

WESTERN SYDNEY
UNIVERSITY



amplifying impact

SUSTAINABILITY REPORT 2023



Western Sydney University acknowledges the Darug, Eora, Dharawal (also referred to as Tharawal) and Wiradjuri peoples. We acknowledge that the teaching, learning and research undertaken across our campuses continues the teaching, learning and research that has occurred on these lands for tens of thousands of years.

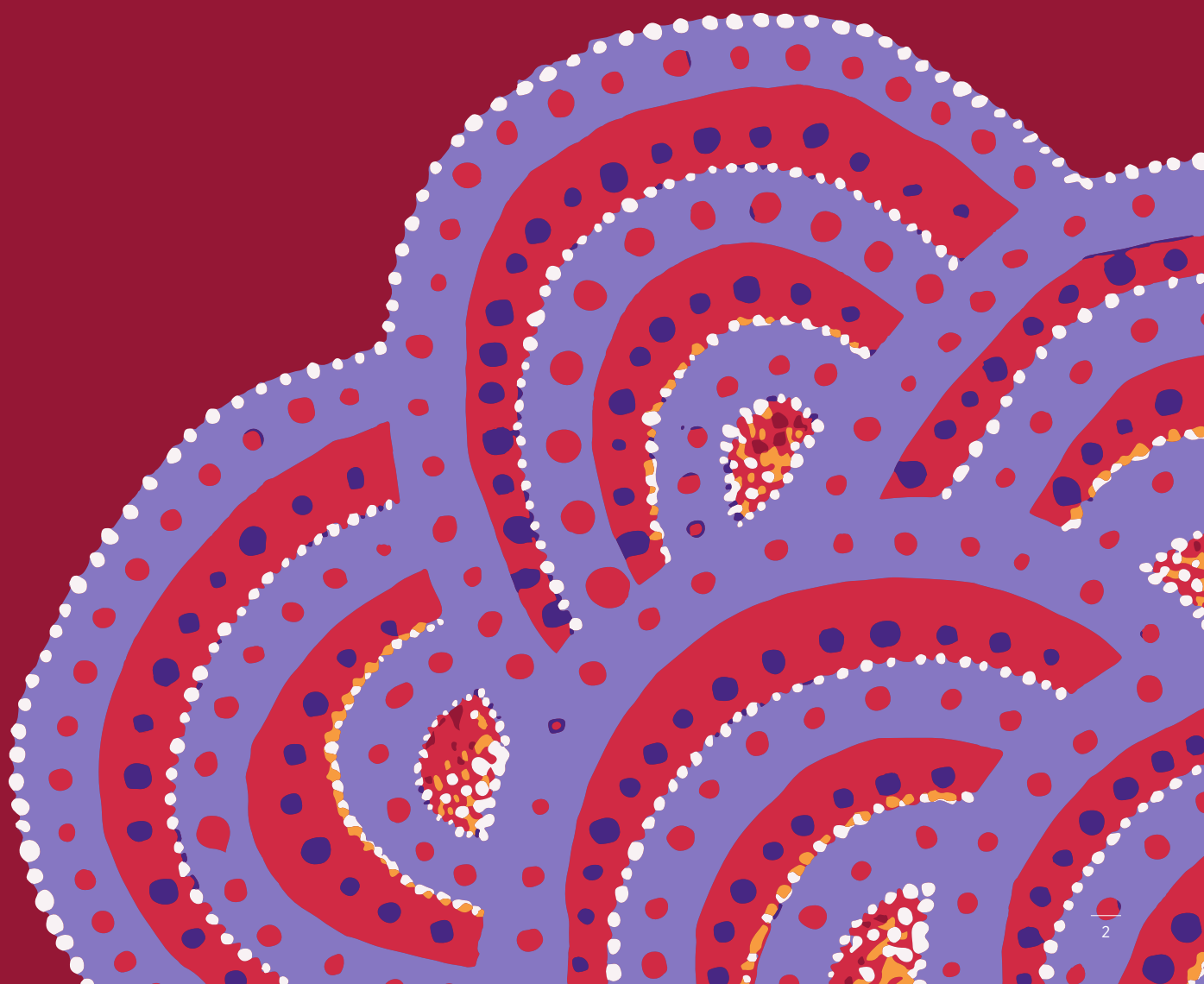


TABLE OF CONTENTS

BY SECTION:

FOREWORD	5
HIGHLIGHTS	6
STRATEGY	10
STUDENTS	13
CURRICULUM	14
OPERATIONS	20
RESEARCH	26
ENGAGEMENT	32
LOOKING AHEAD	39

ARTWORK: THOSE WHO CAME BEFORE US

The Indigenous artwork featured in this report (p. 2, 31 & 36) is drawn from an original artwork, *Those who came before us*, co-facilitated by Wiradjuri-Gamilaroi artist Allan McKenzie and includes contributions from 120 Western Sydney University staff and students. The imagery pieces are a statement of Western Sydney University and its staff, students and community's commitment to an inclusive Australia and its First Nations people.

BY SUSTAINABLE DEVELOPMENT GOAL:

	SDG 1 P: 6, 25, 26
	SDG 2 P: 6, 26, 34
	SDG 3 P: 7, 27, 30, 31
	SDG 4 P: 6, 13, 14, 16, 17, 18, 19, 32, 33, 35, 36, 37
	SDG 5 P: 6, 7, 8, 12, 13, 27, 32, 33
	SDG 6 P: 6, 7, 9, 22, 23, 24, 27, 30, 36, 37
	SDG 7 P: 21, 22, 24, 34
	SDG 8 P: 18, 19, 25, 26, 30, 37
	SDG 9 P: 6, 17, 18, 26, 28, 30, 34, 35
	SDG 10 P: 6, 7, 12, 13, 17, 25, 26, 27, 31, 33, 34, 37
	SDG 11 P: 7, 12, 17, 22, 23, 28, 30, 35, 37
	SDG 12 P: 6, 7, 8, 12, 22, 23, 24, 25, 34
	SDG 13 P: 6, 7, 12, 16, 21, 24, 28, 29, 30
	SDG 14 P: 26, 27, 36, 37
	SDG 15 P: 6, 7, 9, 12, 21, 24, 26, 27, 30, 34, 36, 37
	SDG 16 P: 17, 32, 33
	SDG 17 P: 6, 7, 9, 11, 12, 18, 19, 24, 27, 28, 30, 31, 36



WESTERN SYDNEY
UNIVERSITY



UNI IN THE WORLD 2022 & 2023

TIMES HIGHER EDUCATION
IMPACT RANKINGS

OUR ONGOING WORK AND COMMITMENTS



Shaping curriculum to empower our graduates to contribute to a sustainable, diverse and socially-just world through our **Sustainability Graduate Attribute**.



Achieving recognised **carbon neutrality** status in 2023 with 100% of our total energy used for campus electricity from renewable resources.



Championing research that aligns with the SDGs fostering **multidisciplinary and transdisciplinary approaches** for real-world change.



Scaling up on-campus programs to **combat food insecurity** among our students, delivering almost 16,000 dinners through the Community Dinners program.



Building **collaborative sustainability partnerships and programs** locally and globally across industry, government and community.



Being recognised as a Workplace Gender Equality Agency **Employer of Choice for Gender Equality** for over 20 years.

amplifying impact 2023

FOREWORD

Globally, 2023 was defined by geopolitical conflict, shifts in global power dynamics and international relations, climate disasters, and the technological advances of artificial intelligence (AI). Rising global temperatures continued to disrupt ecosystems, impacting both human livelihoods and biodiversity. The imperative to transition to renewable energy sources grew. The United Nations climate summit, COP28, was the first COP to officially acknowledge that fossil fuels are the root cause of climate change with over 100 nations agreeing to triple renewable energy capacity and double the global rate of energy efficiency by 2030.

Over the course of 2023, the higher education sector also dealt with the increasing challenges and opportunities presented by generative AI. As the sector embraced AI technologies for research, teaching and administrative tasks, ethical considerations and biases emerged as significant concerns. Safeguarding academic integrity while addressing issues of data privacy and security presented challenges. Ensuring equitable access to AI tools and fostering digital literacy among students and staff became pressing priorities.

In Australia, the year was dominated by the Voice to Parliament national referendum. Western Sydney University reaffirmed its ambition and commitment to enable and nurture the next generation of Indigenous leaders, educators and academics, including support for Indigenous self-determination. Rounding out the year, the Australian Universities Accord has provided an opportunity for lasting and transformative reform to the Australian higher education system.

The year also saw a significant return of students to our campuses, students faced with increased cost of living pressures, as well as the impacts of the housing crisis, inflation and economic uncertainty. We have endeavoured to support our student community through free breakfasts, community dinners and financial welfare.

This ninth annual sustainability report *Amplifying Impact* details our ongoing and enduring work across Curriculum, Operations, Research and Engagement over the broad sustainability agenda and our response to many challenges of our time. For the second year in a row we celebrated our stellar performance as global leaders in the Times Higher Education Impact Rankings. Significantly, Western Sydney University achieved considerable success in these rankings with nine individual Sustainable Development Goals (SDGs) ranked in the top ten globally. With this in mind, we are pushing ourselves to think about what is next beyond the United Nations Sustainable Development 2030 agenda.

I would like to acknowledge the enduring leadership and legacy of Emeritus Professor Barney Glover AO, our former Vice-Chancellor, who championed this work across multiple divisions as well as fostering international dialogue on sustainable change.



PROFESSOR CLARE POLLOCK
Interim Vice-Chancellor
and President



WE ARE WESTERN

OUR STUDENTS

Total (ESFTL)	33,290
Live in Western Sydney	77%
Born overseas	47%
First in family	45%
Low SES	30%

OUR STAFF

Academic	1,494
Professional	1,733

OUR CAMPUS NETWORK

Bankstown City
Blacktown (Nirimba)
Campbelltown
Hawkesbury
Liverpool City
Parramatta City
Parramatta South
Penrith
Sydney Olympic Park
Sydney City
Westmead

OUR GLOBAL CAMPUSES

Hong Kong
Vietnam
Online

OUR RESEARCH THEMES

Education and Work
Environment and Sustainability
Health and Wellbeing
Urban Living Futures and Society

OUR SUSTAINABILITY STRATEGIES

Sustaining Success 2021–2026
Sustainability and Resilience 2030

Read and engage with
our Decadal Strategy



our THE Impact Rankings performance

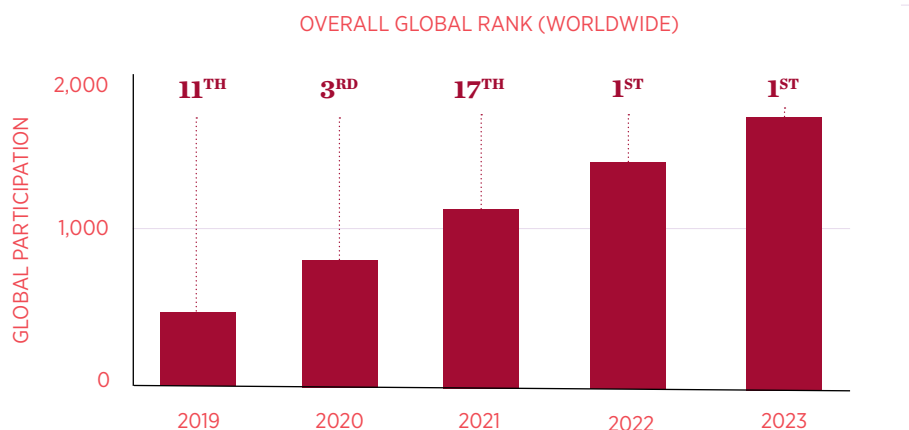
A 5-YEAR REVIEW

The Times Higher Education (THE) Impact Rankings are the only global performance tables that assess universities' impact deploying the United Nations Sustainable Development Goals 2030 framework.

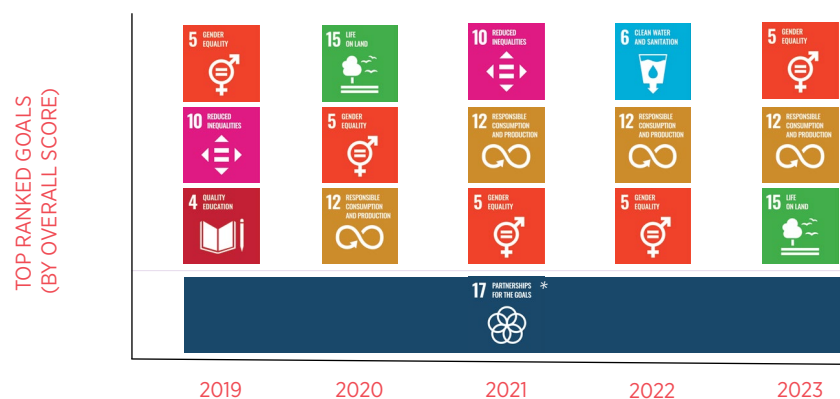
The THE Impact Rankings are the most comprehensive and complex rankings methodology currently available to individual universities across the world. The rankings use indicators across four broad areas - teaching (curriculum), stewardship (operations), research and outreach (engagement) - and include an assessment of an individual institution's policy landscape. Interest in these rankings has grown exponentially since their introduction in 2019. A university's total score in a given year is calculated by combining its score in SDG 17 with its best three results on the remaining 16 SDGs.

Each year Western submits against all 17 SDGs. This is an institutional undertaking and involves input from over 45 different divisions and schools across Western and the submission of over 460 data points and case studies, overseen by a cross-institutional rankings working party. Western has been a consistent global leader, ranking in the world top 20 over the last five years. We have also been individual SDG global leaders for SDG 5 (Gender Equality), SDG 6 (Clean Water and Sanitation), SDG 12 (Sustainable Consumption and Production) and SDG 17 (Partnership for the Goals).

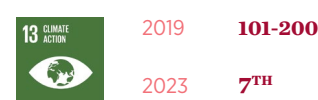
OUR OVERALL THE IMPACT RANKING PERFORMANCE



OUR TOP THREE PERFORMING INDIVIDUAL SDGs



BIGGEST IMPROVEMENTS



WORK STILL TO BE DONE



* SDG 17 is the only mandatory goal included in the THE Impact Rankings submission annually.

the SDGs in numbers

OUR DASHBOARD

2023 AT A GLANCE:



3,704

students graduated from health professions (medicine, nursing, midwifery and health sciences) across all levels of study, an increase from the previous year.



45%

of our senior academic staff and almost half of our current commencing female students and graduates are women.



AUD \$1 million

awarded from the Australian Commonwealth Government to work in partnership with regional organisations, First Nations leaders and the local community to establish 'Platypus Parks' across the Hawkesbury-Nepean River, building resilient rivers and urban platypus habitat.



4,855

students are first in family to start their first degree (45% of our total commencing students). Almost 800 Aboriginal and Torres Strait Islander students were enrolled, and more than 10% of our student population are from developing countries.



9

electric vehicle charging stations established on Hawkesbury, Campbelltown, Kingswood and Parramatta South campuses, encouraging more sustainable commuting by our staff, students and the wider community.



89%

of our total waste produced on campus was diverted away from landfill, using innovative waste management practices over the past decade.



100%

renewable products used in our GreenPower electricity supply, which reduces our campus emissions intensity on the Australian electricity grid.



117 hectares

of endangered Cumberland Plain bushland on Hawkesbury campus established as a Biodiversity Stewardship as part of our target towards Climate Positive campuses.



135

submissions through our *Sustainability and Resilience 2030* Decadal Strategy (SRDS) Digital Engagement Platform from all areas of the University.

AIM OF THE GOALS

SDG 3: Ensure healthy lives and promote wellbeing for all at all ages.

SDG 5: Achieve gender equality and empower all women and girls.

SDG 6: Ensure sustainable management of water and sanitation for all.

SDG 10: Reduce inequality within and among countries.

SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable.

SDG 12: Ensure sustainable consumption and production patterns.

SDG 13: Take urgent action to combat climate change and its impacts.

SDG 15: Protect, restore and promote sustainable use of terrestrial ecosystems and biodiversity.

SDG 17: Strengthen implementation and revitalise the global partnerships.

THE Impact Rankings

A STUNNING ACHIEVEMENT

There are few bigger challenges than the quest for sustainable solutions to global development. Particularly in the face of climate change and growing inequity. The economic, social, cultural and very human implications are impossible to ignore. That is why it is a defining moment for Australia to have one of its own institutions recognised as the world's best at this vitally important task. With all humility, this is a stunning achievement. It defines Western Sydney, a region eschewing labels of disadvantage, as instead a place where paths to ethical, inclusive and sustainable international advantage can be mapped...

PROFESSOR JENNIFER WESTACOTT, CHANCELLOR

FINANCIAL REVIEW (JUNE 2023)



standing on the shoulders of many....

UNWAVERING COMMITMENT

Our success in the global THE Impact Rankings, securing #1 overall for a second year in a row, does not come from an empty space. Deeply embedded in Western Sydney, our institution has long been committed to working collaboratively with our communities for social good. We are proud of our performance and will continue to push the boundaries for social and cultural justice, ecological integrity and just economic transitions.

**PROFESSOR KEVIN DUNN, PROVOST,
OFFICE OF THE SENIOR DEPUTY VICE-CHANCELLOR**



cultures of sustainability

EMBEDDING OUR STRATEGY



Through our cross-institutional governance frameworks established at an executive level, we ensure the SRDS is kept top of mind for our leadership and that this is a living, breathing document that moves with the times. – Dr Nicolene Murdoch, Pro-Vice Chancellor, Educational Partnership and Quality



SUSTAINABILITY AND RESILIENCE DECADAL STRATEGY: 2023 PULSE CHECK

The strategic priority statements outlined in the *Sustainability and Resilience 2030* Decadal Strategy (SRDS) has over 50 long-term actions and commitments to achieve by 2030 to meet the strategy's vision. Our annual Pulse Check tracks and presents our ongoing progress under curriculum, operations, research and engagement (CORE) since the official launch and commencement of the Decadal Strategy in September 2020. Western is tracking well towards reaching its 2030 completion target.

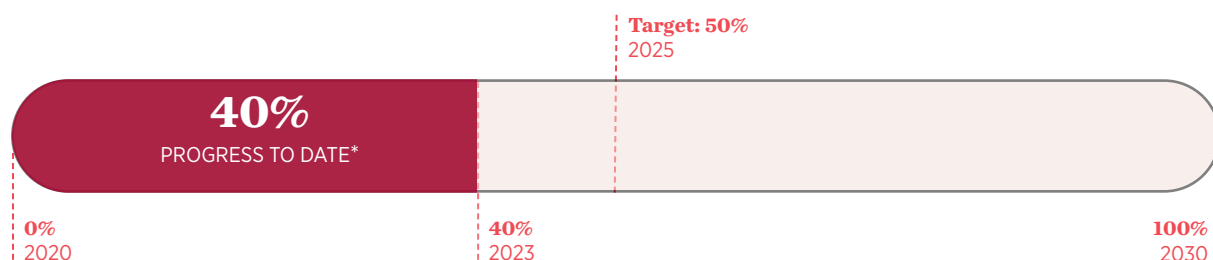
DIGITAL ENGAGEMENT PLATFORM: PROFILING INSTITUTIONAL WORK

The Digital Engagement Platform (DEP) forms an interactive part of our SRDS and provides an opportunity for staff and students to raise the profile of and socialise sustainability CORE initiatives under one cohesive umbrella. The DEP promotes cross-institutional awareness and enables the elevation of the SRDS as a living strategy that works towards the shared goal of building more sustainable and equitable futures.

ANNUAL OPERATIONAL PLAN

Western's Operational Planning Framework provides a standardised approach to operational planning and reporting. Schools, institutes and divisions are required to prepare an Annual Operational Plan (AOP), and quarterly reports track progress. In embedding the SRDS across Western and within the AOP, each individual business unit was asked to identify at least two key initiatives for 2024 which aligned with the SRDS Priority Statements. Over 70 aligned initiatives were identified through this process.

PULSE CHECK: PROGRESSING OUR STRATEGIC ACTIONS



OUR TARGET: Total progress towards targeted and ongoing strategic actions and key metrics of the *Sustainability and Resilience 2030* Decadal Strategy across curriculum, operations, research and engagement.

* Progress analysis based on estimated average weighted score as of December 2023.

OPERATIONALISING SUSTAINABILITY

IMPLEMENTATION



COMMUNICATION

We continue to raise the national and international profile of the SRDS. We showcase and promote via the Digital Engagement Platform through internal staff channels, external events and workshops.



OPERATIONALISATION

We have value added to existing governance frameworks to leverage and embed the SRDS in Annual Operational Planning processes.



MONITORING PROGRESS

We undertake an annual Pulse Check on our strategy progress drawing on information submitted to the DEP, via AOP processes and through stakeholder discussion to help us monitor progress and inform future directions for our sustainability work.



REPORTING AND GOVERNANCE

We have established an SRDS Steering Group and an SRDS Working Group for accountability and decision making across the institution with diverse membership.

KEY INITIATIVE

Our Thought Leadership Event series has effectively highlighted and showcased the University's sustainability efforts, while fostering partnerships to amplify our collective impact. – Fiona Salisbury, The Library

THOUGHT LEADERSHIP SERIES: MAKING KNOWLEDGE ACCESSIBLE

The Library's Thought Leadership series is a dynamic initiative aligned with the University's Decadal Strategy. The series has brought attention to the diverse sustainability initiatives and research endeavours within the University and broader community. Topics include climate action, gender, human rights, wildlife conservation and resilient and safe cities. The events have engaged a broad audience including community, special interest groups and local councils. Commencing in November 2022, a total of 17 events have connected with over 2,000 people, both in-person and online increasing the visibility of Western's world-leading sustainability work.

OUR HIGHLIGHTS AND IMPACT



135

entries on the Digital Engagement Platform from all areas of the University since its launch.



70⁺

new key operational initiatives identified and aligned to the SRDS through the Annual Operational Plan (AOP).

Sustainability-related initiatives are easily identified in the AOP using this symbol.





OUR GLOBAL THE IMPACT RANKINGS 2023

#1

GENDER EQUALITY
(SDG 5)
RESPONSIBLE PRODUCTION AND CONSUMPTION
(SDG 12)
PARTNERSHIPS FOR THE GOALS
(SDG 17)

#2

CLEAN WATER AND SANITATION
(SDG 6)
LIFE ON LAND
(SDG 15)

#3

REDUCED INEQUALITIES
(SDG 10)

#4

GOOD HEALTH AND WELLBEING
(SDG 3)

#5

SUSTAINABLE CITIES AND COMMUNITIES
(SDG 11)

#7

CLIMATE ACTION
(SDG 13)

I am even more proud to be studying at Western Sydney University with our #1 ranking. It is always fantastic for the University to be recognised for its [sustainability] efforts. However, we could and should view this recognition as a source of motivation to do better. There's always room for improvement and more that can be done.

WESTERN SYDNEY UNIVERSITY STUDENTS *

OUR STUDENT PROFILE

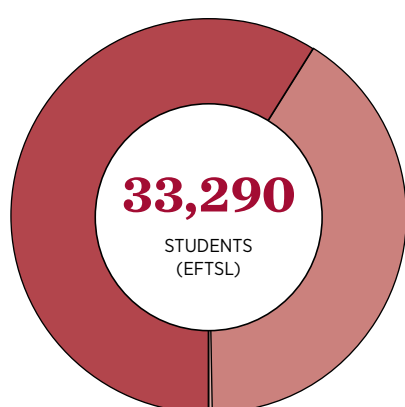
Western Sydney University draws students from more than 160 different countries and cultures. More than half of our students are the first in their family to attend university, and represent a higher than sector average low-socioeconomic circumstances. Our region has the most significant urban populations of Aboriginal and Torres Strait Islander peoples. We are actively working to support their aspirations. We celebrate all of the diverse and rich cultural communities that give our campuses their energy and vibrancy, and strive to create an inclusive, safe and respectful place for study and work.

STUDENT GENDER BREAKDOWN

59%
FEMALE STUDENTS

40%
MALE STUDENTS

1%
OTHER



FIRST IN FAMILY FEMALE STUDENTS



62%

of our female students are first-generation women starting a degree.

REPRESENTATION OF INDIGENOUS STUDENTS



2.1%

of our students population are Aboriginal and Torres Strait Islander.



Target 4.5: By 2030, eliminate gender disparities in education and ensure equal access to all levels of education.

Target 10.2: By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status

* As part of the Peer Assisted Study Sessions (PASS) facilitators' professional development workshops led by Student Retention and Success and Sustainability Education and Partnerships. Workshops were run with 60 PASS facilitators to unpack the THE rankings methodology and the process of achieving #1.

transformative pedagogies

SHAPING OUR TEACHING

“The future of higher education is changing. Our curriculum and pedagogical responses need to keep pace. We are committed to supporting cutting-edge and innovative teaching practices to ensure all our students can thrive in a complex world. – Professor Maryanne Dever, Deputy Vice-Chancellor, Education”

EDUCATION IN THE ANTHROPOCENE: A DIVERSE ARRAY OF PEDAGOGICAL APPROACHES

“... What do I want students to do? Not be freaked out by science... it's tactile, it's about the smell, the feel, seeing, touching a real-life system and think about it.” – Dr Ian Wright, School of Science

In a recent interview-based study funded by the School of Education, it became clear that the participating academics bridging STEM-HASS disciplines put much effort into making both subject matter and pedagogy responsive to the realities of the students. These academics use an exciting and diverse array of pedagogical approaches, including arts-based, learner-centred, experience-based, real-world learning, problem-based, technology-enabled, storytelling, empirical data collection and theory-data intersections. The academics take care to tune into what students need, think and feel in their current environment. Some get the students to do their own real-time data collection and analysis – an imbrication of pedagogy and research.

SCHOOL OF SOCIAL SCIENCES & SCHOOL OF HUMANITIES AND COMMUNICATION ARTS: CLIMATE JUSTICE CURRICULUM AND PEDAGOGIES

“We must change not only what we teach, but how we teach. Our content focuses on an economic system which disregards Country, and our teaching methods reflect that. We need to get better at teaching with Country, as opposed to about Country.” – Nick, First Nations Student Curriculum Partner

Convened by the Critical Pedagogies Research Group staff and students came together for a collective conversation about practices and prospects for climate justice curriculum and pedagogies as part of the third Festival of Action in September. The session incorporated presentations from Medicine, Humanities and Communication Arts, Social Sciences, Science, Sustainability Education and the Student Curriculum Partners. Key themes included the importance of storytelling, of listening deeply and walking slowly, and of responding to the climate emergency holistically. The importance of incorporating Indigenous voices and the interrelationship between climate justice and justice for First Nations people, in Australia and globally was foregrounded.

MICROCREDENTIAL: SUSTAINABILITY THINK, CARE, DO

“The curriculum of this course was amazing and the way this course connected us was remarkable. I am currently studying Engineering in my first year. This course has framed the mind to do anything but be aware you do not harm our mother earth...” – Learner feedback

Launched as a pilot with an international cohort, Sustainability: Think, Care, Do is a short microcredential that aims to foster thinking skills and sustainability knowledge through a social constructivist approach to learning, enabling participants to become change makers. Learners explored sustainability and the SDGs through structured reflection, online tools and a personal action project. Projects were situated in local contexts to respond to personal and/or professional interest, and ranged from measuring the personal use of electricity at home to reshaping curriculum in an architecture program. Delivered online, this course is offering on WesternX, our microcredential platform.

SUSTAINABILITY EDUCATION AND PARTNERSHIPS: PROFESSIONAL DEVELOPMENT RESOURCES

“Education for Sustainability (EfS) is about pedagogy as much as teaching content. While learning about sustainability issues like climate, biodiversity, poverty, urban living or water quality are vital, EfS is about transformative learning, which is often student-centred, experience-based, collaborative and lifelong.”
– Dr Susan Germein, School of Education

Western's sustainability graduate attribute commits us to preparing future graduates who can actively contribute to a sustainable, diverse and socially-just world. To support educators across schools, a comprehensive sustainability teaching and learning guide and resource has been developed. Education for Sustainability (EfS) provides the thinking skills and capabilities to equip learners to take critically informed action towards sustainable futures. It focuses on critical, reflective and creative thinking, systems and complexity thinking, futures thinking, values and world views, as well as participatory and partnership capabilities. The guide equips academics and staff with practical examples of sustainability curriculum entry points, pedagogical tools, and teaching practices from across the institution. Recognising the dynamic and contested nature of sustainability, the guide encourages innovative teaching methods that address the interconnected sustainability challenges - environmental, social, cultural and economic.



Download our Sustainability
Teaching and Learning
Educators Guide

CURRICULUM PATHWAYS FOR EFS

Sustainability teaching can be embedded in curriculum in multiple ways:



Program levels, with majors and minors focused on sustainability and incorporating transformative teaching and learning.



Component within an existing subject such as case studies, assessments or student research projects based on real-world issues.



Interdisciplinary and transdisciplinary subjects or programs, including majors and minors, on sustainability issues and approaches.



Whole of subject focused on sustainability which can provide discipline-specific or generic sustainability understandings and capabilities.



Professional practice, such as work-integrated learning experience, internship or outbound mobility programs, focusing on sustainability.



Increasing complexity within levels of study and programs.

What's cooking?



SCHOOL OF HUMANITIES AND COMMUNICATION ARTS: VISUAL COMMUNICATION FOR CLIMATE ACTION

"This collaboration supported young people to engage with creativity and visual language to call for action on climate change. The event was a creative learning intervention promoting bottom-up knowledge exchange and action, driven by a framework of both thinking-with and centering young people in their own educational experiences."
- Dr Michelle Catanzaro, School of Humanities and Communication Arts and the Young and Resilient Research Centre (YRRC)

Bringing together youth insights and perspectives, pedagogy and research, works by Western design students and research from the YRRC was showcased at 'Powerhouse Late: Climate'. Held in July, the event was attended by 500 people and showcased the role visual communication plays in storytelling and amplifying youth concerns about climate change. The exhibited student work responded to the '100 Climate Conversations' podcast series visually rendering the threats, possible solutions and action to address climate concerns such as fossil fuels, overconsumption, fast fashion and microplastics. The event also featured a panel discussion on 'Young people, climate action and the power of the visual' and included Western first-year design and visual communication student Chris Cameron. The collaboration provided inclusive, cross-institutional opportunities to youth driven climate action and also featured student work from the University of Technology Sydney and The Wollotuka Institute for Indigenous Education and Research, University of Newcastle.



Watch the highlight clip from the Powerhouse Late Climate event



Target 13.3: Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.

sustainability education

IN THE CLASSROOM

“... I talk about the SDGs... there’s a place for the micro and the macro. You can’t change the world by just planting tomatoes... You need to be having bigger picture conversations at the same time. But you can’t just have bigger picture conversations and not learn how to plant tomatoes because you won’t be able to survive on the SDGs.” – Dr Karin Louise, School of Education

SCHOOL OF LAW: FOSTERING DISCOURSE AND ENGAGEMENT

“The main project was a wonderful way to engage my community... I took all the information I was taught in class and all the discussions... and translated the content in Arabic. My goal was to be able to educate my community... to ensure that when it came time to vote they were well informed.” – Student feedback

Winners of the Excellence in Teaching Award 2023, the Public Law Teaching Team have been working to build and deliver a unique learning experience for students across Fundamentals of Australian Law, Legal Analysis and Critique and Government and Public Law. The team developed and taught a capstone elective subject - ‘Law and Public Policy: Referendum 2023 - Engaging in Constitutional Change’. The centrepiece was a community engagement project designed to inform and engage their local communities on the issues around the referendum. Student projects ranged from discussions facilitated at local mosques, high schools and churches, as well as student-led information stalls on campus, social media campaigns and videos, public art, and a submission to Joint Select Committee on the Voice.



SCHOOL OF ENGINEERING, DESIGN AND BUILT ENVIRONMENT: CO-DESIGNING THE FUTURE OF PROJECT MANAGEMENT

“I envision a future where graduates transcend traditional project management frameworks, fully integrating sustainability into their strategic outlook. This includes recognising the profound influence we have on societal welfare and environmental stewardship.” – James Bawtree, Founder & CEO, PMLogic, a Certified B-Corporation

Funded by the National Priorities and Industry Linkage Fund (NPILF) project, a co-design workshop was facilitated by the School of Engineering, Design and Built Environment in September to enhance the postgraduate Project Management offering. A diverse group of 42 participants took part, including 18 industry partners. During the workshop, participants exchanged insights on recent and anticipated industry changes, focusing on their implications for graduate employability. Emphasis was placed on meaningful integration and scaffolded development of sustainability and Indigenous graduate attributes within the program, aiming to deepen students’ understanding of the importance of people, culture and sustainability in project environments and decision-making.



SCHOOL OF EDUCATION: AUTHENTIC ASSESSMENT THROUGH CREATIVITY

“In the first assignment students look at the Cultural Wellbeing Framework and apply it to their own community. They then have to come up with a creative response to the identified social issue. It’s purposefully designed to attract and prepare students for the adaptability and the thinking through of life’s challenges.” – Dr Karin Louise, School of Education

The Creativity and Cultural Wellbeing for Communities subject considers the role of lived wellbeing within creative communities and how we can participate in, and advocate for, sustainable living practices for our collective global futures. The subject is the capstone for the Creative Living minor, the first of its kind in Australian universities and an important emerging field that explores how art making can foster individual, community and global citizenship through recreation, creative and cultural activities. This year students brought knowledge from their own experiences and tackled the water crisis in Uruguay, mental health in Pasifika cultures, animal welfare and factory farming, Asian cuisine, sustainability and culture.



evolving learning landscapes

NAVIGATING NEW HORIZONS

“Strategies and approaches for integrating sustainability in the curriculum can also enable the integration of generative artificial intelligence (AI) for sustainability to ensure our learning and teaching prepares our graduates for ethical and active participation in a world with AI. – Dr Jen Tindale, Learning and Teaching”

STUDENT ACADEMIC INTEGRITY AND AI

Students are introduced to Western’s approach to generative AI through an academic integrity module that is compulsory for all commencing students. The module directs students to Library resources that provide tips on developing AI literacy, recognising the need for students to gain a ‘broader understanding of the ethics, limitations, biases and implications of AI’ (TEQSA, 2023, p. 2). Student-facing activities have focused on ethical approaches to generative AI and showcased student perspectives on researching and using AI.

STAFF PROFESSIONAL DEVELOPMENT

At Western, professional learning on generative AI is a priority. Staff are kept updated on developments in generative AI tools through curated sector resources. A series of all-staff webinars throughout the year kept staff updated on developments in generative AI including ethical use in learning and teaching, implications for the future of work and the future of research and students’ perspectives on generative AI.

LAUNCH PAD: AI FOR POSITIVE SUSTAINABLE SOCIAL CHANGE

“Venture Makers is our entrepreneurship training and development program for students, researchers and staff designed to build and support an entrepreneurial culture that is aligned to the SDGs. Our innovation challenges continue to be popular with a wide range of students developing a range of soft and hard skills that adds to their employability...” – Don Wright, Launch Pad

The Venture Makers Innovation Challenge held in September saw record student attendance from a wide range of disciplines including Business, Communications, Health, Psychology and Technology. Interdisciplinary student teams explored the challenge question: “How we can utilise AI for a positive sustainable social change?”. Students worked with specialist mentors from start-ups and industry and the University to help them develop ideas applying advanced technology concepts and innovative business models within a real-world environment aligned to the SDGs.

Student teams pitched their solutions to a panel of judges including industry leaders and academic experts. The 2023 winning team pitched the idea of an eco-smart system controlled through an AI assistive hardware application empowering users to save energy and make smart decisions about their consumption. Through engaging in the Venture Makers Innovation Challenge, students had the opportunity to develop and exercise skills such as:

- Conceptual design
- Effective brainstorming
- Pitching for impact
- SDG awareness
- Innovation hack canvassing
- Entrepreneurial process and thinking
- Sustainable design
- Corporate presentation and storytelling
- Radical open-mindedness, creativity and empathy
- Time efficiency
- Collaboration.



Target 4.4: By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.

GO GLOBAL: WESTERN TO THE WORLD

"Learning about the life experiences from both fellow students as well as the local community was a highlight... Applying what we have learnt at university to a real world scenario like working in groups, speaking with stakeholders and agencies, and sharing our ideas on sustainability was very valuable and eye opening." – Student reflection, NCP Philippines

Western has a strong educational commitment to providing our students with immersive and empowering learning experiences, particularly in the Indo-Pacific region. This year Western Sydney University undergraduate students travelled to 11 countries, under the Australian Government's New Colombo Plan (NCP), including China, Fiji, Hong Kong, India, Indonesia, Japan, Philippines, Singapore, South Korea, Taiwan and Vietnam. Projects led by the University align with our commitment to sustainability.

OUR NCP MOBILITY HIGHLIGHTS



343

students participated in 29 overseas experiences, including one virtual (online) program.



\$1,047,950

of New Colombo Plan mobility funding supported student access and participation.



Target 4.7: By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including... global citizenship, and appreciation of cultural diversity and of culture's contribution to sustainable development.

SCHOOL OF SCIENCE: CONSERVING THE HEART OF BORNEO

This NCP program provided science students the opportunity to engage with a local Indigenous community of Setulang in Borneo. The program's focus was on the conservation of the primary rainforest in this region. Deforestation for timber and palm oil plantations is a persistent threat in Borneo and the leading cause of biodiversity loss in this region. Setulang have an established "community forest" protected from deforestation, with locals replacing income from logging with ecotourism. Students connected with the local community to experience their culture through homestays, understand their ecotourism practices, and conducted various research projects to measure the effectiveness of this conservation strategy on local biodiversity, while camping in the remote rainforest.

OFFICE OF PVC GLOBAL DEVELOPMENT: TAIWANESE INDIGENOUS CULTURE

Aimed to immerse Western's Indigenous students in the rich Taiwanese Indigenous culture, this NCP program provided international perspectives on Indigenous rights. The program enabled students to learn about Indigenous Taiwanese, their cultures, and their relationships with both the Republic of China state and the natural environment of Taiwan. Students visited coastal and high mountain Indigenous communities to foster sharing and Indigenous cultural exchange regarding the histories and aspirations of Indigenous peoples. Students were encouraged to reflect on the unique life-worlds of the local Indigenous communities in relation to their own communities and global Indigeneity.

‘The UN Climate Convention’s ‘net zero by 2050’ goal – adopted through the landmark Paris Agreement in 2015 – is a clear target for tackling climate change by reducing greenhouse gas emissions. However, it has become clear that there is no pathway to limiting global warming to 1.5°C without addressing nature loss and land degradation. Rather than treat the climate and biodiversity crises separately, we need holistic solutions that tackle them simultaneously.’

GREENING AUSTRALIA, 2023



an interlocked climate and nature agenda

ON-GROUND CAMPUS ACTION

Embracing sustainability isn't merely a choice; it's our commitment to shaping a brighter, greener tomorrow for our staff and students. With carbon neutral certification, a climate-positive approach, and innovative initiatives, our achievements speak volumes. –
Bill Parasiris, Vice-President, Infrastructure and Commercial

ENVIRONMENTAL SUSTAINABILITY: CARBON NEUTRAL CERTIFICATION AND CLIMATE POSITIVE

In late 2021, the University joined the United Nations-led 'Race to Zero for Universities and Colleges' Pledge, with ambitious targets of becoming Climate Positive by 2029. In April, with support from our partnership with Sustainability Advantage, we were certified by Climate Active as Carbon Neutral for business operations. We recognise that climate action also required nature-based

solutions. In working towards achieving these targets, in partnership with Veolia Energy, Western has developed a five year carbon transition plan which will improve our performance across our footprint through:

- Feasible plant and equipment upgrades
- On-site energy generation opportunities
- Procurement re-engineering to focus on sustainability and ethical purchases
- Embracing circular business models and material recovery.

NATIONAL AWARD WINNER FOR CLIMATE ACTION

Western received the Australasian Campuses Universities Towards Sustainability (ACTS) Green Gown Award in the 'Climate Action' category for our co-design towards Climate Positive initiative. This recognition highlights our ongoing efforts in the carbon and climate space, underscoring our commitment to sustainability.

OUR CLIMATE COMMITMENTS



Target 15.3: By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world.

RESTORING NATURE ON HAWKESBURY



15,000 trees
planted on Hawkesbury campus.



1,050 hours
invested in natural land restoration.



117 hectares
established as a Biodiversity Stewardship Site.

from linear to circular economies

A SUSTAINABLE CAMPUS NETWORK

‘The circular economy is about changing the way we produce, assemble, sell and use products to minimise waste and to reduce our environmental impact. It’s great for business; by maximising the use of our valuable resources, and by contributing to innovation, growth and job creation.’

NSW CIRCULAR ECONOMY POLICY STATEMENT, NSW GOVERNMENT, 2023

SUSTAINABLE CAMPUS NETWORK

The University is an anchor institution for the communities of Western Sydney, and our great strength is our distributed network of campuses. Western’s CBD campuses in Liverpool, Bankstown and Parramatta incorporate contemporary teaching and learning design, are accessible by public transport, and reflect our leadership in the implementation of Green Star rated sustainable buildings. Green Star standards are renowned globally for promoting sustainable building practices that encompass a wide range of criteria, including water management, energy efficiency and environmental impact reduction.



ADOPTING SUSTAINABLE PRACTICES: SUSTAINABILITY ADVANTAGE

Western is a Bronze member of the NSW Government’s Sustainability Advantage program. Sustainability Advantage catalyses and facilitates excellence in corporate sustainability by assisting organisations to become sustainability leaders through: supporting organisations to embed sustainability into everyday practices; helping organisations to be more efficient and save money by reducing resource and energy use, water use and waste; and encouraging organisations to set ambitious targets to reduce carbon emissions.



WASTE AND THE CIRCULAR ECONOMY

For campus operations waste minimisation and diversion from landfill (recycling) continues to be a critical task aligning with emerging circular economy frameworks and the increasing interest in reducing plastic use, life cycle design of products and packaging, and diverting materials for reuse in higher value products. The Plastics Reduction and Circular Economy Act 2021 sets out clear targets and timeframes for reductions in plastics and food packaging. Management of Western’s general waste sources has resulted in 50% reduction in waste volumes, and current waste compaction results in diversion from landfill and recycling of almost 90% of Western’s total waste.

OUR GREEN STAR BUILDINGS AND PRECINCTS



sector leader

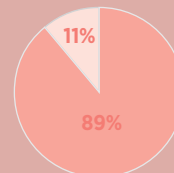
Western is one of the leading universities in Australia for the number of Green Star building projects on our campuses.

4

buildings rated as Certified 6 Star builds or 6 Star Design.



OUR WASTE AND RECYCLING



89%

of waste produced on campus is diverted from landfill.



Target 12.2: By 2030, achieve the sustainable management and efficient use of natural resources.

Target 12.5: By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.

FROM VISION TO REALITY: BANKSTOWN CITY CAMPUS SETS NEW STANDARDS IN WATER CONSERVATION

“Our Bankstown City campus stands as a beacon of sustainable building practices, exemplified by its adherence to Green Star standards.” - Bill Parasiris, Vice-President, Infrastructure and Commercial

With a focus on water efficiency, the Bankstown City campus has implemented a range of innovative measures to minimise its environmental footprint. By integrating cutting-edge water-efficient fixtures such as low-flow faucets and sensor-activated taps, the campus has significantly reduced water consumption within its buildings. Moreover, the implementation of a sophisticated rainwater harvesting system further lessens reliance on potable water sources by collecting and utilising rainwater for non-potable purposes like irrigation and toilet flushing. The Bankstown City campus earned a prestigious 6 Star Green Star As Built v1.3 certification. This achievement not only underscores the University's dedication to sustainability but also demonstrates its leadership in the field of environmental responsibility.



Target 6.4: By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.

Western Sydney University
RANKED 1st

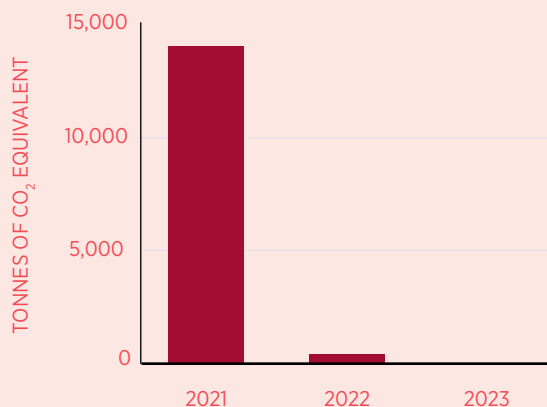
FOR SDG12: RESPONSIBLE CONSUMPTION AND PRODUCTION



CAMPUS ENVIRONMENTAL PERFORMANCE

AT A GLANCE:

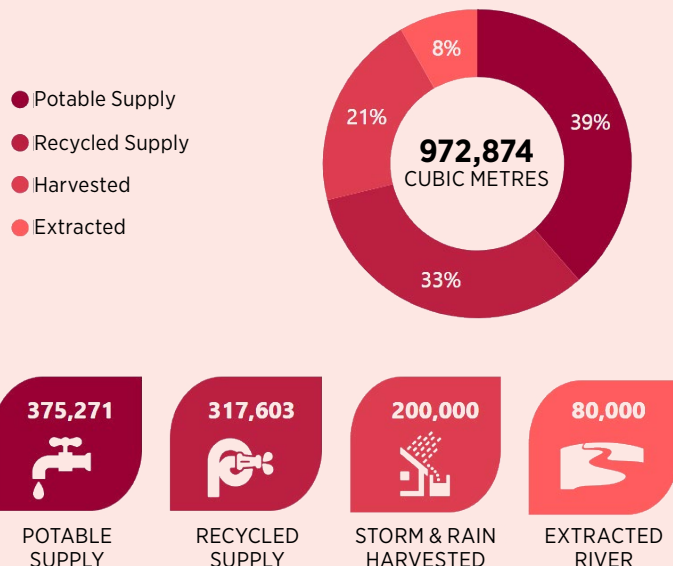
ELECTRICITY EMISSIONS FOOTPRINT



In 2023 Western bought 100% of our electricity from recognised renewable sources, bringing our carbon electricity footprint (scope 2 emissions under the National Carbon Certification Scheme) to zero this year. The University is on track for our aim to be Climate Positive by 2029.



WATER CONSUMPTION AND REUSE



Western's water resources for our campuses and landscapes include water recycling from sewerage, harvesting and treating urban stormwater, and capturing rainwater from rooftops, to reduce the impact on local ecosystems and wildlife whilst benefiting human health and welfare. Another important dimension is incorporating Water Sensitive Urban Design as a key component of precinct developments. Western measures and tracks water consumption in cubic metres for potable, recycled, harvested and extracted water.

* Percentages on figure are rounded up for clarity.



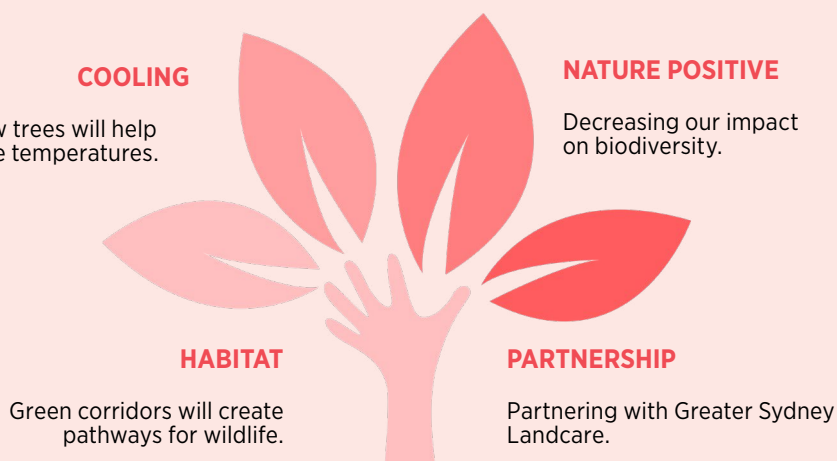
SPOTLIGHT: NATURE POSITIVE MEETS CLIMATE ACTION AT HAWKESBURY

In partnership with Greater Sydney Landcare, Western planted 15,000 native plants, with a further 20,000 being planned over the next two years. The aim is that these plants will assist in lowering temperatures across the Hawkesbury campus, act as a carbon sink, and offer increased areas for native fauna movement on campus, taking steps towards the goal of becoming Climate Positive.

Western is reviewing its remaining 280 hectares of remnant Cumberland Plain Bushland with the aim of designating it into Biodiversity Stewardships, which will ensure its protection in perpetuity. Conservation of these areas will include restoration works that will increase the health of these critically endangered ecological communities and protect vulnerable and endangered fauna.

HAWKESBURY CAMPUS BECOMING CLIMATE POSITIVE

Greater Sydney Landcare is
CREATING CANOPIES



environmental, social and governance (ESG)

ETHICAL FINANCE AND SERVICES

“We are committed and hold ourselves accountable to high standards related to social procurement and responsible investments that align to the SDGs, including our investment portfolio which adheres to a strong environmental, social and governance framework. –
Darren Greentree, Vice-President, Finance and Digital Services

FINANCE: RESPONSIBLE INVESTMENT

“Western believes that being a sustainable investor means also using our investor influence through proxy voting and engagement, to encourage good corporate governance and sustainable operating practices.” – Nenos Mirza, Division of Finance and Digital Services

Western is positioning our investments for a low carbon future. The University invests in the Mercer Sustainable Plus International Shares Fund of which over 50% was invested with managers that specifically target sustainability themes and/or impact investments. Over 2023 Western:

- Continued to decarbonise our endowment funds and benefit from Mercer's Net Zero target and pathway.

As at June, the University's total measured investment portfolio was 29% less carbon intensive than its composite benchmark.

- Reviewed our investments for any potential exposure to modern slavery incidents or risks and found we had no holdings with modern slavery red flags.

FINANCE: ETHICAL PROCUREMENT

“We are committed to combating modern slavery both locally and globally while ensuring continued improvement within our own operations and supply chains.” – Seema Varma, Division of Finance and Digital Services

Over 2023, the Division of Finance and Digital Services established a Modern Slavery Working Group which serves as

a valuable cross-institutional resource, fostering collaboration and knowledge exchange on initiatives to heighten awareness, identify and address risks, and provide advisory support to the executive on critical modern slavery matters.

Collaboration with the Australian Universities' Procurement Network provided opportunities for University representatives to engage with experts and participate in sector-wide risk mitigation strategies. The development of compulsory modern slavery training commenced, to be rolled out across the institution, ensuring that Western staff are educated and able to address potential instances and risks of modern slavery in their individual areas of operation.

OUR INVESTMENT IMPACT



50%

of our investments target sustainability themes and impact investments, like renewable energy, social services and health.



top third

The University ranked in the top third amongst global peers* in its approach to responsible investment.

* Based on Mercer's proprietary Responsible Investment Total Evaluation (RITE) tool and assessment.



Target 12.7: Promote public procurement practices that are sustainable, in accordance with national policies and priorities.

influence, adapt, change

TRANSFORMING RESEARCH

“Research at Western is driven by a powerful desire to see research not just inform, but transform: to tackle pressing challenges, improve lives, and shape a better future for all. – Professor Deborah Sweeney, Deputy Vice-Chancellor, Research, Enterprise and International

RESEARCH IMPACT STRATEGY

“This strategy will further drive and continue to empower all of our researchers to undertake world-class, interdisciplinary, collaborative research to improve the lives of people and communities across the globe, beginning locally in Western Sydney.”
– Professor Deborah Sweeney, DVC, Research, Enterprise and International

Traditionally, university quality metrics focus on academic performance and knowledge utilisation. This includes scientific publications, citation scores, awarded grants and higher degree student completions. There is increasing global recognition of the importance of societal impact in the real world, as an indicator of the innovation dividend, which has generated the concept of an ‘impact agenda’. In response, Western’s latest strategy, *Research Impact Strategy 2023-2026 - Making Our Future*, aims to empower our researchers and higher degree research students to focus on real-world impact as a key component of research success. This includes a commitment to sustainability, equity, transformation and connectedness, while ensuring the vast majority of our research addresses the SDGs.

SCHOOL OF COMPUTER, DATA AND MATHEMATICAL SCIENCES: DIGITAL TECHNOLOGY FOR AGRO-ECONOMIES

“Utilising advances in information and communication technologies we can create a better life for smallholder farmers and food security for the population.” – Professor Athula Ginige, School of Computer, Data and Mathematical Sciences

In response to an oversupply of produce resulting in food waste and associated poverty of thousands of smallholder farmers, researchers at Western have developed a new digital agrifood ecosystem which is now being deployed in South-East Asia. Using an app, developed and implemented for over a decade, together with researchers from Sri Lanka, India, Italy, South Africa, Kenya and Nigeria, the smallholder farming communities are provided with accessible and up-to-date information on best agronomy practices and the supply and demand of certain crops. This year, the initiative has expanded to generate market intelligence trialled with 200 farmers in Gujarat, India in collaboration with a local university.

SCHOOL OF SCIENCE: NATIONAL RECOGNITION COMMUNITY CONSERVATION PROGRAM

“Our project, 1 Million Turtles, brings together researchers, industry, government and the community to work towards a common goal of conserving turtle populations across the nation. As a team, we’re incredibly proud to have been recognised for our innovative approach to achieving this.” – Associate Professor Ricky Spencer, School of Science and Co-Lead of IMT

The 1 Million Turtles (IMT) Community Conservation program uses the TurtleSAT app to involve citizen scientists in hands-on activities such as habitat construction and restoration, nest protection and fox management. Emphasising science, technology, engineering and mathematics literacy, as well as First Nations knowledge, the Australia-wide program has influenced policy and saved over 1,000 freshwater turtles and 200 nests in just a single year. Recognising the impact of this project, IMT has won the 2023 Department of Industry, Science and Resources Eureka Prize for Innovation in Citizen Science, the country’s most comprehensive national science awards.



GRADUATE RESEARCH SCHOOL: SDG GRANTS

“We are supporting our candidates to further develop specific SDG aspects of their PhD projects. Western considers our candidates vital in the important strategic contributions they make to our institutions’ SDG aspirations as the premier university in the THE Impact Rankings.” – Professor Clive Baldock, Graduate Research School and Researcher Development

To support research towards achieving the SDGs, the Graduate Research School offered an allowance fund for higher degree research (HDR) students to complete a small project centred around one of seven identified priority SDGs that aligned with their current field of research. A total of 20 grants were awarded to current PhD candidates totalling almost \$400,000.

SCHOOL OF ENGINEERING, DESIGN AND BUILT ENVIRONMENT: REJUVENATION OF THE SPRINGS IN THE HIMALAYAN REGION

“My PhD project was instrumental in collecting the background data on the springs in the Kumaun region in India. The data collection included a gender equality, disability and social inclusion (GEDSI) focus.” – Neeraj Pant, PhD Candidate

Springs are an important part of the livelihood in the Himalayan region. Funding (\$20,000) assisted in the engagement of an entire village community in water conservation and use, providing training of the local community on spring discharge and rejuvenation. The data collected will help the community sustain the springs for the years to come, leading to economic prosperity and overall wellbeing. This research is also connected to the Australia India Water Centre.

SCHOOL OF BUSINESS: TOWARDS A FRAMEWORK FOR SUSTAINABLE CROSS-BORDER E-COMMERCE

“Cross-border electronic commerce (CBEC) opens up a global digital marketplace, but inevitably poses a threat to environmental sustainability because of intensified carbon footprints along convoluted logistics processes.” – Jiahe Chen, PhD Candidate

This funding (\$19,650) helped advance a framework that will be developed to analyse and compare the environmental impacts of different CBEC logistics operation modes. From the demand side, consumers’ willingness to compromise logistics efficiency for environment-friendly alternatives will also be explored.

SDG GRANT PRIORITY SDGs



SPOTLIGHT: HEALTH AND WELLBEING CLUSTER

Western is a member of the International Association of Universities (IAU) SDG 3 cluster on Health and Wellbeing working towards an integrated approach to health and equity worldwide. Universities for Good Health is an open network comprised of seven higher education institutions across five continents including Makerere University (Uganda), Universidad de Caldas (Columbia), Universitas Gadjah Mada (Indonesia), Karolinska Institutet (Sweden), University College Dublin (Ireland), and Universitat Oberta de Catalunya (Spain).



URBAN TRANSFORMATIONS RESEARCH CENTRE: TURNING PARKS INTO CITY A/C SYSTEMS

"Through an enormous team effort, we were able to deliver Sydney's coolest and smartest parkland." – Professor Sebastian Pfautsch, School of Social Sciences and Urban Transformations Research Centre

Smart Irrigation Management for Parks and Cool Towns (SIMPACT) is a multi-award-winning, transdisciplinary research project that addresses climate change impacts, specifically urban overheating. The technological approach combines smart sensing technology with machine learning in a digital twin to manage the irrigation of Bicentennial Park at Sydney Olympic Park for maximum cooling benefits, critical for building community resilience in Western Sydney. The technology fuses forecasting (what's the weather going to be) with nowcasting (what's the current park environment) and hindcasting (how did soil moisture respond to weather and irrigation management in the past) to optimise soil moisture across the complex park landscape. In the wake of very hot days, SIMPaCT up-regulates irrigation across the park to support maximum rates of transpiration cooling from trees. This helps generate a strong Park Cool Island Effect that helps reduce the Urban Heat Island Effect at Sydney Olympic Park and adjacent suburbs. The live data stream out of the park allows visitors to locate the coolest spot for their picnic.

OUR RESEARCH IMPACT



\$3.7 million

funding from the NSW Government, Sydney Olympic Park Authority and Sydney Water.



300+

sensors in the park and commercial centre to track and monitor.



7°C

cooler air temperature (up to) in Bicentennial Park than in the commercial centre.



Western Sydney University
RANKED 1st
FOR SDG17: PARTNERSHIPS FOR THE GOALS

 Times Higher Education
Impact Rankings 2023
www.thewur.com



climate resilient responses

A COMMON GOAL



Amplifying the transdisciplinary character of our four Research Themes, two priority areas exist that interlink them. We are focused on Equity and Inclusion and Zero Carbon in response to contemporary discourses and planetary health. – Professor Neil Perry, Centre for Western Sydney



YOUNG AND RESILIENT RESEARCH CENTRE: CHILD-CENTRED INDICATORS FOR CLIMATE JUSTICE

“Through engaging sessions, we explored how they experienced, responded to, and interpreted the climate crisis and its potential solutions in various contexts. The insights gathered from these workshops serve as a valuable resource for shaping Australian policy, advocacy and programming.” – Professor Amanda Third, Young and Resilient Research Centre

In partnership with UNICEF Australia, the Young and Resilient Research Centre explored the impact of the climate crisis on children and young people (aged 10-18) across the state. The research extended to climate-impacted communities across NSW. The child-centred indicators were used to develop learning resources called ‘The climate future children want’ cards. Launched as part of UNICEF Australia’s World Children’s Day in November, 172 primary and pre-schools signed up to access the resources, with a reach of approximately 30,000 students Australia-wide. This work has been acknowledged by the NSW Youth Work Awards 2023, being nominated for our ‘Outstanding Partnership’.

SCHOOL OF SOCIAL SCIENCES & SCHOOL OF EDUCATION: CLIMATE CHANGE LITERACY IN LOCAL SCHOOLS

“To empower students around climate change issues, it will be necessary to reverse the declining interest in STEM (Science, Technology, Engineering and Mathematics) education in schools... as STEM skills will be critical when designing effective mitigation solutions for climate change.” – Professor Kathryn Holmes, School of Education and Centre for Educational Research

In a cross-institutional project, Professor Sebastian Pfautsch and Professor Kathryn Holmes’ technology-enhanced learning program demonstrates a significant increase in climate change literacy. The initiative engaged over 100 primary and secondary school students using infrared cameras to explore the Urban Heat Island Effect, resulting in a 79% improvement in climate change literacy for primary students and 62% for secondary students. This program fostered an awareness of urban heat while empowering children with knowledge and STEM-related skills, crucial for addressing climate change challenges.

HAWKESBURY INSTITUTE FOR THE ENVIRONMENT: DECARBONISING AGRICULTURE

“We, and the government in funding us, are looking for holistic solutions that reduce or offset fossil emissions, but also generate co-benefits for people, the environment and nature.” – Professor Ben Smith, Hawkesbury Institute for the Environment

The Land and Primary Industries Network (LPIN) of the NSW Decarbonisation Innovation Hub involves seven universities and two government agencies (NSW Department of Climate Change, Energy, the Environment and Water and NSW Department of Primary Industries) as paid-up partners, and engages with a wide network of large and small companies, industry peak bodies, government organisations and not-for-profits currently pursuing or interested in developing decarbonised technologies, practices and services targetting the land sector. The three-year strategy has six focus areas. One focus is on the adoption of sustainable practices in productive landscapes, particularly agriculture.



Target 13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.
Target 13.3: Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.

collaborations that matter

DRIVING CHANGE

“Co-design, development and implementation is fundamental to our research at Western Sydney University. We work with (not on) communities and other stakeholders to ensure that our research has the greatest impact.” – Professor Freya MacMillan, Associate Pro Vice-Chancellor, Research

AUSTRALIA INDIA WATER CENTRE: SUSTAINABLE WATER FUTURES

“Water management is not just a technical challenge. The AIWC acts as a catalyst for partners to break down silos, think differently and facilitate sustainable water futures through bilateral partnerships and transdisciplinary approaches.” – Professor Basant Maheshwari, School of Science and Australia India Water Centre

The Australia India Water Centre is a collaboration of over 20 Australian and Indian universities, research institutions and water businesses in water research, education, training and capacity building. Western is the Australian lead and the Indian Institute of Technology Guwahati is the Indian lead. The Dams Safety and Rehabilitation project, funded by the Australian Water Partnership in 2023, is a collaborative example between industry leaders in Australia and India. Focusing on policy enhancement and knowledge exchange, in risk and asset management, inclusive decision-making and structural longevity. It featured workshops with the Indian Ministry of Jal Shakti, Department of Water Resources India, Dams Safety NSW, Water NSW and NSW SES, hosting a senior Indian delegation in Australia.

GISU ALLIANCE: BUSINESS IN A CHANGING WORLD

“Our global collaborations with the 23 international members of the Alliance have allowed us to exchange ideas, share best practices, and collaborate on projects that promote the sustainable development of our cities.” – Steve Farr, Executive Director, GISU Alliance

The University is a founding member of the Alliance of Guangzhou International Sister-Cities Universities (GISU). GISU’s ongoing annual Urban Innovation and Entrepreneurship competition has a specific focus on innovation, multidisciplinary and impact aligned to the Sustainable Development 2030 agenda. The competition is a platform for international peer to peer student and institutional learning. In 2023 in partnership with Guangzhou University, a hybrid research symposium for GISU Alliance members was held at Parramatta City campus that focused on business rejuvenation, resilience and creativity in a changing and post pandemic world. Research presentations and papers span diverse areas such as Tourism, Hospitality and Events, Smart Cities, Entrepreneurship, and AI and Technology Management.

URBAN TRANSFORMATIONS RESEARCH CENTRE: INCLUSIVE PLANNING

“To create long-lasting health and wellbeing outcomes for our communities, it’s critical to design places well.” – Professor Nicky Morrison, Urban Transformations Research Centre

The Urban Transformations Research Centre works on solutions for destructive climate-change related impacts on urban environments, a huge issue for Western Sydney. A key goal of the Centre is to provide the means for all stakeholders to jointly define problems and devise solutions to urban challenges. One co-funded initiative explores enabling green-space orientated housing developments across Sydney. The research is focusing on a critical issue that is often overlooked in the pressure to supply new housing — the financial conundrum around creating and upgrading green open spaces within areas that are intended for high-density residential accommodation. Advocating for change, well-designed and attractive urban green spaces are key to successful higher-density development. Green spaces can increase business productivity, enhance community wellbeing, and contribute to reducing severe urban heat.



SPOTLIGHT ON: BRINGING AN INDIGENOUS PERSPECTIVE TO HEALTHCARE

“To be instrumental in closing the gap, we must listen to and privilege Indigenous voices. I believe it’s through listening that we can truly reflect Indigenous’ concerns and knowledge, and work towards improving health and educational outcomes for our mobs. Change takes time but it can happen.” – Professor Aunty Kerrie Doyle, School of Medicine

Professor Aunty Kerrie Doyle, the Associate Dean, Indigenous Health in the School of Medicine and co-chair of the Aboriginal Health and Wellbeing Academic group of Maridulu Budyari Gumar (the Sydney Partnership for Health, Education, Research and Enterprise) has been at Western since 2019 with the aim to deliver improved healthcare outcomes for Indigenous communities across New South Wales. Building a multidisciplinary research team working across a diverse portfolio of projects, the team provides an Indigenous perspective on a range of social science and health-related projects led by other departments and universities, as well as leading its own projects, in response to community needs.

The research revolves around Indigenous mental health, covering issues such as social and emotional wellbeing; gambling and cultural connection; and diabetes and eating disorders. As well as her work on local Australian Indigenous issues, Aunty Kerrie is also part of an international project on the global burden of disease with the University of Washington in Seattle in the United States. It is a huge international project that in 2023 started to include the voices of Indigenous Australians which is vital to amplify the message on health information. Aunty Kerrie would ultimately like to ensure non-Indigenous people have the skills to work effectively in Indigenous communities - not just in Australia but around the world - as educating and training clinicians about working in different communities will ensure healthcare practitioners feel confident in multicultural care settings.



BRIDGING GAPS IN GENDER EQUITY THROUGH APPLIED RESEARCH

The Vice-Chancellor's Gender Equity Fund (GEF) was established in 2017 as an internal small grants fund which focuses on research, projects or initiatives which aim to advance gender equity outcomes and promote inclusion at Western. This sector-leading initiative is open to professional and academic staff, and over the last six years has built a network of committed stakeholders. The GEF seeks to bridge the gap between University policy and the lived experience, and develop a deeper understanding of the equity obstacles experienced by our students and staff.

OUR GEF HIGHLIGHTS

IMPACT FROM 2017 - 2023:



\$185,000

of internal funding has been invested into sector-leading initiatives.



36

projects focused on tackling issues of gender inequity at the University to bridge the gap.



Find out more about the GEF and view the final project reports online



Target 5.c: Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels.

Western Sydney University
RANKED 1st
FOR SDG5: GENDER EQUALITY

 Times Higher Education
Impact Rankings 2023
www.thewur.com



equity, inclusivity and diversity

FROM POLICY TO PRACTICE

‘ Our goal [at Western Sydney University] is to promote and embed a gender-aware and gender-responsive culture that understands gender equality as a core value. That’s our commitment. – Emeritus Professor Barney Glover, Former Vice-Chancellor and President ’

EQUITY AND DIVERSITY: EMBRACING A MULTIFACETED APPROACH

Western strives to embed impactful strategies across its learning and working environments which foster a culture of equity, diversity, respect and inclusion. This commitment is evidenced and supported by:

- A robust governance framework including the Vice-Chancellor’s Gender Equity and Respectful Relationships Advisory Committee and Equity and Diversity Working Party initiative.
- Investments in research and advocacy including the Vice Chancellor’s Gender Equity Fund, Sexualities and Genders Research Group, and the Social Justice Network.
- Practical initiatives addressing gender

disparities such as targeted recruitment, professional development, promotion, mentoring and retention strategies.

- Programs such as Science in Australia Gender Equity (SAGE) and Women in Science and Engineering (WiSE) programs.
- Comprehensive support for those facing gender-based harassment, discrimination or other sex-based offences.
- Engagement with relevant benchmarking, accreditation and self-assessment processes to drive change.
- Inclusive networks and events celebrating gender diversity, including annual participation in the Sydney Gay and Lesbian Mardi Gras, and the Ally Network and Rainbow Western Collective for staff.

SPOTLIGHT ON: SAGE AT WESTERN

Western’s SAGE initiative is a sector leader for advancing gender equity, diversity and inclusion. It works with stakeholders across the institution to drive and deliver strategic, cultural and structural change and promote access, participation and progression for women and gender diverse staff. In 2023, the SAGE team launched two research projects ‘Unlocking Equity in Academic Promotions and Gathering Insights’ and ‘Embedding Workplace Improvements for Indigenous Staff’. In partnership with the Writing and Society Research Centre and Sydney Review of Books SAGE also delivered their third iteration of ‘Writing Gender’, an annual arts-based collaboration, engaging in national conversations to generate new knowledge around gender and culture.

OUR LONG-TERM IMPACT



63%

of all staff members and **61%** of our Board of Trustees members are women.



20 years⁺

of being recognised as a Workplace Gender Equality Employer of Choice.



250⁺

Ally Network volunteers (staff and students) committed to creating an inclusive and respectful culture for LGBTIQ community members.



Target 4.a: Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all.

better together

STUDENT-STAFF ACTIVATION

“ *The response from students was very positive with a higher than average engagement. Our renewed SDG Hub engaged hundreds of students in only a few weeks. We linked and leveraged support with other like-minded student clubs, collectives and student services to build a strong community of practice.* – Sandy Lindsay, SDSN Youth Student Hub Coordinator **”**

STUDENT CLUBS: BRIDGESTONE WORLD SOLAR CHALLENGE

“Our spirit and determination were really on show throughout the challenge and brought us home. This year’s solar car, UNLIMITED 5.0, had one of the most ambitious and innovative designs. Our car can travel 400km using the same amount of energy a Tesla needs to travel 26km.” – Brad Nadalini, Student Team Manager

Western’s Solar Car team with their student-designed car, UNLIMITED 5.0, has placed 9th in the world, and an impressive 1st in Australia in their class, in the world’s most prestigious Solar Car Challenge. With support from the School of Engineering, Design and Built Environment since 2013, the student-led team this year delivered their most cutting-edge vehicle to date, racing 3,000km from Darwin to Adelaide. The Solar Car team was made up of 25 students from the fields of engineering, communications, business, computing and science, who manage every aspect of the project.

STUDENT SUPPORT SERVICES: TACKLING FOOD INSECURITY ON CAMPUS

“For over a decade, our University has been offering free student breakfasts as a way to foster community engagement as a place to connect and build networks, while providing vital support to our student body in tackling food insecurity.” – Student Representative Council

In response to student demand and the increased economic pressure, the student community rallied and successfully advocated for increased funding through the Student Services and Amenity Fee (SSAF) proposal to continue to support the Community Dinners program, deliver a revised free breakfast program, and to roll out the University’s first Food Hub where students will be able to access free produce and common pantry and grocery items. This increase in funding will enable us to continue providing a valuable support to our student body in the way of food security programs.

UNIVERSITY PROGRAMS: SDSN YOUTH CHANGE MAKERS HUB

“I had never tried plant-based milk but pleasantly surprised and would order again in a heartbeat. I found out about the environmental impact of dairy milk, and now I know there are different sustainable choices available.” – Student feedback

The SDG Hub, under the global Sustainable Development Solution Network (SDSN) Youth, was reinvigorated in 2023. The Hub, led by a student coordinator and supported by DVC Academic, focused its efforts on sustainable agriculture, food justice and food insecurity. This included a climate-friendly community dinner at Campbelltown with Inclusive Communities, a pop-up coffee stall on Parramatta South giving out vouchers for free coffee using plant-based milk alternatives, and a make your own native bee hotel at Hawkesbury campus. A group of students were also supplied DIY vegetable garden kits to grow their own food at home over the end of year summer break.



Target 2.1: By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.

ACADEMY U: SUSTAINABLE FUTURES HACKATHON FOR CITIES AND COMMUNITIES

"We were blown away by the level of sophistication, critical thinking and understanding the complexity of this challenge that these high school student teams demonstrated. This is one of our favourite events we participate in each year!" – Professor Neil Perry, Centre for Western Sydney and Jen Dollin, Sustainability Education and Partnerships

The Academy U program prepares students for a successful transition to university and exposes them to new study and career pathways that they may not have considered previously. In November 2023 high school students from 14 Western Sydney schools came together to unpack the SDGs with a focus on Sustainable Cities and Communities (SDG 11). Commencing with a keynote from Western to set the scene the student teams worked through the hackathon format to create practical real-life solutions. The six finalist teams demonstrated their leadership for a sustainable future by pitching their ideas to a panel of judges. When asked "What is the one thing you learned from participating in today's event?", students indicated they had learned about sustainability and its practices, the importance of collaboration and considering different perspectives and critical thinking. The event also partnered with OzHarvest to collect excess food. The students embraced the opportunity to put sustainability into practice, donating two boxes of food.

OUR IMPACT AND ENGAGEMENT



92%

of students indicated they had a greater understanding of their role in 'delivering a sustainable future' as a result of participating.



116

high school students and their teachers from 14 local schools engaged in the day.



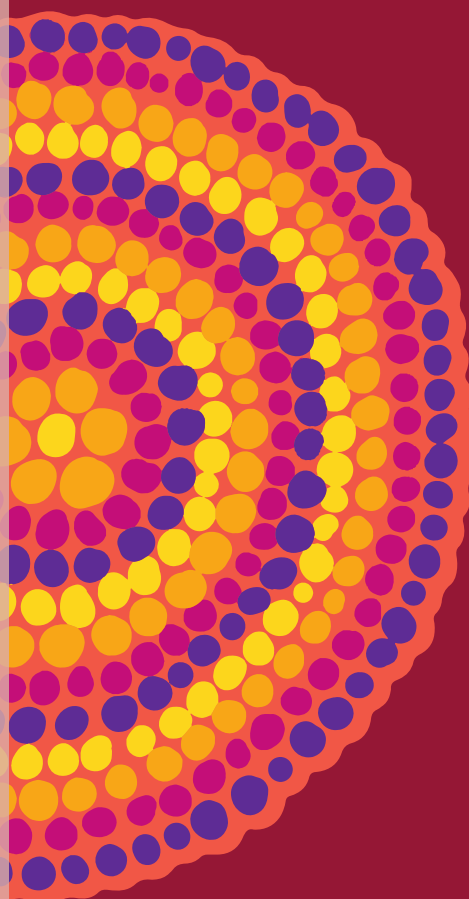
WATER JUSTICE FOR FIRST NATIONS IN AUSTRALIA AND THE PACIFIC

“The symposium provided an important platform for discussion and engagement around a human rights-based approach to water policy and governance, highlighting minority and Indigenous voices. It was also an opportunity to share the leading research and initiatives Western Sydney University is delivering in relation to climate change, water security and Indigenous leadership.”
– Professor Gawaian Bodkin-Andrews, Office of Deputy Vice-Chancellor, Indigenous Leadership

Western Sydney University and Minority Rights Group (MRG) International hosted the Water Justice in Australia and the Pacific Symposium in October 2023 with 50 participants. The event marked the Australian launch of the *Minority and Indigenous Trends 2023: Focus on Water* report developed by MRG, which discusses water justice as human rights, and features global case studies and contributions from Indigenous knowledge keepers, activists and the United Nations Special Rapporteur on Water. Special presentations were delivered by Nyikina Warrwa Elder Professor Anne Poelina, Chair of the Martuwarra Fitzroy River Council, and Mr Sandy Sur, water music practitioner from Vanuatu and director of Leweton Cultural Experience, discussing their contributions to the report in relation to water in Australia and the Pacific. The event included a Darug Yarning with Western’s Elder on Campus Uncle Chris Tobin, Brad Moore and Jacinta Tobin, a Yarning with Dharawal Traditional Descendants and Knowledge Holders Circle, with Uncle Gavin Andrews, Aunty Fran Bodkin, Professor Gawaian Bodkin-Andrews, Uncle John Foster and Sharon Foster, and an open conversation about water justice and rights globally. This event was co-funded by the Institute of Culture and Society, Sustainability Education and Partnerships and the Research Theme Program.



Target 6.4: By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.



engagement

CO-CREATING NEW KNOWLEDGE

“The collaboration between institutions of higher education and their larger communities (local, regional/state, national, global) for the mutually beneficial creation and exchange of knowledge and resources in a context of partnership and reciprocity.”

CARNEGIE FOUNDATION, 2023

SCHOOL OF HEALTH: PRIORITISING INDIGENOUS PERSPECTIVES WITHIN HEALTH AND PHYSICAL EDUCATION

“Dr Kennedy and Associate Professor Bennie are creative, inspiring educators who teach the next generation of Australian children about Indigenous ingenuity and rich cultural continuity, promoting a more just society.” – Professor Susan Page, Pro Vice-Chancellor, Indigenous Education

Within the Health and Physical Education (HPE) program, the goal is to respect and prioritise Indigenous culture through diverse, strengths-based teaching and learning. The program engages with Indigenous knowledges and communities to create inclusive, meaningful and safe learning environments. In multiple subjects, we embed Yulunga Indigenous Games resources and coordinate numerous engagement activities with education and sport partners, which involve more than 500 local Indigenous school students. These events allow HPE students to build cultural competency by connecting with Indigenous ways of being and doing and promote the University within local communities. The work was recognised in 2023 with an Indigenous Focused Teaching and Learning Citation.

LITHGOW TRANSFORMATION HUB: ENGAGING THE LITHGOW COMMUNITY

“The presenters were excellent and extremely passionate and knowledgeable on their subject and the venue was first-rate. It was a wonderful day full of inspiring knowledge and great suggestions and resources.” – Participant feedback

Maldhan Ngurr Ngurra is a Wiradjuri expression meaning ‘working together, side by side’. The Lithgow Transformation Hub brings the Lithgow and University communities to work together for a vibrant future for Lithgow. This year the hub delivered more than 30 events and engaged with over 500 individuals, including:

- Generating 4,968 new observations and 1,515 species identifications using iNaturalist through four BioBlitz events.
- Collaborating with local schools to deliver citizen science projects.
- Supporting Wiradjuri culture through events, workshops, and collaborative artworks.
- Delivering education, skills building, and creative activities to improve resilience, via the Regenerating Lithgow: People, Place and Planet grant.

HAWKESBURY-NEPEAN WATERKEEPER ALLIANCE: CAPTURE, CONNECT, CONSERVE

“We know how important it is for the community to be actively involved in monitoring programs, like River Snap, when it comes to protecting our waterways. We are capturing images from different river users that tell a story and are helping us not only monitor change but how the community connect, use and appreciate the river.” – Dr Michelle Ryan, Hawkesbury-Nepean Waterkeeper, School of Science

Funded by the University’s Strategic Initiative Fund, River Snap is a citizen science project dedicated to promoting awareness and long-term monitoring. The first installation was piloted at Howe Park, Windsor, in partnership with Hawkesbury City Council. Through this initiative, community members submit their observations using their smart phones to capture photos of the Hawkesbury-Nepean River. Their data has shown quicker than anticipated recovery along the riparian zone post-flooding, growth of new riparian plants as part of community re-vegetation efforts, and the active use of the river for recreation by the community.



SRDS: INTERCONNECTED PRIORITY STATEMENTS

Three conceptual areas informed the development of the SRDS priorities statements: Aboriginal and Torres Strait Islander Indigenous Knowledges; Planetary Health; and the United Nations Sustainable Development Goals (SDGs). These priorities are:

- **Aboriginal and Torres Strait Islander Knowledges:** Embrace Indigenous knowledges for pathways to sustainability and Caring for Country.
- **Regenerative Systems:** Value biodiversity linking human wellbeing to environmental health.
- **Resilient Cities:** Enable urban resilience and adaptive capacity in our region.
- **Climate Action:** Step up efforts to support climate action in our region.
- **Economic Transitions:** Enact new visions for economic transitions through ethical economic and ecological relationships.
- **Ethical Artificial Intelligence (AI):** Harness the benefits of AI and automation in planning for sustainability.
- **Food Security and Sustainable Agriculture:** Promote agroecological principles for just food systems.
- **Justice:** Activate environmental justice and social inclusion to tackle inequality in our region.
- **Partnerships:** Collaborate with regional, national and international organisations across all sectors to deliver impact across these priority statements.



Explore the SRDS Digital Engagement Platform and share your sustainability work

Globally, only 12% of the SDGs are on track for 2030. We must dramatically increase our efforts to create just living conditions for life on our planet. As a world-leading university for the SDGs, we have a responsibility. We have the zing, knowledge and people. Let's share our successes globally and keep true to our values of Fairness and Integrity.

**PROFESSOR SEBASTIAN PFAUTSCH,
VICE-CHANCELLOR'S SUSTAINABILITY IMPACT AWARD 2023 WINNER**

PUBLISHED
June 2024

© Western Sydney University

Written by: Jen Dollin and Brittany Vermeulen, Sustainability Education and Partnerships.

This report has been contributed to by over 55 University staff, students and external partners.

A small quantity of this report have been printed by a local, small family-run business on Forest Stewardship Council (FSC) certified paper, using print products and printing services at a higher environmental level than the industry standard.

GRAPHICS

Photos: Courtesy of Sally Tsoutas (2024), Western Sydney University photographer, unless otherwise indicated.

Artwork: Allan McKenzie (2023), *Those who came before us*.

Icons: Flaticon (2024). [online] Available at: <https://www.flaticon.com/>

SDG Icons: United Nations Sustainable Development (2019). [online] Available at: https://www.un.org_news_communications-material

The content of this publication has not been approved by the United Nations and does not reflect the views of the United Nations or its officials or Member States.

CONTACT INFORMATION

Sustainability Education and Partnerships
Office of the Pro Vice-Chancellor, Educational Partnerships and Quality

sustainability@westernsydney.edu.au

westernsydney.edu.au/sustainability

Western Sydney University
Locked Bag 1797
Penrith NSW 2751 Australia



UNI IN THE WORLD 2022 & 2023

TIMES HIGHER EDUCATION
IMPACT RANKINGS



[WESTERNSYDNEY.EDU.AU](https://westernsydney.edu.au)