

# PUBLIC DISCLOSURE STATEMENT

**CHARLES STURT UNIVERSITY** 

ORGANISATION CERTIFICATION

CY2022

## Australian Government

# Climate Active Public Disclosure Statement







NAME OF CERTIFIED ENTITY	Charles Sturt University
REPORTING PERIOD	1 January 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.
	Michelle Crosby Chief Operating Officer Date: 14/12/2023



## **Australian Government**

## Department of Climate Change, Energy, the Environment and Water

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Version March 2023.



## 1.CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	24,495 tCO2-e
OFFSETS USED	3% ACCUs, 97% VCUs.
RENEWABLE ELECTRICITY	Total renewables 78.59%
CARBON ACCOUNT	Prepared by: Charles Sturt University
TECHNICAL ASSESSMENT	29.06.23 Pangolin Associates Pty Ltd Next technical assessment due: CY2025

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## 2. CARBON NEUTRAL INFORMATION

## **Description of certification**

This Carbon Neutral Certification is for the Organisational certification of CHARLES STURT UNIVERSITY, ABN 83 878 708 551, its Australian business operations and other registered businesses, Charles Sturt Winery, 2MCE-FM, Kajulu Communications, Charles Sturt University Environmental and Analytical Laboratories, AGRIPARK, and Agrisciences Research and Business Park.

## Organisation description

Charles Sturt University (Charles Sturt), ABN 83 878 708 551, is a multi-campus regional NSW University established in 1989. Its registered businesses include Charles Sturt Winery, 2MCE-FM, Kajulu Communications, Charles Sturt University Environmental and Analytical Laboratories, AGRIPARK, and Agrisciences Research and Business Park.

The Office of the Vice-Chancellor and President is located at The Grange Chancellery, Panorama Avenue, Bathurst, NSW, 2795. Charles Sturt's registered place of business is Bathurst excepting for Charles Sturt University Environmental and Analytical Laboratories which is Wagga Wagga.

Charles Sturt has six multi-faculty campuses which operate from Albury-Wodonga, Bathurst, Dubbo, Orange, Port Macquarie and Wagga Wagga. It has several specialist campuses including in Canberra, and Study Centres located in Sydney, Melbourne and Brisbane.

Charles Sturt attracted more than 30,000 student enrolments in undergraduate, post-graduate and nonaward courses in 2022. This includes on-line and on-campus students, and enrolments through on-shore specialty and partner institutions.

The University's regional locations enables it to make a distinctive contribution to higher education and economic prosperity in regional Australia, in fields such as health, agriculture and the environment. It is through this regional network of campuses that Charles Sturt is committed to maintaining a course and research profile that meets the needs and supports the aspirations of its communities and contributes to the enrichment of regional Australia.

The University has three Faculties (Faculty of Arts and Education, Faculty of Business, Justice & Behavioural Sciences, and the Faculty of Science and Health) and numerous schools and centres for specialised areas of study and research.

In 2022, following the University Strategy 2030, Charles Sturt re-focused its research with the launch of three new research institutes:

- Gulbali Institute: Integrated agriculture, water and environment research.
- Rural and Regional Health Research Institute: Research on regional, remote and Indigenous health.
- Artificial Intelligence and Cyber Futures Institute: Data science, artificial intelligence and cyber security.



Charles Sturt also delivers programs throughout the world by partnering with overseas higher education providers. These are excluded from the Charles Sturt University emissions boundary.

The following entities are excluded from this certification:

Legal entity name	ABN	ACN
The Charles Sturt University Foundation Trust	31158135157	N/A
Charles Sturt Campus Services Limited	37063446864	N/A



## 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

Livestock – Bespoke (Cattle, Sheep, Horses)

Construction Projects - Bespoke

Paper Towel/Tissue - Bespoke

Employee Commuting - Bespoke

Water (Town & WW) - Bespoke

Carbon Neutral Products and Services

Electricity (Market Based)

- NSW
- ACT
- Solar
- Partner / Study Centres
- Data Centre

ICT Services and equipment (Computer, Telecommunications)

Machinery & Vehicles (Motor Vehicles)

Office Equipment & supplies (Equipment, Printing, Stationery, Paper)

Refrigerants

Stationary Energy (gaseous fuels)

Stationary Energy (liquid fuels)

Transport Air

Transport (Land & Sea)

Waste

(GW, Food, Garden, Recycling, Sludge, Clinical)

Working from home

Calculator - Result A

### Non-quantified

Nil

## Optionally included.

Nil

## Outside emission boundary

### **Excluded**

Use and end-of-life sold products (Wine)

Franchises

Investments

Professional Services (Other External)

Postage Courier & Freight (External Services)

Food

Cleaning and Chemicals (Sulphur Hexafluoride)

Cleaning and Chemicals (Acetylene)



## 4.EMISSIONS REDUCTIONS

## **Emissions reduction strategy**

Charles Sturt's commitment to sustainability is embedded in its <u>Sustainability Statement</u>. Sustainability in all its forms is a core institutional policy objective at Charles Sturt and it has relevance to each of the Focus Areas under the <u>University Strategy</u>. The impact is wholistic for the university's business including its teaching, research and operational practices.

Charles Sturt is a signatory to the <u>University Commitment to Sustainable Development Goals</u> (SDG's) and manages the improvements and actions through its Learning in Future Environments (LiFE) index.

These programs inform Charles Sturt's sustainability practices and provide a framework for measurement and performance improvement.

Five of the 17 SDG's are focused on Energy and Climate Emissions.

#### These include:-

- SDG 7: Affordable and Clean Energy
- SDG 9: Industry, Innovation and Infrastructure
- SDG 11: Sustainable Cities and Communities
- SDG 12: Responsible Consumption and Production
- SDG 13: Climate Action

Sustainability at Charles Sturt is the University's business area dedicated to driving Charles Sturt's commitment to creating a sustainable future for all.

Charles Sturt has developed a comprehensive plan, <u>"Towards a Greener University"</u>, which sets out a pathway for Charles Sturt to be resilient, efficient and ready for a low carbon future.

The key objectives of the plan are defined under Charles Sturt Asset Optimisation Plan:

- Deliver Charles Sturt's Clean Energy Strategy to eliminate Scope 1 and Scope 2/3 energy emissions by 2030.
- Improve energy efficiency to 0.60 GJ/UFA\* (from 0.67 baseline)
- Improve water efficiency to 1.29 kL/UFA\* (from 1.74 kL/UFA\* baseline)
- Reduce waste production to 19.9 kg/EFTSL\* (from 26.9 kg/EFTSL\* baseline)
   (\* Notes: UFA: Useable Floor Area: sqm; EFTSL: Equivalent Full-time Student Loading)

The deliverable of this plan includes programs where environmental and economic benefits prevail. These include:

### 1. Energy

- Energy Efficiency (HVAC) programs
- On-site Renewables + Energy Storage
- Renewable Energy Contracts
- Elimination of Natural Gas

## 2. Water

- Water consumption monitoring & use.
- 3. Resource Efficiency and Waste
  - Waste management-recycle / Sustainable information and communications technology



### **Emissions reduction actions**

reduction of Base Year total emissions.

Targeted emission reduction activities delivered in 2022 are estimated to have reduced emissions by a further 15,490 t CO2-e (see below), equivalent to a reduction of 44% of Base Year total emissions.

This is estimated to be 64% of Charles Sturt's near term 2030 Target which is equivalent to a nominal 70%

In respect of its Clean Energy Emission Strategy, emission reduction activities in this energy targeted category have now delivered a total reduction of 28,552 t CO2-e, equivalent to a reduction of 78% of Base Year energy emissions (from 36,526 t CO2-e in 2014 to 7,974 t CO2-e in 2022).

The emissions reductions activities in 2022, which primarily targeted the energy category, included:

- Renewable Power Purchase Agreement Charles Sturt entered into a renewable power purchase agreement with Iberdrola Australia for the supply of renewable (wind) power for all Charles Sturt's large scale grid electricity supplies (94% of total grid electrical consumption), commencing 1<sup>st</sup> January 2022.
  - Estimated emissions avoided: 14,950 t CO2-e.
- - Estimated emissions avoided: 387 t CO2-e.
- Energy Efficiency Natural Gas
   Targeted HVAC building energy efficiency improvements resulted in Natural Gas savings of 2,328 GJ.
  - Estimated emissions avoided: 153 t CO2-e.



## **5.EMISSIONS SUMMARY**

## **Emissions over time**

This is a comparison of reported emissions over time from the base year as well current and prior years. As shown by a comparison of emissions in the table below, in 2022 there was a 44% reduction in emissions compared to the base year.

More significantly there was a decline in emissions from 2019 to 2020 of 17%, and a further decline in 2021 of 12%. And a further decline of 33% in 2022. These successive annual reductions followed and significantly more than offset the increase in emissions of 14% from the base year to 2019.

While the 2022 result comes on the back of a decline in student numbers measured as Equivalent Full-time Loads (EFTLs), one core measure of university activity, overall, the emissions per EFTLs also reflects this decreasing trend with decreases of 15%, 7% and 12% respectively in the years 2020, 2021 and 2022.

Emissions since base year									
		Total tCO <sub>2</sub> -e (without uplift)	Total tCO <sub>2</sub> -e (with uplift)						
Base year:	2014-CY	43,624	N/A						
Year 1:	2015-CY	46,066	N/A						
Year 2:	2016-CY	46,921	N/A						
Year 3:	2017-CY	49,964	N/A						
Year 4:	2018-CY	49,729	N/A						
Year 5:	2019-CY	49,824	N/A						
Year 6:	2020-CY	41,322	N/A						
Year 7:	2021-CY	36,474	N/A						
Year 8:	2022-CY	24,495	N/A						

## Significant changes in emissions

Emission source name	Previous year emissions (t CO <sub>2</sub> -e)	Current year emissions (t CO <sub>2</sub> -e)	Detailed reason for change
Electricity (S2&S3)	20,504	5,151	<ul> <li>Renewable (Wind) Electricity PPA for Large Grid Supplies</li> <li>Increased Solar PV Generation / Consumption</li> <li>Improved (HVAC) building energy efficiency</li> <li>Rationalisation of (leased) facilities</li> <li>Reduced Emission Factor</li> </ul>
Natural Gas NSW/ACT (non- metro) (GJ)	7,895	6,880	<ul> <li>Energy Mix (85% of difference. Reduced NG Consumption COGEN – Reduced Electricity)</li> <li>Energy Efficiency (15% of difference. HVAC Bld Energy Efficiency)</li> </ul>
Livestock - Bespoke	2,526	2,956	<ul> <li>Increased stocking; Increased emission factor.</li> </ul>



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

The only Climate Active carbon neutral product used was business/copy paper.

Certified brand name	Product/Service/Building/Precinct used
COS	Business / Copy Paper

## **Emissions summary**

A summary of the organisations emissions by category is tabulated below.

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

Emission category	Sum of Scope 1 (t CO2-e)	Sum of Scope 2 (t CO2-e)	Sum of Scope 3 (t CO2-e)	Sum of Total Emissions (t CO2-e)
Accommodation and facilities	0.00	0.00	262.57	262.57
Climate Active Carbon Neutral Products and Services	0.00	0.00	0.00	0.00
Electricity	0.00	2067.47	3083.08	5150.55
ICT services and equipment	0.00	0.00	538.99	538.99
Machinery and vehicles	0.00	0.00	89.19	89.19
Office equipment & supplies	0.00	0.00	141.07	141.07
Refrigerants	959.24	0.00	0.00	959.24
Stationary Energy (gaseous fuels)	5410.24	0.00	1469.89	6880.13
Stationary Energy (liquid fuels)	205.96	0.00	54.38	260.34
Transport (Air)	0.00	0.00	1235.80	1235.80
Transport (Land and Sea)	312.23	0.00	222.82	535.05
Waste	0.00	0.00	1035.22	1035.22
Working from home	0.00	0.00	85.38	85.38
Livestock - Bespoke	2955.99	0.00	0.00	2955.99
Construction Projects - Bespoke	0.00	0.00	1847.65	1847.65
Office Supplies - Bespoke	0.00	0.00	64.60	64.60
Transport (land & Sea) - Bespoke	0.00	0.00	1798.82	1798.82
Water - Bespoke	0.00	0.00	654.62	654.62
Total	9843.67	2067.47	12584.06	24495.20

## **Uplift factors**

N/A.



## **6.CARBON OFFSETS**

## Offsets retirement approach

This certification has taken an in-arrears offsetting approach.

The total emission to offset is 24,495 t CO2-e.

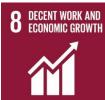
The total number of eligible offsets used in this report 24,495.

Of the total eligible offsets used, 259 were previously banked and 26,500 were newly purchased and retired. 2,264 are remaining and have been banked for future use.

### Co-benefits

Charles Sturt University has selected offsets which have co-benefits that address some of the United Nations Sustainable Development Goals (SDGs). Otherwise known as the Global Goals, these are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity. The Goals that are specifically addressed by the offsets include SDG 7, SDG 8, SDG 9, SDG 13, and SDG 15.











The projects selected for the purchase and retirement of offsets for this reporting period are as follows:

### Arnhem Land indigenous savannah fire management Projects: Australia

Greenhouse gases emitted from savanna fires make up 3% of Australia's total emissions. Savanna burning projects undertaken by Traditional Owners and Aboriginal rangers reduce GHG emissions by undertaking cool, lower intensity fires in the early dry season when the vegetation still contains some moisture from the wet season. This reduces the GHG emitted from high intensity, unmanaged fire in the late dry season when the country is dry.

In addition to the carbon abatement the project is delivering 'core benefits' to country including:

- Managing country, the right way
- Revitalising connection to country
- Improving corridors to take pressure off wildlife
- Building new fire skills and experience for rangers.

#### Duzce Aksu Hydro Electricity Power Plan, Turkey.

This project constructs and operates a flowing water hydroelectric power plant with a capacity of 46.2 MW on the Aksu River in Duzce Province, Turkey. Flowing-water hydroelectric power plants generate electricity by obtaining kinetic energy from the flow of water. Since there is no large amount of water stored in the



reservoir behind the dam, the scale and impact on the ecosystem of the water area is generally smaller than that of conventional hydroelectric power plants. The power plant replaces fossil fuel power generation, has a positive impact on the environment and contributes to the economies of countries and regions.

#### 100 MW Solar Project in Bhalda in Rajasthan, India.

The project involves installation of 100 MW solar power in Bhadla, in the state of Rajasthan, India. The project replaces anthropogenic emissions of greenhouse gases (GHG's) estimated to be approximately 146,086 tCO2e per year (proposed avg. value), thereby displacing 154,179 MWh/year amount of electricity from the generation-mix of power plants connected to the Indian electricity grid, which is mainly dominated by thermal/fossil fuel-based power plants.

### CO2 Australia Creating a Better Climate Project Stage 2 (CFI) Project EOP100985)

This project is a Carbon Farming Initiative. It has established permanent plantings of Eucalyptus polybractea trees on land that was previously used for agricultural purposes. It is located in NSW, Australia.

#### CO2 Australia Creating a Better Climate Project Stage 2 (CFI) (Project EOP100254)

This project is a Carbon Farming Initiative. This project established permanent plantings of Eucalyptus polybractea, Eucalyptus loxophleba and Eucalyptus kochii trees on land that was previously used for agricultural purposes. It is located in NSW, Australia.

#### CO2 Australia Creating a Better Climate Project (CFI) (Project EOP100627)

This project is a Carbon Farming Initiative This project established permanent plantings of Eucalyptus loxophleba and Eucalyptus polybractea trees on land that was previously used for agricultural purposes. It is located in NSW, in the local government areas of Bland, Carrathool, Coolamon, Dubbo, Greater Hume Shire, Lachlan, Narrandera, Narromine, Parkes and Wellington.



## Eligible offsets retirement summary

					Project description Type of Pagistry Date retired Social number (and Vintage Stanled Fligible												
Project description	Type of offset units	Registry	Date retired	Serial number (and hyperlink to registry transaction record)	Vintage	Stapled quantity	Eligible quantity retired (tCO <sub>2</sub> -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 (%)						
Arnhem Land indigenous savanna fire management projects (Fish River Project) Australia.	KACCUs	ANREU	18 Apr 2022	3,786,094,729 – 3,786,096,213 (Note: Copies of registry transaction records/ letter from administrator provided to Climate Active)	2019-20		1485	1226	0	259	1%						
Duzce Aksu Hydro Electricity Power Plan, Turkey	VCU	Verra	14/04/2023	10005-171376291- 171391253-VCS-VCU-262- VER-TR-1-2095-01012020- 30092020-0 (Note: Copies of registry transaction records/ letter from administrator provided to Climate Active)	2020		14,963	0	0	14,963	61%						
100 MW Solar Project in Bhalda in Rajasthan, India	VCU	Verra	14/04/2023	9707-125948222- 125957108-VCS-VCU-1491- VER-IN-1-1482-01042020- 30092020-0 (Note: Copies of registry transaction records/ letter from administrator provided to Climate Active)	2020		8,887	0	0	8,887	36%						



CO2 Australia Creating a Better Climate Project Stage 2 (CFI) Project EOP100985)	KACCUs	ANREU	24/03/2023	8,342,112,039 – 8,342,112,238 (Note: Copies of registry transaction records/ letter from administrator provided to Climate Active)	2021-22		200	0	0	200	1%
CO2 Australia Creating a Better Climate Project Stage 2 (CFI) (Project EOP100254)	KACCUs	ANREU	29/03/2023	8,356,692,985 - 8,356,693,769 (Note: Copies of registry transaction records/ letter from administrator provided to Climate Active)	2022-23		785	0	599	186	1%
CO2 Australia Creating a Better Climate Project (CFI) (Project EOP100627)	KACCUs	ANREU	29/03/2023	8,345,564,000 - 8,345,565,664 (Note: Copies of registry transaction records/ letter from administrator provided to Climate Active)	2021-22		165	0	1665	0	0%
Total eligible offsets retired and used for this report										24,495	
				Total eligible offsets	retired this re	eport and ba	inked for use in	n future reports	2,264		

Type of offset units	Eligible quantity (used for this reporting period)	Percentage of total
Australian Carbon Credit Units (ACCUs)	645	3%
Verified Carbon Units (VCUs)	23,850	97%



## 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)\*

15,654

<sup>\*</sup> 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)
Bodangora Wind Farm Pty Limited - NSW	NSW, Australia	LGC	REC Registry	27/03/2023	WD00NS16	274550- 287501	2022	Wind	12,952
Bodangora Wind Farm Pty Limited - NSW	NSW, Australia	LGC	REC Registry	27/03/2023	WD00NS16	287502- 290203	2022	Wind	2,702
Total LGCs surrendered this report and used in this report									15,654



## APPENDIX A: ADDITIONAL INFORMATION

#### Additional Offsets Information:

Copies of retirement certificates / letters attesting to the retirements from the Offset Schemes as per attached File [.LTR\_C\_OffsetRetirementCancellations\_2022CSU]

### Additional LGC's Retirement Information:

Copy of Voluntary surrender offer (Offer ID 6463) accepted for surrender ex rec-registry.gov.au as per attached File [EXTERNAL Voluntary surrender offer accepted for surrender SECOFFICIAL]



## 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.



Market-based approach summary			
Market-based approach	Activity Data (kWh)	Emissions (kg CO <sub>2</sub> -e)	Renewable percentage of total
Behind the meter consumption of electricity generated	164,994	0	1%
Total non-grid electricity	164,994	0	1%
LGC Purchased and retired (kWh) (including PPAs)	15,654,000	0	62%
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)	79,940	0	0%
Jurisdictional renewables (LRET) (applied to ACT grid electricity)	20,101	0	0%
Large Scale Renewable Energy Target (applied to grid electricity only)	3,873,053	0	15%
Residual Electricity	5,393,250	5,150,554	0%
Total renewable electricity (grid + non grid)	19,792,088	0	79%
Total grid electricity	25,020,344	5,150,554	78%
Total electricity (grid + non grid)	25,185,338	5,150,554	79%
Percentage of residual electricity consumption under operational control	45%		
Residual electricity consumption under operational control	2,451,420	2,341,106	
Scope 2	2,164,890	2,067,470	
Scope 3 (includes T&D emissions from consumption under operational control)	286,530	273,636	
Residual electricity consumption not under operational control	2,941,830	2,809,448	
Scope 3	2,941,830	2,809,448	

Total renewables (grid and non-grid)	78.59%
Mandatory	15.46%
Voluntary	62.47%
Behind the meter	0.66%
Residual scope 2 emissions (t CO <sub>2</sub> -e)	2,067.47
Residual scope 3 emissions (t CO <sub>2</sub> -e)	3,083.08
Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO <sub>2</sub> -e)	2,067.47
Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO <sub>2</sub> -e)	3,083.08
Total emissions liability (t CO <sub>2</sub> -e)	5,150.55
Figures may not sum due to rounding. Renewable percentage can be above 100%	



Location-based approach	Activity Data (kWh) total	Not under operational control				
Percentage of grid electricity consumption under operational control	88%	(kWh)	Scope 2 Emissions (kgCO <sub>2</sub> -e)	Scope 3 Emissions (kgCO <sub>2</sub> -e)	(kWh)	Scope 3 Emissions (kgCO <sub>2</sub> -e)
ACT	107,837	95,242	69,526	5,714	12,595	9,950
NSW	24,606,817	21,732,741	15,864,901	1,303,964	2,874,076	2,270,520
SA	0	0	0	0	0	0
VIC	288,607	254,898	216,663	17,843	33,709	31,013
QLD	17,083	15,088	11,014	2,263	1,995	1,756
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)	25,020,344	22,097,968	16,162,104	1,329,785	2,922,376	2,313,239
ACT	0	0	0	0		
NSW	164,994	164,994	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)	164,994	164,994	0	0		
Total electricity (grid + non grid)	25,185,338					

Residual scope 2 emissions (t CO <sub>2</sub> -e)	16,162.10
Residual scope 3 emissions (t CO²-e)	3,643.02
Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO <sub>2</sub> -e)	16,162.10
Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO <sub>2</sub> -e)	3,643.02
Total emissions liability	19,805.13

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 <sub>2</sub> -e)
Enter name or address of Climate Active certified building/precinct	0	0
Enter name or address of Climate Active certified building/precinct	0	0
Enter name or address of Climate Active certified building/precinct	0	0
Enter name or address of Climate Active certified building/precinct	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 <sub>2</sub> -e)
Enter name of Climate Active Carbon Neutral electricity product	0	0
Enter name of Climate Active Carbon Neutral electricity product	0	0
Enter name of Climate Active Carbon Neutral electricity product	0	0
Enter name of Climate Active Carbon Neutral electricity product	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

All Relevant Emission sources are quantified and quantified within the Activity data hierarchy classification levels 1 to 4. No Uplift factors (data classification level 5) were applied. (Refer Climate Active Technical Guidance Manual, August 2022 p48.)

## 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 <u>one</u> of the following reasons:

- 1. Immaterial <1% for individual items and no more than 5% collectively
- 2. <u>Cost effective</u> Quantification is not cost effective relative to the size of the emission but uplift applied.
- 3. <u>Data unavailable</u> 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			
Nil	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.



## 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:

- <u>Size</u> The emissions from a particular source are likely to be large relative to the organisation's electricity, stationary energy and fuel emissions.
- 2. <u>Influence</u> 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.
- 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
Use and end-of-life of sold products (Wine)	N	N	N	N	N	Size: Charles Sturt Winery is a very small business as a result of our Wine research. We already capture (but do not disaggregate) all emissions from utilities supplies and stationery supplies. Emissions not captured were estimated to be about 13 t CO2-e, being less than 5% of Charles Sturt University's 1% Materiality Base.  Influence: We do not have the potential to specifically influence the emissions from this particular source beyond the boundary of Charles Sturt.  Risk: There are no relevant laws or regulations that apply to limit emissions specifically from this source, the source does not create supply chain risks, and it is unlikely to be of significant public interest.  Stakeholders: Key stakeholders are unlikely to consider this a relevant source of emissions for our business.  Outsourcing: N/A
Franchises	N	N	N	N	N	Size: The University does not operate franchises.  Influence: N/A  Risk: N/A  Stakeholders: N/A  Outsourcing: N/A



Investments	N	N	N	Υ	N	Size: Charles Sturt has a small investment portfolio mainly managed by and invested through institutional fund managers. It is conservatively estimated that the emission from investments is significantly less than 160 t CO2-e, being less than 50% of Charles Sturt University's 1% Materiality Base.  Influence: Charles Sturt utilises the services of numerous institutional fund managers to administer its medium- and long-term portfolio's. It accepts their benchmarking facilities in accordance with its investment strategy requirements and does not have the potential to specifically influence the emissions from this particular source.  Risk: There are no relevant laws or regulations that apply to limit emissions specifically from this source, the source does not create supply chain risks, and given its earnings, it is unlikely to be of significant public interest.  Stakeholders: Key stakeholders may consider this as a relevant source of emissions for our business.  Outsourcing: N/A
Professional Services (Other External)	Υ	N	N	N	N	Size: Some categories of "grouped" specialised professional services including General Business & Information Technology are a significant multi-million dollar spend, which could give rise to estimated emissions of about 1,000 t CO2-e  Influence: We do not have the potential to influence the emissions from this source, including by shifting to a different lower-emissions supplier for our business.  Risk: There are no relevant laws or regulations that apply to limit emissions specifically from this source, the source does not create supply chain risks, and it is unlikely to be of significant public interest.  Stakeholders: Key stakeholders, are unlikely to consider these as relevant (individual) sources of emissions for our business.  Outsourcing: We have not previously undertaken these activities within our emissions boundary and comparable organisations do not typically undertake this activity within their boundary.
Postage Courier & Freight (External Services)	N	N	N	N	N	Size: The University operates an internal mail delivery system between its main campuses. Emissions from this delivery system are already captured. Charles Sturt has no specialised freight services or storage needs. Any additional emissions from external mail services are expected to be much less than 25 t CO2-e, equivalent to less than 10% of Charles Sturt University 1% Materiality Base.  Influence: We do not have the potential to influence the emissions from this source, including by shifting to a different lower-emissions supplier for our business.  Risk: There are no relevant laws or regulations that apply to limit emissions specifically from this source, the source does not create supply chain risks, and it is unlikely to be of significant public interest.  Stakeholders: Key stakeholders, including the public, are unlikely to consider this a relevant source of emissions for our business.  Outsourcing: We have not previously undertaken this activity within our emissions boundary.



Food	N	Y	N	N	N	Size: Charles Sturt operates a minimal food service and supply on its main campuses. Currently all these food service costs of utilities and waste is captured in Charles Sturts carbon accounts. The majority of food supplies taken on campuses are procured by individuals through external sources. Utilities and waste associated with this personal service is currently captured in Charles Sturt emissions. None of these emissions are disaggregated or discounted from the general Charles Sturt carbon accounts. It was estimated emissions specifically attributable to food purchases for on-selling was less than 190 t CO2-e, equivalent to less than 70% of Charles Sturt University's 1% Materiality Base.  Influence: We have the potential to influence some emissions from this source, including by shifting to a different lower-emissions supplier for this service.  Risk: There are no relevant laws or regulations that apply to limit emissions specifically from this source, the source does not create supply chain risks, and it is unlikely to be of significant public interest.  Stakeholders: Key stakeholders are unlikely to consider this a relevant source of emissions for our business.  Outsourcing: We have not previously undertaken this activity within our emissions boundary.
Cleaning and Chemicals (Sulphur Hexafluoride)	N	N	N	N	N	Size: The emissions source is less than 0.7 t CO2-e  Influence: We do not have the potential to influence the emissions from this source  Risk: There are no relevant laws or regulations that apply to limit emissions specifically from this source, the source does not create supply chain risks, and it is unlikely to be of significant public interest.  Stakeholders: Key stakeholders, are unlikely to consider this a relevant source of emissions for our business.  Outsourcing: N/A
Cleaning & Chemicals (Acetylene)	N	N	N	N	N	Size: The emissions source is less than 0.1 t CO2-e  Influence: We do not have the potential to influence the emissions from this source  Risk: There are no relevant laws or regulations that apply to limit emissions specifically from this source, the source does not create supply chain risks, and it is unlikely to be of significant public interest.  Stakeholders: Key stakeholders, are unlikely to consider this a relevant source of emissions for our business.  Outsourcing: N/A





