



PUBLIC DISCLOSURE STATEMENT

BARANGAROO

PRECINCT CERTIFICATION


FY2021–22

Australian Government
Climate Active
Public Disclosure Statement



An Australian Government Initiative



NAME OF CERTIFIED ENTITY	Barangaroo
REPORTING PERIOD	1 July 2021 – 30 June 2022 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>Jessica Kite Director Planning & Design 27/01/23</p>



Australian Government
**Department of Industry, Science,
 Energy and Resources**

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Version March 2022. To be used for FY20/21/CY2021 reporting onwards.



1. CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	13,302 tCO ₂ -e
OFFSETS BOUGHT	100% ACCUs
RENEWABLE ELECTRICITY	100%
TECHNICAL ASSESSMENT	14/12/2021 Pangolin Associates Next technical assessment due: FY24
THIRD PARTY VALIDATION	Type 2 validation 16/01/2023 Chris Wilson Pangolin Associates

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2. CARBON NEUTRAL INFORMATION

Description of certification

This carbon neutral certification accounts for the emissions resulting from the operations of the Barangaroo Precinct. The Barangaroo Precinct ('Barangaroo') comprises three main areas: Barangaroo Reserve, Barangaroo South and Central Barangaroo.

Barangaroo Reserve is a six-hectare waterfront park located at the headland of the northern end of Barangaroo. The park was delivered by the NSW State Government and opened in August 2015. In addition to expansive lawns and landscaped areas, lookouts, walking and cycle paths, and tidal rock pools, more recently, Marrinawi Cove, situated at the northern end of the Reserve, was opened to the public for swimming. Barangaroo Reserve also comprises the Cutaway, an expansive, underground event space, and a 300-space underground car park. Plans are underway to deliver a new cultural facility within the Cutaway, including internal alterations and fitout of the existing void to deliver a multi-level, multi-functional space capable of catering to a range of events, exhibitions and activations.

Barangaroo South is a mixed-use neighbourhood which accommodates commercial office buildings, residential apartments, shops, cafes, restaurants and a resort hotel. The precinct features generous public domain areas, including a public cove, public open space, wide pedestrian friendly walkways, trees and landscaping and public realm areas that interface with the harbour, city, and broader Barangaroo Precinct. The site is serviced by a central basement, housing a district cooling plant (DCP) with harbour heat rejection, a recycled water treatment plant (RWTP) and other shared infrastructure including loading docks, waste and recycling transfer and storage facilities and a bicycle storage hub with end of trip facilities.

The development of Barangaroo South commenced in 2012 and currently comprises International Towers 1, 2 and 3 (Buildings C3, C4 and C5), Anadara and Alexander (Buildings R8 and R9), International House (Building C2), Daramu House (Building C1), Barangaroo House (Building R1), Exchange Place (Building R7) and Crown Sydney Resort. The total Gross Floor Area (GFA) of the operational portion as at end of Financial Year 2022 is approximately 457,000m².

The first stage of the development of Barangaroo South is complete, with buildings designed and significant infrastructure already delivered that contribute to meeting climate positive targets, carbon neutrality and achieving world class benchmarks in energy efficiency and sustainability. The delivery of stage two is well under way with the construction of the new Crown Sydney Resort completed in December 2020 and One Sydney Harbour's three high-rise residential apartments (R4A, R4B and R5)

"Climate Active certification demonstrates that carbon abatement and carbon neutrality is possible in large scale urban renewal projects.

Carbon neutrality at Barangaroo can now be considered a model for other urban renewable projects across Australia."

scheduled for competition in 2024/25. At full build out Barangaroo South is expected to have a total building GFA of approximately 535,000m².

Central Barangaroo sits between Barangaroo Reserve and Barangaroo South and will deliver cultural, civic and community outcomes that will enrich the character and experience of the precinct, fulfill the NSW Government's commitment to delivering 50% public open space across the 22-hectare precinct, and complete the sweep of experiences along Sydney CBD's western waterfront. The 5.2-hectare site will contain three hectares of unparalleled public space for recreation, events, and entertainment, including a 1.85ha park (Harbour Park) situated on the water's edge which is planned for construction in 2025. Until then, the NSW Government is delivering temporary community uses and activations within the Harbour Park area. Central Barangaroo will combine community, civic and cultural spaces, and attractions with residential, retail, and commercial uses. Barangaroo and the broader precinct will be supported by a new Metro Station located at the north of the site, which is expected to be operational by 2024.

While Barangaroo has become part of the fabric of the broader Sydney CBD, it is of such a scale that it has become a significant community precinct in its own right, with an estimated residential and worker population of around 20,000 people, plus an estimated 18 million visitors annually.

The NSW State Government own the land at Barangaroo. Infrastructure NSW is the NSW Government agency responsible for overseeing the development and management of the Precinct on behalf of the State Government. Place Management NSW oversee the operation and management of its public spaces. In the context of Barangaroo's Carbon Neutral certification under the Climate Active Carbon Neutral Standard (CACNS) for Precincts, Infrastructure NSW, in conjunction with Barangaroo South developer Lendlease Millers Point (LLMP) and Sydney Crown Resort, are responsible for preparing the current carbon account, purchasing eligible offset units, and maintaining the relevant reports for the Precinct's carbon neutral claim.

Infrastructure NSW oversees the delivery of the Precinct, including the delivery and ongoing operation of precinct wide initiatives relating to sustainability. Lendlease and Crown Sydney Resort as ground lessees and developers of Barangaroo South, have responsibilities to report on both base building, central infrastructure, and tenant operational emissions as these relate to the CACNS reporting boundary.

Precinct geographical boundary

The geographic boundary of the precinct is the main criterion for defining the emission sources within the certification boundary. Figure 1 below illustrates the extent of the Barangaroo Precinct, consistent with precinct planning documents.

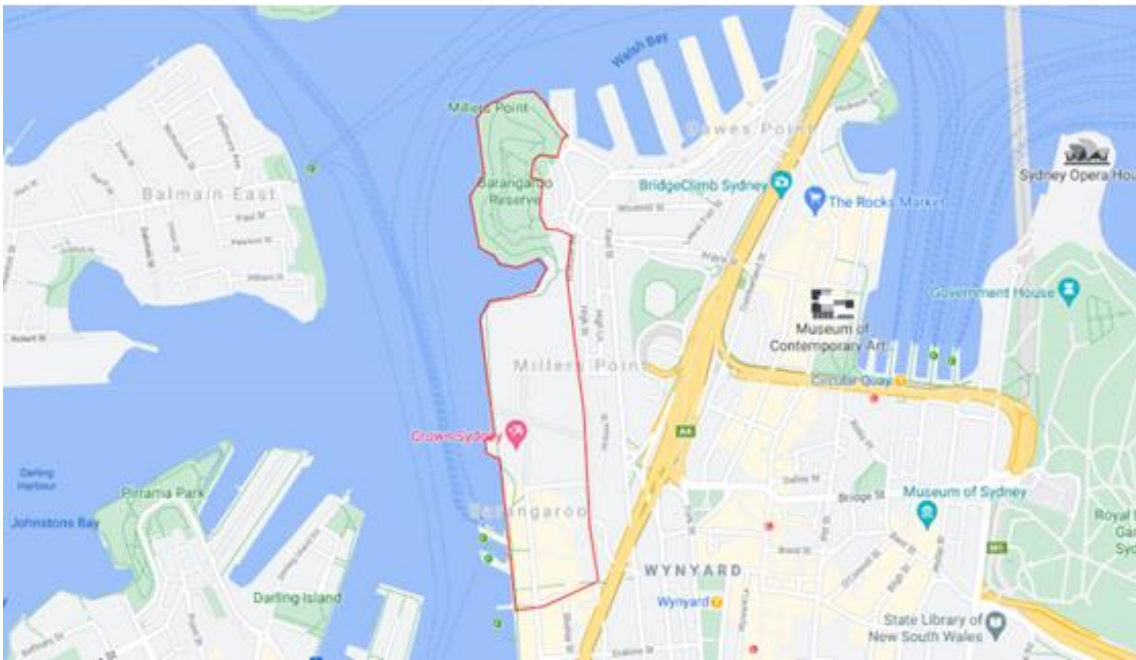


Figure 1 Barangaroo Precinct geographical boundary

Figures 2 and Table 1 below define the current operational area of Barangaroo, which reflects the built-out area considered in this Climate Active certification. Other buildings within Barangaroo are not yet complete or are immaterial.

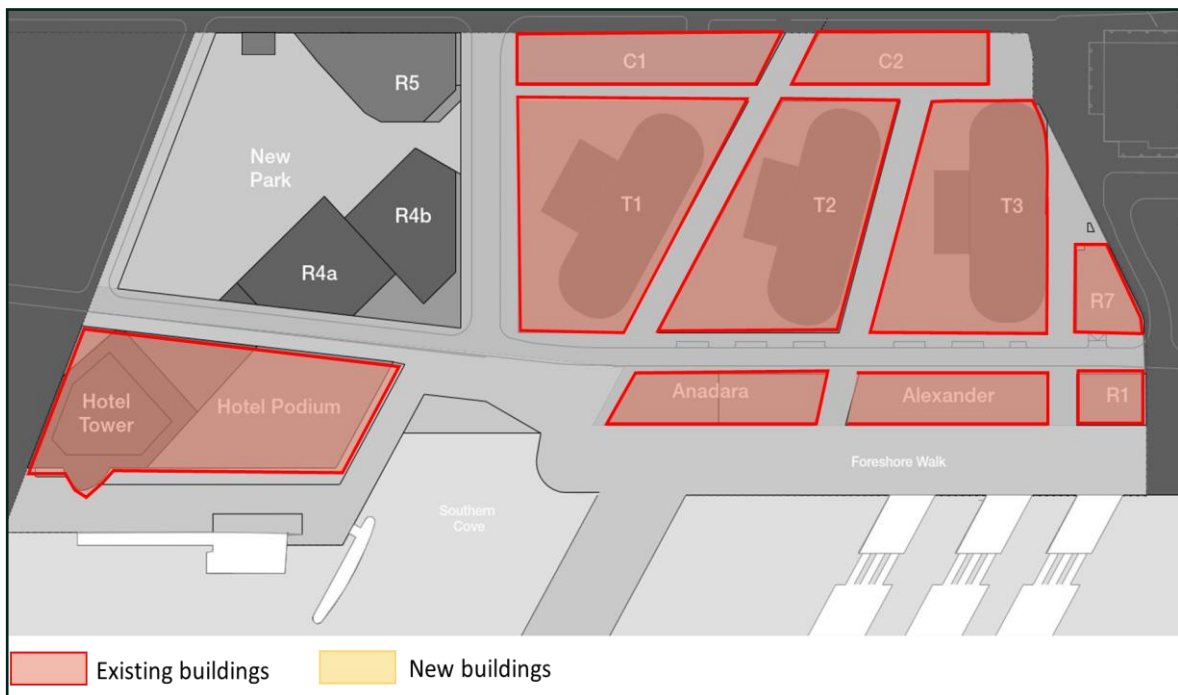


Figure 2 Highlighted areas illustrate the current operational buildings of Barangaroo

Table 1 Summary of buildings within Barangaroo completed and operational

Building	Reporting Period							Operational Date
	FY16	FY17	FY18	FY19	FY20	FY21	FY22	
Public Domain	✓	✓	✓	✓	✓	✓	✓	June 2015
Basement	✓	✓	✓	✓	✓	✓	✓	June 2015
International Tower 1 (T1)		✓	✓	✓	✓	✓	✓	October 2016
International Tower 2 (T2)	✓	✓	✓	✓	✓	✓	✓	June 2015
International Tower 3 (T3)	✓	✓	✓	✓	✓	✓	✓	May 2016
Anadara & Alexander (R8 & R9)	✓	✓	✓	✓	✓	✓	✓	November 2015
Exchange Place (R7)		✓	✓	✓	✓	✓	✓	October 2016
International House (C2)		✓	✓	✓	✓	✓	✓	May 2017
Barangaroo House (R1)			✓	✓	✓	✓	✓	December 2017
Daramu House (C1)					✓	✓	✓	September 2019
Crown Sydney Resort						✓	✓	December 2020

3.EMISSIONS BOUNDARY

Emission sources relevant to the Barangaroo Precinct have been identified in accordance with the Climate Active Carbon Neutral Standard for Precincts. The principles of geographic boundary, precinct operations, relevance and materiality have been applied to determine whether emissions sources are to be included in the carbon account. Where emissions are considered non quantifiable or an allowable exclusion, this has been clearly stated and justified against this set of criteria.

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 relevant and are quantified in the carbon inventory. This may include emissions that are not identified as arising due to the operations of the certified entity, however are **optionally included**.

Non-quantified emissions have been assessed as relevant 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

Excluded emissions are those that have been assessed as not relevant to an organisation's or precinct's operations and are outside of its emissions boundary or are outside of the scope of the certification. These emissions are not part of the carbon neutral claim. Further detail is available at Appendix D.

Inside emissions boundary

Quantified

- Stationary Energy
- Electricity
- Refrigerants
- Water
- Waste
- Land and sea transport

Non-quantified

- Barangaroo Management Office:
 - Stationary Energy
 - Electricity
 - Water
 - Waste
- Land and sea transport (intra-precinct transport)
- Stationary Energy (Liquified Petroleum Gas).
- Barangaroo Reserve and carpark

Outside emission boundary

Excluded

- Office equipment and supplies
- Food
- Air transport (Business-related travel)
- Land and sea transport (Visitors)
- Events temporary generation

Data management plan for non-quantified sources

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

4. EMISSIONS REDUCTIONS

Emissions reduction strategy

The NSW Government has a long-standing commitment for the Barangaroo Precinct to be a world-class sustainable and Climate Positive Development. NSW Government, Lendlease and Crown Sydney Resort have been working together to deliver on this shared commitment, which is embedded in the contract between parties, and involves initiatives to being carbon neutral, water positive, working towards zero waste in operation, and providing community wellbeing now and in the long term. To date this commitment has required a holistic approach by:

- Maximising energy efficiency within the buildings and associated infrastructure;
- Maximising the use of onsite renewables;
- Allocating monies for the establishment of a community carbon fund; and
- Setting operational carbon budgets and targets.

Through the collaborative efforts of the NSW Government, the precinct developers, suppliers and tenants, we continue to invest in our precinct-wide sustainability infrastructure programs and develop new technologies and education campaigns to reach our energy, waste, water and carbon emission targets. A number of strategies to reduce emissions within the precinct are outlined below.

- **Barangaroo Metro Station** – Barangaroo Metro Station forms part of Transport for NSW's (TfNSW) Sydney Metro City and Southwest rapid transit scheme. The Metro station is scheduled to open in 2024 and will provide an additional mode of public transport connecting Barangaroo to the Greater Sydney region.
- **Mission Zero** – In August 2020, Lendlease set a target to be a '1.5°C aligned company¹', committing to Net Zero Carbon for Scope 1 and 2 by 2025 and Absolute Zero Carbon by 2040. The Absolute Zero target requires eliminating all emissions from Lendlease operations, including Scope 3 emissions generated indirectly from Lendlease's activities, without the use of carbon offsets. Feasibility studies and roadmaps are being developed to phase out the fossil-fuel based plant and equipment within the buildings managed by Lendlease within Barangaroo South precinct by 2040.
- **Tenant Engagement** – Tenant energy and water analysis reports have been developed for commercial and retail tenants of Barangaroo to provide insights to facilitate efficiency improvements.
- **Shared Services** –Barangaroo's shared services, located in the basement of Barangaroo, have two critical pieces of infrastructure related to energy and water reduction;
 - The District Cooling Plant (DCP) delivers chilled water to each building, leveraging of the diversity within the precinct to maximise the efficiency of the plant, benefiting all of the buildings within the precinct. As well as this, the utilisation of harbour heat rejection removes the need for cooling towers on the rooves of each building, freeing up space for

¹ <https://www.lendlease.com/missionzero/>

solar panels and significantly reducing the volume of water consumption within the precinct,

- o the Recycled Water Treatment Plant (RWTP) is capable of capturing, storing, treating and processing all water used on site. Volumes of wastewater treated will continue to increase as other buildings within the Barangaroo precinct become operational. At full capacity the plant will be capable of treating up to 1 million litres per day which is more water than the precinct uses.
- o Organic Waste Management: In October 2020, Goterra commissioned the first commercial Modular Infrastructure for Biological Services (MIB) in Barangaroo. The MIB unit is located in the precinct basement and utilises black soldier fly larvae to convert food waste into high quality, sustainable insect protein and soil enhancer. The decentralized MIB eliminates the need for organic waste management logistics. The unit currently processes over 10 tonnes of food waste per month, producing 2 tonnes of insect larvae and 500kg of soil conditioner, whilst also preventing over 20tCO₂-e from food waste per month. Volumes of waste treated will continue to increase as other parts of the precinct become operational.

Emissions reduction actions

This section outlines the key actions that have reduced emissions in this reporting period:

- **Renewable Electricity:** All electricity used at Barangaroo is sourced from 100% renewable energy sources, including a combination of on-site solar generation and purchase of large-scale generation certificates (LGCs) to account for all remaining electricity consumed within the precinct.
- **Building Services Advanced Analytics:** In the past 12 month CIM building analytics has been rolled out across all the commercial buildings within the Barangaroo precinct. This was following a successful 6 month trial on Tower 1 during FY21 which cemented the benefits of having data driven solutions to achieve energy and water efficiencies.
- **Outdoor Heating Electrification:** The electrification of the covered outdoor heating of R8/R9 retail tenancies was completed in FY22. This was done to reduce the reliance on fossil fuels across the precinct with an efficient heating solutions. This also had the added benefit of allowing the capture of more accurate data as the meters attached to the heaters are able to record and report data as required.
- **Waste re-educations:** As the buildings return to a more business as usual operating rhythm the commercial towers have refocused on educating tenants on the best practices on minimising waste to landfill. Tours of the waste facilities are taking place once a month offering people the chance to explore Barangaroo's waste facility's and be shown first-hand where their waste is processed. Along with this, the commercial towers set up stalls in the lobby area of tower 2 to educate tenants and visitors on the correct waste disposal routines.
- **Work From Home:** In response to COVID-19, many organisations residing in the Barangaroo precinct established work from home arrangements with their employees. The introduction of work from home arrangements resulted in a significant decline in the number of employees travelling to the precinct for work leading to emission reductions arising from staff commute, waste generation, electricity, gas and water usage.

5. EMISSIONS SUMMARY

Emissions over time

This section compares emissions over time between the base year and current year. In accordance with the Standard, the base year will be revised as subsequent parts of the Barangaroo precinct commence operation and become occupied. The base year has been revised to FY20, which reflects the same built-out area considered in this year's report.

Emissions since base year		Total tCO ₂ -e
Base year/Year 1	FY20	9,083
Base year/Year 1 (restated):	FY20	8,985
Year 2:	FY21	11,079
Year 3:	FY22	13,302

*FY20 emissions have been restated due to an issue with an electricity meter and previously estimated gas data being replaced by actual meter data. The restated inventory is detailed in Appendix A.

Significant changes in emissions

The table below summarises the significant changes in emissions observed in the current reporting period. 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
Natural Gas (NSW/ACT) metro	6,774	5,631	Increase due to Crown Sydney Resorts only operating for a partial year in FY21. The gas emissions associated with Crown increased from 3081 tCO ₂ -e to 4387tCO ₂ -e.
Waste	1,191	1,660	Due to COVID-19 impacts and the resulting decline in retail trade and office closures, waste generated within the precinct fell, particularly Organics (-32%) and landfill waste (13%), between FY21 and FY22, resulting in a fall in associated emissions.
Land and Sea Transport	4,822	3,511	Increase due to Crown Sydney Resorts only operating for a partial year in FY21 along with an adjustment in emissions factors relating to mode of transports with the Climate Active calculators

Use of Climate Active carbon neutral products and services

N/A.

Precinct emissions summary

The electricity summary is available in the Appendix B. Electricity emissions were calculated using a market-based approach.

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)
Crown Resort Hotel ²	3523	0	3962	7485
Climate Active Carbon Neutral Products and Services	0	0	0	0
Electricity	0	0	0	0
Horticulture and Agriculture	0	0	0	0
Intra-precinct transport	0	0	0	0
Refrigerants	0	0	0	0
Stationary energy (gaseous fuels)	1903	0	484	2387
Stationary energy (liquid fuels)	36	0	2	38
Transport (land and sea)	0	0	2035	2035
Waste	0	0	905	905
Water	0	0	294	294
Working from home	0	0	158	158
Total	5,463	0	7,840	13,302

Uplift factors

N/A.

² The Crown Resort Hotel's emissions are categorised as follows: 25 tCO₂-e for refrigerants, 4,387 tCO₂-e for stationary energy from gaseous fuels, 2,787 tCO₂-e for land and sea transport, and 286 tCO₂-e for waste.

6. CARBON OFFSETS

Offsets retirement approach

In arrears

1. Total number of eligible offsets banked from last year's report	0
2. Total emissions footprint to offset for this report (tCO ₂ -e)	13,302
3. Total eligible offsets required for this report	13,302
4. Total eligible offsets purchased and retired for this report	23,450
5. Total eligible offsets banked to use toward next year's report	10,148

Co-benefits

Both Infrastructure NSW, Lendlease and Crown Resorts Sydney have aspirations to support local NSW renewable energy projects through the purchase and retirement of large-scale generation certificates (LGCs) for purchased electricity emissions. LGCs have been used to account for 100% of Barangaroo Precinct's grid supplied electricity in FY22.

Furthermore, Infrastructure NSW Lendlease and Crown Resorts Sydney will seek to support offset projects that provide additional social and environmental outcomes. There is a preference to procure Australian Carbon Credit Units (ACCUs) for Scope 1 and 3 residual emissions.

1. Poon Boon Regeneration Project, New South Wales.

This project establishes permanent native forests through assisted regeneration from in-situ seed sources (including rootstock and lignotubers) on land that was cleared of vegetation and where growth was suppressed for at least 10 years prior to the project having commenced.

The Project enables grazing management at a sustainable level, allowing regeneration of the land and soils. By contrast, previous activity on the property led to a suppression of vegetation growth. This project also strives to achieve additional quantifiable benefits to the environment and community. A focus on sustainable livestock production through long-term soil and vegetation regeneration will increase the capacity of the land to support biodiversity as a result of establishing permanent native forests. In turn, delivering consistent permanent sequestration and abatement into the future.

2. Curraweena Regeneration Project, New South Wales.

This project establishes permanent native forests on land that previously has been cleared and regrowth had been suppressed for at least 10 years. The project assists regeneration through altering land management practices to relieve grazing, mechanical and chemical pressure often exerted on regenerating vegetation under typical farming practices.

The project is located next to a regional National Park which increases the habitat area for native flora and fauna.

3. Kenilworth Regrowth Project, New South Wales

This project establishes permanent native forests through assisted regeneration from in-situ seed sources on land that was cleared of vegetation and where regrowth was suppressed for at least 10 years prior to the project having commenced.

Eligible offsets retirement summary

Offsets retired for Climate Active carbon neutral certification												
Project description	Type of offset units	Registry	Date retired	Serial number (and hyperlink to registry transaction record)	Vintage	Stapled quantity	Eligible quantity (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 (%)	Location
Poon Boon Regeneration Project	ACCU	ANREU	11 July 2022	8,341,149,217 – 8,341,155,566	2021-22	-	6,350	0	0	6,350	48%	NSW, Australia
Curraweena Regeneration Project	ACCU	ANREU	31 October 2022	8,336,573,460 - 8,336,580,624	2021-22	-	7,165	0	213	6,952	52%	NSW, Australia
				8,347,459,486 - 8,347,461,955	2022-23	-	2,470	0	2,470	0	0%	NSW, Australia
				8,347,455,121 - 8,347,459,485	2022-23	-	4,365	0	4,365	0	0%	NSW, Australia
Kenilworth Regrowth Project	ACCU	ANREU	14 November 2022	8,351,285,076 – 8,351,288,175	2022-23	-	3,100	0	3,100	0	0%	NSW, Australia
Total offsets retired this report and used in this report										13,302		
									Total offsets retired this report and banked for other reports	10,148		

Type of offset units	Quantity (used for this reporting period claim)	Percentage of total
Australian Carbon Credit Units (ACCU)	13,302	100%

*A hyperlink to the ANREU transaction records is not available. Evidence of carbon offset retirements have been provided to Climate Active for verification.

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)*	36,136
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	Eligible units	Registry	Surrender date	Accreditation code (LGCs)	Certificate serial number	Generation year	Quantity (MWh)	Fuel source	Location
Barangaroo Solar	LGC	REC Registry	2021/2022	SRPVNS58	634-922	2021	289	Solar	NSW
Barangaroo Solar	LGC	REC Registry	2021/2022	SRPVNS58	1-336	2022	336	Solar	NSW
White Rock Wind Farm	LGC	REC Registry	30/01/23	WD00NS12	312203-336233 ³	2022	24,654 ³	Wind	NSW
White Rock Wind Farm	LGC	REC Registry	30/01/23	WD00NS12	347917-349398	2022	1,482	Wind	NSW
Moorabool Wind Farm	LGC	REC Registry	30/01/23	WD00VC41	198815-208814	2022	10,000	Wind	VIC
Total LGCs surrendered this report and used in this report							36,136³		

³ A total of 24,029 MWh has been surrendered for with respect to certificate serial number 312203-336233; an additional 625 MWh of LGCs (Certificate serial number: 335610-336233) have been banked for future use.

APPENDIX A: ADDITIONAL INFORMATION

Barangaroo – FY20 Carbon Inventory (Restated)

Emission source category	FY20 tonnes CO ₂ -e	FY20 (restated) tonnes CO ₂ -e
Stationary energy	3,046	2,929
Electricity (market-based)	0	19
Refrigerants	37	37
Water	320	320
Waste	1,763	1,763
Land and sea transport	3,917	3,917
<i>Total net emissions (CO₂-e)</i>	9,083	8,985

APPENDIX B: ELECTRICITY SUMMARY

Electricity emissions are calculated using a **market-based approach**.

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.

Market-based approach summary			
Market-based approach	Activity data (kWh)	Emissions (kgCO ₂ -e)	Renewable percentage of total
Behind the meter consumption of electricity generated	624,723	0	1%
Total non-grid electricity	624,723	0	1%
LGC Purchased and retired (kWh) (including PPAs & Precinct LGCs)	36,136,077	0	65%
GreenPower	8,513,000	0	15%
Jurisdictional renewables (LGCs retired)	0	0	0%
Jurisdictional renewables (LRET) (applied to ACT grid electricity)	0	0	0%
Large Scale Renewable Energy Target (applied to grid electricity only)	10,195,631	0	18%
Residual electricity	0	0	0%
Total grid electricity	54,844,709	0	99%
Total electricity consumed (grid + non grid)	55,469,432	0	100%
Electricity renewables	55,469,432	0	
Residual electricity	0	0	
Exported on-site generated electricity	0	0	
Emissions (kgCO ₂ -e)		0	
<i>A negative residual electricity emissions in kgCO₂-e rounds to zero because the negative emissions can only be used to reduce electricity consumption emissions. See the Climate Active electricity accounting rules for further information.</i>			
Total renewables (grid and non-grid)	100.00%		
Mandatory	18.38%		
Voluntary	80.49%		
Behind the meter	1.13%		
Residual electricity emissions footprint (tCO₂-e)	0		
<i>Figures may not sum due to rounding. Renewable percentage can be above 100%.</i>			

Location-based approach summary

Location-based approach	Activity data (kWh)	Scope 2 Emissions (kgCO ₂ -e)	Scope 3 Emissions (kgCO ₂ -e)
NSW	54,844,709	42,778,873	3,839,130
Grid electricity (scope 2 and 3)	54,844,709	42,778,873	3,839,130
NSW	624,723	0	0
Non-grid electricity (Behind the meter)	624,723	0	0
Total electricity consumed	55,469,432	42,778,873	3,839,130
Emissions footprint (tCO₂-e)			
	46,618		
<i>Scope 2 emissions (tCO₂-e)</i>	42,779		
<i>Scope 3 emissions (tCO₂-e)</i>	3,839		

Climate Active carbon neutral electricity product summary

Carbon neutral electricity offset by Climate Active product	Activity data (kWh)	Emissions (kgCO ₂ -e)
N/A	0	0

Climate Active carbon neutral electricity is not renewable electricity. The emissions have been offset by another Climate Active member through their product certification.

APPENDIX C: INSIDE EMISSIONS BOUNDARY

Non-quantified emission sources

The following sources emissions have been assessed as relevant, 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	(1) Immaterial	(2) Cost effective (but uplift applied)	(3) Data unavailable (but uplift applied & data plan in place)	(4) Maintenance
Barangaroo Management Office activities including: - Stationary Energy - Electricity - Water - Waste	Yes	No	No	No
Land and sea transport (intra-precinct transport)	Yes	No	No	No
Stationary Energy (Liquified Petroleum Gas).				
Barangaroo Reserve and carpark	Yes	No	No	No

APPENDIX D: OUTSIDE EMISSIONS BOUNDARY

Excluded emission sources

The below emission sources have been assessed as not relevant to an organisation's or precinct's operations and are outside of its emissions boundary. These emissions are not part of the carbon neutral claim. Emission sources considered for relevance must be included within the certification boundary if they meet two of the five relevance criteria. Those which only meet one condition of the relevance test can be excluded from the certification boundary.

Emissions tested for relevance are detailed below against each of the following criteria:

1. **Size** The emissions from a particular source are likely to be large relative to the organisation's electricity, stationary energy and fuel emissions.
2. **Influence** The responsible entity has the potential to influence the reduction of emissions from a particular source.
3. **Risk** The emissions from a particular source contribute to the organisation's greenhouse gas risk exposure.
4. **Stakeholders** Key stakeholders deem the emissions from a particular source are relevant.
5. **Outsourcing** The emissions are from outsourced activities previously undertaken within the organisation's boundary, or from outsourced activities typically undertaken within the boundary for comparable organisations.

Emission sources tested for relevance	(1) Size	(2) Influence	(3) Risk	(4) Stakeholders	(5) Outsourcing	Included in boundary?
Office equipment and supplies	No	No	No	No	No	No
Food and beverage	No	No	No	No	No	No
Events temporary generation	No	Yes	No	No	No	No
Business-related Travel	No	No	No	No	No	No
Visitor Commute	No	No	No	No	No	No



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