THE UNIVERSITY OF SYDNEY

Sustainability Strategy

Climate-related Financial Disclosure 2024

Acknowledgement of Country

The University of Sydney's campuses and facilities sit on the ancestral lands of many of Australia's First Peoples, who have exchanged knowledges for the benefit of all for thousands of generations.

These include the Gadigal, Gamaraygal, Dharug, Wangal, Tharawal, Deerabbin, Darkinyung, Guringgai, Gamilaraay, Barkindji, Bundjalung, Wiradjuri, Wiljali, Ngunawal, Gureng Gureng and Gagudju Peoples.

In respectfully acknowledging the ancient learning cultures and traditions of Aboriginal and Torres Strait Islander peoples, the University of Sydney declares its commitment to the continuation of this sharing through the agency of our work.

There is no place in Australia that has not been known, nurtured and loved by Australia's First Peoples, whose profound understanding of sustainability has been applied for many tens of thousands of years.

THE UNIVERSITY OF SYDNEY

Sustainability Strategy

Climate-related Financial Disclosure 2024

Foreword, Chancellor and Vice-Chancellor

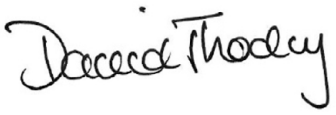
The University of Sydney recognises that climate change presents one of the most significant challenges of our time. As a leading academic and research institution, we have an important role to play in understanding and addressing climate-related risks while identifying opportunities to contribute to a more sustainable and resilient future.

In this first climate-related financial disclosure, we outline the steps the University is taking to strengthen its climate resilience, enhance transparency, and ensure compliance with evolving regulatory requirements. While we are still in the early stages of integrating climate risk considerations into our governance, strategy, and financial planning, this report reflects our commitment to responsible stewardship and continuous improvement.

Our approach builds on the University's long-standing efforts to reduce emissions, increase energy efficiency, and embed sustainability principles across research, education, and operations. However, we acknowledge that further work is needed to deepen our understanding of climate-related financial risks, strengthen adaptation measures, and develop a clear pathway for meeting our long-term sustainability commitments.

This report is an important step in our journey towards greater climate resilience. By building on emerging guidance and engaging meaningfully with our stakeholders, we aim to ensure that the University remains well-positioned to navigate the challenges and opportunities presented by a changing climate.

We thank our staff, students, and partners for their ongoing contributions and collaboration in this critical area.



David Thodey AO
(BA Anthrop/Eng, HonDSc Deakin '15, HonDBusUTS '18, HonDBusSyd '23)
Chancellor

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"In this first climate-related financial disclosure, we outline the steps the University is taking to *strengthen* its climate resilience, *enhance* transparency, and ensure compliance with evolving regulatory requirements."

Introduction

This voluntary climate disclosure for the year ended 31 December 2024 has been prepared in partial alignment with the *Reporting framework for first year climate-related financial disclosures* (TPG24-33), issued by NSW Treasury. It marks an important step in strengthening the University's readiness for full compliance in 2025. In line with the framework's guidance on disclosure maturity (Section 3.2), this report reflects a foundational level of capability and is based on all reasonable and supportable information available at the reporting date, without undue cost or effort.

The disclosure covers:

- **Governance:** roles, responsibilities, and oversight of climate-related matters
- **Risk Management:** processes for identifying, assessing, and managing climate-related risks
- **Strategy:** assessment of climate-related risks and opportunities, and approach to managing these risks and opportunities, including scenario analysis
- **Metrics and Targets**: available data, indicators, and climate-related targets.

Over the coming year, we will continue to build our understanding of material climate-related risks and opportunities, improve the quality and availability of relevant data, expand the use of scenario analysis, and strengthen internal systems and capability. This phased approach recognises that the quality and depth of disclosures will mature over time, as the University progressively enhances its ability to identify, assess, and manage climate-related risks and opportunities.

We will continue to *build* our understanding of material climate-related risks and opportunities, *improve* the quality and availability of relevant data, *expand* the use of scenario analysis, and *strengthen* internal systems and capability.

Governance

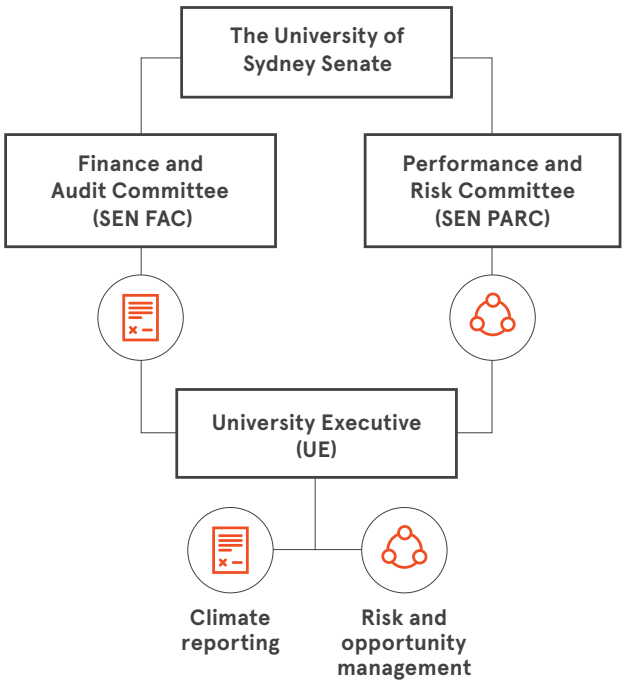
Oversight and decision-making

The University of Sydney maintains strong governance structures to support effective decision-making, risk management, and accountability. While climate-related considerations are still maturing in integration across these frameworks, governance bodies are increasingly incorporating climate risks, opportunities, and reporting obligations alongside broader strategic, financial, and operational priorities.

The Senate, as the University's highest governing body, provides overarching oversight of strategy, risk management, and regulatory compliance. Climate-related matters are considered as part of Senate's responsibilities for institutional governance, risk appetite, and legal obligations.

Supporting the Senate:

- The **Senate Finance and Audit Committee (Sen-FAC)** oversees financial management, investments, assurance processes, and compliance with reporting obligations, including climate disclosures.
- The **Senate Performance and Risk Committee (Sen-PARC)** reviews risk management systems and ensures climate risks are integrated into enterprise risk frameworks alongside other ESG considerations.



The **University Executive (UE)** operationalises governance frameworks, embedding climate considerations within financial planning, investment decisions, and risk management processes. Supported by the **Sustainability Program Control Board (SPCB)**, the UE monitors progress against the University's Sustainability Strategy, ensures compliance with regulatory requirements, and manages risks to achieving climate targets.

Climate risks, opportunities, and regulatory updates are progressively being incorporated into reporting to the Senate, its committees, and the University Executive to support informed decision-making and alignment with evolving priorities.

Management's role and accountability

Senior management is responsible for embedding climate-related risks and opportunities across institutional processes. The Director, Sustainability, and Director, Financial Control and Treasury, ensure:

- Compliance with disclosure requirements and accurate reporting.
- Coordination of internal monitoring and assurance.
- Cross-functional collaboration to support integrated decision-making.

Management supports regular updates to governance bodies, ensuring transparent oversight of climate-related risks, opportunities, and progress.

Monitoring targets and progress

Progress towards the University's *Sustainability Strategy 2020–2025*, including our ambition of net zero Scope 1 and 2 emissions by 2030, is monitored through established reporting mechanisms. Biannual updates are provided to the UE and Senate, and the Annual Sustainability Report is endorsed by the SPCB, UE, and Senate prior to public release.

A business case for addressing the University's remaining scope 1 emissions is currently under development, including consideration of electrification, offsets, and low-carbon innovation. This will be presented to the UE and Senate in 2025, at which time milestones and targets, including the 2030 net zero ambition, will be reviewed to ensure continued alignment with feasibility, resourcing, and risk.

The SPCB plays a key role in tracking implementation, ensuring projects stay on track, budgets are effectively applied, and risks to target achievement are managed. Climate targets are integrated into broader financial and risk planning processes, supporting institutional resilience and sustained accountability.

Strategy

Climate-related risks and opportunities

The University of Sydney is a globally recognised academic institution committed to excellence in research, teaching, and community impact. Operating across a diverse infrastructure with multiple campuses, state-of-the-art research facilities, agricultural land and remote research stations, and residential accommodations, the University is a nexus for innovation, knowledge transfer, and societal progress. Through a broad network of over 70,000 students and industry, government, and academic partnerships, the University shapes the future workforce and drives global solutions.

Climate change influences the University's strategic direction and impacts education and research excellence. The University's exposure and response to climate change influences its financial sustainability, operational resilience, and institutional reputation.

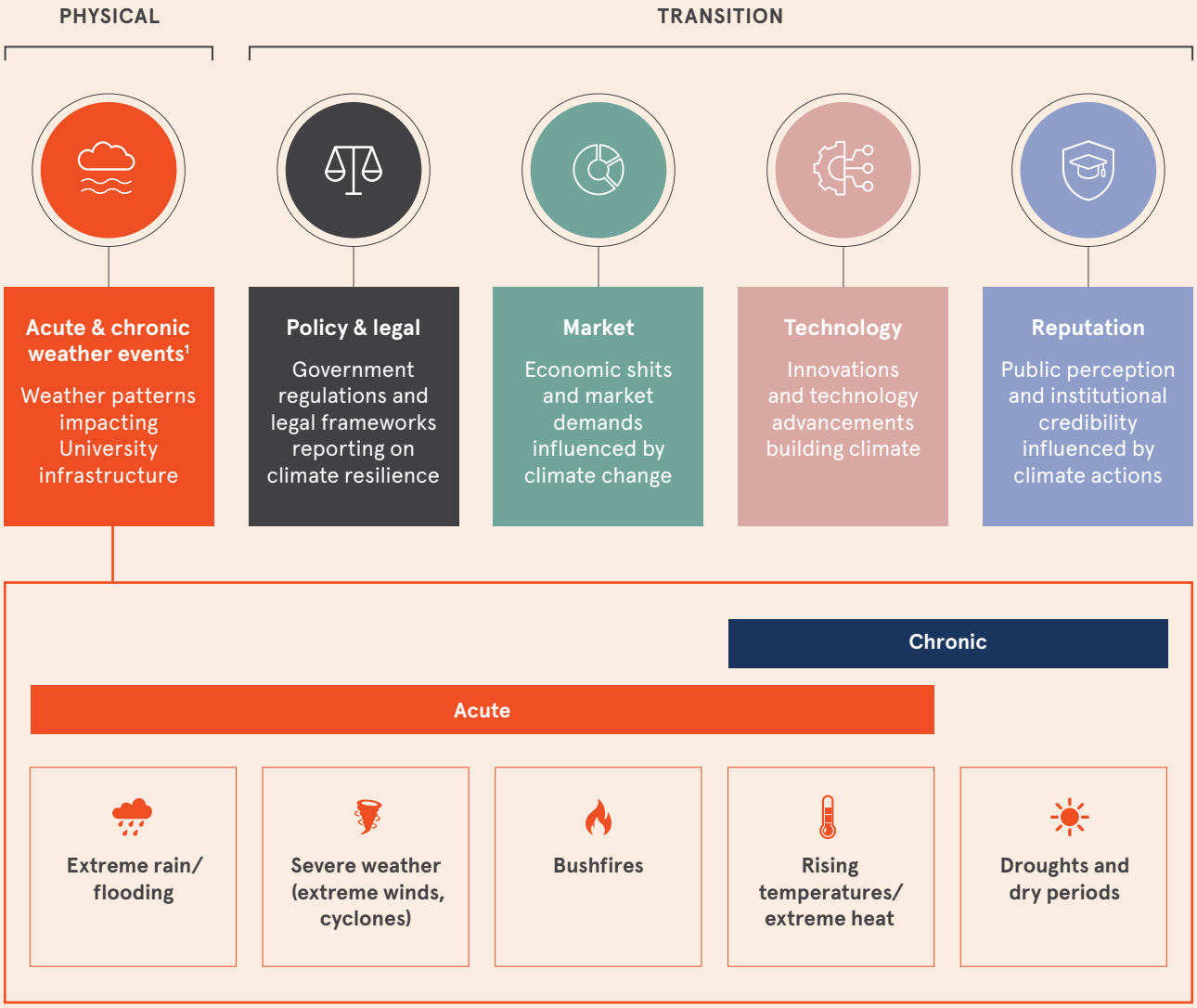
The transition to a low-carbon economy, in particular, presents regulatory and financial challenges, requiring the University to adapt its investment strategies, procurement practices, and research priorities. These challenges also create opportunities for leadership in climate resilience, sustainability education, and research in emissions reduction, reinforcing the University's global impact.

To shape its strategic response to climate change, the University assesses climate-related risks and opportunities by identifying its greatest areas of impact and exposure. This includes evaluating financial, regulatory, and reputational factors through a Materiality Assessment, analysing physical and transition risks in a Climate Risk and Opportunity Assessment, and testing resilience under different climate futures through a Climate Scenario Analysis.

Findings from these assessments highlight the increasing frequency of extreme weather events, evolving regulatory requirements, and shifting stakeholder expectations. Without intervention, these factors could lead to infrastructure damage, increased operational costs, and reputational risks. Conversely, the University is well-positioned to capitalise on opportunities to leverage its research leadership, transition towards renewable energy, and embed sustainability principles within core education programs, ensuring a future-ready workforce equipped to address global climate challenges.

Physical and transitions risks and opportunities

Climate risks and opportunities are typically grouped into two broad categories: physical risks from direct climate impacts, and transition risks and opportunities from changes in policy, markets, technology, and reputation as the world moves towards a low-carbon economy. These risks are diagrammed and explored below.



1. Acute climate risks refer to extreme weather events that occur over short timeframes, such as storms, floods, and heatwaves. Chronic climate risks refer to long-term shifts in climate patterns, such as rising average temperatures, sea level rise, or long-term drought.

Priority physical risks

RISK	THEME	POTENTIAL IMPACT	TIME HORIZON[2]
Extreme rain/ flooding	Acute Risks	Significant asset damage, disruption to teaching and research, increased repair costs, higher insurance premiums, reputational risk from unpreparedness.	Short to Long
Severe weather (extreme wind, cyclones)	Acute Risks	Structural damage to facilities, power outages impacting critical research, operational shutdowns, staff and student safety hazards.	Short to Long
Bushfires	Acute Risks	Threat to campus infrastructure, air quality deterioration impacting health, biodiversity loss, campus closures, increased recovery costs.	Short to Long
Rising temperatures/ extreme heat	Chronic Risks	Increased cooling costs, infrastructure strain, reduced outdoor learning capability, higher risk of heat-related illnesses among staff and students.	Medium to Long
Droughts and dry periods	Chronic Risks	Rising operational expenses due to increased water demand, compromised agricultural research, landscape degradation, higher insurance costs.	Short to Long

Acute Weather Events | Chronic Weather Events | Policy & Legal | Market | Technology | Reputation

2. The short- to medium-term time horizon is defined as 2030, represented as an average over the period from 2020 to 2039. The long-term time horizon is defined as 2050, represented as an average over the period from 2040 to 2059.

Priority transition risks

RISK / OPPORTUNITY	THEME	POTENTIAL IMPACT	TIME HORIZON
Market demand for sustainable education & research *(opportunity)*	Market	Growing student demand for sustainability-focused programs, increased competition for research funding, reputational gains as a leader in climate-aligned education and innovation.	Medium to Long
Decarbonisation & emissions reduction requirements *(risk)*	Policy & Legal	Evolving policy and legal requirements may require significant capital investment, including potential electrification of assets. This may increase procurement costs, complicate supplier engagement, and create reputational risk if emissions reduction targets are not met.	Medium to Long
Climate resilience regulations *(risk)*	Policy & Legal	Rising costs for retrofitting existing buildings, increased insurance premiums, mandatory resilience planning for high-risk areas, potential devaluation of assets due to climate vulnerability.	Medium to Long
Litigation & legal liabilities *(risk)*	Policy & Legal	Increased risk of lawsuits due to inadequate climate action, potential financial penalties, regulatory disruptions, and reputational harm from inaction or greenwashing claims.	Short to Medium
Circular economy & supply chain transformation *(opportunity)*	Market	Cost-saving potential through resource efficiency, reduction in operational waste, enhanced supply chain resilience, reputational benefits for sustainability leadership.	Short to Medium
Advancements in low-carbon & climate technologies *(opportunity)*	Technology	Increased R&D and operational efficiency gains through automation, AI-driven sustainability solutions, emissions and water consumption reductions leading to cost savings.	Medium
Stakeholder expectations & institutional reputation *(risk and opportunity)*	Reputation	Increased scrutiny from students, staff, investors, and funding bodies; reputational damage if commitments are weak or unfulfilled; talent attraction and retention dependent on strong climate credentials.	Medium
Collaboration & industry leadership in just transition	Reputation	Strengthened industry and government partnerships, leadership opportunities in shaping climate policies, increased research funding, reputational gains for proactive climate leadership.	Medium

Acute Weather Events · Chronic Weather Events · Policy & Legal · Market · Technology · Reputation

Concentration of climate-related risks and opportunities

The University's climate-related risks and opportunities are concentrated across distinct geographies and asset types, with varying exposure to acute and chronic physical hazards under both low and high emissions scenarios.

Central campuses such as Camperdown/Darlington are projected to face increasing exposure to extreme heat, intense rainfall and fire weather[3]. By 2050, these campuses may experience an additional 10 days over 35°C annually and a rise in extreme rain intensity by 6%, increasing risks to health, infrastructure, and operations[4]. The urban location may further exacerbate heat impacts due to the urban heat island effect.

In contrast, the University's rural farms and field research stations, including sites in Gunnedah, Narrabri and Arthursleigh, are particularly vulnerable to chronic hazards like drought and acute risks such as bushfires. These areas are projected to see the greatest increases in fire weather days (up to 11 additional days per year), extended dry spells, and extreme heat. This poses significant threats to agricultural productivity, research continuity, and asset resilience.

Field stations and leased regional sites also face increasing exposure to extreme rain frequency and intensity, potentially affecting biodiversity research and operational access.

This geographic differentiation in climate exposure highlights the need for location-specific adaptation strategies and underscores the importance of prioritising resilience investments in both urban and rural settings.

Strategy and decision making

The University of Sydney's *Sustainability Strategy 2020–2025* was developed in 2019, and it remains relevant in managing our material climate-related risks and opportunities. Structured around the pillars of Research and Education, Resilient Places and a Responsible Footprint, and Good Governance and Coordination, the strategy integrates climate considerations to mitigate risks and capture opportunities across the University's operations.

Through Research and Education, the University is embedding climate considerations across academic programs, expanding sustainability-focused learning, and advancing research into emissions reduction, renewable energy, and adaptation. Our multidisciplinary institutes (MDIs), including the Sydney Environment Institute, the Net Zero Institute, and the Heat and Health Research Incubator, continue to drive research on climate impacts, decarbonisation strategies, and resilience.

Under Resilient Places and a Responsible Footprint, the University has reached its 100% renewable electricity target ahead of schedule through a Power Purchase Agreement with Red Energy and Snowy Hydro. We continue to expand onsite solar, improve energy efficiency, and design infrastructure to 5-Star Green Star standards, increasing resilience to extreme weather and embedding climate adaptation into our built environment.

We are also strengthening governance under the Good Governance and Coordination pillar by improving climate-related disclosures, aligning with evolving regulatory requirements, and embedding climate risks into core decision-making. This supports transparency, reduces exposure to risks such as greenwashing and non-compliance, and enhances accountability across the University.

Building on progress to date, the University is developing a Net Zero Plan to establish a structured and funded pathway towards our Scope 1 and 2 decarbonisation goals. As part of this work, a detailed business case is being prepared to inform decision-making on remaining scope 1 emissions. The University remains committed to the 2030 ambition; however, final delivery will be contingent on the feasibility, cost, and timing of electrification and other emissions reduction or offset pathways. This forward planning approach ensures risks are appropriately managed and that the target remains credible and achievable.

3. Fire weather refers to annual count of days where the Fire Weather Index exceeds the 95th percentile. Data from NASA NEX (IPCC AR6).
4. Climate scenario findings use quantitative metrics from the NASA-NEX 25km downscaled dataset, based on IPCC AR6 models and World Meteorological Organisation extremes. The analysis compares recent past exposure to projected future changes across scenarios and time horizons. Projections reflect the average of multiple climate models, following best scientific practice, with the most granular data selected where available.

Financial position, performance and cash flows

The University has not yet undertaken detailed financial modelling of climate-related risks and opportunities. However, preliminary analysis indicates that a significant future financial risk is the capital investment required to electrify buildings currently reliant on natural gas. This transition will likely require substantial infrastructure upgrades and coordination across asset classes. Feasibility assessment is underway, and the scale and timing of associated investment will depend on the outcomes of this planning.

There were no material impacts of climate-related risks on the University's financial statements for the 2024 reporting period. Additionally, no climate-related risks or opportunities are currently expected to result in a material adjustment to the carrying amount of assets or liabilities in the next annual reporting cycle.

In 2024, the University's renewable energy power purchase agreement (PPA) continued to support progress toward its emissions reduction targets. During the period, 138,914 Large-Scale Generation Certificates (LGAs) acquired under the PPA were voluntarily surrendered. The surrendered LGAs had a market value of approximately $5 million.

A range of projects were also delivered under the University's *Sustainability Strategy*, with a total 2024 program cost of $6 million. These works focused on emissions reduction and efficiency improvements, including upgrades to lighting systems, solar generation, heating and cooling, water efficiency, and waste infrastructure.

The University has commenced a pilot electrification project to better understand the scale and complexity of transitioning buildings away from natural gas. Electrification is expected to be one of the most significant capital investments required to decarbonise our operations and will play a critical role in eliminating Scope 1 emissions. In 2025, the University will progress concept and detailed design work for nine priority buildings and begin work on up to five of these. The pilot is intended to test the feasibility of various design approaches, identify infrastructure constraints, and inform future planning decisions. The outcomes of this work will directly influence the timing, cost, and sequencing of further electrification across the University.

At the same time, the University recognises the important role it plays in meeting increasing demand for climate-related research and education, particularly across disciplines.

The University will continue to develop and refine its mechanisms to accurately track and model future opportunities to undertake impactful climate-related research and education.

Structured around the pillars of *Research and Education, Resilient Places and a Responsible Footprint*, and *Good Governance and Coordination,* the strategy integrates climate considerations to mitigate risks and capture opportunities across the University's operations.

Climate resilience

The University of Sydney recognises the growing need to build resilience to acute and chronic climate risks to support the continuity of our core mission. Early assessments, including our Climate Risk and Opportunity Assessment and Scenario Analyses, have identified vulnerabilities across assets, infrastructure, and operations, informing initial adaptation planning. Risks such as extreme weather events, infrastructure damage, operational disruptions, and financial pressures are shaping our understanding of resilience needs.

To strengthen institutional alignment, we convened a Strategic Resilience Workshop with Sustainability, Risk, Finance, and Strategic Planning teams, mapping climate risks and opportunities against our Institutional and Sustainability Strategies. This exercise identified priority gaps and actions to inform a more integrated resilience framework.

Initial initiatives using the AdaptNSW Climate Risk Ready framework and the Climate Ready Health Check have provided valuable insights into the University's adaptive capacity. These pilots, including climate risk registers, localised adaptation plans, and reviews of selected buildings, establish a foundation for embedding climate considerations into long-term asset management and infrastructure planning.

Integration of climate adaptation measures into capital works planning is progressing, with a focus on stormwater management, heat mitigation, and climate-responsive building design. Operational preparedness is also under review, including enhancements to business continuity planning and the resilience of critical services such as power, water, and IT infrastructure.

Financial modelling is underway to assess investment needs for energy efficiency, electrification, and risk mitigation measures. While a formalised financial resilience approach is still in development, these evaluations will inform funding pathways for adaptation and emissions reduction initiatives.

The University acknowledges that climate resilience is an evolving area. As we refine our strategy and embed climate considerations into institutional processes, we will continue to strengthen our approach to ensure long-term resilience, operational continuity, and alignment with our academic mission.

SPOTLIGHT

Climate Justice and Disaster Law (LAWS6320)

The University of Sydney continues to integrate climate considerations into its curriculum, equipping students with the knowledge and skills to address climate-related challenges. One example is Climate Justice and Disaster Law (LAWS6320), a postgraduate unit of study which explores the legal, policy, and economic dimensions of climate justice and disaster risk reduction.

This unit examines multilateral climate agreements, disaster risk reduction, and human rights in climate adaptation, providing students with insights into international and domestic climate policy responses. It also explores liability regimes, compensation for climate-related loss and damage, and the role of insurance in managing climate risks.

By integrating law, policy, and climate science, the unit offers a multidisciplinary approach to climate governance, ensuring graduates are prepared to navigate and contribute to evolving climate-related legal and policy frameworks.

SPOTLIGHT

Climate resilience & energy innovation at the Sydney Biomedical Accelerator

Architectural concept of the Sydney Biomedical Accelerator (left) next to the Susan Wakil Health Building (right), viewed from Western Avenue. Image courtesy of Denton Corker Marshall.

The Sydney Biomedical Accelerator (SBA), currently in the design phase, is the first University building to undergo a Climate Assessment Plan (CAP) during its planning. This establishes a new benchmark for integrating climate resilience into infrastructure planning. As a research-intensive facility developed in partnership with Sydney Local Health District and NSW Government, the SBA presents unique challenges, requiring high energy use and stringent environmental controls, while also addressing climate risks.

The CAP identified key climate risks, including extended blackouts, occupant health impacts from heatwaves, increased electricity demand, and flooding risks. In response, the building's mechanical systems were designed to accommodate projected temperature increases, incorporating expanded HVAC setpoints, night cooling strategies, and passive design features to reduce energy consumption while maintaining performance standards.

The SBA also represents a milestone in energy efficiency modelling, marking the first time this level of analysis has been applied to a University research building. The project will integrate high-efficiency chillers, heat recovery systems, and fume cupboard manifolds. The SBA project will also be the first fully electric laboratory facility on campus with no gas connection to the building.

As a result of the project's informed resilient design choices and reduced risk exposure, the University is exploring Climate Assessment Plans for all new Green Star-certified buildings. This ensures that future developments embed climate resilience, low-carbon solutions, and alignment with the University's Net Zero and sustainability commitments from the earliest stages of planning.

Risk management

The University's Risk Management Framework

The University's Risk Management Framework (RMF) provides a structured and systematic approach to identifying, assessing, and managing risks which could impact its mission, operations, and stakeholders. It guides the systematic analysis of risk factors including but not limited to financial, operational, reputational and strategic risks, and establishes the University's risk appetite and tolerance across ten categories of risk.

Risk management processes are embedded across multiple levels of the University, ensuring that climate risks are not managed in isolation but are considered alongside other material risks:

- The **Enterprise Risk Register** is actively overseen by the senior executive team and reviewed by Sen-PARC to ensure effective governance.
- **Local Unit Risk Registers** are maintained across faculties, schools, and operational portfolios, allowing teams to track and manage risks at the functional level.
- **Key Risk Indicators (KRIs)** support continuous monitoring of risk exposure, ensuring that risk trends are actively tracked and assessed.
- **Risk Monitoring and Reporting Processes** are aligned with the University's broader governance frameworks to maintain oversight and accountability.

The University manages a range of material risks, including financial sustainability, cybersecurity threats, student safety, operational continuity, and our conduct in line with community expectations. Climate risks are considered within this broader context to ensure a balanced and integrated approach to institutional risk management.

Strengthening organisational resilience

The University's Organisational Resilience Framework has been strengthened through a combination of learning from structured exercises and real-world incidents.

Organisational resilience efforts in 2024 included structured exercises and real-world stress testing, strengthening incident response protocols, and informing future planning, including for climate-related risks.

Assessing and monitoring climate risks

The University conducted a Climate Risk and Opportunity Assessment in collaboration with operational, professionals and academic staff to identify material climate-related risks and opportunities. This process integrated expertise from infrastructure management, finance, risk, sustainability, and research teams, ensuring a holistic evaluation of climate risks across the University's assets, operations, and strategic priorities.

To support risk quantification, the University conducted Physical and Transition Climate Scenario Analyses, modelling climate impacts under SSP1-2.6 (low emissions) and SSP5-8.5 (high emissions) scenarios across 2030 (short- to medium-term) and 2050 (long-term) time horizons.

The Physical Scenario Analysis evaluated the risks of extreme heat, bushfires, flooding, severe storms, and prolonged drought, at each location where the University operates, with a focus on infrastructure resilience, operational continuity, and research impacts, particularly in agricultural and field-based research environments.

The Transition Scenario Analysis (below) examined the implications of policy shifts, carbon pricing, market fluctuations, and evolving sustainability regulations, alongside changes in the demand for climate-related education and research. This included assessing trends in student enrolments in sustainability-focused courses, research funding opportunities for low carbon technologies, and institutional positioning within the broader sustainability research landscape. These insights help to prepare the University to remain financially, operationally, and reputationally prepared for the transition to a low-carbon economy.

Climate-related risks are prioritised based on their potential impact, likelihood, and strategic significance relative to other risks within the University's RMF. Risks with high financial, operational, or reputational exposure are escalated within the Enterprise Risk Register, ensuring executive oversight and integration into strategic decision-making. Lower-priority risks are tracked and reassessed over time, ensuring responsiveness to emerging climate trends.

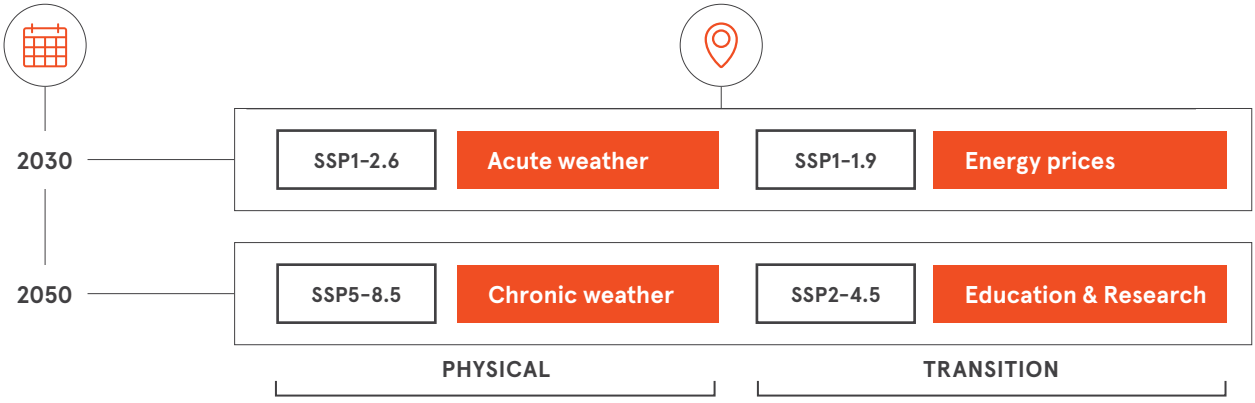
Embedding climate risk

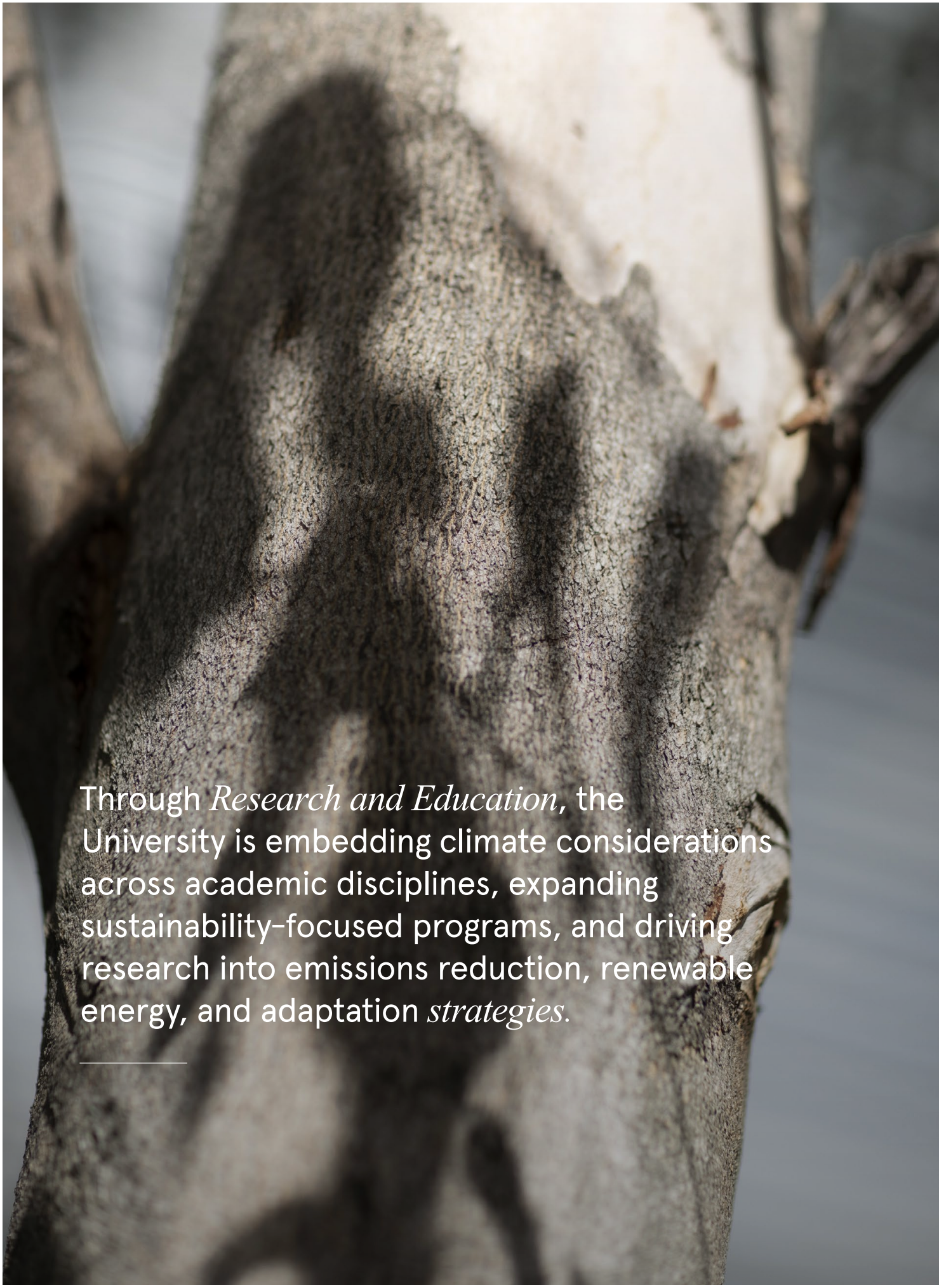
Recognising the increasing materiality of climate risks, the University has explicitly embedded climate-related risks within the Enterprise Risk Register and is in the process of embedding across Local Risk Registers. Climate risks are identified, assessed, managed, and monitored in accordance with the RMF, ensuring that they are integrated into enterprise-wide risk governance structures and considered within existing oversight mechanisms.

At the enterprise level, climate risks have been mapped to Enterprise Thematic Risks (ETRs), aligning them with the RMF. This structured approach ensures consistent risk assessment, prioritisation, and mitigation strategies, reinforcing climate risk as a core enterprise consideration.

At the local level, climate risk considerations have been embedded in local risk registers of priority areas including University Infrastructure, the Faculty of Science, and Central Operations Services. This reflects our focus on preparing for and mitigating the impacts of physical climate risks while also identifying and capturing opportunities to be a leader in climate research. Risk register reviews are facilitated by the Enterprise Risk Management Team, ensuring that climate risks are assessed with clear ownership assigned across relevant units. Where necessary, the Sustainability Team has provided targeted insights on climate and nature-related risk factors, further strengthening institutional awareness and response capabilities.

Climate scenario analysis parameters





Through *Research and Education*, the University is embedding climate considerations across academic disciplines, expanding sustainability-focused programs, and driving research into emissions reduction, renewable energy, and adaptation *strategies.*

Metrics and targets

Selection of sustainability targets

The University of Sydney recognises the urgency of climate action and has made emissions reduction a core priority in its *Sustainability Strategy 2020–2025* For this disclosure, we have selected existing targets that address our most material climate risks and meet current disclosure requirements. These targets provide an important foundation but do not yet fully capture the breadth of our identified risks and opportunities. As we develop our next strategy beyond 2025, we will establish more fit-for-purpose targets and metrics to better measure progress against our evolving risk profile and ensure transparent, accountable reporting.

Climate-related targets

The University has identified three key mitigation targets that meet disclosure requirements and reflect our material climate-related priorities. These targets guide operational decisions and are regularly reviewed to ensure alignment with emerging best practices and evolving regulatory expectations.

1. Net zero emissions from Scope 1 & 2 sources by 2030

Under the *Sustainability Strategy 2020–2025*, the University set a target to achieve absolute net zero Scope 1 and Scope 2 emissions by 2030[5], aligned with a 1.5°C pathway. The target applies to the University in its entirety, following the boundaries set by the National Greenhouse and Energy Reporting Scheme (NGERS), and covers all relevant greenhouse gases including carbon dioxide, methane, and nitrous oxide. Progress is measured against a 2018 baseline, using total gross emissions (tCO_2-e) for Scope 1 and 2, with annual tracking.

2. 100% renewable electricity sourcing by 2025[6]

Transitioning fully to renewable electricity is a critical component of emissions reduction. The University has already made substantial progress towards this goal through a Power Purchase Agreement (PPA) with Red Energy, which covers almost all of the University's electricity needs. While the PPA covers the bulk of the footprint, there are a small number of sites not included, which the University accounts for by purchasing and surrendering additional renewable energy certificates.

3. On-site renewable energy generation – 3 megawatts by 2025

Expanding on-site renewable energy capacity enhances energy security and contributes directly to emissions reduction efforts. The University continues to invest in rooftop solar installations and infrastructure upgrades to meet this target.

5. A business case is currently being developed to evaluate options for managing remaining Scope 1 emissions. This process will inform implementation decisions beyond the current 2020–2025 strategy and ensure that final delivery pathways are both feasible and credible.
6. Subsidiaries are excluded from this calculation due to their immaterial emissions footprint.

Performance against emissions and energy targets

Scope 1 & 2 emissions

The Scope 1 and 2 greenhouse gas (GHG) emissions are reported adhering to the principles of the Greenhouse Gas Protocol and National Greenhouse and Energy Reporting (NGER) Scheme. The reporting boundary follows an operational control approach, encompassing all assets and activities where the University has the authority to implement operational policies. For Scope 2, both location-based and market-based methodologies have been used to report emissions to provide a complete and transparent picture of the University's electricity-related emissions.

The Scope 1 emissions include sources of direct emissions from both stationary and mobile fuels. For calculation of Scope 1 emissions, consumption data for natural gas, diesel, petrol, ethanol and liquid petroleum gas (LPG) is collected from invoices and emission factors are applied in accordance with the latest government-published sources, including the National Greenhouse Accounts (NGA). At present, data on refrigerant leakage, land-use change emissions, livestock emissions, and emissions from bio-digesters is unavailable and therefore excluded from the Scope 1 boundary. We acknowledge that improving the accuracy of our emissions reporting is essential to meeting our climate commitments, and the University is actively working to address these data gaps in Scope 1 reporting.

The Scope 2 emissions sources include all indirect emissions from electricity consumption. The National Greenhouse Accounts (NGA) emission factors have been used to calculate the location-based emissions. For market-based emissions, the University has a renewable power purchase agreement (PPA) with an electricity retailer to procure large-scale generation certificates (LGCs) which sufficiently meet the criteria to be used a market-based instrument in Scope 2 reporting.

EMISSIONS CATEGORY	2024 (JAN-DEC) EMISSIONS (tCO2-e)
Scope 1 emissions	
Stationary energy combustion	
Natural gas	5,405
Diesel	715
Vehicle fuels (including mobile plant and equipment)	
Diesel	327
Petrol	104
LPG	8
Ethanol	23
Total Scope 1 emissions	**6,604**

Net zero emissions from Scope 1 & 2 sources by 2030

Location-based GHG Emissions (tCO_2-e)

Location-based Scope 2 emissions are calculated using the average emissions intensity of the local electricity grid. This method reflects the physical reality of emissions from electricity consumed on campus, regardless of energy contracts or purchases..

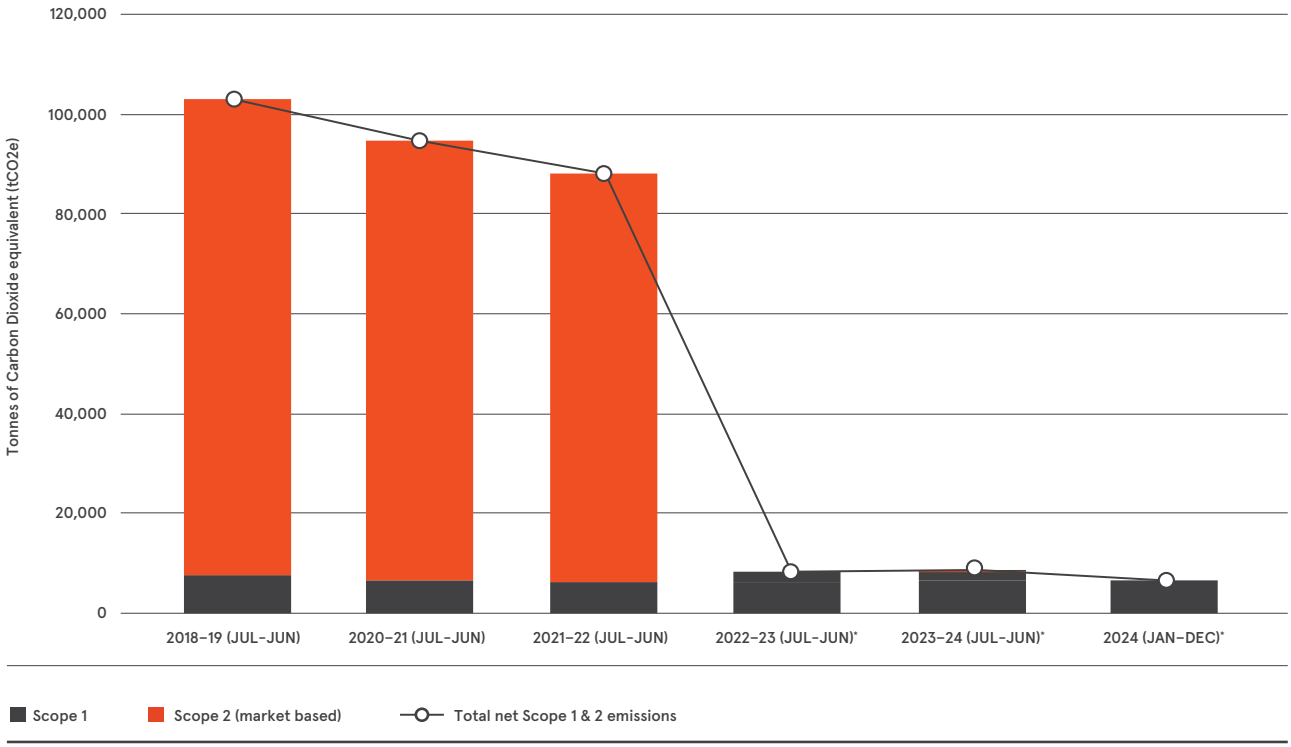
		JUL–JUN REPORTING YEAR				JAN–DEC REPORTING YEAR	
EMISSION CATEGORY (tCO2e)	2018–19 BASELINE	2020–21	2021–22	2022–23	2023–24	2024	% CHANGE FROM BASELINE
Scope 1 emissions	7,440	6,611	6,046	6,202	6,594	6,604	-11.24%
Scope 2 emissions (location-based)	95,553	88,202	82,179	76,378	75,373	73,700	-22.87%
Total net Scope 1 & 2 (location-based) emissions	**102,993**	94,813	88,225	82,580	81,967	**80,304**	**-21.99%**

Market-based GHG Emissions (tCO_2-e)

Market-based Scope 2 emissions allow for the use of market-based mechanisms such as renewable energy certificates (RECs) and Power Purchase Agreements (PPAs). This approach reflects the emissions from electricity the University has purposefully chosen to buy and is used to track progress against our Net Zero by 2030 target.

		JUL–JUN REPORTING YEAR				JAN–DEC REPORTING YEAR	
EMISSION CATEGORY (tCO2e)	2018–19 BASELINE	2020–21	2021–22	2022–23	2023–24	2024	% CHANGE FROM BASELINE
Scope 1 emissions	7,440	6,611	6,046	6,202	6,594	6,604	-11.24%
Scope 2 emissions (market-based)	95,553	88,202	82,179	2,005	2,088	0	-100%
Total net Scope 1 & 2 (market-based) emissions	**102,993**	94,813	88,225	8,207	8,682	**6,604**	**-93.59%**

Year-on-year Scope 1 and 2 (Market-based) GHG emissions



*From 2022–23, renewable electricity was sourced via a Power Purchase Agreement (PPA).

Historically, baselines and emissions reporting under the University's Sustainability Strategy have been based on July to June years, aligning with National Greenhouse and Energy Reporting Scheme (NGERS) requirements. This disclosure represents the first time the University has reported emissions on a calendar year basis, aligning our climate-related disclosures with the University's financial reporting period.

At present, livestock emissions are not included in our Scope 1 inventory. However, we recognise that these emissions are likely to be material, given the scale of our agricultural operations. As of 2024 year-end we manage approximately 15,443 sheep and 2,135 cattle across our properties. As part of our ongoing commitment to improving the completeness and accuracy of our emissions reporting, we intend to incorporate livestock emissions in future disclosures. This work will align with recognised methodologies for agricultural emissions accounting and support our broader efforts to strengthen climate-related disclosures.

BDO were engaged to provide limited assurance for the reported 2024 Scope 1 and Scope 2 location-based and market-based emissions. For more information about the procedures conducted please refer to limited assurance report on page 24.

100% renewable electricity sourcing by 2025

The University has successfully achieved its target to source 100% of its electricity from renewable sources, ahead of the 2025 deadline. This has been delivered primarily through a Renewable Energy Power Purchase Agreement (PPA) with Snowy Energy.

While the University purchases renewable electricity through the PPA for the majority of its sites, the electricity itself is not supplied directly to each location. Instead, the renewable credentials are confirmed through the surrender of Large-scale Generation Certificates (LGCs), with each LGC representing 1 MWh of renewable electricity generation.

Under the agreement, Snowy Energy is mandated to surrender 20% of the required LGCs on the University's behalf. The remaining 80%, together with additional LGCs purchased from Snowy Energy to cover three smaller sites not included in the PPA, are procured and surrendered by the University each year. For calendar year 2024, the University will surrender a total of 109,932 LGCs, equivalent to 109,932,163 kWh of electricity consumption.[7]

This approach ensures that all electricity consumed by the University is matched with certified renewable generation. It satisfies the 100% renewable electricity target from both a carbon accounting and procurement perspective and demonstrates the University's strong commitment to decarbonising its operations and supporting the broader energy transition.

		JUL–JUN REPORTING YEAR				JAN–DEC REPORTING YEAR
METRIC	2018–19 BASELINE	2020–21	2021–22	2022–23	2023–24	2024
Percentage of electricity from renewables	0%	0%	0%	97.64%	97.67%	100%

On-site renewable energy generation – 3 megawatts by 2025

The University continues to make strong progress toward its on-site renewable energy target, with total installed capacity reaching 1.99 MW by the end of the 2024 calendar year. In 2024 alone, an additional 628 kW of solar was installed across the Camperdown and Darlington campuses. The University remains on track to achieve its 3 MW target, with additional installations planned in 2025 across multiple campuses, including Camden, Narrabri, Darlington, and One Tree Island.

		JUL–JUN REPORTING YEAR				JAN–DEC REPORTING YEAR
METRIC[8]	2018–19 BASELINE	2020–21	2021–22	2022–23	2023–24	2024
Installed on-site renewable capacity (MW)	0.86	1.07	1.14	1.14	1.86	1.99

7. University of Sydney receives bi-annual transfers of LGCs from Snowy Energy into its REC Registry account based on invoiced electricity consumption. The University calculates the electricity usage specific to university-operated sites and surrenders the required LGCs accordingly.

8. During the preparation of the 2024 sustainability data, discrepancies were identified in historical solar reporting. Some operational sites had been omitted, and incorrect capacity figures were recorded for others, leading to inconsistencies in prior reported outputs. A full review has now been completed, and an annual verification process will be implemented to ensure ongoing data accuracy and consistency.

Scope 3 emissions

Scope 3 emissions represent the largest portion of the University of Sydney's greenhouse gas (GHG) footprint. These emissions occur across the University's upstream and downstream value chain and are not directly controlled by the University but are critical to understanding its overall climate impact.

BDO was engaged to provide limited assurance over the University's reported 2024 Scope 3 emissions. For more information about the procedures conducted, please refer to the limited assurance report on page 24.

Methodology to account for Scope 3 emissions

The University employed a hybrid approach to Scope 3 emissions accounting, combining environmentally extended input-output (EEIO) analysis with process-based information and estimates. The calculations were carried out by the Integrated Sustainability Analysis (ISA) research group within the University, using the globally recognised GLORIA[9] multi-region input-output (MRIO) database that it previously built.

EEIO modelling allows the University to comprehensively calculate emissions across our value chain, including upstream and downstream activities between different sectors of the economy. This goes far beyond emissions from indirect suppliers just a few steps removed from direct procurement. In contrast, traditional process-based life-cycle analysis (LCA) of Scope 3 emissions tends to concentrate on direct inputs and suppliers within the first or second tier of the supply chain, potentially missing material emissions further upstream or downstream. By looking more deeply into the value chain, the EEIO approach provides a more complete and connected view of indirect emissions.

The University's methodology aligns with the Greenhouse Gas Protocol's recommendation to combine top-down EEIO with bottom-up LCA for maximum completeness and accuracy. As a result, the University's reported Scope 3 emissions are likely to be significantly higher, and more representative, than organisations using purely process-based methods.

The IO analysis calculations focus on indirect impacts. Two Scope 3 areas were analysed using different methods:

- International student travel (the majority of Scope 3, Category 9) was calculated using the International Civil Aviation Organization (ICAO) online carbon emissions calculator or, where destinations were unavailable, using the International Air Transport Association (IATA) online calculator.
- Financed emissions (Scope 3, Category 15) were assessed by Mercer using detailed investment data.

9. GLORIA is part of the virtual Industrial Ecology Laboratory as detailed on their website.

Scope 3 emissions by category

The following table summarises the Scope 3 emissions for calendar year 2024, covering all 15 categories defined by the Greenhouse Gas Protocol:

SCOPE 3 CATEGORY	2024 (JAN-DEC) EMISSIONS (tCO2-e)
1. Purchased goods and services	158,654
2. Capital goods	54,239
3. Fuel- and energy-related activities not included in Scope 1/2	17,858
4. Upstream transportation and distribution	1,809
5. Waste generated in operations	6,070
6. Business travel	9,298
7. Employee commuting	1,007[10]
8. Upstream leased assets	862
9. Downstream transportation and distribution	23,718
10. Processing of sold products	18,085
11. Use of sold products	7,233
12. End-of-life treatment of sold products	0
13. Downstream leased assets	796
14. Franchises	0
15. Investments	49,949[11]
Total Scope 3 emissions	**349,578**

Scope 3 key insights

The University's Scope 3 emissions profile paints a detailed picture of the carbon intensity embedded across its extended operations and value chain. The largest share of emissions is generated upstream, particularly through purchased goods and services and capital goods, which together account for more than 60% of total Scope 3 emissions. Within this, some of the most emissions-intensive purchases are tied to core research and teaching functions, including laboratory and clinical supplies and agricultural inputs.

Contracted services also play a major role. Contractors, international student agents, and research service grants are significant drivers of both operational spending and emissions. Emissions related to capital development were substantial in 2024, partly due to significant projects (e.g. J15 Shepherd Street Building and G08 Molecular Bioscience Building). Capital development emissions will continue in 2025, particularly in relation to the Sydney Biomedical Accelerator. These vital investments will carry a high carbon footprint during their delivery.

Downstream, there are key emissions hotspots around financial investments and international student travel. Emissions associated with flights taken by full-fee-paying international students (reported under Category 9) contribute nearly 7% of Scope 3 emissions.

This work provides a foundation for informed decarbonisation efforts, supplier engagement, and strategic integration of climate impacts across the University's operations and investments.

10. Employee commuting emissions reflect greenhouse gases associated with staff driving to work, specifically emissions enabled by the University's provision of on-campus parking facilities.
11. Category 15 investment emissions analysis is based on 31 December 2023 private market holdings data and 30 June 2024 public market holdings data.

As we *shape* our next strategy beyond 2025, we will set more fit-for-purpose *targets* to capture the full breadth of climate *risks* and *opportunities*, ensuring transparent and accountable progress.

Independent Assurance Report

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INDEPENDENT ASSURANCE REPORT

To the Senate of the University of Sydney

Conclusion

We have undertaken a limited assurance engagement on the Greenhouse Gas ('GHG') statement of the University of Sydney for the year ended 31 December 2024, comprising the Emissions Inventory summarised below and the Explanatory Notes.

Emissions category	2024 (Jan-Dec) emissions (tCO2-e) - Location-based	2024 (Jan-Dec) emissions (tCO2-e) - Market-based
Scope 1 emissions	6,604	6,604
Scope 2 emissions	73,700	0
Scope 3 emissions	349,578	349,578
Total emissions	**429,882**	**356,182**

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the University of Sydney's GHG statement for the year ended 31 December 2024 is not prepared, in all material respects, in accordance with the GHG Protocol Corporate Accounting and Reporting Standard ('GHG Protocol') and GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard ('Scope 3 Standard') methodology.

Basis for conclusion

We conducted our engagement in accordance with Standard on Assurance Engagements ASAE 3410 *Assurance Engagements on Greenhouse Gas Statements* issued by the Auditing and Assurance Standards Board. This standard requires that we plan and perform this engagement to obtain limited assurance about whether the GHG statement is free from material misstatement.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

Senate's responsibilities

The Senate of the University of Sydney is responsible for the preparation of the GHG statement in accordance with the GHG Protocol Standard and Scope 3 Standard methodology. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation of a GHG statement that is free from material misstatement, whether due to fraud or error.

Our independence and quality management

We have complied with the independence and relevant ethical requirements of APES 110 *Code of Ethics for Professional Accountants (including Independence Standards)*, which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

The firm applies Auditing Standard ASQM 1 *Quality Management for Firms that Perform Audits or Reviews of Financial Reports and Other Financial Information, or Other Assurance or Related Services Engagements* which requires the firm to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Assurance practitioner's responsibilities

Our responsibility is to express a limited assurance conclusion on the University of Sydney's GHG statement based on the procedures we have performed and the evidence we have obtained. We conducted our limited assurance engagement in accordance with Standard on Assurance Engagements ASAE 3410, *Assurance Engagements on Greenhouse Gas Statements* ('ASAE 3410'), issued by the Auditing and Assurance Standard Board. That standard requires that we plan and perform this engagement to obtain limited assurance about whether the GHG statement is free from material misstatement.

A limited assurance engagement undertaken in accordance with ASAE 3410 involves assessing the suitability in the circumstances of the University of Sydney's use of the GHG Protocol Standard and Scope 3 Standard methodology as the basis for the preparation of the GHG statement, assessing the risks of material misstatement of the GHG statement whether due to fraud or error, responding to the assessed risks as necessary in the circumstances, and evaluating the overall presentation of the GHG statement. A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks.

The procedures we performed were based on our professional judgement and included:

- Undertaking enquiries with management regarding the process and controls for capturing, collating, quantification and reporting the Emissions Inventory and Explanatory Notes;
- Reconciling the GHG statement with the University of Sydney's underlying records;
- Undertaking analytical review procedures over data and obtaining explanations from management regarding unusual or unexpected amounts; and
- Reviewing the University Sydney's quantification methodology to ensure that it is appropriate for assurance and for assessing the preparation, collation and quantification of the GHG statement, in all material respects, in accordance with the GHG Protocol Standard and Scope 3 Standard methodology for the year ended 31 December 2024.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement and consequently the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have 3 been obtained had a reasonable assurance engagement been performed. Accordingly, we do not express a reasonable assurance opinion about whether the University of Sydney's GHG statement has been prepared, in all material respects, in accordance with the GHG Protocol Standard and Scope 3 Standard methodology for the year ended 31 December 2024.

Inherent limitations

Because of the inherent limitations of an assurance engagement, together with the internal control structure it is possible that fraud, or error may occur and not be detected.

Restricted use

This report has been prepared for use by Senate of the University of Sydney for the purpose of providing assurance of the GHG statement for the year ended 31 December 2024. We disclaim any assumption of responsibility for any reliance on this report to any person other than the Senate of University Sydney, or for any other purpose other than that for which it was prepared.

BDO Audit Pty Ltd

BDO

Ian Hooper
Director

Sydney, 20 May 2025

THE UNIVERSITY OF SYDNEY

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Produced by the Sustainability Team, Office of the Provost and Deputy Vice-Chancellor, April 2024.