The Green Thread

Stories of sustainability from Birpai country to Wiradjuri country



2025 THE Impact rankings released

Charles Sturt continues to achieve strong results in the Times Higher Education (THE) Impact Rankings, reflecting our deep commitment to sustainability across our university strategy. THE's Impact Rankings are the only global university rankings measuring progress toward the United Nations' 17 Sustainable Development Goals (SDGs), assessing research, teaching, partnerships, engagement, and operations. Charles Sturt ranked:

- Top 1% for Climate Action (12th globally)
- Top 4% for Gender Equality
- Top 6% for Reduced Inequalities
- Top 7% for Clean Water and Sanitation
- Top 9% for Life on Land and Partnerships for the Goals

These results are especially notable amid growing global competition. In 2025, 2,526 universities from 130 countries or territories participated. Want to help us improve across other Goals? Visit: Sustainable Development Goals – Sustainability to learn more.

The Green Thread is a bi-annual newsletter of sustainable initiatives at Charles Sturt University



Welcome

Welcome to the first edition of The Green Thread - a newsletter dedicated to sharing and promoting the work done towards sustainability across our diverse communities.

The Charles Sturt ethos 'Yindyamarra Winhanganha' - the wisdom of respectfully knowing how to live well in a world worth living in embodies sustainability. It drives what we do.

We pay our respect to all First Nations elders both past and present from the lands where Charles Sturt University students and staff reside.

In particular, we acknowledge the Wiradjuri, Ngunawal, Gundungurra, and Birpai peoples of Australia, who are the traditional custodians of the land where Charles Sturt University campuses are located.

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Yindyamarra Reconcilitation Site virtual tour

A new self-paced virtual tour of the Wagga Wagga campus Yindyamarra Reconciliation Site was launched during Reconciliation week in May. The tour features stunning 360° footage captured on-site. Discover the cultural significance of this special place and its surrounds, learn about the formation of the reconciliation site, and explore the unique flora and fauna that call it home. Take the journey anytime, from anywhere with this fantastic resource developed by the Division of Learning and Teaching.

Access the virtual tour through the Library Services – First Nations page: Yindyamarra Reconciliation Tour



Electric Vehicle Terminology:

BEV - Battery Electric vehicle- runs only on electricity.
PHEV - Plug in hybrid. 80-100km battery range with an ICE (internal combustion engine) for the majority.
Range - The number of kilometres your BEV is capable of travelling.
Fast Charger - EV charger of 50 kW or above. Presently 120 kW fast chargers are installed on the Bathurst and Wagga campuses.
Wall Box or Trickle Charger - Dedicated EV charger located on campus, at a workplace or at your residence.
Regen - Regenerative braking puts energy (charge) back into the battery as the EV slows down or goes down a hill.

Electric Vehicles - not just a big smoke phenomenon

As charging infrastructure improves and living costs rise, more Australians are embracing EVs - not just in cities, and not just Teslas or BYDs.

Purchasing considerations...

Safety: Despite some recent misleading reports, EVs are statistically much less likely to catch fire than combustion vehicles. In NSW alone, there were 2,803 internal combustion engine fires in 2022–23, compared to just 6 EV fires across all of Australia over 13 years leading up to 2023.

Cost: While EVs may have higher upfront costs, they offer significant long-term savings due to minimal maintenance and running costs —especially when charged with excess solar power. Even public charging is about half the cost of fueling a petrol vehicle. John Martin, Energy Projects Officer at Charles Sturt describes the savings after having his Tesla Model Y for over 2 years and 90,000 kilometres:

"With home solar, it costs us just $4.50 to drive 1,000 km. Once you own a BEV, you won't go back—no servicing costs, just tyres and wipers in two years."

Usage & Range: If you drive up to 40km daily for work or school, an EV is a great choice and can be trickle charged on weekends or even at work. Most EVs offer around 400km of range, though this varies by car, driving style, and battery size. For longer trips, it's important to plan charging stops—but this is becoming less of a barrier than in the past.

Charging Points: Many EVs have built-in apps to help you identify suitable charging points along your journey and plan stops. They are even able to show availability at a given moment in time. There are also a variety of maps such as: Vehicle Charging Map. Charles Sturt has installed 120kW DC Fast Chargers onto our Bathurst and Wagga Wagga Campuses. Staff and students can also access an EV trickle charger at the Orange, Albury-Wondonga and Port Macquarie campuses.

Space: EVs often feel roomier than expected due to their flat underfloor batteries and lack of a transmission shaft, which means more legroom and storage space. The best way to see the difference? Take one for a test drive. Charles Sturt staff can also book an EV from the fleet for inter-campus travel—you might just find it's the perfect fit for your next car.



Summer Hill Creek restoration

In 2016 Charles Sturt reached its target to allocate 20% of its core campus land to biodiversity. Since then, much has been done in improving the biodiversity value of these sites across all campuses, including monitoring via site surveys and engagement activities. An example is the restoration, in partnership with Summer Hill Creekcare, of a section of Summer Hill Creek that passes through the Orange campus.

During May, the initiative involved a team of volunteers planting over 250 native trees, shrubs and ground covers to reduce riparian erosion and encourage biodiversity, in a site known as ‘Risky Paddock’. Set aside by the University specifically for conservation rather than agricultural use, this site forms part of the campus’ biodiversity zones. If rain falls now over the winter months, the plantings should thrive and attract native birds and other wildlife.

Summer Hill Creekcare Landcare group aims long-term to provide shade along the creek which runs from Suma Park Reservoir to Ophir. Shade will provide key habitat to enable native fish to breed in the Creek. Charles Sturt University highly values the experience and dedication of the Summer Hill Creekcare volunteers in partnering with us to work towards the Sustainable Development Goal of supporting life on land, and improving water quality.

Volunteering has many benefits, including social, physical and mental wellbeing.

To get involved in an environmental restoration project, reach out to us at: sustainability@csu.edu.au



“Conversations like these are essential to building a more just and sustainable future, both in our university and in the wider community.”

- Rev. Tau’alofa Anga’aelangi

Faith and the Climate Crisis

A seminar ‘Faith and the Climate Crisis’, held on 8 May at Charles Sturt University's Port Macquarie campus, brought together students, academics, and community members to explore how major religious traditions engage with environmental responsibility.

Prompted by the student group Christian Students Uniting at Charles Sturt (CSUCS), the event included speakers from Islamic, Christian, and Hindu backgrounds. Professor Mehmet Ozalp, Reverend Professor Jione Havea, and Dr Kashmira Dave shared insights on how each faith tradition encourages action on climate change, addressing moral obligations to care for the Earth.



Chaired by Professor Ross Chambers (OAM), the forum fostered respectful multifaith dialogue and provided a unique opportunity for reflection on the intersection of religion and sustainability. A panel discussion and Q&A followed by a shared supper encouraged open discussion and personal storytelling, deepening participants' understanding of the role faith can play in addressing the climate crisis.

Charles Sturt University graduate, Rev. Tau’alofa Anga’aelangi grew up in Oceania and attended the event. He explained some of the benefits of the discussion:

“*We listened to a range of faith viewpoints and highlighted the lived realities of people facing the harshest impacts of climate change. Caring for the land and sea has always been part of our identity and way of life... Hearing those same principles reflected in other traditions gave us hope*.”

Do you know someone interested in a faith-based career? Why not share these courses offered by Charles Sturt in Islamic Studies, and Theology and Christian Ministry.

Fueling change across our campuses

Charles Sturt aims to power its campuses with 100% renewable energy. A key step toward this goal is phasing out gas by electrifying campus infrastructure. Gas remains cheaper per unit than electricity, but the gap is closing—especially when factoring in the benefits of onsite renewable generation. Thanks to the higher efficiency of electric heat pumps compared to gas-burning systems, electricity now often delivers heating at a lower cost per unit of useful energy.

In the past 18 months, Charles Sturt completed two major electrification projects at its Bathurst campus.

The first project involved the conversion of gas boilers servicing hydronic heating systems with electric heat pumps at Macquarie Village, a 200-bedroom residential accommodation precinct. Windradyne Village with 96 bedrooms was the site of the second project, replacing gas storage domestic hot water systems with heat pumps.

Air-sourced heat pumps used in both projects provide the advantage of pulling free heat from the air and allowing the systems to consume much less energy than equivalent gas or electric resistance systems. Coupled with our 100 per cent renewable electricity sources, these new installations will operate with zero greenhouse gas emissions.

The strategy behind the action

"Charles Sturt University developed its initial road map for a Clean Energy Strategy in 2017. Campus electrification offers an immediate pathway for conversion of energy sources required to operate our buildings and campuses to 100% renewables. There is currently no clear technical or commercially viable pathway for full conversion of fossil gas to green gas sourced from either biogas or hydrogen.

Respected industry commentators such as the Green Building Council of Australia identify building electrification as a key priority for transitioning to a low-carbon economy, noting the high costs of production and limited supply of practical alternatives."

- Ed Maher,
Manager Sustainability at Charles Sturt







Session 1 Tip: Saving steel - all of us, every week

94% of households in Australia now have access to steel can recycling, however only 56% of steel cans are returned for recycling. Every year each Australian sends around 3.5 kilograms of steel cans to landfill – collectively, that's enough steel to make 40,000 fridges! In addition, making steel from recycled cans uses 75% less energy than when producing steel from raw materials.

It's a no brainer that our best option for sustainability is to recycle all the steel that we can. When our comingled (yellow-lid) recycling bins are emptied at the local material recovery facility, steel is separated from other materials using magnets. Unfortunately, small items such as bottle tops or can lids often end up not being picked up by the magnets as they are tangled with other materials.

How many steel food cans do you open per week? Did you know that it is easy to recycle 100% of the can? Follow these steps for ensuring all of your can gets recycled:



Above: Baled cans ready for recycling at Cairncross Material Reovery Facility, Port Macquarie



1) Rinse out the can removing any food waste and place the lid inside the rinsed can.



2) Crush the can with the lid trapped inside. You can even add steel jar lids and bottle tops too.



3) Place the can into your comingled recycling bin. Easy!

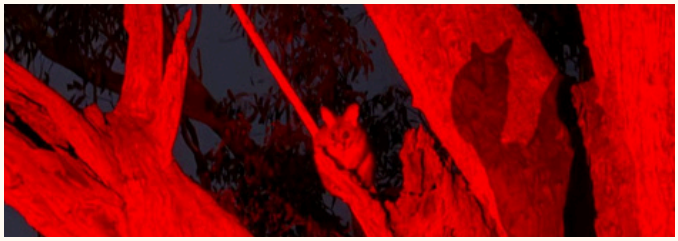




Students shine spotlight on nest boxes

Around 300 native Australian species rely on tree hollows, including the glossy black cockatoo, squirrel glider, lace monitor, and brown tree frog. However, deforestation is rapidly reducing these habitats. Between 2000 and 2017, over 7.7 million hectares of potential threatened species habitat was cleared in Australia. In NSW, 40 hollow-dependent species are now listed as threatened.

The students and staff at Charles Sturt are motivated to make a difference. In 2022, the university's Box Gum Grassy Woodlands Understorey Restoration Project installed three Habitech nesting boxes on campus. These are designed to provide habitat for squirrel gliders and parrots. The Wagga Wagga Campus Environment Group hopes to construct and add more wooden nesting boxes on site to further improve housing options for birds and fauna.



During session 1, Sustainability Advisor and Veterinary Science student, Lucinda Evatt, led a nighttime wildlife spotlighting tour through Wagga Campus biodiversity zones.

The evening, run by student group Wagga Wildlife Conservation Society in collaboration with Local Land Services Riverina, was open to all students. The event educated participants on the species endemic to our campus locations, the benefits of installing innovative habitat nesting boxes and spotlighting etiquette. Approximately 40 people attended and highlights included spotting several brush-tail possums, including one with joeys, and a tawny frogmouth.

Would you like to be involved? Campus Environment Working Groups run across all campuses, and in Wagga, Albury and Port Macquarie there are also student-run Environmental groups. For information on upcoming events run by these groups see: Sustainability Events



Smart water use in dry times

Extreme weather is now common across NSW, as seen in early 2025—with severe floods in the north and droughts in the west and south. In May, Port Macquarie recorded 742mm of rain, while Dubbo had just 53mm. These contrasts highlight the urgent need for climate action and smarter water management.

At Charles Sturt's Dubbo campus, smart irrigation practices are helping address this challenge. Over the past year, Hydrawise Smart Irrigation Controllers have been used to adjust watering based on live weather data. The campus has also reduced irrigated areas to smaller lawns and native gardens, supporting both conservation and biodiversity.

Since the inception of Smart Irrigation Controllers, Dubbo campus has excelled on its water target and managed to save over one megalitre of water compared with the previous year. This equates to a saving of $4,883 per year for the Dubbo campus alone, and efficiencies for staff labour also.

Wagga campus has also adopted the use of these irrigation controllers, significantly reducing water use and expense across the two campuses.

"Staff previously had to adjust watering zones and check for leaks manually. Now, it's all done remotely via smartphone, greatly improving efficiency."

-Benjamin Moore,
Maintenance & Operations
Co-ordinator Dubbo Campus





Perfect premises for pollinators

This year's UN World Bee Day theme, "Bee inspired by nature to nourish us all", highlights how pollinator decline threatens food production, raises costs, and puts food security at risk. Pollination supports over 75% of global crops.

Locally, biosecurity challenges such as the Varroa mite, a parasite that affects European honeybees essential for crop pollination, have continued to spread in New South Wales. The mite is now also in Victoria.

To raise awareness of the plight of pollinators, Charles Sturt hosted World Bee Day events in May across the Bathurst, Wagga, and Albury-Wodonga campuses. The Albury-Wodonga event was led by Student Sustainability Advisor Emily Green and the Enviro Club.

Around 30 people attended the event, learning about species of native bees known to the local area, their habitat needs and the role they play in pollination.

Ecologist in the Gulbali Institute, Joanne Bennett, spoke to the importance of native bees:

"Native bees are useful pollinators for a lot of fruit crops such as tomato, avocado, apple, tomato and macadamia. Australia has a rich diversity of native bees, of around 2000 bee species, but only 1700 or so are described. Most native bees are solitary, but there are some native species that form colonies, such as stingless bees."

As part of the event, participants constructed six bee hotels, which were then placed in the university gardens. This included creating crevices and holes in natural materials, that are known to provide nests for our native bee species, such as drilled hardwood, pithy stems and clay soil. Students will be to identify the species on site by the appearance of their nesting holes over time.

Another way to support native bees is by planting native nectar-providing flowering plants. Could you build a bee hotel or plant natives this spring? Local communities love bees too. See Local Beekeepers to find your local hive tribe.

Meet Staff Sustainability Champ: Illana Jones

We interviewed a Staff Sustainability Champ, Illana Jones, who is making a difference through her role at Charles Sturt:



1) What's your role and what does an average day look like?
As the Reslife Coordinator for Orange and Dubbo Campuses, no two days are the same—from supporting students and admin work to helping Residential Leaders and answering public queries. The most rewarding part is seeing students grow from move-in day to graduation, especially those who overcome challenges to succeed.

2.What is the best thing about the Orange campus?
I've been to every campus and they are all unique. The Orange campus is special because we are a compact campus: it creates a great sense of community and the grounds are really beautiful. I also love that we have the FalconCam Project - a pair of peregrine falcons living in the onsite water tower – we can go on the webcam anytime and see what the falcons are up to.

3.What does Sustainability look like to you and how are you incorporating it into your daily job?
To me, sustainability is about everyone doing their part. While the university has impressive projects, it's the individual actions that matter. At Orange campus, we've focused on improving recycling. Many students arrive at 18 with little knowledge of proper waste management, so it's been great to see their behaviour shift over the year. It's been a team effort—Facilities Management added signage and bin stickers, and Orientation Week sessions introduced sustainable habits early on. We've also included sustainability in RL training, helping them support students. The RLs launched 'Project Decontamination', a recycling competition involving staff and students, with the winning dorm earning a food prize.

4. What benefits are there for you and other staff in engaging in the Campus Environment Working Group?
The main benefit is having a voice in campus sustainability initiatives and seeing real outcomes through collaboration. It's also a great way to connect across divisions. For anyone considering joining a Campus Environment Working Group—I say go for it. The commitment is small, but the rewards are significant.

5. What can we as a University do to be more sustainable?
Our next challenge at Orange campus is to divert more food waste from landfill. We have the means to recycle it all, reducing methane emissions and supporting a healthier environment. Building on success with commingled recycling, students will now be tasked with recycling food waste correctly. More broadly, greater engagement in sustainability across the University would benefit students, staff, and the organisation as a whole.

Please follow our socials for more Sustainability at Charles Sturt updates. Would you like to provide feedback, design assistance or contribute to the next edition of The Green Thread? Please email stories, images or ideas to: jacquelinemurray@csu.edu.au