# National Carbon Offset Standard
# Carbon Neutral Program
# **Public Disclosure Summary**

Charles Sturt University

An Australian Government Initiative

Charles Sturt University

BASE YEAR: 2014

THIRD CARBON NEUTRAL PERIOD: 2017

## 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 20/6/18

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

Auditor assurance statement link:

**Australian Government**
**Department of the Environment and Energy**

# 1. Carbon neutral information

## 1A. Introduction

Charles Sturt University (CSU) was established in 1989 as a multi-campus institution and, over the past 25 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, Brisbane 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 and Education, Business, Justice and Behavioural Sciences, 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 is a partner in the ARC Centre of Excellence for Policing and Security (CEPS).

The University has four University Research Centres: 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). The University also hosts the Functional Grains Centre which is an Australian Research Council Industrial Transformation Training Centre and is a partner in the Cooperative Research Centre for High Integrity Australian Pork

## 1B. Emission sources within certification boundary

### Quantified sources

| Table 1: Reported Emissions Sources for CSU Third Year Report | | | |
|---|---|---|---|
| Emissions Source | Emissions Reported | | |
| | Scope 1 | Scope 2 | Scope 3 |
| Natural Gas | ✓ | | ✓ |
| LPG | ✓ | | ✓ |
| Diesel | ✓ | | ✓ |
| Gasoline | ✓ | | ✓ |
| 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 | | | ✓ |
| Reimbursed private vehicle usage | | | ✓ |
| Travel- Air short haul | | | ✓ |
| Travel- Air medium haul | | | ✓ |
| Travel- Air long haul | | | ✓ |
| Paper | | | ✓ |
| Paper Towels | | | ✓ |

### 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:

- 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 $tCO_2$-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 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.

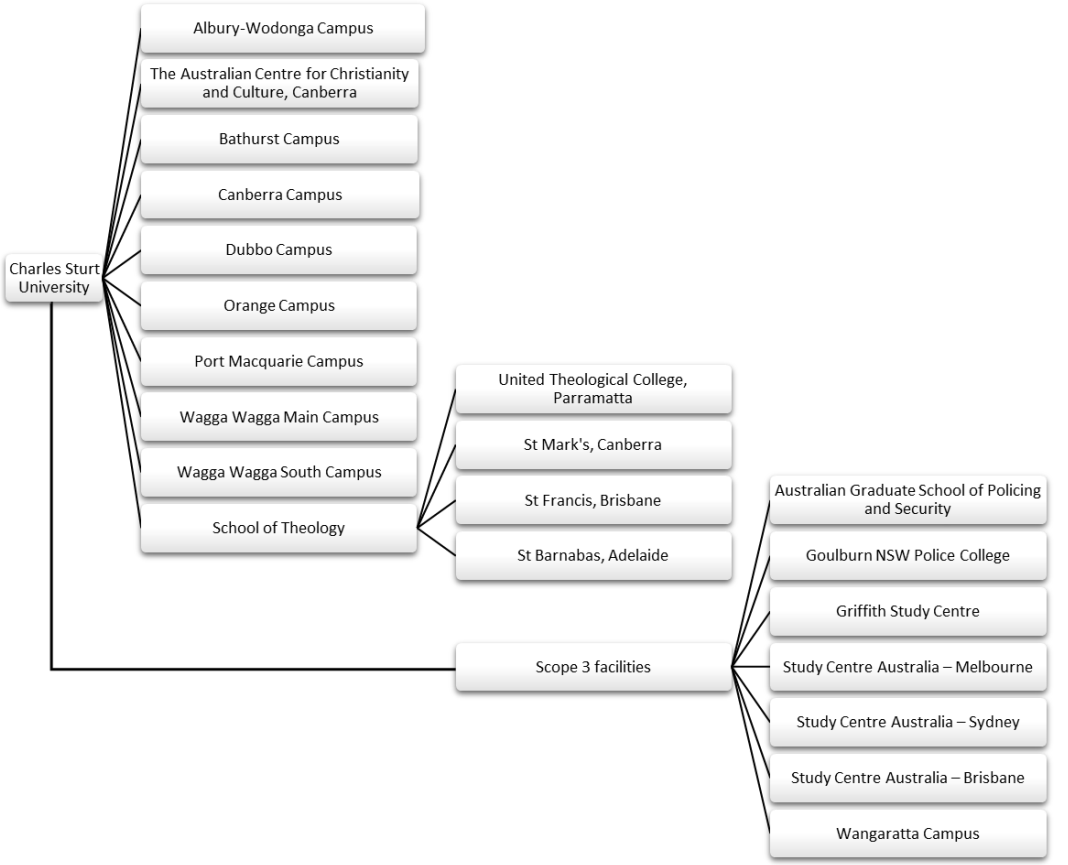
## Excluded Sources

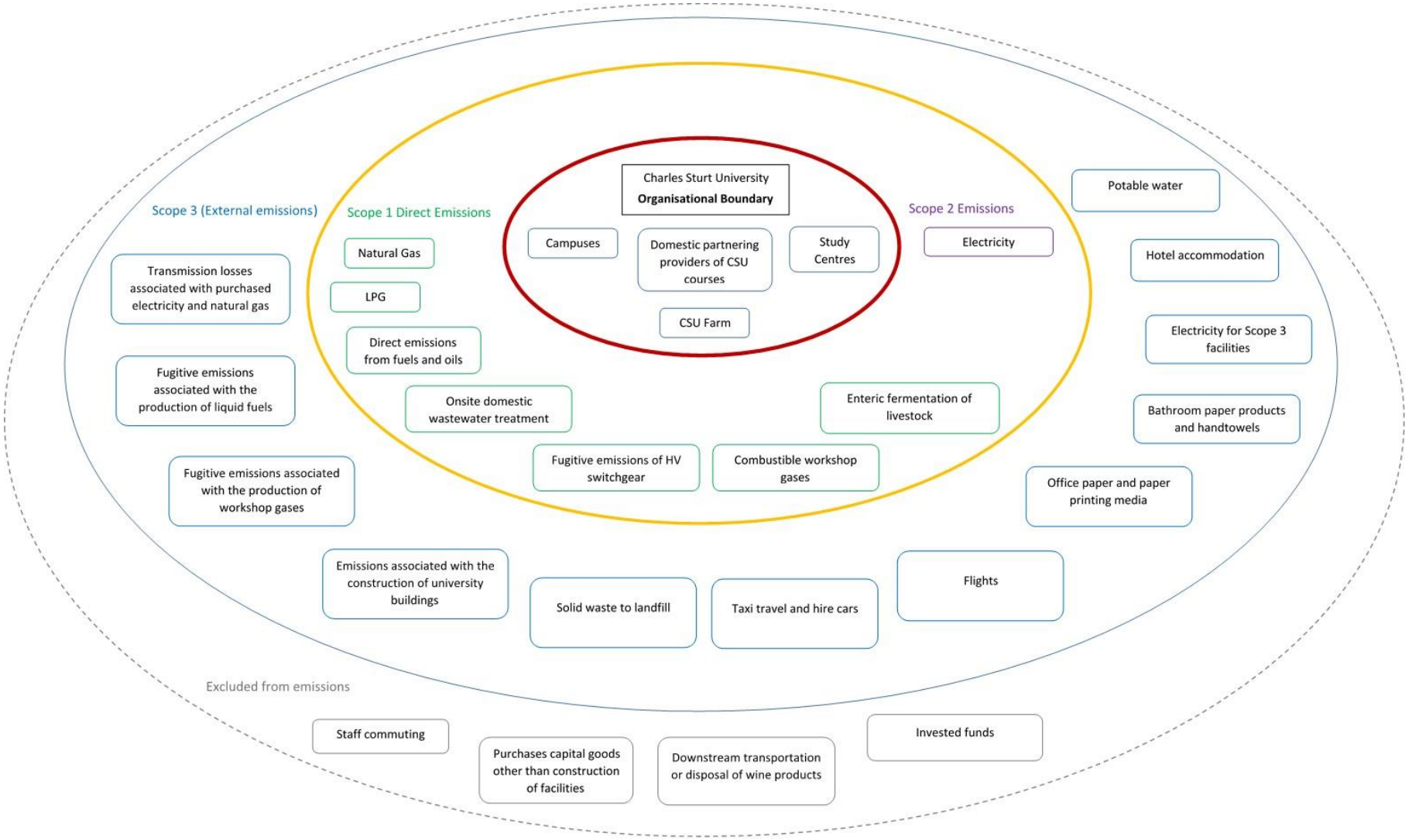
The following emission sources were considered in relation to CSU's operations and have been determined to be outside of the reporting scope for CSU:

- Capital Goods
    - The largest capital items for CSU relate to the facilities and thus this emissions source was not further considered.
- 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.
- 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 Organisation Boundary for the purposes of Carbon Neutral Certification




Charles Sturt University
Organisational Boundary
Campuses
Domestic partnering providers of CSU courses
Study Centres
CSU Farm
Scope 1 Direct Emissions
Natural Gas
LPG
Direct emissions from fuels and oils
Onsite domestic wastewater treatment
Fugitive emissions of HV switchgear
Combustible workshop gases
Enteric fermentation of livestock
Scope 2 Emissions
Electricity
Scope 3 (External emissions)
Transmission losses associated with purchased electricity and natural gas
Fugitive emissions associated with the production of liquid fuels
Fugitive emissions associated with the production of workshop gases
Emissions associated with the construction of university buildings
Solid waste to landfill
Taxi travel and hire cars
Flights
Potable water
Hotel accommodation
Electricity for Scope 3 facilities
Bathroom paper products and handtowels
Office paper and paper printing media
Excluded from emissions
Staff commuting
Purchases capital goods other than construction of facilities
Downstream transportation or disposal of wine products
Invested funds

# 2. Emissions reduction measures

## *2A. Emissions over time*

Please note that the FTE student numbers for prior reporting years have been updated since the reporting conducted in 2015 to include only those facilities covered in the CSU Organisational Boundary. This has resulted in higher reported emissions-intensities per student than the previous report.

**Table 2.** Emissions since base year

| | Base Year (2014) | 2015 | 2016 | 2017 |
|---|---|---|---|---|
| Scope 1 | 5,936 | 8,063 | 8,293 | 10,658 |
| Scope 2 | 26,915 | 26,035 | 19,754 | 20,160 |
| Scope 3 | 10,773 | 11,968 | 18,874 | 19,146 |
| Total ($tCO_2$-e) | 43,623 | 46,067 | 46,921 | 49,964 |
| FTE Students (in Facilities covered by CSU) | 19,220 | 19,648 | 18,362 | 19,100 |
| Emissions/FTE Student | 2.27 | 2.34 | 2.56 | 2.62 |

## *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 2017, in addition to the on-going savings generated form the emissions reductions activities reported in the 2015 and 2016 reports. 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 2017 included the installation or removable covers over hot water valves.

| **Table 3.** Emissions reduction measures implemented in the current reporting period | | | | | |
|---|---|---|---|---|---|
| Year completed | Emission source | Reduction measure and calculation method | Scope | Status | Reduction t $CO_2$-e |
| 2017 | Electricity | **Installation of a 1,774 kW solar panel system at the Wagga Campus**<br><br>The 1,774 kW solar array is expected to produce over 2,600,000 kWh pa. Although the LGCs will be sold for the first seven years they may be retained in the future to reduce emissions. | 2 | On-going | 0 |
| Total emission reductions implemented in this reporting period | | | | | 0 |

# 3. Emissions summary

| **Table 4.** Emissions Summary | | |
|---|---|---|
| Scope | Emission source | t $CO_2$-e |
| 1 | Natural Gas (Distributed In A Pipeline) | 6,894 |
| 1 | LPG | 57 |
| 1 | Vehicle Fuel - Diesel | 467 |
| 1 | Vehicle Fuel - ULP | 377 |
| 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 | 1,774 |
| 1 | Enteric Fermentation of Livestock - Sheep | 982 |
| 1 | Enteric Fermentation of Livestock - Horses | 18 |
| 2 | Electricity - NSW & ACT | 20,160 |
| 3 | Transmission and Distribution Electricity (NSW) | 2,791 |
| 3 | Scope 3 Facility Electricity (NSW) | 4,162 |
| 3 | Scope 3 Facility Electricity (VIC) | 5,906 |
| 3 | Scope 3 Facility Electricity (QLD) | 159 |
| 3 | Construction | 698 |
| 3 | General Waste | 989 |
| 3 | Travel - Taxi | 26 |
| 3 | Travel - Personal Reimbursed | 84 |
| 3 | Travel - Short Haul (<463km) | 273 |
| 3 | Travel - Medium Haul (>463 <3,700 km) | 242 |
| 3 | Travel - Long Haul (>3,700 km) | 841 |

| **Table 4.** Emissions Summary | | |
|---|---|---|
| Scope | Emission source | t $CO_2$-e |
| 3 | A3 Recycled | - |
| 3 | A3 Virgin | - |
| 3 | A3 Certified Carbon Neutral | - |
| 3 | A4 Recycled | 10 |
| 3 | A4 Virgin | 27 |
| 3 | A4 Certified Carbon Neutral | - |
| 3 | Offset Printing Roll | |
| 3 | Natural Gas (Distributed In A Pipeline) | 1,820 |
| 3 | LPG | 3 |
| 3 | Vehicle Fuel - Diesel | 24 |
| 3 | Vehicle Fuel - ULP | 20 |
| 3 | Vehicle Fuel - E10 | 5 |
| 3 | Paper Towels/Toilet Tissue | 60 |
| 3 | Water | 358 |
| 3 | Hotel Accommodation | 648 |
| Total Gross Emissions | | 49,964 |
| GreenPower or retired LGCs | | 0 |
| Total Net Emissions | | 49,964 |

Note that the total reported is prior to rounding in the presentation of Table 4.

# 4. Carbon offsets

## *4A. Offsets summary*

| **Table 5.** Offsets Summary | | | |
|---|---|---|---|
| Offset type and registry | Year retired | Quantity | Serial numbers |
| Guohua Wulate Zhongqi Chuanjing Phase II Wind Farm Project, China<br>VCS<br>APX Registry | 2017 | 620 | 3310-148838490-148839110-VCU-003-APX-CN-1-1200-01012010-31122010-0 |
| CO2 Australia Creating a Better Climate Project (Reforestation)<br>ACCU<br>Australian National Registry of Emission Units | 2018 | 1,000 | 3,754,194,184 - 3,754,195,183 |

**Table 5.** Offsets Summary

| Offset type and registry | Year retired | Quantity | Serial numbers |
|---|---|---|---|
| Mapoon Carbon Project (Savannah fire management)<br>ACCU<br>Australian National Registry of Emission Units | 2018 | 2,000 | 3,760,627,649 - 3,760,629,648 |
| West Arnhem Land Fire Abatement (WALFA) Project (Savannah fire management)<br>ACCU<br>Australian National Registry of Emission Units | 2018 | 3,000 | 3,756,670,266 - 3,756,673,265 |
| Household Biogas plants installed in rural areas of Uttar Pradesh & Gujarat<br>Gold Standard<br>Markit Registry | 2018 | 4,000 | GS1-1-IN-GS2520-4-2017-6318-6294 to 10293 |
| Rimba Raya Biodiversity Reserve Project<br>VCS<br>APX Registry | 2018 | 4,000 | 5852-264262256-264282255-VCU-034-MER-IN-1-1580-01022017-30112017-0 |
| Solar Grouped Project by ACME Group<br>VCS<br>APX Registry | 2018 | 20,000 | |
| 199.70 MW Wind Project in Maharashtra by BWDPL<br>VCS<br>APX Registry | 2018 | 3,972<br><br>308<br><br>7,189<br><br>5,875 | 5856-264295284-264299255-VCU-034-MER-IN-1-1447-17052013-31122013-0<br><br>5855-264294976-264295283-VCU-034-MER-IN-1-1447-01012014-31122014-0<br><br>5744-257511379-257518567-VCU-034-MER-IN-1-1447-01012015-31122015-0<br><br>5853-264282256-264283911-VCU-034-MER-IN-1-1447-01012016-01042016-0 |
| Total offsets retired | | | 51,000 |
| Net emissions | | | 0 |

| **Table 5.** Offsets Summary | | | |
|---|---|---|---|
| Offset type and registry | Year retired | Quantity | Serial numbers |
| Total offsets held in surplus for future years:<br><br>199.70 MW Wind Project in Maharashtra by BWDPL<br>VCS<br>APX Registry<br>5853-264283912-264287786-VCU-034-MER-IN-1-1447-01012016-01042016-0 | | | 1,656 |

## *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 n umber 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)*

*This section is optional. Include here any details about project types from which the offsets have been purchased. Where certain project types relate to only a portion of the overall amount of offsets used, this must be made clear. For example, "The project types stated here relate to 31 per cent of the total amount of offsets purchased and retired for this reporting period."*

# 5. Use of trade mark

| **Table 6.** Trade mark register | |
|---|---|
| Where used | Logo type |
| CSU Website (inclusive of CSU Green Website Sections) | Certified Organisation |
| CSU Website – common page footer | Certified Organisation |
| Carbon Natural 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?

CSU actively considers approaches to improving biodiversity and environmental outcomes across the full breadth of its operations. The 2017 CSU Sustainability Scorecard will set out the full scope of our environmental achievements and will be accessible through this link (at the time of reporting this report was still being drafted):

http://www.csu.edu.au/csugreen/publications/sustainability-score-card