PUBLIC DISCLOSURE STATEMENT

CO2 AUSTRALIA

ORGANISATION CERTIFICATION
CY2021

Australian Government

Climate Active
Public Disclosure Statement

An Australian Government Initiative

NAME OF CERTIFIED ENTITY	CO2 Australia Ltd
REPORTING PERIOD	1 January 2021 – 31 December 2021 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.* Name of signatory Tai White-Toney Position of signatory Carbon Programs Manager Date 14 July 2022

Australian Government
Department of Industry, Science, Energy and Resources

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

1.CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	327 tCO2-e
OFFSETS BOUGHT	100% ACCU's
RENEWABLE ELECTRICITY	NA
TECHNICAL ASSESSMENT	Date: 26/03/2021 Name: Sarah Colquhoun Organisation: Pangolin Associates Pty LTD Next technical assessment due: CY2023

Contents

2. CARBON NEUTRAL INFORMATION

Description of certification

This inventory has been prepared for the calendar year (CY) from 1 January 2021 to 31 December 2021 and covers the Australian operations of CO2 Australia Ltd, ABN: 81 102 990 803.

"Climate Active certification gives businesses a credible, measurable and respected stamp against their carbon neutral credentials"

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:

- Unit 12, 11 McKay Gardens, Turner ACT 2612
- 12 Wentworth Street, Wagga Wagga NSW 2650
- 17 Riverside, North Forbes Road, Condobolin NSW 2877
- Level 2, 12 Browning Street, West End QLD 4101
- 46/7 Stirling Street, Robinson WA 6330
- Properties across Australia owned by Mallee Land Company and Blue-Leafed Mallee.

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).

Organisation description

Established in 2004, CO2 Australia is one of Australia's longest running developers and managers of carbon projects. We have pioneered the successful delivery of carbon market services in Australia and currently act as an Emissions Reduction Fund (ERF) agent on behalf of a range of large industrials, transport companies, government agencies, corporates and private landholders. We also manage the largest carbon forestry estate in Australia and have hands-on management responsibility for a series of major emissions reduction projects, expected to generate more than 10 million tonnes of carbon abatement into the Australian market, with our international project interests generating an additional five million tonnes under the Clean Development Mechanism.

CO2 Australia's key achievements to date include:

- First company to be accredited under the NSW Greenhouse Gas Abatement Scheme.
- First company to become an Accredited Abatement Provider under the Greenhouse Friendly™ program in relation to tree planting projects.
- First Australian Associate Member and a listed Offset Provider under the Chicago Climate Exchange.
- Establishment of over 30,000 ha of tree plantings for carbon project purposes.
- Successful registration of the first project under the Afforestation and Reforestation methodology under the Carbon Farming Initiative.
- First company to successfully generate Australian Carbon Credit Units (ACCUs).
- On behalf of Woodside, successfully delivered Australia's largest commercial emissions offset program based on dedicated forest carbon sink plantings.
- Registration to date of 37 ERF projects (as a project proponent or ERF agent) under various land sector methods that cover more than 300,000 hectares and are expected to generate over 10 million ACCUs across the life of the projects.
- Successful registration of the first projects sited on land within the conservation estate under the Human-Induced Regeneration and Environmental Plantings methodologies.
- First company to successfully register a project under the Plantation Forestry methodology in Australia.

Our roots are firmly planted in carbon projects and helping clients participate in, and benefit from, the ever-changing carbon market. But carbon is not all we do. We also have more than a decades' experience delivering biodiversity offsets under state and Commonwealth frameworks. We are one of the few companies that can offer end-to-end offset services, from the development of offset strategies right through to securing and managing the offset in perpetuity. To date, we have secured more than 90,000 hectares of new protected areas through offset projects, with more than 100,000 hectares in the pipeline.

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

Quantified

Accommodation and facilities

Taxis & Ridesharing

Vehicle Hire

Waste

Postage, courier, and freight

Horticulture and Agriculture

Food

Cleaning and Chemicals

Electricity

ICT services and equipment

Office equipment & supplies

Products

Professional Services

Transport (Air)

Transport (Land and Sea)

Water

Working from home

Recycling

Non-quantified

Refrigerant

Outside emission boundary

Excluded

NA

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

Background Summary

CO2 Australia's Emissions Reduction Strategy (ERS) outlines the actions that our organisation is undertaking to reduce emissions from activities and operations between 2018 and 2028. The ERS is in accordance with the *Climate Active Carbon Neutral Standard for Organisations or Precincts* and has been developed to provide a framework to help CO2 Australia maintain carbon neutrality and Climate Active certification. Each year the ERS is updated to reconcile the previous years' actions and identify priority activities for future years to further reduce emissions at both an employee and organizational level.

CO2 Australia commits to reduce our total emissions across the value chain (i.e. scopes 1, 2 and 3) by at least 50% and maintain emissions below that level by 2028, from the 2018 base year levels. Once this target is reached (i.e. annual emissions are consistently below 542 tCO_2-e, or average that amount or less by 2028), CO2 Australia will review our ERS and amend accordingly to optimise future emissions reduction targets. We have revied three of our biggest emissions sources within the three scopes: transport, electricity and horticulture.

Scope 1 emissions will be further reduced by:

- Target action #1: optimizing ride sharing opportunities during field work which will reduce fuel consumption by 5% by 2028 which will reduce emissions by 1%, 4.44 tCO_2-e.

Scope 2 emissions will be reduced by:

- Target action #1: switching our electricity provided to a company with 50% renewable electricity by 2028 year which will reduce our emissions by 10%, 34.02 tCO_2-e.

Scope 3 emissions will be reduced by

- Target action #1: Complete Life Analysis on seedlings providers with the intention to switch supplier to a carbon neutral provider by 2028 year which will reduce emissions by 5%, 16.8 tCO_2-e.

Emissions reduction actions

For CY2018, CO2 Australia measured our carbon footprint for the first time in accordance with Climate Active standard. This has allowed us to develop a quantitative emissions reduction target. Several emission reductions measures were implemented in 2021, which contributed to 50% emission reduction comparing between CY2020 and CY 2021 and developed a carbon action plan for the period of 2020 – 2023 with the aim of reducing our per employee emissions on a yearly basis.

Three sources, transportation, energy consumption and waste management, have been identified in this plan as areas where substantial improvements can be made. Other emission sources (seedlings and

contractors) may be considered for reduction solutions for next calendar year. Following the plan, a carbon emission reduction guide for CO2 Australia offices and activities has been drafted.

Transportation

Fuel used for transport is CO2 Australia's major emission source, accounting for approximately 24% for CY21. The following practices were implemented and encouraged by management to reduce this emission source. These included:

- Facilitating flexible working arrangements with our staff so they can work remotely when required, reducing the need for commutes into our central offices and being able to go directly to sites without coming into our offices by December 2022.
- Supporting staff who wish to ride a bike or walk to work by having facilities for showering at work and bike storage when negotiating new leases.
- When scheduling meetings, preferentially use of teleconferences reduce the need for travel for meetings.
- When flying, attempting to maximise travel by coordinating several meetings for each trip as well as compiling multi-stop flights, when possible, to avoid numerous return flights.

Energy Consumption

In 2021, energy consumption in offices accounted for 11% and 21%, ranked second after transport fuels and third-party services – fertiliser. We identified feasible measures including improving housekeeping activities, replacing old equipment with more energy efficient equipment and using renewable energy in order to save energy consumption. These practices have been encouraged and investigation into the cost associated with major changes has commenced.

Practices implemented in 2021, and will continue:

- Turning off lighting and devices in the evenings and over weekends.
- Applying 10 – 30 minutes principle to monitors: turn off monitor after 10 minutes, "sleep mode" after 30 mins un-touching done in Brisbane office. This will be enacted by December 2022.
- Applying 10 – 30 minutes principle to printers, photocopiers: Set up "standby" or "energy saving" mode when not in use in more 10 minutes or turn off in more 30 minutes in Canberra office.
- LED lighting replacements in our Brisbane office have already been implemented. We will look to change the LED lighting in the Wagga Wagga office by 2023.
- Continue purchasing/leasing of indoor plants in offices to absorb the temperature from office equipment.
- Switching to clean energy providers by 2023.

- Purchasing energy efficient equipment when old equipment needs replacing.

Waste Management

Although waste management wasn't a major source of emissions for CY2020 and CY2021 it has been identified as an area where improvement can be rapidly made. These have been implemented across our major offices and are progressively implemented in all other offices.

- We will continue to reduce plastic consumption with the goal of 80% reduction of all virgin plastic by 2025.
- We will requiring staff to use keep cups in the office to minimise takeaway coffee cups by CO2 Australia employees.
- We will set default printing set to double sided, black and white for all of our photocopiers and printers by December 2021.

We will make purchases for the FSC or PEFC trademark products with the goal of switching entirely by 2025.

5.EMISSIONS SUMMARY

Emissions over time

Emissions since base year		Total tCO2-e
Base year:	2018	1,083.1
Year 1:	2019	807.7
Year 2:	2020	651.2
Year 3:	2021	326.8

Significant changes in emissions

Emission source name	Current year ($kgCO_2$-e)	Previous year ($kgCO_2$-e)	Detailed reason for change
Diesel oil post-2004	79,102.4	91,512.3	Fewer project implementation / planting jobs this FY
Vegetable and fruit growing, hay, plant nurseries, flowers	37,644.4	189,016.3	Fewer project implementation / planting jobs this FY
Total net electricity emissions (Location based)	68,049.4	71,648.2	Increased work-from-home capacity
Chemical fertilisers	45,732.5	62,364.2	Fewer project implementation / planting jobs this FY
Technical services	31,100.5	141,888.8	Fewer project implementation / planting jobs this FY

Use of Climate Active carbon neutral products and services

- Pangolin Associates Pty LTD
- Reflex A4 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 total emissions (tCO_2-e)
Accommodation and facilities	11.20
Air transport (fuel)	0
Air transport (km)	13.08
Vehicle Hire	3.61
Carbon neutral products and services	0
Cleaning and chemicals	0.20
Construction materials and services	0
Electricity	68.05
Food	2.78
Horticulture and agriculture	83.38
ICT services and equipment	17.19
Land and sea transport (fuel)	0
Land and sea transport (km)	88.72
Machinery and vehicles	0
Office equipment & supplies	0.81
Postage, courier and freight	1.13
Products	0.41
Professional services	31.87
Refrigerants	0
Roads and landscape	0
Stationary energy	0
Taxis and Ridesharing	0.12
Waste	0.91
Water	0.97
Working from home	2.34
Total	**326.78**

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	327
3. Total eligible offsets required for this report	327
4. Total eligible offsets purchased and retired for this report	327
5. Total eligible offsets banked to use toward next year's report	0

Co-benefits

The project from which the ACCU were generated was registered with the Clean Energy Regulator as project EOP100985 in January 2015. This project, Carbon Estate: Creating a Better Climate project (Stage 2) establishes permanent plantings of *Eucalyptus polybractea* trees on land that was previously used for agricultural purposes.

Eligible offsets retirement summary

Offsets cancelled 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 (%)**
This project, Carbon Estate: Creating a Better Climate project (Stage 2)	ACCUs	ANREU	23 May 2022	8,342,111,712 - 8,342,112,038	2021-22	0	327	0	0	327	100%
									Total offsets retired this report and used in this report	327	
									Total offsets retired this report and banked for future reports	0	

Type of offset units	Quantity (used for this reporting period claim)	Percentage of total
Australian Carbon Credit Units (ACCUs)	327	100%

Transaction ID	AU22299
Current Status	Completed (4)
Status Date	23/05/2022 14:55:45 (AEST) 23/05/2022 04:55:45 (GMT)
Transaction Type	Cancellation (4)
Transaction Initiator	White-Toney, Tai Bailey
Transaction Approver	Soanes, Aaron James
Comment	Voluntary cancellation for CO2 Australia for Climate Active certification for 2021.

Transferring Account

Account Number	AU-1119
Account Name	Carbon Estate Pty Ltd
Account Holder	Carbon Estate Pty Ltd

Acquiring Account

Account Number	AU-1068
Account Name	Australia Voluntary Cancellation Account
Account Holder	Commonwealth of Australia

Transaction Blocks

Party	Type	Transaction Type	Original CP	Current CP	ERF Project ID	NGER Facility ID	NGER Facility Name	Safeguard	Kyoto Project #	Vintage	Expiry Date	Serial Range	Quantity
AU	KACCU	Voluntary ACCU Cancellation			EOP100985					2021-22		8,342,111,712 - 8,342,112,038	327

7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

Renewable Energy Certificate (REC) summary

NA

APPENDIX A: ADDITIONAL INFORMATION

NA

APPENDIX B: ELECTRICITY SUMMARY

Electricity emissions are calculated using a location-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)	7,694	0	10%
Jurisdictional renewables (LRET) (applied to ACT grid electricity)	1,751	0	2%
Large Scale Renewable Energy Target (applied to grid electricity only)	12,509	0	16%
Residual Electricity	54,959	54,649	0%
Total grid electricity	76,913	54,649	29%
Total Electricity Consumed (grid + non grid)	76,913	54,649	29%
Electricity renewables	21,953	0	
Residual Electricity	54,959	54,649	
Exported on-site generated electricity	0	0	
Emissions (kgCO2e)		54,649	

Total renewables (grid and non-grid)	28.54%
Mandatory	28.54%
Voluntary	0.00%

Behind the meter	0.00%
Residual Electricity Emission Footprint (TCO2e)	55

Figures may not sum due to rounding. Renewable percentage can be above 100%

Location Based Approach Summary

Location Based Approach	Activity Data (kWh)	Scope 2 Emissions (kgCO2e)	Scope 3 Emissions (kgCO2e)
ACT	9,445	7,367	661
NSW	3,143	2,452	220
SA	0	0	0
Vic	0	0	0
Qld	56,703	45,363	6,804
NT	0	0	0
WA	7,621	5,106	76
Tas	0	0	0
Grid electricity (scope 2 and 3)	76,913	60,288	7,762
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	76,913	60,288	7,762

Emission Footprint (TCO2e)	68
Scope 2 Emissions (TCO2e)	60
Scope 3 Emissions (TCO2e)	8

Climate Active Carbon Neutral Electricity summary

Carbon Neutral electricity offset by Climate Active Product	Activity Data (kWh)	Emissions (kgCO2e)
NA	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
Refrigerants	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?
NA						

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