

# National Carbon Offset Standard Carbon Neutral Program Public Disclosure Summary



An Australian Government Initiative

Charles Sturt University

BASE YEAR: 2014

FIRST CARBON NEUTRAL PERIOD: 2015

## 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.

A handwritten signature in black ink, appearing to read "Andrew Vann".

Date: 8/12/16

Professor Andrew Vann

Vice-Chancellor and President  
Charles Sturt University

Type of carbon neutral certification: Organisation

Verification

Date of most recent external verification/audit: 24/3/2016 for the Initial Application

Auditor: Gillian Hand-Smith

Auditor assurance statement link:



**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 27 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 9,600 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 6,000 students around the globe, with more than 2,300 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 to meet 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 (Arts & Education, Business, Justice & Behavioural Science, and 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.

Research is conducted through institutes and centres located across the University's campuses. The University hosts the Centre for Applied Philosophy and Public Ethics (CAPPE) which is an Australian Research Council (ARC) Special Research Centre and is a partner in the ARC Centre of Excellence for Policing and Security (CEPS).

The University has four Centres of Research Excellence (CAPPE; the Graham Centre for Agricultural Innovation; the Institute for Land, Water and Society [ILWS] and the Research Institute for Professional Practice Learning and Education [RIPPLE]); five Strategic Research Centres (the National Wine and Grape Industry Centre [NWGIC]; the Centre for Research in Complex Systems [CRiCS]; the Centre for Public and Contextual Theology [PACT]. The University is also a partner in Cooperative Research Centres including Cotton Catchment Communities, Future Farm Industries and High Integrity Australian Pork.

## 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	✓		
Purchased electricity		✓	✓
Emissions associated with construction			✓
Municipal Waste			✓
Travel-Taxi			✓
Reimbursed private vehicle usage			✓
Travel- Air short haul			✓
Travel- Air medium haul			✓
Travel- Air long haul			✓
Paper			✓
Paper Towels			✓
Enteric Fermentation of Livestock			✓

### 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
  - The largest capital items for CSU relate to the facilities and thus this emissions source was not further considered.
- 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 CSU. 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, CSU does not manufacture goods and thus these emissions source are not relevant for the organisation.
- Downstream leased assets
  - CSU offer a small number of courses through partner institutions over which CSU does not have operational control. These are a small component of the overall higher education service offered by CSU and have been assessed as not likely to significantly impact the reported emissions.
- Franchises
  - Not relevant to CSU operations.
- Investments
  - Through both the Charles Sturt Investment Portfolio and the Charles Sturt Foundation Investment Portfolio, CSU directly hold investments in a number of investment fund products and also direct shares in ASX listed companies. CSU 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.
  - CSU 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

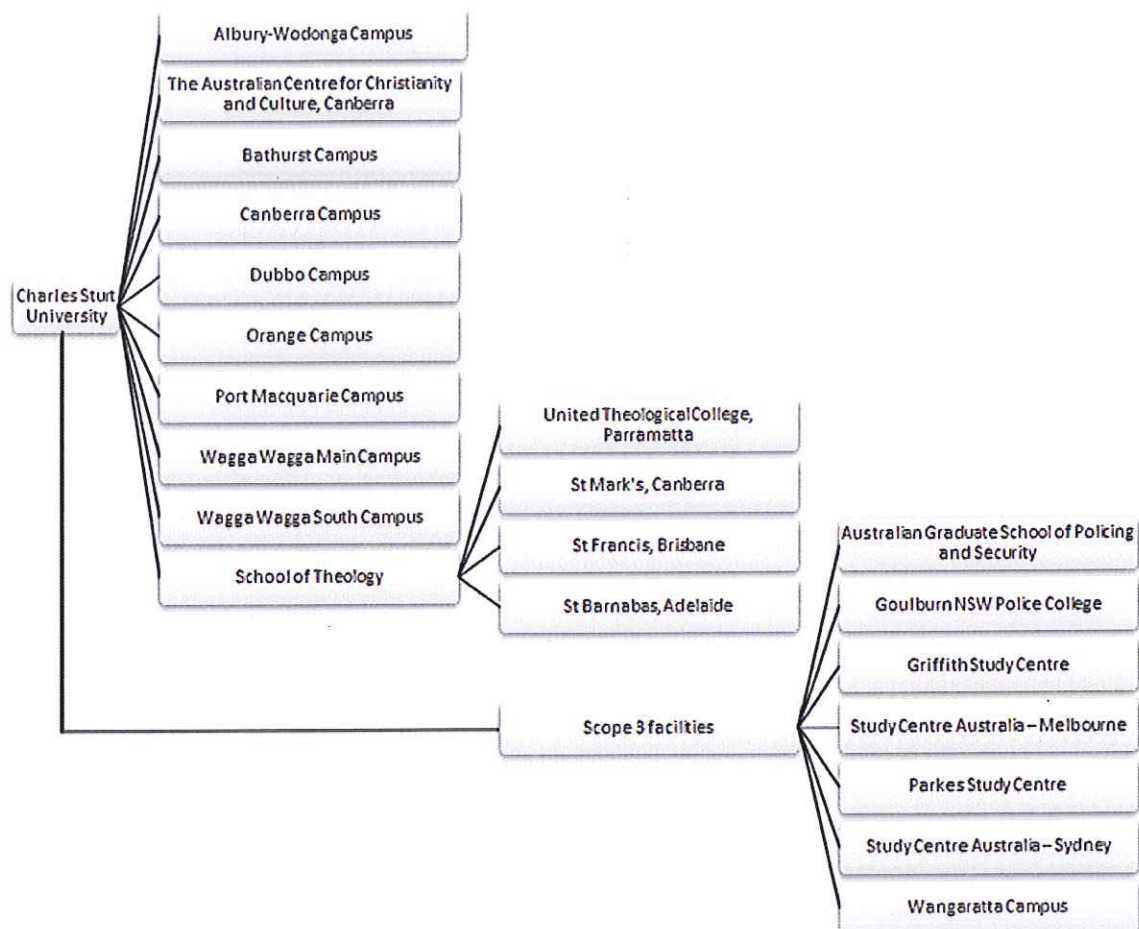
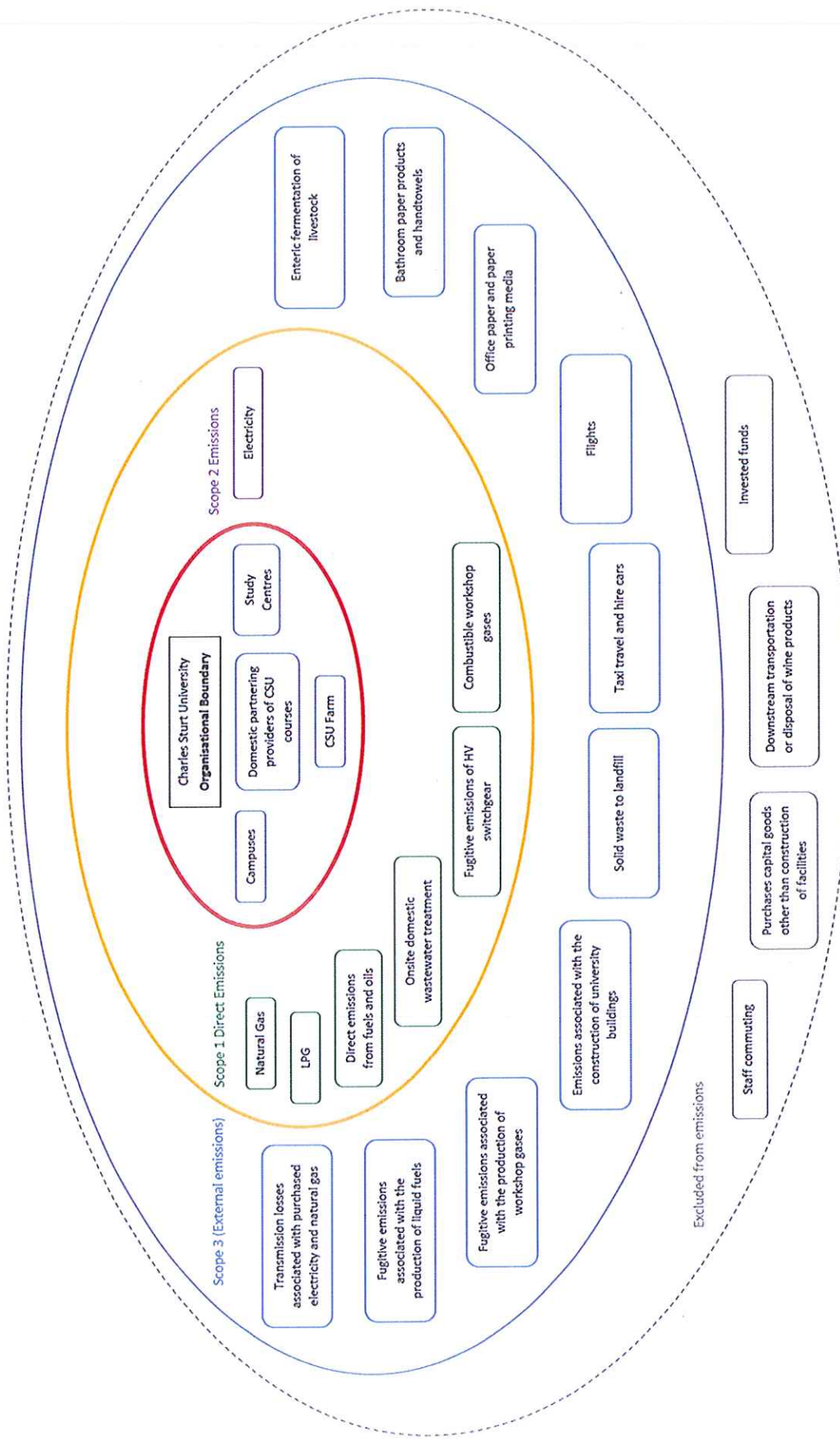


Figure 2 - Charles Sturt University carbon inventory boundary for the purposes of Carbon Neutral Certification



## 2. Emissions reduction measures

### 2A. Emissions over time

Table 2. Emissions since base year		
	Base Year (2014)	2015
Scope 1	5,936	8063
Scope 2	26,915	26,035
Scope 3	10,773	11,968
Total (tCO <sub>2</sub> -e)	43,623	46,067
Emissions/FTE Student	2.09	2.19

### 2B. Emissions reduction strategy

CSU's 2015-2016 Sub-Plan (Infrastructure Physical and Virtual), which is part of the broader University Strategy sets out the specific emissions reductions activities for Charles Sturt in the near term. A summary of the emissions reduction strategy and opportunities is available online at : <https://www.csu.edu.au/csugreen/our-commitments>

### 2C. Emissions reduction actions

Charles Sturt University is proactively reducing the emissions associated with its operations through discrete and targeted programs. Table 2 summarises the key projects undertaken in 2015 for which emissions savings estimates and/or measured data were available. In each case the emissions or electricity savings were taken from the data provided by the lead contractor.

CSU has also undertaken a number of other emissions reductions actions to actively reduce the emissions across the organisation but for which limited measured emissions and/or energy savings data is available. These projects in 2015 included:

- The purchase of electric carts for use at campuses, replacing the use of fossil fuel powered vehicles;
- An electricity saving campaign across the Bathurst residences; and
- Peer to peer training on the separation of recyclable and organic materials from the landfill waste stream at residences.

These and other environmental improvement projects undertaken by CSU in 2015 are further discussed in Section 6.



<b>Table 3. Emissions reduction measures implemented in the current reporting period</b>					
Year completed	Emission source	Reduction measure and calculation method	Scope	Status	Reduction t CO <sub>2</sub> -e
2014 and 2015	Electricity and Gas	<b>Installation of Co-generation facility at Bathurst:</b> Installation of a gas fired co-generation plant. Emissions savings calculated by the project consultant.	1 and 2	On-going	1,159
2015 (on-going)	Electricity	<b>Energy Performance Contract</b> Upgrade to lighting, air conditioning and hot water services across the Bathurst and Wagga Wagga Campuses. Emissions savings were calculated conservatively from the reported total electricity savings of 817,046 kWh/annum and using the FY16 NSW & ACT Electricity Scope 2 Factor.	2	On-going	686
2015	Electricity	<b>Conservation Voltage Reduction</b> Lowering the voltage of campus supplied electricity. Emissions savings are calculated based on the forecast electricity savings of 78,294 kWh/6 months provided by the lead contractor and using the FY16 NSW & ACT Electricity Scope 2 Factor.	2	On-going	132
Total emission reductions implemented in this reporting period					1,977

### 3. Emissions summary

<b>Table 4. Emissions Summary</b>		
Scope	Emission source	t CO <sub>2</sub> -e
1	Natural Gas (Distributed In A Pipeline)	7,045
1	LPG	66
1	Vehicle Fuel - Diesel	504



<b>Table 4. Emissions Summary</b>		
Scope	Emission source	t CO <sub>2</sub> -e
1	Vehicle Fuel - ULP	426
1	Vehicle Fuel - LPG	14
1	Ethanol	0
1	Petroleum Based Oils	1
1	Domestic Wastewater Treatment	6
1	Acetylene	0.4
1	SF6 - leakage	0.0
2	Electricity - NSW & ACT	22,882
2	Electricity - VIC	3,153
3	Purchased Electricity (NSW)	3,231
3	Purchased Electricity (VIC)	355
3	Construction	2,064
3	General Waste	865
3	Travel - Taxi	28
3	Travel - Personal Reimbursed	39
3	Travel - Short Haul (<463km)	229
3	Travel - Medium Haul (>463 <3,700 km)	250
3	Travel - Long Haul (>3,700 km)	858
3	A3 Recycled	0
3	A3 Virgin	2
3	A4 Recycled	7
3	A4 Virgin	41
3	A5 Virgin	0
3	Offset Printing Roll	21
3	Natural Gas (Distributed In A Pipeline)	1,863
3	LPG	2
3	Vehicle Fuel - Diesel	26
3	Vehicle Fuel - ULP	23
3	Vehicle Fuel - LPG	1
3	Enteric Fermentation of Livestock - Cattle	1,397
3	Enteric Fermentation of Livestock - Sheep	597
3	Enteric Fermentation of Livestock - Horses	19
3	Paper Towels/Toilet Tissue	52
<b>Total Gross Emissions</b>		<b>46,067</b>
<b>GreenPower or retired LGCs</b>		<b>0</b>
<b>Total Net Emissions</b>		<b>46,067</b>

## 4. Carbon offsets

### 4A. Offsets summary

<b>Table 5. Offsets Summary</b>			
Offset type and registry	Year retired	Quantity	Serial numbers
CO2 Australia Creating a Better Climate Project (Reforestation) ACCU Australian National Registry of Emission Units	2016	8,000	3,741,589,623 - 3,741,597,622
CO2 Australia Creating a Better Climate Project (Reforestation) ACCU Australian National Registry of Emission Units	2016	299	3,741,597,623 - 3,741,597,921
10.9 MW Bundled Solar Power Project VCS APX Registry	2016	5,506	4337-182469600-182475105-VCU-048-MER-IN-1-1486-01012014-31122014-0
The Wulabo 30 MW Wind-Farm Project in Urumqi, Xinjiang of China VCS APX Registry	2016	2,054	4560-189574019-189576072-VCU-034-APX-CN-1-472-30112014-31122014-0
The Wulabo 30 MW Wind-Farm Project in Urumqi, Xinjiang of China VCS APX Registry	2016	1,423	4561-189576073-189577495-VCU-034-APX-CN-1-472-01012016-01042016-0
The Wulabo 30 MW Wind-Farm Project in Urumqi, Xinjiang of China VCS APX Registry	2016	8,464	4678-193008169-193016632-VCU-034-APX-CN-1-472-01012015-31122015-0
Hebei Chengde Weichang Yudaokou Pasture 150MW Wind Farm Project VCS APX Registry	2016	11,562	4687-193234881-193246442-VCU-034-APX-CN-1-892-01092011-31122011-0
Hebei Chengde Weichang Yudaokou Pasture 150MW Wind Farm Project VCS APX Registry	2016	8,689	2478-106296622-106305310-VCU-003-MER-CN-1-892-01012011-16012011-0

Table 5. Offsets Summary			
Offset type and registry	Year retired	Quantity	Serial numbers
Hebei Chengde Weichang Yudaokou Pasture 150MW Wind Farm Project VCS APX Registry	2016	106	2478-106289178-106289283-VCU-003- MER-CN-1-892-01012011-16012011-0
Total offsets retired			46,103
Net emissions			0
Total offsets held in surplus for future years: CO2 Australia Creating a Better Climate Project (Reforestation) ACCU Australian National Registry of Emission Units  3,741,597,623 – 3,741,597,921			36

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

##### *Offset Purchase*

CSU has 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 CSU's values and offer high engagement value
3. Consideration of projects that offer regional connectivity with CSU's international partners, a number of which are listed here: <http://www.csu.edu.au/international/options/international-partners>)
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)

Australian-based offsets represent 17% of the total volume (and 68% of the purchased offset value). Co-benefits that are being delivered through the Australian-based projects include restoration of habitats for native fauna, new employment opportunities for regional Australians and diversification of income streams for Australian farmers.



The balance of offsets purchased and retired have been purchased from internationally-based projects associated with renewable energy. The projects supported are all located in developing countries. Co-benefits of these projects include new employment opportunities for people involved in the construction and maintenance of the renewable energy systems, increased air quality, and improvements in the reliability of electricity supply as a result of decentralised generation.

## 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
For a limited time on staff electronic signatures	Certified Organisation

## 6. Have you done more?

CSU has further demonstrated it's commitment to environmental improvement in 2015 with the CSU School of Management and Marketing signing on to the United Nations' Principles for Responsible Management Education. Further, CSU were recognised by the NSW Government for our efforts in improving energy efficiency receiving the inaugural Energy Productivity in Action Business Leader (Commercial) Award.

CSU actively considers approaches to improving biodiversity and environmental outcomes across the full breadth of it's operations. In 2015 CSU's Sustainability Scorecard sets out the full scope of our environmental achievements and is accessible through this link:

[http://www.csu.edu.au/\\_data/assets/pdf\\_file/0008/2453444/CSUG-Sustainability-Report-WEB-160831.pdf](http://www.csu.edu.au/_data/assets/pdf_file/0008/2453444/CSUG-Sustainability-Report-WEB-160831.pdf)

## **SNAPSHOT OF SUSTAINABILITY 2015**

### RESULTS FROM YOUR VOICE STAFF SURVEY

THEN 2013

NOW 2015



88%  
AWARE OF ENVIRONMENTAL  
AND SOCIAL SUSTAINABILITY  
INITIATIVES HAPPENING AT CSU



80%  
ENCOURAGED TO PARTICIPATE  
IN ENVIRONMENTAL AND SOCIAL  
SUSTAINABILITY INITIATIVES  
HAPPENING AT CSU



72%  
ACTIVELY PARTICIPATE IN  
ENVIRONMENTAL AND SOCIAL  
SUSTAINABILITY INITIATIVES  
HAPPENING AT CSU

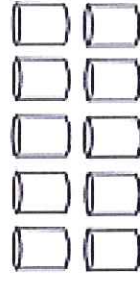


3902  
LIGHT FITTINGS  
UPGRADED UNDER  
THE ENERGY  
PERFORMANCE CONTRACT



132 BOXES

OF  
NON-  
PERISHABLE  
FOOD



& 74 BOXES

OF  
KITCHEN  
ITEMS  
DONATED  
ACROSS ALL CAMPUSES

HEY TOSSER  
BATHURST  
REACHED

2000

PEOPLE



SOCIAL MEDIA CSU ORGANICS EST.

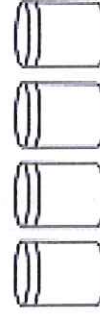
@ ORANGE CAMPUS

455  
FACEBOOK  
LIKES

12  
KITCHEN CADDIES  
INSTALLED IN STAFF KITCHENS

FACEBOOK.COM/CSUGREEN

BATTERY RECYCLING  
180 BINS



DEPLOYED IN 2015 TO  
MULTIPLE CAMPUSES

CEC

CAMPUS  
ENVIRONMENTAL  
COMMITTEE

75  
CURRENT  
MEMBERS



#### SUSTAINABILITY GRANT

LARGE GRANT

1 APPLICATION

1

AWARDED

TOTAL \$50,000

SMALL GRANT

6 APPLICATIONS

6

AWARDED

TOTAL \$45,000

STREAM 2 RESEARCH

4 APPLICATIONS

0

AWARDED

CO GEN  
IN BATHURST  
GENERATED



3,700,000  
kWh

#### TREE PLANTING DAYS

1095 TREES & SHRUBS

PLANTED ACROSS

4

CAMPUSES



ALBURY

DUBBO

BATHURST

WAGGA

1000 STUDENTS  
PARTICIPATED

PRIMARY & SECONDARY

TONER CARTRIDGES

395 KILOGRAMS

OF RECYCLED  
TONER CARTRIDGES



IN THE  
HIGHER EDUCATION  
PARTICIPATION PROJECT



ALBURY BATHURST DUBBO WAGGA

ACROSS MULTIPLE CAMPUSES  
THROUGHOUT 2015

SAAF FUNDING

STUDENT SERVICES & AMENITIES FEES

BATHURST CAMPUS CEC  
ECO WALK BATHURST

\$\$\$\$\$  
FUNDING OF

\$196,000