

PUBLIC DISCLOSURE STATEMENT

LENDLEASE CONSTRUCTION (AUST) HOLDINGS PTY LIMITED

SERVICE CERTIFICATION FY2022–23

Australian Government

Climate Active Public Disclosure Statement





Climate

NAME OF CERTIFIED ENTITY	Lendlease Construction (Aust) Holdings Pty Limited
REPORTING PERIOD	1 July 2022 – 30 June 2023 Arrears report
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.
	David Paterson Managing Director, Constrtuction 30 April 2024



Australian Government

Department of Climate Change, Energy, the Environment and Water

Public Disclosure Statement documents are prepared by the submitting organisation. The material in Public Disclosure Statement documents represents the views of the organisation and do not necessarily reflect the views of the Commonwealth. The Commonwealth does not guarantee the accuracy of the contents of the Public Disclosure Statement documents and disclaims liability for any loss arising from the use of the document for any purpose.

Version March 2023.



1.CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	1,441 tCO ₂ -e
CARBON OFFSETS USED	100% ACCUs
RENEWABLE ELECTRICITY	100%
CARBON ACCOUNT	Prepared by: Lendlease Construction (Aust) Holdings Pty Limited
TECHNICAL ASSESSMENT	31 October 2022 (FY2021-22 report) Chris Wilson Pangolin Associates
	Next technical assessment due: FY2024-25 report

Contents

1.	Certification summary	3
2.	Certification information	4
3.	Emissions boundary	5
4.	Emissions reductions	7
5.	Emissions summary	9
6.	Carbon offsets	.12
7. Re	newable Energy Certificate (REC) summary	.14
Арре	ndix A: Additional information	.15
Арре	ndix B: Electricity summary	.19
Арре	ndix C: Inside emissions boundary	.22
Арре	ndix D: Outside emission boundary	.23



2.CERTIFICATION INFORMATION

Description of certification

This carbon neutral certification covers construction services provided by Lendlease and accounts for the emissions associated with construction activities between the time of site establishment through to practical completion. The following Lendlease projects are included in this Climate Active carbon neutral certification for FY23:

- 140 Lonsdale St (VIC)
- One Sydney Harbour R1, R2 and R3 (NSW)
- New Performing Arts Venue (QLD)
- 555 Collins Street (VIC)
- Powerhouse Parramatta Museum (NSW)
- Frankston Hospital Redevelopment Project (VIC)
- 51 Flinders Lane (VIC)

Lendlease construction projects that commit to Climate Active certification account for and offset their emissions on an annual basis for the entire duration of the construction period. The embodied carbon emissions associated with building materials are not included within the scope of this service certification.

Service description

Lendlease provides a Climate Active certified carbon neutral construction service to its Australian clients on an opt-in basis. The functional unit for this service certification is defined as one square meter of building gross floor area (GFA), with emission intensity expressed in terms of kgCO₂-e/m² GFA. The scope of this certification is cradle-to-grave, noting the exclusion of embodied emissions from building materials listed above.



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.





Service process diagram

This certification is cradle-to-grave. The below diagram shows the attributable upstream processes, servide delivery processes, and attributable downstream processes.





4.EMISSIONS REDUCTIONS

Emissions reduction strategy

In August 2020, Lendlease announced their most ambitious climate change targets. The targets are fully aligned with the goals of the Paris Agreement and set a global benchmark for the real estate industry. Lendlease has set a target to be a '1.5°C aligned company', committing to:

- Net Zero Carbon by 2025 for Scope 1 emissions, produced directly from the fuels we burn, and Scope 2 emissions from the power we consume: and
- Absolute Zero Carbon by 2040, eliminating all emissions, including Scope 3 emissions generated indirectly from our activities, without the use of offsets.

Lendlease has defined five clear milestones to decarbonisation, these are:

- Create a decarbonisation investment strategy in 2021.
- Phase out diesel and gas in our operations.
- Use 100% renewable electricity before 2030.
- Collaborate with supply chain partners to set pathways to zero carbon by 2040.
- Collaborate with our tenants and residents to transition to renewable electricity by 2040.

As part of the decarbonisation strategy, Lendlease Construction has implemented a number of strategies that directly reduce emissions on construction sites, including the following:

- Site Sustainability Standards –Version 2 of Lendlease Construction's Site Sustainability Standards were released in September 2020 and include revised minimum requirements that all projects must comply with to reduce environmental, economic and social impacts through energy and water efficiencies and operational management. The new standards include a "carbon badge" for projects that take substantial action to reduce and eliminate emissions.
- Site Accommodation Lendlease has engaged with supply chain partners to agree minimum requirements for all site accommodation provided to Lendlease projects. Site shed initiatives include but are not limited to: ensuring LED lighting to 95% of fittings, motion sensors for lightings, installation of door closers, tinted windows and blinds, and establishing minimum requirements for insulation and appliance energy star ratings.
- **Renewable Electricity** Lendlease Construction has committed to using 100% renewable electricity across all projects nationally from 2021 onward. This will be achieved via on-site renewable technologies as well as the purchase of renewable energy certificates.



 Fossil Fuel Free Construction¹ – Lendlease Construction remains committed to phasing out fossil fuel-based energy sources within our operations. Projects prioritise the use of electic machinery and equipment where possible. Where it is not possible to electrify, projects are using biofuels within plant and equipment, including the use of B5 and B20 biodiesel blends and have started the first use of renewable diesel on two projects..

Emissions reduction actions

The following initiatives have been implemented as emission reduction actions on the construction projects certified within this reporting period:

- All project site sheds / site offices have included energy efficient appliances with a star rating of no lower than two stars from the highest possible rating as determined on www.energyrating.gov.au
- Site sheds are fitted with HVAC motion sensor systems that sense occupancy in a space and will automatically switch off the heating and cooling when the space is not used, improving energy efficiency and reducing energy use.
- Construction sites have implemented measures to improve fuel use efficiency by implementing
 efficient driving operation and productivity strategies that reduce the quantum of fuel used during the
 construction period.
- B5 biodiesel blends have been used within construction plant and equipment on 140 Lonsdale St, 555 Collins projects, Parramatta Powerhouse Museum and 51 Flinders Lane. Using biodiesel blends on sites reduce greenhouse gas emissions compared to conventional diesel.
- Renewable diesel has powered 3 tower cranes at Powerhouse Parramatta, and a 230t mobile crane on New Performing Arts Venue.
- Electric cranes have been used on project sites including the New Performing Arts Venue (NPAV), 555 Collins and One Sydney Harbour. Electric cranes, in conjunction with purchase of renewable electricity, provide significant emission reductions when compared with standard diesel cranes. NPAV successfully deployed a battery to power a tower crane to substitute a diesel generator as grid capacity had been fully utilised for other construction equipment. The battery was able to overcome the grid capacity constraints and enabled the project to electrify a third tower crane on site.
- Use of electric concrete pump to substitue diesel concrete pump on OSH R3.



¹ Fuel Free Construction | Scope 1 | Mission Zero (lendlease.com)

5.EMISSIONS SUMMARY

Emissions over time

The functional unit for this certification is one square meter of building gross floor area; however, using this functional unit on an annual basis for construction projects that span multiple years would not accurately represent a project's emission intensity. As a result, emission intensity will be disclosed once projects have reached practical completion, allowing for an effective comparison of emissions over time and across projects. The table below will be updated as projects reach practical completion with the emission intensity for each project.

Project	Practical Completion	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	Emissions per project (tCO ₂ -e)	Functional Unit (kgCO ₂ -e/m ² of GFA)	
Woodside Building for Technology and Design (VIC)	2020	0	0	0	177	561	0	0	0	739	38.84	
140 Lonsdale Street (VIC)	2022	0	0	0	0	91	192	74	29	384	10.91	
New Performing Arts Venue (QLD)	2023	0	0	0	0	147	256	79	18	503		
One Sydney Harbour - R1 (NSW) [†]	2022	0	0	0	0	1	74	93	74	243		
One Sydney Harbour - R2 (NSW) [†]	2022	0	0	0	0	0	6	64	73	139	Emissions per functional unit to be	
One Sydney Harbour - R3 (NSW) [†]	2024	0	0	0	0	0	0	1	29	30	declared at practical	
One Sydney Harbour – Remediation (NSW)	Part of R1	762	1,667	1,235	1,446	150	0	0	0	5,259	completion	
One Sydney Harbour – Basement (NSW)	R2 R3	0	0	849	2,160	1,457	436	0	0	4,903		
555 Collins Street (VIC)	2024	0	0	0	0	0	143	170	85	398	8.78	
Powerhouse Parramatta (NSW)	2024	0	0	0	0	0	0	143	389	532	Emissions per	
Frankston Hospital Redevelopment Project (VIC)	2025	0	0	0	0	0	0	15	597	612	functional unit to be	
51 Flinders Lane (VIC)	2025	0	0	0	0	0	0	0	147	147	completion	
Total Emissions Per FY [^]		762	1,667	2,084	3,783	2,407	1,108	638	1440	13,889		

[†] The three One Sydney Harbour residential apartment towers, R1, R2 and R3, sit above a shared basement. The emissions generated from the One Sydney Harbour remediation and basement phases will be apportioned to each tower following their completion and based on the respective gross floor area.

^ Total emissions may not equal the sum of individual projects due to rounding. The total emissions to be offset has been rounded up to the nearest whole number.



Significant changes in emissions

The table below summaries the significant changes in emissions observed in the current reporting period compared to the previous year. Significant changes are defined by a +/- 5% change in an emission source category that contributes to more than 5% of the total emissions.

Emission source	Current year (tCO ₂ -e)	Previous year (tCO ₂ -e)	Reason for change
Diesel oil	1232.2 tCO ₂ -e	452.6 tCO ₂ -e	The diesel usage increased in FY23 is mainly due to the demolition and civil works in early contruction phase for two of the projects. Also, a new project (51 Flinders Lane) was added to this certification.
Construction and demolition waste	67 tCO ₂ -e	112 tCO ₂ -е	Waste emissions decreased in FY23 as a result of the scope of construction work in the year compared to the previous year. Two projects completed contruction activities in FY23.

Use of Climate Active carbon neutral products and services

N/A.

Emissions summary

The following table summarises emissions per emissions category for the FY2022-23 reporting period. The table below outlines emissions prior to inclusion of uplift factors. The following table is rounded to the nearest whole number.

Emission category	Sum of Scope 1 (tCO ₂ -e)	Sum of Scope 2 (tCO ₂ -e) *	Sum of Scope 3 (tCO ₂ -e)	Sum of total emissions (tCO ₂ -e)
Electricity	0	0	0	0
Stationary energy	1046.7	0	259.2	1305.9
Waste	0	0	67.0	67.0
Water supply and wastewater treatment	0	0	39.0	39.0
Total	1046.7	0	365.3	1411.9

*Electricity emissions are being reduced as a result of the purchase of 100% renewable electricity on construction sites in FY23.



Uplift factors

An uplift factor is an upwards adjustment to the total carbon inventory to account for relevant emissions, which cannot be reasonably quantified or estimated. This conservative accounting approach helps ensure the integrity of the carbon neutral claim.

Reason for uplift factor	tCO ₂ -e
Uplift factor to account embodied carbon of plant, equipment and site offices (2% uplift)	28.2
Total footprint to offset (uplift factors + net emissions)	1440.2

Emissions intensity per functional unit	N/A*
Number of functional units to be offset	N/A*
Total emissions to be offset (tCO ₂ -e)	1441**

*Functional units and emission intensities will be disclosed per project once projects reach practical completion and as illustrated on page 11.

** The total footprint was rounded up.



6.CARBON OFFSETS

Offsets retirement approach

This certification has taken an in-arrears offsetting approach. The total emissions to offset are 1441 tCO_2 -e. The total number of eligible offsets used in this report is 1441. Of the total eligible offsets used, 1441 were previously banked and 0 were newly purchased and retired. 1709 units are remaining and have been banked for future use.

Co-benefits

Colodan Native Forest Project, Great Barrier Reef

The Great Barrier Reef's water quality is under serious threat by land-based activities such as farming along the coastline. Water runoff from farms flushes fertilizers, pesticides and soil into rivers and onto the reef with dire consequences for corals, sea grasses and marine wildlife. The Colodan Native Forest Project located between Gladstone and Bundaberg, Queensland, will regenerate nearly 3,000 hectares of natural woodland, including endangered Brigalow Forest, and will protect around 500 hectares of established native forest from being cleared.

Sustainable management of the property is improving soil health and water retention, helping to reduce erosion and run off within the Burnett catchment. The project is further securing crucial habitat for native wildlife and will support 98 threatened plant and animal species including the koala, brush-tailed rock wallaby, northern brown bandicoot, echidna and sugar glider. This project contributes to 100% of the total of offsets purchased and retired for this reporting period.



Eligible offsets retirement summary

Evidence of retired offsets has been provided to the Climate Active during their assessment.

Offsets retired for Climate Active certification											
Project description	Type of offset units	Registry	Date retired	Serial number (and hyperlink to registry transaction record)	Vintage	Stapled quantity	Eligible quantity retired (tCO ₂ -e)	Eligible quantity used for previous reporting periods	Eligible quantity banked for future reporting periods	Eligible quantity used for this reporting period	Percentage of total (%)
Catchment Conservation Alliance - Great Barrier Reef Initiative Site #3	ACCU	ANREU	4 Aug 2021	3,777,307,193 - 3,777,307,210	2019-19	-	18	0	0	18	1.2%
Catchment Conservation Alliance - Great Barrier Reef Initiative Site #3	ACCU	ANREU	4 Aug 2021	794,699,141 - 3,794,700,204	2019-20	-	1064	0	0	1064	73.8%
Catchment Conservation Alliance - Great Barrier Reef Initiative Site #3	ACCU	ANREU	4 Aug 2021	799,165,790 - 3,799,167,857	2019-20	-	2068	0	1709	359	24.9%
Total offsets retired this report and used in this report										1,441	
Total offsets retired this report and banked for future reports 1709											

Type of offset units	Eligible quantity (used for this reporting period)	Percentage of total
Australian Carbon Credit Units (ACCUs)	1,441	100%



7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

Renewable Energy Certificate (REC) Summary

The following RECs have been surrendered to reduce electricity emissions under the market-based reporting method.

1.	Large-scale Generation certificates (LGCs)*	3,655
2.	Other RECs	0

* LGCs in this table only include those surrendered voluntarily (including through PPA arrangements), and does not include those surrendered in relation to the LRET, GreenPower, and jurisdictional renewables.

Project supported by LGC purchase	Project location	Eligible unit type	Registry	Surrender date	Accreditation code	Certificate serial number	Generation year	Fuel source	Quantity (MWh)
Western Downs Green Power Hub - Solar	Qld, Australia	LGC	Australian REC Registry	21 Dec 2023	SRPVQLS8	209300 - 212954	2023	Solar	3655
Total LGCs surrendered this report and used in this report									



APPENDIX A: ADDITIONAL INFORMATION

The following tables summaries the emissions per project.

Woodside Building for Technology and Design (VIC)										
Emission source category	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23		
Stationary Energy	-	-	-	77	77	-	-	-		
Purchased Electricity	-	-	-	97	397	-	-	-		
Waste disposed to landfill	-	-	-	3	77	-	-	-		
Water supply and wastewater treatment	-	-	-	-	-	-	-	-		
Embodied carbon of plant and equipment (2% uplift)	-	-	-	-	11	-	-	-		
Gross Emissions (tCO2-e)	-	-	-	177	561	-	-	-		

140 Lonsdale St (VIC)								
Emission source category	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23
Stationary Energy	-	-	-	-	70	155	46	20
Purchased Electricity	-	-	-	-	12	20	0	0
Waste disposed to landfill	-	-	-	-	7	13	23	6
Water supply and wastewater treatment	-	-	-	-	-	-	3.31	2
Embodied carbon of plant and equipment (2% uplift)	-	-	-	-	2	4	1	1
Gross Emissions (tCO2-e)	-	-	-	-	91	192	74	29

New Performing Arts Venue (QLD)										
Emission source category	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23		
Stationary Energy	-	-	-	-	6	57	37	16		
Purchased Electricity	-	-	-	-	3	25	0	0		
Waste disposed to landfill	-	-	-	-	136	170	39	1		
Water supply and wastewater treatment	-	-	-	-	-	-	1.03	1.12		
Embodied carbon of plant and equipment (2% uplift)	-	-	-	-	3	5	2	0.4		
Gross Emissions (tCO2-e)	-	-	-	-	147	256	79	18		



One Sydney Harbour – Remediation (NSW)										
Emission source category	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23		
Stationary Energy	277	1,397	806	999	52	-	-	-		
Purchased Electricity	9	111	352	13	-	-	-	-		
Waste disposed to landfill	461	125	52	405	95	-	-	-		
Water supply and wastewater treatment	-	-	-	-	-	-	-	-		
Embodied carbon of plant and equipment (2% uplift)	15	33	24	28	3	-	-	-		
Gross Emissions (tCO2-e)	762	1,667	1,235	1,446	150	-	-	-		

One Sydney Harbour – Basement (NSW)										
Emission source category	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23		
Stationary Energy	-	-	-	152	742	127	-	-		
Purchased Electricity	-	-	833	1,966	658	288	-	-		
Waste disposed to landfill	-	-	-	-	28	12	-	-		
Water supply and wastewater treatment	-	-	-	-	-	-	-	-		
Embodied carbon of plant and equipment (2% uplift)	-	-	17	42	29	9	-	-		
Gross Emissions (tCO2-e)	-	-	849	2,160	1,457	436	-	-		

One Sydney Harbour – R1 (NSW)									
Emission source category	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	
Stationary Energy	-	-	-	-	1	67	66	46	
Purchased Electricity	-	-	-	-	-	-	0	0	
Waste disposed to landfill	-	-	-	-	-	6	12	12	
Water supply and wastewater treatment	-	-	-	-	-	-	13.6	15	
Embodied carbon of plant and equipment (2% uplift)	-	-	-	-	-	1	1.83	1.5	
Gross Emissions (tCO2-e)	-	-	-	-	1	74	93.5	74	



One Sydney Harbour – R2 (NSW)									
Emission source category	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	
Stationary Energy	-	-	-	-	-	5	55	56	
Purchased Electricity	-	-	-	-	-	0	0	0	
Waste disposed to landfill	-	-	-	-	-	1	5.5	7	
Water supply and wastewater treatment	-	-	-	-	-	-	2.33	7.5	
Embodied carbon of plant and equipment (2% uplift)	-	-	-	-	-	0	1.25	1	
Gross Emissions (tCO2-e)	-	-	-	-	-	6	63.95	72	

555 Collins Street (VIC)								
Emission source category	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23
Stationary Energy	-	-	-	-	-	106	141	62
Purchased Electricity	-	-	-	-	-	6	0	0
Waste disposed to landfill	-	-	-	-	-	29	24	18
Water supply and wastewater treatment	-	-	-	-	-	-	2.57	3
Embodied carbon of plant and equipment (2% uplift)	-	-	-	-	-	3	3.34	1.7
Gross Emissions (tCO2-e)	-	-	-	-	-	143	170.20	85

One Sydney Harbour Tower R3 (NSW)									
Emission source category	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	
Stationary Energy	-	-	-	-	-	-	0	23	
Purchased Electricity	-	-	-	-	-	-	0	0	
Waste disposed to landfill	-	-	-	-	-	-	1	5	
Water supply and wastewater treatment	-	-	-	-	-	-	0.001	0.4	
Embodied carbon of plant and equipment (2% uplift)	-	-	-	-	-	-	0.019	0.6	
Gross Emissions (tCO2-e)	-	-	-	-	-	-	0.97	29	



Powerhouse Parramatta (NSW)									
Emission source category	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	
Stationary Energy	-	-	-	-	-	-	137	371	
Purchased Electricity	-	-	-	-	-	-	0	0	
Waste disposed to landfill	-	-	-	-	-	-	2	6	
Water supply and wastewater treatment	-	-	-	-	-	-	0.86	5.4	
Embodied carbon of plant and equipment (2% uplift)	-	-	-	-	-	-	2.8	7.6	
Gross Emissions (tCO2-e)	-	-	-	-	-	-	143	389	

Frankston Hospital Redevelopment Project (VIC)									
Emission source category	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	
Stationary Energy	-	-	-	-	-	-	9	572	
Purchased Electricity	-	-	-	-	-	-	0	0	
Waste disposed to landfill	-	-	-	-	-	-	6	11	
Water supply and wastewater treatment	-	-	-	-	-	-	0.06	2	
Embodied carbon of plant and equipment (2% uplift)	-	-	-	-	-	-	0.29	12	
Gross Emissions (tCO2-e)	-	-	-	-	-	-	15	597	

51 Finlders Lane (VIC)								
Emission source category	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23
Stationary Energy	-	-	-	-	-	-	-	140
Purchased Electricity	-	-	-	-	-	-	-	0
Waste disposed to landfill	-	-	-	-	-	-	-	1
Water supply and wastewater treatment	-	-	-	-	-	-	-	3
Embodied carbon of plant and equipment (2% uplift)	-	-	-	-	-	-	-	3
Gross Emissions (tCO2-e)	-	-	-	-	-	-	-	147



APPENDIX B: ELECTRICITY SUMMARY

There are two international best-practice methods for calculating electricity emissions – the location-based method and the market-based method. Reporting electricity emissions under both methods is called dual reporting.

Dual reporting of electricity emissions is useful, as it provides different perspectives of the emissions associated with a business's electricity usage.

Location-based method

The location-based method provides a picture of a business's electricity emissions in the context of its location, and the emissions intensity of the electricity grid it relies on. It reflects the average emissions intensity of the electricity grid in the location (State) in which energy consumption occurs. The location-based method does not allow for any claims of renewable electricity from grid-imported electricity usage.

Market-based method

The market-based method provides a picture of a business's electricity emissions in the context of its renewable energy investments. It reflects the emissions intensity of different electricity products, markets and investments. It uses a residual mix factor (RMF) to allow for unique claims on the zero emissions attribute of renewables without double-counting.

For this certification, electricity emissions have been set by using the market-based approach.



Market-based approach summary			
Market-based approach	Activity Data (kWh)	Emissions (kgCO₂-e)	Renewable percentage of total
Behind the meter consumption of electricity generated	0	0	0%
Total non-grid electricity	0	0	0%
LGC Purchased and retired (kWh) (including PPAs)	3,654,472	0	81%
GreenPower	0	0	0%
Climate Active precinct/building (voluntary renewables)	0	0	0%
Precinct/Building (LRET)	0	0	0%
Precinct/Building jurisdictional renewables (LGCS surrendered)	0	0	0%
Electricity products (voluntary renewables)	0	0	0%
Electricity products (LRET)	0	0	0%
Electricity products jurisdictional renewables (LGCs surrendered)	0	0	0%
Jurisdictional renewables (LGCs surrendered)	0	0	0%
Jurisdictional renewables (LRET) (applied to ACT grid electricity)	0	0	0%
Large Scale Renewable Energy Target (applied to grid electricity only)	846,109	0	19%
Residual Electricity	0	0	0%
Total renewable electricity (grid + non grid)	4,500,581	0	100%
Total grid electricity	4,500,582	0	100%
Total electricity (grid + non grid)	4,500,582	0	100%
Percentage of residual electricity consumption under operational control	100%		
Residual electricity consumption under operational control	0	0	
Scope 2	0	0	
Scope 3 (includes T&D emissions from consumption under operational control)	0	0	
Residual electricity consumption not under operational control	0	0	
Scope 3	0	0	•

Total renewables (grid and non-grid)	100.00%
Mandatory	18.80%
Voluntary	81.20%
Behind the meter	0.00%
Residual scope 2 emissions (t CO ₂ -e)	0.00
Residual scope 3 emissions (t CO ₂ -e)	0.00
Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO2-e)	0.00
Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO2-e)	0.00
Total emissions liability (t CO ₂ -e)	0.00
Figures may not sum due to rounding. Renewable percentage can be above 100%	



Location-based approach summary						
Location-based approach	Activity Data (kWh) total	Under operational control		Not under operational control		
Percentage of grid electricity consumption under operational control	100%	(kWh)	Scope 2 Emissions (kgCO ₂ -e)	Scope 3 Emissions (kgCO ₂ -e)	(kWh)	Scope 3 Emissions (kgCO ₂ -e)
NSW	2,647,738	2,647,738	1,932,849	158,864	0	0
VIC	1,593,823	1,593,823	1,354,749	111,568	0	0
QLD	259,021	259,021	189,085	38,853	0	0
Grid electricity (scope 2 and 3)	4,500,582	4,500,582	3,476,683	309,285	0	0
NSW	0	0	0	0		
VIC	0	0	0	0		
QLD	0	0	0	0		
Non-grid electricity (behind the meter)	0	0	0	0		
Total electricity (grid + non grid)	4,500,582					

Residual scope 2 emissions (t CO ₂ -e)	3,476.68
Residual scope 3 emissions (t CO₂-e)	309.29
Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO2-e)	3,476.68
Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO2-e)	309.29
Total emissions liability	3,785.97

Operations in Climate Active buildings and precincts

Operations in Climate Active buildings and precincts	Electricity consumed in Climate Active certified building/precinct (kWh)	Emissions (kg CO2-e)		
N/A	0	0		
Climate Active carbon neutral electricity is not renewable electricity. These electricity emissions have been offset by another Climate Active member through their building or precinct certification. This electricity consumption is also included in the market based and location based summary tables. Any electricity that has been sourced as renewable electricity by the building/precinct under the market based method is outlined as such in the market based summary table.				

Climate Active carbon neutral electricity products

Climate Active carbon neutral product used	Electricity claimed from	Emissions		
	Climate Active electricity	(kg CO2-e)		
	products (kWh)			
N/A	0	0		
Climate Active carbon neutral electricity is not renewable electricity. The	se electricity emissions have been c	offset by another Climate		
Active member through their electricity product certification. This electricity consumption is also included in the market based and				
location based summary tables. Any electricity that has been sourced as renewable electricity by the electricity product under the				
market based method is outlined as such in the market based summary	table.			



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 <u>one</u> 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. <u>Data unavailable</u> 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
Machinery and vehicles (embodied carbon of plant equipment & sit sheds)	Data unavailable (but uplift applied & data plan in place)

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).

There are no excluded emission souces within this certification.

Data management plan for non-quantified sources

The data management plan below outlines how more rigorous quantification can be achieved for material (greater than 1%) non-quantified emission sources.

 Machinery and vehicles (pro-rated) - Internal processes have been established to ensure projects maintain a record of the plant and equipment used on site throughout project duration. The records will detail specific manufacturers, models and the duration that plant and equipment are used on site to enable an assessment of the embodied carbon of plant and equipment.



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. <u>Size</u> 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.
- <u>Risk</u> The emissions from a particular source contribute to the responsible entity's greenhouse gas risk exposure.
- 4. <u>Stakeholders</u> The emissions from a particular source are deemed relevant by key stakeholders.
- <u>Outsourcing</u> 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
Construction Materials (Emobdied Carbon)	Y	Ν	Ν	Ν	Ν	 Size: The embodied carbon in contruction material is liketly to be large compare to other emission sources, however, inclusion of emobided carbon in contruction material in this certification will be a duplicating to Climate Active Upfront certification. Influence: The influence is subject to the project specific targets and contractual agreement which are put in place before commencement of the construction phase. 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/service. Outsourcing: We have not previously undertaken this activity within our emissions boundary and comparable products/services do not typically undertake this activity within their boundary.



An Australian Government Initiative

