PUBLIC DISCLOSURE STATEMENT

GUNLAKE CONCRETE NSW PTY LTD

PRODUCT CERTIFICATION
TRUE-UP: FY2023–24

Australian Government

Climate Active
Public Disclosure Statement

An Australian Government Initiative

NAME OF CERTIFIED ENTITY	Gunlake Concrete NSW Pty Ltd
REPORTING PERIOD	True-up: financial year 1 July 2023 – 30 June 2024
DECLARATION	*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.* Angus Richmond
	Angus Richmond Commercial Director 14 October 2024

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

Version 9.

1. CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	True-up: -210 tCO_2-e Projection: 210 tCO_2-e Total: 0 tCO_2-e
CARBON OFFSETS USED	100% VCUs
RENEWABLE ELECTRICITY	N/A
CARBON ACCOUNT	Prepared by: start2see Pty Ltd
TECHNICAL ASSESSMENT	Date: 28 September 2023 Organisation: start2see Pty Ltd Next technical assessment due: 31 October 2026
THIRD PARTY VALIDATION	The carbon footprints are based on our Environmental Product Declaration, which have been independently verified by Andrew D. Moore of Life Cycle Logic

Contents

2. CERTIFICATION INFORMATION

Description of product certification

This product certification is for ready-mixed concrete. The ready-mixed concrete we produce is primarily used in the civil, housing, multi-residential, commercial, industrial, and infrastructure segments. Carbon neutral products are available to Gunlake customers on an opt-in basis. This will allow carbon neutral certification to be applied on a project and/or client basis. The type and quantity of concrete products supplied to a project and/or client can be negotiated with carbon offset requirements determined using our EPD. The total carbon emissions inventory to be offset will be assessed annually based on the quantity of carbon neutral certified products sold.

The functional unit is defined as *1 cubic metre (m^3) of ready-mixed concrete (as ordered by our clients) with a given strength grade and identifying characteristics*. The functional unit covers the cradle-to-gate plus end-of-life stages of our products. Intermediate life cycle stages are outside the scope of our current EPD and are therefore excluded from the carbon account. The impact of the excluded life cycle stages (e.g. transport to construction site, construction, use) is relatively minor compared to the included emissions, but shall not be considered zero.

The responsible entity for this product certification is Legal entity name Gunlake Concrete NSW Pty Ltd, ABN 35 606 681 850.

This Public Disclosure Statement includes the true-up information for FY2023-2024, which is our first year of reporting. The underlying carbon account is based on our EPD, which was published on 30 August 2022. The base year for which the data were collected is FY2020-21.

Description of business

Gunlake Concrete NSW (Gunlake) is an industry-leading supplier of ready-mixed concrete to the Greater Sydney region. Gunlake is the largest local independent supplier of concrete and quarry products in NSW. Currently we have five concrete batching plants in operation, in Smeaton Grange, Prestons, Glendenning, Silverwater, and Banksmeadow.

We have attained opt-in carbon neutral certification for our ready-mixed concrete produced at any of our sites. This Climate Active certification aligns with the carbon footprint calculations as outlined in our Ready-mixed concrete Environmental Product Declaration (EPD)[1].

Our EPD and the underlying Life Cycle Assessment (LCA) methodology is in accordance with the international standards ISO 14025, ISO 14040 and ISO 14044 and has been verified to be compliant with EN 15804+A2. As such, the carbon accounting within the EPD closely aligns with the principles set out in the Climate Active Product and Services Standard. We have therefore adopted the streamlined EPD certification pathway with Climate Active to cover the scope of this carbon neutral certification.

[1] https://epd-australasia.com/epd/gunlake-concrete-ready-mixed-concrete/

3. EMISSIONS BOUNDARY

Inside the emissions boundary

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

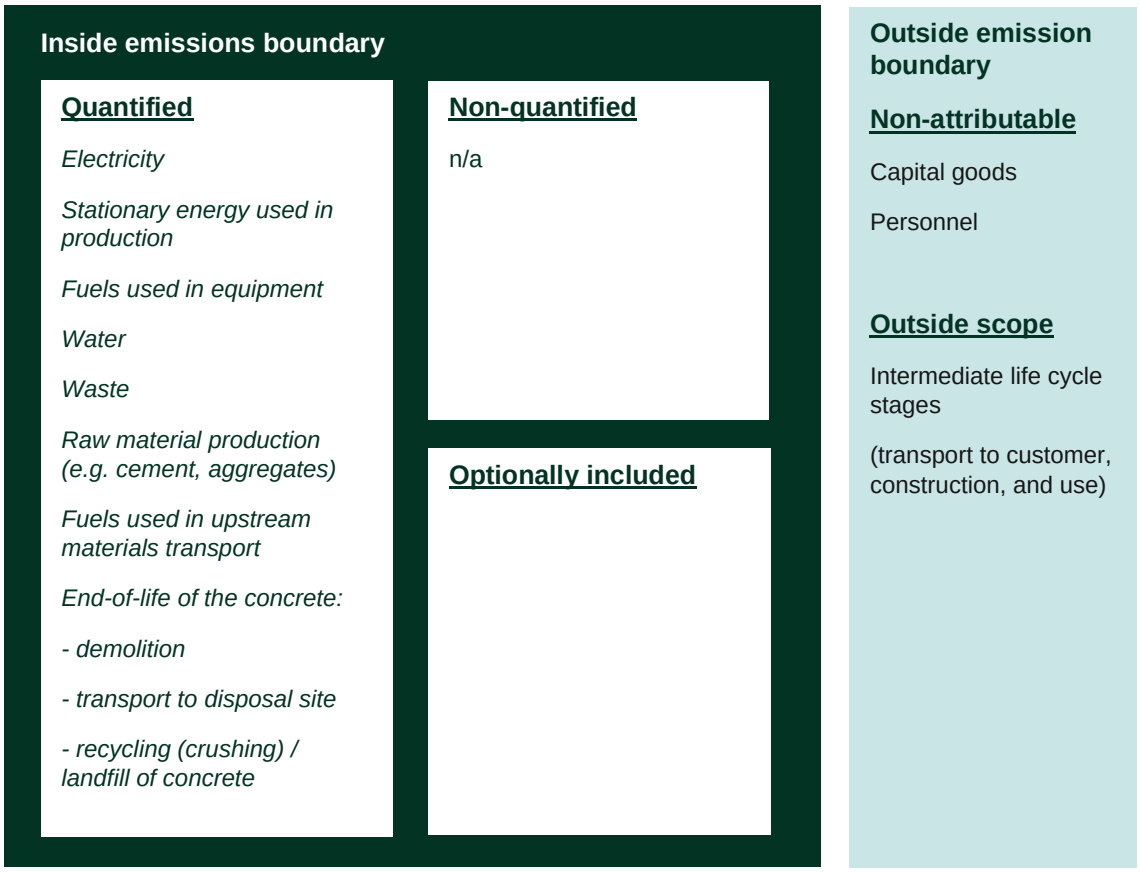
Quantified emissions have been assessed as 'attributable processes' of a product or service. These attributable processes are services, materials and energy flows that become the product or service, make the product or service and carry the product or service through its life cycle. These attributable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

Outside the emissions boundary

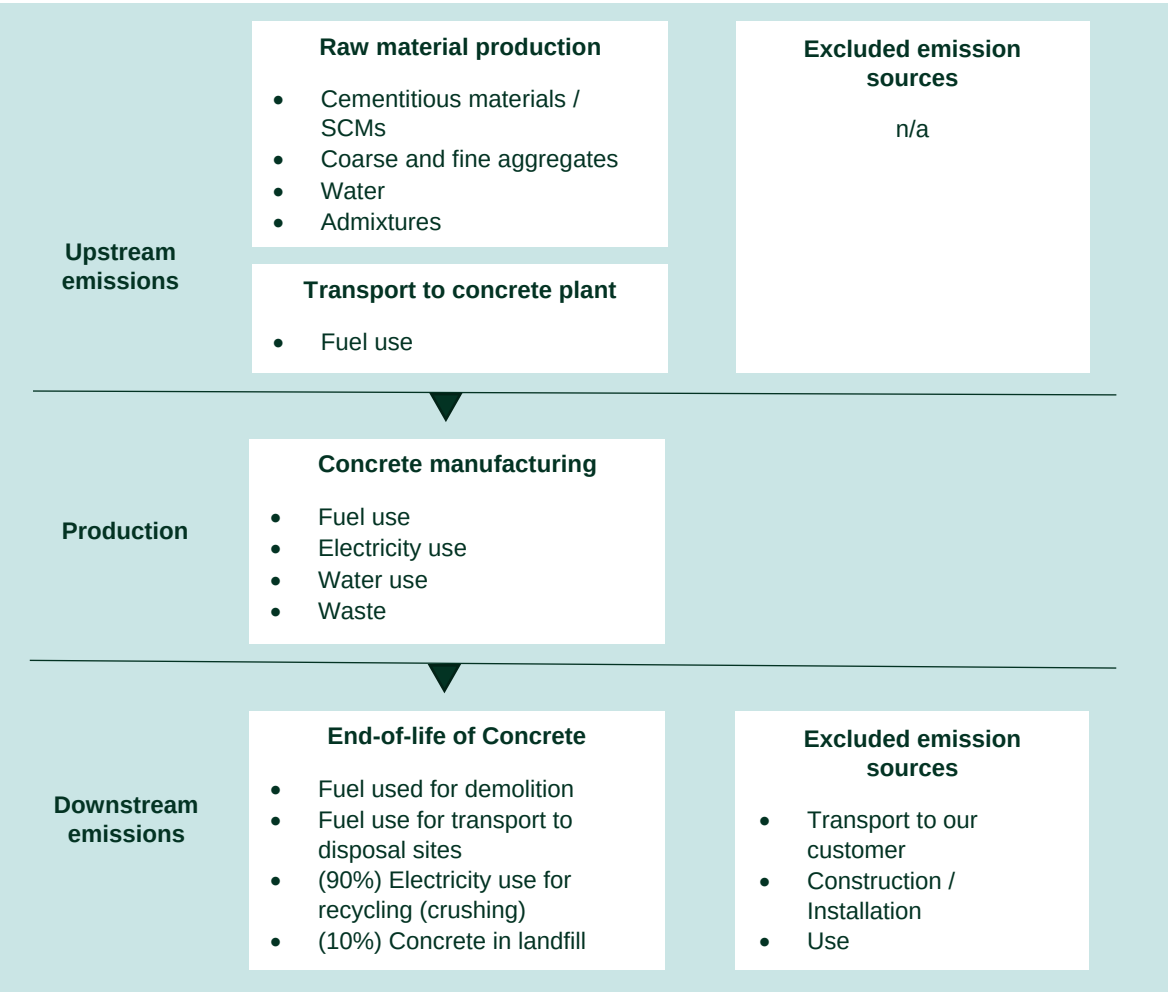
Non-attributable emissions have been assessed as not attributable to a product or service. They can be **optionally included** in the emissions boundary and therefore have been offset, or they can be listed as outside of the emissions boundary (and are therefore not part of the carbon neutral claim). Further detail is available at Appendix D.

Emissions boundary for FY2023-24 (true-up)



Product process diagram for FY2023-24 (true-up)

The following diagram covers the cradle-to-gate plus end-of-life life cycle stages of concrete. Intermediate life cycle stages are not included as the concrete can be used for a large number of potential applications in infrastructure projects or industrial, commercial and residential building projects. Furthermore, full life cycle LCAs show that the excluded intermediate stages typically contribute only marginally to ready-mixed concrete's GHG emissions.[2]



[2] For example, see figure 2 in: R Frischknecht et al 2019 IOP Conf. Ser.: Earth Environ. Sci. 323 012037

4. EMISSIONS REDUCTIONS

Emissions reduction strategy

Introduction

As the global community intensifies its efforts to combat climate change, the concrete industry, renowned for its significant carbon footprint, must play a pivotal role in reducing emissions. Gunlake Concrete is committed to achieving a total carbon reduction of 30% between 2021 and 2030. This strategy outlines a comprehensive plan to attain this ambitious target.

1. Carbon Baseline Assessment

We have attained opt-in carbon neutral certification for our ready-mixed concrete produced as outlined in our Ready-mixed concrete Environmental Product Declaration (EPD).

2. Energy Efficiency and Alternative Materials

a. **Energy Efficiency**: Invest in energy-efficient equipment and processes at our concrete production facilities. Implement best practices for energy management, such as optimising pneumatic and hydraulic systems with advanced PLC systems.

b. **Alternative Materials**: Explore and integrate alternative materials like supplementary cementitious materials (SCMs), recycled aggregates, and low-carbon concrete mixes. These materials can significantly reduce the carbon intensity of our products.

3. Fleet Management and Transportation

a. **Fleet Optimization**: Transition to a more efficient fleet with lower emissions, including electric or hybrid vehicles, and implement fuel-efficient driving practices. Regular maintenance and route optimisation will further minimise emissions.

b. **Local Sourcing**: Source raw materials and aggregates locally whenever possible to reduce transportation-related emissions.

4. Renewable Energy Sources

Invest in renewable energy sources for our production facilities. Solar panels, wind turbines, and other clean energy solutions can significantly reduce our reliance on fossil fuels.

5. Lower Carbon Cement

Source cement from suppliers that have lower carbon footprints. Cement typically accounts for 85% of the embodied carbon in ready-mixed concrete.

6. Supplier Engagement

Collaborate with our suppliers to encourage sustainable practices and the adoption of low-carbon materials. Establish clear sustainability criteria for suppliers and reward those who meet these standards.

7. Employee Training and Engagement

Educate and engage our employees in our sustainability efforts. Empower them to identify and implement emission reduction opportunities in their daily activities.

8. Emission Tracking and Reporting

Implement a robust emissions tracking and reporting system to monitor progress towards our 2030 target. Regularly communicate our progress to stakeholders, including customers and investors.

9. Regulatory Compliance

Stay abreast of evolving environmental regulations and ensure compliance at all levels. Proactively engage with regulatory bodies to advocate for policies that support emissions reduction in the concrete industry.

10. Continuous Improvement

Establish a culture of continuous improvement, regularly reviewing and updating our emissions reduction strategy to incorporate the latest technologies and best practices.

Conclusion

By embracing this emissions reduction strategy, Gunlake Concrete aims to achieve a total carbon reduction of 30% by 2030, contributing to global efforts to mitigate climate change. This commitment not only aligns with our environmental responsibility but also positions us as an industry leader in sustainable concrete production. Together, we can build a greener, more sustainable future.

5.EMISSIONS SUMMARY

Emissions over time

This is our first year of reporting. We did not sell any carbon neutral certified concrete products in FY2023-34.

Emissions since base year		
	Total tCO_2-e	**Emissions intensity of the functional unit**
Base year: FY2023-24	0	~0.350 t CO_2-e*

** 0.350 t CO_2e/m^3 is an estimate across our range of products. The actual footprint will be based on mix designs of the products sold as carbon neutral. The products covered by our EPD vary in emissions intensity from 231 kg CO_2e/m^3 to 472 kg CO_2e/m^3 (including 37 kg CO_2e/m^3 end-of-life emissions).*

Significant changes in emissions for FY2023-24 (true-up)

The total emissions of our opt-in carbon neutral products have changed significantly from our projected emissions for this (FY2023-24) reporting period. We projected to sell 600 m3 of carbon neutral certified concrete in FY2023-24, but did not sell any.

Significant changes in emissions			
Attributable process	**Projected emissions** (t CO_2-e)	**Actual emissions** (t CO_2-e)	**Reason for change**
Concrete	210	0	The expected uptake of carbon neutral concrete has not eventuated in the reporting period.

Use of Climate Active carbon neutral products, services, buildings or precincts for FY2023-24 (true-up)

No Climate Active carbon neutral products or services have been used in the cradle-to-gate production of our concrete.

Emissions summary for FY2023-24 (true-up)

A summary of emissions by life cycle stage is presented in the table below.

This emissions summary represents the attributable emissions from customers who have opted-in to the product only.

Life cycle stage / Attributable process / Emission source	Projection tCO_2-e*	True-up tCO_2-e*
Raw materials (cement, supplementary cementitious materials (slag, fly-ash), aggregates, admixtures, water)	75-80%	75-80%
Transport of raw materials to the concrete plant	10-15%	10-15%
Concrete production process	1-2%	1-2%
End-of-life stage of concrete (assuming 90% recycling and 10% landfill)	7-15%	7-15%
Attributable emissions (tCO_2-e)	**210****	**0**

** The contribution of emission sources is provided in percentages to indicate the varying contribution depending on concrete mix designs.*

*** We projected selling 600 m^3 of carbon neutral certified concrete to a large project, which equalled a projection of 210 tCO_2-e.*

No uplift factors have been applied.

The previous report was a projection report using representative data to estimate the emissions for the reporting year. This table shows the differences between projected emissions and actual emissions.

Product / Service offset liability	Projection	True-up
Emissions intensity per functional unit	~0.350 t CO_2-e*	n/a
Emissions intensity per functional unit including uplift factors	n/a	n/a
Number of functional units covered by the certification	600	0
Total emissions (projected, tCO_2-e)	**210**	
Total emissions (actual, tCO_2-e) to be offset		**0**
Difference between projected and actual emissions	210 tCO_2-e	

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
Verified Carbon Units (VCUs)	0	n/a

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
April Salumei Rainforest Conservation REDD Project (EKIESL-VCS-Aug-16-03)	VCU	Verra Registry	2/11/2023	15806-719967381-719967880-VCS-VCU-352-VER-PG-14-1122-01012013-31122013-0	2013	500	0	500	0	n/a

Co-benefits

Deep within the East Sepik Province of Papua New Guinea is TEM's April Salumei REDD Project. A combined area of 603,712 ha. the landscape is defined by forested land on mineral soils. The project area is thriving with both traditional culture and extraordinary levels of biodiversity.

Located within a Forest Management Area designated for timber production by the Papua New Guinean Forest Authority, the project area was facing a very material threat. The carbon finance attracted through verified carbon unit revenues offers Indigenous landowners a form of income based on the carbon storage and ecosystem services provided by the forest, rather than through the short-term royalties that flow from logging concessions. Conserving the forest and its carbon stocks avoids significant volumes of carbon emissions.

Our project aims to improve the overall wellbeing of local communities, support sustainable agricultural development, provide access to employment, healthcare, education, and infrastructure, all while preserving the rich cultural traditions and customs of the Indigenous owners.

The project contributes to the following United Nations Sustainable Development Goals:

7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

Renewable Energy Certificate (REC) Summary

N/A

APPENDIX A: ADDITIONAL INFORMATION

N/A

APPENDIX B: ELECTRICITY SUMMARY

Electricity emissions are calculated using a location-based approach.

Note: concrete production makes up only 1-2% of the GHG emissions of ready-mixed concrete (mainly electricity and diesel use on-site) and using a location-based or market-based approach won't materially affect the footprint of our products.

We have not used the Climate Active electricity calculator, as the footprint of our products is determined in our EPD.

APPENDIX C: INSIDE EMISSIONS BOUNDARY

Non-quantified emission sources

There are no non-quantified emission sources within this product LCA.

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**).

Emissions Source	No actual data	No projected data	Immaterial
N/A			

Data management plan for non-quantified sources

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

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 FY2023-24 True-up emissions boundary
Capital goods	N	N	N	N	N	**Size:** The emissions source is likely to be below 5% of concrete's emissions, which is not large compared to other attributable emissions. **Influence:** We do not have the potential to materially influence the emissions from this source, including by shifting to a different lower-emissions supplier for our product. **Risk:** There are no relevant laws or regulations that apply to limit emissions specifically from this source, the source does not create supply chain risks, and it is unlikely to be of significant public interest. **Stakeholders:** Key stakeholders, including the public, are unlikely to consider this a relevant source of emissions for our product. **Outsourcing:** We have not previously undertaken this activity within our emissions boundary and comparable products do not typically undertake this activity within their boundary.
Personnel	N	N	N	N	N	**Size:** The emissions source is likely to be below 1% of concrete's emissions, which is not large compared to other attributable emissions. **Influence:** We do not have the potential to materially influence the emissions from this source, including by shifting to a different lower-emissions supplier for our product. **Risk:** There are no relevant laws or regulations that apply to limit emissions specifically from this source, the source does not create supply chain risks, and it is unlikely to be of significant public interest. **Stakeholders:** Key stakeholders, including the public, are unlikely to consider this a relevant source of emissions for our product. **Outsourcing:** We have not previously undertaken this activity within our emissions boundary and comparable products do not typically undertake this activity within their boundary.

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