



PUBLIC DISCLOSURE STATEMENT

ASTRON ENVIRONMENTAL SERVICES PTY LTD

ORGANISATION CERTIFICATION


FY 2021–22

Australian Government
Climate Active
Public Disclosure Statement



An Australian Government Initiative



NAME OF CERTIFIED ENTITY	Astron Environmental Services Pty Ltd Arrears report
REPORTING PERIOD	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></p>
	Dr. Stuart Pearse General Manager August 23, 2023



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

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Version March 2022.



1. CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	720 tCO ₂ -e
OFFSETS BOUGHT	25% ACCUs, 75% VCU
RENEWABLE ELECTRICITY	18.59%
TECHNICAL ASSESSMENT	Theresa Banta 100% Renewables Pty Ltd Next technical assessment due: FY 2024-25
THIRD PARTY VALIDATION	Type 1 January 23, 2023 Katherine Simmons Krea Consulting

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2. CARBON NEUTRAL INFORMATION

Description of certification

This public disclosure statement (PDS) supports the certification of the Australian operation of Astron Environmental Services Pty Ltd (ABN: 64 115 081 591) as an organisation going carbon neutral under the Climate Active Carbon Neutral Certification Standard for Organisations. This report includes an overview of Astron Environmental Services Pty Ltd's greenhouse gas (GHG) emissions reduction strategy as well as a description of the GHG emissions boundaries.

The baseline emissions reported in this document are for FY 2022, which is the first year of certification.

Organisation description

Astron Environmental Services Pty Ltd is a privately owned Australian business in the environmental consulting industry. Astron is one of Australia's longest established environmental consultancies with over 35 years' continuous experience in Western Australia. The company provides a comprehensive range of environmental services in the following industries: Biodiversity, Earth Observation, Mine Closure, Oil Spill Scientific Monitoring, Rehabilitation and Weed Management. Astron has offices in Perth and Margaret River.

“Astron is an ecological advisory company that assists clients in achieving a nature positive future. Climate change poses a threat to the natural environment. Consequently, we are committed to reducing our emissions and supporting nature-based solutions whilst encouraging others to achieve Net Zero and be Climate Active.”

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"> Fleet vehicles (diesel) Refrigerants Electricity Business accommodation Air travel Taxi and ridesharing Hire cars Employee commute Working from home Cleaning and chemicals Construction materials and services Food and catering ICT services and equipment Machinery and vehicles Office equipment & supplies Carbon neutral paper Postage, courier, and freight Products (photographic and recording media) Professional services Refrigerants Waste Water 	<p><u>Non-quantified</u></p> <p>N/A</p>	<p><u>Excluded</u></p> <p>N/A</p>

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

Astron Environmental Services conducts a large volume of work in remote environments and by nature of our operations extensive travel is required by air and land so we can assist our clients through survey, monitoring and management of the natural environment. This work is essential to limit the impact of land and industrial development on biodiversity and to facilitate activities that restore and conserve nature.

Astron has an overall emission reduction strategy to reduce our footprint by 17% by 2030 via reduction of Scope 1, 2 and 3 emissions. Astron intends to reduce our carbon emissions by focusing primarily on key sources where the most impact can be achieved. By nature of our operations land and air travel is a fundamental requirement for our operations; however, over time we have invested in approaches using remotely sensed imagery from satellites to reduce the requirement for on ground monitoring activities. The sources of emissions is presented in Figure 1 below:

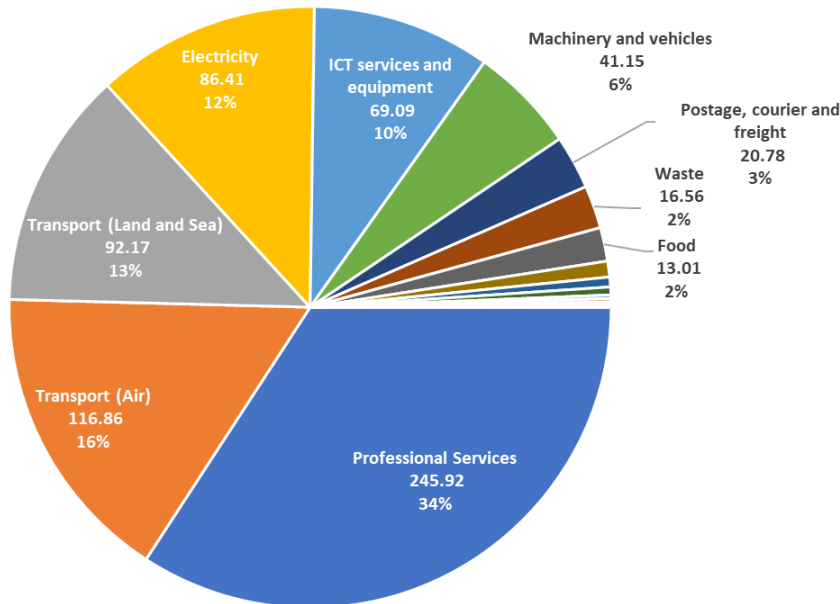


Figure 1. Carbon emission sources by percentage contribution and tonnes for Astron Environmental Service Pty Ltd.

Due to shared metering on leased buildings unfortunately we cannot pay for green energy or install renewable energy infrastructure on our buildings. However, if relocating premises in 2024 we will lease a more sustainable building equipped with renewable energy generation to reduce our electricity footprint will be a key consideration. In the short term (2023 to 2024) Astron will be running a culture-based campaign to encourage the team to consider taking actions around the office that reduce our electricity consumption. We will also undertake an internal audit in 2023 within the buildings to determine if there are opportunities for upgrading electricity consuming devices and infrastructure to more efficient equipment.

For land transport in terms of vehicle use for work purposes at present there are not currently more sustainable options such as mine specification electric 4wd vehicles available for hire or purchase. As this technology becomes available we will be able to further reduce our emissions by switching to an electric

fleet. Astron will encourage the use of hybrid or electric ride share vehicles for team members commuting to and from Perth airport when mobilising to the field. Team members will also be encouraged to meet clients on Microsoft Teams wherever possible, and if commuting to in person client meetings to also use ride share vehicles. Astron will also continue to invest in the use of remote sensing for the purpose of environmental monitoring to where possible reduce the frequency or intensity of field based monitoring activities thereby further reducing our carbon footprint.

Team members will be encouraged to use greener transport such as cycling or public transport for commuting to the office. In 2024 we will complete a commute to work survey to determine the mode of transport team members use to travel to the office as a component of this campaign and to better inform the accuracy of our total emissions. For air transport, where Astron is purchasing flights on behalf of our clients we will purchase carbon offset air tickets. We envisage this will result in a 2% reduction in overall contribution of flight to our carbon footprint by 2024. We will look to purchase more sustainable office stationary and supplies where possible, as well as encourage the team to use stationary as efficiently as possible thereby reducing the volume consumed.

5. EMISSIONS SUMMARY

Use of Climate Active carbon neutral products and services

Certified brand name	Product or Service used
Reflex	A4 White Unwrapped Copy Paper 80gsm

Organisation emissions summary

The electricity summary is available in 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)
Professional Services	-	-	245.92	245.92
Transport (Air)	-	-	116.86	116.86
Transport (Land and Sea)	4.47	-	87.70	92.17
Electricity	-	86.41	-	86.41
ICT services and equipment	-	-	69.09	69.09
Machinery and vehicles	-	-	41.15	41.15
Postage, courier and freight	-	-	20.78	20.78
Waste	-	-	16.56	16.56
Food	-	-	13.01	13.01
Cleaning and chemicals	-	-	6.14	6.14
Office equipment & supplies	-	-	3.81	3.81
Accommodation and facilities	-	-	3.06	3.06
Water	-	-	1.37	1.37
Refrigerants	1.37	-	-	1.37
Construction materials and services	-	-	1.11	1.11
Products	-	-	0.83	0.83
Working from home	-	-	0.003	0.003
Climate Active carbon neutral products and services	-	-	-	-
Grand Total	5.83	86.41	627.40	719.64

6. CARBON OFFSETS

Offsets retirement approach

In arrears

1.	Total emissions footprint to offset for this report	720 t CO ₂ -e
2.	Total eligible offsets purchased and retired for this report	720 t CO ₂ -e
3.	Total eligible offsets banked to use toward next year's report	0 t CO ₂ -e

Co-benefits

This section provides a brief description of the carbon offsets purchased and retired for Astron Consulting Pty Ltd's carbon neutral claim.

Bundled Wind Power Project by Mytrah Group

The project relates to 75 per cent of the total amount of offsets purchased and retired for this reporting period. The activity includes the generation of electrical energy using wind and selling the generated electricity to the respective state utilities under the Indian Grid. The power produced displaces an equivalent amount of power of the grid which is fed mainly by fossil fired power plants. Hence, it results in the reduction of greenhouse gas emissions. The project meets the following Sustainable Development Goals:



This project is stapled to the Canopy Blue Kelp Reforestation Project that aims to restore the 97,438 hectares of kelp forest that were lost during the 2011 marine heatwave. This heatwave caused the release of 310,949 tonnes of carbon into the atmosphere.

Kelp forests represent an important but often overlooked carbon sink in the ocean, with kelp plants being

some of the fastest growing on the planet. They store organic carbon as standing biomass and sequester carbon by exporting and burying detritus in the deep ocean. Kelp plants take up inorganic carbon (including CO₂) from water and convert it into plant tissue (i.e., organic carbon biomass) making them a valuable carbon sink.

Cudgerie Tundulya Regeneration Project

The project relates to 25 per cent of the total amount of offsets purchased and retired for this reporting period. The goal of this project is to establish permanent native forests through assisted regeneration from in-situ seed sources (including rootstock and lignotubers) on previously cleared land where regrowth has been suppressed for at least 10 years prior to the project's commencement. This project meets the following Sustainable Development Goals:



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 (%)
The Canopy Blue Kelp Reforestation Project				KRC 11872-12411	2022	540	0				
Stapled to											
Bundled Wind Power Project by Mytrah Group	VCU	Verra	11 April 2023	6918-358615355-358615894-VCU-034-APX-IN-1-1728-01012017-24112017-0	2017	540	540	0	0	540	75%
Cudgerie Tundulya Regeneration Project	ACCU	ANREU	18 April 2023	8,355,457,033 – 8,355,457,212	2022-2023		180	0	0	180	25%
Total offsets retired this report and used in this report										720	
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					
Verified Carbon Units (VCUs)		540				75%					
Australian Carbon Credit Units (ACCU)		180				25%					

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)*	0
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
Not applicable	-	-	-	-	-	-	-	-	-
Total LGCs surrendered this report and used in this report							Not applicable		

APPENDIX A: ADDITIONAL INFORMATION

Attachment 1: Proof of the Canopy Blue Kelp Reorestation Project offset retirement

Kelp Reorestation Credit Certificate

Presented to:

Astron Environmental Services Pty Ltd

This certificate guarantees the permanent retirement of 540 Canopy Blue, Kelp Reorestation credits.

This equates to 540 Kelp plants grown in the lab and deployed into the Kalbarri restoration area, along with the permanent retirement of 540 tonnes of CO2 equivalent (*stapled credit):

Retired on behalf of Astron Environmental Services Pty Ltd for the purpose of Climate Active certification for the period of FY2022

**Stapled Credit - Supplied by Pangolin Associates*

Canopy Blue


Certification period
2022

Kelp Reorestation Credit Certificate
KRC 11872- 12411

Date of issuance:
01/05/2023

Jon-paul Cox
Jon-paul Cox, CEO - Canopy Blue Pty Ltd

Attachment 2: Proof of ACCU purchase and retirement



**Australian
National Registry
of Emissions Units**

Logged In as: Samantha Hever / Industry User

[NREU Home](#)
[Account Holders](#)
[Accounts](#)
[Initial Position Summary](#)
[Projects](#)
[Transaction Log](#)
[NER Notifications](#)
[Public Reports](#)
[Company Profile](#)

Transaction Details

Transaction details appear below.

Transaction ID	AU26956
Current Status	Completed (4)
Status Date	18/04/2023 12:02:52 (AEST) 18/04/2023 02:02:52 (GMT)
Transaction Type	Cancellation (4)
Transaction Initiator	Hever, Samantha
Transaction Approver	Clear, Geoffrey
Comment	

Transferring Account

Account Number AU-3048

Account Name VIRIDIOS CAPITAL PTY LTD

Account Holder VIRIDIOS CAPITAL 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			ERF158444					2022-23		8,355,457,033 - 8,355,457,212	180

Transaction Status History

Status Date	Status Code
18/04/2023 12:02:52 (AEST) 18/04/2023 02:02:52 (GMT)	Completed (4)
18/04/2023 12:02:51 (AEST) 18/04/2023 02:02:51 (GMT)	Proposed (1)
18/04/2023 12:02:51 (AEST) 18/04/2023 02:02:51 (GMT)	Account Holder Approved (97)
18/04/2023 10:14:37 (AEST) 18/04/2023 00:14:37 (GMT)	Awaiting Account Holder Approval (95)

Ecovadis

Astron has subscribed to the ESG platform Ecovadis (www.ecovadis.com) where following assessment of our companies performance across the areas of environment, labour & human rights, ethics and sustainable procurement we achieved an 87th percentile score meaning when benchmarked against other professional, scientific and technical services companies we achieved an overall score higher than or equal to 87% of all ranked companies earning us a Silver Medal ranking. Astron is committed to our ESG and improving our Ecovadis score.

ASTRON ENVIRONMENTAL SERVICES PTY LTD East Perth - Australia Other professional, scientific and technical activities  Company size: S  Assessment scope: Entity 	Overall Score 64/100	
	Percentile  87th	

Accounting for Nature Certification

Accounting for Nature (<https://www.accountingfornature.org/>) is building the world's more credible and trusted environmental accounting standard. Through the process of Natural Capital Accounting and placing an economic value on nature this will assist both a reduction in clearing of nature which contributes to removal of carbon sinks, enhance and improve the worlds natural capital, as well as encourage biodiverse plantings which increases ecosystem resilience. We are committed to achieving a nature positive future and currently three members of the Astron team are Accounting for Nature Accredited Experts (<https://www.accountingfornature.org/expert-register>) of the 89 Experts and Auditors nationally combined. We are in the process of achieving accreditation of additional team members and in 2023 formed a new team within Astron, the Natural Capital and Ecosystem Restoration team. This further demonstrates our commitment to being Climate Active.

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	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)	0	0	0%
Jurisdictional renewables (LRET) (applied to ACT grid electricity)	0	0	0%
Large Scale Renewable Energy Target (applied to grid electricity only)	19,832	0	19%
Residual Electricity	86,849	86,412	0%
Total grid electricity	106,681	86,412	19%
Total Electricity Consumed (grid + non grid)	106,681	86,412	19%
Electricity renewables	19,832	0	
Residual Electricity	86,849	86,412	
Exported on-site generated electricity	0	0	
Emissions (kgCO ₂ e)		86,412	
Total renewables (grid and non-grid)	18.59%		
Mandatory	18.59%		
Voluntary	0.00%		
Behind the meter	0.00%		
Residual Electricity Emission Footprint (TCO₂e)	86		

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	0	0	0
NSW	0	0	0
SA	0	0	0
Vic	0	0	0
Qld	0	0	0
NT	0	0	0
WA	106,681	71,476	1,067
Tas	0	0	0
Grid electricity (scope 2 and 3)	106,681	71,476	1,067
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	106,681	71,476	1,067

Emission Footprint (TCO2e)	73
<i>Scope 2 Emissions (TCO2e)</i>	71
<i>Scope 3 Emissions (TCO2e)</i>	1

Climate Active Carbon Neutral Electricity summary

Carbon Neutral electricity offset by Climate Active Product	Activity Data (kWh)	Emissions (kgCO2e)
Not applicable	-	-

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. 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
Not applicable	-	-	-	-

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?
Not applicable	-	-	-	-	-	-



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