PUBLIC DISCLOSURE STATEMENT

CAPITAL BREWING CO PTY LTD

ORGANISATION CERTIFICATION
CY2022

Australian Government

Climate Active
Public Disclosure Statement

An Australian Government Initiative

NAME OF CERTIFIED ENTITY	Capital Brewing Co Pty Ltd
REPORTING PERIOD	Calendar year 1 July 2022– 31 December 2022 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.* UNSIGNED
	Name of signatory Position of signatory Date

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

Version March 2023.

1.CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	820.2 tCO_2-e
OFFSETS USED	100% VCUs
RENEWABLE ELECTRICITY	92.39%
CARBON ACCOUNT	Prepared by: Pangolin Associates
TECHNICAL ASSESSMENT	Date: 9/02/2022 Name: Sarah Colquhoun Organisation: Pangolin Associates Next technical assessment due: CY2023

Contents

2.CARBON NEUTRAL INFORMATION

Description of certification

This inventory has been prepared for the calendar year 1 July 2022– 31 December 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 (CO_2), methane (CH_4), nitrous oxide (N_2O) and synthetic gases - hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) sulphur hexafluoride (SF6) and nitrogen trifluoride (NF_3). These have been expressed as carbon dioxide equivalents (CO_2-e) using relative global warming potentials (GWPs).

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 996 person 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 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

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

Non-quantified

N/A

Outside emission boundary

Excluded

Customer refrigeration

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 packs
- 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 I 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

From 2022 (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.

5. EMISSIONS SUMMARY

Emissions over time

Note that the reporting approach has changed from FY to CY, and this report is reflective of a 6-month period.

Emissions since base year			
		Total tCO_2-e (without uplift)	Total tCO_2-e (with uplift)
Base year/Year 1:	2020–21	1,119.1	-
Year 2:	2021–22	1627.9	-
Year 3/Base year for Calendar Period	CY2022	820.2	-

Significant changes in emissions

NA as the reporting approach has changed from FY to CY.

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

Certified brand name	Product/Service/Building/Precinct used
Opal Australian Paper (Reflex)	Paper

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 (t CO_2-e)
Accommodation and facilities	0.0	0.0	0.8	0.8
Cleaning and Chemicals	0.0	0.0	6.0	6.0
Climate Active carbon neutral products and services	0.0	0.0	0.0	0.0
Electricity	0.0	16.5	2.2	18.6
Food	0.0	0.0	31.9	31.9
ICT services and equipment	0.0	0.0	8.3	8.3
Machinery and vehicles	0.0	0.0	1.0	1.0
Office equipment & supplies	0.0	0.0	2.2	2.2
Postage, courier and freight	0.0	0.0	7.5	7.5
Products	0.0	0.0	14.9	14.9
Professional Services	0.0	0.0	59.2	59.2
Refrigerants	3.4	0.0	0.0	3.4
Stationary Energy (gaseous fuels)	55.2	0.0	14.0	69.2
Stationary Energy (liquid fuels)	9.9	0.0	3.3	13.3
Transport (Air)	0.0	0.0	11.5	11.5
Transport (Land and Sea)	19.3	0.0	67.8	87.1
Waste	0.0	0.0	18.0	18.0
Water	0.0	0.0	7.9	7.9
Working from home	0.0	0.0	1.0	1.0
Total organisation emissions	**87.8**	**16.5**	**257.5**	**361.7**
Production of raw materials			224.4	224.4
Production of packaging			220.3	220.3
Freight of raw materials & packaging			9.0	9.0
Transport to customer			4.7	4.7
Total Product emissions	**0.0**	**0.0**	**458.5**	**458.5**
Product and organisation total emissions	**87.8**	**16.5**	**715.9**	**820.2**

Uplift factors

An uplift factor is an upwards adjustment to the total carbon inventory to account for relevant emissions that 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
N/A	
Total of all uplift factors	
Total emissions footprint to offset *(total emissions from summary table + total of all uplift factors)*	

6.CARBON OFFSETS

Offsets retirement approach

This certification has taken an in-arrears offsetting approach. The total emission to offset is 821 t CO_2-e. The total number of eligible offsets used in this report is 821. Of the total eligible offsets used, 0 were previously banked and 821 were newly purchased and retired. 0 are remaining and have been banked for future use.

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 SOx, NOx, 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	10730-245051582-245052402-VCS-VCU-997-VER-IN-1-1762-26042018-31122018-0	2018	0	821	0	0	821	100%
									Total eligible offsets retired and used for this report	821	
									Total eligible offsets retired this report and banked for use in future reports	0	

Type of offset units	Eligible quantity (used for this reporting period)	Percentage of total
Verified Carbon Units (VCUs)	821	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

* 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)
Total LGCs surrendered this report and used in this report									

APPENDIX A: ADDITIONAL INFORMATION

N/A

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**

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Market-based approach summary

Market-based approach	Activity Data (kWh)	Emissions (kg CO_2-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)	0	0	0%
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)	189,230	0	74%
Jurisdictional renewables (LRET) (applied to ACT grid electricity)	47,582	0	19%
Large Scale Renewable Energy Target (applied to grid electricity only)	244	0	0%
Residual Electricity	19,521	18,642	0%
Total renewable electricity (grid + non grid)	**237,055**	**0**	**92%**
Total grid electricity	**256,576**	**18,642**	**92%**
Total electricity (grid + non grid)	**256,576**	**18,642**	**92%**
Percentage of residual electricity consumption under operational control	100%		
Residual electricity consumption under operational control	**19,521**	**18,642**	
Scope 2	17,239	16,463	
Scope 3 (includes T&D emissions from consumption under operational control)	2,282	2,179	
Residual electricity consumption not under operational control	**0**	**0**	
Scope 3	0	0	

Total renewables (grid and non-grid)	**92.39%**
Mandatory	**18.64%**
Voluntary	**73.75%**
Behind the meter	**0.00%**
Residual scope 2 emissions (t CO_2-e)	**16.46**
Residual scope 3 emissions (t CO_2-e)	**2.18**
Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO_2-e)	**16.46**
Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO_2-e)	**2.18**
Total emissions liability (t CO_2-e)	**18.64**

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)**
ACT	255,267	255,267	186,345	15,316	0	0
NSW	1,309	1,309	956	79	0	0
SA	0	0	0	0	0	0
VIC	0	0	0	0	0	0
QLD	0	0	0	0	0	0
NT	0	0	0	0	0	0
WA	0	0	0	0	0	0
TAS	0	0	0	0	0	0
Grid electricity (scope 2 and 3)	**256,576**	**256,576**	**187,301**	**15,395**	**0**	**0**
ACT	0	0	0	0		
NSW	0	0	0	0		
SA	0	0	0	0		
VIC	0	0	0	0		
QLD	0	0	0	0		
NT	0	0	0	0		
WA	0	0	0	0		
TAS	0	0	0	0		
Non-grid electricity (behind the meter)	**0**	**0**	**0**	**0**		
Total electricity (grid + non grid)	**256,576**					

Residual scope 2 emissions (t CO_2-e)	**187.30**
Residual scope 3 emissions (t CO^2-e)	**15.39**
Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO_2-e)	**187.30**
Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO_2-e)	**15.39**
Total emissions liability	**202.70**

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 CO_2-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 Climate Active electricity products (kWh)**	**Emissions (kg CO_2-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 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 relevant, are captured within the emissions boundary, but are not measured (quantified) in the carbon inventory. They have been non-quantified due to one of the following reasons:

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

Relevant non-quantified emission sources	Justification reason
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.

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

APPENDIX D: OUTSIDE EMISSIONS BOUNDARY

Excluded emission sources

The below emission sources have been assessed as not relevant to this organisation'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

Excluded emissions sources summary

Emission sources tested for relevance	Size	Influence	Risk	Stakeholders	Outsourcing	Justification
Customer refrigeration	N	N	N	N	N	

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