 125 934 947.

This Public Disclosure Statement includes information for FY2024-25 reporting period.

In FY2025 an EPD was published for this product. Therefore the carbon account is now based on the Environmental Product Declaration (EPD) for Clay Bricks from Austral Bricks and Daniel Robertson, Longford, Tasmania v2.0 (published 20 May 2025).

This EPD is published under the EPD Australasia Programme and is in accordance with ISO 14025:2006 and EN 15804:2012+A2:2019/AC:2021. The EPD is available on the [EPD Australasia website](#) or the [Brickworks website](#). The EPD covers cradle-to-grave life cycle stages, including cradle-to-gate (modules A1-A3), plus end-of-life (modules C1-C4). This product certification also includes delivery to customer (module A4). Modules A5 (construction process) and B1-B7 (use) have not been included due to the inability to predict how the material will be used following manufacture. The carbon inventory for our bricks and pavers has been calculated based on the global warming potential (GWP-total) results of the EPD.

Description of business

Brickworks Limited (Brickworks) is one of the Australia's leading providers of building products. Austral Bricks, a subsidiary of Brickworks has been transformed from originally a New South Wales state based operation to a national organisation with manufacturing operations in NSW, Victoria, Tasmania, South Australia, Western Australia and Queensland. Austral Bricks manufactures and markets clay products such as bricks and pavers. The manufacturing process involves mining clay and shale and mechanically processing it prior to shaping and firing the bricks in kilns fuelled predominately by natural gas.

Austral Bricks Longford, Tasmania operates a low carbon operation whereby the kiln is predominately fired by sawdust. It has manufactured carbon neutral bricks since 2013/14 under the Climate Active Standards.

Brickworks brick products are manufactured to Australian Standard AS/NZS 4455 and AS 3700. Product quality testing is performed in accordance with AS/NZS 4456. Further details on product use and design for different applications can be found on Brickworks' website and more specifically our bricks product page and [product information page](#).



3. EMISSIONS BOUNDARY

Inside the emissions boundary

All emission sources listed in the emissions boundary are part of the carbon neutral claim.

Quantified emissions have been assessed as 'attributable processes' of a product or service. These attributable processes are services, materials and energy flows that become the product or service, make the product or service and carry the product or service through its life cycle. These attributable emissions have been quantified in the carbon inventory.

Non-quantified emissions have been assessed as attributable and are captured within the emissions boundary, but are not measured (quantified) in the carbon inventory. All material emissions are accounted for through an uplift factor. Further detail is available at Appendix C.

Attributable emissions sources can be **excluded** from the carbon inventory but still considered as part of the emissions boundary if they meet **all three of the below criteria**. An uplift factor may not necessarily be applied.

1. A data gap exists because primary or secondary data cannot be collected (**no actual data**).
2. Extrapolated and proxy data cannot be determined to fill the data gap (**no projected data**).
3. An estimation determines the emissions from the process to be **immaterial**).

Outside the emissions boundary

Non-attributable emissions have been assessed as not attributable to a product or service. They can be listed as outside of the emissions boundary (and are therefore not part of the carbon neutral claim).

Further detail is available at Appendix D.

Inside emissions boundary

Quantified

Raw materials: Clay, oxides, additives

Manufacturing operations: Fuel, Electricity, calcinations emissions, water, waste water treatment, waste disposal, calcination emissions, packaging etc

Transport: Raw materials to manufacturing site, transfers between manufacturing sites and transport up to the first delivery point to customer

End of life: Deconstruction / demolition, transport to waste processing, waste processing and disposal

Non-quantified

Minor ancillary materials and packaging

Excluded

N/A

Outside emission boundary

Non-attributable

Head office business travel

Head office energy use

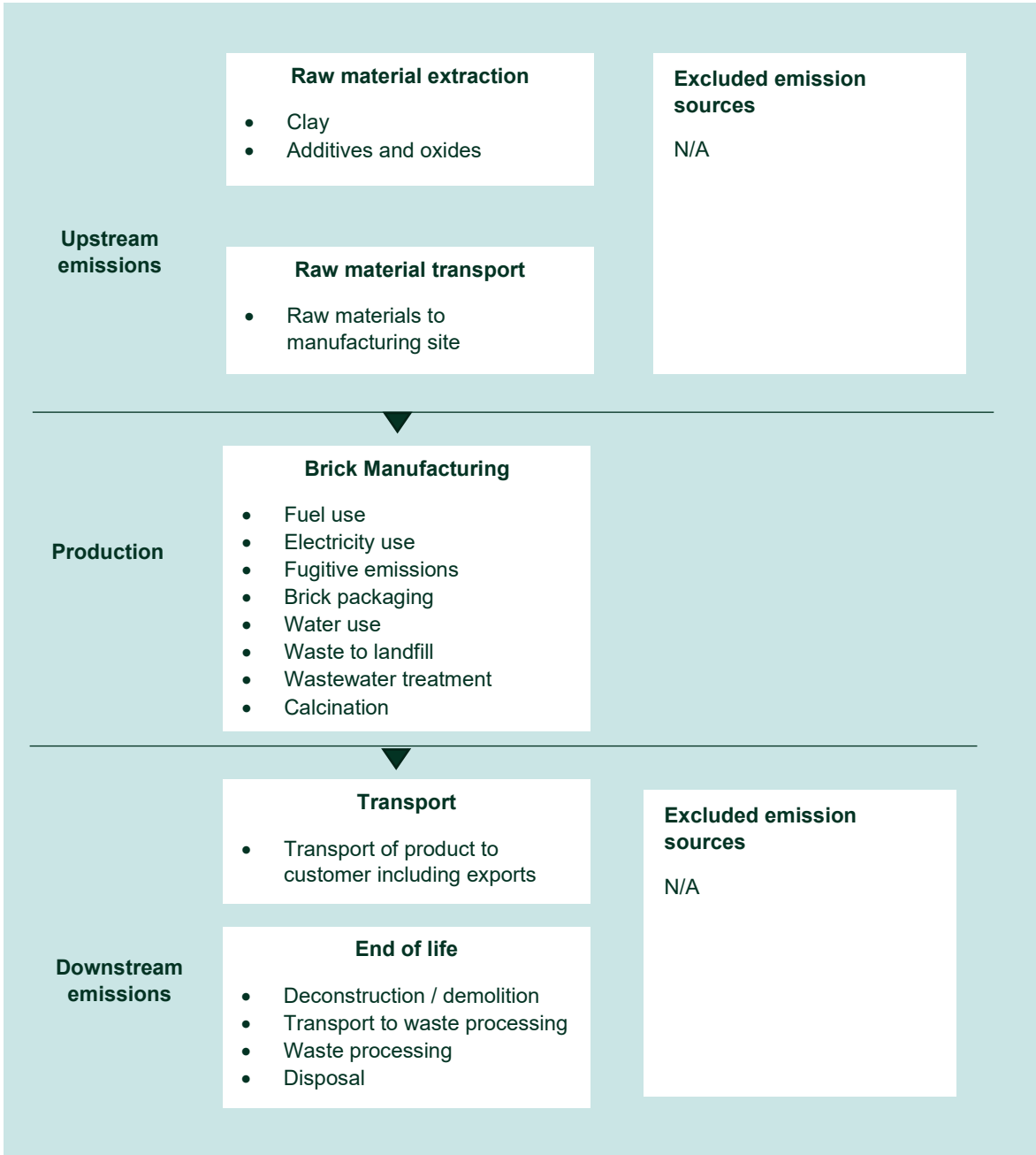
Capital goods

Construction / installation

Use stage

Product process diagram

Cradle-to-grave boundary



4. EMISSIONS REDUCTIONS

Emissions reduction strategy

As a subsidiary of Brickworks Limited, Austral Bricks Tasmania has the backing of professional teams in environment, sustainability and research and development. Brickworks has made significant sustainability strides, FY2025 emissions fell 28% from FY2022 levels, driven by maintenance activities and intermittent plant shutdowns, while brick carbon intensity improved 4% per m² globally. Brickworks' enhanced target is a 15% reduction in brick carbon intensity (Scope 1 and 2) by 2030, from baseline FY22, across combined Australian and North American operations. This intensity-based approach supports greater overall abatement, maintains flexibility for growth, and ensures continued transparent reporting of both absolute and intensity metrics.

The carbon target is also underpinned by our stretch target for a 10% increase in gas efficiency at Austral Brick plants by 2030 since FY2018. Since FY2018, which marked the start of a strategic 10-year investment vision to drive energy efficiency, our Austral Bricks business has seen a 7.4% improvement in gas efficiency.

Brickworks has over 12 years of experience in providing carbon neutral products from our Longford Tasmania facility which produces one of Australia's lowest embodied carbon fired clay bricks. In FY2025 Brickworks published an Environmental Product Declaration for the Longford manufacturing facility which shows that products produced at this site are 56% lower in embodied carbon per m² than industry references¹.

Longford uses 73% bioenergy of the site's energy mix, which has avoided over 95,000 t CO₂-e in emissions over 12 years. Residual emissions from the lifecycle of brick manufacture and sales from Longford have been offset over the last 12 years. We seek to replicate the success of this low brick carbon manufacturing process across Brickworks sites.

According to estimates by the Australian Renewable Energy Agency, bioenergy could account for 33% of the industrial heat processing needs by 2030. We are actively advancing various feasibility studies for a series of projects designed to significantly boost the utilisation of bioenergy including additional landfill gas resources, integrating alternative organic raw materials, and generating on-site bioenergy through anaerobic digestion.

¹ Comparisons are "cradle to gate". Brickworks performance is based on weighted average and published EPD "GWP-Total" and are compared to AusLCI v1.42 Carbon Emission Factors (Construction) using "Climate Change – CN".

Climate Related Strategy and Programs

In Australia, Brickworks Limited carbon emissions have followed a general downward trend, with a 61% decrease in FY2025 compared to the base year 2005/06 (Scope 1 and 2).

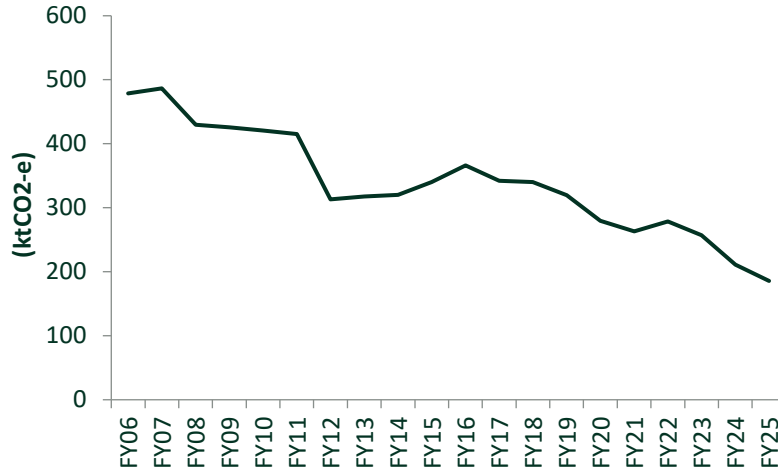


Figure 1. Brickworks Building Products Australia Greenhouse Gas Emissions Since FY06 (ktCO2-e)

The decrease is attributed to efficiencies gained from alternate fuels, manufacturing consolidation, equipment upgrades and operational improvements. Brickworks has invested over \$400 million dollars since 2006 in equipment upgrades and operational improvements (including new plants) and carbon reduction strategies.

Our climate-related strategy, targets and programs build on these achievements, focusing on four key areas, including efficiency, lower carbon energy sources, innovation and improving the energy efficiency of homes over lifetime operations.

Sawdust is the main fuel source at Austral Bricks Longford, Tas and is a waste acquired from various Tasmanian sawmills. While the use of sawdust is less energy efficient than natural gas, its bioenergy component means that net carbon emissions from the combustion of sawdust is 40 times lower than natural gas avoiding over 5,700 tonnes of greenhouse gas emissions.

In addition to this Brickworks continue research and development projects that are embedded into production across the Brickworks Building Product operations including new products and efficiency gains. The relevant projects for Austral Bricks are described below.

Thermal mass

Provide leading research on passive thermal design enabling reduced lifetime energy use. We have invested in updating critical thermal mass research demonstrating benefits from thermal mass with the University of Newcastle. We continue to educate designers and customers on the advantages of thermal mass in design through tailored advice to optimise customer designs to maximise NatHERS ratings for seven stars and beyond.

Light-weighting and higher recycled content

Brickworks' dedication to excellence means our products are fired in some of the leading energy-efficient kilns, with ongoing research to reduce brick weight through enhanced core percentage and innovative core patterns, resulting in savings on clay, energy, fuel, and ease for bricklayers.

Using enhanced clay materials, our Queensland and NSW brick factories have increased core percentage for some products from 27-28% to 41%, reducing material use by 18%, cutting energy consumption, and maintaining/improving product quality while increasing kiln capacity. These gains are being rolled out across selected Austral Brick products.

Raw material optimisation

Optimal raw material mixes can reduce embodied carbon or process heat demands. Brickworks commitment to innovation continues to be rewarded by significant developments in energy savings and premium product development. Ongoing research into traditional clay materials has provided us with a deep understanding of their physical and chemical properties. This knowledge allows us to successfully develop raw material optimised mixes which require less process heat energy, reducing the embodied carbon of bricks.

Emissions reduction actions

Austral Bricks Tasmania's FY2025 maintenance program continued to focus on minimising thermal leakage and improving energy efficiency. Alongside this, several unquantified improvements were made, including

- light weighting bricks by increasing core percentage, leading to savings in clay, energy, and transport fuel and
- reducing raw material transport distance by sourcing clay raw materials closer to the factory.

Austral Bricks Tasmania continues to investigate reducing packaging and optimising transport routes to further reduce emissions in the future.

5. EMISSIONS SUMMARY

Emissions over time

Our Longford plant has been licensed under Climate Active since 2012-13. In 2024-25 Brickworks an EPD was developed and published for the products produced at our Longford Plant. This assessment covers all bricks and pavers made at the Longford plant and covers the emissions boundary as previously described. In addition to the EPD assessment, Brickworks also uses a simplified carbon calculator to estimate the emissions for transport of the product to our customers for both domestic and export sales.

The FY2024-25 reporting period has now been set as a new base year, replacing FY2012-13. There are methodology changes between the EPD product category rules (PCR) and the life cycle assessment initially completed for our initial climate active assessment. These changes include a shift to EPD based methodology (EN 15804+A2), the inclusion of biogenic emissions, market-based electricity accounting and new system boundaries and factors that prevent alignment with previous years.

Emissions since base year			
		Total tCO ₂ -e	Percentage change in the Emissions intensity per tonne
Year 0:	2012-13	3402	
Year 1:	2013-14	3668	
Year 2:	2014-15	3381	
Year 3:	2015-16	4832	
Year 4:	2016-17	5088	
Year 5:	2017-18	5932	
Year 6:	2018-19	5054	
Year 7:	2019-20	6656	100%
Year 8:	2020-21	6188	99%
Year 9:	2021-22	5467	86%
Year 10:	2022-23	5334	93%
Year 11:	2023-24	4940	90%
New base year: Year 12:	2024-25	6372	N/A - due to the reasons noted above, the emissions intensity of the product for this reporting period is not comparable

Production numbers are confidential and therefore emission intensity has been expressed as a percentage change.

Significant changes in emissions

Emission source	Previous year emissions (t CO ₂ -e)	Current year emissions (t CO ₂ -e)	Reason for change
EPD - A1-3 Production of bricks	2828.4	3682.5	Change in methodology - Now based on EPD, includes biogenic carbon emissions
Transport of product to customer	1726.2	2133.5	Increased sales into VIC and NSW (increased transport distance)

The difference in year 12 emissions and previous year's emissions is due to methodology changes between the EPD product category rules (PCR) and the life cycle assessment initially completed. The key methodology changes include:

- Accounting for biogenic emissions such as waste sawdust is required under the PCR whereas the National Greenhouse Account (NGA) factors used in the previous LCA model and Climate Active requirements do not contain any scope 3 emission factors for these biogenic materials
- Market based electricity accounting (as required under the PCR) rather than location-based electricity accounting used in the previous model.

Since 2013 the following changes in emissions have occurred:

- There has been an increase in natural gas usage following the introduction of sawdust drying equipment and burners to supplant coal as a fuel source in 2014. While these initiatives led to a rise in natural gas consumption, they concurrently reduced electricity and coal usage.
- Emissions from transportation to customers increased because of increased interstate transfers since 2013.
- Emissions from coal have decreased through the substitution of on-board coal with natural gas-fired segments of the kiln.
- Electricity usage emissions decreased with various energy efficiency activities undertaken since 2013. Details of these projects are outlined in each annual PDS.
- A minor increase in emissions due to the inclusion of calcination emissions from the firing of clay.

Use of Climate Active carbon neutral products, services, buildings or precincts

N/A

Emissions summary

Life cycle stage	tCO ₂ -e
Upstream emissions	3682.5
Product delivery	2133.5
Downstream emissions	555.8
Attributable emissions (tCO₂-e)/ tonne	6371.8

Product / Service offset liability	
Emissions intensity per functional unit	Commercial in confidence
Emissions intensity per functional unit including uplift factors	N/A
Number of functional units covered by the certification	Commercial in confidence
Total emissions (tCO₂-e) to be offset	6371.8

6. CARBON OFFSETS

Eligible offsets retirement summary

Offsets retired for Climate Active certification

Type of offset unit	Quantity used for this reporting period	Percentage of total units used
Australian Carbon Credit Units (ACCUs)	2993	46.97%
Verified Carbon Units (VCUs)	3379	53.03%

Project name	Type of offset unit	Registry	Date retired	Serial number	Vintage	Total quantity retired	Quantity used in previous reporting periods	Quantity banked for future reporting periods	Quantity used for this reporting period	Percentage of total used this reporting period
Thaa-Nguigarr Carbon Project, Qld	ACCU	ANREU	22/12/2021	8,329,894,393 - 8,329,896,392	2021-22	2000	970	537	493	16.16%
Crow Lake Wind Emissions Reduction Project	VCU	Verra Registry	29/06/2022	7609-410719671-410722160-VCU-043-MER-US-1-756-01012018-31122018-0	2018	2490	1969	0	521	8.18%
Usak Wind Power Plant, Turkey ²	VCU	Verra Registry	22/12/2021	8493-25265219-25269218-VCS-VCU-1590-VER-TR-1-1546-01012015-31122015-0	2015	4000	1142	0	2858	44.85%
Dulverton Landfill Gas Project	ACCU	ANREU	14/04/2025	8349311072 - 8349311072	2022-23	1	0	0	1	0.02%
Dulverton Landfill Gas Project	ACCU	ANREU	14/04/2025	8349311073 - 8349313571	2022-23	2499	0	0	2499	30.79%

² These offsets have been transferred from the Brickworks Building Products Opt In PDS. These credits were not previously used to offset any other carbon emissions and therefore no double counting of these units has occurred.

Co-benefits

Thaa-Nguigarr Carbon Project, Qld (ERF109636)

This project is an early dry season Savanna burning project aimed at reducing late dry season wildfires, and therefore reducing carbon emissions.

Balkanu Cape York Development Corporation Pty Ltd is the project proponent in association with the land holder Poonko Aboriginal Corporation and the Prescribed Body Corporate Thaa-Nguigarr. The project is carried out on Strathgordon Station covering an area of 118,000 hectares.

The project was declared by the Clean Energy Regulator on 20 December 2016. A fire management program was instigated in 2016 and continues to the present. This mitigates wildfire risk, conserves vegetation and animal species, protects wetlands and controls weeds. Burning takes place in the Early Dry Season each year, before the start date of the Late Dry Season of the 1st August. The operations are conducted by Traditional Owners and other staff as required.

The revenue from the sale of the carbon credits obtained enables Traditional Owners to support their landholding obligations and cultural and environmental aspirations for the property.

Dulverton Landfill Gas Project, Tas (EOP101207)

The Dulverton Landfill in Tasmania is now equipped with LMS Energy's advanced landfill gas system, designed to capture and destroy methane—a potent greenhouse gas—produced from decomposing organic waste. With around 17 gas wells, the system extracts approximately 150–200 cubic metres of gas per hour, reducing emissions by an estimated 10,000 tonnes of CO₂e annually. The captured gas is flared using LMS's high-efficiency, low-noise combustion technology, which is accredited for carbon credit schemes. ACCUs are only issued for abatement achieved above established baselines which represent the regulatory proportion of gas that would have been required to be captured at the landfill site. The incentivisation provided by the ACCU scheme allows LMS to go above and beyond this regulatory requirement and maximising gas capture. This initiative not only mitigates climate change but also provides clean, renewable energy to the local community.

International Units: Crow Lake Wind Emissions Reduction Project

Crow Lake Wind is a 162 MW wind farm located near Chamberlain, South Dakota. The project generates emissions reductions by displacing grid connected sources.

International Units: Usak Wind Power Plant, Turkey is a wind farm in Banaz Town of Usak Province, providing renewable electricity to the Turkish grid. The project also stimulates the economic development as wind power, being an infinite and natural resource, is ecologically more sustainable than other fossil fuel-based energy generation. From a local perspective, the project provides employment opportunities for local people. Ancillary works are undertaken by local companies providing opportunities to advance technological capacity.

7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

N/A

APPENDIX A: ADDITIONAL INFORMATION

Brickworks and Greening Australia Partnership

In 2025, Brickworks has established a partnership with Greening Australia to support Australian bushland restoration projects and through its carbon credits business, Canopy the selection of nature-based offsets to support our future FY2026 Climate active offerings.



Nature-based Carbon Credit Procurement (Australian & International Markets)

As a broker of carbon credits generated from Greening Australia projects and of high-quality third-party credits, Canopy is helping Brickworks meet our Climate Active certification. Canopy only sells high integrity nature-based ACCUs (Australian Carbon Credit Units) and international units verified under carbon standards that are fully compliant with the Australian Climate Active (carbon neutral) standard.

As a signatory to the voluntary Australian Carbon Industry Code of Conduct, Canopy Nature Based Solution is a signatory to the Carbon Market Institute's (CMI's) Carbon Industry Code of Conduct.

All profits from carbon offset brokerage are reinvested into Greening Australia's work.

We're proud to purchase a select portion of verified credits from large-scale, high-integrity projects to offset the emissions associated with our certified products. These offsets will be disclosed in future Climate Active Public Disclosure Statements.

Bush Regeneration Partnership (Non-Credit Generating)

Brickworks is proud to launch our new partnership with Greening Australia for bush regeneration.

Brickworks partners with Greening Australia to restore ecosystems and deliver broader environmental benefits beyond carbon offsets, while also working with Greening Australia's Canopy on nature-based offsets to support product carbon neutrality.

Through our partnership with Greening Australia, we're supporting targeted, landscape-scale restoration across NSW to create and protect critical habitat for the Glossy Black-Cockatoo. The Brickworks and Greening Australia partnership is contributing \$50,000 funding in 2025–26 for habitat restoration for the Glossy Black Cockatoo.

APPENDIX B: ELECTRICITY SUMMARY

N/A

APPENDIX C: INSIDE EMISSIONS BOUNDARY

Non-quantified emission sources

The following emissions sources have been assessed as attributable, are captured within the emissions boundary, but are not measured (quantified) in the carbon inventory. These emissions are accounted for through an uplift factor. They have been non-quantified due to one of the following reasons:

1. **Immaterial** <1% for individual items and no more than 5% collectively
2. **Cost effective** Quantification is not cost effective relative to the size of the emission but uplift applied.
3. **Data unavailable** Data is unavailable but uplift applied. A data management plan must be put in place to provide data within 5 years.
4. **Maintenance** Initial emissions non-quantified but repairs and replacements quantified.

Relevant non-quantified emission sources	Justification reason
Minor ancillary materials	Immaterial (as described in the EPD)
Packaging of additives and oxides	Immaterial (as described in the EPD)

Data management plan for non-quantified sources

There are no non-quantified sources in the emission boundary that require a data management plan.

Excluded emission sources

Attributable emissions sources can be excluded from the carbon inventory, but still considered as part of the emissions boundary if they meet **all three of the below criteria**. An uplift factor may not necessarily be applied.

1. A data gap exists because primary or secondary data cannot be collected (**no actual data**).
2. Extrapolated and proxy data cannot be determined to fill the data gap (**no projected data**).
3. An estimation determines the emissions from the process to be **immaterial (less than 1% of emissions)**.

Emissions Source	No actual data	No projected data	Immaterial
No excluded emission sources			

APPENDIX D: OUTSIDE EMISSION BOUNDARY

Non-attributable emissions have been assessed as not attributable to a product or service (do not carry, make or become the product/service) and are therefore not part of the carbon neutral claim. To be deemed attributable, an emission must meet two of the five relevance criteria. Emissions which only meet one condition of the relevance test can be assessed as non-attributable and therefore are outside the carbon neutral claim. Non-attributable emissions are detailed below.

1. **Size** The emissions from a particular source are likely to be large relative to other attributable emissions.
2. **Influence** The responsible entity could influence emissions reduction from a particular source.
3. **Risk** The emissions from a particular source contribute to the responsible entity's greenhouse gas risk exposure.
4. **Stakeholders** The emissions from a particular source are deemed relevant by key stakeholders.
5. **Outsourcing** The emissions are from outsourced activities that were previously undertaken by the responsible entity or from outsourced activities that are typically undertaken within the boundary for comparable products or services.

Non-attributable emissions sources summary

Emission sources tested for relevance	Size	Influence	Risk	Stakeholders	Outsourcing	Justification
Head Office business travel	N	Y	N	N	N	Corporate business travel emissions (at 738-780 Wallgrove Rd, Horsley Park NSW) have been excluded from the boundary, as these emission sources are not attributable to the products.
Head Office energy use	N	Y	N	N	N	Corporate head office energy use emissions (at 738-780 Wallgrove Rd, Horsley Park NSW) have been excluded from the boundary, as these emission sources are not attributable to the products.
Capital goods	N	Y	N	N	N	The embodied emissions of capital goods (plant equipment, buildings, infrastructure) are considered non-attributable to the product. This is consistent with industry standard LCAs for construction products, as outlined in the Product Category Rules (PCR) of the International EPD System and has been verified by the Registered Consultant that has compiled our inventory.
Construction and installation	N	N	N	N	N	Austral Bricks cannot influence or determine site specific installation practices, operational energy/water, maintenance, repair, replacement or refurbishment scenarios. These stages therefore do not meet the relevance criteria for inclusion in the product carbon neutral boundary.
Use stage	N	N	N	N	N	Austral Bricks cannot influence or determine site specific installation practices, operational energy/water, maintenance, repair, replacement or refurbishment scenarios. These stages therefore do not meet the relevance criteria for inclusion in the product carbon neutral boundary.



An Australian Government Initiative

