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The Green Thread

Stories of sustainability from Birpai country to Wiradjuri country



The importance of rivers – a Birpai perspective

Dr Aunty Rhonda Radley is a respected ally of the Charles Sturt community and local Birpai Elder who grew up on Birpai country. She remembers Dungang 'Hastings River', as always central to her life. Aunty Rhonda reflects on what significance Dungang has for Aboriginal people and what the river is telling us if we truly listen. For Aboriginal people listening is not just using your ears, it is using your whole body, all your senses.

"*Before colonisation, Birpai people's lifestyle connected them to the river system. As they moved along the waterways, they camped and used the surrounding plants and trees for food, medicines, implements and to make shelter. Aboriginal people gathered and moved across Country in seasons. The Country speaks to us and we listen. Our people as custodians protected all species and ecosystems during vulnerable times, such as breeding seasons. In this way, we understood our interconnectedness with Country and that we are part of Country, not separate from it. This is our Culture. This is our way of thinking.*

Water is a feminine element. Many of our cultural practices as Birpai women occurred in and around the waterways, such as birthing and other ceremonies. We think of the river as our life force, our blood moving through our veins. We need to keep the river healthy to keep us healthy. At times when I swim in Dungang I feel with my whole body that the river is not healthy. Being a Birpai person means knowing it is my responsibility to care for our waterways and land. If we do not have a healthy river, then we aren't healthy.

Since colonisation, Birpai people have witnessed a decline in the health of Dungang. This includes erosion and turbidity from land clearing and farming practices; impacts on the riparian plants and aquatic animals through the over use of fertilisers on farmland; development on the riverbanks causing increased runoff; and impacts from activities like boating and littering. At one time there was a thriving fishing industry in the area. Unfortunately, the people overfished the river and the river health declined – this led to the river's closure to commercial fishing. What we do now matters. Let us all make choices to improve and maintain the health of our rivers and all the lifeforms that depend on its health. Working towards a sustainable future benefits us all. We owe that to our children's children." – Dr Aunty Rhonda Radley

Welcome

Welcome to the third 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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Related Sustainable Development Goals





Times Higher Education Rankings success

Charles Sturt University has again been recognised as a global leader in sustainability, maintaining our position in the top 200 in the 2026 Times Higher Education (THE) Sustainability Impact Ratings. The results are supported by the University's 2025 Sustainable Development Goals Report. Our THE results included: Top 2% globally for SDG 5 Gender Equality; Top 3% globally for SDG 13 Climate Action; Top 9% globally for SDG 10 Reduced Inequalities and top 10% globally for SDG 16, Peace, Justice and Strong Institutions.

The health of the Murray-Darling, with Dr Shamsi

All bar one of Charles Sturt campuses are part of the so-called 'mighty' Murray-Darling Basin river system. We asked one of our own experts, Professor Shokoofeh Shamsi, for her take on the Murray-Darling's vitality:

For many across inland New South Wales, rivers are deeply personal places. They are places where families fish, where communities gather, where wildlife depends on water to survive, and where many First Nations people maintain enduring cultural and spiritual connections to Country.

Yet across the Basin, signs of ecological stress are becoming increasingly difficult to ignore. Fish kills, blue-green algal blooms, declining native fish populations, invasive species, habitat fragmentation and worsening water quality are all symptoms of a river system under pressure.

As a biologist interested in the relationships between species and how these interactions shape ecosystems, I often investigate what is beneath the surface. One of those relationships is parasitism. Although parasites may sound unpleasant, they are important ecological indicators for biodiversity, water quality and ecosystem stress.

Recreational fishers from across inland NSW are increasingly finding parasites in fish they catch. They ask me questions such as: Is this fish safe to eat? Has the river changed? Why are we seeing more of this now? These conversations have inspired a new research project supported through the 2026 Charles Sturt University Sustainability Research Grants program. The project will map some of the dangerous parasites in inland fish communities across the Murray–Darling Basin, helping improve understanding of river health, emerging risks, and the long-term sustainability of our waterways.

Why do fish kills and blue-green algae outbreaks occur?

Fish kills and algal blooms usually emerge when multiple environmental pressures combine, including: low river flows, nutrient runoff, rising temperatures, habitat degradation, reduced connectivity, and prolonged drought conditions. When rivers stop flowing naturally water becomes stagnant, and oxygen levels can rapidly decline. Fish then become stressed and more vulnerable to disease, parasites and environmental shocks. Blue-green algae outbreaks occur when nutrients entering waterways from agriculture, combined with warm temperatures and slow-moving water, create ideal conditions for algae to flourish. Some of these blooms produce toxins that can affect fish, livestock, pets and humans.

Why do floodplains and billabongs matter?

Healthy rivers are not simply channels of flowing water. Floodplains, wetlands and billabongs are essential to ecosystems. Natural flooding allows nutrients to move across landscapes, replenishing wetlands, supporting breeding cycles of fish and birds, and maintaining biodiversity. When rivers are heavily regulated through dams, weirs and altered flow systems, these natural ecological rhythms become disrupted. Some wetlands remain dry for years when historically they would have filled. The result is reduced habitat complexity, declining biodiversity, and less-resilient ecosystems.

How does river infrastructure affect river health?

Infrastructure like weirs and dams has helped support agriculture and regional development, but it has also significantly altered river function. Barriers interrupt fish migration, modify water temperature and flow patterns, reduce connectivity between habitats and alter sediment movement. Native species that evolved in dynamic, connected river systems often struggle under these altered conditions, and introduced species can sometimes adapt more readily, compounding pressure on native fish.

...continued from page 3

Are water buy-backs working?
Water buy-backs remain one of the most debated aspects of Murray–Darling management. Environmental water recovery has helped support some ecological outcomes, particularly during dry periods, but many scientists and communities argue that water recovery alone is not enough if broader catchment management issues are not addressed.

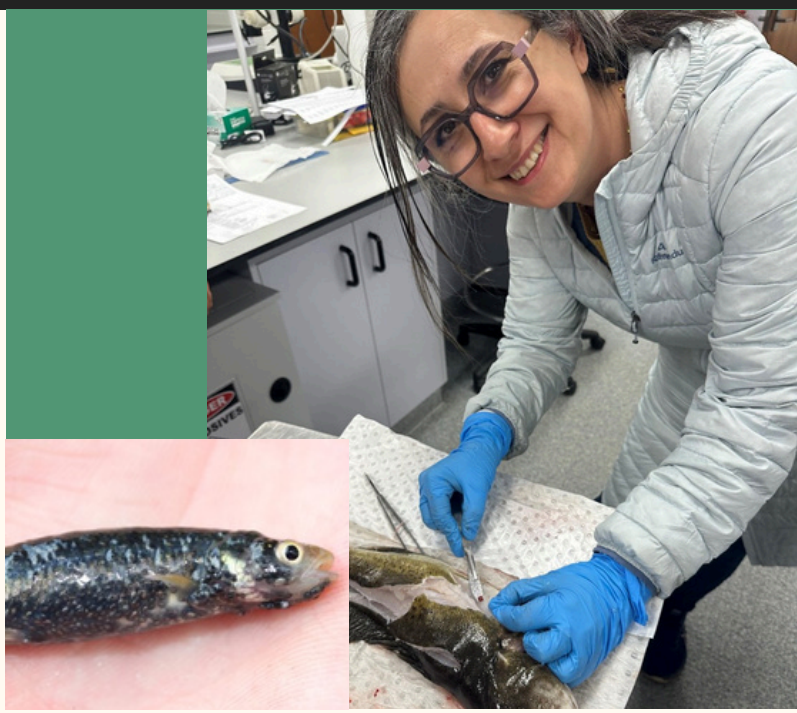
River health depends not only on the volume of water returned to the environment, but also on timing, connectivity, water quality, habitat restoration and long-term planning.

Importantly, conversations about water allocation also involve complex equity considerations. Decisions affect farmers, regional towns, industries, ecosystems and First Nations communities, whose relationships with water extend far beyond economic value alone.

What role will climate change play?
Climate change is intensifying many of the pressures on the Basin, particularly through more frequent heatwaves, floods and drought cycles.

Warmer water temperatures can accelerate parasite life cycles, increase disease transmission and place additional stress on fish populations. More extreme droughts and floods can alter ecological balance and create favourable conditions for emerging pathogens and invasive species.

These changes mean that monitoring river health can no longer focus only on visible events such as fish kills. We also need to pay attention to less visible biological indicators, including parasites, disease patterns and ecosystem interactions.



Above (inset): Even tiny fish can show signs of parasites and (right) Dr Shamsi examines a fisher's catch for the presence of parasites

What should governments consider for the future?
The future sustainability of the Murray–Darling Basin depends on recognising that healthy rivers are inseparable from healthy communities. long-term decisions must balance environmental needs with agriculture, cultural values and regional livelihoods. Stronger ecological monitoring, transparent science, community involvement and First Nations leadership are essential. Protecting this vital ecological and cultural system requires long-term thinking, shared responsibility and recognising river health as part of broader interconnected ecosystems and communities.

Ultimately, protecting the Murray–Darling Basin requires courage to have difficult conversations and to confront uncomfortable realities about the cumulative impacts of water extraction, environmental degradation, climate change and competing priorities. Sustainable futures cannot be built by ignoring ecological warning signs simply because they are politically or economically inconvenient.

See Dr Shamsi's TEDx presentation for more on how parasites can tell important stories about the health of our vital waterways.



"Moths are incredibly important to their ecosystems with many acting as pollinators for very specific flowers and trees. Australia is home to over 20,000 species of moths, by comparison we only have about 400 species of butterflies. Why so many? No one is quite sure, but most species haven't been scientifically described, leaving lots of room for citizen science." - Dr Anke Frank

Marvelling over moths

Like moths to a streetlight, 200 community members gathered on 29th April at the Port Macquarie campus to marvel at moths. Following on from the very successful 2024 'Bat Night', 'Moth Night' was a free community event coordinated by Charles Sturt University lecturer Dr. Anke Frank, from the School of Agricultural, Environmental and Veterinary Sciences.

Guest speakers were local entomologist and avid moth expert, Tony Moore, as well as students and teachers from a local school.

Most of us know what hibernation is, but do you know the term aestivation? This refers to animals, like the bogong moth, that instead of becoming inactive during winter, stay inactive during summer, seeking refuge from the heat by gathering in crevices and caves on high mountains. This is just one of the many facts presented by 10-year-old guest speaker Winnie from The Nature School, whose presentation on bogong moths was truly astounding.

Bogong moths travel thousands of kilometres, from as far as Queensland all the way down to our alpine regions, using the Earth's magnetic field to navigate. Winnie highlighted that these creatures, a major food source for First Australians in precolonial times and currently for animals including pygmy possums, are unfortunately threatened by light pollution, climate change and habitat loss.



Guest speaker Tony Moore has sighted and studied over 2000 species of moths on his nearby 10-hectare Biodiversity Conservation Area adjoining Lake Innes (Burrawan). Some of these moths had not previously been identified by modern science.

Tony showcased live moths, museum and personally collected specimens, research and trapping tools. He clearly outlined the differences between moths and butterflies. It's not just that moths come out at night - plenty are active during the day - nor is it their size or behaviour. The difference is one tiny organelle called a frenulum, which joins the front and hind wings together.

The event was made family friendly thanks to a partnership with The Nature School. Shannon Kelly, Teaching & Learning Coordinator at the school, facilitated a variety of interactive activities enhancing the educational experience for the staff, students and community members attending the event. Winnie also designed an interactive bogong moth migration board game with light and sound features that attracted participants of all ages.

Dr Frank is passionate about teaching communities about the often overlooked and underappreciated species in our midst. What's on the list for the next one? Ants, spiders, fungi or possibly back to bats!

What's the real cost of Artificial Intelligence?

AI is impacting many aspects of life, not least of all teaching and learning. Across a myriad of industries, AI is streamlining processes and even in some cases helping with addressing environmental problems. It summarises articles, helps students understand complex concepts or lengthy texts, can save us time, spit out an exercise program and even provide counselling - if you dare. This leaves many wondering how work lives will be impacted and what advice will we give to our young people about their career aspirations. It also leaves some of us feeling a bit uncomfortable.

Last year, 372 Charles Sturt University staff undertook a survey on the topic of AI. The survey captured attitudes to AI in higher education, including opportunities, preparedness, staff confidence and staff concerns or challenges. When asked 'What should be the university's top priority in relation to AI?', second only to 'Training in AI for staff and students' was 'Ethical and responsible use' of AI. Staff concerns raised in the survey also included 'Environmental impact and sustainability'.

So, in a world of increasingly unignorable global emissions and climate change, how does our use of AI impact our world and society? And what would responsible use look like? Stephen Mansfield, Faculty of Education, outlines some of the questions and concerns he and other staff have in unrestrained use of AI:

Large Language Models (LLMs) and similar AI tools are gobsmacking inventions. However, as evidenced by the impact of social media on children, sometimes technology moves faster than the ethics needed to guide it. Are AI-sceptics like me close-the-gate-after-horse-has-bolted types? Perhaps. However, there are good reasons why a mindful approach benefits us all.

The United Nations Environment Programme highlights that LLMs uses vast amounts of water, energy and resources that could be utilised elsewhere. When a quarter of humanity lacks access to clean water and sanitation, is this thirst for knowledge equitable? Data centres also occupy considerable land and create tonnes of electronic waste containing mercury and lead. At some point will the data bubble burst and we be left with defunct infrastructure, causing more waste?

Economically, the small choices we make about how often we use AI can have an exponential impact on investment in the AI behemoths. Research has shown that even a 1-2% drop in the daily usage of an LLM like Chat GPT can lead to hundreds of billions of dollars less investment in the data centres that are popping up worldwide. According to PauseAI Australia, this is one of the best ways to put the brakes on while we wait for Government regulation to catch up.

Ethical concerns include the fact that many LLMs were trained on trillions of pages of other writer's hard work, the majority of whom never consented and were never paid for their intellectual property. So, the magic trick of Chat GPT (and it's equivalents) is actually a sleight of hand – it's not AI that writes that article or report for us; we're standing on the shoulders of millions of authors throughout history who used to get credit for their work. I've used AI, and I do see its value. But for me, some of the best discoveries and hardest-won victories in thinking and writing come when I struggle through how to start something, or how to structure a piece, or even how to edit for clarity. In this age of AI, are our students missing out on the intellectual benefits of deep critical thinking? And if so, how will it impact their ability in the workplace?

Stephen recommends this **blog** for approaches on mindful AI use. Read on to **page 7** for Charles Sturt research relating to the **ethical considerations** of Generative Artificial Intelligence.

... the real cost of AI, continued from page 6

Charles Sturt Professor Zahid Islam, Director of the AI and Cyber Futures Centre calls for the need for unprecedented ethical vigilance in relation to generative AI. In his PROVOCATION lecture 'The Illusion of Friendship: Why Generative AI demands Ethical Vigilance', Dr Islam points out that generative AI has gone beyond being just 'a tool' and into 'a conversation'.

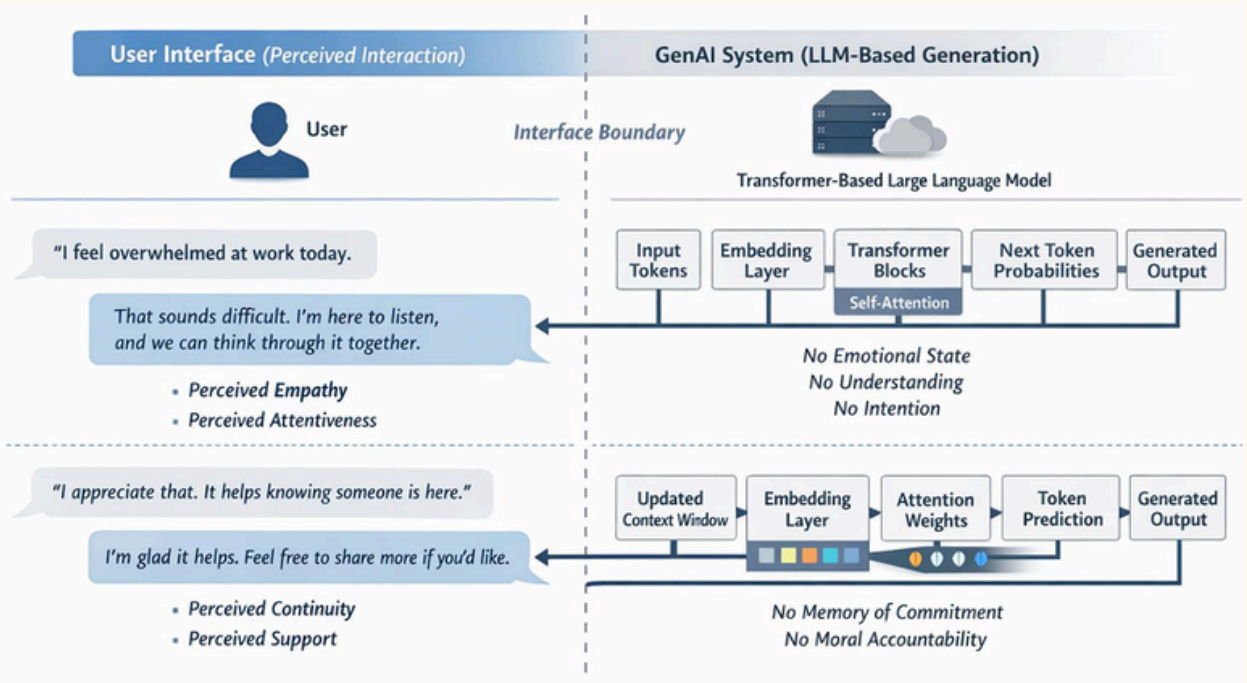
The problem here is that some users are confusing the conversation with a relationship. Concerning social implications of this include: teens turning to AI for emotional support; people developing feelings for their AI Chatbot or confusing AI support for friendship; and sadly examples of suicide after advice given by a Chatbot.

For these reasons, Dr Islam advocates for the need for AI literacy, including educational safeguards from childhood, ethical design requirements for LLMs, institutional policies and accountability, and the need for human decision-making at every step.Responsibility for AI use falls not just governments, but LLM designers, educational institutions, and on society as a whole.

The question remains, will we react quickly enough and who will take this on? In June, a report released by the United Nations University for Water, Environment and Health, describes AI's environmental impact as a governance and justice issue, not just a technical one. While the benefits of AI spread globally, the environmental harm often falls on local, specific, and sometimes vulnerable communities.

The report identifies the need for a 'responsible AI ecosystem' built on transparency, efficiency, equity, environmental justice, lifecycle accountability, global cooperation, and sustainable use. By making AI's carbon, water, and land footprints measurable and comparable, it would enable governments and planners to integrate AI into broader energy, climate, water, and land-use strategies without shifting environmental burdens onto those least able to bear them. Who in our Charles Sturt academia is up for the challenge? Charles Sturt AI Resources:

- Statement of Principles for the use of Artificial Intelligence
- Critical Artificial Intelligence (AI) Literacies
- S.E.C.U.R.E. GenAI Use Framework for Staff





Prof. Zahid Islam

Above: This diagram illustrates the contrast between user-percieved emotional engagement (left panel) and the underlying generative mechanism of a Gen AI system (right panel) in a two-turn interaction. Source: The Illusion of Friendship: Why Generative AI Demands Unprecedented Ethical Vigilance by Professor Zahid Islam

Our university solar journey

Whether it's pausing for a moment to glance out the library window or taking a stroll around campus, it's hard not to notice the impressive expanse of solar panels at Charles Sturt University. To learn about our solar electricity generation and how it helps us create a world worth living in, we're getting the facts from Ed Maher, Manager, Sustainability who has been there every step of our solar journey.

Starting with solar

Charles Sturt's solar journey was initiated by Facilties Management in a serious way in 2014 in a study assessing the technical viability and business case for establishing rooftop or ground-mounted solar across campuses. This came on the back of sustained interest from the University community about the prospect of solar energy generation, recognition that the installed cost of solar generation systems was continually improving and a desire to reduce the University's carbon footprint. A tender for the installation of a large-scale roof-top mounted solar energy system at the Wagga Wagga campus was released in 2016.

How much solar?

Since then, Charles Sturt University has grown to operating six solar power stations of rooftop solar, covering 67 buildings across its six campuses. The installed generating capacity is more than 4.5 MW with an annual output of more than 5,500 MWh. With commercial-scale roof-top systems in Australia typically ranging up to 1MW, the Charles Sturt University's roof top solar is one of the largest in Australia.

How is it used?

The 5,500MWh generated is more than 25% of Charles Sturt University's annual electricity consumption. This power is embedded across the University's internal electrical networks and is essentially used for on-site consumption at each campus. About 10% is exported to the NSW grid.



What are the benefits to our university?

Annually, the operating cost savings from our solar power stations for Charles Sturt equates to more than $1m, and reduces the carbon emissions from electricity production in the NSW grid by 3,850 t CO2-e. Our impressive multi-campus solar array is a visual advertisement for our commitment to sustainability and demonstration of our university ethos in action.

Solar and our carbon-neutral status

When Charles Sturt initially achieved certified carbon neutral status under the Climate Active program in 2015, the major contributors to our carbon footprint were electricity and natural gas, representing over 84% of our greenhouse gas emissions. Charles Sturt has been very proactive in reducing these energy-related emissions. In the ten years to 2024, Charles Sturt University has reduced its energy-related carbon emissions (scope 1, 2 and 3) by 78%. Besides producing our own solar power, activities have also included improved energy efficiency in our operations, converting gas heating systems to high-efficiency electric and sourcing renewable generated electricity from commercial electricity retailers. Charles Sturt's electricity has been sourced almost entirely from renewable sources since 2022.

What future plans do we have for solar power?

Charles Sturt has already installed solar on most suitable rooftops, so future projects will focus on integrating solar into new buildings and major upgrades. Electrifying remaining gas-powered equipment will further cut emissions and create new opportunities for on-site renewable generation. Advances in battery storage may also make it commercially viable for the university to expand its solar capacity and use stored energy to meet overnight demand.

The transition to renewables, with Dr Simon Wright

It may have escaped your attention, but we are in the midst of an energy revolution. And it's happening right under our noses or more precisely, on our houses. Excitingly, Australian households are leading the charge.

More than 4 million residential properties have installed solar, making Australia the global leader by penetration in solar household adoption, saving occupants between $1500 and $2000 per annum in electricity costs and reducing environmental pollution.

At the same time, generous subsidies from both state and federal governments have enabled more than 11% of households or 450,000 homes to install battery storage units, with 99% seizing the opportunity to install new or additional solar.

These investments deliver a broad range of benefits to both households and the broader community in terms of significant cost savings, greater flexibility in energy usage, cleaner and cheaper power for everybody together, improved grid stability and fewer power outages, and importantly reduced levels of air pollution from fossil fuels.



Marlinja: Australia's first First Nations community micro grid (NT)
Photo credit: Dr Simon Wright

The good news doesn't stop there. Accelerated by recent fuel shortages and spiralling costs, more Australians than ever are buying electric vehicles (EVs). In May alone, one in 5 vehicles purchased in Australia was an EV, which along with hybrids accounted for 50% of monthly car sales, accelerated by the arrival of cheaper models from China in particular. In the coming months, a trial of 1000 households will see these 'batteries on wheels' used to power homes particularly during evening peak demand.

Large organisations are also playing their part in this revolution with all sectors of the economy investing in renewables - Fortescue Mining's $1billion investment into the largest private off-grid renewable energy and storage system has been much publicised.

Universities have also embraced clean energy in an attempt to protect themselves against increasing energy costs, reduce carbon emissions and build a stronger social licence to operate. Charles Sturt has been a trailblazer, investing heavily in solar across all campuses and working closely with network service providers to optimise efficiencies.

As a nation we now generate almost half of our electricity from renewable energy with South Australia and Western Australia leading the way. Challenges remain, not least concerns from regional communities about the long-term benefits of hosting the energy infrastructure that will power our cities.

Nevertheless, as Ross Garnaut highlighted in his 2022 book The Superpower Transformation, Australia remains well positioned to dominate the renewable energy industry as a provider of resources, people and knowledge if we move quickly to embrace the current opportunities.
For more on home batteries, read the next article *Home batteries: What to consider*.

Home batteries: what to consider, with Jess Marsh

For a long time, home batteries have been considered by some as too expensive. When weighing up the upfront cost with how long it would take to pay off a battery system, it didn't stack up. However, the argument for installing home batteries is now stronger than ever. Whether it's the desire to be more self-sufficient in times of uncertainty or feeling the pinch with rising energy and fuel costs, now is a great time to invest in a more sustainable way of powering your home. Jess Marsh, Charles Sturt's Project Officer - Energy Management and Climate Adaptation, delves into what to consider when it comes to home batteries:

The Clean Energy Council reported the installation of home batteries has more than doubled in the space of one year (FY2024/25) and on top of this, due to the Government Cheaper Home Batteries rebate program, installation has skyrocketed in the last 6-9 months. With a significant increase in EV sales in Australia - due to lower purchase prices, more model availability and dramatic increases in fuel prices - more Australians are seeing the benefits from producing and storing their own energy while owning an electric vehicle.

What are the benefits of home self-generation and storage?

Home self-generation and storage reduce reliance on the grid, cut emissions and lower bills by using clean, renewable power produced at home. They also offer greater energy security during extreme weather events such as storms, fires or floods, and can even create income through a 'virtual power plant' (VPP) by selling stored energy during high-demand periods.

What about pairing batteries with EVs?

Pairing a home battery with an EV eliminates fuel and charging costs by letting you charge your car with solar power or stored energy - some EVs even offer vehicle-to-home capability so your car can power your house! Growing national charging infrastructure is also making longer trips easier.

Where do I start?

Start by reviewing your energy bill to understand your current charges, usage and usage patterns. When getting quotes, go with local retailers and ask them to itemise any available rebates. It's also worth considering retailers that offer a VPP, which lets you buy and sell energy on your terms — possibly earning you significant income during price spikes. If you have a smart meter installed at your home, it's worth analysing the energy used by your household at different times of the day and the extent of generated energy that is currently being exported to the grid. Shifting the time of use for energy you have generated yourself is where batteries really come into their own.

How much storage do I need?

As a general rule, 14- 25 kWh batteries are in the sweet spot for most homes. Considering the current rebate, if you can cover your own use and have some to spare, it will be financially beneficial by potentially reducing your grid use to zero and allowing you to sell excess and generate income.

What else do I need to know?

Most solar and battery systems will have an app that lets you see your generation, usage and battery charge level – this really helps to decide when you should plug in your EV or use those energy hungry appliances (when your battery is close to 100%). Pairing a new battery with a change in household use patterns is the best way to achieve lower bills and overall lower energy use. Set timers for pools, and air conditioners, use your appliances when the sun is out, look into solar hot water if your current system needs an update, and regularly compare your energy retailer – they won't always tell you if their prices go up!



Did you know...
new EV chargers accessible for staff and students have been installed at Port Macquarie campus! (user pays fees apply).

Driving down medical waste and costs in Health

'Planetary health' is a concept that emphasises the interdependence of human well-being and ecological sustainability. Taking a planetary health approach means attaining the highest levels of global health, well-being and equity, whilst protecting Earth's natural systems. This way of thinking is becoming increasingly important in many sectors, not least of all Health, where professionals are in a unique position not only to influence outcomes for patients, but the communities in which they live.

Accordingly, a team of Charles Sturt academics led by Pauletta Irwin, Faculty of Science and Health, acknowledged that healthcare is a major contributor to global emissions, and nursing—being the largest health workforce—has a critical role in reducing environmental impact. In a paper titled From Paper to Pixels: Evaluating the Impact of Digital Transformation on Sustainability in Nursing Education, Irwin et al make the case that higher education institutions are increasingly expected to embed sustainability principles, yet historically nursing curricula has lagged behind.

To create impact in this area, the team saw an opportunity to reduce paper consumption by transitioning Nursing and Paramedicine students from paper-based simulated learning environments (SLEs) to the use of digital simulated Electronic Health Records (EHRs). The team commissioned the design of HealthiERSim®, an in-house EHR simulation tool. After implementing this tool, Dr Irwin's team measured an overall decrease in paper use of 12.59% acknowledging that results were affected by inconsistent educator update, and that when fully implemented could assist in decreasing paper consumption further. The use of the digital EHR also had the added benefit of better preparing students for real-world scenarios and the use of electronic health records.



Above: Nursing simulation recycling trolley
Above (inset): reusable wrist bands

Improving sustainability outcomes in Faculty of Nursing classes has in fact been occurring at Charles Sturt for many years, including the recycling of medical products. Faculty staff have recently streamlined the process with the introduction of a new source separation recycling trolley. Previously, students placed all recyclables into large classroom tubs, leaving tech staff to sort through wet IV lines and occasionally dangerous items like uncapped needles or broken ampoules that had been incorrectly discarded.

The new recycling system shifts responsibility to students, reducing contamination, improving safety and also saving staff time because items no longer need to be manually sorted before repackaging. Repackaging these items is required as it allows students to practice using aseptic technique, simulating how the items would be used in clinical practice. Although this creates waste, the amount of soft plastic/paper waste generated is far less than the amount of medical items. Other improvements include the introduction of reusable Velcro wrist bands. Although most medical items used in simulation can be recycled, they still cannot be reused in clinical practice, however the separation of waste materials is making students conscious of the waste generated, training them to be waste conscious in their future workplaces.

Ideas People Purpose: Planetary Health Community of Practice

What happens when you bring together passionate people from across Charles Sturt with a shared interest in health, sustainability and community impact? The result is the Planetary Health and One Health Community of Practice (CoP)—a growing, collaborative space where ideas, expertise and innovation come together. The CoP began to take shape during the development of the Graduate Certificate in Public Health, when an opportunity emerged to design a subject focused on One Health and Planetary Health. What quickly became clear was just how much expertise already exists across the University. From agriculture, animal sciences to our extensive health programs, Charles Sturt is uniquely positioned to lead in this space—particularly in addressing challenges facing regional communities.

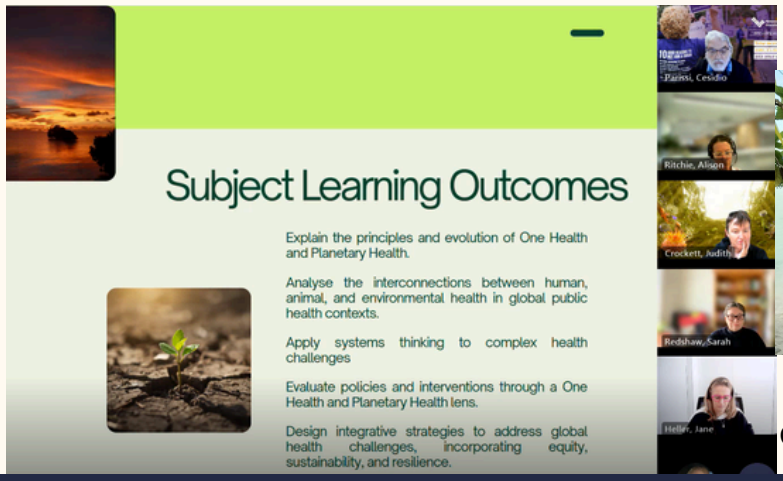
At its heart, the CoP is about connection. It creates a space for educators, researchers and professional staff to come together, share knowledge, and explore fresh perspectives on big challenges—whether that's responding to climate-related disasters, strengthening community resilience, or tackling emerging and re-emerging diseases.

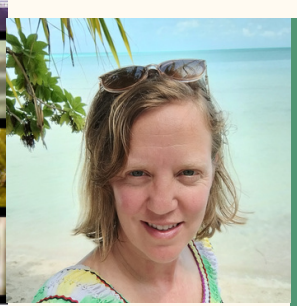
Since launching, the group has focused on building strong foundations. Early meetings explored members' interests and priorities, leading to the development of a shared database of expertise to support collaboration. Now, monthly sessions provide a dynamic forum where members spotlight research or teaching topics, share resources, and test out new ideas in a supportive environment.

The CoP also reflects the University's ethos of Yindyamarra Winhanganha—encouraging respectful relationships with each other and the world around us. Sustainability sits at the centre of these conversations, alongside a strong commitment to partnerships with communities and industries. The work aligns across multiple Fields of Research, from agriculture, land and farm management (3002), veterinary sciences (3009), ecological applications (4102) and environmental management (4104) to epidemiology (4202), health sciences and systems (4203), public health (4206) and Aboriginal and Torres Strait Islander environmental knowledges and management (4503).

Momentum is already building. Smaller groups have formed around shared interests, with projects underway in areas such as Pacific-based One Health initiatives, green prescribing and collaborative research funding proposals. The CoP is also contributing directly to learning and teaching, including the development of a new postgraduate subject launching next year, and exploring opportunities for guest teaching across disciplines. For further reading for Planetary Health Curriculum Guidelines, see Planetary Health Alliance

Most importantly, the CoP is open. If you're curious, interested, or already working in this space, you're encouraged to get involved. Join the Teams group or reach out directly to learn more—new voices and perspectives are always welcome. Please contact Jodie Brabin at jbrabin@csu.edu.au for more information or to get involved!





Jodie Brabin - Planetary Health Community of Practice

If you would like to contribute to the next edition of The Green Thread, please email stories, images or ideas to: jacquelinemurray@csu.edu.au