



PUBLIC DISCLOSURE STATEMENT

CAPITAL BREWING CO PTY LTD

**ORGANISATION CERTIFICATION
FY2021–22**

Australian Government
**Climate Active
Public Disclosure Statement**



An Australian Government Initiative



NAME OF CERTIFIED ENTITY	Capital Brewing Co Pty Ltd
REPORTING PERIOD	Financial year 1 July 2021– 30 June 2022
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>UNSIGNED</p> <p>Name of signatory Position of signatory Date</p>



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

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1. CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	1627.9 tCO ₂ -e
OFFSETS BOUGHT	100% VCU's
RENEWABLE ELECTRICITY	99.47%
TECHNICAL ASSESSMENT	Date: 9/02/2022 Name: Sarah Colquhoun Organisation: Pangolin Associates Next technical assessment due: Date FY2025

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2. CARBON NEUTRAL INFORMATION

Description of certification

This inventory has been prepared for the financial year 1 July 2021–30 June 2022 and covers the Australian business operations of Capital Brewing Co, ABN: 71 610 788 317.

The operational boundary has been defined based on an operational control test, in accordance with the principles of the National Greenhouse and Energy Reporting Act 2007. This includes the following locations and facilities:

- 1 Dairy Road, Fyshwick ACT 2609
- 822 George Street, Chippendale NSW 2008

The methods used for collating data, performing calculations and presenting the carbon account are in accordance with the following standards:

- Climate Active Standards
- The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
- National Greenhouse and Energy Reporting (Measurement) Determination 2008.

Where possible, the calculation methodologies and emission factors used in this inventory are derived from the National Greenhouse Accounts (NGA) Factors in accordance with "Method 1" from the National Greenhouse and Energy Reporting (Measurement) Determination 2008.

The greenhouse gases considered within the inventory are those that are commonly reported under the Kyoto Protocol; carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O) and synthetic gases - hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) sulphur hexafluoride (SF₆) and nitrogen trifluoride (NF₃). These have been expressed as carbon dioxide equivalents (CO₂-e) using relative global warming potentials (GWPs).

*“Capital Brewing Co
is proud to be
Climate Active
Carbon Neutral
because there’s no
beer on a dead
planet!”*

Organisation description

Capital Brewing Co Pty Ltd is an Australian owned company engaged in the production and sale of beer. Capital's headquarters at 1 Dairy Rd, Fyshwick ACT, consists of a 2.5HL brewhouse, fermenters, packaging line, and associated production and storage facilities in addition to a 996person capacity hospitality venue and offices.

A small satellite office in Chippendale, Sydney provides office accommodation for regional sales and support staff.

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 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		Outside emission boundary
<p><u>Quantified</u></p> <ul style="list-style-type: none"> Accommodation and facilities Cleaning and Chemicals Climate Active carbon neutral products and services Electricity Food ICT services and equipment Machinery and vehicles Office equipment & supplies Postage, courier and freight Products Professional Services Refrigerants Stationary Energy (gaseous fuels) Stationary Energy (liquid fuels) Transport (Air) Transport (Land and Sea) Waste Water Working from home 	<p><u>Non-quantified</u></p> <p>N/A</p>	<p><u>Excluded</u></p> <ul style="list-style-type: none"> Customer refrigeration

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

Capital Brewing Co will draw on our first certified emissions summary to develop a detailed reduction strategy in the next six months to further reduce our footprint.

Short term (1-2 years)

- Reduce level of imported malt by switching to locally grown grain through the use of regenerative farming practices
- Find alternatives to international hops and Increase use of Australian grown hops as a percentage of total hop consumption.
- Reduce CO2 use in production through CO2 recycling strategies
- Changing plastic can holders to recycled cardboard cluster paks
- Promote and encourage sustainable commute methods for employees
- Join with other breweries throughout Australia to collectively lobby brewery supply chains for lower carbon options
- Installation of yeast harvesting and dosing equipment to reduce the use of imported yeast

Medium term(3-5 years)

- Reduce Natural Gas usage by moving to electric heaters in outdoor F&B area
- Increase [Trees for Tomorrow Program](#) | from 5000 trees planted to 10000
- Reduce water consumption to <3.9L/L
- Plant and Equipment upgrades to reduce water and chemical use including, but not limited to an automated Clean In Place system

Long term(10+ years)

- Investigate transitioning gas fired steam boilers to electricity or 'green gas' eg hydrogen.
- Transition gas powered forklifts to an electric fleet
- Transition Capital Brewing Co vehicle fleet to all-electric
- Investigate emission reduction scheme opportunities from our raw material inputs (Hops and Barley) in order to inset carbon credits into our own supply chain

Using this year's data as a base (normalized post COVID-19), we expect these strategies will reduce emissions across scope 1, 2 and 3 by 10% in 2025 and 20% by 2035.

Emissions reduction actions

Emission reduction strategies for action over the next year will include:

Capital Brewing Co has worked to reduce its own emissions by installing upgraded refrigeration equipment that uses a new refrigerant with a lower GWP. Our previous system used refrigerant R-410A with a GWP of 2088 and we will now be using R-513A with a GWP 573. Capital Brewing Co is also continuously working to promote and lobby businesses within the industry and our own supply chain to look at their own emissions and question what changes can be made.

[Carbon neutral Capital launches industry template – Brews News Australia](#)

5. EMISSIONS SUMMARY

Emissions over time

Emissions since base year		Total tCO ₂ -e
Base year/Year 1:	2020–21	1,119.1
Year 2:	2021–22	1627.9

Significant changes in emissions

Emission source name	Current year (tCO ₂ -e and/ or activity data)	Previous year (tCO ₂ -e and/ or activity data)	Detailed reason for change
Natural Gas NSW/ACT (metro) (GJ)	138.4	73.8	COVID Taproom closed during previous year + Business Growth
Petrol: Medium Car	68.4	9.7	Business Growth/Return to work and increased travel
Advertising services	42.4	17.4	Business Growth

Use of Climate Active carbon neutral products and services

Capital Brewing Co use Opal Australian Paper (Reflex) carbon neutral paper.

Organisation 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)
Accommodation and facilities	0.0	0.0	3.5	3.5
Cleaning and Chemicals	0.0	0.0	11.9	11.9
Climate Active carbon neutral products and services	0.0	0.0	0.0	0.0
Electricity	0.0	2.5	0.0	2.5
Food	0.0	0.0	62.8	62.8
ICT services and equipment	0.0	0.0	16.5	16.5
Machinery and vehicles	0.0	0.0	0.7	0.7
Office equipment & supplies	0.0	0.0	4.5	4.5
Postage, courier and freight	0.0	0.0	14.9	14.9
Products	0.0	0.0	31.8	31.8
Professional Services	0.0	0.0	118.3	118.3
Refrigerants	8.6	0.0	0.0	8.6
Stationary Energy (gaseous fuels)	110.3	0.0	28.0	138.4
Stationary Energy (liquid fuels)	19.9	0.0	1.2	21.1
Transport (Air)	0.0	0.0	6.6	6.6
Transport (Land and Sea)	41.3	0.0	127.1	168.4
Waste	0.0	0.0	36.0	36.0
Water	0.0	0.0	16.6	16.6
Working from home	0.0	0.0	1.4	1.4
Total organisation emissions	180.1	2.5	482.1	664.6
Production of raw materials	0.0	0.0	448.9	448.9
Production of packaging	0.0	0.0	440.6	440.6
Freight of raw materials & packaging	0.0	0.0	36.2	36.2
Transport to customer	0.0	0.0	37.7	37.7
Total Product emissions	0.0	0.0	963.3	963.3
Product and organisation total emissions	180.1	2.5	1445.4	1627.9

Uplift factors

Reason for uplift factor	tCO ₂ -e
N/A	
	Total of all uplift factors
	Total footprint to offset <i>(total net emissions from summary table + total uplifts)</i>

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	1,628
3. Total eligible offsets required for this report	1,628
4. Total eligible offsets purchased and retired for this report	1,628
5. Total eligible offsets banked to use toward next year's report	0

Co-benefits

Bundled Solar Power Project by Solar Arise Projects Pty Ltd

The project activity involves the installation of Solar PV project. The total installed capacity of the project is 120 MW of Solar PV plant located at different states in India. The project is promoted by SolarArise India Projects Pvt. Ltd.

Co-benefits:

Social well-being: The project would help in generating employment opportunities during the construction and operation phases. The project activity will lead to development in infrastructure in the region like development of roads and also may promote business with improved power generation.

Economic well-being: The project is a clean technology investment in the region, which would not have been taken place in the absence of the VCS benefits the project activity will also help to reduce the demand supply gap in the state. The project activity will generate power using zero emissions Solar PV based power generation which helps to reduce GHG emissions and specific pollutants like SO_x, NO_x, and SPM associated with the conventional thermal power generation facilities.

Technological well-being: The successful operation of project activity would lead to promotion of Solar based power generation and would encourage other entrepreneurs to participate in similar projects.

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 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 (%)
Bundled Solar Power Project by Solararise India Projects PVT. LTD	VCU	Verra	21/12/2023	10730-245058013-245058053-VCS-VCU-997-VER-IN-1-1762-26042018-31122018-0	2018	0	41	0	0	41	3%
Bundled Solar Power Project by Solararise India Projects PVT. LTD	VCU	Verra	21/12/2023	10730-245071438-245073024-VCS-VCU-997-VER-IN-1-1762-26042018-31122018-0	2018	0	1,587	0	0	1,587	97%
Total eligible offsets retired and used for this report										1,628	
Total eligible offsets retired this report and banked for use in future reports										0	

Type of offset units	Quantity (used for this reporting period claim)	Percentage of total
Verified Carbon Units (VCUs)	1,628	100%

7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

Renewable Energy Certificate (REC) summary

N/A.

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

1. Large-scale Generation certificates (LGCs)*	N/A
2. Other RECs	N/A

* 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
Total LGCs surrendered this report and used in this report									

APPENDIX A: ADDITIONAL INFORMATION

N/A.

Additional offsets cancelled for purposes other than Climate Active Carbon Neutral Certification

Project description	Type of offset units	Registry	Date retired	Serial number (and hyperlink to registry transaction record)	Vintage	Eligible Quantity (tCO ₂ -e)	Purpose of cancellation

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 (kgCO2e)	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 & Precinct LGCs)	0	0	0%
GreenPower	0	0	0%
Jurisdictional renewables (LGCs retired)	375,484	0	81%
Jurisdictional renewables (LRET) (applied to ACT grid electricity)	85,742	0	18%
Large Scale Renewable Energy Target (applied to grid electricity only)	565	0	0%
Residual Electricity	2,476	2,464	0%
Total grid electricity	464,267	2,464	99%
Total Electricity Consumed (grid + non grid)	464,267	2,464	99%
Electricity renewables	461,791	0	
Residual Electricity	2,476	2,464	
Exported on-site generated electricity	0	0	
Emissions (kgCO2e)		2,464	

Total renewables (grid and non-grid)	99.47%
Mandatory	99.47%
Voluntary	0.00%
Behind the meter	0.00%
Residual Electricity Emission Footprint (TCO2e)	2
<i>Figures may not sum due to rounding. Renewable percentage can be above 100%</i>	
<i>Voluntary includes LGCs retired by the ACT (MWh)</i>	375

Location Based Approach Summary

Location Based Approach	Activity Data (kWh)	Scope 2 Emissions (kgCO2e)	Scope 3 Emissions (kgCO2e)
ACT	461,226	359,756	32,286
NSW	3,042	2,372	213
SA	0	0	0
Vic	0	0	0
Qld	0	0	0
NT	0	0	0
WA	0	0	0
Tas	0	0	0
Grid electricity (scope 2 and 3)	464,267	362,128	32,499
ACT	0	0	0
NSW	0	0	0
SA	0	0	0
Vic	0	0	0
Qld	0	0	0
NT	0	0	0
WA	0	0	0
Tas	0	0	0
Non-grid electricity (Behind the meter)	0	0	0
Total Electricity Consumed	464,267	362,128	32,499

Emission Footprint (TCO2e)	395
<i>Scope 2 Emissions (TCO2e)</i>	362
<i>Scope 3 Emissions (TCO2e)</i>	32

Climate Active Carbon Neutral Electricity summary

Carbon Neutral electricity offset by Climate Active Product	Activity Data (kWh)	Emissions (kgCO2e)
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
N/A				

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?
Customer refrigeration	No	No	No	No	No	No



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