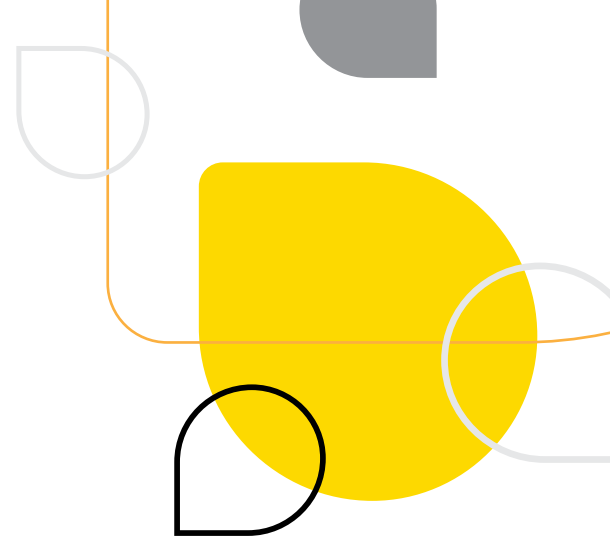




**UNSW**  
SYDNEY

Australia's  
Global  
University

# ENVIRONMENTAL SUSTAINABILITY PLAN 2019-21



UNSW acknowledges and pays respect to the traditional owners where University campuses stand at Kensington (the Bedegal people of the Eora Nation), Paddington and Coogee (the Gadigal People of the Eora Nation) and Canberra (the Ngunnawal peoples).

Our Kensington campus is located near an 8000-year-old campsite around which the people of the area taught culture, history and subsistence. From an age-old past through to the present the site holds significance as a place for gathering, meeting, teaching and sharing.

UNSW is committed to honouring Australian Aboriginal and Torres Strait Islander peoples' unique relationships to the land, waters and seas and their rich contribution to society.

# CONTENTS

From the President and Vice-Chancellor .....	02
Environmental sustainability at UNSW .....	03
Campus sustainability in action .....	04
Developing the Environmental Sustainability Plan .....	05
The ESP at a glance .....	06
Achieving the Global Goals .....	07
Focus areas .....	08
a. Climate Action .....	08
b. Buildings & Campus .....	09
c. Energy & Water Efficiency .....	10
d. Waste & Recycling .....	11
e. Travel & Transport .....	12
f. Goods & Services .....	13
g. Investments .....	14
h. Engagement & Integration .....	15
i. Learning & Teaching .....	16
j. Research & Advocacy .....	17
Governance & reporting .....	18
Roles & responsibilities .....	19
Relevant standards & frameworks .....	21



# FROM THE PRESIDENT AND VICE-CHANCELLOR



Our planet faces a series of complex environmental challenges, from pollution of land and oceans to biodiversity loss and climate change.

A report published in 2018 by the UN

Intergovernmental Panel on Climate Change warned that the global community had only until 2030 to bring about the unprecedented transformation that is required to limit global warming to a maximum of 1.5°C. A recent UN report has warned that over the coming decades, human activity will put more than one million plant and animal species at risk of extinction.

Our planet is under extreme pressure and it is time that public and corporate institutions – including universities – take action that matches the scale of the challenge.

UNSW has a long history of environmental stewardship through education, and as leaders in research fields from advanced recycling and climate science to renewable energy and storage. About 50% of the solar panels sold world-wide today use UNSW-designed technology, and our alumni are at the forefront of the photovoltaics and energy transition industries.

We are also a major investor, consumer and land holder, and our campuses form part of the daily lives of some 62,000 students and more than 6,700 staff. In many ways we are like a small city, and so it is right that we grow and invest like any sustainable city would, with a responsible and clear plan.

Since introducing our first Environment Policy in 1995, UNSW has shown that major change is possible:

- our landmark rainwater capture system sees more than 90% of campus stormwater injected into the local aquifer and used to reduce our mains water usage;
- our solar power purchase agreement will see our campus powered by 100% renewable electricity from 2020 – a first for an Australian university; and
- improvements to waste management practices saw 90% of our waste diverted from landfill in 2018.

This Environmental Sustainability Plan 2019-2021 will see us build on, embed and deepen our activities over the next three years.

Commitments include increasing our onsite solar energy generation, reducing our total emissions in line with a 1.5°C global warming scenario as set out on the Paris Agreement, and becoming a leader by improving our approach to responsible investing, through a process of de-carbonising our relevant financial investments in a way that keeps our portfolio emissions intensity within

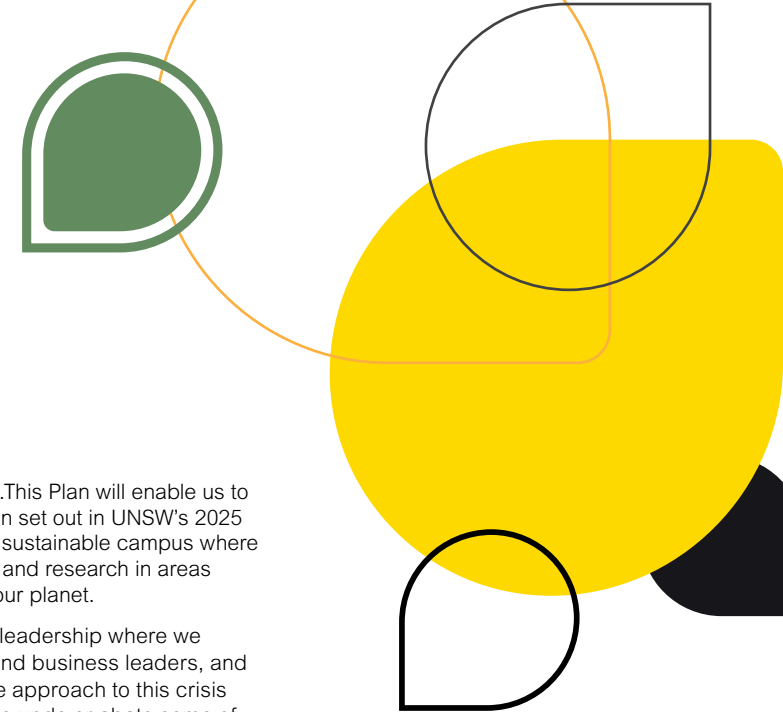
the Paris commitments. This Plan will enable us to realise the bold ambition set out in UNSW's 2025 Strategy – a vision of a sustainable campus where we undertake teaching and research in areas critical to the future of our planet.

While UNSW will show leadership where we can, so must political and business leaders, and individuals. A collective approach to this crisis is imperative if we are to undo or abate some of the catastrophic environmental damage that has already been done.

I invite all students, staff and members of the broader UNSW community to take ownership of this Plan, and treat what is the greatest moral challenge of our time with the seriousness it deserves.

**Professor Ian Jacobs**

President and Vice-Chancellor



# ENVIRONMENTAL SUSTAINABILITY AT UNSW

UNSW Sydney is an education and research-intensive university, delivering outstanding teaching alongside cutting-edge research. Established in 1949 and with campuses in Sydney and Canberra, UNSW has a unique focus on the scientific, technological and professional disciplines.

Environmental sustainability is a key element of our 2025 Strategy. Through this, we have made it our mission to become the first university in Australia to commit to having 100% of its electricity supplied by photovoltaic solar power.

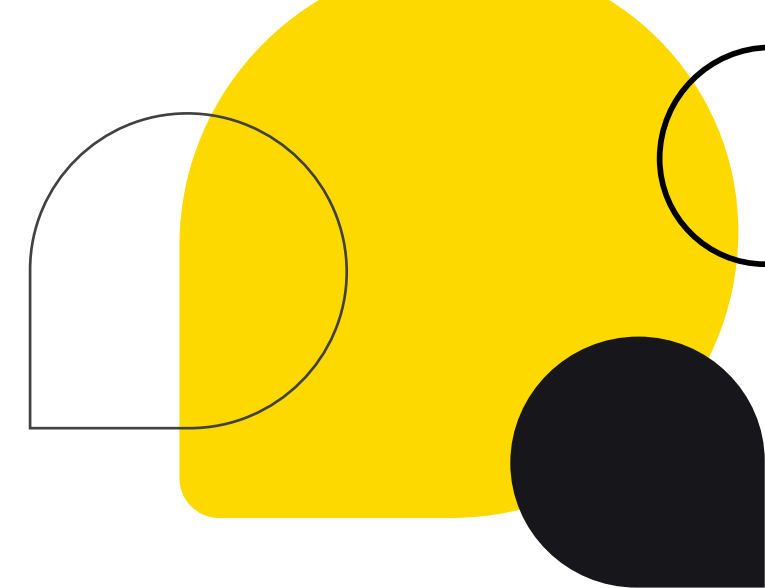
Our students and staff are actively engaged in environmental and social issues. We recognise that we are uniquely positioned to contribute to solving global environmental challenges through teaching, research, thought leadership and demonstrating leading practices on our campuses.

UNSW is committed to continuously improving environmental performance across University operations – from the way we plan, construct, operate and power our buildings, reduce and manage waste, make purchasing decisions and travel to and around our campuses.

Through our learning and teaching programs we educate students about environmental issues and equip them to understand and solve global challenges. Our contribution to a sustainable world is underpinned by our strong research focus – helping to tackle environmental challenges such as climate change.

**Our vision is to be a catalyst for an environmentally sustainable future through excellence in research, teaching and campus operations.**

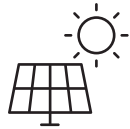




# CAMPUS SUSTAINABILITY IN ACTION

UNSW has a history of environmental stewardship across research, learning & teaching and campus operations across several decades. The Environmental Sustainability Plan (ESP) will build on past achievements, while raising our ambition levels to meet the environmental challenges of today.

Highlights during 2018 included:



## SOLAR POWER PURCHASE AGREEMENT

Announced a 15-year solar photovoltaic Power Purchase Agreement (PPA) that will provide UNSW with 100% renewable electricity by 2020.



## REDUCED MAINS WATER USE

UNSW's Kensington campus has reduced mains water use by progressively transitioning to bore water, which represented 44% of total water use in 2018.



## EXPANSION OF RAINWATER CAPTURE SYSTEM

Our rainwater capture system was expanded and now drains rainwater from 90% of the campus, replenishing the Botany Sands Aquifer (the source of our bore water).



## 90% LANDFILL DIVERSION

Comingled general waste is responsibly sorted off-site, with more than 90% diverted from landfill in 2018 for recycling, composting and waste-to-energy.



## FIRST 'RETURN AND EARN' MACHINE FOR A UNIVERSITY

A new Return and Earn reverse vending machine – the first for a NSW educational institution – allowed more than 2.6 million containers to be recycled.



## EXPANDING FACILITIES FOR CYCLISTS

104 new bicycle spaces plus six repair stations and pumps were added in 2018, bringing the total to around 900 spaces.

# DEVELOPING THE ENVIRONMENTAL SUSTAINABILITY PLAN

UNSW's environmental sustainability program is coordinated by the Sustainability unit within Estate Management. The Environmental Sustainability Plan was developed during 2018 through:

- an internal review of current UNSW environmental sustainability performance trends and practices
- benchmarking of UNSW performance and practices with leading Australian and international peer organisations
- consultation with more than 350 stakeholders, including students, professional and academic staff, university leadership and government representatives – through surveys, interviews and forums
- an assessment of our material environmental issues, based on the perceptions of internal and external stakeholders.

**“UNSW is a world leader in research and innovation. It has a responsibility to act on the overwhelming evidence for climate change.”**

*UNSW Environmental Sustainability Survey 2018*

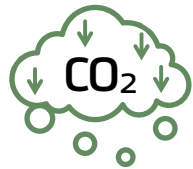


# THE ENVIRONMENTAL SUSTAINABILITY PLAN AT A GLANCE

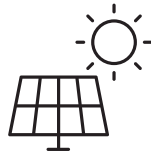
The Environmental Sustainability Plan 2019-21 (ESP) outlines a roadmap towards best practice in environmental sustainability in the higher education sector. It defines commitments, targets and activities across 10 key focus areas, each supporting specific themes of the UNSW 2025 Strategy and UN Sustainable Development Goals.

The ESP targets the following outcomes by 2022:

## CLIMATE ACTION



Set a pathway to **net zero emissions** in line with a 1.5°C global warming limit



Switch our campuses to **100% renewable power** by 2020

## ENERGY & WATER EFFICIENCY



Save over **\$300<sub>k</sub>** each year in energy and water costs

## BUILDINGS & CAMPUS

Maintain tree canopy cover of **28%**

(102,593m<sup>2</sup>) at Kensington campus



Design new buildings to be **zero emission in operation**

## ENGAGEMENT & INTEGRATION



Increase student and staff engagement in environmental sustainability

## TRAVEL & TRANSPORT



Increase active commuting by staff and students to **20%**

## WASTE & RECYCLING



Reduce general waste per student by **10%**



Maintain **90%** landfill diversion of general waste

## GOODS & SERVICES

Align procurement processes with **ISO 20400**

## INVESTMENTS



Establish a **Responsible Investment Framework**

## LEARNING & TEACHING

Establish a program to integrate **'SDG thinking'** into learning & teaching programs



## RESEARCH & ADVOCACY

Continue research and thought leadership on global environmental challenges





# ACHIEVING THE GLOBAL GOALS

The United Nations Sustainable Development Goals (SDGs) are at the heart of a global agenda aiming to tackle the world's most pressing challenges by 2030 – including ending poverty, bringing more equitable prosperity and protecting the planet.

Universities have a critical role to play in the achievement of the SDGs through research, teaching and campus operations. The Environmental Sustainability Plan supports UNSW's contribution to seven of the SDGs that have an environmental focus.

## Goal



Ensure availability and sustainable management of water and sanitation for all



Ensure access to affordable, reliable, sustainable and modern energy for all



Make cities inclusive, safe, resilient and sustainable



Ensure sustainable consumption and production patterns



Take urgent action to combat climate change and its impacts



Conserve and sustainably use the oceans, seas and marine resources



Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss

## ESP Focus Areas

Energy & Water Efficiency

Climate Action  
Energy & Water Efficiency

Buildings & Campus  
Travel & Transport

Waste & Recycling  
Goods & Services  
Engagement & Integration

Climate Action

Waste & Recycling

Buildings & Campus  
Goods & Services





# CLIMATE ACTION

In 2018, a landmark report by the UN Intergovernmental Panel on Climate Change (IPCC)<sup>1</sup> warned that a rapid and unprecedented transformation is required to limit global warming to a 'safe' limit of 1.5°C. Mitigating our climate impact, while building capacity to adapt to a changing climate, are key challenges for UNSW.

Initial analysis shows that more than 50% of our emissions are indirect emissions associated with purchased goods and services, travel and other activities. We will develop a complete inventory of our direct and indirect emissions and develop a long-term pathway to zero emissions – aligned with the Paris Agreement commitment of limiting global warming to 1.5°C.

The activities in each focus area of this Plan contribute to reducing our greenhouse gas emissions.

## Commitments

- Transition to renewable energy and reduce net greenhouse gas emissions to zero
- Ensure our campuses and operations are resilient to future climate risks

## Targets

- Reduce net emissions from building energy use to zero by 2020.
- Expand onsite solar energy generation to 1.2MWp by 2022.
- Reduce total Scope 1, 2 and 3<sup>2</sup> emissions in line with a 1.5°C global warming scenario.

## Activities

- Develop a Scope 1, 2 and 3 emissions inventory and strategy to achieve net zero emissions.
- Evaluate carbon pricing mechanisms.
- Purchase 100% renewable electricity by 2020.
- Develop a Climate Adaptation and Resilience Plan.

<sup>1</sup> IPCC, 2018: Global warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C

<sup>2</sup> Scope 1: Direct GHG emissions (e.g. mains gas); Scope 2: Indirect GHG emissions from consumption of purchased electricity, heat or steam; Scope 3: Other indirect emissions (e.g. travel, waste, purchased goods and services).

## Sustainability in Action

UNSW signed a 15-year solar energy Power Purchase Agreement in 2018 that will provide the University with 100% renewable electricity by 2020.

By 2018, we expanded onsite solar PV generation capacity to almost 800kW – enough to power 160 homes.

## 2025 Strategy

D3: World Class Environments

# BUILDINGS & CAMPUS

Development of our campuses presents an opportunity to provide healthy and regenerative places for learning and work that minimise use of natural resources in their construction and operation. A framework will be developed establishing our approach to sustainable design in new build and refurbishment projects, to deliver spaces that are fit for purpose and future proofed. This approach is underpinned by a minimum standard for new buildings, delivering high levels of sustainable design while allowing flexibility to choose the rating system best suited to each project. Our approach also seeks to drive improved utilisation of existing spaces.

## Commitment

- Embed leading environmental sustainability principles and practices throughout the planning and operation of our buildings and campuses

## Targets

- Design and build new buildings to minimum 5\* Green Star Design & As Built or equivalent and 5.5\* NABERS Energy equivalent by 2022.
- Ensure no net loss in tree canopy cover compared to the 2018 baseline (28%).

## Activities

- Establish and implement a framework to embed sustainability best practices into the Estate Improvement and Estate Development programs.
- Ensure all planting schemes use minimum 70% indigenous species, with a preference for drought-resistant species.
- Implement one initiative each year to benefit the natural environment, biodiversity or urban agriculture.
- Establish a life-cycle Building Information Modelling (BIM) strategy and roadmap.
- Design new buildings to be zero emission in operation.

## Sustainability in Action

UNSW includes energy and sustainability performance requirements in the design of all new buildings, including high-efficiency facades, solar photovoltaic cells, high-efficiency lighting and controls, and energy and water sub-metering.

The Tyree Energy Technologies Building, completed in 2012, was the first UNSW building to have its design certified as 6\* under the GBCA's Green Star rating system.

## 2025 Strategy

D3: World Class Environments





# ENERGY & WATER EFFICIENCY

UNSW campuses are significant consumers of energy and water, and some higher education activities are by their nature energy and resource intensive. We aim to continually improve energy and water efficiency by investing in high-efficiency equipment and fittings and new technologies to improve control of building systems. In the long term, we will progressively electrify our campuses, transitioning from fossil fuels such as gas to renewable energy.

## Commitments

- Continually improve energy efficiency and electrify our campuses
- Reduce potable water use and return water to the hydrological cycle

## Targets

- Achieve a NABERS Energy equivalent rating of 4\* or above for 10 existing buildings by 2022.
- Increase average energy efficiency of existing buildings by 3% by 2022.
- Increase water efficiency per EFTSL by 2% by 2022.

## Activities

- Develop and implement an Energy & Water Strategy.
- Expand the building active commissioning program.
- Install aquifer recharge monitoring equipment.
- Install a bore water network for non-potable uses in all new buildings.
- Ensure all new water consuming fixtures are WELS-rated.
- Review laboratory and equipment efficiency requirements.

## Sustainability in Action

Expanded our rainwater capture system in 2018. Water from more than 90% of the campus is now injected into the Botany Sands Aquifer, replenishing the source of bore water used.

In 2018, UNSW partnered with TransGrid to install the first industrial-scale Tesla battery on an Australian university campus as part of a 10 year energy research trial. The battery can store up to 500 kWh of electricity.

## 2025 Strategy

D3: World Class Environments

# WASTE & RECYCLING

Waste is the most visible environmental issue on campus and tackling single-use disposables – in particular plastics – has been identified as a key priority by the UNSW community. Our strategy follows the waste hierarchy by promoting reuse over single-use, reducing packaging and prioritising products that are recyclable. We will do this by engaging with suppliers and retailers, and improving waste management facilities and practices.

## Commitment

- Close the loop by minimising waste, improving resource efficiency and managing waste responsibly

## Targets

- Reduce general waste<sup>3</sup> per EFTSL by 10% by 2022.
- Maintain general waste landfill diversion at 90%+.
- Achieve minimum 90% recycling of construction and demolition waste.

## Activities

- Develop and implement a Waste Management Plan.
- Implement centralised waste collection in offices and expand food waste collection.
- Work with retailers and hospitality partners to eliminate single-use plastics wherever feasible and practical.
- Identify and implement circular economy initiatives.
- Ensure best practice recycling of construction and demolition waste.
- Implement a comprehensive furniture reuse solution and platform.

<sup>3</sup> General waste defined as including mixed waste from internal and external areas and segregated paper, food and mixed recyclables

## Sustainability in Action

An on-campus Return and Earn reverse vending machine enabled students, staff and the local community to recycle more than 2.6 million glass, plastic and metal containers in 2018.

After launching food waste collection from retail outlets and colleges in 2018, approximately 30 tonnes of food waste per month was collected and transformed into renewable energy and fertiliser.

## 2025 Strategy

D3: World Class Environments





# TRAVEL & TRANSPORT

How people travel to, from, and through our campuses is an important strategic issue for UNSW. Future growth of the University will need to be supported by public and active transport modes in order to manage congestion and reduce pollution. We will develop a new plan to improve key connections to, from, and through our campuses – with a focus on pathways, wayfinding, policies and key infrastructure upgrades.

Opportunities to reduce staff business travel have also been identified, including expansion and promotion of enhanced audio-visual (AV) and video conferencing (VC) facilities. Investment in high-quality third-party carbon reduction projects is planned to offset the environmental impact of staff travel.

## Commitment

- Ensure our campuses are easily accessible by multiple transport modes and our community is supported to make active and sustainable transport choices

## Targets

- Increase the percentage of staff and students commuting by active travel modes to 20% by 2022.
- Reduce air travel emissions by 1% by 2022.

## Activities

- Develop a Campus Transport and Access Plan.
- Provide secure bicycle storage and end-of-trip facilities in key campus locations.
- Establish processes to measure and offset business travel carbon emissions.
- Identify and evaluate opportunities to expand AV and VC facilities and promote these as an alternative to travel.

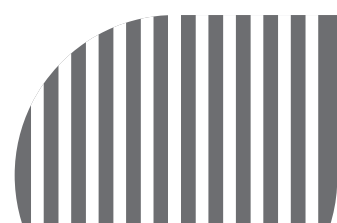
## Sustainability in Action

A Bicycle Masterplan was developed in 2014 and updated in 2017, analysing issues related to cycling, and identifying opportunities for improvement. This Masterplan guides our efforts to progressively improve facilities and information for cyclists.

104 new bicycle parking spaces and 6 repair stations were added in 2018, bringing the total to around 900 bicycle parking spaces available on the Kensington campus.

## 2025 Strategy

D2: Operational Effectiveness & Sustainability



# GOODS & SERVICES

Sustainable procurement practices aim to procure goods and services with the lowest environmental impact and greatest economic and social benefits, while implementing strategies to avoid unnecessary consumption. In 2018, an assessment was undertaken of the key social, environmental and economic sustainability risks and opportunities in our supply chain. From this, a roadmap was developed to align procurement processes with the ISO 20400 standard for sustainable procurement and priority projects were identified for implementation.

Sustainable procurement practices also play a key role in delivering activities in other focus areas, including Energy & Water Efficiency, Waste & Recycling and Buildings & Campus.

## Commitment

- Integrate sustainability and 'circular economy' principles into procurement practices

## Target

- Align procurement processes with ISO 20400 by 2022.

## Activities

- Implement the ISO 20400-aligned Sustainable Procurement Roadmap.
- Implement the Sustainable Procurement priority projects.
- Assess and monitor supply chain environmental impacts.

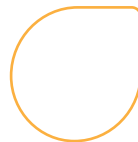
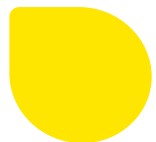
## Sustainability in Action

Sustainability standards are embedded in our lease terms with campus retail partners.

UNSW's preferred stationery supplier provides a range of environmentally friendly and ethically sourced goods that meet requirements for recycled content and third-party environmental standards and certifications.

## 2025 Strategy

D2: Operational Effectiveness & Sustainability





# INVESTMENTS

Investors increasingly require environmental, social and governance (ESG) factors to be integrated into investment strategies and decision-making. The physical and transition risks associated with climate change and the shift to a low carbon economy should be understood and carefully considered when making investment decisions.

In 2016, a new Investment Policy committed UNSW to conducting investment activities in a way that reflects the commitments of the Paris Agreement, the University's endeavours to find solutions to climate change, and a leading position among university peers. Implementing a Responsible Investment Framework and transparent reporting will enable the University to manage our investment climate risks and address stakeholder concerns.

## Commitments

- Integrate best practice environmental, social and governance principles within our investment activities
- Assess and mitigate investment climate risks and invest in solutions to climate change

## Target

- Align investment portfolio emission intensity with Paris Agreement commitments by 2020.

## Activities

- Complete a climate risk assessment in line with the recommendations of the Task Force for Climate-related Financial Disclosures (TCFD).
- Establish a Responsible Investment Framework consistent with the Investment Policy and UN Principles for Responsible Investment.
- Set an investment portfolio emission intensity target and report annually in line with TCFD recommendations.

## Sustainability in Action

UNSW requires its Investment Managers to be signatories to the United Nations Principles of Responsible Investment (UNPRI) and conducts an annual review of their ESG capabilities and integration of ESG principles.

Every year, UNSW measures the carbon footprint and intensity of Australian and international equity investments and compares these against the previous year's carbon footprint and associated performance benchmark.

## 2025 Strategy

D2: Operational Effectiveness & Sustainability



# ENGAGEMENT & INTEGRATION

For the ESP to succeed, it will need to be embedded into the University's culture. Through staff and student engagement programs we aim to build a culture of environmental awareness and good practice amongst the UNSW community. The success of our engagement efforts will be measured through a survey to compare progress with our 2018 baseline.

An annual review of progress against the commitments, targets and activities in this Plan will be published to raise awareness, celebrate successes and maintain momentum.

## Commitments

- Build a community of environmental awareness and good practice
- Integrate this Plan across University decision-making, planning and management processes

## Target

- Increase levels of student and staff engagement in environmental sustainability, measured through a survey.

## Activities

- Develop a sustainability communications plan and engagement programme
- Complete a survey to measure engagement levels and priorities of the UNSW community
- Develop comprehensive data monitoring, collection and reporting procedures
- Complete an annual review and progress report outlining progress against the commitments, targets and actions in this Plan
- Report annually on the progress of activities to the Sustainability team

## Sustainability in Action

UNSW won 'Best Campaign Supporting Sustainability' in the global 2019 Edurank Social Media Awards. Judged by a panel of students, UNSW was selected for using social media to bring about positive, sustainable change.

In 2013, UNSW became the first Group of Eight (Go8) university to produce a sustainability report.

## 2025 Strategy

B3: Knowledge Exchange  
D1: People & Culture





# LEARNING & TEACHING

UNSW offers a range of educational programs that equip our future leaders with the skills to tackle contemporary environmental sustainability challenges. To provide a platform for sustainability knowledge to be embedded in all learning and teaching programs, a progressive three-year program is planned to engage staff and students with the UN Sustainable Development Goals (SDGs). This would begin with the development of a suite of online resources to support the inclusion of 'SDG thinking' in courses as academic staff see fit.

The next phase is a 'Champions for the Goals' program where an academic lead is assigned for each SDG and the UNSW campus is used as a living laboratory to test the potential application and contribution to the SDGs.

## Commitments

- Offer learning and teaching programs that inspire students to contribute to a sustainable world
- Provide leading interdisciplinary education in environmental management

## Targets

- The SDG module is offered across the FULT (Foundations of University Learning and Teaching) program of study by Term 1 2020.
- One course per program of study per faculty includes the SDG module as an assessed activity by 2021.
- One course per program of study per faculty incorporates SDG thinking using the SDG toolkit by Term 2 2021.
- One project per SDG is developed and integrated as an assessed activity by Term 1 2022.
- Continue to offer interdisciplinary education in environmental management in line with the Learning and Teaching Academic Standards Statement for Environment and Sustainability.

## Activities

- Develop an online 'SDG thinking' module to improve the SDG literacy of students and staff.
- Develop an 'SDG thinking' toolkit available through UNSW Teaching Gateway.

## Sustainability in Action

UNSW offers a range of educational programs that equip our graduates to address environmental sustainability issues – including renewable energy, sustainable materials, climate change, built environment, biological, earth and environmental sciences, business, engineering and law

In 2018, the UNSW Sunswift solar car team set a Guinness World Record for the lowest energy consumption for a 4,100 km journey across Australia in an electric car. Sunswift is a student-led initiative now in its 22<sup>nd</sup> year.

## 2025 Strategy

A2: Educational Excellence



# RESEARCH & ADVOCACY

Research underpins our contribution to a sustainable world. UNSW has a proud history in diverse disciplines including solar energy, sustainable materials technology, biodiversity conservation and climate science. We will continue research and thought leadership to address global environmental challenges, communicating our findings to the wider community and showcasing research on campus.

## Commitments

- Support researchers to develop solutions to global environmental challenges
- Be a leading advocate for a sustainable world by advancing policy discussion and debate

## Target

- Implement one sustainability-related research showcasing project on campus by 2020.

## Activities

- Communicate UNSW environmental and sustainability-related research to the community and broader society.
- Provide thought leadership on environmental and sustainability issues through the Grand Challenges program.
- Invest in new and emerging research areas including Digital Grid and Materials and Manufacturing.

## 2025 Strategy

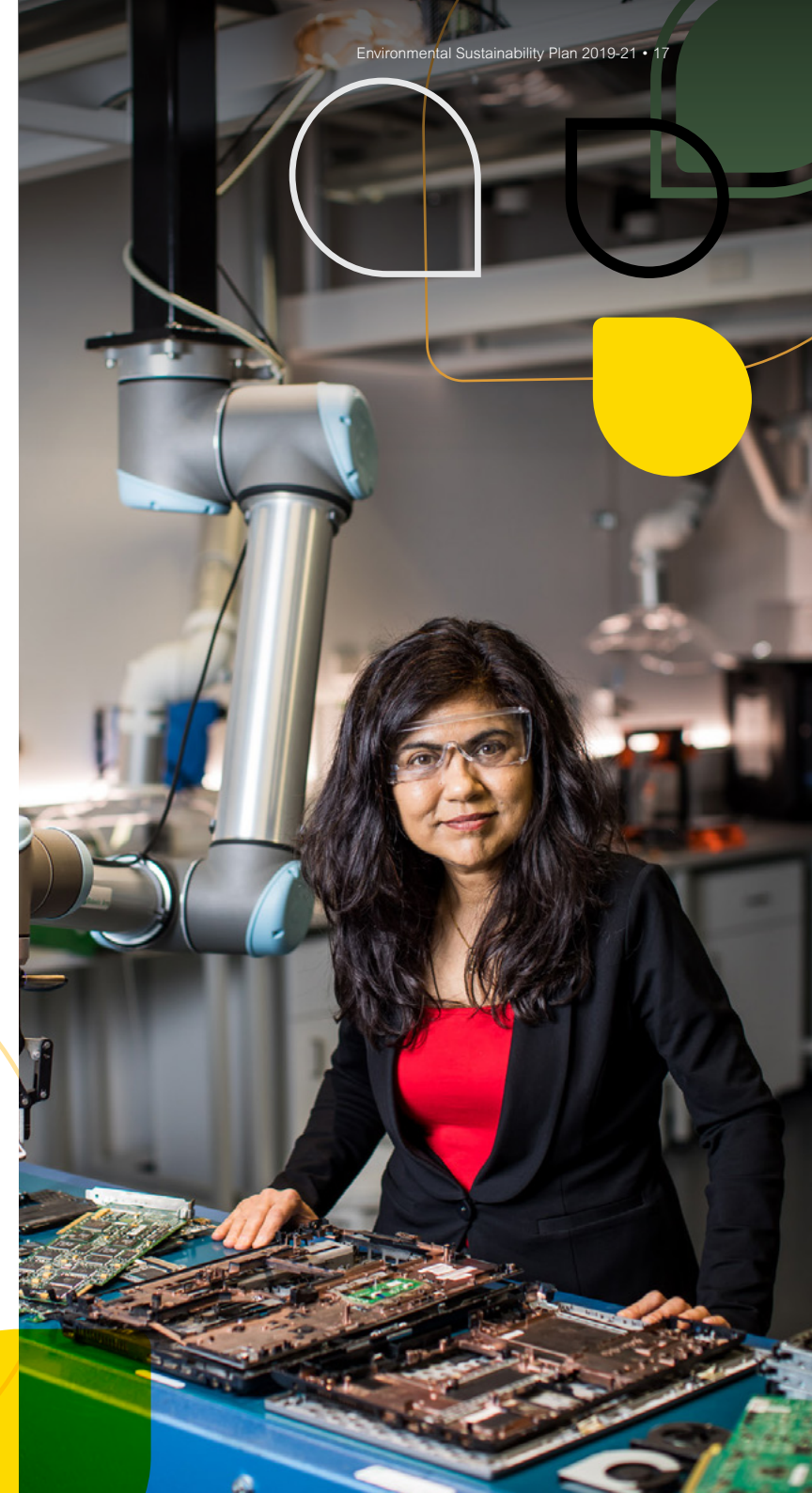
- A1: Research Quality
- B2: Grand Challenges

## Sustainability in Action

Professor Veena Sahajwalla (pictured right) opened the world's first e-waste microfactory in 2018 at UNSW's Centre for Sustainable Materials Research and Technology (SMaRT Centre). Professor Sahajwalla is internationally renowned for inventing 'green steel', which uses waste tyres in the manufacture of steel.

UNSW Professor Martin Green became the first Australian to win the prestigious Global Energy Prize in 2018 for his research and educational activities in the field of photovoltaics. Professor Green and his team have revolutionised the efficiency and costs of solar photovoltaics.

In 2017, UNSW launched a landmark series of reports as part of the Grand Challenge on Climate Change – outlining the challenges and opportunities facing society in the areas of Energy Transitions, Climate Change, Air Pollution and Health, and Justice and Climate Change.





# GOVERNANCE & REPORTING

Effective governance is critical to addressing evolving environmental sustainability priorities and expectations. The following governance structure and reporting mechanisms support the integration of the Environmental Sustainability Plan across University operations and the monitoring of commitments, targets and activities.

## Governance Structure



## Voluntary Reporting

Performance against targets, initiatives and successes will be publicly reported through an annual Sustainability Report, consistent with the Global Reporting Initiative (GRI) 'Core' Environmental topics (300-308).

## Statutory Reporting

UNSW reports under the:

- National Greenhouse and Energy Reporting (NGER) scheme national framework – reporting on greenhouse gas emissions, energy production and energy consumption
- National Pollutant Inventory (NPI) and National Environment Protection Measure (NEPM) – providing publicly available information on substances emitted to air, land and water.

## Networks and Associations

UNSW participates in the following networks and associations:

- Group of Eight (Go8) Australian research-intensive universities
- Australasian Campuses Towards Sustainability (ACTS)
- Tertiary Education Facilities Management Association (TEFMA)
- Universitas 21 – Declaration on Sustainability.

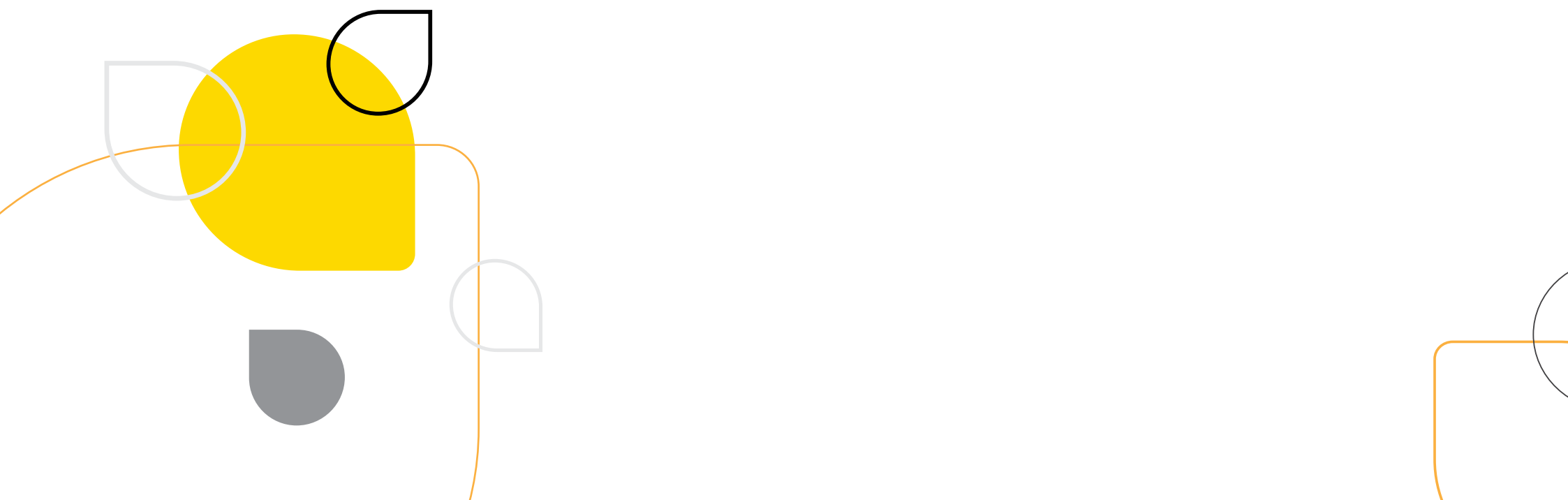


# ROLES & RESPONSIBILITIES

This section details the individuals responsible for the delivery of activities that support the commitments and targets in the ESP.

FOCUS AREA	ACTIVITIES	RESPONSIBILITY
<b>Climate Action</b>	• Develop a Scope 1, 2 & 3 emissions inventory and strategy to achieve net zero emissions	Head of Environmental Sustainability
	• Purchase 100% renewable electricity by 2020	Director, Facilities Management
	• Develop a Climate Adaptation and Resilience Plan	Executive Director, Estate Management
<b>Buildings &amp; Campus</b>	• Establish and implement a framework to embed sustainability best practices into the Estate Improvement and Estate Development Programs	Executive Director, Estate Management
	• Ensure that all planting schemes use minimum 70% indigenous species, with a preference for drought-resistant species	Director, Facilities Management and Director, Development
	• Implement one initiative to enhance the natural environment or biodiversity each year	Director, Development
	• Establish a life-cycle Building Information Modelling (BIM) strategy and roadmap	Director, Development
	• Design new buildings to be zero emission in operation	Director, Development
<b>Energy &amp; Water Efficiency</b>	• Develop and implement an Energy & Water Strategy	Director, Facilities Management
	• Expand the building active commissioning programme	Director, Development
	• Install aquifer recharge monitoring equipment	Director, Development
	• Install a bore water network for non-potable uses in all new buildings	Director, Development
	• Ensure that all new water consuming fixtures are WELS-rated	Director, Development
	• Review laboratory and equipment efficiency requirements	Director, Facilities Management
<b>Waste &amp; Recycling</b>	• Develop and implement a Waste Management Plan	Director, Facilities Management
	• Implement centralised waste collection in offices and expand food waste collection	Director, Facilities Management
	• Work with retailers and hospitality partners to eliminate single-use plastics wherever feasible and practical	Director, Business & Campus Services
	• Identify and implement circular economy initiatives	Head of Environmental Sustainability
	• Ensure best practice recycling of construction and demolition waste	Director, Development
	• Implement a comprehensive furniture reuse solution and platform	Director, Facilities Management
<b>Travel &amp; Transport</b>	• Develop a Campus Transport and Accessibility Plan	Executive Director, Estate Management
	• Provide secure bicycle storage and end-of-trip facilities in key campus locations	Executive Director, Estate Management
	• Establish processes to measure and offset business travel carbon emissions	Head of Environmental Sustainability
	• Identify and evaluate opportunities to expand AV and VC facilities and promote these as an alternative to travel	Vice-President, Finance & Operations
<b>Goods &amp; Services</b>	• Implement the ISO20400-aligned Sustainable Procurement Roadmap	Director, Strategic Procurement
	• Implement the Sustainable Procurement priority projects.	Director, Strategic Procurement
	• Assess and monitor supply chain environmental impacts.	A/Professor, Civil & Environmental Engineering

FOCUS AREA	ACTIVITIES	RESPONSIBILITY
<b>Investments</b>	• Complete a climate risk assessment in line with the recommendations of the TCFD	Director, Treasury and Investment Services
	• Establish a Responsible Investment Framework consistent with the Investment Policy and UN Principles for Responsible Investment	Director, Treasury and Investment Services
	• Set a portfolio emission intensity target and report annually in line with TCFD recommendations	Investment Sub-Committee
<b>Engagement &amp; Integration</b>	• Develop a sustainability communications plan and engagement program	Head of Environmental Sustainability & Internal Communications Manager
	• Complete a survey to measure engagement levels and priorities of the UNSW community	Head of Environmental Sustainability
	• Develop comprehensive data monitoring, collection and reporting procedures	Head of Environmental Sustainability
	• Complete an annual review and progress report outlining progress against the commitments, targets and actions in this Plan	Head of Environmental Sustainability
	• Report annually on the progress of activities to the Sustainability team	Action Owners
<b>Learning &amp; Teaching</b>	• Develop an online 'SDG thinking' module to improve the SDG literacy of students and staff	Director, Academic Development Services and A/Lecturer, Civil & Environmental Engineering)
	• Develop an 'SDG thinking toolkit' available through UNSW Teaching Gateway	
<b>Research &amp; Advocacy</b>	• Communicate UNSW environmental and sustainability-related research to the community and broader society	Head of Corporate Communications
	• Provide thought leadership on environmental and sustainability issues through the Grand Challenges program	Executive Director, Division of Research
	• Invest in new and emerging research areas including Digital Grid and Materials and Manufacturing	Futures Institutes





# RELEVANT STANDARDS & FRAMEWORKS

THEME	STANDARD OR FRAMEWORK	DESCRIPTION
<b>Climate Change</b>	Paris Agreement	A 2015 international agreement within the UN Framework Convention on Climate Change, aiming to reduce greenhouse gas emissions and limit the global temperature increase to no more than 1.5-2°C.
	Greenhouse Gas (GHG) Protocol	Global standard for greenhouse gas emissions accounting and reporting, developed by the World Resources Institute and World Business Council for Sustainable Development.
	Science Based Targets Initiative (SBTI)	GHG reduction target setting methodology aligning with the GHG Protocol and the Paris Agreement objective of 1.5-2°C.
<b>Sustainable Development</b>	United Nations Sustainable Development Goals (SDGs)	17 global goals aiming to tackle the most pressing environmental, social and economic issues by 2030. Used to connect organisational sustainability strategy and reporting to the global agenda.
<b>Learning &amp; Teaching</b>	Learning & Teaching Academic Standards Statement for Environment and Sustainability	Describes the minimum or threshold learning outcomes (TLOs) that graduates of tertiary programs in environment and sustainability are expected to meet or exceed, providing a curriculum reference point for designing and teaching diverse and innovative environment and sustainability programs.
<b>Sustainable Buildings</b>	Green Star Design & As Built	Certification standard for the sustainable design and construction of buildings, administered by the Green Building Council of Australia (GBCA).
<b>Sustainable Procurement</b>	ISO 20400	Provides guidance on integrating sustainability principles within procurement activities.
<b>Sustainability Reporting</b>	Global Reporting Initiative (GRI) Standards	Global standard for sustainability reporting, representing best practice for reporting on a range of economic, environmental and social impacts.
<b>Investments</b>	UN Principles for Responsible Investment (PRI)	Six principles providing guidance for responsible investment, aiming to support signatories to incorporate sustainability issues into investment decision-making and ownership practices.
	Task Force on Climate-related Financial Disclosures (TCFD)	Industry-led initiative created to develop a set of recommendations for voluntary climate-related financial disclosures.



## Contact us

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### Estate Management

#### UNSW Sydney

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