

# National Carbon Offset Standard Carbon Neutral Program Public Disclosure Summary



**Charles Sturt  
University**



An Australian Government Initiative

Charles Sturt University

BASE YEAR: 2014

FOURTH CARBON NEUTRAL PERIOD: 2018

## Declaration

To the best of my knowledge, the information provided in this Public Disclosure Summary is true and correct and meets the requirements of the National Carbon Offset Standard Carbon Neutral Program.

	Date: 7 June 2019
Professor Andrew Vann	
Vice-Chancellor and President Charles Sturt University	

Type of carbon neutral certification: Organisation

Verification

Date of most recent external verification/audit: 30 June 2017 for 2016CY reporting

Auditor: Gillian Hand-Smith



**Australian Government**

**Department of the Environment and Energy**

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# 1. Carbon neutral information

## 1A. Introduction

Charles Sturt University (CSU) was established in 1989 as a multi-campus institution and, over the past 30 years, has grown into a dynamic and progressive university well-known for its innovative approach to education and applied research.

Our capacity for flexible delivery and international reputation for online learning provide access to educational opportunity throughout Australia and the world. As a national University, Charles Sturt attracts more than 18,000 on campus and 24,000 distance education students. To address our commitment to making a positive contribution to the wider Australian community and to participating in the internationalisation of higher education, Charles Sturt University delivers educational opportunities to more than 2,600 students around the globe, with more than 8,000 students at CSU Study Centres in Sydney and Melbourne.

Through our network of campuses, and in close association with industry, professions and government, we are committed to maintaining a course and research profile that meets the needs and supports the aspirations of our communities, and contribute to the enrichment of inland Australia.

We consider our regional, national and international roles to be integrally linked and mutually reinforcing. We believe that the University's success in attracting national and international students strengthens the programs it is able to offer its inland communities. The University's regional locations enable it to make a distinctive national and international contribution in such fields as health sciences, food and water security, environmental sustainability and economic prosperity.

The University's three faculties (Faculty of Arts and Education; Faculty of Business, Justice & Behavioural Science; and Faculty of Science) comprise a number of schools and centres. Faculties operate across campuses and are responsible for developing and delivering courses, while schools are generally based on a single campus and carry responsibility for teaching subjects. Administrative and academic support services are provided by the divisions, centres and offices, which operate across the University's campuses. Our disciplines include: Agricultural and Wine, Animal and Veterinary, Environmental and Outdoor Recreation, Allied Health and Paramedicine, Exercise and Sport, Medical and Dentistry, Nursing, Midwifery and Indigenous Health, policing, law, criminology, security, emergency management, customs and excise studies, border management, psychology, accounting, engineering, human resources, marketing, business management, computing and information technology, performing and visual arts, art history, communications, human services, library and information studies, theology, sociology, literature, philosophy, history, Indigenous Australian studies, education, teacher education, Islamic studies and civilisation.

The University has four Centres of Research Excellence comprising the Graham Centre for Agricultural Innovation; the Institute for Land, Water and Society (ILWS) the National Wine and Grape Industry Centre (NWGIC); and the Centre for Public and Contextual Theology (PACT).

## 1B. Emission sources within certification boundary

### Quantified sources

Table 1: Reported Emissions Sources for CSU Initial Application			
Emissions Source	Emissions Reported		
	Scope 1	Scope 2	Scope 3
Natural Gas	✓		✓
LPG	✓		✓
Diesel	✓		✓
Gasoline	✓		✓
Ethanol in E10 Blends	✓		✓
Sulphur Hexafluoride	✓		
Acetylene	✓		✓
Petroleum based oils and greases	✓		✓
Domestic wastewater treatment	✓		
Enteric Fermentation of Livestock	✓		
Purchased electricity		✓	✓
Emissions associated with construction			✓
Municipal Waste			✓
Travel-Taxi			✓
Hotel accommodation			✓
Reimbursed private vehicle usage			✓
Travel- Air short haul			✓
Travel- Air medium haul			✓
Travel- Air long haul			✓
Paper			✓
Paper Towels			✓
Potable water			✓

## Non-quantified sources

The following emission sources have not been quantified in line with the provisions in the NCOS. The impact of excluding these sources is not expected to materially affect the overall total emissions:

- Capital Goods
- Employee Commuting
  - With greater than 2,000 employees geographically dispersed across Australia, quantifying the emissions associated with employee commuting is likely to be onerous (even with a sample selection of staff). A survey of staff habits at Albury noted 62% drive to campus. Using conservative assumptions and projecting these survey results across all staff, the employee commuting emissions were estimated at 356 tCO<sub>2</sub>-e which are immaterial for Charles Sturt. No additional data was available in 2015 on staff commuting and the emissions remain immaterial for this inventory.
- Downstream transportation and distribution, processing, use and end-of-life of sold products.
  - Generally, Charles Sturt does not manufacture goods and thus these emissions source are not relevant for the organisation.
- Downstream leased assets
  - Charles Sturt offer a small number of courses through partner institutions over which Charles Sturt does not have operational control. These are a small component of the overall higher education service offered by Charles Sturt and have been assessed as not likely to significantly impact the reported emissions.
- Franchises
  - Not relevant to Charles Sturt operations.
- Investments
  - Through both the Charles Sturt Investment Portfolio and the Charles Sturt Foundation Investment Portfolio, Charles Sturt directly hold investments in a number of investment fund products and also direct shares in ASX listed companies. Charles Sturt does not have operational control over either the managed fund products nor does it have operational control of any company in which it has invested through its shareholdings.
  - Charles Sturt has adopted the internal “Responsible Investment Guideline” for both investment funds

## 1C. Diagram of certification boundary

Figure 1: Charles Sturt University organisation boundary for the purposes of Carbon Neutral Certification

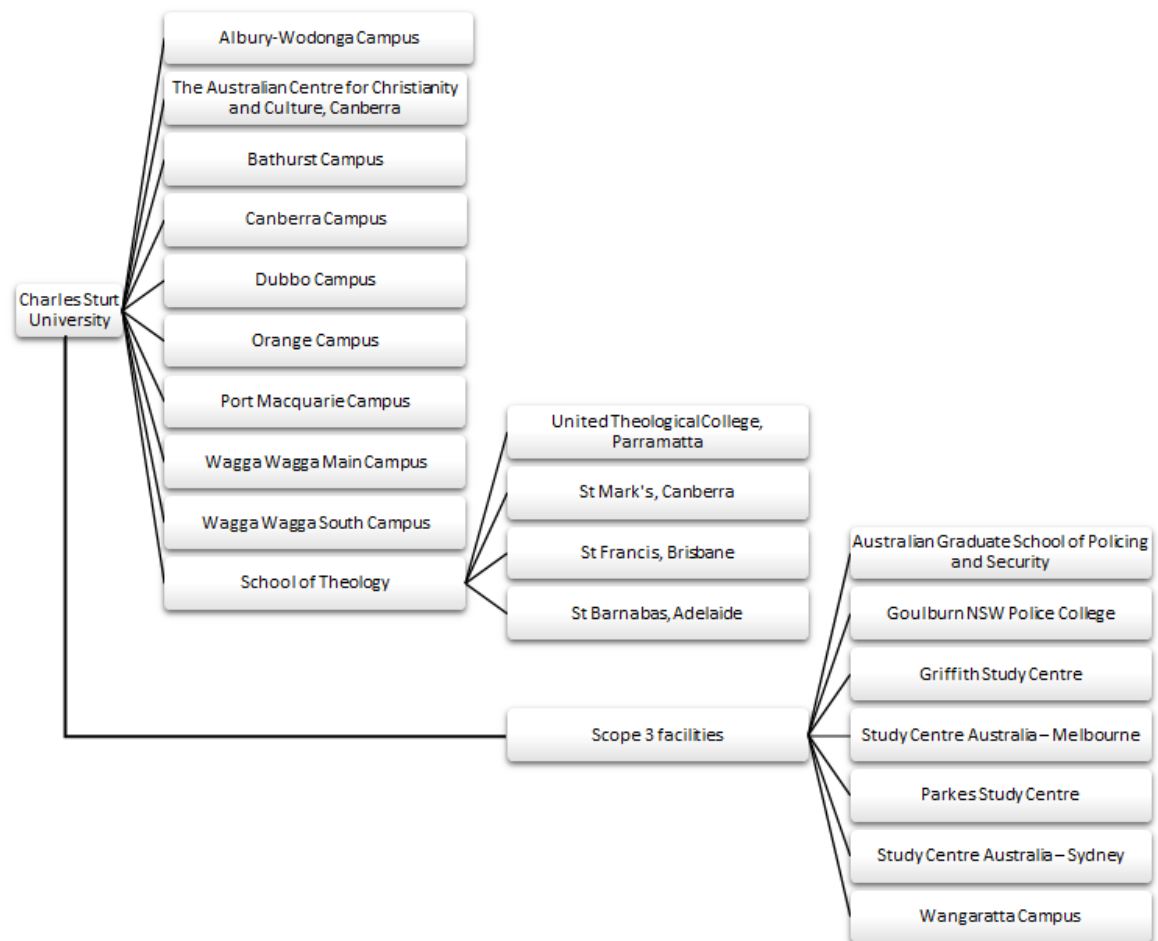
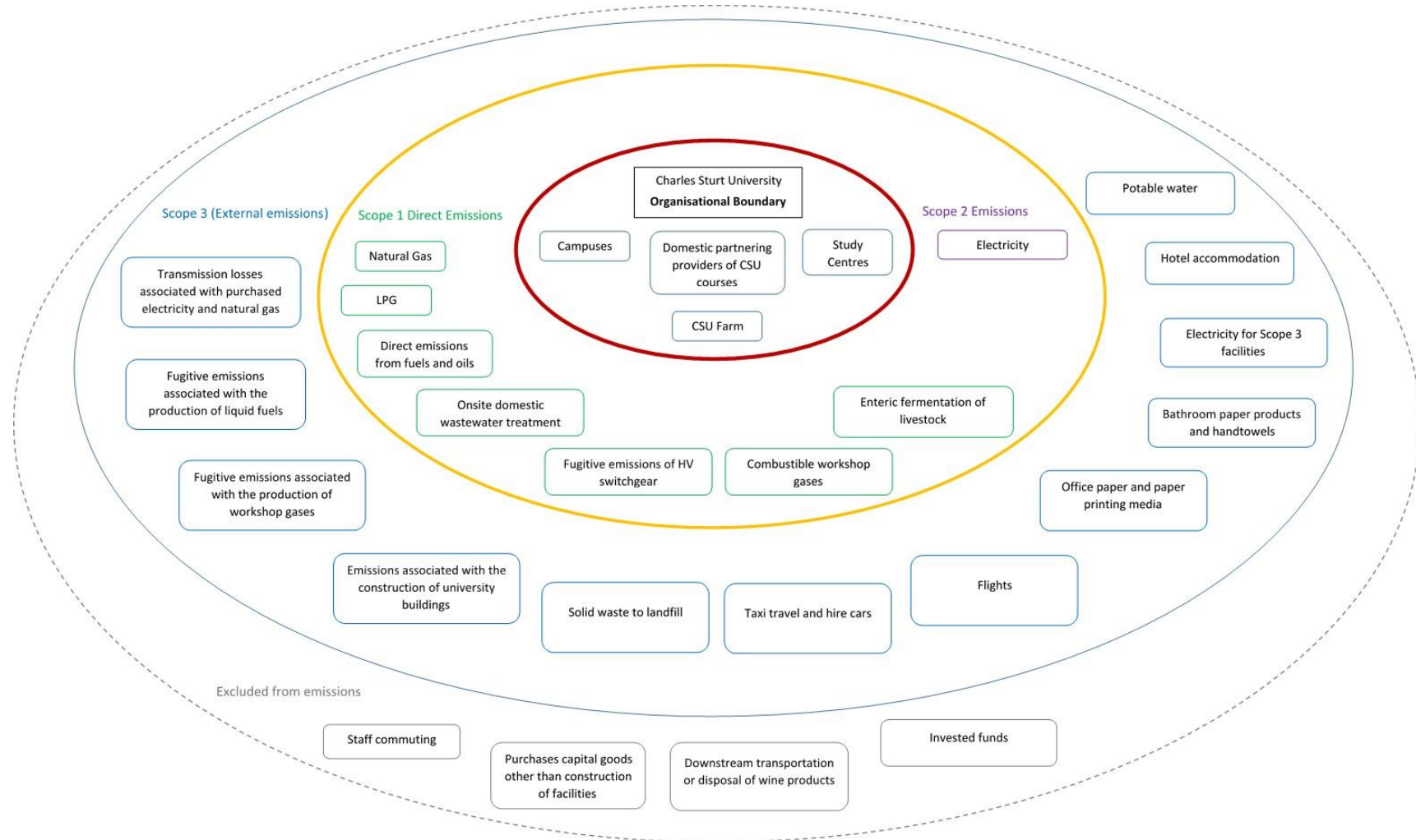


Figure 2 - Charles Sturt University carbon inventory boundary for the purposes of Carbon Neutral Certification



## 2. Emissions reduction measures

### 2A. Emissions over time

<b>Table 2. Emissions since base year</b>		
	<b>Base Year (2014)</b>	<b>2018</b>
Scope 1	5,936	10,155
Scope 2	26,915	19,939
Scope 3	10,773	19,635
Total (tCO <sub>2</sub> -e)	<b>43,623</b>	<b>49,729</b>
Emissions/FTE Student	<b>2.09</b>	<b>2.30</b>

### 2B. Emissions reduction strategy

Building on our achievement of being Australia's first certified carbon neutral university back in 2016, we continue to push ourselves to model best practice in sustainability with the adoption of a target to derive all of our energy needs from renewable sources by 2030. Together we are effecting change for the benefit of the public good. Charles Sturt University has adopted the Learning in Future Environments (LiFE) index as a key element to the University's Strategy. LiFE is a structured process for evaluating current practices that support or impede good sustainability practices and for developing improvement plans via cross-organisational participation.

Charles Sturt's [Sustainability Statement](#), which is part of the broader University Strategy sets out commitments for Charles Sturt in the long term. A summary of the emissions reduction strategy and opportunities is available online at : <https://www.csu.edu.au/csugreen>

## 2C. Emissions reduction actions

Charles Sturt University is proactively reducing the emissions associated with its operations through discrete and targeted programs. In 2018 these focused primarily on campus energy and transport between campuses. These projects in 2018 included:

- Commencement of Stage 2 Solar PV deployment across Charles Sturt at Dubbo, Charles Sturt at Orange, Charles Sturt at Bathurst and Charles Sturt at Albury-Wodonga adding 2.5MW of solar to 1.7MW at Wagga Wagga;
- Installation of higher efficiency lighting and air-conditioning technologies as part of building refurbishments completed
- Adoption of new lighting standards for outdoor lighting
- Car pooling initiatives using coffee vouchers as a reward for 2,269 ride shares; and
- Successful diversion strategies to reduce the landfill waste stream at residences.

These and other environmental improvement projects undertaken by Charles Sturt in 2018 are further discussed in Section 6.





### 3. Emissions summary

Table 4. Emissions Summary		
Scope	Emission source	t CO <sub>2</sub> -e
1	Natural Gas (Distributed In A Pipeline)	6,133
1	LPG	46
1	Vehicle Fuel - Diesel	533
1	Vehicle Fuel - ULP	518
1	Vehicle Fuel – E10	82
1	Petroleum Based Oils	1
1	Domestic Wastewater Treatment	6
1	Acetylene	0
1	SF6 - leakage	0
1	Enteric Fermentation of Livestock - Cattle	1,871
1	Enteric Fermentation of Livestock - Sheep	896
1	Enteric Fermentation of Livestock - Horses	32
2	Electricity - NSW & ACT	19,939
3	Transmission and Distribution Electricity (NSW)	2,432
3	Natural Gas (Distributed In A Pipeline)	1,619
3	LPG	3
3	Vehicle Fuel - Diesel	27
3	Vehicle Fuel - ULP	27
3	Vehicle Fuel - E10	4
3	Electricity – Leased Assets	9,522
3	Construction	1,316
3	General Waste	952
3	Travel – flights short haul	232
3	Travel – flights medium haul	288
3	Travel – flights long haul	1,228
3	Travel - Taxi	25
3	Travel - Personal Reimbursed	71
3	Paper	45
3	Printing paper (offset roll)	11
3	Water	939
3	Accommodation	789
3	Paper Towels/Toilet Tissue	52
Total Gross Emissions		49,729
Total Net Emissions		0

Since the 2014 baseline year, Charles Sturt has introduced the following emission sources into its carbon inventory:

- Enteric Fermentation of Livestock
- Scope 3 emissions from potable water
- Scope 3 emissions associated with accommodation for University business

## 4. Carbon offsets

### 4A. Offsets summary

Table 5. Offsets Summary					
Project	Activity Type	Registry	Standard	Serial Numbers	Retirement
<b>CO2 Australia Creating a Better Climate Project</b>	Reforestation	Australian National Registry of Emission Units	CFI / Kyoto AACUS	3,771,846,859 - 3,771,848,781	1,923
<b>Solar Grouped Project ACME Group</b>	Renewable Energy - Solar	APX Registry	Verified Carbon Standard	6327-295550086-295572657-VCU-034-MER-IN-1-1580-01022017-30112017-0	22,573
<b>CECIC HKE Zhangbei Lvnabao Wind Power Project</b>	Renewable Energy - Wind	APX Registry	Verified Carbon Standard	5916-266492862-266507861-VCU-034-APX-CN-1-727-01012016-31122016-0	15,000
<b>Rimba Raya Biodiversity Reserve Project</b>	Avoided Deforestation	APX Registry	Verified Carbon Standard	6287-294250060-294258636-VCU-016-MER-ID-14-674-01012014-30062014-1	8,577
2017 Carry Over 199.70 MW Wind Project in Maharashtra	Renewable Energy - Wind	APX Registry	Verified Carbon Standard	5853-264283912-264287786-VCU-034-MER-IN-1-1447-01012016-01042016-0	1,656
<b>Total offsets retired</b>	49,729				
<b>Net emissions</b>	0				

#### 4B. Offsets purchasing and retirement strategy

##### *Offset Purchase*

Charles Sturt established a series of four principles to help guide decisions associated with the procurement of carbon offsets. These principles are as follows:

1. Support for locally-based projects to the extent that is deemed financially viable
2. A preference for projects that align with Charles Sturt's values and offer high engagement value
3. Consideration of projects that offer regional connectivity with Charles Sturt's international partners, a number which are listed here: <https://www.csu.edu.au/division/global-engagement-and-partnerships/partnerships/international-linkages>)
4. The per unit cost of the offset option

CSU purchases and retires offsets in arrears of the reporting period, once its annual inventory has been established and total quantity of offsets known.

#### 4C. Offset projects (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 addressed by the offsets include SDG 7, SDG 8, SDG 9, SDG 13, SDG 15.



**The Rimba Raya Biodiversity Reserve Project**, an initiative by InfiniteEARTH, aims to reduce Indonesia's emissions by preserving some 64,000 hectares of tropical peat swamp forest. This area, rich in biodiversity including the endangered Bornean orangutan, was slated by the Provincial government to be converted into four palm oil estates. Located on the southern coast of Borneo in the province of Central Kalimantan, the project is also designed to protect the integrity of the adjacent world renowned Tanjung Puting National Park, by creating a physical buffer zone on the full extent of the eastern border of the park.

**CO2 Australia Creating a Better Climate Project (Reforestation)**: Extensive plantings of native eucalypt tree species have progressively been established by CO2 Australia through central New South Wales across the past decade. Plantings include tree belts integrated into existing farming operations, and larger consolidated plantings delivering larger scale abatement outcomes. Species have been selected for drought, disease and fire tolerance, with mallee eucalypts favoured for many project locations. For some projects, revenue share arrangements have been negotiated with landholders, so that proceeds from carbon sales flow back to landholders. Revegetation in what are otherwise heavily cleared

landscapes delivers a number of biodiversity and environmental co-benefits, as well as helping to promote the uptake of carbon projects and tree planting by local landholders

**CECIC HKE Zhangbei Lvnaobao Wind Power Project:** These are utility scale renewable energy projects delivered in India and China respectively which offer carbon emission reductions compared to conventional energy. The Project promotes sustainable development through the following aspects:

- Reduce greenhouse gas emissions compared to the business-as-usual scenario;
- Help to stimulate the growth of the wind power industry in China;
- Reduce the emission of other pollutants resulting from the power generation industry in China, compared to a business-as-usual scenario;
- Create local employment opportunities during the construction and operation of the Project;
- Stimulate the development of local tourism industry.

**Solar Grouped project by ACME Group:** The grouped project activity supports the development of new grid-connected renewable energy power plants in India using solar energy technologies. It seeks to enable investment in large scale and small scale grid connected plants that export their generated output to the regional / national electricity grid in India.

## 5. Use of trade mark

Table 6. Trade mark register	
Where used	Logo type
CSU Website (inclusive of CSU Green website sections)	Certified Organisation
Carbon Netural Flyer prepared by CSU	Certified Organisation
Presentations on CSU's journey to carbon neutrality	Certified Organisation
CSU and CSU Green Facebook Pages	Certified Organisation
Staff electronic signatures	Certified Organisation

## 6. Have you done more?

Sustainability is a key performance measure for the University. These activities include:

- In 2007 CSU became a signatory to the Talloires Declaration.
- Since 2013, CSU has adopted the Learning in Future Environments (LiFE) index as the framework for benchmarking, evaluating and identifying areas for improvement to shape CSU's sustainability action plan.
- CSU has subscribed to the United Nations Sustainable Development Goals and at a National level CSU is an active member of Australian Campuses Towards Sustainability (ACTS).
- The Sustainable Practices Graduate Learning Outcome (GLO) has been developed to embed sustainable practices as a standard across graduating students from any discipline so that graduates can "Demonstrate attitudes and implement actions that meet the needs of the present without compromising the ability of future generations to meet their own needs and those of the environment"



- CSU's Research Narrative is based on the principles of 'Yindyamarra Winhanganha' is a Wiradjuri phrase meaning, 'the wisdom of respectfully knowing how to live well in a world worth living in'. The narrative is heavily focused on supporting all aspects of sustainability including sustainable environments, flourishing communities and resilient people that all intersect to create "a world worth living in"
- Adoption of a 2030 100% Clean Energy Strategy for the entire university

In 2018 CSU's Sustainability Scorecard sets out the full scope of our environmental achievements and is accessible through this link:

<https://www.csu.edu.au/csugreen/publications/sustainability-score-card>