Sustainability-Linked Loan Framework
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A campus and culture built around sustainability

MACQUARIE UNIVERSITY

We are embedding sustainability in all our teaching programs to ensure our students are equipped to meet the complex challenges of today and tomorrow.

Macquarie University is engaged with the real and often complex problems and opportunities that define our lives. Since our foundation 60 years ago, we have aspired to be a different type of university—one focused on fostering collaboration between students, academics, industry and society. As a collective, we are advancing world-class theoretical thinking and translating it into real-world solutions.

Over the years, we have grown to become the centre of a vibrant local and global community. Our Wallumattagal Campus—named in recognition of the First Nations country on which the University is situated—is uniquely located in the heart of Australia’s largest high-tech precinct, Sydney’s Macquarie Park.

More than A$1 billion has been invested in our facilities and infrastructure, ensuring our 44,000 students and 3000 staff can thrive on a campus that is dynamic, sustainable and built for collaboration. We are ranked among the top one per cent of universities in the world and recognised for producing graduates among the most sought-after professionals in the world.

We enjoy an enviable reputation for research excellence—100 per cent of our research is rated at world standard or above, and we rank among the top 10 universities in Australia in many research disciplines.

We are also committed to undertaking research that addresses global sustainability challenges and we are embedding sustainability in all our teaching programs to ensure our students are equipped to meet the complex challenges of today and tomorrow.

Our students have access to a wide range of degrees, majors and specialisations including the Environmental Management major of the Bachelor of Environment, the Environmental Finance specialisation of the Master of Applied Finance and the Master of Commerce that cover sustainability, ethics and the SDGs, and elective units in the Master of Applied Economics, the Master of Applied Finance and the Master of Business Administration that cover corporate and environmental sustainability topics.

1 Degrees, majors and specialisations with a sustainability focus include: the Environmental Management major of the Bachelor of Environment, the Environmental Finance specialisation of the Master of Applied Finance and the Master of Commerce that cover sustainability, ethics and the SDGs, and elective units in the Master of Applied Economics, the Master of Applied Finance and the Master of Business Administration that cover corporate and environmental sustainability topics.
Advancing a greener future
MACQUARIE’S SUSTAINABILITY STRATEGY

Macquarie has already significantly reduced landfill waste, greenhouse gas emissions, and potable water consumption while also protecting flora and fauna biodiversity on campus.

As a university – a place of future-focused research and education that generates real-world impact – Macquarie is uniquely positioned to advance a more sustainable future.

Our understanding of sustainability is aligned with the United Nations Sustainable Development Goals (SDGs). The SDGs are 17 interlinked goals designed as a global blueprint to achieve a better and more sustainable future for all.

Our commitment to the principles of sustainability in all we do includes:

- undertaking research that contributes to solving global challenges
- ensuring students are able to contribute actively to an environmentally healthy and equitable society
- reducing the negative impact on our society and environment
- consuming energy, water, food, products and transport responsibly
- actively supporting our local community and region.

Our Sustainability Strategy 2015–2019 had objectives that centred on research priority areas and initiatives to embed sustainability into our curriculum. Additionally, it emphasised continuous improvement in environmental protection and management. The former strategy led to a significant reduction in landfill, greenhouse gas emissions and potable water consumption, in addition to protecting flora and fauna biodiversity on campus.

We are now in the process of developing Macquarie’s next sustainability strategy that will guide our initiatives and efforts through to 2030. In framing and seeking feedback on the new strategy, we established three key working groups: Wallumattagal Campus, Community and People, and Research and Education, with Indigenous cultural knowledge and the SDGs embedded into all three.

Our next sustainability strategy will complement the Macquarie Advantage Education Strategy. Sustainability is a value and an ethos the education strategy will embed into education. Our passion for promoting sustainability, solving known and emerging problems, and preparing future leaders to make a positive impact in the world is our Macquarie advantage.

This commitment to continue making a real impact and contributing to the SDGs is evidenced through the development of key performance indicators (KPIs) for our Sustainability-Linked Loan Framework.
Our journey to date

SUSTAINABILITY TIMELINE

Ranked #1 in the world
for SDGs Life Below Water and #4 for Clean Water and Sanitation, in the top 20 for five categories and #39 overall Times Higher Education Impact Rankings, 2023

WGEA Employer of Choice
Athena SWAN Bronze Award Workplace Gender Equality Agency, 2022

Teaching
- Bachelor of Biodiversity and Conservation
- Bachelor of Environment
- Master of Conservation Biology
- Master of Environment
- Master of Sustainable Development

Research centres
- Ethics and Agency
- Hearing
- Lifespan Health and Wellbeing
- Motor Neuron Disease
- Smart Green Cities
- Transforming Energy Markets

2015–2019
Sustainability strategy
Centred on research priority areas and initiatives to embed sustainability into our curriculum, as well as continuous improvement in environmental protection and management

2018–2019
Sustainability Financing Framework
The world’s first dual-tranche and longest-tenure sustainability bond, achieving global recognition and receiving the title of Sustainability Bond of the Year: Corporate at the 2019 Environmental Finance Bond Awards. The use of proceeds allocated to supporting green building projects, promoting the sustainable management of waterways and enhancing access to essential services

July 2020
Renewable electricity
Total greenhouse gas emissions cut by 50 per cent, with 100 per cent of campus electricity sourced from Snowy hydro-backed Red Energy

July 2023
Sustainability-linked loan
A $450 million sustainability-linked loan facility, the largest in the higher education sector. Six ambitious KPIs. All margin adjustments benefit disadvantaged students through scholarships

2023–2030
Sustainability strategy
Under development

* Scope 1 and 2 greenhouse gas emissions.
Financing sustainable initiatives
SUSTAINABILITY BONDS

In August 2018, Macquarie launched its inaugural Sustainability Financing Framework, issuing $250 million in the world’s first dual-tranche and longest-tenure sustainability bond. The transaction was globally recognised at the 2019 Environmental Finance Bond Awards, winning the prestigious award of Sustainability Bond of the Year: Corporate.

The transaction, split between A$200 million 10-year and A$50 million 25-year tranches, was led by HSBC and the National Australia Bank (NAB). NAB remarked that our clear commitment to sustainability principles made it logical to introduce a sustainability bond to the Australian dollar market.

With impact reporting across green, social, and sustainability bonds still in its relative infancy in Australia, the transaction provided the opportunity to show leadership in this area.

Macquarie led the world with its award-winning A$250 million transaction.

Macquarie University Financing Platform

The move towards sustainability financing has been a fundamental part of Macquarie’s overall commitment to embed environmental and social considerations into processes and practices across our core activity areas. In 2018, we developed the inaugural Sustainability Financing Framework to govern our engagement in the debt capital markets, with proceeds designated to fund eligible green and social projects in line with the International Capital Market Association (ICMA) Sustainability-Linked Bond Guidelines and aligned with the SDGs.

Macquarie’s Sustainability-Linked Loan Framework extends our commitment to green and social financing to also include other financial instruments, such as loans.

Macquarie University Financing Platform

SUSTAINABILITY BONDS

Use of proceeds
Proceeds must be used on initiatives that fall within green or social (or both) nominated categories.

ICMA sustainability bond principles: 4 pillars
1. Use of proceeds
2. Process for project evaluation and selection
3. Management of proceeds
4. Reporting (includes impact reporting)

SUSTAINABILITY-LINKED LOAN FRAMEWORK

Key performance indicators (KPIs)
1. Sustainability performance targets (SPTs)
2. Loan/bond characteristics
3. Reporting
4. Verification

Our objective is to further integrate our commitments across financing, and drive the achievement of ambitious, sustainable outcomes that are outlined in Macquarie’s new sustainability strategy, designed with a life cycle extending to 2030.
Prioritising sustainable outcomes

SUSTAINABILITY-LINKED LOAN FRAMEWORK

The proceeds of funds raised under this framework will be used to make real progress against the United Nations Sustainable Development Goals.

Macquarie intends to issue and manage sustainability-linked loans in alignment with the Asia Pacific Loan Market Association (APLMA) sustainability-linked Loan Principles 2023 (SLLPs). Instead of identifying a specific use for proceeds, Macquarie will use the proceeds of any debt issued under this framework for general corporate purposes, prioritising initiatives that deliver sustainable outcomes.

All sustainability-linked loans adhere to the following governance structure:
1. Selection of key performance indicators (KPIs)
2. Calibration of sustainability performance targets (SPTs)
3. Structural characteristics
4. Reporting
5. Verification

The proceeds of funds raised under this framework will be used to make real progress against the United Nations Sustainable Development Goals.

Selection of Key Performance Indicators (KPIs)

In collaboration with Macquarie’s faculties, a structured process was followed for the identification and development of a comprehensive list of potential KPIs for inclusion in the framework.

An initial list of 20 potential KPIs were identified from existing and prospective projects that covered all environmental, social and governance (ESG) categories.

To validate the materiality of the KPIs, a scorecard assessment criteria was developed in line with the SLLPs and Macquarie’s new sustainability strategy. KPIs from the initial list were assessed against these criteria to arrive at the following KPIs:

- Scope 1 and 2 emissions
- Scope 3 emissions
- Biodiversity conservation
- Cultural awareness and SDGs training
- Gender equality
- Diversity and inclusion

Scorecard assessment criteria

- Alignment: Consistent with Macquarie’s strategic framework and new sustainability strategy
- Consistent with bank market priorities
- Materiality: Relevant to the operations of the University and of strategic significance to stakeholders
- Meaningful expected outcomes
- Ambition: Requires initiatives beyond business as usual
- Natural improvement in measurement relative to historical performance
- Achievability: Clearly defined steps to achieve targets
- Target can be reasonably met by the organisation over a predefined timeline
- Measurability: Performance and status against detailed time-bound plans and impact reporting available
- Assessment to peers or other benchmarks
- Cost (consideration): Considered but not weighted in the scorecard
- Expected approval by relevant stakeholders and committees

Definition of greenhouse gas scopes

- Scope 1: Greenhouse gas emissions are direct emissions from an activity (e.g. natural gas used for heating or fuels used in cars).
- Scope 2: Greenhouse gas emissions are the electricity consumed from the generation of purchased electricity.
- Scope 3: Greenhouse gas emissions are the result of activities that occur as part of the upstream and downstream supply chain. They are often referred to as value-chain emissions (e.g. emissions associated with an organisation’s purchase of goods and services, including travel).
2. CALIBRATION OF SUSTAINABILITY PERFORMANCE TARGETS (SPTs)

**KPI: SCOPE 1 AND 2 EMISSIONS**

SPT: Reduce Scope 1 and Scope 2 emissions by 2028 from a 2022 baseline

Macquarie has successfully achieved a 90 per cent reduction since 2019. This KPI aims to continue reducing carbon emissions by focusing on the last 10 per cent that are more challenging to abate.

Our pathways towards a carbon-neutral model will be achieved in line with our targets to:
- reduce absolute Scope 1 emissions by a further 14 per cent by 2028
- reduce Scope 2 emissions to zero by 2024 and maintain them at zero thereafter.

Instead of offsetting our emissions, we are taking an absolute emissions reduction approach, which will require considerably more work. This work has been separated into two major projects to:
- define calculation methodologies and boundaries to measure and set a robust baseline for Scope 3 emissions
- develop and implement sustainable procurement guidelines and policies to inform Macquarie’s relationships with its suppliers.

The target will be measured annually using milestone targets that detail activities for measuring Scope 3 emissions and calibrating interim and long-term reduction targets.

To achieve the specified reduction in Scope 1 emissions, existing gas boilers will be electrified, requiring a significant investment. In addition, an electrification plan will be developed.

Our performance against these targets will be measured annually using milestones. These milestones will represent specific activities that will enable for an absolute reduction in emissions.

The SPT has been calibrated to ensure a high level of ambition, consistent with Macquarie’s new sustainability strategy. This ambition is demonstrated through:
- continuous material improvement from a 2022 baseline, noting we have already achieved a 90 per cent reduction in Scope 1 and 2 emissions since 2019
- alignment to a 1.5-degree pathway.

3 Measured in accordance with the National Greenhouse and Energy Reporting Scheme

4 According to the United Nations, in order to limit global warming to 1.5°C, annual emissions need to be reduced by half by 2030 and ultimately reach net zero by 2050.

We worked with independent experts to conduct an assessment of our Scope 3 emissions footprint to understand the extent and primary sources of emissions. This exercise identified the top five contributors to our Scope 3 emissions: construction materials and services, professional services, students working from home, machinery and vehicles, and ICT services and equipment. Importantly, this data was derived from a COVID-impacted year, leading us to anticipate an increase in Scope 3 emissions from travel in the future.

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The target will be measured annually using milestone targets that detail activities for measuring Scope 3 emissions and calibrating interim and long-term reduction targets.
For the purpose of this SPT, the parameters of biodiversity restoration will be primarily focused on the forest containing endangered Turpentine-Ironbark, which represents 3.5 hectares of Macquarie’s Wallumattagal Campus. The SPT has been calibrated to be ambitious, aiming for outcomes beyond business as usual.

In noting the unique and non-benchmarkable nature of biodiversity targets, additional outcomes will be achieved through annual targets that include:

- measuring the integrity of the forest area using geographic information system (GIS) software
- conducting annual vegetation surveys
- implementing additional primary and secondary weeding
- recruiting tree, shrub and ground species from local seed banks
- creating partnerships that embed biodiversity conservation into course materials and PACE (Professional and Community Engagement) program units.

We plan to track our performance against this SPT by measuring the percentage change in the area of forest with high and very high integrity, using GIS software. By 2028, we aim to increase this area by a minimum of 25 per cent, reaching 75 per cent from the 2022 baseline. Additional tracking will be completed through a condition scoring process, conducted by students and staff, using spatial analysis tools and vegetation scorecards to monitor the levels of forest integrity and restoration accurately.

This SPT comprises two components. The first component relates to our commitment to extend strategies and initiatives that allow us to take Indigenous education to new and exciting levels. The Manawari Aboriginal Cultural Safety Training is one of these initiatives. It encourages our students and staff to discover and cultivate respect for the values, beliefs and practices of the local Dharug people. The training is underpinned by our Indigenous Strategy 2016–2025 and reconciliation statement, and is expected to enhance cultural and Indigenous awareness for more than 20,000 students and staff by 2028.

The second component of the SPT comprises developing and implementing a new a new online training course about the SDGs. As a university, we recognise the important role we play in addressing global challenges by teaching the next generation of leaders. Similar to our Manawari Aboriginal Cultural Safety Training, the SDGs training is expected to reach 20,000 students and staff across the University by 2028.

In setting this SPT, we aim to make further progress towards achieving gender equality.

A sub-target includes achieving a minimum 40 per cent representation of both women and men in senior academic roles (associate professor and professor) in aggregate by 2030.

A lack of female representation at the higher levels of academia is not unique to Macquarie, pervading the higher education sector on a global scale. Our target of aligning with the WGEA 40:40 Vision for the upper levels of our academic workforce builds on existing programs that target a three per cent and five per cent increase in female representation across associate professor and professor levels respectively.

As a university, we recognise the important role we play in addressing global challenges by teaching the next generation of leaders.
The structural characteristics of each sustainability-linked loan will vary based on our performance against the SPTs. In general, achieving our KPIs will result in an adjustment to the margin (interest rate) that we pay to the bank. These financial incentives or penalties are defined in the documentation of each sustainability-linked loan, including the magnitude of the margin adjustment, effective dates and reporting requirements.

In line with our commitment to providing an equitable, accessible and inclusive environment, we have committed to use all margin adjustments from sustainability-linked loans to support students from disadvantaged backgrounds. This may include, but is not limited to, students who are the first in their family to attend university, Indigenous students or those from low socioeconomic backgrounds.

Prior to issuance, an independent verifier, such as a second-party opinion provider, is required to review the relevance and robustness of the selected KPIs, the level of ambition of the proposed SPTs and their calculation methodologies. Additionally, they assess the reliability of the baseline or reference point selected for KPI improvement. We engaged DNV Business Assurance Australia to provide a second-party opinion on the alignment of the June 2023 sustainability-linked loan with the SLLPs.

Post-issuance, our performance against these variables will be verified annually and reported to the appropriate lenders. The University also plans to publish a public report annually. Contact us if you have any questions.
Reinvesting in our community

Macquarie has committed to reinvest all margin adjustments from sustainability-linked loans to support students from disadvantaged backgrounds. The selection of scholarship recipients will be managed under our Widening Participation Program. Criteria for selection will include factors such as low socioeconomic status, first in the family to attend university and Indigenous. These scholarships will assist with accommodation and/or other living expenses.

In April 2020, Macquarie signed a seven-year contract to switch to a 100 per cent renewable electricity source for our Wallumattagal Campus in Macquarie Park. The move saw our total greenhouse gas emissions cut by 90 per cent, with the campus’ electricity being sourced from Snowy Hydro from 1 July 2020. Under the contract, we purchase approximately 54,422 MWh of clean energy per annum, which is equivalent to saving the emissions of 8,500 households each year.

Other sustainability initiatives aimed at reducing waste have successfully reduced landfill disposal to less than five per cent of the total waste generated on campus. Additionally, these initiatives include using recycled and sustainable materials in building works and revitalising existing buildings to improve energy efficiency. These measures – alongside our commitment to sustainable building design, energy efficiency, waste reduction, water conservation and biodiversity management – demonstrate our leadership and innovation in sustainability and protect one of our greatest assets: our green, parkland campus.

The contract with Red Energy, which is owned by Snowy Hydro, has helped us surpass our original aim of reducing emissions by 40 per cent by 2030. This partnership will also create new collaboration opportunities in sustainable energy research that benefit the wider community.
Mars Creek remediation

Mars Creek is one of two creeks traversing the Macquarie Park campus. In 2019 and 2020, a major rejuvenation project was undertaken to improve the restoration of these natural landscapes and wetlands.

The Mars Creek rehabilitation project has reduced the impact of storm flows for the Macquarie community and improved flood mitigation both on campus and downstream for the Lane Cove River. It has also significantly enhanced the native plants along the project’s creek edge.

To focus on improving the creek’s habitat, previous hard engineering works that originated in the 1960s were removed in a process of opening up a section of the creek that had been piped through a subterranean stormwater system for more than 50 years.

The project has created a new naturalised surface channel through a section of the original creek bed, reinstating a riparian corridor of approximately 20 metres in width.

Additional habitat features provide native freshwater eels with a new migration route from their existing habitat in the University’s lake to the rehabilitated upper reaches of Mars Creek.
Science camps for children who are Deaf or hard of hearing

Children who are Deaf or hard of hearing generally attend mainstream schools, and opportunities to meet other Deaf peers are rare. This means they often have no peers who can relate to the unique challenges they face. For example, despite the availability of hearing aids and cochlear implants to assist with hearing, they need to exert greater effort when listening in noisy environments, such as the classroom and playground.

Effective listening in these contexts is critical for positive educational and social outcomes. Additionally, children who are Deaf or hard of hearing tend to have poorer psychosocial outcomes, such as difficulties with peer relationships when compared to their typically hearing peers. Stigma, bullying, lack of access to role models who are Deaf or hard of hearing, or people who use Auslan (Australian sign language) can lead to further social isolation in childhood and beyond.

The reason the Australian Hearing Hub Junior Science Academy for children who are Deaf or hard of hearing was created in 2018 was to spark change in a small but significant way. The school holiday camps brought together key Australian Hearing Hub stakeholders, such as the Parents of Deaf Children, with Macquarie University academics, clinicians and educators at the Junior Science Academy.

The camps continue to grow with increased collaborative support from Australian Hearing Hub members (Hearing Australia, National Acoustic Laboratories, Cochlear Limited, NextSense, The Shepherd Centre and Macquarie University Hearing), the Junior Science Academy and Parents of Deaf Children.

Providing camps free of charge is a priority and is currently achieved via a variety of sources, including some ongoing funding, crowdfunding, donations and in-kind support.

The camps aim to provide opportunities for children who are Deaf or hard of hearing to engage with their peers in an accessible communication space through hands-on science activities designed for their needs.

For example, class sizes are capped at 12 children to reduce noise and provide a higher educator/volunteer-to-child ratio. The educators use assistive listening devices, captioning for videos and printouts for instructions. Auslan interpreters provide access for children who use Auslan, which also enables everyone to learn new signs.

All educators and volunteers undertake Deaf Awareness Training before the campus. The volunteers assist with the camps include clinical audiology students and young adults who are Deaf or hard of hearing. The camp aims to nurture a love for learning by making science fun, accessible and inspiring.

For parents of children who are Deaf or hard of hearing, it is an opportunity to meet other parents in similar situations.

Macquarie’s sustainability impact on the rise

In June 2023, Macquarie jumped 47 places to claim 39th position globally in the Times Higher Education (THE) Impact Rankings. We have also been recognised with top 10 rankings in two subcategories, including a number one spot.

The THE Impact Rankings assess the performance of universities against the United Nations 17 Sustainable Development Goals (SDGs). In 2023, 1591 universities across 112 countries and regions were assessed.

Macquarie stands at the pinnacle globally for SDG14: Life Below Water, securing the number one position in the world. Our other top rankings include:

- 4th for SDG6: Clean Water and Sanitation
- 12th for SDG8: Decent Work and Economic Growth
- 13th for SDG13: Climate Action
- 18th for SDG15: Life on Land.
RESPONSIBLE INVESTMENT MANAGEMENT

1. The University, through its strategic framework Our University: A Framing of Futures, has made a clear commitment to adhering to the principles of sustainability in all that it does.

2. The University positions itself as a responsible investor, believing companies or assets will not thrive over the long term if they ignore environmental issues, social issues, corporate governance issues and ethical issues.

3. As a responsible investor, the University will give serious and due consideration to environmental, social and governance (ESG) issues, as well as ethical issues, in the process of selecting and monitoring of investments. Investments will be made in line with University’s Modern Slavery Statement.

5. The University will exercise its ownership rights in accordance with the principles of being a responsible and long-term investor.

Source: Macquarie University Investment and Treasury Risk Management Policy (2023)

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