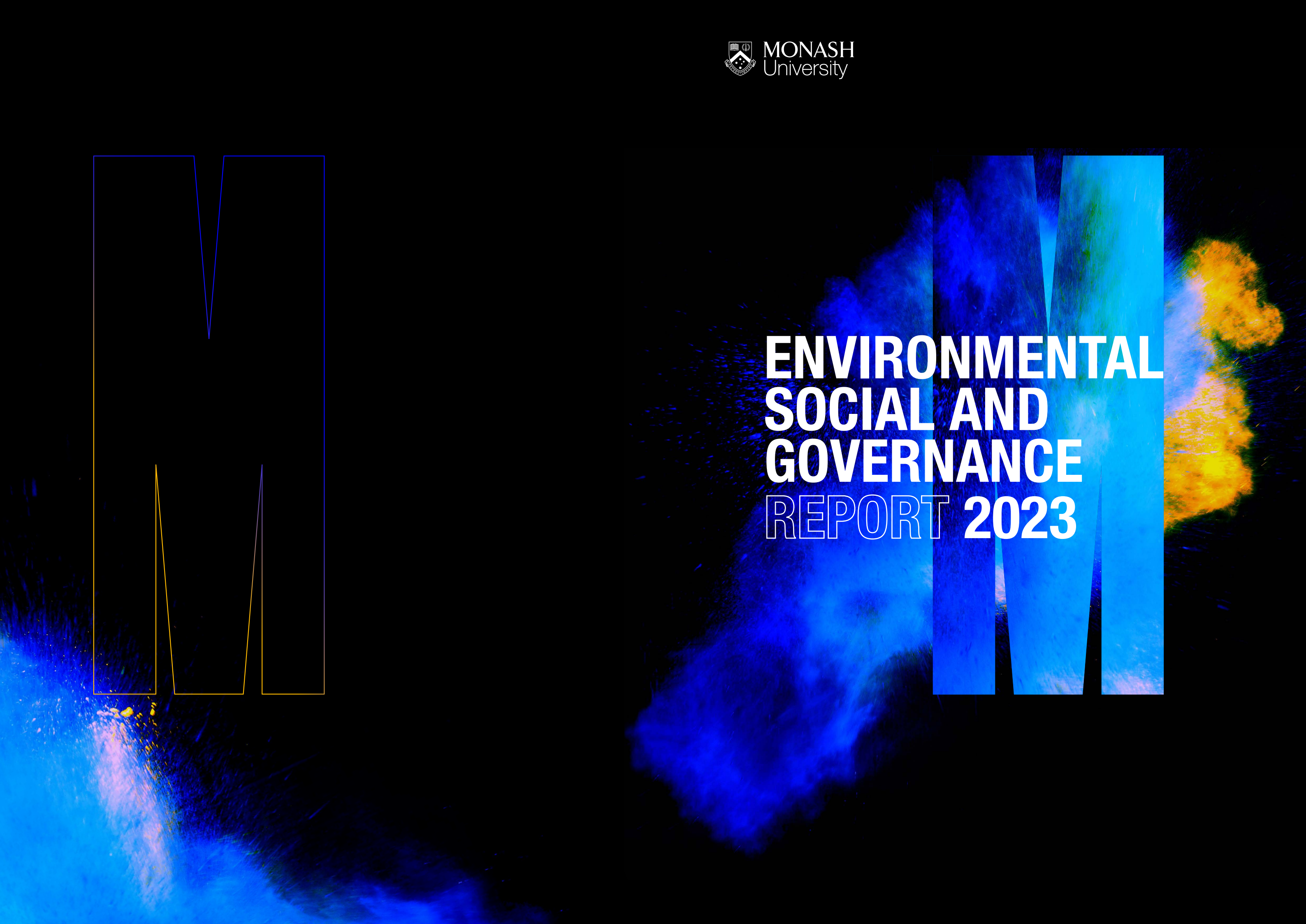




ENVIRONMENTAL SOCIAL AND GOVERNANCE REPORT 2023

MONASH UNIVERSITY recognises that its Australian campuses are located on the unceded lands of the people of the Kulin Nations, and pays its respects to their Elders, past and present.

Monash is committed to fostering a society that recognises, respects and includes Indigenous peoples, cultures and knowledge.

The University will contribute to the creation of this society by working with and celebrating Aboriginal and Torres Strait Islander peoples, cultures and knowledge, as well as Indigenous peoples of other places where Monash has a campus or major presence.

MONASH UNIVERSITY is committed to supporting and contributing to Treaty discussions in the state of Victoria and the Yoorrook Justice Commission.

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FOREWORD BY THE VICE-CHANCELLOR AND PRESIDENT, MONASH UNIVERSITY



2023 was a significant year for planetary health as we reached the halfway point for the 2030 target of the United Nations Sustainable Development Goals.

It was a year that included, in September 2023, the first UN Global Stocktake of progress against the 2015 Paris Agreement, which found the global community was ‘not on track’ to meet its commitments to mitigate climate change.

And it was a year that concluded with a warning by the Monash Climate Change Communications Research Hub that 2023 was likely to be the hottest year on record.

It is sobering to acknowledge how much work must be done to address climate change – the transformations still to be made to our economies, to our ways of doing business and to our own behaviour. But we should not ignore the encouraging advances that have been made in recent years to meet those challenges.

Those advances include new sustainability and climate-related financial reporting standards for capital markets, and global campaigns to support organisations committing to net zero emissions.

They include the rapid growth of technological innovations to reduce greenhouse emissions, such as advances in lithium sulfur battery development by the Faculty of Engineering, or by the Monash-led ARC Research Hub for Carbon Utilisation and Recycling, which is transforming carbon dioxide into valuable products.

And they include the emergence of a new generation of leaders, including students, staff and alumni of the Monash community, to coordinate action to address the impacts of a changing climate, to foster sustainability and to champion social justice.

Monash launched its first Environmental, Social and Governance Statement in 2016 and renewed its commitment with a second guiding statement in 2021. In the years since, we have greatly increased the scale of our contributions to sustainable practice, as this latest annual report on our ESG progress shows.

This year’s report has also been expanded considerably to incorporate climate risks, demonstrating further our commitment to aligning with better practice in sustainability matters and to being transparent in our endeavour to do so.

This same commitment will similarly shape the development of our next ESG Statement over the coming year, ensuring we advance the University’s social and environmental obligations in a manner that is consistent with the values and the expectations of our Monash community.

I am very pleased to see the progress we have made towards realising those commitments.

Professor Sharon Pickering

Vice-Chancellor and President

STATEMENT BY ESG & ESTATES COMMITTEE

The members of the Monash University ESG & Estates Committee present this report on Monash University's advances across its environmental, social and governance (ESG) commitments during the year ended 31 December 2023.

MEMBERS

The following persons were members of ESG & Estates Committee during the year of this report:

- > The Hon Simon Crean, Deputy Chancellor and Chair *(until June 2023)*
- > Ms Geraldine Johns-Putra, Council Member and Chair *(from July 2023)*
- > Mr Simon McKeon AO, Chancellor
- > Professor Margaret Gardner AC, President and Vice-Chancellor
- > Ms Cheryl Batagol PSM, ESG & Estates Committee Member
- > Ms Pitsa Binnion, Council Member
- > Ms Ishka De Silva, Council Member
- > Professor Susan Elliott AM, Interim President and Vice-Chancellor
- > Ms Jill Garner, Victorian Government Architect
- > Professor Shane Murray, Dean, Faculty of Art, Design & Architecture
- > Associate Professor Tui McKeown, Council Member
- > Ms Jennifer Samms, Council Member
- > Professor John Thwaites AM, Chair, Monash Sustainable Development Institute
- > Professor SueAnne Ware, Head of School of Architecture and Built Environment, University of Newcastle

MEMBERSHIP CHANGES DURING 2023

- > The Hon Simon Crean was Chair of the Committee from the beginning of the year until his passing in June 2023
- > Ms Geraldine Johns-Putra was a member from the beginning of the year. She was appointed Chair of the Committee in July 2023 and continues in office at the date of this report
- > Professor SueAnne Ware was a member from the beginning of the year until the duration of her term concluded in June 2023
- > Professor Margaret Gardner AC was a member from the beginning of the year until her resignation as President and Vice-Chancellor in August 2023
- > Professor Susan Elliott AM was appointed a member in August 2023 as Interim President and Vice-Chancellor until December 2023
- > Professor John Thwaites AM was appointed a member in August 2023 and continues in office at the date of this report
- > Ms Cheryl Batagol PSM was appointed a member in August 2023 and continues in office at the date of this report

MEETINGS OF MEMBERS

The meetings of the members of ESG & Estates Committee held during the year ended 31 December 2023, and meetings attended by each member are detailed in Table 1.1:

TABLE 1.1: ESG & ESTATES COMMITTEE MEETINGS, 2023

COMMITTEE MEMBER	MEETINGS AND DATES			
	1-2023	2-2023	3-2023	4-2023
	18 APR	14 JUN	29 AUG	2 NOV
The Hon Simon Crean	✓	✓	–	–
Ms G Johns-Putra	✓	✓	✓	✓
Mr S McKeon AO	✓	✓	✓	✓
Professor M Gardner AC	✓	✓	✓	✓
Ms C Batagol PSM	–	–	✓	✓
Ms P Binnion	✓	✓	–	–
Ms I De Silva	–	✓	–	✓
Professor S Elliott AM	–	–	✓	–
Ms J Garner	✓	✓	✓	✓
Professor S Murray	✓	✓	✓	✓
Assoc Professor T McKeown	✓	✓	✓	✓
Ms J Samms	–	✓	✓	✓
Professor J Thwaites AM	–	–	✓	–
Professor S Ware	✓	–	–	–

PRINCIPAL ACTIVITIES

Throughout 2023, in addition to discharging its responsibilities in planning and managing the University's estate, the Committee:

- > received and considered quarterly updates from management on the implementation of the nine priorities articulated in the ESG Statement 2021-2025;
- > oversaw the implementation of the University's commitment to the United Nations Sustainable Development Goals; and
- > endorsed for Council consideration, annual reports for publication on the University's progress in implementing the ESG Statement and the Sustainable Development Goals.

SIGNIFICANT ACTIVITIES AND CHANGES IN STATE OF AFFAIRS

Acknowledgement of the Honourable Simon Crean

The Committee was greatly saddened by the passing of the University's Deputy Chancellor and the Committee's Chair, the Hon Simon Crean on 25 June 2023. At the Committee's third meeting on 29 August 2023, members noted:

- > the Hon Simon Crean's remarkable legacy as a champion for Monash and communities the University was established to serve;
- > his leadership and vision as Chair of the ESG and Estates Committee; and
- > his contributions to advance the University's commitment to sustainability, to ESG principles and to responsible and ethical practice.



Resignation of President and Vice-Chancellor Professor Margaret Gardner AC

Monash University President and Vice-Chancellor, Professor Margaret Gardner AC, was appointed as the 30th Governor of Victoria following the recommendation of the Premier, The Honourable Daniel Andrews. Professor Gardner's role on the Committee concluded with her resignation from Monash University on 4 August 2023.

At the Committee's third meeting on 29 August 2023, members thanked Professor Gardner for her contributions to the business of the Committee and to the success of Monash University since her appointment as President and Vice-Chancellor in 2014.

Publication of 2022 ESG Report

The first comprehensive and aggregated annual report on Monash University's advances across the priority areas identified by the ESG Statement 2021-2025 was submitted to the Committee at its second meeting on 14 June 2023. The Committee noted the 2022 ESG Report and endorsed its submission to Council.

The 2022 ESG Report was subsequently approved by Council on 25 July 2023 and released to the public on 26 July 2023.

Publication of 2022 SDG Report

The first whole-of-institution annual report on Monash University's advances against the United Nations Sustainable Development Goals (SDGs) was submitted to the Committee at its second meeting on 14 June 2023. The Committee noted the 2022 SDG Report and endorsed its submission to Council.

The 2022 SDG Report was subsequently approved by Council on 25 July 2023 and released online as a live digital report on 26 July 2023.

ESG Reporting Expanded to Incorporate Climate Risk

The ESG Statement 2021-2025 emphasises the importance of adopting current standards of better practices in how the University reports on progress against its ESG priorities. The Committee considers disclosure of climate risks and mitigation strategies to be a further opportunity for the University to further align its ESG reporting with better practice. The Committee resolved at its third meeting on 29 August 2023 that climate risk disclosure should be incorporated into future ESG annual reporting.

Committee Performance Self-Evaluation

In November 2023 an online self-evaluation survey was circulated to ESG & Estates Committee members to help the University gain insight into how the Committee was fulfilling its governance responsibilities. The survey was part of a broader ongoing program to assess the effectiveness of boards and committees across the Monash Group. The majority of comments in the responses received were positive and did not require further action. Additional actions to address various other matters raised by the respondents, including revisions to the Terms of Reference, were approved by the Committee at its second meeting on 22 May 2024.

CURRENT AND LIKELY DEVELOPMENTS

Revised Terms of Reference

At its second meeting on 22 May 2024, Committee members endorsed a proposal to revise the Terms of Reference to clarify the expanded role and scope of the Committee to include ESG matters (since 2022) and the responsibilities of Committee members, particularly with regard to how the business of the Committee aligns with those of the Audit & Risk Committee and the Resources & Finance Committee.

The revised Terms of Reference were approved by University Council on 19 June 2024.

The revised ESG and Estates Committee Terms of Reference are provided in Appendix 1.

Climate Reporting Standards in Australia

In March 2024, the *Treasury Laws Amendment (Financial Market Infrastructure and Other Measures) Bill 2024* was introduced into the Federal Parliament to align with the International Financial Reporting Standards (IFRS) on Climate-related Disclosures and apply those standards in the Australian context. The proposed Bill would make climate related disclosure reporting mandatory for entities required to report under Chapter 2M of the *Corporations Act 2001*. As previously noted, notwithstanding that Monash does not report under Chapter 2M of the Corporations Act, the Committee has resolved that climate risk disclosure should be incorporated into ESG annual reporting to align with standards of better practice.

Renewal of the ESG Statement

At its second meeting on 22 May 2024, Committee members endorsed a proposal that a Working Group be established to explore the development of the next iteration of Monash's ESG Statement. The purpose of the Working Group will be to consult with stakeholders across the Monash community to develop an updated ESG Statement for Monash, taking into consideration:

- > the rapidly evolving and expanding ESG landscape;
- > the strategic direction and priorities of the University, including responsibilities to place and local community;
- > examples of ESG best-practice across Australian and international universities;
- > alignment with other University plans and programs;
- > the introduction of a Sustainable Investment Statement; and
- > alignment with other institutional reporting and communication requirements (e.g. annual reporting, SDG reporting).

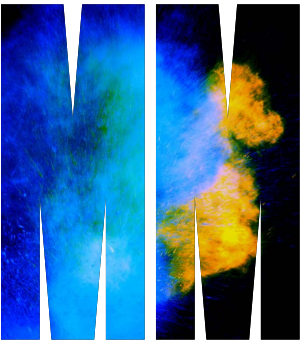
The proposal to establish the Working Group to renew the University's ESG Statement was approved by University Council on 19 June 2024.

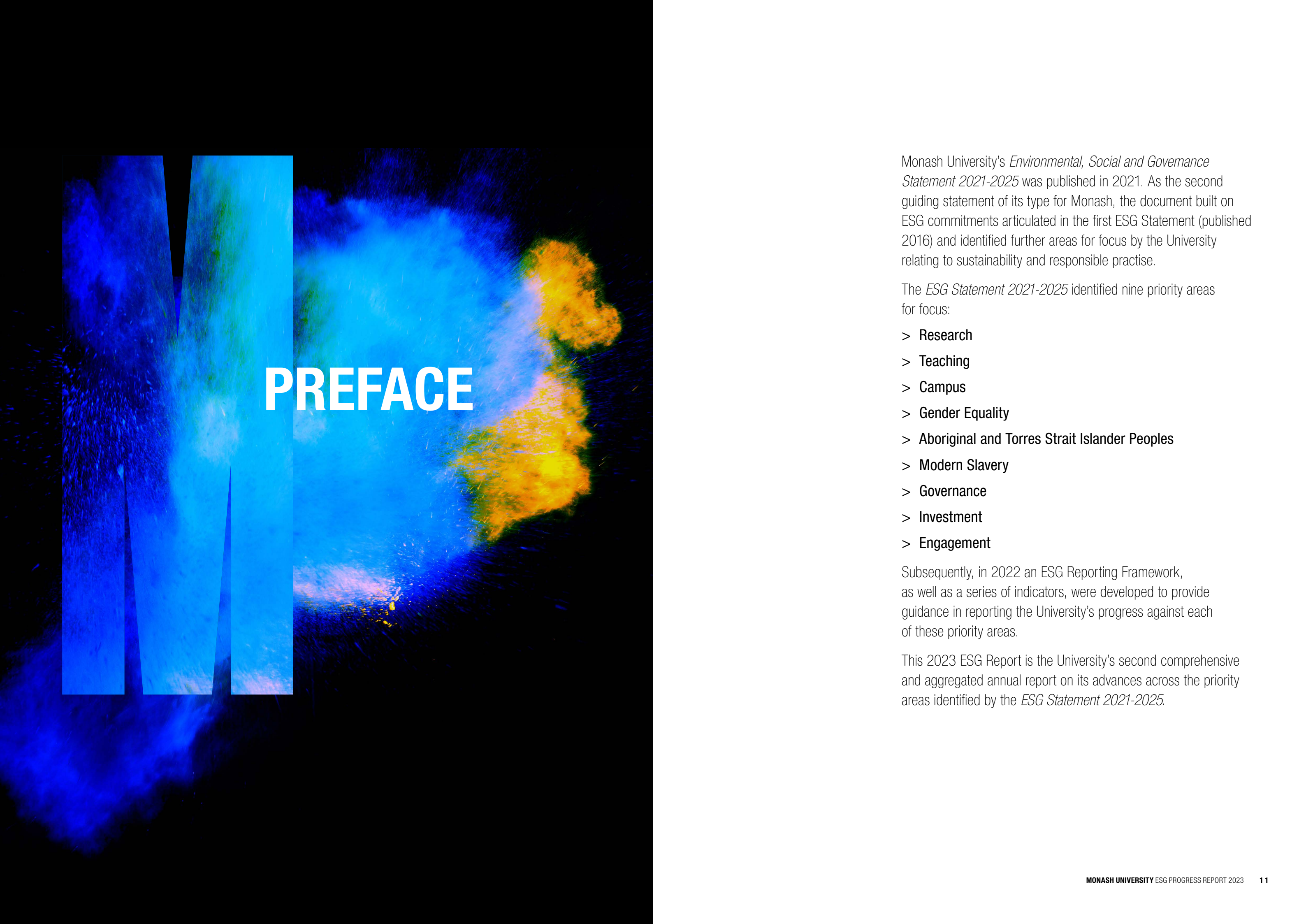
This report is made in accordance with a resolution of the members of the ESG & Estates Committee.

Ms Geraldine Johns-Putra

Council Member and Chair
ESG & Estates Committee
Melbourne, Australia

July 2024





PREFACE

Monash University's *Environmental, Social and Governance Statement 2021-2025* was published in 2021. As the second guiding statement of its type for Monash, the document built on ESG commitments articulated in the first ESG Statement (published 2016) and identified further areas for focus by the University relating to sustainability and responsible practise.

The *ESG Statement 2021-2025* identified nine priority areas for focus:

- > **Research**
- > **Teaching**
- > **Campus**
- > **Gender Equality**
- > **Aboriginal and Torres Strait Islander Peoples**
- > **Modern Slavery**
- > **Governance**
- > **Investment**
- > **Engagement**

Subsequently, in 2022 an ESG Reporting Framework, as well as a series of indicators, were developed to provide guidance in reporting the University's progress against each of these priority areas.

This 2023 ESG Report is the University's second comprehensive and aggregated annual report on its advances across the priority areas identified by the *ESG Statement 2021-2025*.

SUMMARIES OF PERFORMANCE

RESEARCH

The University will grow its leadership in social and environmental sustainability fields including research in clean and renewable energy, and improve how it captures, measures and reports discoveries that advance the UN Sustainable Development Goals.

ESG COMMITMENTS

1. Clean energy transitions
2. Leveraging and reporting against the UN Sustainable Development Goals
3. Establishing a central portal of ESG-relevant research activity

SUMMARY STATEMENT

Working with the community to develop new models and capabilities to achieve the SDGs is a key research priority for Monash. Throughout 2023, the University made significant progress in this endeavour. Publications relating to the SDGs have continued to grow strongly; in particular research relating to SDG 4: Quality Education has increased by 50 per cent, and research relating to SDG 9: Industry, Innovation & Infrastructure and relating to SDG 13: Climate Action, which have experienced increases of 59 per cent. Cross-faculty SDG related research maintains a clear trajectory for growth.

Monash is on track to exceed its 2022 record for outputs relating to SDG 7: Affordable & Clean Energy and research relating to clean energy is cited at a rate that is 85 per cent higher than the world average.

TEACHING

The challenges of the age are environmental and social challenges. Monash students must be able to lead efforts to solve them. The University will respond to this demand by growing student engagement in learning opportunities in ESG themes. Monash will leverage the advantages provided by its international campuses, partnerships with other universities and its Indo-Pacific footprint for doing so.

ESG COMMITMENTS

1. The Global Immersion Guarantee
2. Increasing New Colombo Plan cohorts
3. Growing ESG and SDG engagement
4. Compiling ESG and SDG teaching programs and activities

SUMMARY STATEMENT

In 2023 Monash continued to demonstrate its role as a pioneer in education, training and professional development related to sustainability matters. The University expanded access to immersive, sustainability-themed experiences, growing the footprint of its flagship Global Immersion Guarantee program to include two new locations – Vanuatu and Samoa.

Monash secured the highest amount of New Colombo Plan funding ever in 2023 and remains well positioned to expand its programs in the Pacific region.

Monash Enrich, a curated online portal for students which hosts information on curricular and extra-curricular rich experiences available beyond their academic courses of study has attracted strong interest since its September 2023 launch.



CAMPUS

The University will continue to transition towards net zero emissions and develop a Circular Economy Framework for its campus operations.

ESG COMMITMENTS

1. Continue transition towards Net Zero
2. Establish a five-year circular economy plan
3. Eliminate single-use retail plastics
4. Implement a food organic waste program

SUMMARY STATEMENT

Monash is continuing to reduce its energy intensity and lower its carbon emissions toward net zero through a combination of building improvements and energy efficiency programs such as LED lighting upgrades. As part of the transition from natural gas, in 2023 the University completed the replacement of gas-fired heating with an all-electric centralised thermal plant (modular heat pumps) servicing five major buildings in the Clayton campus engineering precinct.

Monash has also completed the development of its Circular Economy Five-Year Framework and Implementation Plan to lead the transition to a circular economy where resources are used efficiently, waste is minimised, and innovation drives a more sustainable campus.

GENDER EQUALITY

The University will foster an inclusive organisational culture in which staff of all genders, of diverse cultural backgrounds, faiths and heritages participate equally and are recognised equally at all levels, notably senior levels. The University will intensify focus to eliminate the systemic barriers to professional advancement in order to achieve parity in senior professorial, senior academic and senior professional roles, as well as salary parity across the University.

ESG COMMITMENTS

1. Recognition, retention and career advancement
2. Improve HR and harassment policies consistent with modern best practices
3. Expand gender equality goals
4. Gender parity

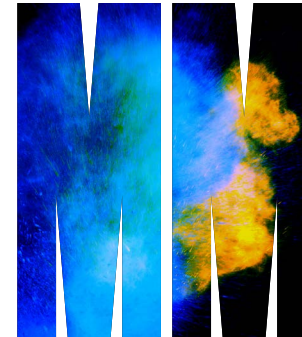
SUMMARY STATEMENT

Throughout 2023 Monash further advanced and refined its commitments to gender equality and broader obligations toward equity, diversity and inclusion. This included introducing an Enabling and Evaluation Plan to support monitoring and evaluation of the intersectional Equity, Diversity and Inclusion Framework.

By the midpoint of implementation at the end of 2023, 77 per cent of action items in the Gender Equality Action Plan 2022-2025 had been either completed or were ongoing. The proportion of women receiving offers for academic roles in STEM had increased from 38.3 per cent in 2020 to 52.4 per cent in 2023.

Monash further expanded its transparency on sexual harm data with the publishing of a comprehensive Sexual Harm Prevention and Response Annual Report for 2022.

SUMMARIES OF PERFORMANCE CONTINUED



ABORIGINAL AND TORRES STRAIT ISLANDER PEOPLES

Through our teaching, research and community engagement, the University will continue to make a substantial and ongoing contribution to Indigenous advancement by fostering mutually-beneficial partnerships with Indigenous peoples and communities.

ESG COMMITMENTS

1. Implement the Aboriginal and Torres Strait Islander Framework
2. Support Treaty conversations and the Yoorrook Justice Commission
3. Contribute to First Nations Voice to Parliament co-design process

SUMMARY STATEMENT

Indigenous enrolments at Monash have grown consistently, including a 250 per cent increase in Masters enrolments and a doubling in PhD enrolments since 2018. After the impacts of COVID-19, 2023 also marked a promising turn towards parity with non-Indigenous students in terms of student success (measured by Weighted Average Mark).

Monash also recorded significant advances in its endeavour to strengthen recruitment, development and retention of Indigenous staff, with a 20 per cent year on year increase in Aboriginal and Torres Strait Islander Peoples being employed by the University.

Staff and student groups across Monash contributed to the Voice to Parliament conversation throughout 2023. The University is well placed to contribute further as attention turns to alternative pathways toward Treaty.

MODERN SLAVERY

Monash University supports all efforts to eliminate modern slavery and is committed to delivering a robust, meaningful response to the Modern Slavery Act.

ESG COMMITMENTS

1. Identify slavery risks in the supply chain
2. Implement program to manage risks
3. Establish a structure for oversight
4. Develop impact measures
5. Share research to inform efforts to eliminate modern slavery

SUMMARY STATEMENT

Monash completed the fourth year of its initial five-year program in 2023, with significant improvements in two high risk areas.

Monash is working with a new cleaning supplier to build an in-house reporting capability, utilising open book pricing to improve transparency of labour rates, hours and locations worked, profit margins and similar elements. The approach allows Monash to break down the full price of its complex cleaning services each month, to close levels of detail as required.

The partnership with Electronics Watch has also greatly improved transparency for Monash IT equipment, uncovering areas for supply chain improvement even with top tier electronics providers. Multiple remediations to improve transparency and treatment of workers are already underway by Electronics Watch and partners such as the Responsible Business Alliance.

INVESTMENT

The University will continue to transition its investment portfolio towards carbon neutrality.

ESG COMMITMENTS

1. Define the pathways to carbon neutrality across externally managed investments
2. Annual reporting on climate alignment of investments

SUMMARY STATEMENT

Monash made further advances to decarbonise its portfolio during 2023, cutting the Weighted Average Carbon Intensity (WACI) of its investments by 13 per cent from 2022. Frontier's weighted average ESG rating of the University's managed fund portfolio (excluding cash) also improved from 2.54 to 4.37 stars. 85 per cent of the portfolio is now assessed as four stars or better (up from 38 per cent in 2022).

This improvement in both WACI and ESG ratings was primarily from the reallocation of almost \$500m from the Macquarie Diversified Equity Yield Fund (one star) into Russell Domestic and Global Low Carbon Funds (five stars).

The University continues to meet with its fund managers annually to discuss investment performance and ESG matters, including approaches to ESG integration, modern slavery and active ownership.

ENGAGEMENT

Building a sustainable future is the most pressing challenge confronting communities globally. Governments and industry worldwide are searching for answers to help them meet this challenge. The University will mobilise governments, industry and communities to adopt sustainable practice.

ESG COMMITMENTS

1. Monash Technology Precinct investment
2. Sustainability leadership in South East Melbourne
3. Foster Pacific engagement on sustainability

SUMMARY STATEMENT

The launch of the Monash Precinct Network (MPN), a not-for-profit, multi-partner organisation tasked with accelerating engagement and innovation with industry, education, research, government and supply chains in the MTP and Greater South East Melbourne, was a signature moment in the University's endeavour to foster innovation and investment in the MTP.

Monash has also continued its engagement with the Greater South East Melbourne (GSEM) group of local councils and participated in 31 engagements with organisations inside the GSEM area over the year, generating \$9.2 million in funding.

A signature example of the University's work to increase its engagement in the Pacific, the Pacific Actions for Climate Transitions (PACT) Research Centre, officially launched in March 2023 in collaboration with the Government of Fiji and Fiji National University.

AT A GLANCE IN 2023



Research relating to climate action has **grown by 59%**



1245 students took part in the **Global Immersion Guarantee**



Emissions from natural gas and electricity use were **57% below** the 2015 baseline



31,383 coursework students completed the **Respect at Monash module**



Number of Aboriginal and Torres Strait Islander Peoples employed at Monash **increased 20%**



1557 new suppliers onboarded, compliant with relevant modern slavery requirements

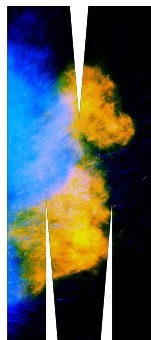


83% of managed funds have an ESG rating of four-stars or better



31 engagements with organisations located in Greater South East Melbourne

BACKGROUND



The Environmental, Social and Governance (ESG) Statement 2021–2025 was published in 2021 to guide Monash in environmental, social and governance issues and strategies.

The second ESG Statement builds on commitments articulated in the inaugural ESG Statement (released 2016) and places emphasis for future commitments in the following areas:

- > Strong links to and reporting under the United Nations Sustainable Development Goals (SDG)
- > Renewed focus and effort to lead progress on the social issues of gender equity and inclusion, advancing Aboriginal and Torres Strait Islander peoples and addressing modern slavery
- > Establishing a decarbonisation target for University investments
- > A 'deep immersion' approach to the inclusion of ESG into the teaching program
- > Continued academic leadership in ESG and sustainable development through research
- > Utilising engagement to mobilise communities, industry and support government initiatives to support ESG
- > A circular economy approach to campus operations and resource use.

ESG PRIORITY AREAS

Nine priority areas are identified by the *ESG Statement 2021–2025*:

- 1. Research:** The University will grow its leadership in social and environmental sustainability fields including research in clean and renewable energy, and improve how it captures, measures and reports discoveries that advance the UN SDGs.
- 2. Teaching:** The challenges of the age are environmental and social challenges. Monash students must be able to lead efforts to solve them. The University will respond to this demand by growing student engagement in learning opportunities in ESG themes. Monash will leverage the advantages provided by its international campuses, partnerships with other universities and its Indo-Pacific footprint for doing so.
- 3. Campus:** The University will continue to transition towards net zero emissions and develop a Circular Economy Framework for its campus operations.
- 4. Gender Equality:** The University will foster an inclusive organisational culture in which staff of all genders, of diverse cultural backgrounds, faiths and heritages participate equally and are recognised equally at all levels, notably senior levels. The University will intensify focus to eliminate the systemic barriers to professional advancement to achieve parity in senior professorial, senior academic and senior professional roles, as well as salary parity across the University.
- 5. Aboriginal and Torres Strait Islander Peoples:** Through our teaching, research and community engagement, the University will continue to make a substantial and ongoing contribution to Indigenous advancement by fostering mutually-beneficial partnerships with Indigenous peoples and communities.
- 6. Modern Slavery:** Monash University supports all efforts to eliminate modern slavery and is committed to delivering a robust, meaningful response to the Modern Slavery Act.
- 7. Governance:** The University will explore opportunities to improve its capture and reporting of environmental, social and governance advances.
- 8. Investment:** The University will continue to transition its investment portfolio towards carbon neutrality.
- 9. Engagement:** Building a sustainable future is the most pressing challenge confronting communities globally. Governments and industry worldwide are searching for answers to help them meet this challenge. The University will mobilise governments, industry, and communities to adopt sustainable practice.

For each of the nine ESG priority areas, key priorities were defined to help the University achieve its overall sustainability commitments as reflected in the ESG Statement.

The first comprehensive and aggregated annual report on the University's advances across these priority areas was released to the public on 26 July 2023.

GOVERNANCE

REPORTING ON GOVERNANCE

The Governance discussion featuring in this 2023 ESG Report focuses on the University's ESG reporting structure. A full overview of the governance of Monash University, including legislative requirements and statements of compliance, can be found in the 2023 Annual Report, which is available online.

A detailed breakdown of the overall governance and management structure for Monash University is provided in *Appendix 2*.

ESG AND ESTATES COMMITTEE

Accountability for overseeing management of ESG commitments and SDG progress has been assigned to a Standing Committee of University Council. The ESG and Estates Committee (formerly known as the Estates Committee) was appointed by Council to assist Council in discharging its responsibilities in:

- > planning and managing the University's estate;
- > overseeing the implementation of the University's commitment to the United Nations' Sustainable Development Goals; and
- > ensuring the University is meeting environmental, social and governance obligations relating to sustainability.

The Terms of Reference for the ESG and Estates Committee require that two members of the Committee must have expertise relevant to ESG and sustainability matters (see Table 1.1).

The complete ESG and Estates Committee Terms of Reference are provided in *Appendix 1*.

TABLE 1.2: ESG AND ESTATES COMMITTEE MEMBERS AND ATTENDEES

CLASS	CATEGORY / ROLE
Committee Member	The Chancellor (ex officio)
	The Vice-Chancellor & President (ex officio)
	At least two Council members
	Two University Professors, one with architecture expertise and the other with expertise relevant to ESG
	Two external members, one with architecture expertise and the other with expertise relevant to ESG
In attendance	Senior Vice-President & Chief Operating Officer
	Senior Vice-President & Chief Financial Officer
	University Architect
Secretary	Executive Director, Buildings and Property Division

SENIOR EXECUTIVE OVERSIGHT

Monash University's Senior Executive is responsible for considering and endorsing key performance indicators, annual targets and ESG and SDG reports that are submitted to the Vice-Chancellor's Executive Implementation and Oversight Committee (VCEIO) and the ESG and Estates Committee.

Each of the nine ESG priority areas has an allocated University lead in the senior executive team to advance the University's focus on ESG at a senior level.



VICE-CHANCELLOR'S EXECUTIVE IMPLEMENTATION AND OVERSIGHT COMMITTEE

The Vice-Chancellor's Executive Implementation and Oversight (VCEIO) Committee advises the Vice-Chancellor on the implementation of University strategy, monitors progress of key initiatives and provides oversight to the University's risk profile.

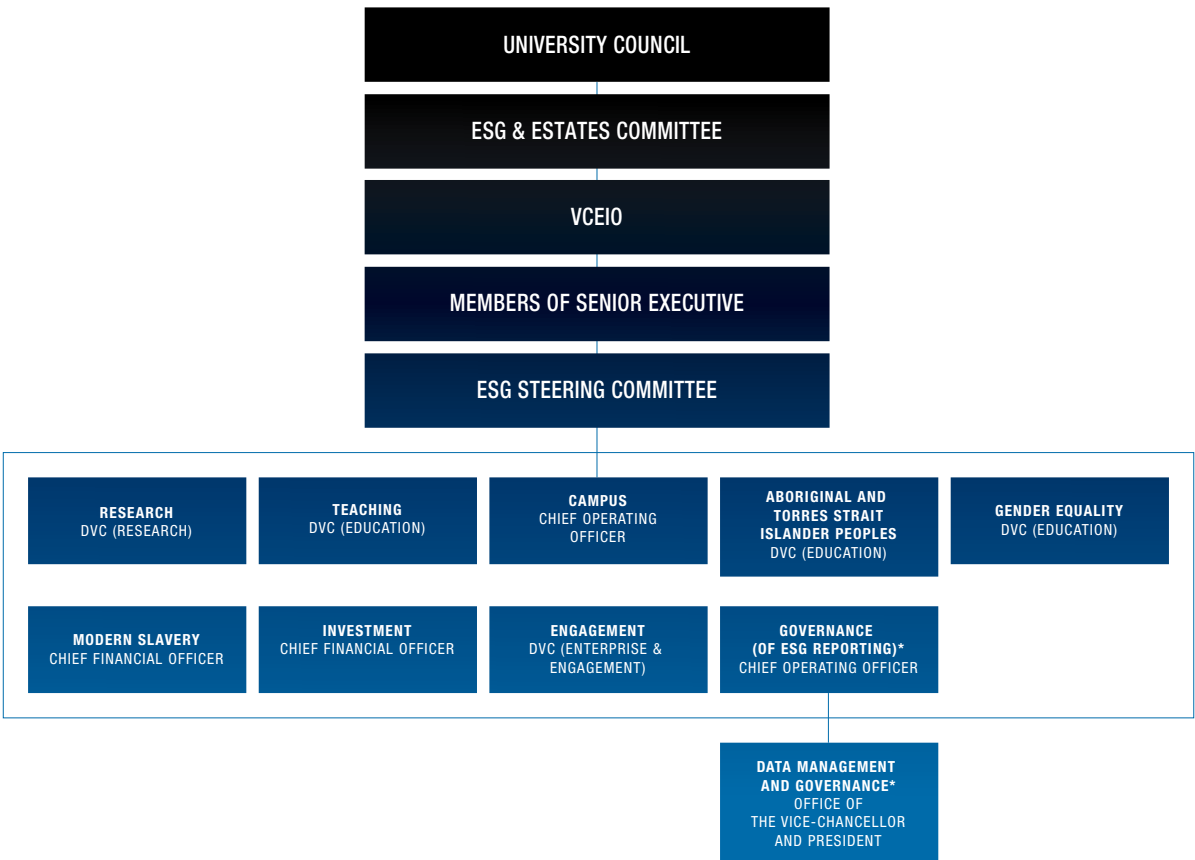
VCEIO has operational oversight of those parts of the ESG Statement that are incorporated into the implementation plan and regular reports are provided to it, in accordance with the VCEIO reporting schedule.

ESG STEERING COMMITTEE

The ESG Steering Committee was established in November 2022 to provide additional oversight to implementation of commitments in the ESG Statement and to advance progress against the SDGs.

Members of the ESG Steering Committee are nominated by members of the Senior Executive to represent them and be accountable for their respective ESG priority areas at the Committee, including progress toward meeting ESG priorities and identifying emerging risks to achieving those priorities and proposed mitigation measures.

FIGURE 1.1: ESG GOVERNANCE STRUCTURE



NOTE: A detailed breakdown of the overall governance and management structure for Monash University is provided in *Appendix 2*.

* While overall responsibility for ESG reporting lies with the COO, the COO portfolio works with the Enterprise Intelligence and Insights team to manage data and analytics for ESG and SDG reporting.

ABOUT THIS REPORT

This 2023 ESG Report is divided into two sections:

- 1. Report on 2023 ESG Progress:** The second annual report on the progress of the University's work in 2023 to meet the commitments articulated in the University's ESG Statement 2021-2025.
- 2. Climate Risk Disclosure:** A report on the risks associated with the impact of climate change and the transition to a low carbon economy.

REPORT ON 2023 ESG PROGRESS

Reporting on progress across the University's ESG priorities is guided by the ESG Reporting Framework (the Framework). Council approved the Framework on 15 June 2022.

Under the Framework, each University ESG priority area lead determines the appropriate indicators relevant to their responsible ESG priority area, with these indicators to be incorporated in annual ESG reporting.

The Enterprise Intelligence and Insights team and Office of the Chief Operating Officer consulted with each of the respective ESG priority lead offices to develop indicators that are relevant, objective, robust and measurable. In instances where ESG priorities are not quantifiable, qualitative measures have been utilised (e.g. in the form of case studies or project examples).

These indicators form the basis for the 2023 Report on ESG Progress.

CLIMATE RISK DISCLOSURE

The ESG Statement 2021-2025 emphasises the importance of adopting current standards of better practices in how the University reports on progress against its ESG priorities. Disclosure of climate risks and mitigation strategies represents a further opportunity for Monash to further align its ESG reporting with better practice.

The second section of the 2023 ESG Report therefore considers key features of how climate is projected to change in coming decades, utilising two potential greenhouse gas emissions scenarios based on climate projections developed by the CSIRO.

Significant risks to the ESG priority areas and the relevant portfolio overseeing that priority have been identified, based on the changes projected to Melbourne's climate. Where relevant, information on current measures to mitigate those risks has also been provided.



REPORT ON 2023 ESG PROGRESS



RESEARCH

The University will grow its leadership in social and environmental sustainability fields including research in clean and renewable energy, and improve how it captures, measures and reports discoveries that advance the UN Sustainable Development Goals.

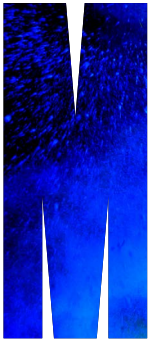
ESG commitments

1. Clean energy transitions
2. Leveraging and reporting against the UN Sustainable Development Goals
3. Establishing a central portal of ESG-relevant research activity

SUMMARY STATEMENT

Working with the community to develop new models and capabilities to achieve the SDGs is a key research priority for Monash. Throughout 2023, the University made significant progress in this endeavour. Publications relating to the SDGs have continued to grow strongly; in particular research relating to *SDG 4: Quality Education* has increased by 50 per cent, and research relating to *SDG 9: Industry, Innovation & Infrastructure* and relating to *SDG 13: Climate Action*, which have experienced increases of 59 per cent. Cross-faculty SDG related research maintains a clear trajectory for growth.

Monash is on track to exceed its 2022 record for outputs relating to *SDG 7: Affordable & Clean Energy* and research relating to clean energy is cited at a rate that is 85 per cent higher than the world average.



PRIORITY 1: Clean Energy Transitions

The University will develop and refine a living plan for clean energy transitions to become the exemplar Australian university for energy innovation research and practice enabling a net zero future.

In 2023, Monash researchers made significant advances in energy innovation, including the discovery of an enzyme capable of converting atmospheric hydrogen into electricity and the development of a new lithium-sulphur battery design. Further information on these and other projects can be found in Monash University's 2023 Sustainable Development Goals Report under [SDG 7: Affordable and Clean Energy](#).

As of the time of reporting, Monash University researchers had published a total of 263 outputs relating to SDG 7 Affordable and Clean Energy in 2023, spanning journal articles, conference proceedings and other publications. As further publications will be added to the Scopus database through to June 2024, the final total publications relating this indicator for 2023 is on track to exceed its 2022 record of 270 publications.

TABLE 2.1: 2023 SDG7 RESEARCH OUTPUTS
BREAKDOWN BY CATEGORY

CATEGORY	TOTAL
Journal article	249
Conference proceeding	7
Book series	5
Trade publication	2
TOTAL	263

UPDATED 2022 RESEARCH OUTPUTS DATA

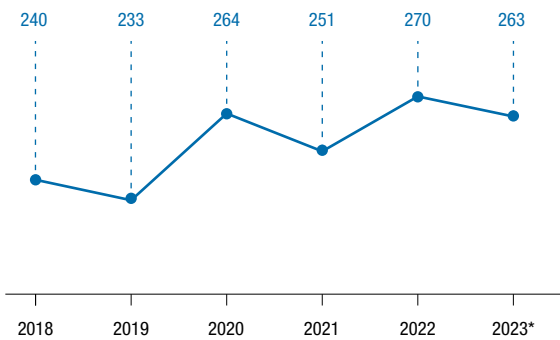
In the 2022 ESG Report, the figure given for Monash University research relating to SDG 7 Affordable and Clean Energy was 234 publications, a seven per cent downturn on the 2021 result. That total was obtained from Scopus in April 2023. While the report acknowledged that 234 publications was a preliminary figure unlikely to be the final tally for 2022 (with additional publications to be added to the Scopus database through to June 2023), it was viewed as sufficient to infer that research relating to SDG 7 had eased since peaking in 2020.

This forecast turned out to be incorrect. Subsequent reporting shows the final 2022 figure for Monash research relating to SDG 7 was 270 publications, representing an eight per cent improvement on the 2021 total and the best result for the University to date. Data for 2022 in the charts below have been updated to reflect this.

These findings should be considered when reviewing the University's 2023 research outputs, which are also based on data obtained from Scopus before the final June update (in April 2024).

The top research fields contributing to our SDG 7 performance in 2023 were Engineering, Chemical Sciences, Physical Sciences and Earth Science.

FIGURE 2.1: RESEARCH PUBLICATIONS RELATING TO SDG 7: AFFORDABLE AND CLEAN ENERGY



* Figure for 2023 is based on data obtained in April 2024. Final 2023 figure is likely to be higher.

FIELD-WEIGHTED CITATION IMPACT

Field-Weighted Citation Impact (FWCI) refers to the ratio of the actual number of citations received by a research output and the total citations expected based on the average of the subject field.

An FWCI value of 1 may be interpreted as having 'world average impact'. Thus, a publication with an FWCI of more than 1 indicates higher than expected citations based on the global average for similar publications.

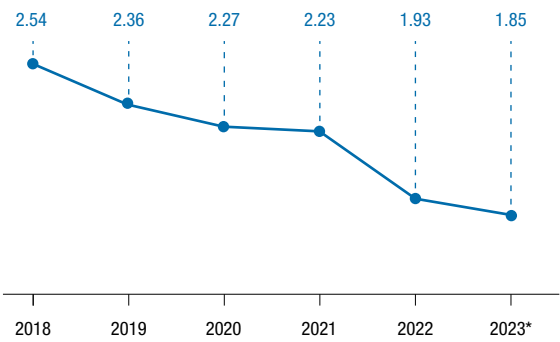
As FWCI reflects citations received to date, a publication's FWCI value may fluctuate over a four-year period. For this reason, some of the values assigned for 2022 have changed from those provided in the 2022 ESG Report.

At the time of reporting (April 2024), the 2023 three-year rolling FWCI of Monash research relating to SDG 7 was 1.85. This means Monash research publications relating to affordable and clean energy are cited at a rate that is 85 per cent higher than the world average.

The Monash three-year rolling FWCI for SDG7 has declined from its peak in 2018 (when FWCI was 2.54). This coincides with the departure of several key researchers from the Monash Energy Institute, whose work contributed significantly to publications in the Chemical Science research field (the biggest source of Monash publications relating to SDG 7).

In addition, as public awareness of climate change and sustainability matters grows, a global average increase in research outputs relating to the SDGs is to be expected, which means the floor for 'world average impact' FWCI is rising. Ongoing work by SciVal to improve how it maps SDGs to publications may also lead to the inclusion of new research outputs which have yet to accumulate many citations.

FIGURE 2.2: 3-YEAR ROLLING FWCI RELATING TO SDG 7



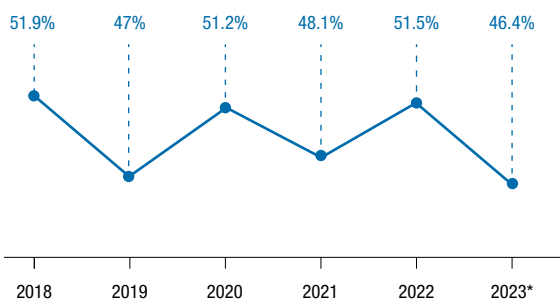
DEFINING INTERDISCIPLINARY RESEARCH

Impact occurs where disciplines intersect. Fostering interdisciplinary research across the traditional boundaries is a priority for Monash to advance its mission to pioneer innovation and solve the complex societal challenges of the age.

There are multiple ways to define and measure interdisciplinary research. For the purposes of this section of the report, interdisciplinary research is defined as research publications for which Scopus has assigned two or more All Science Journal Classification (ASJC) fields.

Of Monash research publications relating to clean and affordable energy, approximately one half (46.4 per cent as of April 2023) qualify as being interdisciplinary, having been assigned two or more ASJC fields. This proportion has remained comparatively steady over the past six years.

FIGURE 2.3: PROPORTION OF INTERDISCIPLINARY PUBLICATIONS RELATING TO SDG 7



PRIORITY 2:

Leveraging and reporting against the UN Sustainable Development Goals

By leveraging and reporting against the Sustainable Development Goals to frame advances in environmental and social transformation, the University will increase the significance of its research to the public and strengthen how it coordinates interdisciplinary collaboration across its diverse research profile.

Monash researchers published 4568 publications relating to the SDGs in 2023, according to April 2024 data. With further publications to be added to the Scopus citation database until June 2024, it is expected that the final total for 2023 will be higher. Selected highlights of this SDG related research are featured in Monash's 2023 Sustainable Development Report, illustrating the real world impact of these research outputs.

Overall, the trajectory for producing SDG-related research is positive, as the gradient for Figure 2.4 below shows.

Much of this growth has been driven by research relating to the following SDGs:

- > SDG 3 Good Health and Wellbeing – up by 578 publications (24 per cent)
- > SDG 4 Quality Education - up by 97 publications (50 per cent)
- > SDG 9 Industry, Innovation and Infrastructure – up by 110 publications (59 per cent)
- > SDG 10 Reduced Inequality – up by 91 publications (47 per cent)
- > SDG 13 Climate Action – up by 81 publications (59 per cent)

Working with the Monash community to develop new models and capabilities to achieve the SDGs is also identified as a key priority of the University's Research Implementation Plan 2022-25.

FIGURE 2.4: RESEARCH PUBLICATIONS RELATED TO THE SDGS

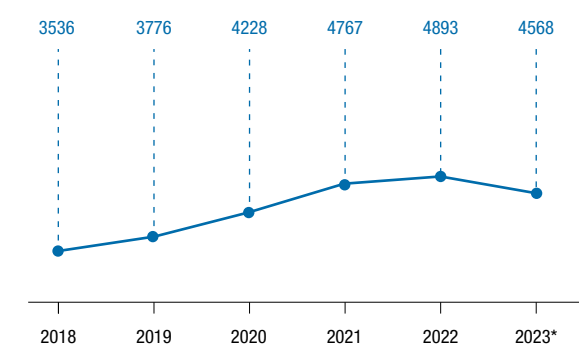
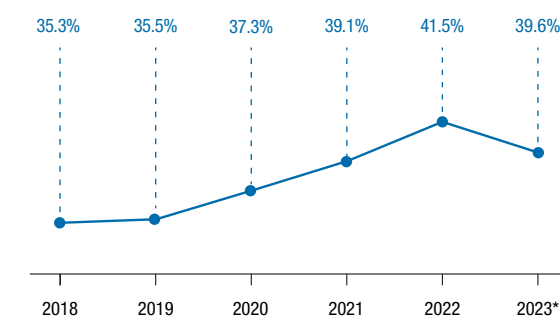


FIGURE 2.5: PROPORTION OF PUBLICATIONS RELATED TO THE SDGS

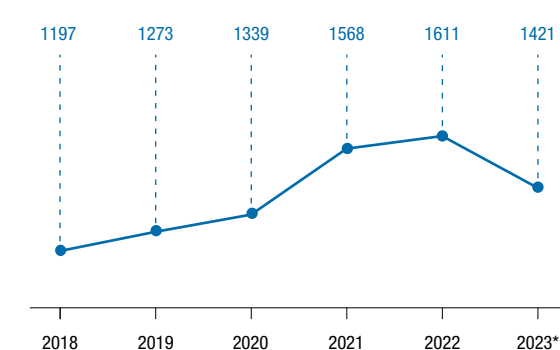


INTERDISCIPLINARY SDG-RELATED RESEARCH

Interdisciplinary research relating to the SDGs (defined as research publications for which Scopus has assigned two or more ASJC fields) shows an upward trend over the longer term.

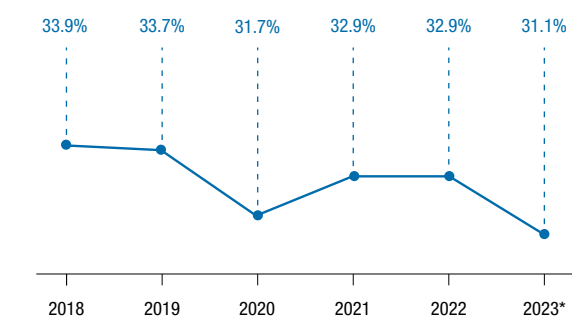
At the time of reporting, Monash University researchers had published a total of 1421 interdisciplinary publications relating to the SDGs in 2023. The final total interdisciplinary publications figure for 2023 is likely to increase as further publications are added to the Scopus database through 2024.

FIGURE 2.6: INTERDISCIPLINARY PUBLICATIONS RELATED TO THE SDGS



Approximately one-third of Monash sustainability-related research outputs in 2023 (31.1 per cent as of April 2024) were assigned two or more ASJC fields.

FIGURE 2.7: PROPORTION OF SDG RELATED PUBLICATIONS THAT ARE INTERDISCIPLINARY



* Figure for 2023 is based on data obtained in April 2024. Final 2023 figure is likely to be higher.

MEASURING CROSS-FACULTY INTERDISCIPLINARY RESEARCH

Quantifying research publications for which Scopus has assigned two or more All Science Journal Classification (ASJC) fields is one method for assessing interdisciplinary research performance.

A supplementary method for measuring interdisciplinary research is also considered here for the 2023 ESG Report, based on the proportion of SDG related publications with co-authors based across multiple faculties. The scope of relevant research outputs is considerably smaller using this method, being restricted to those publications that have more than one Monash author and where the co-authors of the publication are located in separate faculties.

By April 2024 Monash researchers had co-authored 340 cross-faculty publications related to the SDGs (Figure 2.8) – a decline on the 2022 result but still showing a clear trajectory toward improving performance over the five-year term. This is shown more clearly in the proportion of cross-faculty interdisciplinary SDG-related publications, which has improved consistently from 6.9 per cent to 10.3 per cent over five years from 2019.

FIGURE 2.8: CROSS-FACULTY PUBLICATIONS RELATED TO THE SDGS

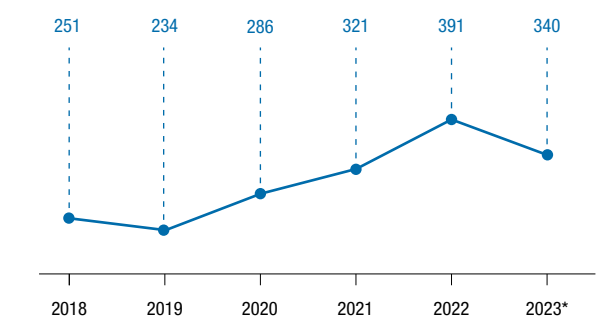
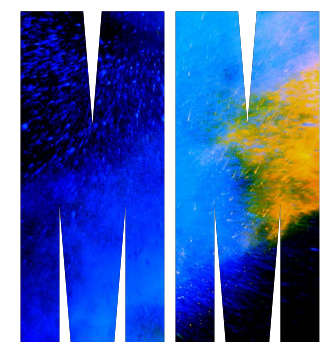
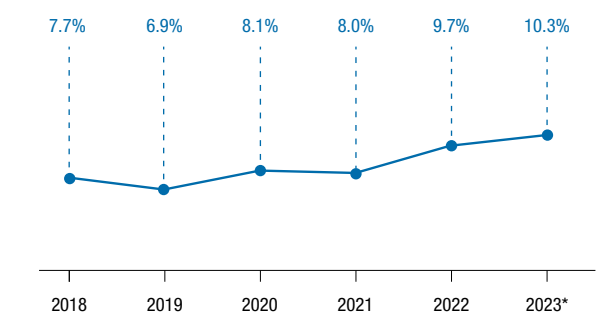


FIGURE 2.9: PROPORTION OF CROSS-FACULTY PUBLICATIONS RELATED TO THE SDGS



PRIORITY 3: Establishing a central portal of ESG-relevant research activity

Monash will establish as a priority a central portal or digest of ESG-relevant research activity being conducted across all its faculties and affiliated bodies, to be made available to the Monash community. The University will ensure all of its external departments, centres and affiliates are included in the capture of this information.

Research related to sustainability is captured automatically on Pure, the University's research management system, which centralises information on research profiles, grants, contracts and research outputs. All Monash researchers, research outputs and organisational units that foster sustainability, including research activity with external organisations with whom Monash has co-authored outputs, are 'auto-tagged' with relevant SDGs.

This process was previously outlined in further detail in the ESG Report for 2022.

Successful roll out of SDG auto-tagging in Pure marked the completion of a central portal for information on sustainability relevant research activity across Monash. This portal is available via the external facing portal: research.monash.edu.

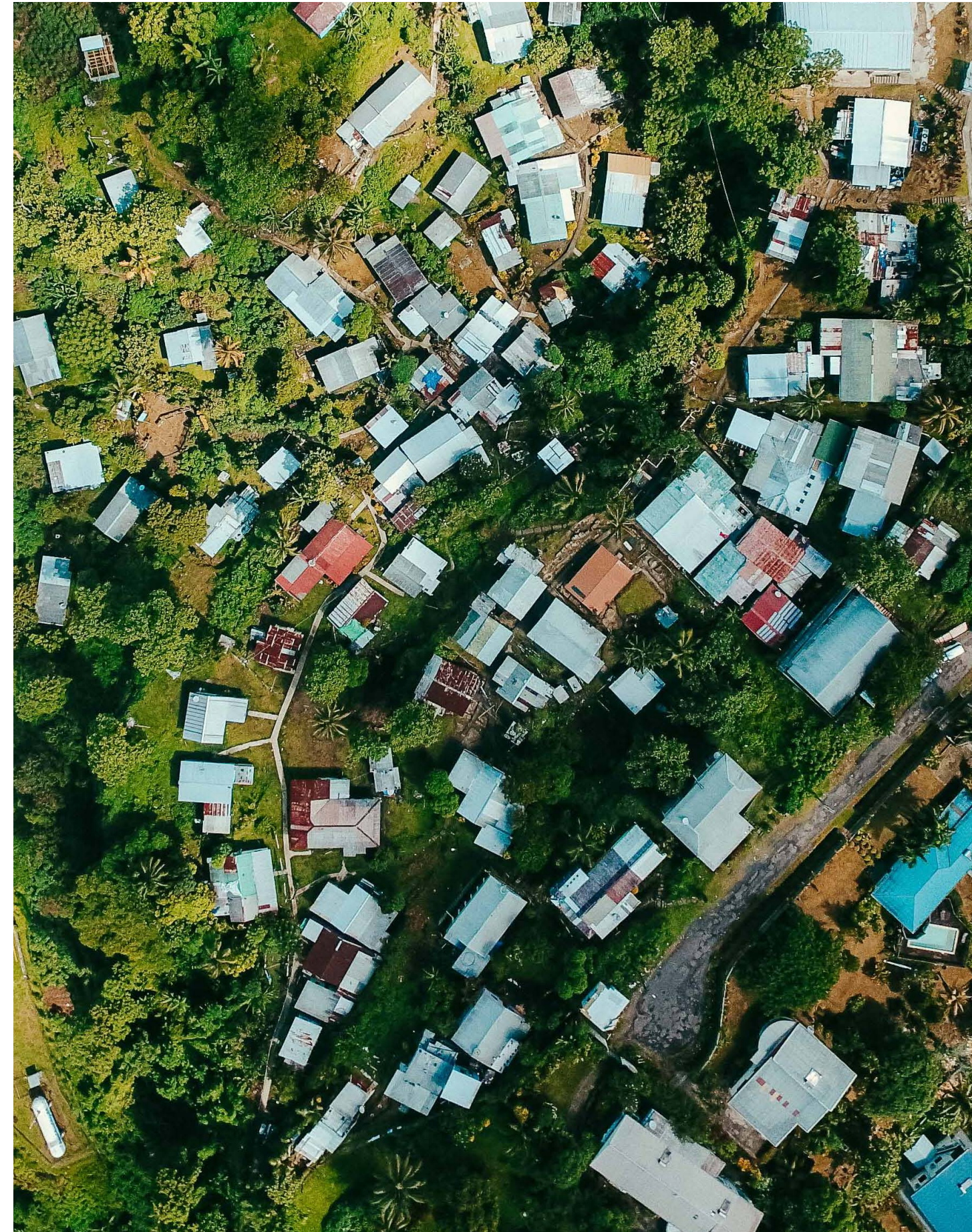
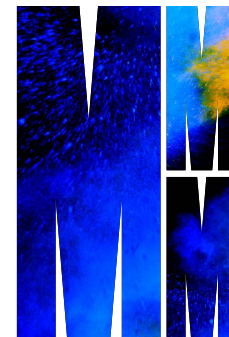
RESEARCH AS KEY PILLAR OF INSTITUTIONAL SDG REPORTING

To further improve capture and reporting of sustainability advances, in 2023 Monash University launched a centrally managed, whole-of-institute annual SDG reporting program. The first annual SDG report was released in July 2023 (on 2022 activity).

Research is one of four key pillars by which SDG activities are categorised in the SDG reporting framework (alongside Education, Engagement and Operations). The report emphasises signature and interdisciplinary Monash research activities that span multiple SDGs.

The SDG report is also a core platform for the University's rankings performance. As a live digital resource, the report can be revised to enable timely updates in response to changes in rankings metrics.

The SDG Report is publicly available online via Monash University's Sustainable Development portal and is updated annually.





TEACHING

The challenges of the age are environmental and social challenges. Monash students must be able to lead efforts to solve them. The University will respond to this demand by growing student engagement in learning opportunities in ESG themes. Monash will leverage the advantages provided by its international campuses, partnerships with other universities and its Indo-Pacific footprint for doing so.

ESG commitments

1. The Global Immersion Guarantee
2. Increasing New Colombo Plan cohorts
3. Growing ESG and SDG engagement
4. Compiling ESG and SDG teaching programs and activities

SUMMARY STATEMENT

In 2023 Monash continued to demonstrate its role as a pioneer in education, training and professional development related to sustainability matters. The University expanded access to immersive, sustainability-themed experiences, growing the footprint of its flagship Global Immersion Guarantee program to include two new locations – Vanuatu and Samoa.

Monash secured the highest amount of New Colombo Plan funding ever in 2023 and remains well positioned to expand its programs in the Pacific region.

Monash Enrich, a curated online portal for students which hosts information on curricular and extra-curricular rich experiences available beyond their academic courses of study has attracted strong interest since its September 2023 launch.

PRIORITY 1: Global Immersion Guarantee

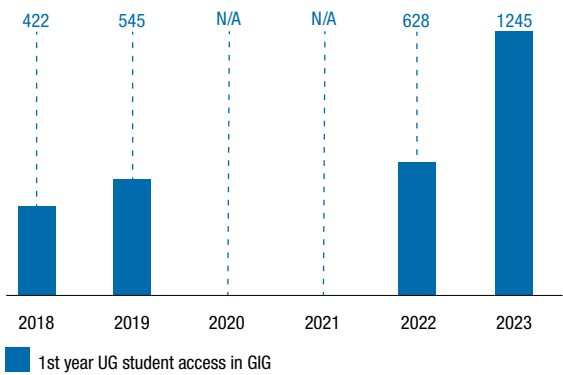
Monash will commit to the extension of the Global Immersion Guarantee as an elective for all first-year students enrolled in undergraduate degrees.

CHANGES IN REPORTING

For 2023 a change was introduced in how Global Immersion Guarantee participation is reported to measure the year the student enrolled in GIG, rather than the calendar year of participation in the program. This is because the GIG is held over the summer at the end of each year. Data for previous years have therefore been updated to reflect this in the charts.

The Global Immersion Guarantee (GIG) is an international study experience that provides Monash students the opportunity to meet with sustainability practitioners in Asia, the Pacific and Europe to understand the impact of human activities on the environment. Participation in the GIG program expanded further in 2023, with the support of unprecedented funding under the New Colombo Plan (see PRIORITY 2). In total, 1245 students took part in GIG in 2023, a twofold increase in volumes for 2022.

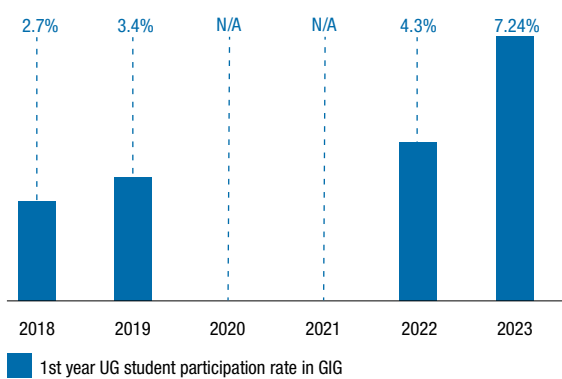
FIGURE 3.1: FIRST-YEAR UNDERGRADUATE STUDENT ENROLMENTS IN GLOBAL IMMERSION GUARANTEE



EXPANDING GLOBAL IMMERSION GUARANTEE ACCESS

The proportion of first year students participating in the GIG increased greatly to 7.2 per cent in 2023.

FIGURE 3.2: FIRST-YEAR UNDERGRADUATE STUDENT PARTICIPATION RATE IN GLOBAL IMMERSION GUARANTEE

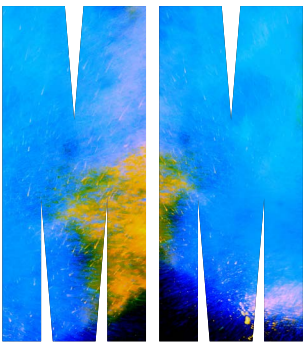


About two thirds (65.3 per cent) of first-year courses offered access to GIG in 2023, which was unchanged from 2022.

Monash seeks to further expand the number of undergraduate degrees offering access to the program. However, there remain constraints on the University's ability to accommodate the GIG elective unit in some disciplines, particularly many health disciplines (e.g. Pharmacy, Nursing and Paramedicine) and Engineering, where the curriculum is governed by standards mandated by professional accreditation bodies.

EXPANDING GLOBAL IMMERSION GUARANTEE LOCATIONS

Fiji was the most popular destination for GIG participants in 2023, offering study themes in conservation and eco-tourism. Aligning with the University's endeavour to advance its engagement with the Pacific, the GIG program also expanded to two new Pacific locations: Samoa (food security) and Vanuatu (climate resilience).



PRIORITY 2: Increase New Colombo Plan cohorts

Monash will engage with the Australian Government to expand funding under the New Colombo Plan to include broader cohorts where possible, in particular the Pacific region.

Monash was awarded an unprecedented \$3.94 million under the New Colombo Plan (NCP) 2023 Mobility Program. The Global Immersion Guarantee program continued to account for the majority of this funding, equalling 85 per cent of the total NCP allocation to Monash.

Funding for other NCP programs was directed to student mobility activities in Japan, Korea and Vietnam.

FIGURE 3.4: NEW COLOMBO PLAN FUNDING ALLOCATIONS, 2019-2023

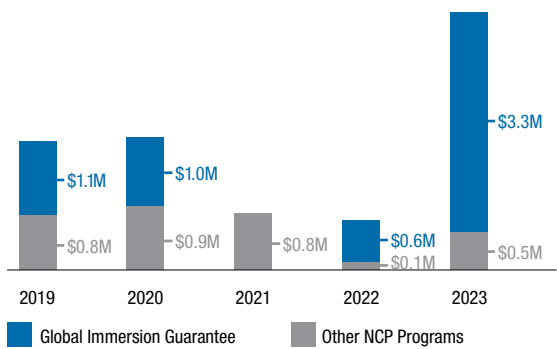
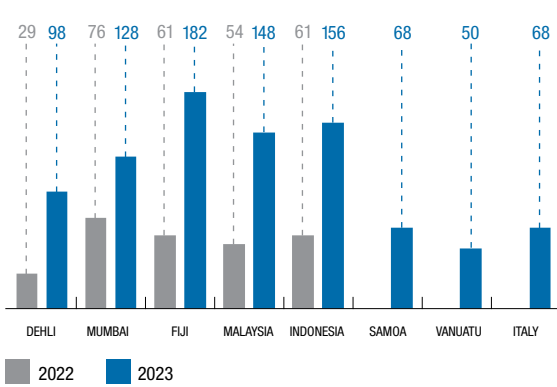


TABLE 3.1: GLOBAL IMMERSION GUARANTEE PARTICIPATION BY LOCATION (2023)

LOCATION	THEMES OF STUDY	STUDENTS
Delhi	> Air and water pollution > Mass urbanisation	98
Mumbai	> Mass urbanisation > Climate change and gender equity > Waste management > Renewable energy	128
Fiji	> Conservation > Eco-tourism	182
Malaysia	> Heritage conservation > Eco-conservation > Sustainability > Reclamation, development and livelihoods	148
Indonesia	> Energy security	156
Samoa	> Food security	68
Vanuatu	> Climate resilience	50
Italy	> Sustainable tourism > Sustainable fashion / fast fashion	68

FIGURE 3.3: GLOBAL IMMERSION GUARANTEE PARTICIPATION BY LOCATION (2022 V 2023)



ENGAGEMENT WITH AUSTRALIAN GOVERNMENT

Throughout 2023, Monash University engaged extensively with the Australian Government, particularly the NCP Secretariat and the Department of Foreign Affairs, to expand NCP funding.

These discussions contributed to the following successful outcomes:

- > increasing funding from \$3000 to \$4000 per GIG student;
- > improving flexibility in funding across programs and cohorts;
- > awareness of the importance of multi-year funding for key mobility programs (i.e. GIG); and
- > expanding NCP funding to new GIG locations (Samoa and Vanuatu).

PRIORITY 3: Increase ESG and SDG engagement

The University will commit to the extension of ESG and SDG awareness and engagement across all degrees.

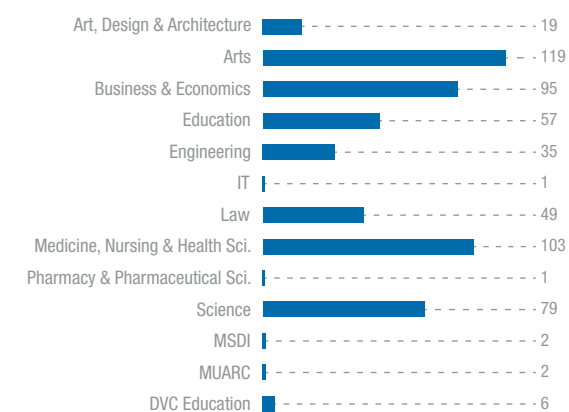
CHANGES IN HOW SUSTAINABILITY ENGAGEMENT IS REPORTED

All Monash students irrespective of their degree can access programs that foster engagement in sustainability (i.e. ESG and SDG) related matters. These span curricular, co-curricular and extra-curricular programs from foundational units to action-focused course capstones, as well as cross-faculty interdisciplinary offerings.

In 2023 an in-depth survey was undertaken of all sustainability related curricular and extra-curricular programs offered across all Monash faculties. This report therefore is able to provide separate metrics for curricular and extra-curricular rich experiences related to the SDGs, which were not available in the 2022 ESG Report.

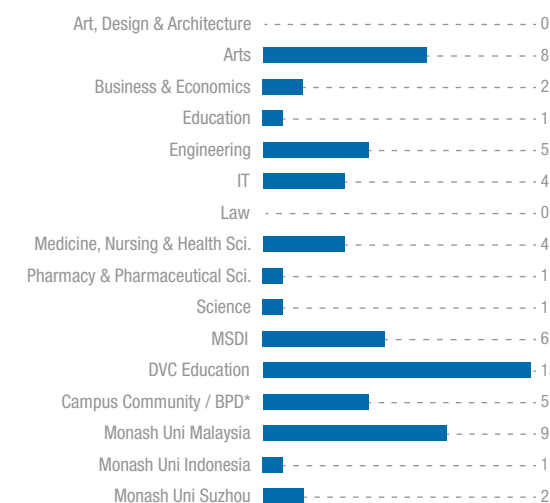
It is estimated that 29,312 students completed at least one unit related to the SDGs throughout the year. Each individual student is counted only once, regardless of whether they completed multiple SDG units.

FIGURE 3.5: IN-CURRICULUM RICH EXPERIENCES (UNITS) RELATED TO THE SDGS



Extracurricular rich experiences are hosted across faculties as well as other parts of the University, including the Campus Community Division in Australia and international campuses. A total of 12,918 students participated in extracurricular rich experiences related to SDGs.

FIGURE 3.6: EXTRA-CURRICULAR RICH EXPERIENCES RELATED TO THE SDGS



PRIORITY 4: Compiling and publishing ESG teaching programs and activities

Monash will compile and publish annually its ESG teaching programs and activities to be available both internally and externally on the University website.

MONASH ENRICH

In 2023, Monash Enrich (enrich.monash.edu) was launched, a curated online portal for students, which hosts information on curricular and extra-curricular rich experiences available to them beyond their academic courses of study.

Populated with experiences from every faculty and campus, Monash Enrich offers access to searchable, personalised SDG related volunteering opportunities based on the students' identified areas of interest, year level, location of study and teaching period.

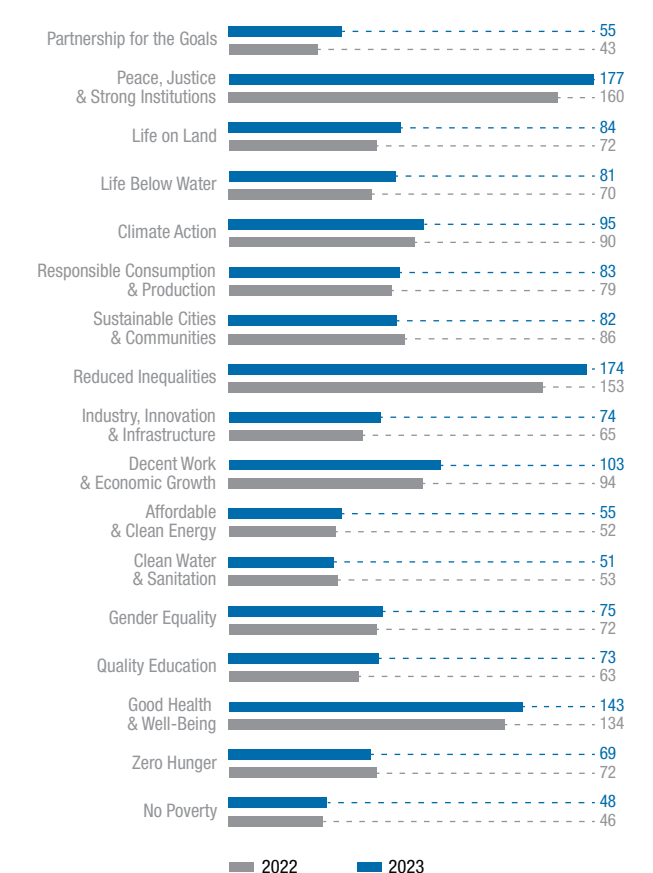
Since launching in September 2023, Monash Enrich has received an average of 3344 visits per month.

In 2023, 568 units at Monash addressed at least one SDG (up slightly from 556 in 2022). This represents around one in every five Monash units (17.4 per cent).

All 17 UN SDGs are well represented within Monash's unit portfolio, with particularly strong representation around:

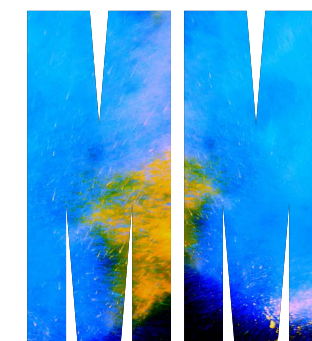
- > SDG3 – Good Health and Wellbeing
- > SDG10 – Reduced Inequalities
- > SDG16 – Peace, Justice and Strong Institutions

FIGURE 3.7: EDUCATIONAL OFFERINGS ALIGNING WITH THE SUSTAINABLE DEVELOPMENT GOALS (2023)



Monash courses and units are increasingly designed using the SDGs as a theoretical framework. For example, every unit in Monash's Master of Environment and Sustainability is directly mapped to an SDG.

Similarly, a core unit in the Bachelor of Global Studies, "Interdisciplinary Collaboration in a Global World", uses the SDGs as a guiding principle in both theory and practice.





CAMPUS

University will continue to transition towards net zero emissions and develop a Circular Economy Framework for its campus operations.

ESG commitments

1. Continue transition towards Net Zero
2. Establish a five-year circular economy plan
3. Eliminate single-use retail plastics
4. Implement a food organic waste program

SUMMARY STATEMENT

Monash is continuing to reduce its energy intensity and lower its carbon emissions toward net zero through a combination of building improvements and energy efficiency programs such as LED lighting upgrades. As part of the transition from natural gas, in 2023 the University replaced gas-fired heating in five major buildings on Clayton campus with a centralised electric thermal plant (modular heat pumps).

Monash has also completed the development of its Circular Economy Five-Year Framework and Implementation Plan to lead the transition to a circular economy where resources are used efficiently, waste is minimised, and innovation drives a more sustainable campus.

A complete breakdown of sustainability data for Monash University sites is provided in Appendix 3.

PRIORITY 1: Net Zero

The University will continue to transition towards net zero emissions.

NET ZERO

Monash University is committed to achieving net zero emissions across its Australian campuses. Its strategy to do so is based on the following pillars:

- > extensive energy efficiency measures within existing buildings;
- > performance standards for new builds;
- > switching from gas to all-electric campuses;
- > deployment of renewable energy on- and off-site; and
- > engaging with industry partners and communities.

In 2023, Monash undertook the following activities to help realise its Net Zero commitments:

- > Completed the replacement of gas-fired heating in five major buildings on Clayton campus with a centralised electric thermal plant (modular heat pumps);
- > Continued upgrading end-of-life gas-fired hot water systems with high-efficiency electric heat pump technology;
- > Installed new electric vehicle charging spaces across the Clayton, Caulfield and Peninsula campuses;
- > Converted more of the University vehicle fleet to fully electric or hybrid vehicles;
- > Delivered a masterclass, Realising Net Zero Buildings, with the Green Building Council of Australia.

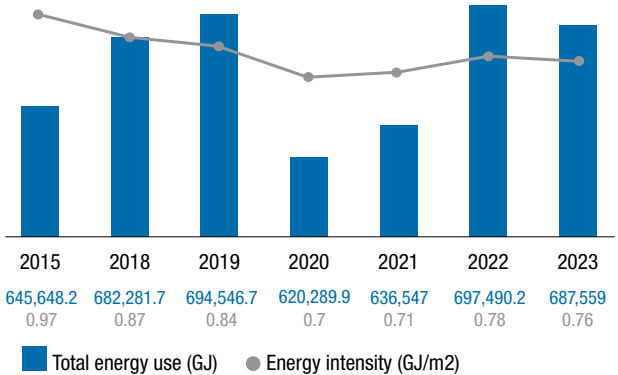
ENERGY CONSUMPTION AND EMISSIONS

CAMPUS ENERGY USE

Building improvements and the roll out of energy efficiency programs such as LED lighting upgrades have helped Monash to improve the efficiency of its campus spaces and further reduce energy use.

Total energy use for 2023 was 1.4 per cent lower than 2022. Energy intensity (GJ/m²) has also reduced 2.6 per cent from 2022 to 2023 and is now 21.7 per cent below the 2015 baseline.

FIGURE 4.1: TOTAL ENERGY (GJ) AND ENERGY INTENSITY (GJ/M2), 2015-2023



MEASURING ENERGY EMISSIONS

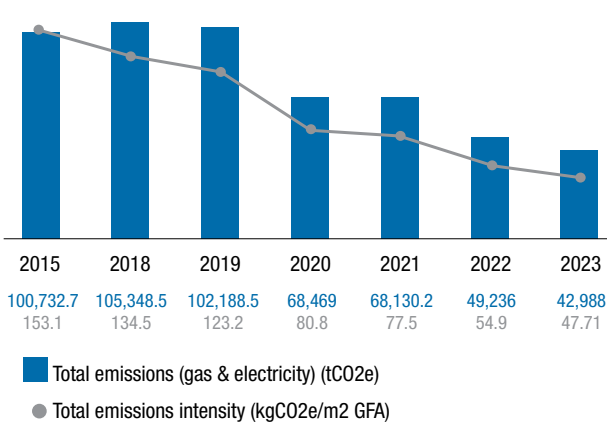
CARBON DIOXIDE EQUIVALENT (CO2E)

Carbon dioxide constitutes the overwhelming majority of greenhouse gases identified as reportable by the Greenhouse Gas Protocol. For this reason, in climate accounting, all greenhouse gases are expressed as carbon dioxide-equivalents (CO₂e) to facilitate comparison. This unit, typically measured in tonnes (tCO₂e), allows for easy comparisons across different years and operations.

Monash continues to make significant progress to reaching its Net Zero target. Greenhouse gas emissions from natural gas (Scope 1) and electricity (Scope 2) totalled 42,988 tCO₂e in 2023. This was 12.7 per cent lower than in 2022 and 57 per cent below the 2015 baseline.

Much of this improvement can be attributed to an increase in the percentage of offsets purchased for electricity from the Murra Warra Wind Farm.

FIGURE 4.2: NET CARBON EMISSIONS AND EMISSIONS INTENSITY 2015-23



NOTE: Emissions here reflect campus operations at Caulfield, Clayton, Parkville and Peninsula (the Net Zero boundary). A full breakdown of emissions under operational control in Australia are provided in Appendix 3.

The intensity of Monash carbon emissions (measured as kgCO₂e per square metre) decreased by 13 per cent year on year. Emissions intensity is now less than one third the 2015 baseline.

MEASURING SCOPE 3 EMISSIONS

SCOPE 1, 2, AND 3

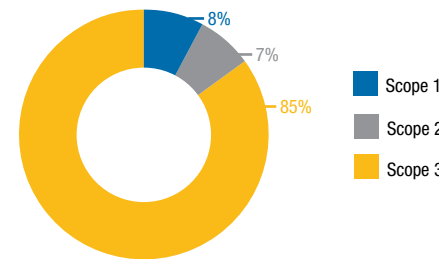
International carbon accounting standards classify greenhouse gas emissions into three categories: Scope 1, 2, and 3. These are defined as follows:

- > Scope 1: On-site emissions from gas and fuel combustion, and the use of refrigerants. Almost all Scope 1 emissions at Monash campuses are generated by heating and hot water using natural gas.
- > Scope 2: Indirect emissions from generating imported electricity (grid electricity).
- > Scope 3: Indirect emissions from the value chain.

Scope 3 emissions are not counted towards the University's Net Zero target.

Scope 3 emissions from the value chain account for 85 per cent of Monash University's total emissions. The primary drivers of Scope 3 emissions for Monash are purchased goods and services, commuting and travel.

FIGURE 4.3: GREENHOUSE EMISSIONS BY SCOPE, 2023



In 2023, Monash expanded its reporting boundary to include more Scope 3 categories and align with the Greenhouse Gas (GHG) Protocol's Corporate Value Chain (Scope 3) Standard. This included detailed assessment of Scope 3 emissions, improving the University's ability to provide more comprehensive data across additional categories.

A complete breakdown of this data is provided in Appendix 3.

MEASURING RENEWABLE ENERGY USE

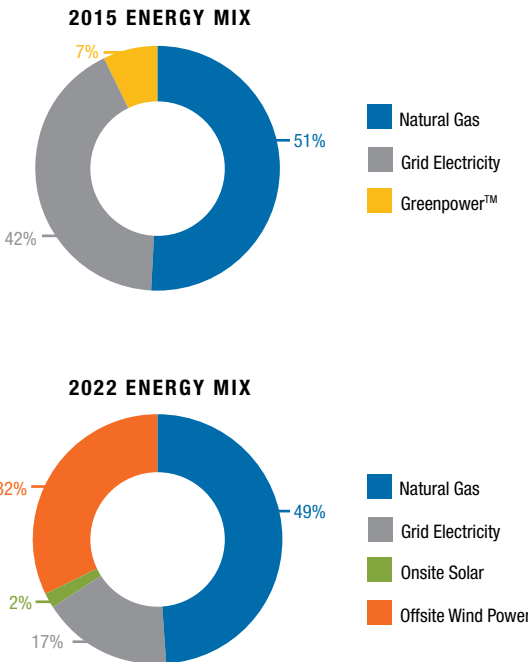
SOURCES OF RENEWABLE ENERGY

Monash obtains its renewable energy from onsite and offsite sources.

- > Onsite: Across the four campuses, Monash has a total campus rooftop solar capacity of 4.41MW. Solar PV systems generated 3,521,676 kWh of renewable energy in 2023.
- > Offsite: Monash has a long-term power purchase agreement with the Murra Warra Wind Farm in western Victoria, to buy both electricity production and large scale renewable energy certificates (RECs) generated by the farm. Monash purchased approximately 75 GWh from the site in 2023.

Use of renewable energy sources continues to increase year on year. In 2023, solar and wind energy generated 67 per cent of Monash University's electricity use (compared to 62 per cent in 2022) and 34 per cent of total energy use (gas and electricity) (31 per cent in 2022).

FIGURE 4.4: ENERGY MIX 2015 V 2023



Natural gas still accounts for roughly half of total energy use (49 per cent) on Monash campuses. The University is working to replace legacy gas-fired hot water and heating systems with all-electric heat pump technology.

PRIORITY 2: Circular Economy Plan

Establish a five-year circular economy plan to minimise waste to landfill and transition from comingled recycling to “close the loop” on valuable materials through better business practices and infrastructure investment.

Monash University completed the development of its Circular Economy Five-Year Framework and Implementation Plan to lead the transition to a circular economy where resources are used efficiently, waste is minimised, and innovation drives a more sustainable campus.

The Framework identifies five key pillars, summarised in Table 4.1. Each pillar is underpinned by clearly defined targets and initiatives to achieve them, spanning the five year roadmap.

TABLE 4.1: CIRCULAR ECONOMY FIVE-YEAR FRAMEWORK PILLARS

PILLAR	SUMMARY
Waste Transformation	Prioritise designing out waste, transitioning from single use to reuse and improving recovery of valuable materials across Monash University operations
Regenerating Nature	Nurturing natural systems and revitalization of ecosystems through conservation, restoration and ecological coexistence Embracing a circular food system through reducing food waste and enhancing nutrient recycling
Sustainable Buildings	Create sustainable and resource efficient approach to construction, renovation, and building management Minimise waste, reduce the environmental impact, and maximise the lifespan of buildings and their components to reduce the embodied and operational carbon of buildings
Net Zero Transport	Low carbon transport strategy
Responsible Procurement	To act for the benefit of the whole community, through socially responsible procurement and support a responsible, resilient and transparent supply chain

A summary of targets for each of these pillars is provided in Appendix 3.

The Circular Economy Five-Year Framework and Implementation Plan was approved by Monash ESG & Estates Committee in its first meeting of 2024.

Improvements in the monitoring of waste diversion streams on Monash campuses was also undertaken during the Framework’s development and will be core to the success program. Further information on waste monitoring is provided under Priority 3.



PRIORITY 3: Eliminate single-use retail plastics

Eliminate single-use retail plastics across Australian campuses by 2023.

SECTION 465 OF THE ENVIRONMENT PROTECTION ACT 2017

As noted in the 2022 ESG Report, regulations under section 465 of the Environment Protection Act 2017 banned the sale or supply in Victoria of single-use plastic drinking straws, cutlery, plates, drink stirrers, cotton bud sticks, expanded polystyrene food service items and drink containers.

All retailers at Monash University’s Australian campuses were complying when the ban came into effect in February 2023.

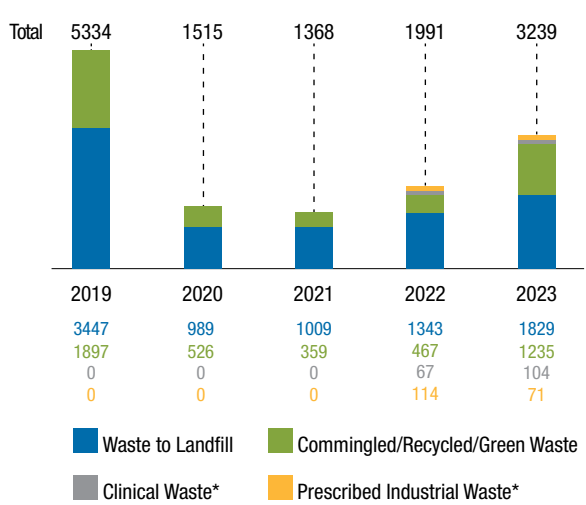
MEASURING WASTE GENERATION ON MONASH CAMPUSES

Monash produced 3239 tonnes of waste in 2023, comprising 1829 tonnes of general waste to landfill, and 1235 tonnes recycled (38 per cent).

Recycled waste streams include cardboard (25 per cent); commingle (18.4 per cent); paper (5.4 per cent); grease trap (21.4 per cent); metal (three per cent); pallet recycling (three per cent); tyres, mattresses, e-waste (one per cent), and green waste (13 per cent).

Clinical waste and prescribed industrial waste are also counted among categories diverted from landfill, but these accounted for only 5.4 per cent of all waste generated.

FIGURE 4.5: WASTE GENERATED BY CATEGORY (t), 2019-23



*NOTE: Pre-2022 data for Clinical Waste and Prescribed Industrial Waste not available

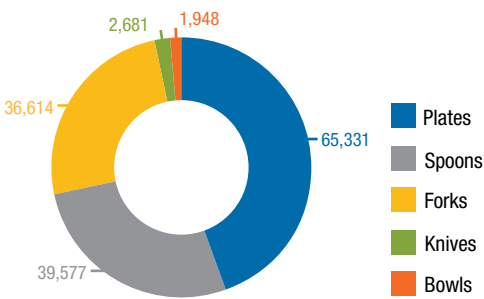
The return of staff and students to campus with increased frequency likely contributed to the increase in waste generation in 2023 compared with the previous three years (62.7 per cent higher than 2022). Tracking and reporting on waste generated and diverted also improved with the appointment from November 2022 of a new waste contractor. Clinical Waste and Prescribed Industrial Waste categories were counted in reporting for the first time from this date. As such, metrics for those diverted streams are not available for years prior to 2022.

REUSABLE DINING PILOT PROGRAM

Subsequent to the ban on single use plastics, a reusable dining pilot program was held from February–November 2023 at the Clayton Campus Centre. The program was supported by Sustainability Victoria funding and involved five food retailers.

In 10 months of the program’s operation, a total of 146,151 reusable items were washed, including 65,331 plates and 1948 bowls. This was equivalent to 67,279 meals served on reusables, subsequently diverting the equivalent volume in single-use packaging from landfill.

FIGURE 4.6: EQUIVALENT SINGLE-USE ITEMS DIVERTED FROM LANDFILL



Several waste audits provided further insights into the impact of the reusable dining pilot and for future waste management planning. Post-consumer waste audits conducted on public bins within proximity of the Clayton Campus Centre revealed that waste contamination in comingled recycling was higher than 70 per cent.

PRIORITY 4:

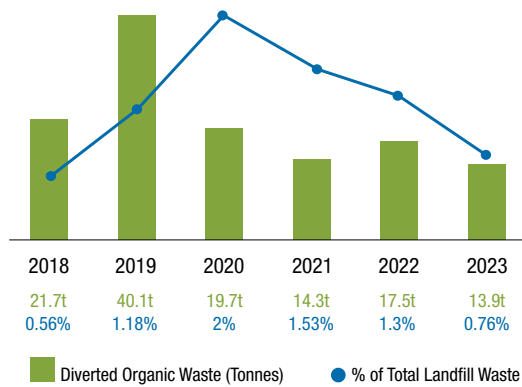
Food organic waste program

Implement a food organic waste program to divert organic waste from landfill.

Waste audits conducted subsequent to the reusable dining pilot have identified significant opportunities to improve how food waste is managed. This is reflected in broader waste management data, which shows a 20 per cent year on year decline in organic waste diverted from landfill (Figure 4.7).

Overall, food waste accounted for 42 per cent of public realm waste in post-consumer waste audits in 2023. A September 2023 pre-consumer waste audit showed the proportion of food waste (which includes coffee grounds) to be even higher in back of house waste produced by retailers, averaging 59 per cent across 14 retailers.

FIGURE 4.7: ORGANIC WASTE DIVERTED FROM LANDFILL, 2018-2023



REDUCING FOOD WASTE THROUGH THE CIRCULAR ECONOMY FRAMEWORK

The Regenerating Nature pillar of the Circular Economy Five-Year Framework and Implementation Plan articulates a program to reduce food waste and improve nutrient recycling at Monash. This includes five-year targets to:

- > halve organic material volumes going to landfill; and
- > reduce food waste by 15 per cent from the 2023 baseline.

The following initiatives have been developed to achieve the food waste targets:

- > Implement separated food and organics collection
- > Provide food and organics collection at large events
- > Implement food waste avoidance program for food retailers
- > Implement food waste avoidance program for students and staff
- > Update campus policies to include food and organic circularity
- > Review existing supplier agreements and identify opportunities to procure food from secondary food markets
- > Map and identify food redistribution pathways and expand program of fresh food handouts to address student food insecurity
- > Create annual calendar of circular food events and initiatives and promote broadly





GENDER EQUALITY

The University will foster an inclusive organisational culture in which staff of all genders, of diverse cultural backgrounds, faiths and heritages participate and are recognised equally at all levels, notably senior levels. The University will intensify focus to eliminate the systemic barriers to professional advancement to achieve parity in senior professorial, senior academic and senior professional roles, as well as salary parity across the University.

ESG commitments

1. Recognition, retention and career advancement
2. Improve HR and harassment policies consistent with modern best practices
3. Expand gender equality goals
4. Gender parity

SUMMARY STATEMENT

Throughout 2023 Monash further advanced and refined its commitments to gender equality and broader obligations toward equity, diversity and inclusion. This included introducing an Enabling and Evaluation Plan to support monitoring and evaluation of the intersectional Equity, Diversity and Inclusion Framework.

By the midpoint of implementation at the end of 2023, 77 per cent of action items in the Gender Equality Action Plan 2022-2025 had been either completed or were ongoing. The proportion of women receiving offers for academic roles in STEMM had increased from 38.3 per cent in 2020 to 52.4 per cent in 2023.

Monash further expanded its transparency on sexual harm data with the publishing of a comprehensive *Sexual Harm Prevention and Response Annual Report* for 2022.

PRIORITY 1: Recognition, retention and career advancement

The University will actively support recognition, retention and career advancement of women. Renewed focus will be on fields where both their potential and leadership is underrepresented. The University will strive to remove systemic barriers generated by (for example) caregiving responsibilities, and work to reduce unconscious bias in decision-making.

HOW GENDER IS REPORTED

Monash University reporting on gender is based on three categories: Woman, Man and Non-Binary / Gender Diverse. At the time of reporting, there were 27 staff members at Monash who reported as non-binary or gender diverse.

The data provided for this report is based on Monash University's Australian staff. In future annual reporting, it is anticipated that data from international Monash locations will also be included.

WOMEN IN SENIOR ROLES

ACADEMIC STAFF

Women make up the majority of early and mid-career researchers at Monash but are significantly under represented in senior academic roles. Fewer than one third of Level E academic staff (Professorial or Senior Principal Research Fellow level) were women in 2023.

FIGURE 5.1: PROPORTION OF WOMEN BY ACADEMIC LEVEL, 2023

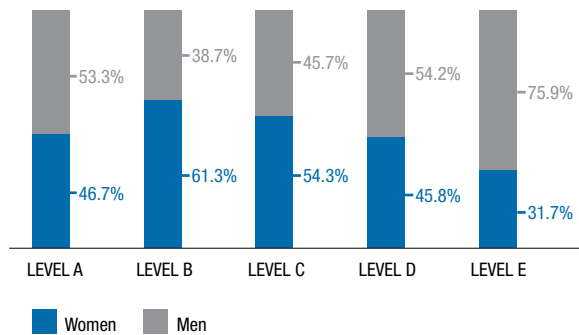
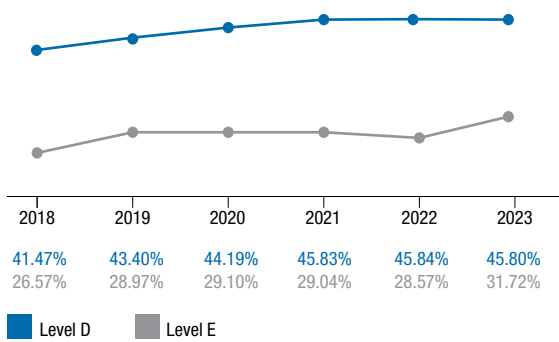


Figure 5.2 shows the difficulty in shifting women's representation in senior academic roles. However, there has been some movement in Level E, which improved three percentage points in 2023.

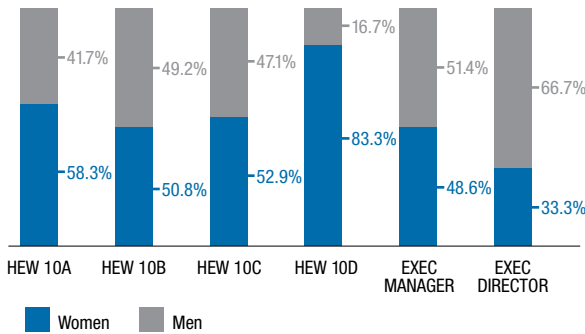
FIGURE 5.2: WOMEN IN SENIOR ACADEMIC ROLES, 2018-2023



PROFESSIONAL STAFF

Women are the majority of Monash professional staff at every HEW Level from HEW 2 to HEW 10, including all four HEW 10 sub-levels. However, this trend reverses at the more senior Executive Manager and Executive Director levels. Women occupied one third of executive director positions in 2023.

FIGURE 5.3: PROPORTION OF WOMEN IN SENIOR PROFESSIONAL STAFF ROLES, 2023

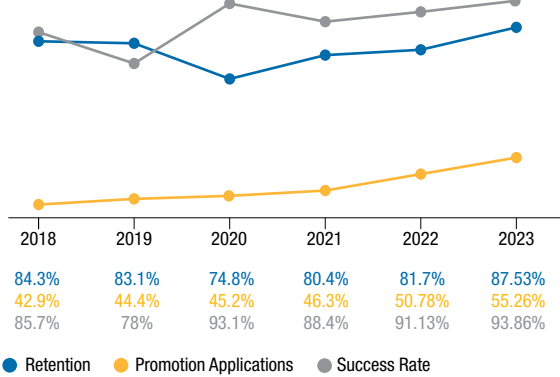


REPRESENTATION IN STEMM

IMPROVING WOMEN'S REPRESENTATION IN STEMM

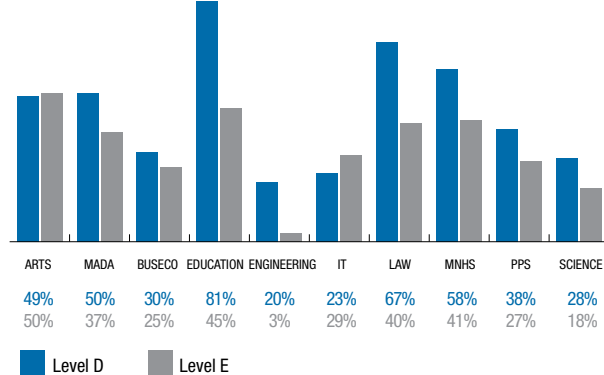
Advancing women's careers in science, technology, engineering, mathematics, and medicine (STEMM) disciplines is a core priority of Monash University's gender equality strategy. The University is continuing to invest in resources to help solve the structural and cultural barriers contributing to women's underrepresentation in STEMM.

FIGURE 5.4: RETENTION AND PROMOTION OF WOMEN IN STEMM, 2018-2023



While applications for promotion and promotion success rates for women in STEMM shows gradual improvement, there remains considerable variation between STEMM disciplines. The breakdown of senior academic roles by faculty in Figure 5.5 shows this clearly. Women were well below parity across every STEMM faculty, except Medicine, Nursing and Health Sciences.

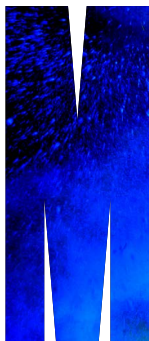
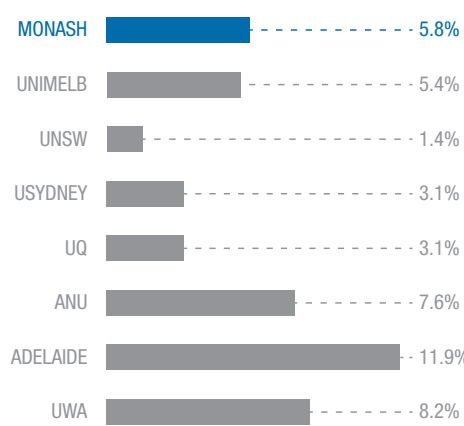
FIGURE 5.5: PROPORTION OF WOMEN IN SENIOR ACADEMIC ROLES BY FACULTY, 2023



GENDER PAY GAP

The median gender pay gap at Monash University was 5.8 per cent in 2023. This positions the University in the middle of its peers in the Group of Eight.

FIGURE 5.6: GROUP OF EIGHT MEDIAN GENDER PAY GAP IN TOTAL REMUNERATION, 2023



PRIORITY 2: Improve HR and harassment policies consistent with modern best practices

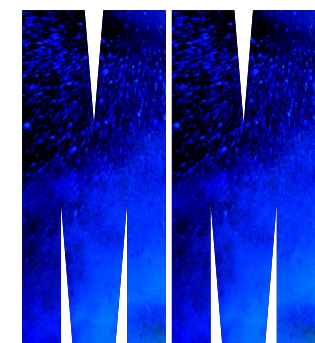
The University will advance on the leadership set through its Respect. Now. Always. programs to ensure HR and harassment policies continue to develop and improve consistent with modern best practices, and with consideration given to the Sex Discrimination Commissioner’s Respect@Work Sexual Harassment National Inquiry Report (2020).

RESPECT AT MONASH

Respect at Monash (previously Respect. Now. Always.) is a whole-of-University initiative to prevent and respond to incidents of sexual harm and gender-based violence. Gender violence prevention is coordinated through the Equity, Diversity and Inclusion team, who utilise an intersectional approach to prevent gender-based violence and other forms of harm and discrimination. Sexual harm response is coordinated through the Safer Community Unit, which takes a trauma-informed, person-centred approach to coordination of disclosures, reports and support.

Throughout 2023 Monash continued to implement its response to the 2021 National Student Safety Survey. Of the 85 planned action items, 78 were completed in 2023. Key highlights included:

- > the pilot of a Dating in Australia workshop program to address the lower rates at which international students report sexual harm;
- > expanding early intervention and tertiary prevention strategies by establishing the Revisiting Respect module;
- > embedding culturally responsive and intersectional practice in response and prevention training; and
- > increasing visibility of support services and report options throughout the student lifecycle, including in the first session of all first-year classes, in the student learning system and via on-campus social messaging campaigns on digital screens.



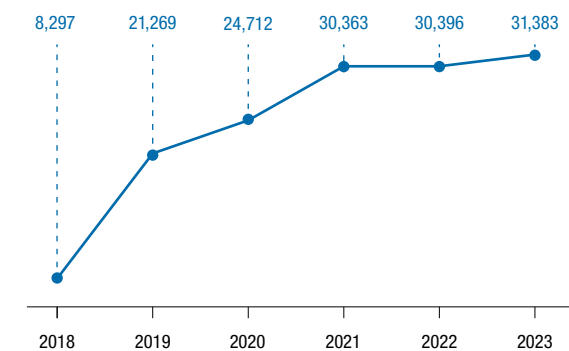
GENDER EQUALITY

STUDENTS

RESPECT AT MONASH ONLINE MODULES

The Respect at Monash online modules were developed to help ensure the whole of the Monash community understand the University’s expectations around respect. All students studying at Monash must complete either Respect at Monash or Respectful Research at Monash (for graduate research students). Staff at Monash are required to complete the Respect at Monash: For Staff module.

FIGURE 5.7: RESPECT AT MONASH MODULE COMPLETIONS BY COURSEWORK STUDENTS, 2018-23



In total, 31,383 coursework students completed the Respect at Monash module in 2023. Students who complete the training self-report significant improvements in:

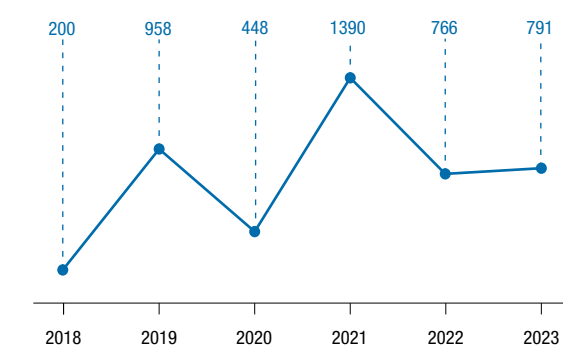
- > knowledge of support services available at Monash;
- > steps they can take to safely engage in online relationships;
- > confidence in intervening when they observe harmful behaviour; and
- > understanding of how Monash fosters a safe and respectful community.

BRIGHT STUDENT LEADER TRAINING

BRIGHT (Bystander, Respect, Intimate Partner Violence and Gender in Higher Education Training) is a peer-led, interactive training session that teaches participants to recognise harmful behaviour and how they can intervene safely. BRIGHT is mandatory for student leaders and highly recommended for aspiring student leaders.

BRIGHT enrolments rose by three per cent in 2023.

FIGURE 5.8: BRIGHT PREVENTION OF GENDER-BASED VIOLENCE STUDENT LEADER TRAINING, 2018-23

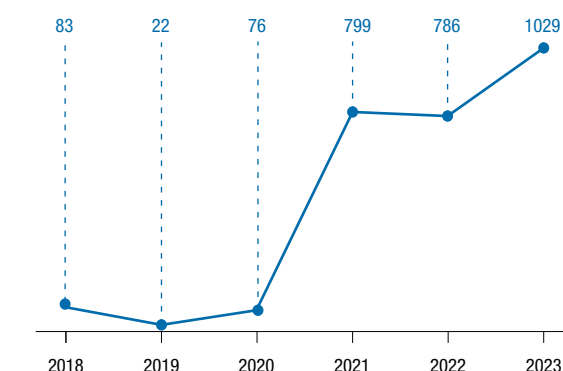


RESPONDING TO DISCLOSURES TRAINING

The Responding to Disclosures module provides training for staff and student leaders on how to respond with support and respect if someone confides in them about sexual harm. It includes information on reasons why victims-survivors find it difficult to disclose sexual harm; how to respond to a disclosure of sexual harm without causing further harm or trauma, and key services and self-care practices available for victims-survivors of sexual harm.

Student participation in the Responding to Disclosures training increased 31 per cent year on year, with more than 1000 completions in 2023.

FIGURE 5.9: RESPONDING TO DISCLOSURES STUDENT COMPLETIONS, 2018-23



STAFF

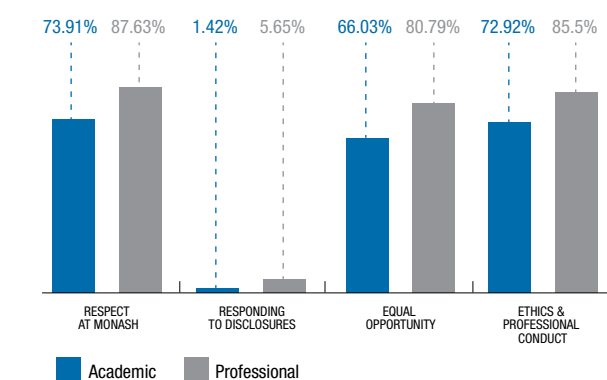
Respect at Monash training for staff recorded 8570 further completions in 2023, adding to the 12,174 staff who had already completed the module in 2022. Staff completions of other modules relevant to gender equality and reducing sexual harm also continued to grow.

FIGURE 5.10: EQUAL OPPORTUNITY AND ETHICS & PROFESSIONAL CONDUCT MODULE COMPLETIONS BY STAFF, 2018-23



Completion rates were higher among professional staff than academic staff for all forms of gender equality and sexual harassment training.

FIGURE 5.11: ACADEMIC VS PROFESSIONAL STAFF MODULE COMPLETION RATES, 2023



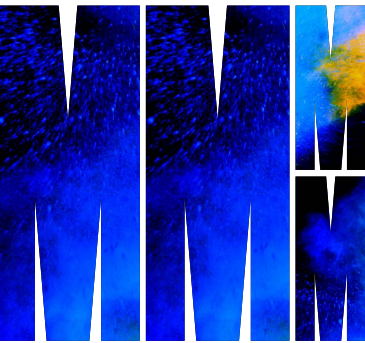
NOTE: Responding to Disclosures training is currently mandatory only for staff in student facing roles in Monash Residential Services, Safer Community Unit and Student Conduct and Compliance.

PRIORITY 3:
Expand gender equality goals

Where relevant, the University will expand the scope of its gender equity goals and efforts to outreach programs and the student population under the United Nations Sustainable Development Goal 5: Gender Equality.

Several of the programs and activities offered by the Equity, Diversity and Inclusion team in 2023 were designed to advance gender equality. This included the LGBTIQA+ Ally program for students, which had 290 participants during the year, as well as the BRIGHT training on gender-based violence (791 completions). Major events including Respect at Uni Week, and Equity, Diversity and Inclusion Week, further expanded outreach to students on gender equity.

Representation in governance has also improved, with student leaders across the Monash Group now serving on the Respect at Monash Committee and the Equity, Diversity and Inclusion Committee.



GENDER EQUALITY

PRIORITY 4:
Gender parity

The University will identify and formalise the mechanisms and expedited timelines for achieving parity in senior roles and other areas where women’s participation at Monash is low.

GENDER EQUALITY ACTION PLAN

Launched in 2022, Monash University’s Gender Equality Action Plan sets out a four year pathway to address gender inequities for all staff, eliminate the systemic barriers to professional development and career advancement, and to achieve gender and salary parity and progress towards a deep and broad inclusiveness across the University. The Plan outlines measurable actions across seven priority areas:

- 1. Recruitment
- 2. Career progression, promotion and development
- 3. Gender composition at all levels of our workforce
- 4. Gendered work segregation
- 5. Workplace support, leave and work flexibility
- 6. Workplace culture, leadership and diversity
- 7. Gender pay equity.

A complete list of the objectives contained in the Gender Equality Action Plan is provided in Appendix 4.

At the time of reporting, 77 per cent of the 105 action items identified in the Gender Equality Action Plan were either completed or ongoing.

A summary of key advances against the seven pillars of the Gender Equality Action Plan is provided in Table 5.1.

TABLE 5.1: KEY OUTCOMES AGAINST THE GENDER EQUALITY ACTION PLAN, 2023

PILLAR	KEY 2023 OUTCOMES
Recruitment	> An Inclusive Recruitment Guidelines for Hiring Managers document was developed to provide selection panels with better understanding of inclusive and equitable recruitment. Guidelines are now routinely distributed to all hiring managers > 56% of all appointments to positions within three reporting levels to the Vice-Chancellor were women, compared to 41% in 2021 > The proportion of women receiving job offers for academic roles in STEMM faculties increased from 38.3% in 2020 to 52.4% in 2023
Career progression, promotion and development	> Applications for promotion by women (total 157) exceeded applications by men (total 134) in 2023, reversing historic trends > Average promotion success rate for women also improved, with 92% of applications being successful (compared to 87% for men). Women outperformed men across each promotion level > An inaugural information session on Dispelling Myths in Academic Promotion attracted 290 attendees > A new targeted program on writing skills and strategies in applications for promotion was developed, accompanied by the establishment of peer-support networks and provision of material and examples for developing compelling application narratives
Gender composition at all levels of our workforce	> The proportion of women in senior management roles reporting directly to the Vice-Chancellor increased to 38.5% in 2023 (from 20% in 2021). Across all other reporting tiers, the representation of women remained proportionate to their overall employment, standing at 58%. > The proportion of women in senior executive roles (Executive Directors, Executive Managers classified above HEW 10) also rose to 43% (from 38% in 2021). > Women’s representation in senior academic roles (Associate Professor and Professor) is improving. The proportion of women among Professors exceeded 30% for the first time (32% in 2023)
Gendered work segregation	> The proportion of women among Professors in STEMM reached 28.4%. although still far from parity, the 5.5 percentage point rise over two years (from 22.9% in 2021) signifies accelerated improvements and a positive shift in addressing pronounced gender disparity in these disciplines. > The number of women Professors in STEMM also exceeded 100 for the first time (from 81 in 2021). In contrast, the growth in the number of men STEMM Professors during the same period was 12%, highlighting the success of targeted initiatives, programs and strategies pursued by Monash University over several years
Workplace support, leave and flexibility	> 2023 Employee Experience Survey results showed that 81.4% of respondents felt supported by their manager in flexible work arrangements (compared to 69% in 2021) > Gender composition of staff accessing formal flexible work arrangements mirrors overall workforce distribution: 58% of women; 42% of men. > In 2023, 22% of fixed-term and ongoing staff (excluding casual positions) were employed on a part time basis. 75% of part time staff were women > 2337 Monash staff (22%) accessed carer’s leave. Women continued to access carer’s leave at a greater rate than men. Data dashboards were developed to enable monitoring of staff absences by a range of employment and demographic detail
Workplace culture, leadership and diversity	> 2023 Employee Experience Survey results showed that women encountered sexual harassment at a higher rate than men (9% vs 5%). > The data also revealed higher instances of sexual harassment among members of marginalised communities, including trans and gender diverse staff. Staff with disability were more than twice as likely to experience discrimination at work. One in four people with a disability stated they were not sure if they experienced discrimination, emphasising the need for continued education, training and awareness raising. > 83.4% of respondents agreed that Monash uses inclusive and respectful images and language, and 76.4% respondents believed the University encourages respectful workplace behaviours.
Gender pay equity	> Results of a comprehensive gender pay gap audit undertaken in 2023, including benchmarking, were presented to the Vice-Chancellor’s Group and Monash Council in Q1 2024.



MONASH ABORIGINAL AND TORRES STRAIT ISLANDER PEOPLES

Through our teaching, research and community engagement, the University will continue to make a substantial and ongoing contribution to Indigenous advancement by fostering mutually-beneficial partnerships with Indigenous peoples and communities.

ESG commitments

1. Implement the Aboriginal and Torres Strait Islander Framework
2. Support Treaty conversations and the Yoorrook Justice Commission
3. Contribute to First Nations Voice to Parliament co-design process

SUMMARY STATEMENT

Indigenous enrolments at Monash have grown consistently, including a 250 per cent increase in Masters enrolments and a doubling in PhD enrolments since 2018. After the impacts of COVID-19, 2023 also marked a promising turn towards parity with non-Indigenous students in terms of student success (measured by Weighted Average Mark).

Monash also recorded significant advances in its endeavour to strengthen recruitment, development and retention of Indigenous staff, with a 20 per cent year on year increase in Aboriginal and Torres Strait Islander Peoples being employed by the University.

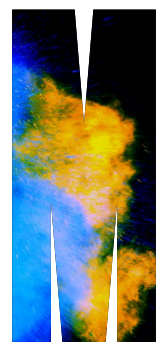
Staff and student groups across Monash contributed to the Voice to Parliament conversation throughout 2023. The University is well placed to contribute further as attention turns to alternative pathways toward Treaty.

PRIORITY 1: Implement the Aboriginal and Torres Strait Islander Framework

Monash will continue to implement the pillars articulated in the Aboriginal and Torres Strait Islander Framework 2019–2030 across all of the University’s operations, and be responsive to ongoing commitments established through governments and Indigenous community priorities.

The Aboriginal and Torres Strait Islander Framework (2019-2030) commits Monash to realise the aspirations of Aboriginal and Torres Strait Islander Peoples, contribute to the safeguarding of cultural heritages, and use the University’s expertise and resources to involve Aboriginal and Torres Strait Islander people in teaching and learning. The Framework articulates four key pillars to:

1. Increase the participation and support the success of Indigenous students
2. Embed Indigenous perspectives and content into curriculum
3. Grow research contributions to address and serve the needs of Indigenous people and communities
4. Uphold traditional knowledge and respect for Indigenous students, staff and communities.

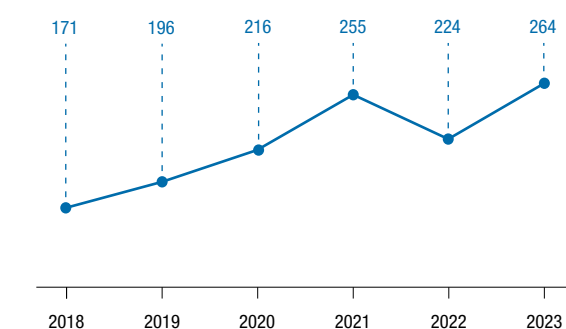


ABORIGINAL AND TORRES
STRAIT ISLANDER PEOPLES

PARTICIPATION AND SUCCESS OF FIRST NATIONS STUDENTS

Participation and success of Indigenous students at Monash is a mixed story. Indigenous enrolments at Monash University have grown consistently across the past five years. In 2023, there were 264 First Nations enrolments in a Monash course of study by equivalent full-time student load (EFTSL). This was an 18 per cent increase in the number of Indigenous enrolments since 2022, when there were 224 enrolments. One quarter of First Nations students at Monash come from outside Victoria.

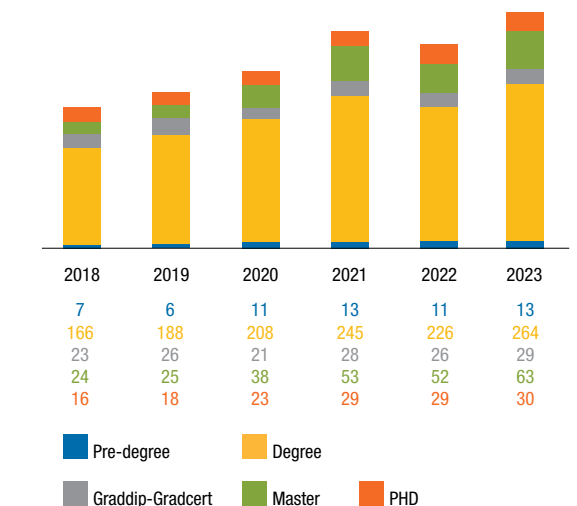
FIGURE 6.1: FIRST NATIONS ENROLMENTS (EFTSL), 2018-2023



The majority of First Nations students (49 per cent) are enrolled in an undergraduate degree. Graduate Certificate and Diploma enrolments are relatively consistent, while postgraduate enrolments are also growing strongly. There has been a 250 per cent increase in Masters enrolments since 2018 and a doubling of PhD enrolments in the same period.

A prominent example of postgraduate study is the Master of Indigenous Business Leadership. A unique two-year business leadership program, led and designed by Indigenous Australians and a collaboration between Monash Business School and William Cooper Institute, the Master of Indigenous Business Leadership tailors the core elements of traditional business school programs to the needs of Indigenous leaders.

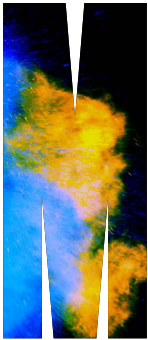
FIGURE 6.2: FIRST NATIONS ENROLMENTS BY COURSE TYPE (EFTSL), 2018-2023



CASE STUDY: ALTERNATIVE ENTRY PATHWAYS FOR FIRST NATIONS STUDENTS

Monash University offers alternative entry pathways and pre-degree courses specifically tailored for First Nations prospective students across a variety of study areas. One such pathway is the Monash Indigenous Access Program (MIAP), which provides avenues for Indigenous applicants who may not meet the course requirements for Monash University courses through Victorian Tertiary Admissions Centre (VTAC).

MIAP serves as a scholarship-funded bridging program aimed at preparing Indigenous students for entry into a diverse range of undergraduate degrees at Monash University. Additionally, for those who prefer a part-time option, the Indigenous Non-Award Pathway (INAP) is available as part of MIAP.



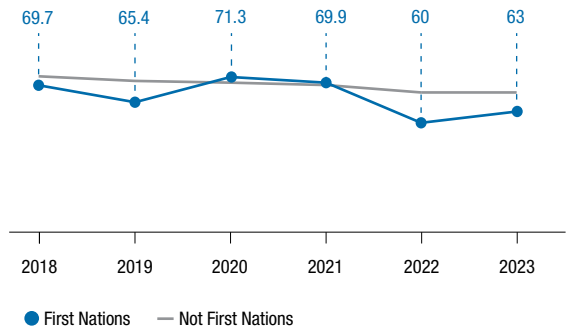
MEASURING THE IMPACT OF COVID-19 ON STUDENT SUCCESS

WEIGHTED AVERAGE MARK (WAM)

One measure of academic achievement at Monash is the **Weighted Average Mark (WAM)**. The WAM is the average mark the student achieves across all completed units in a course. This allows for precise measurement because the calculation is based on the students’ actual marks (eg: 78, 89, 63 etc) and the year level of each unit. This includes any failed and repeated units. The WAM is out of 100.

The average WAM for First Nations students declined slightly between the end of 2021 and through 2022. In 2023 we are seeing a promising turn towards parity with non-Indigenous students when performance between the two cohorts was comparable.

FIGURE 6.3: COMPLETION RATES BY WEIGHTED AVERAGE MARK, 2018-2023



As noted previously in the 2022 ESG report, COVID-19 had considerable impact for Indigenous students, often separating them from their families and communities. This dislocation led some students to elect to return to regional or interstate locations when able. Other students accepted the availability of free vocational education and training (offered by several state governments) and employment options not requiring a qualification to pursue career opportunities outside of Monash. These factors exacerbate the educational achievement gap between Indigenous and non-Indigenous students.

SUPPORT FOR FIRST NATIONS STUDENTS

Monash utilises learning analytics to assist with early intervention and timely referrals for students deemed to be academically at risk. These include support services like the Student Academic Success (SAS) team, faculty advisors, Disability Support Services (DSS), as well as the Indigenous Tutorial Assistance Program (ITAS) for First Nations students. These proactive measures are helping mitigate the negative impact on Indigenous student success rates.

WILLIAM COOPER INSTITUTE

All Indigenous students enrolled in coursework and bridging programs are supported by the William Cooper Institute, the University’s Indigenous student support hub. These services are supported by funding under the Commonwealth Government’s Indigenous Student Success Program.

The William Cooper Institute works closely with other Monash areas, including faculty-based Indigenous units like Gukwonderuk Indigenous Health Unit in the Faculty of Medicine, Nursing and Health Sciences, to help drive Indigenous success and completion rates.

A summary of further forms of support Monash offers to First Nations students is provided in Table 6.1.

TABLE 6.1: STUDENT SUPPORT FOR FIRST NATIONS STUDENTS, 2023

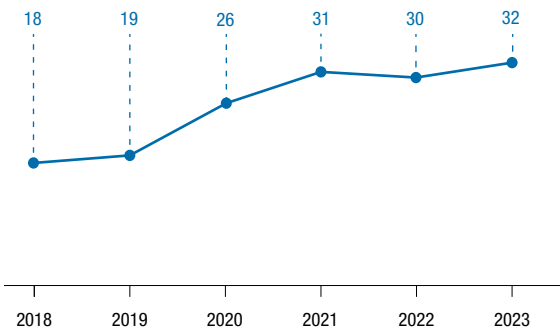
SUPPORT PROGRAM	DESCRIPTION
Indigenous Academic Enhancement Program	All Indigenous students, including those enrolled in post-graduate coursework study, are eligible to apply for the Indigenous Academic Enhancement Program (IAEP). The IAEP is an opt-in program that links students with specialised tutors on a weekly basis for enrolled units. Each tutor possesses relevant knowledge and tailors their support to each individual student. Students are eligible to receive one hour per week, per unit though additional hours can be requested in the lead up to assessments or exams.
Textbook subsidy scheme	This program offered by the William Cooper Institute offers to purchase Indigenous students’ prescribed textbooks, materials and uniforms for the units they are enrolled in each semester.
Elder in Residence	Our Elder in Residence, Aunty Diane Singh, has a long history working in Indigenous education and as part of her role at Monash, she provides support to students wanting to make connections with local communities or wanting to find out more about their own family history and connections.
Student Study Lounge	The William Cooper Institute provides study lounge facilities at three campuses – Clayton, Caulfield and Peninsula – and has a dedicated study space for students to connect with each other, staff, their tutors and with members of the community. Elders, cultural practitioners, leaders from various sectors and many other stakeholders are invited in on a weekly basis to promote opportunities for First Nations students. There are also weekly lunches, food and drop in tutors available throughout the week.
Other Support	The William Cooper Institute organises study skills sessions in areas like academic writing, using the Monash Library and preparing for exams and can also arrange for emergency relief funds for those that require additional assistance throughout the semester. Initiatives such as the Indigenous Leaders Program - which sees Aboriginal and Torres Strait Islander students travel to Canada to meet with First Nations peers internationally, an Orientation Camp for first year students to assist with the transition to tertiary study and many other opportunities.

HIGHER DEGREE RESEARCH STUDENTS

Pillar 3 of the Framework states that, by 2030, Monash University will have Aboriginal and Torres Strait Islander higher degree research (HDR) candidates and leading academics in all faculties and institutes.

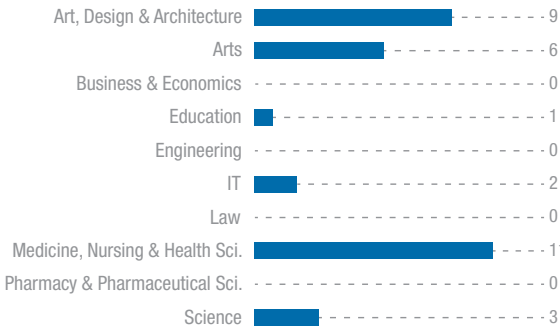
Indigenous HDR enrolments have remained relatively level over the past three years. In 2023 there were 32 HDR students enrolled at Monash (16.5 EFTSL), a 23 per cent improvement on 2020 enrolments.

FIGURE 6.4: FIRST NATIONS HIGHER DEGREE RESEARCH ENROLMENTS (HEADCOUNT), 2018-23



The largest First Nations graduate research cohorts were enrolled in the faculties of Art, Design and Architecture (nine HDR students), Arts (six HDR students) and Medicine, Nursing and Health Sciences (11 HDR students).

FIGURE 6.5: FIRST NATIONS HDR ENROLMENTS BY FACULTY (HEADCOUNT), 2023



SUPPORTING FIRST NATIONS HDR STUDENTS

The University implemented several programs to provide accessible, supportive pathways into research higher degrees for First Nations students in 2023.

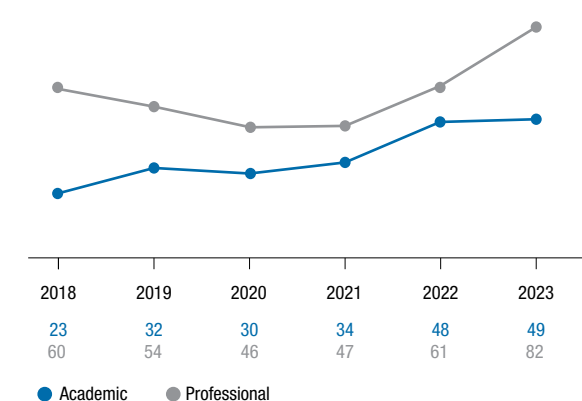
Strategic Investment (SI) funding was allocated as a top-up scholarship for Indigenous PhD candidates. This funding mechanism serves to supplement existing scholarships and support Indigenous students in their research endeavours, including funding for post-doctoral positions.

A new position of Director, Indigenous Research was also introduced in 2023. This role is tasked with conducting a comprehensive analysis of our current practices and initiatives related to supporting Indigenous students in research higher degrees. The Director, Indigenous Research will work collaboratively with stakeholders to identify areas for improvement and develop a clear and strategic way forward.

PARTICIPATION AND SUCCESS OF FIRST NATIONS STAFF

Monash continues to record significant advances in its endeavour to strengthen the recruitment, development and retention of Indigenous staff. In 2023 a total 131 Aboriginal and Torres Strait Islander Peoples were employed by Monash, a 20 per cent improvement on the total for 2022.

FIGURE 6.6: FIRST NATIONS STAFF (ACADEMIC V PROFESSIONAL) BY HEADCOUNT, 2018-2023



By working to reduce common barriers Indigenous people face accessing employment opportunities through initiatives such as the Indigenous Employment Policy and Procedure, Monash is increasing the number of First Australians in senior roles. Four faculties now have a position of Associate Dean (Indigenous).

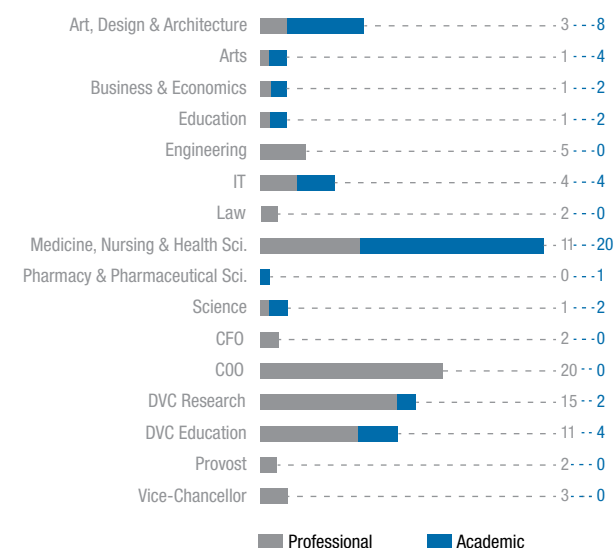
- > Arts
- > Education
- > IT
- > Medicine, Nursing & Health Sciences

A list of the highest First Nations leadership positions within Monash University for 2023 is provided in Appendix 5.

PROFESSIONAL STAFF

Nearly two-thirds (63 per cent) of Aboriginal and Torres Strait Islander Peoples employed by Monash are professional staff. Most of these staff members work in the central portfolios. The offices of the COO, DVC Education and DVC Research together account for 59 per cent of Indigenous professional staff.

FIGURE 6.7: FIRST NATIONS STAFF BY ORGANISATIONAL UNIT (HEADCOUNT), 2023



ACADEMIC STAFF

Academic staff – including both research and teaching and research only staff – accounted for 37 per cent of First Nations staff employed by Monash in 2023.

First Nations academic appointments are particularly strong in the Faculty of Art, Design and Architecture (eight Indigenous academic staff), which hosts the Wominjeka Djeembana Lab, and the Faculty of Medicine, Nursing and Health Sciences (20 Indigenous academic staff).

Targeting investment to support recruitment of Indigenous researchers is a key priority of the Monash Aboriginal and Torres Strait Islander Framework and strategic investment funding has been allocated to retain and support Indigenous research talent. Renewal of the Indigenous Employment Policy and Procedure has also enabled several academics enrolled in HDR study to take up employment at Monash.

PRIORITY 2: Support Treaty conversations and the Yoorrook Justice Commission

Monash University will contribute to Treaty conversations and support the Victorian Government’s establishment of the Yoorrook Justice Commission.

In December 2023 Dr Petah Atkinson from the Gukwonderuk Indigenous Health Unit (Faculty of Medicine, Nursing and Health Sciences) was named one of five inaugural members of the First People's Assembly Treaty Authority, to serve as independent overseers of the upcoming Treaty negotiations in Victoria.

The University's engagement in the Voice to Parliament process throughout 2023 (outlined in Priority 3 below) provided diverse opportunities for Monash to contribute to conversations relating to the process toward Treaty in Victoria and nationally.

Truth-telling was also facilitated through in-person Cultural Recognition sessions and online cultural awareness modules offered by Monash. The Indigenous Cultural Awareness and Recognition training module, which includes information on Treaty, Yoorrook and Uluru Statement commitments, is mandatory for all Monash staff.

Indigenous perspectives were further amplified through university-wide guest speaker events, allowing for deeper understanding and appreciation of Indigenous knowledge and experiences.

PRIORITY 3: Contribute to First Nations Voice to Parliament co-design process

At the Commonwealth level, Monash University will support and contribute to the First Nations Voice to Parliament co-design process.

In February 2023 Monash released a public statement reaffirming its commitment to support and contribute to the process outlined in the Uluru Statement from the Heart ahead of the national referendum to amend the Constitution to establish an Indigenous Voice to Parliament. The statement was released with the unanimous support of Monash University Council.

A full version of the University statement is provided in Appendix 6.

Academic and professional staff and student groups across the University contributed to the Voice to Parliament conversation throughout 2023. Prominent examples of these activities include:

- > A panel discussion with Attorney General Mark Dreyfus, hosted by the William Cooper Institute (February 2023)
- > The development of a Voice to Parliament website to channel all related research and community focuses outputs from the University, including links to student-led activities.
- > The History is Calling event, held at Clayton Campus in September 2023, which was attended by Members of Parliament, members of the Victorian philanthropic community, Indigenous Elders and community members. Guest Speakers included Thomas Mayo, Professor Megan Davis and Eddie Betts, and a performance by Paul Grabowsky.
- > Panel discussions, social media posts, guest lectures, scholarly publications, and editorial contributions were generated by academics and professional staff throughout year.
- > Following the outcome of the referendum, Monash's Pro Vice-Chancellor (Indigenous) reaffirmed the University's commitment to effecting positive change for Indigenous Australians through our research, teaching, and community engagement activity.

Indigenous Australians are turning their attention to alternative pathways toward Treaty(s) and Monash will continue to make significant contributions going forward.

ABORIGINAL AND TORRES STRAIT ISLANDER PEOPLES



MODERN SLAVERY

Monash University supports all efforts to eliminate modern slavery and is committed to delivering a robust, meaningful response to the Modern Slavery Act.

ESG commitments

1. Identify slavery risks in operations and the supply chain
2. Implement program to manage risks
3. Establish a structure for oversight
4. Develop impact measures
5. Share research to inform efforts to eliminate modern slavery

SUMMARY STATEMENT

Monash completed the fourth year of its initial five-year program in 2023, with significant improvements in two high risk areas.

Monash is working with a new cleaning supplier to build an in-house reporting capability, utilising open book pricing to improve transparency of labour rates, hours and locations worked, profit margins and similar elements. The approach allows Monash to break down the full price of its complex cleaning services each month, to close levels of detail as required.

The partnership with Electronics Watch has also greatly improved transparency for Monash IT equipment, uncovering areas for supply chain improvement even with top tier electronics providers. Multiple remediations to improve transparency and treatment of workers are already underway by Electronics Watch and partners such as the Responsible Business Alliance.



MONASH SPENDING ON GOODS AND SERVICES

In 2023, Monash University spent a total of \$1.23 billion on suppliers for goods and services and purchased from 15,174 suppliers in 63 countries (excluding low-value and one-time suppliers).

Of these suppliers, 1557 were new suppliers that were onboarded using the new mandatory modern slavery onboarding process outlined in Priority 1 and Priority 2.

The largest categories of spend in 2023 were:

- > Corporate Professional Services
- > Human Resources
- > Construction, Refurbishment and Works

PRIORITY 1: Identify slavery risks

Leverage procurement and supply chain operations, investments and fund managers, as well as research and teaching activities to identify and eliminate slavery risks for the University’s own supply chain. Leverage Monash research to inform government and civil society strategies to address human slavery globally.

OPERATIONS

Key operational risks for Monash relate to the University’s practices in recruitment and procurement.

RECRUITMENT RISKS

Monash University’s operations cater to 84,884 students, supported by 18,234 staff across six countries. Each country has specific labour practice laws and obligations. At-risk groups both domestically and overseas include vulnerable populations as a result of job insecurity, economic hardship, cultural practices, literacy and language issues, or the lack of knowledge about local laws.

Monash has developed rigorous policies, processes and monitoring to identify and avoid risks for staff and students in relation to servitude, forced labour, debt bondage in a homestay environment, and in their search for employment.

A summary of those measures is provided in Table 7.1.

TABLE 7.1: MONASH MEASURES TO REDUCE RISKS RELATED TO RECRUITMENT

MEASURE	SUMMARY
Employment instruments	> All employment instruments meet Australian legal requirements > Robust hiring practices in place, including fair recruitment and hiring processes, as well as conditions of work and behaviour > Monash HR practices are subject to audit > Internal audit of Monash College staff recruitment undertaken 2023
Policies and resources	> Rights of staff and students clearly set out through readily available policies and websites (including protections from bullying, discrimination, harassment, victimisation and vilification)
Complaint and grievance processes	> Complaint and grievance processes readily accessible for staff and students > Processes include clear identification, explanation, access to internal and third-party complaint avenues, anonymous complaint handling and timeframes for escalation
Student programs	> Career Connect program provides employability workshops, resources workplace rights, work conditions, pay rates, Fair Work Ombudsman and Fair Work links > 'Working in Australia' module released 2023 to educate students on work rights, entitlements, and obligations > Work underway to extend support to Malaysia and Indonesia > Monash College agent agreement for Professional Year program updated 2023 to include modern slavery clauses



PROCUREMENT RISKS

Business drivers, internal stakeholder expectations and procurement practices at Monash have the potential to create flow-on effects to downstream suppliers that may in turn incentivise forced labour, debt bondage and slavery by (for example):

- > setting unreasonable delivery or response timeframes;
- > accepting unreasonable below-market pricing;
- > seeking unreasonably high investment returns;
- > high-risk investing or purchasing without relevant due diligence;
- > accepting ambiguous responses to requests in tenders; or
- > accepting multi-level subcontracting without sufficient due diligence.

Monash has a mature procurement framework in place to help staff assess and address these risks through education and changes to policies and processes. The University's academic expertise is central to meeting this commitment. A summary of those measures is provided in Table 7.2.

TABLE 7.2: MONASH MEASURES TO REDUCE RISKS RELATED TO PROCUREMENT PRACTICES

MEASURE	SUMMARY
Policies and procedures	> Value and risk-based approach to procure goods and services > Detailed policies and standardised templates provide guidance on responsible practices, e.g. sufficient time for procurement planning, clear specifications, setting realistic expectations, ethics, confidentiality, and probity
Modern slavery training module	> Developed in consultation with Monash academic experts to help staff identify signs of hidden slavery practices in supply chains > Deployed to all staff with procurement responsibilities and all new staff from 2023
Strategic Procurement team	> Highly complex analytical expertise to reduce risk > Customised advice as needed, e.g. for procurement of high risk products or services. > Customised questions, advice on standard terms and review of tender responses as subject matter experts
CIPS program training	> Chartered Institute of Procurement and Supply (CIPS) Ethical Procurement and Supply eLearning program training > Completed by members of Strategic Procurement team > Testing conducted on an annual basis

Supply chain

SUPPLY CHAIN RISKS

Supply chains involving multiple layers of international suppliers carry higher risks depending on the type of industry, raw materials, components and the countries involved in supply and processing. These risks may be hidden one or more steps beyond the University's visibility into it.

Monash conducts risk analysis, reviews sourcing processes and contractual instruments and provides training to identify and mitigate modern slavery risk in its supply chain.

RISK ASSESSMENTS

Monash uses advice from the Department of Home Affairs and the Global Slavery Index to identify and assess high risk focus areas. Monash also continues to work as a contributing member of the Australian Universities Procurement Network (AUPN) to assess additional risk management methodologies and systems. A spend-based risk assessment system created with the AUPN is also utilised with additional guidance from Monash academic experts.

The 2023 spend assessment showed that supply chain risks predominantly sit in the types of goods and services procured, rather than where Monash procures from, and that a small number of suppliers account for the majority of spend in high-risk categories.

The five categories of products and services deemed to be of most significant risk for Monash, and the total amount spent on them in 2023, were as follows:

- > IT hardware \$39.17 million
- > Cleaning services \$21 million
- > Security services \$12.6 million
- > Apparel \$.092 million
- > Solar panels \$0.27 million

Activities to mitigate these risks are outlined in Priority 2.

FUND MANAGERS

Monash University's investment portfolios are managed on its behalf by fund managers. In 2023, 100 per cent of the University's fund managers included appropriate due diligence on modern slavery as part of their annual reporting to Monash. Each listed meaningful and reasonable actions such as supplier risk assessments, investment risk assessments, and staff training.

SUPPLIER ONBOARDING

All new mid-to-high value or recurring suppliers to Monash University must confirm they are compliant with relevant modern slavery requirements to proceed through Monash's supplier onboarding (supplier creation) process in Australia. A supplier that has not successfully been through this process is not able to be ordered from or paid.

In total, 1557 supplier records were created through this process in 2023.

CONTRACT AND SOURCING DOCUMENT TEMPLATE WORDING

A framework of template clauses was developed under academic guidance for key documents involving procurement of goods or services. The template clauses include 'low-risk' and 'high-risk' provisions, as well as specific terms related to electronics hardware. These clauses have been implemented in the various templates by the Office of General Counsel for use in new agreements

TRAINING AND COMMUNICATIONS

The Modern Slavery Training Module was deployed to all new staff from 2023.

Monash hosts a modern slavery website featuring information on University programs to address modern slavery, including annual statements as well as additional educational resources. Monash College also hosts its own modern slavery website.

As the modern slavery program matures an integrated digital communications campaign including social media and web-based communications will be held to raise awareness, promote discussion and provide additional skills and information on the issue to staff and students.

PRIORITY 2: Implement program to manage risks

A comprehensive, multi-year program will be implemented to identify and manage modern slavery risks throughout Monash University's extensive global networks, focusing on high-risk areas, risk reviews, training and awareness, and supporting Monash partners to understand their supply chains.

Monash completed the fourth year of its five-year Modern Slavery Program in 2023. Full details of the program are published in the University's 2023 Modern Slavery Act Statement.

TRAINING PROGRAM REVIEW

There were 3761 new completions of the modern slavery training module in 2023. In total 8923 Monash staff and students have completed the online training course since launch.

Additional training KPIs were introduced to ensure completion by a wider cohort, with training being mandatory for all staff roles related to procurement, purchasing, or relevant legal or commercial themes. The course is also mandatory for new staff.

In view of the 100 per cent compliance rate among key procurement staff (including offshore entities – see below) and overall positive feedback on the training, the Modern Slavery Steering Committee determined to defer a full review of the program in favour of a training effectiveness review. This will assess training retention among staff who completed the module one, two and three years previously. The findings will be used to revise content and establish if a refresher course should be introduced to improve retention over time.

Further data on staff and student participation in the modern slavery training module is provided in Appendix 7.

EXPANDED COMPLIANCE MONITORING

The Risk and Compliance Unit and the Office of the General Counsel undertook compliance checks on four recent Australian contracts relating to an assortment products and services deemed 'high risk' and 'low risk'. The purpose of the audit was to identify whether suitable modern slavery terms were in place, including the rights specific to high risk standard terms (which include the right to audit via business or factory inspection).

All four agreements were found to contain the correct modern slavery terms and were compliant with the Modern Slavery Act.

OTHER KEY PROGRAM UPDATES

Key Monash activities during 2023 to identify and manage modern slavery risks and obligations are summarised in Table 7.3 opposite.

TABLE 7.3: KEY UPDATES ON THE FIVE-YEAR PLAN, 2023

COMMITMENT	SUMMARY
Offshore agreement and sourcing template updates	> A discovery exercise was undertaken for each offshore entity that had commenced onboarding, including review of methods used to execute agreements > This exercise allows the creation of a specific plan to update templates for each entity.
Implementation of operational framework	> The cross-entity operational framework, designed to be suitable for the onboarding of any current or future entity globally, was utilised for onboarding Monash Indonesia and the World Mosquito Program.
Expanded offshore training rollout	> Training has been deployed more deeply into Monash University Malaysia, Monash Indonesia and the World Mosquito Program, with additional roles being identified as requiring mandatory training.
IT hardware	> In 2023, Monash received information on more than 20 final assembly factories likely to be part of our hardware supply chain identified as having occurrence of modern slavery in their business > Remediation is ongoing in 11 factories. In two instances, discussion of issues resulted in positive responses from our direct supplier, leading to improved responses from their assembly factory
Cleaning services	> A high value and complex tender was completed in 2023, with prevention of modern slavery at core of the process > As part of tender evaluations, modern slavery disclosures were rated against a scoring matrix aligned with the Modern Slavery Act reporting requirements > Specific high-risk modern slavery clauses targeted at cleaning services were included in final agreement > Material improvements have been developed for operationalisation in 2024 and subsequent years
Security services	> A separate major procurement process for security services was also undertaken in 2023 > Mitigation strategies to those for cleaning process were used during very early procurement stages of tender planning, through to evaluation, negotiation and contracting stages > Tender included social responsibility sub criterion to address modern slavery, broken down into (1) Employment practices; (2) Social and labour responsibility; (3) General business ethics. > Successful tenderer will commence security services in 2024 adopting the new methods, tools and reporting to address risk
Apparel	> Undertook works to interview key existing suppliers and review third-party certifications that relate to modern slavery in their operations and supply chains > Commercial solution for apparel, including new supplier agreements and development of supporting policies, processes and procedures to limit apparel purchases to pre-approved panel of suppliers, to be executed in 2024, utilising baseline work undertaken in 2023
Solar panels	> Concluded strategic solar deployment across existing buildings and campuses in 2023 > Further risk review undertaken during procurement process noted that Monash had limited supply options and buying power to influence market for the single planned purchase > The following considerations were noted in the review: > Identification of modern slavery risk should occur at early planning stages before decision is made on energy type (i.e. solar vs wind) > Risk must be assessed early in project planning to identify changes in supply chains, e.g. new lower-risk suppliers > Monash may consider the benefits of increasing purchasing power via the AUPN (subject to ACCC approval and processes)
Supplier due diligence in tenders and processes	> Due diligence on responsible procurement, employment, and anti-modern slavery practices is now standard in tenders. > For tenders in known high-risk products or services, customised modern slavery questions and evaluations tailored to the specific industry, product or service are typically used in addition to anti-modern slavery contract clauses in the supplier agreements. > A broader sector approach to supplier questionnaires is being developed with the AUPN.
Monash College partner review	> One new partner commenced in 2023 which will be reviewed in 2024
Student Placement Agreements updated and deployed	> Updated Placement Agreements were deployed by the Industry Placement team in 2023

INTERNATIONAL CAMPUSES AND ENTITIES

Training in the modern slavery program expanded to include Monash University Malaysia, Monash Indonesia and World Mosquito Program (WMP) staff in 2023.

A summary of the current status of these programs is provided in Table 7.4.

TABLE 7.4: INTERNATIONAL CAMPUSES AND ENTITIES

ENTITY	SPEND	LARGEST SPEND	SUMMARY
Monash University Malaysia	\$24.7M	Research equipment Refurbishment works AV Hardware	Monash University Malaysia (MUM) is not required to report on modern slavery under local law and the campus is still in the process of aligning with Monash University's Modern Slavery Program. MUM recruitment practices comply with local laws. MUM also seeks to work beyond local minimums, e.g. replacing two 12-hour security shifts with three eight-hour shifts. An Occupational Health & Safety (OHS) Committee promotes safe and healthy work environments and coercion, threats or deceptive practices are not tolerated. MUM has representatives on the Modern Slavery Steering Committee and Working Group, and it was identified that assistance may be required to uplift certain practices, including sourcing and supplier relationships.
Monash Indonesia	\$0.47M	IT Advertising Facilities Management	Monash Indonesia undertakes background checks on suppliers, many of which are recommended by the University in Australia. Monash Indonesia has a representative on the Modern Slavery Steering Committee. Monash Indonesia is still being onboarded, and will require assistance in understanding the risks of its current practices and supply chain and controls to mitigate risk. This is to be expected for an entity at this stage of onboarding.
Monash College	\$9M	Business and management consulting services Course development and expert advice services Electronic library supplies	Monash College has processes and policies in place and undertakes due diligence on new suppliers. Monash College also produces an annual Modern Slavery compliance statement approved by the College Board. Monash College has representatives on the Modern Slavery Steering Committee and Working Group. An opportunity has been identified to include control testing and an assurance process to assess the effectiveness of measures and compliance with policies. This will be discussed with the Steering Committee and, if deemed appropriate, will be factored into the 5-year rolling works program.
World Mosquito Program	\$16.8M	Contractors Travel IT	World Mosquito Program (WMP) follows the human resources, OHS and procurement policies and procedures of Monash University in Australia. WMP is still part way through onboarding.
Monash Suzhou	NA	NA	Monash Suzhou follows the human resources, OHS and procurement policies and procedures of Monash University in Australia, adjusted for local laws as required. Monash Suzhou is to commence onboarding soon. Training has been identified as being required to assist staff in identifying risks. Future contracts will need to have clauses updated with modern slavery terms. Supplier checklists or other vetting processes will be needed to assess suppliers. A Modern Slavery Working Group representative will be sought once Suzhou has been officially engaged to commence onboarding.

IMPLEMENTATION OF OPERATIONAL FRAMEWORK

The Operational Framework is an all in one guide developed for onboarding international Monash entities into the University's modern slavery program. The Operational Framework is one of the first documents provided to an entity after it has been engaged to join the program, and was used for onboarding Monash Indonesia and the World Mosquito Program.

PRIORITY 3:
Establish a structure for oversight

A comprehensive structure, including executive oversight committee and working group to leverage deep academic expertise, will be established to support the University's modern slavery program.

As previously noted in the 2022 ESG Report, the University has a clearly defined governance structure supported by an expert advisory panel, the Modern Slavery Steering Committee, to oversee the development and implementation of the modern slavery program of work. This governance structure was instituted in 2019 following introduction of the Modern Slavery Act 2018 (Cth).

The remit of this structure is to develop, review and refine the University's response to modern slavery within our operations and supply chains.

While the Steering Committee determines program direction, there is an escalation pathway that utilises the University's management structure. As the modern slavery program of work is managed by Strategic Procurement, escalations are managed from Strategic Procurement to the Chief Financial Officer and Senior Vice-President, who is a member of the Vice-Chancellor's Group.

A diagram representing the governance structure of the Modern Slavery program is provided in Appendix 8.

PRIORITY 4:
Develop impact measures

Monash will utilise its research expertise to develop impact measures that enable the assessment and development of efforts to counter modern slavery and to improve and target these efforts.

Academic expertise is core to the University's strategy to eliminate modern slavery from its operations and supply chain, including reporting on its progress.

In 2023 the Steering Committee coordinating the modern slavery program included five researchers from the faculties of Arts, Law and Business and Economics. These Committee members were appointed based on their extensive subject matter expertise, spanning human rights and people trafficking to procurement and supply chain management.

CASE STUDY: LEVERAGING ACADEMIC EXPERTISE IN PROCUREMENT

Monash University's Buildings and Property Division (BPD) executed one of the largest cleaning services tenders in Australia in 2023. Cleaning services represent one of the highest value, most complex and high-risk services Monash utilises, and cleaning has previously been identified as a high-risk industry by the Department of Home Affairs.

As part of its tender evaluations, the University rated bidders' modern slavery disclosures against a modern slavery quality scoring matrix which was previously developed by researchers at the Monash Centre for Financial Studies in the Monash Business School.



PRIORITY 5:

Share research to inform efforts to eliminate modern slavery

The University will share and communicate research findings that can inform regional and global efforts to eliminate modern slavery. This work is an essential component of the efforts focused on the reduction and eradication of exploitation in all its forms.

Monash academics authored or co-authored seven research outputs published in 2023 that related directly to issues of modern slavery. These outputs are summarised in Table 7.5.

TABLE 7.5: MONASH UNIVERSITY RESEARCH OUTPUTS ON MODERN SLAVERY, 2023

RESEARCHER	FACULTY (SCHOOL)	FULL REFERENCE
Pham, Nga, Cui, Bei and Ruthbah, Ummul.	Monash Business School	Pham, N., Cui, B., & Ruthbah, U. (2023) <i>Modern Slavery Disclosure Quality Ratings: ASX100 Companies Update 2023</i> [Research brief]. Monash Centre for Financial Studies, Monash Business School. DOI: 10.26180/24419881.
Larin, Tegan Maree	Art, Design and Architecture (Department of Design)	Larin, T & Jovanovski, N 2023, "Sex Trafficking of Women and Children: Male Sexual Violence, Public Health, and the International Survivor Movement" in P Liamputtong (ed.), <i>Handbook of Social Sciences and Global Public Health</i> . Springer, Cham Switzerland, pp. 1819-1839.
Palmer, Wayne Joseph	Arts (Indonesian Studies)	Yea, S, Stringer, C & Palmer, W 2023, "Funnels of unfreedom: Time-spaces of recruitment and (Im)Mobility in the trajectories of trafficked migrant fishers", <i>Annals of the American Association of Geographers</i> , vol. 113, no. 1, pp. 291-306. https://doi.org/10.1080/24694452.2022.2084016
Maycock, Matthew William	Arts (Criminology)	Maycock, M 2023, "What has almost 20 years of 'freedom' meant for Kamaiya men in Kailali district Nepal?", <i>Journal of Modern Slavery</i> , vol. 8, no. 1, pp. 45-63.
Tan, Shih Joo	Arts (Monash Gender and Family Violence Prevention Centre)	Tan, SJ 2023, "Gendered Labour, Everyday Security and Migration: An Examination of Domestic Work and Domestic Workers' Experiences in Singapore and Hong Kong". <i>Routledge Studies in Criminal Justice, Borders and CitizEnship</i> , 1st edn, Routledge, Abingdon Oxon UK.
Landau, Ingrid Mary	Business and Economics (Business Law and Taxation)	Landau, I 2023, <i>Human Rights Due Diligence and Labour Governance</i> . Oxford Labour Law, 1st edn, Oxford University Press, Oxford UK.
Currie, Samantha	Law	Currie, S 2023, <i>Working in the Crossfire: Legal Representation of People with Lived Experience of Human Trafficking: A Study of Immigration Legal Aid Lawyers in the United Kingdom</i> . 1st edn, Monash University, Melbourne Vic Australia.
Uddin, Jasim	Monash University Malaysia School of Business	Uddin, MJ, Azmat, F, Fujimoto, Y & Hossain, F 2023, "Exploitation in Bangladeshi ready-made garments supply chain: a case of irresponsible capitalism?", <i>The International Journal of Logistics Management</i> , vol. 34, no. 1, pp. 164-188.

MONASH CENTRE FOR FINANCIAL STUDIES

MODERN SLAVERY DISCLOSURE SCORING FRAMEWORK

The Modern Slavery Disclosure Scoring Framework was developed by the Monash Centre for Financial Studies (MCFS) to measure the disclosure quality of companies required to report on risks to modern slavery in their operations and supply chains. The Framework provides a benchmark for evaluating the statements submitted by Australian Securities Exchange companies under the requirements under the Modern Slavery Act 2018 (Cth).

The Modern Slavery Research Program in the Monash Centre for Financial Studies (MCFS) has demonstrably informed best practices of companies and investors, as well as shaping regulation. Examples across each of these sectors are provided as follows:

- > Companies: Companies that have acknowledged the influence of the MCFS or Modern Slavery Disclosure Scoring Framework in preparing their Modern Slavery Statements include: ANZ, Aristocrat Leisure, BHP, Evolution Mining, Qantas, QBE, Mirvac, Star Entertainment Group, and Vicinity.
- > Investors: MCFS research has been acknowledged in risk management and corporate engagement by Macquarie, TelstraSuper, State Super and Alliance Bernstein. The MCFS Modern Slavery Research Program team have also contributed to investor groups' policy advocacy working groups, including the Responsible Investment Association Australasia (RIAA) and the International Corporate Governance Network (ICGN).
- > Regulatory: MCFS research was cited substantially in the Final Report of the Statutory Review of Modern Slavery Act 2018 (Cth) released in May 2023. A total of 23 submissions by other organisations also cited the University's research in their responses to the MSA consultation. Professor John McMillan, AO, who led the review of Australia's Modern Slavery Act provided a testimonial that he was substantially informed by Monash's research in the course of his mission.

The MCFS team presented best disclosure practices to the Australian Government's Interdepartmental Committee on Modern Slavery in Public Procurement. They also presented their assessment of the disclosure quality of the Commonwealth Modern Slavery Statement to the Australian Government and related recommendations for improvement.





INVESTMENT

The University will continue to transition its investment portfolio towards carbon neutrality.

ESG commitments

1. Define pathways to carbon neutrality across externally managed investments
2. Annual reporting on climate alignment of investments

SUMMARY STATEMENT

Monash made further advances to decarbonise its portfolio during 2023, cutting the Weighted Average Carbon Intensity (WACI) of its investments by 13 per cent from 2022. Frontier's weighted average ESG rating of the University's managed fund portfolio (excluding cash) also improved from 2.54 to 4.37 stars. 83 per cent of the portfolio is now assessed as four stars or better (up from 39 per cent in 2022).

This improvement in both WACI and ESG ratings was primarily from the reallocation of almost \$500m into a five-star low carbon equity fund.

The University continues to meet with its fund managers annually to discuss investment performance and ESG matters, including approaches to ESG integration, modern slavery and active ownership.

PRIORITY 1:

Carbon neutrality across externally managed investments

Monash will work with fund managers to define the pathways that enable it to achieve carbon neutrality across its externally managed investments by 2050.

Monash University had approximately \$1.4 billion invested in its Long Term Investment Portfolio (LTIP) on 31 December 2023, the majority of which (87 per cent) was externally managed.

COMMITMENT TO RESPONSIBLE INVESTMENT

Monash University has a fiduciary obligation to invest sustainably, promote sustainable activities and earn investment returns while preserving the purchasing power of its endowment for future generations.

ESG concerns, particularly those relating to the impact of a changing climate, are material to investment returns and must therefore be incorporated into the University's investment decision-making and active ownership processes.

To do so, Monash is working to weight its portfolio appropriately, to deliver better ESG outcomes; to implement mandatory – as well as value based – exclusions across its direct and indirect investments, and to support strategies to improve the sustainability of all its financial assets.

Monash has greatly improved the environmental sustainability of its funds since the release of the ESG Statement 2021-2025 and is pursuing the priority to transition the portfolio towards the Net Zero target as soon as possible while maintaining its corporate responsibility to manage its finances responsibly and sustainably at all times.

In recent years considerable rebalancing has helped to improve the responsible investment credentials of the portfolio, alongside significant adjustments in asset allocations, including changes in relation to the level of bonds and private equity investments.

In 2023, Monash advanced the following measures to improve the alignment of its investments with ESG principles and to reduce the carbon intensity of the portfolio.

TABLE 8.1: MITIGATION MEASURES TO MANAGE HIGH-RISK CATEGORIES 2023

FOCUS	2023 SUMMARY
Governance	> As a signatory to the UN-supported Principles for Responsible Investment (PRI), the University submitted its annual PRI Report in September 2023
Measurement	> Weighted Average Carbon Intensity (WACI) reduced by more than 13 per cent throughout the year
Policy	> A comprehensive review was undertaken of ESG and investment objectives in the Monash Investment Policy. This included benchmarking analyses of policies for global organisations with similar objectives to Monash. A policy was drafted and initial consultation was completed. Feedback is now being incorporated into an updated draft Policy which will undergo further consultation.
Monitoring	> Investment Advisory Committee met with each of the University's fund managers over the course of 2023 with a focus on ESG matters > The University improved its weighted average ESG rating from 2.54 to 4.37
Leadership and Action	> The University continues to decarbonise its investment portfolio, allocating an additional \$500 million (approx.) to dedicated low carbon funds > Monash invested into a Private Equity Stewardship fund that incorporates ESG Integrated, Sustainable Thematic and Impact Investments

PRINCIPLES OF RESPONSIBLE INVESTMENT

Monash University is a signatory to the United Nations-supported Principles of Responsible Investment (PRI), which requires the University to provide reports on progress made towards advancing responsible investment factors into its investment strategies.

The following measures were used in the University's investment practices to align with responsible investment best practice and to reduce carbon intensity:

1. Requiring all investment managers to be PRI signatories
2. Reducing the carbon intensity of the investment portfolio and investing in climate change solutions via a low-carbon global equities product
3. Investing in renewable energy infrastructure projects
4. Investing in tailored portfolios that exclude exposure to coal, tobacco, uranium and cluster munitions
5. Engaging with investment managers, including meeting at least annually, to understand their approach to ESG investing and advocate ongoing progress
6. Utilising independently assessed ESG star ratings in fund manager assessments and ongoing monitoring

Monash improved its compliance with annual United Nations-supported Principles for Responsible Investment (PRI) reporting requirements in 2023.

The 2023 PRI Assessment Report awarded Monash a score of four stars, which is above the PRI median, in three out of four assessed modules. This represented is a significant improvement over the University's previous submission where only one module scored four stars.

Investment performance has also exceeded the targeted return of CPI plus 3.5 per cent per annum over the last 10 years.



PRIORITY 2:

Annual reporting on climate alignment progress of investments

Monash will report annually on its progress to improve the climate alignment of its investments as part of the University's broader responsible investment and sustainable development goals (SDG) reporting processes.

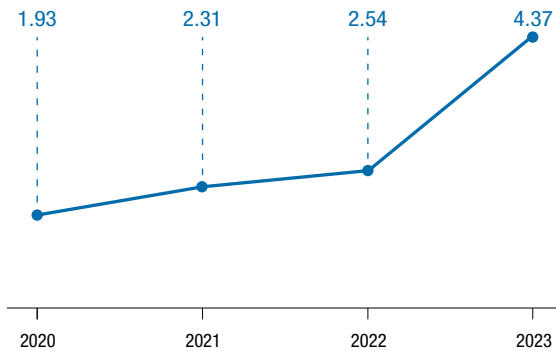
MEASURING SUSTAINABILITY PERFORMANCE OF MANAGED FUNDS

FRONTIER ESG RATING

Since 2020 Monash University has engaged independent asset consultant Frontier Advisors to assess the ESG performance of its managed funds. Funds are subsequently rated based on a 5-star rating system developed by Frontier. The results of this assessment are summarised in Figure 8.1 below.

Frontier's weighted average ESG rating of the University's managed fund portfolio (excluding cash held by Pandal) improved from 2.54 stars to 4.37 stars on 31 December 2023.

FIGURE 8.1: FRONTIER WEIGHTED AVERAGE ESG RATING, 2020-2023



Based on ESG Ratings (excluding Pandal Cash), 83 per cent of the portfolio is now assessed as four-star or better. This represents an improvement of 49 percentage points on the previous study period (when 34 per cent of the portfolio received a four-star rating).

WEIGHTED AVERAGE CARBON INTENSITY

In January 2023 Monash University introduced a new sustainability assessment to measure the Weighted Average Carbon Intensity of managed funds.

CALCULATING WEIGHTED AVERAGE CARBON INTENSITY

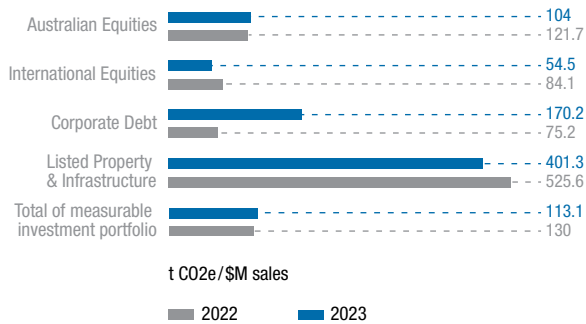
Weighted Average Carbon Intensity (WACI) is a metric used to estimate the exposure of an investment portfolio or index to potential carbon-intensive companies, based on their emissions and financial performance.

WACI is expressed in tons of greenhouse gas converted to carbon dioxide emissions using the greenhouse gas protocol per million sales, written as tCO2e/\$Sales.

Monash is reducing its exposure to carbon intensive companies in its investment portfolio. The WACI score for the University's overall measurable investment portfolio on 31 December 2023 was 113.1t CO2e per \$million sales. This was 13 per cent lower than for the previous year.

The improvement in both WACI and ESG ratings was primarily from the reallocation of almost \$500 million into a five-star ESG rated, low carbon equity fund.

FIGURE 8.2: WEIGHTED AVERAGE CARBON INTENSITY BY INVESTMENT CATEGORY



AVAILABILITY OF DATA FOR MEASURING SUSTAINABILITY PERFORMANCE

WACI DATA AVAILABILITY

Excluding property, Monash does not currently hold any direct investments in its Long Term Investment Portfolio, the majority of which is managed on its behalf by external fund managers. For some funds under external management, there is limited visibility to measure the entire scope of their allocations and hence their carbon exposure, particularly in unlisted assets (while noting that Monash requires all investment managers be PRI signatories and monitors their ESG performance).

As the WACI of an investment category is calculated according to the data available for that category, the more transparent the data within a particular category, the more reliable the WACI score can be assumed to be for that category.

Monash University is working with fund managers to increase the visibility of data.

While the measurement of WACI is gaining maturity, some gaps in data availability remain, particularly in Corporate Debt.

Transparency of Corporate Debt has nevertheless improved considerably year on year, from 25.1 per cent in 2022 to 43.5 per cent in 2023 which was the major driver for the increase in WACI for this asset class.

Data availability for WACI assessment is improving across every investment category.

TABLE 8.2: DATA AVAILABILITY FOR WACI ASSESSMENT, 2022 V 2023

	2022	2023
AUSTRALIAN EQUITIES	96.9%	97.7%
INTERNATIONAL EQUITIES	98.9%	99.4%
CORPORATE DEBT	25.1%	43.5%
LISTED PROPERTY & INFRASTRUCTURE	99.6%	99.7%
OVERALL MEASURABLE PORTFOLIO	86.5%	87.1%





ENGAGEMENT

Building a sustainable future is the most pressing challenge confronting communities globally. Governments and industry worldwide are searching for answers to help them meet this challenge. The University will mobilise governments, industry and communities to adopt sustainable practice.

ESG commitments

1. Monash Technology Precinct investment
2. Sustainability leadership in South East Melbourne
3. Foster Pacific engagement on sustainability

SUMMARY STATEMENT

The launch of the Monash Precinct Network (MPN), a not-for-profit, multi-partner organisation tasked with accelerating engagement and innovation with industry, education, research, government and supply chains was a signature moment in the University's endeavour to foster innovation and investment in the MTP.

Monash has also continued its engagement with the Greater South East Melbourne (GSEM) group of local councils and participated in 31 commercial engagements with organisations inside the GSEM area over the year, generating \$9.2 million in funding.

A standout example of the University's work to increase its engagement in the Pacific, the Pacific Actions for Climate Transitions (PACT) Research Centre, officially launched in March 2023 in collaboration with the Government of Fiji and Fiji National University.

PRIORITY 1: Monash Technology Precinct



The University will leverage its position as a critical mass of research, education and innovation to attract investment to the Monash Technology Precinct

LAUNCH OF THE MONASH PRECINCT NETWORK BACKGROUND

The Monash Precinct Network (MPN) is a not-for-profit, multi-partner organisation tasked with accelerating engagement and innovation with industry, education, research, government and supply chains in the MTP and Greater South East Melbourne. MPN was conceived by Monash University in partnership with the following founding members:

- > ANSTO
- > CSIRO
- > City of Monash
- > Moog
- > Textron
- > Eastern Innovation and
- > The Agenda Group.

The MPN launched in March 2023 with an event attended by more than 100 leaders from industry, the R&D sector, education providers and government.

Key activities led by the MPN to advance innovation and investment in the MTP during the remainder of 2023 included:

- > launching the Net Zero event series to foster knowledge exchange of best practices in organisational net zero transition;
- > expanding its network community to 445 organisations across industry, research and education;
- > hosting an array of C-suite and showcase events, focused on industry R&D collaboration in energy transition, smart manufacturing, artificial intelligence, cybersecurity, jobs of the future, mobility and innovation; and
- > the Startup and Spinout Retention Project to retain early-stage high-growth companies in the Precinct.

VICTORIAN HIGHER EDUCATION STATE INVESTMENT FUND PROJECTS

Monash continued its roll out key projects in the MTP supported by \$82 million in funding through the Victorian Higher Education State Investment Fund (VHESIF). A summary of the progress on these projects is provided in Table 9.1.

TABLE 9.1: 2023 VHESIF MTP HIGHLIGHTS

VHESIF THEME	UPDATE
Net Zero	The final stages of the government-funded segment of Net Zero project were completed, with upgrades to the Engineering and Science Thermal Precincts.
Smart Manufacturing Hub	Work on the Smart Manufacturing Hub (now Monash Innovation Labs) concluded, with subject matter experts moving into the facility to begin their collaboration with students in the Engineering and IT faculties. More information on Monash Innovation Labs is provided in the discussion under Precinct Innovation and Commercialisation.
Medicines Manufacturing Innovation Centre (MMIC)	The MMIC Clayton node progressed on the Synchrotron site, with a temporary lab space set up and operational in preparation for the new facility being completed.
Research platforms	New equipment was installed at several research platforms, including the Centre for Drug Candidate Optimisation, Microscopy Australia (Clayton node) and Monash Biomedical Imaging.

OTHER SIGNATURE MTP PROGRAMS

A summary on progress of other signature Monash University projects crucial to driving innovation and collaboration in the MTP is provided in Table 9.2.

TABLE 9.2: SIGNATURE MTP PROGRAMS

PROGRAM	SUMMARY
Australian Research Council (ARC) Net Zero Precincts	The Monash Net Zero Precincts ARC is a collaborative partnership with Engie, the City Councils of Monash and Greater Dandenong, CSIRO, ICLEI, the Energy Efficiency Council (Australia) and Swinburne University to support urban regions reach net zero emissions. The project is tested in the MTP through three Living Lab experiments across energy, mobility and buildings. In 2023 the Stage 1 Report was released, drawing on over 50 interviews with participants connected to the Monash Technology Precinct to understand how everyday experiences, complications and possibilities are shaping net zero futures. Stage 2 of the project also commenced, investigating how the MTP can achieve a balance in achieving net zero emissions with the everyday social, political and experiential realities of the community.
ARC Research Hub for Carbon Utilisation and Recycling	The ARC Research Hub for Carbon Utilisation and Recycling aims to develop technologies to transform carbon dioxide emissions into valuable products and create pathways to market to drive industry transformation. The ARC is investing \$5 million into the project over five years under the ARC Industrial Transformation Research Program, with a further \$6.5 million allocated by Monash University and partners, including seven national and international universities and 17 industry partners.
Victorian Heart Hospital (VHH)	The VHH officially opened in February 2023. The VHH is expected to deliver nearly \$400 million in community benefits in its first five years. This includes more than \$110 million from Monash University's co-located Victorian Heart Institute, which brings together cardiovascular experts, multi-disciplinary researchers, students, and entrepreneurs focused on taking discoveries, techniques and therapies out of the lab and into practice.
Moderna partnership and co-location	Construction works for Moderna's first large-scale mRNA production facility in the Southern Hemisphere – and the first in the world to be built on a university campus – commenced in April 2023. The facility, located at the corner of Blackburn and Wellington roads, will greatly enhance Australia's medical R&D, clinical trials and global supply chain access. The facility is expected to officially open in Q4 2024 and become fully operational in Q1 2025.
Monash Technology Precinct (MTP) Vision	The MTP Vision was created to inform the Suburban Rail Loop Authority's planning for, and development of, the future Suburban Rail Loop (SRL) Station at Clayton campus and surrounding SRL Precinct.

GOVERNMENT ENGAGEMENT

In 2023 Monash University hosted 116 state and federal government ministers and MPs at its Clayton campus. The campus also received eight global delegations, including high-level representatives from New Zealand, China, India, Singapore, Victorian Trade Commissioners and the Global Institute on Innovation Districts.

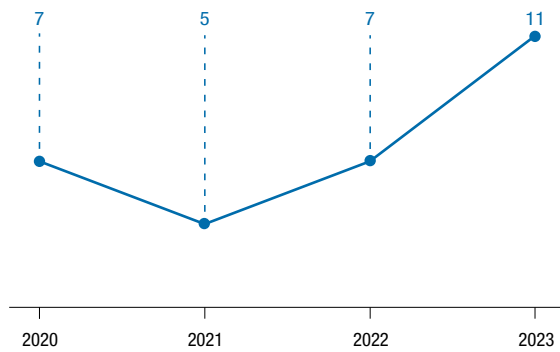
Precinct Innovation and Commercialisation

SPINOUTS

In the context of commercialisation, spinouts are a type of start-up which are based on Monash intellectual property (IP). In some instances, the University may hold equity in a spinout in exchange for licensing the IP. They may also license the IP on purely financial terms (such as royalties and annual fees) without taking any equity in the new company.

In 2023 there were 11 new spinouts based on Monash IP, an increase on seven in the previous year. The University held equity in eight spinouts, bringing the portfolio of spinouts in which equity is held to 27.

FIGURE 9.1: SPINOUTS AND START-UPS, 2020-2023



Both start-ups and spinouts associated with Monash (staff, researcher, student or alumni) are supported by the Generator, Monash University's central start-up and entrepreneurship hub.



In 2023 the Generator supported 57 start-up projects and engaged over 630 students, staff and alumni to promote entrepreneurship and entrepreneurial skill development across Monash.

Over the year, the University completed thirty new deals with external parties to licence the use of Monash intellectual property and generated \$3.5 million in commercial revenue.

FIGURE 9.2: NEW DEALS, 2020-2023

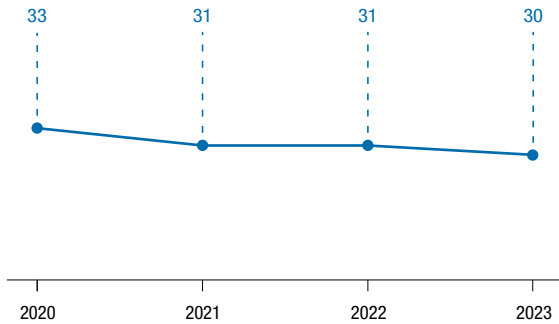
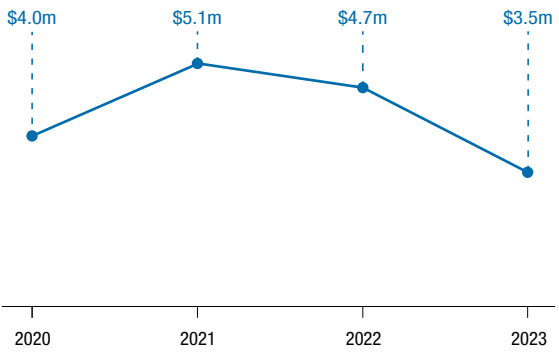


FIGURE 9.3: COMMERCIALISATION REVENUE, 2020-2023



A complete list commercialisation data is provided in Appendix 9.

Advances in Precinct Commercialisation

In 2023 Monash led several advances to nurture and accelerate the growth of current and future start-up and spinout companies in the MTP.

MONASH INNOVATION LABS

Monash Innovation Labs opened in March 2023. Supported by the Victorian Higher Education State Investment Fund (VHESIF), the Monash Innovation Labs support and enable companies across all sectors and at all life-stages to advance their ideas and test products and innovations with direct access to state-of-the-art, purpose-built smart manufacturing, smart infrastructure and smart processing laboratories.

The facility enables established businesses to have a research base within the heart of the Monash Technology Precinct through a tailored space licence agreement.

UNISEED

Monash joined the UniSeed investment fund as a full partner in November, increasing access to crucial early-stage investment capital for Monash spinouts to support research translation and foster innovation.

Uniseed is Australia's longest-running venture fund, with investment capital from partner research organisations and a leading Australian superannuation fund, UniSuper. As a result of Monash committing to a pro-rata contribution of \$3.6 million over three and a half years, all upcoming Monash spinout opportunities and existing spinout companies will become eligible for investment by Uniseed's current fund.

BREAKTHROUGH VICTORIA

Monash established a partnership with Breakthrough Victoria to provide crucial early-stage capital and guidance for spinout innovation. The \$15 million pre-seed support will enable investment of up to \$500,000 per annum into the development of new ventures spun out of Monash University research. This serves the dual purpose of enhancing product development and safeguarding research with strong commercial potential, ensuring its successful path to market viability.

SPINOUT CASE STUDIES

NODE: TURNING INERTIA INTO IMPACT

In the march towards net zero, there can be no cohesive momentum without buy-in and tangible action from global businesses.

N0de is a Monash spinout launched in 2023 with goal of empowering organisations to activate and accelerate their sustainability transformation through a cutting-edge digital platform that generates a tailored, dynamic net zero plan in minutes, not months. N0de works on turning inertia into impact by empowering organisations to focus on a proven path to Net Zero carbon emissions.

In addition to boasting the successful application of their program at Monash University, in 2023 n0de has won contracts with other institutions, government agencies and real estate companies to deliver their solution.

JUPITER IONICS: CARBON-NEUTRAL, GREEN AMMONIA

Jupiter Ionics has invented an electrolytic cell that produces green ammonia using only water, air and renewable energy with no CO2 emissions. This scalable, electrochemical technology can be used by the agriculture industry for fertiliser and as a clean alternative fuel source for transport industries, providing global industries with the methods to support greater sustainability and drastically reduced emissions.

In 2023, Jupiter Ionics signed a lease to move into Monash Innovation Labs and raised \$9 million in funding from investors including CIMIC, Breakthrough Victoria and Wesfarmers.

PRIORITY 2:

Sustainability Leadership in South East Melbourne

Building on relationships with key stakeholders such as Greater South East Melbourne, the University will establish a participatory process to engage key stakeholders to drive adoption of environmental and social principles in South East Melbourne and further progress collaborative development of local water, waste and energy solutions.

Greater South East Melbourne

Monash continued its engagement with the Greater South East Melbourne (GSEM) group of local councils, representing Cardinia and Mornington Peninsula shires and the cities of Casey, Frankston, Greater Dandenong, Kingston, Knox and Monash.

In total, the University participated in 31 commercial engagements with organisations inside the GSEM area over the year and generated \$9.2 million in funding for Monash activities.

MONASH COMMISSION

The Monash Commission Seminar Series was held for its second year to drive engagement with the findings of the Commission's inquiry on The Liveable Metropolis.

The seminar series engaged researchers, government and industry bodies, including GSEM, the Suburban Rail Loop Authority and the Global Institute on Innovation Districts to explore and articulate a local contextual understanding of how to apply the Commission's findings on the opportunity of intermediary cities to deliver resilience, impact and prosperity to the Monash National Employment and Innovation Cluster.



ENGAGEMENT

Further Engagement in the region

CIRCULAR ECONOMY JOURNEY PROJECT

BACKGROUND

The Circular Economy Journey Project is a collaboration between the Monash Business School, South East Melbourne Manufacturers Alliance and the Circular Economy Business Innovation Centre (CEBIC – delivered by Sustainability Victoria), to investigate circular economy adoption in Victoria's manufacturing sector. The project was launched in 2022.

Monash Business School completed the second and third stages of the Circular Economy Journey Project, which included the following activities to promote the rapid adoption of circular economy practices within the manufacturing industry of south-east Melbourne:

1. Launch of the Monash Circular Economy Roundtable, bringing together government and business representatives at the leading edge of circular policy and strategy to accelerate the wider adoption of circular practices.
2. Creation of a Circular Economy and Sustainability research interest group to support businesses and councils in the South East Melbourne region
3. Completion of a seeding project with the University of Warwick to support exchange of best practices across businesses in the United Kingdom and Melbourne, with a focus on the South East Melbourne region.

ACTIVE ENERGY PRECINCTS

BACKGROUND

Active Energy Precincts is a collaboration launched in 2021 between Monash University, six local government areas (LGAs) and Birdwood Energy to demonstrate the business case for microgrids to improve energy reliability and reduce carbon emissions and costs in regional communities.

2023 marked the completion of the Active Energy Precincts microgrid feasibility project for six precincts across three LGAs, including the installation of a 108-kilowatt battery storage system at Healesville Community Link.

In April 2023 further funding was also awarded under the Federal Government's Preparing Australian Communities (PAC) Grant to a Resilient Energy Precincts joint venture between Monash University and Yarra Ranges LGA to explore resilience, cost, and net zero considerations in collaboration with Yarra Ranges Council.

GREEN LAB

Green Lab, Monash Business School's hub for research on sustainability and climate change, launched in 2023 to deliver interdisciplinary research that contributes to improved policy and regulatory settings and to help shape social and organisational behaviours to advance sustainability in Australia, the Asia-Pacific region and beyond.

By bringing together academics and industry experts on sustainability, Green Lab is helping communities to address challenges relating to climate and sustainability governance, adaptation to climate change impacts and to realising circular economy and sustainable supply chains in practice.

Key achievements by Green Lab since its launch included:

- > contributing to the Australian Conservation Foundation's new benchmarking of climate commitments by Australia's biggest banks;
- > hosting public webinars on the Geopolitics of Food Security and Feeling Climate Change to the Bone; and
- > delivering key submissions and presentations on climate and sustainability reporting to Australian and international standard-setting bodies.

PRIORITY 3: Sustainability engagement in the Pacific

The University will develop a Pacific engagement plan to coordinate its regional efforts to promote action on sustainable practice, social justice and good governance

A summary of key engagement activities undertaken by Monash to promote sustainable practice, social justice and good governance in the Pacific region is provided in Table 9.3.

TABLE 9.3: KEY ENGAGEMENT ACTIVITIES IN THE PACIFIC REGION, 2023

ACTIVITY	SUMMARY
Revitalising Informal Settlements and their Environments (RISE)	> Settlement upgrades in the five sites in Makassar progressed to ~70 per cent completion, with two of five sites under commissioning > First full settlement upgrade in Suva complete, with tenders released for the other five sites > Funding extension (\$8.6m) awarded by Wellcome Trust to mid-2026. Additional funding for Suva build (\$4m) awarded by Government of Fiji and New Zealand Ministry of Foreign Affairs > Genomic sequencing capacity established in RISE Makassar lab, with staff training completed and first results produced (differentiating environment, animal and human origin as a key measure of environmental pathogen exposure)
Pacific Actions for Climate Transitions (PACT) research centre	> Collaboration with Government of Fiji and Fiji National University > Officially launched March 2023 in Suva by Fijian Deputy Prime Minister Finance, Professor Biman Prasad > Awarded \$1.6m in initial funding from Government of Fiji July 2023 > Inaugural Director, Professor Paul Dargusch, commenced appointment December 2023
UN Sustainable Development Solutions Network Australia, New Zealand & Pacific (SDSN AusNZPac)	> Hosted and led by Monash Sustainable Development Institute (MSDI) > Network of >40 member higher education and civil organisations across Asia-Pacific, including Samoa, Vanuatu and Fiji to mobilise SDG action > Launched ‘Towards an AusNZPac Youth SDG Index’ in July 2023, a youth-led report that was first in the world to use SDG framework to measure young people’s progress towards sustainable development. Featured contributions for young people in eight countries in the Asia-Pacific region. > Partnered with 360info (independent digital news wire based out of Monash) to produce “State of the SDGs” report in September 2023, featuring insights from authors across the SDSN Network on the obstacles to achieving the SDGs in the Indo-Pacific Region
Pacific Urban Partnership	> MSDI, as Monash representative on Pacific Urban Partnership, was co-organiser of Sixth Pacific Urban Forum (PUF6) in Suva, Fiji (September 2023), bringing together national and local governments, United Nations (UN) agencies, regional bodies, and academia > PUF6 focused on sustainable urbanisation, localisation of the SDGs and climate change > MSDI also worked with Pacific Urban Partnership and Australian Government Department of Foreign Affairs and Trade to build Pacific capacity to undertake voluntary local reviews (VLRs) on progress towards the SDGs, including: co-organising sessions at 10th UN Asia-Pacific Forum on Sustainable Development; drafting a preparatory handbook and supporting launch meeting for the City of Suva’s VLR process
2023 Conference of the Parties of the UN Framework Convention on Climate Change (COP28)	> Monash delegation of 35 staff and students plus virtual delegation attended COP28 in Dubai, November 2023 > 70 events run at the Monash Pavilion, many with Pacific partners, as well as former UN Ambassador to the Solomon Islands and current Monash Climate Change Envoy > Invited side-event at the Australian Pavilion with SPREP (Secretariat of the Pacific Regional Environment Programme) > Numerous Pacific ministers attended Monash side events and participated as panellists and speakers, including at the first-ever in-person COP ministerial side-event on health and climate change in the Pacific, co-hosted with World Health Organisation > Special youth events held in partnership with Australian Government Department of Climate Change, Energy, the Environment and Water to engage Pacific and ANZ youth in dialogue.

ACTIVITY	SUMMARY
ARC Centre of Excellence for the Elimination of Violence Against Women (CEVAW)	> Led by Monash University, CEVAW will address the full range of forms of violence against women in Australia and the Indo-Pacific region > Aims to transform understanding of the problem by examining structural drivers that cause and compound violence against women, and pioneering new, evidence-based approaches to inform trajectory-altering practice and policy > Six Australian universities (including Monash) and 45 national and international partner organisations have officially joined the Centre > Planning activities and establishment phase undertaken in 2023 included a workshop with CEVAW partners in Fiji > Officially commenced operations 1 January 2024
World Health Summit Regional Meeting 2024	> As host to the 2024 World Health Regional Summit, Monash worked extensively in 2023 to secure event partners, venue sponsorship and local, regional and international speakers for the Summit > Proposed Pacific speakers and panellists for the Summit include former NZ Prime Minister the Rt Hon Helen Clark, Pacific Chief of Health of the UN Population Fund Dr Titola Duro-Aina, representatives from Department of Maori Health and Maori Health Authority, Fiji National University College of Medicine, Nursing and Health Sciences, the University of Auckland and the Fiji Women’s Rights Movement. > International Presidency of the World Health Summit (a 12-month term allocated to the forthcoming host of the World Health Summit Regional Meeting) was handed to Monash University in a ceremony in Berlin, October 2023
Pacific Islands Virtual Online Training in Surgery Phase II (PIVOT)	> Partnership with Fiji National University, the Monash Children’s Stimulation (MCS) Centre (collaboration between Monash Children’s Hospital and Department of Paediatrics, Monash University), and facilitated by Royal Australasian College of Surgeons > Provides sustainable training for local trainees and surgeons and helps address the educational deficit caused by the interruption of visiting teams providing education in low-resource countries during COVID-19 pandemic > Funding received for a further three years in 2023
Fiji International Professional Experience	> The inaugural Fiji International Professional Experience (Fiji IPE) was successfully held in mid-2023, with 28 pre-service students completing a demanding three week teaching placement in Suva schools and an early childhood centre > Program was co-constructed with University of the South Pacific and the Fijian Ministry of Education > Funded through the New Colombo Plan
Agreement with Tertiary Scholarships and Loans Service (Fiji)	> Agreement signed with Tertiary Scholarships and Loans Service (TSLS) of Fiji to support Fiji’s human capacity development needs in engineering, health sciences, information technology, and science and innovation > Small cohort of TSLS-funded students enrolled in a range of undergraduate programs in 2023
Pacific Primer by 360info	> Updated special report by Monash-led open-access global information agency 360info, released ahead of the November 2023 Pacific Islands Forum (PIF), in collaboration with PIF Secretariat > Report included articles addressing key issues facing the Pacific as identified by PIF and other specialists in the region > Published by 14 outlets with a combined potential reach of 4.9 million readers across 24 countries – mainly NZ, the Pacific and Southeast Asia
World Mosquito Program (WMP)	> DFAT Regional Health Partnership grant awarded to support further expansion of <i>Wolbachia</i> mosquito releases in Kiribati and Indonesia, and a new project implementation in Dili, Timor-Leste > WMP commenced partnership with Menzies School of Health Research for implementation of <i>Wolbachia</i> in Timor-Leste, pending approvals from Government of Timor-Leste > In New Caledonia, releases were completed throughout entire municipalities of Mont Dore and Dumbea, completing <i>Wolbachia</i> coverage throughout greater Noumea with a total population of 150,000 people. Releases also commenced in the city of Païta (19,000 people), November 2023. > A manuscript reporting implementation, entomological and public health outcomes of the <i>Wolbachia</i> releases in Fiji, Vanuatu and Kiribati was co-authored with government partners from the three countries and is under review at Public Library of Science – Neglected Tropical Diseases journal
Global Immersion Guarantee	> New Colombo Plan funded fieldwork unit on sustainability related challenges for Monash undergraduate students > Program expanded to two new Pacific locations in 2023: Samoa (68 students) and Vanuatu (50 students) > More information on the Global Immersion Guarantee is available in the Teaching section of this report



CLIMATE RISK DISCLOSURE

SECTION 1

Mapping climate scenarios and risks

EXECUTIVE SUMMARY

Consideration of the risks associated with the impact of climate change and the transition to a low carbon economy, as well as the opportunities that accompany that transition, is essential for effective institutional planning. This report represents Monash University's first endeavour to capture and report on those risks on an institutional level.

In this report, key features of how climate is projected to change in coming decades are considered, utilising two potential greenhouse gas emissions scenarios based on climate projections developed by the CSIRO. Significant risks to the ESG priority areas and the relevant portfolio overseeing that priority have been identified, based on the changes projected to Melbourne's climate over coming decades. Where relevant, information on current measures to mitigate those risks has also been provided.

The collated list of physical and transitional climate related risks to Monash University identified by the ESG Steering Committee is provided in Section 2.

BACKGROUND

CLIMATE REPORTING STANDARDS IN AUSTRALIA

INTERNATIONAL SUSTAINABILITY STANDARDS BOARD

The International Sustainability Standards Board (ISSB) was established in 2021 to develop a global baseline for sustainability and climate-related financial disclosure reporting standards for capital markets.

In June 2023 the ISSB issued two inaugural International Financial Reporting Standards (IFRS):

- > IFRS S1: General Requirements for Disclosure of Sustainability-related Financial Information;
- > IFRS S2: Climate-related Disclosures.

In March 2024, the *Treasury Laws Amendment (Financial Market Infrastructure and Other Measures) Bill 2024* was introduced into the Federal Parliament to align with the IFRS S2 Climate-related Disclosures and apply those standards in the Australian context.

At the time this report was prepared, the proposed Bill would make climate related disclosure reporting mandatory for entities that are required to prepare an annual report under Chapter 2M of the Corporations Act. Monash has received advice that, since universities do not report under Chapter 2M of the Corporations Act 2001, they will not be required to make climate related disclosures under the standards as they are proposed.

FOUNDATIONS FOR A MONASH CLIMATE RISK REPORTING PROGRAM

The ESG Statement emphasises the importance of adopting current standards of better practices in how the University reports on progress against its ESG priorities. Disclosure of climate risks and mitigation strategies represents a further opportunity for the University to further align its ESG reporting with better practice.

In addition, there are further grounds for introducing a climate risk disclosure program at Monash to align with the IFRS standards proposed. These include:

- > **Emerging disclosure requirements in other states:** In 2023 the NSW Government introduced a proposal to change reporting requirements for NSW Government Sector Finance Agencies, including universities, which would require them to include information on climate-related risks in their future annual reporting. While similar requirements have yet to be introduced for Victorian universities, the NSW proposal represents a broader shift towards the mainstreaming of climate risk reporting internationally. It would seem likely that comparable disclosure standards for Victorian public organisations will be introduced in time.
- > **Principles for Responsible Investment (PRI) reporting obligations:** The “four pillars” underpinning the IFRS standards (Governance, Strategy, Risk Management and Metrics / Targets) are based on identical standards set by the earlier Task Force on Climate related Financial Disclosures (TCFD), which are core to reporting for signatories to the Principles for Responsible Investment (PRI). Monash is a PRI signatory and lodges a PRI submission relating to its ESG commitments on its investments annually. By beginning to incorporate climate-related disclosure into annual ESG reporting, the University will be better able to satisfy its obligations as a PRI signatory.

- > **Impact 2030:** Climate change is one of the three global challenges identified in Monash University's Impact 2030 Strategic Plan. Impact 2030 commits Monash to “aim for a better-informed understanding of the nature and impacts of climate change on our environments and lives, for enhanced capabilities in our graduates to engage with these impacts in their work and their lives, and for new ideas and solutions about how we might prevent or mitigate detrimental effects and produce enhanced quality in our natural and created environments”. Implementing a framework that enables the University to identify and respond to climate related risks to its operations and improve climate resilience supports this commitment.

RISK MANAGEMENT AND BUSINESS CONTINUITY

Monash University's approach to the management of risk and compliance is defined by its Group Risk Management Framework, Group Risk Management and Compliance Policy and supporting procedures.

GROUP RISKS

Risks perceived to be most important to the University's strategic objectives are captured in the Monash Group Risk Profile. These risks are both strategic and operational. Group Risks are identified by reference to Monash's Operational Risk Profile, the Monash strategic plan (Impact 2030), supporting plans, external circumstances, and specialist internal advice.

The Group Risks, which are not public, form part of the decision making behind major initiatives, faculty planning and administrative planning processes.

OPERATIONAL RISK MANAGEMENT

Monash's Group Risk Management Framework applies the Three Lines of Defence Model (3LoD) to embed and coordinate responsibility for risk identification and response activities across the University, with the Risk and Compliance Unit (RCU) serving as a central risk function for the University, supported by a network of functional experts and specialist risk areas.

Under this model, individual business units across the University (process owners) own and have primary responsibility for the management of risks associated with day-to-day operational activities. Other accountabilities assumed by the first line include design, operation, and implementation of controls. The RCU provides frameworks, policies, tools and support for risk and compliance management activities across the University.

In 2023, the Risk and Compliance Unit commenced a systematic engagement program to support organisational units across Monash to record risks on a centralised Operational Risk Register.

BUSINESS CONTINUITY AND OPERATIONAL RESILIENCE

The Operational Resilience function was established in late 2022 with a remit to bring together the University's business continuity and crisis management capabilities into a single function. It supports operational resilience across the Monash Group, including Australian and international campuses, and wholly owned entities.

Operational Resilience engages Monash business areas in business planning and risk assessments to embed proactive resilience and risk management practices into their operations. This work includes:

- > business impact analyses specific to business area services;
- > risk assessments to help business areas understand the environment they operate within;
- > recovery plans;
- > training in and awareness of recovery procedures and the roles and responsibilities of staff;
- > continual maintenance of recovery procedures in a changing risk environment; and
- > validating recovery procedures and the people who activate them.



MAPPING CLIMATE RISK

BACKGROUND: THE PARIS AGREEMENT AND PROGRESS SINCE 2015

195 nations are signatories of the 2015 Paris Agreement to keep rising global surface temperatures well below 2 °C (and preferably no higher than 1.5 °C) above pre-industrial levels.

In September 2023, the first United Nations global stocktake on the Paris Agreement reported that the world was “not on track” to meet the commitments. In January 2024, the European Union’s Copernicus Climate Change Service reported that global warming had exceeded temperatures of 1.5 °C between February 2023 to January 2024 for the first time on record.

The impacts of climate change are already occurring. How severe those impacts will be over coming decades depends on how successfully greenhouse emissions are reduced.

MODELLING CLIMATE CHANGE SCENARIOS

The UN Intergovernmental Panel on Climate Change (IPCC) utilises Representative Concentration Pathways (RCPs) to describe how climate change scenarios vary depending on the volume of greenhouse gases emitted. A higher RCP value means higher greenhouse gas emissions, and therefore more severe climate change impact.

The IPCC Fifth Assessment Report (AR5) in 2014 used four different RCP pathways for climate modelling and research. Projected increases in global mean temperature according to these scenarios are provided in Table 10.1.

TABLE 10.1: IPCC AR5 GLOBAL WARMING INCREASE (°C) PROJECTIONS

SCENARIO	MEAN TEMPERATURE INCREASE (RANGE)	
	2046–2065	2081–2100
RCP2.6	1.0 (0.4 to 1.6)	1.0 (0.3 to 1.7)
RCP4.5	1.4 (0.9 to 2.0)	1.8 (1.1 to 2.6)
RCP6	1.3 (0.8 to 1.8)	2.2 (1.4 to 3.1)
RCP8.5	2.0 (1.4 to 2.6)	3.7 (2.6 to 4.8)

These four scenarios were incorporated into broader socioeconomic scenarios (Shared Socioeconomic Pathways) in the IPCC Sixth Assessment Report (released 2021-2023).

MODELLING CLIMATE CHANGE SCENARIOS FOR MELBOURNE

In 2019 the CSIRO’s Climate Science Centre with the Victorian Government developed a series of climate projections utilising high-resolution simulations to consider how the regional climate of Victoria is likely to respond to global warming under different RCP scenarios.

The *Victorian Climate Projections 2019* developed by the CSIRO serve as the basis of scenario planning for this inaugural report on Monash University’s climate risk.¹

A NOTE ON CLIMATE PROJECTIONS AND ANALYSIS USED IN THIS REPORT

Monash hosts extensive world class climate research expertise. This spans the Australian Research Council Centre of Excellence for the Weather of the 21st Century, the School of Earth, Atmosphere and Environment in the Faculty of Science, the Monash Climate Change Communication Research Hub in the Faculty of Arts, the Monash Sustainable Development Institute and ClimateWorks Centre, the Monash Energy Institute and many other groups and researchers across all faculties and campuses.

As this report develops in future years, Monash will utilise this expertise further to inform and improve how the University assesses, mitigates and reports on climate risk.

The scope of reporting will also be expanded to include climate change projections for international Monash University campus locations, including Selangor, Malaysia and Banten, Indonesia.

IMPACT OF A CHANGING CLIMATE ON MELBOURNE

The CSIRO projects changes for Greater Melbourne based on two plausible emissions scenarios:

- > RCP4.5: an intermediate scenario based on medium emissions and
- > RCP8.5: a worst-case scenario based on high emissions.

A summary of how key features of Melbourne’s climate are projected to change in coming decades based on these two emissions scenarios is provided in Table 10.2. The changes are based against a 1986-2005 baseline.

Full details, including the breakdown in seasonal variables, are provided in the CSIRO report.

¹Clarke JM, Grose M, Thatcher M, Round V & Heady C. 2019. *Greater Melbourne Climate Projections 2019*. CSIRO, Melbourne Australia.

TABLE 10.2: CLIMATE VARIABLE CHANGES (COMPARED TO 1986-2005 AVERAGES)*

VARIABLE (ANNUAL)	SCENARIO	PROJECTED CHANGES		
		2020–2039	2040–2059	2080–2099
MAXIMUM TEMPERATURE (°C)	RCP4.5	0.9 (0.8 to 1.3)	1.6 (1.0 to 2.0)	2.2 (1.8 to 3.4)
	RCP8.5	1.2 (1.0 to 1.6)	1.9 (1.5 to 2.7)	4.0 (2.8 to 5.3)
RAINFALL (%)	RCP4.5	-4 (-13 to 2)	-6 (-13 to 1)	-8 (-24 to 1)
	RCP8.5	-9 (-14 to -2)	-8 (-19 to 2)	-20 (-28 to 6)
RELATIVE HUMIDITY (%)	RCP4.5	-1.0 (-2.5 to -0.1)	-1.4 (-2.4 to 0.2)	-2.0 (-4.7 to -0.9)
	RCP8.5	-1.4 (-2.2 to -0.4)	-1.7 (-3.2 to 0.3)	-4.1 (-6.4 to 0.8)
PAN EVAPORATION (%)	RCP4.5	8.2 (6.2 to 14.0)	12.7 (5.2 to 17.4)	18.9 (15.0 to 30.9)
	RCP8.5	10.1 (7.2 to 13.3)	16.8 (7.8 to 24.9)	34.8 (14.6 to 51.0)
SUMMER EXTREME (ARI20) DAILY MAX TEMPERATURE (°C)	RCP4.5	0.4 (-0.6 to 2.9)	2.1 (-1.1 to 4.3)	3.6 (1.3 to 4.8)
	RCP8.5	0.3 (-0.9 to 3.9)	2.7 (0.8 to 5.0)	4.4 (0.9 to 6.5)
EXTREME (ARI20) DAILY RAINFALL (%)	RCP4.5	-8 (-12 to 23)	1 (-17 to 27)	4 (-9 to 44)
	RCP8.5	-12 (-27 to 29)	-6 (-19 to 46)	13 (-20 to 35)

**Changes are displayed in median, 10th and 90th percentile
Extreme daily maximum temperature and extreme daily rainfall are based on a 20 year average recurrence interval (ARI202)*

In summary, CSIRO projections suggest that Monash University can anticipate the following climatic changes to affect its Melbourne campuses over coming decades as a consequence of human greenhouse emissions:

- > **Rising temperatures:** Annual average daily maximum temperatures will increase by approximately one degree over the years to 2039. Days of extreme temperatures will also increase in frequency and severity, with flow-on impacts for human and environmental health as well as longer bushfire seasons.
- > **Declining rainfall:** Both scenarios project declining annual rainfall in Melbourne. This has ramifications for water management and the health of local ecosystems. Conversely, extreme rain and storm-related events are likely to become more intense.
- > **Reduced humidity:** Relative humidity is projected to decrease slightly. This will contribute further to landscape drying, reducing tree cover and exacerbating fire and drought risk.
- > **Increased evaporation:** Climate modelling ties increased evaporation rates with greater frequency and intensity of storms as well as landscape drying, with further consequences for water management and local ecosystems.

These and similar changes have profound implications for Monash and other universities worldwide, each of which will have to align with evolving environmental, regulatory, social and financial adaptations to mitigate climate impacts. These implications include:

- > ensuring the safety and wellbeing of staff and students in an era of increased extreme weather risk;
- > managing the changing energy infrastructure of campuses (e.g. changes in humidity will affect the efficiency of heating, ventilation, and air conditioning (HVAC) systems that provide a comfortable on-campus environment);
- > facing increased public scrutiny of the sustainability performance and accountability of Monash and its industry and research partners;
- > responding to policy and regulatory changes; and
- > reducing the economic costs of managing rapid climate changes (e.g. higher insurance premiums).

Further examples may be found in the Themes column of the Climate Risk Tables in Section 2.

IDENTIFYING CLIMATE RELATED RISKS FOR MONASH

For this first report, the ESG Steering Committee was asked to identify significant risks to each respective ESG priority area and the relevant portfolio overseeing that priority, based on the changes projected to Melbourne's climate over coming decades due to increasing greenhouse emissions. Where relevant, information on current measures to mitigate those risks was also sought.

ESG priorities (and hence risks associated with those priorities) are owned by specific portfolios. These are outlined under the Governance section of this report.

To align with the IFRS standard, these risks were defined as belonging to one of two categories:

- 1. **Physical risks** associated with the physical impacts of climate change.
- 2. **Transition risks** associated with the policy, regulatory and technological changes accompanying the transition to a lower-carbon economy.

Physical risks were further categorised according to being either:

- > **acute risks** arising from weather-related impacts (e.g. bushfires, heat waves, deluge events); or
- > **chronic risks** arising from longer-term shifts in climatic patterns (e.g. rising temperatures, reduced rainfall).

The collated list of physical and transitional climate related risks to Monash University identified by the ESG Steering Committee is provided in Section 2.

MEASURES TO MITIGATE CLIMATE RISKS

Most of the climate-related risks identified in preparing this report (see Section 2) fall within the broader Group Risk profile.

Subsequent to the ESG Steering Committee's work to identify potential climate impacts, the collated list of physical and transition risks (identified in Section 2) was shared with the Risk and Compliance Unit to inform its engagement with each of the portfolios responsible for the ESG priority areas.

For climate risks assessed to potentially have a material effect on Monash's strategic objectives, the ESG Steering Committee will work with the Risk and Compliance Unit to start work to embed climate risk into centralised risk management processes (e.g. the Group Risk Profile and Risk Appetite Statement and Operational Risk Register), as deemed appropriate by the Executive Director, Group Governance and Risk.

OPERATIONAL RESILIENCE

Monash conducts business impact analyses (BIAs) to determine the criticality of business activities and associated resource requirements to ensure operational resilience and continuity of operations during and after a business disruption. These are undertaken annually using a standardised template provided by the Operational Resilience function to support consistency across the University.

Subsequent to the risk mapping exercise undertaken by the ESG Steering Committee, relevant BIA functions have been assigned, in collaboration with the Operational Resilience function, to each of the physical and transitional climate risks identified in Section 2. The list of Monash business functions is provided in Table 10.3.

This work will be used to inform the development of a systematic process of minimising the impact of disasters, reducing vulnerabilities, and enhancing the resilience of communities and societies to various hazards.

TABLE 10.3: MONASH BUSINESS FUNCTIONS

MAJOR ACTIVITY	FUNCTIONS
TEACHING	> Academic Management (e.g. curriculum design) > Placements Management > Examination Management > Teaching / Lecture Activities > Scholarships and Support
RESEARCH	> Research Activities > Research Management > Placements Management
CORPORATE SERVICES	> Finance / Budgeting > Reporting Activities > Project Management > Occupational Health and Safety > Marketing and Reputation > Human Resources > Facilities Management > Events Management > Student Services > Enterprise Technology Services

OPPORTUNITIES IN RESPONDING TO CLIMATE CHANGE

Climate change is identified in Monash University's Impact 2030 Strategic Plan as one of three challenges of the age (alongside Geopolitical Security and fostering Thriving Communities). The University is therefore committed to "a path that is driven by our purpose, to create the understanding and possibilities, in collaboration with others, nationally and internationally, to respond to climate change" as one of those three challenges.

GLOBAL CHALLENGES BLUEPRINT

The Global Challenges Blueprint was developed in 2023 as a direct response to Impact 2030. The outcome of extensive engagement across the Monash community as well as with key partners and alumni, the Blueprint articulates key opportunities, strengths and themes by which the University's portfolios, faculties, campuses and institutes can respond to the global challenges, including opportunities to address the impacts of climate change, within the scope of their own activities, plans and budgets.

The Global Challenges Blueprint is provided in Section 3.

FUTURE DIRECTIONS

This is Monash University's first report on climate risk disclosure. In this report key features of how Melbourne's climate is projected to change in coming decades have been considered, utilising two potential greenhouse gas emissions scenarios based on climate projections developed by the CSIRO: an intermediate scenario assuming medium greenhouse emissions (RCP4.5) and a worst-case scenario assuming high greenhouse emissions (RCP8.5).

Significant physical and transitional risks relevant to the University's ESG priority areas have been collated based on the changes projected to Melbourne's climate over coming decades (see Section 2).

In future climate risk disclosure by Monash, it is anticipated that the scope of reporting will be expanded to:

- > include climate change projections for Selangor, Malaysia and Banten, Indonesia, with information sourced from the Monash University campuses located in these regions on climate risks specific to those locations;
- > utilise Monash climate research expertise to inform and improve how the University assesses, mitigates and reports on climate risks;
- > expand the pathways for climate modelling and research to align with the broader socioeconomic scenarios (Shared Socioeconomic Pathways) articulated in the IPCC Sixth Assessment Report (released 2023); and
- > articulate anticipated changes in the likelihood and severity of particular climate risks depending on the modelled socioeconomic scenario and RCP pathway.

Periodic updates on the progress of this work will be provided to the Vice-Chancellor's Group and the ESG & Estates Committee.





CLIMATE RISK DISCLOSURE

SECTION 2

Identified climate risks

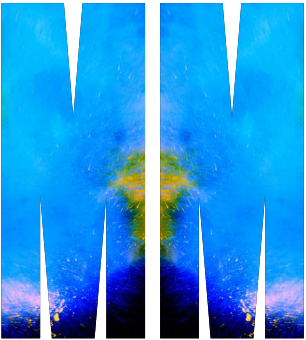
The following tables are a compilation of identified physical (acute and chronic) and transition risks to Monash University, based on climatic changes anticipated as a consequence of human caused greenhouse emissions. These were identified by ESG Steering Committee in Q1 2024.

Due to the similarity of many of the risks identified between the different ESG priorities, they have been categorised under common themes (e.g. “Impacts on wellbeing and safety”). Some risks are also duplicated across multiple themes, where relevant.

ACUTE PHYSICAL RISKS

PHYSICAL RISKS ARISING FROM CLIMATE AND WEATHER-RELATED EVENTS

THEME	RISK	ESG PRIORITY	MITIGATION / INITIATIVES IDENTIFIED
Impacts on wellbeing and safety	Impact of extreme heat on student halls of residence that do not have active cooling and are particularly vulnerable during heatwaves	Campus	> Investigating costs for installing air conditioned cooling in communal refuge spaces (subject to capital funding) > Reviewing building heating, ventilation and air conditioning (HVAC) management > Building asset renewal – upgrade existing buildings to withstand heat waves (thermal upgrades) so buildings remain thermally comfortable
	Extreme weather event on campus (e.g. storm, flood, wind) leading to risk to health and safety of Monash students and staff	Campus	> Procedures and systems in place > Grounds management - assess trees / natural landscapes, remove leaf litter, regular maintenance of external drains, roofs, water harvesting infrastructure > Implement WFH and remote study when storms are predicted / communications issued to staff to leave ahead of storms > Inspection of gutters / high traffic areas prior to major rain events > Increase permeable areas on campus > Continue to upgrade roofs (subject to capital funding)
	Extreme climate event off campus (e.g. bushfire, air pollution) leading to risk to health and safety of Monash students and staff	Campus	> Procedures and systems in place > HVAC maintenance and filters to ensure internal air quality not impacted by poor external air > Building Automation Systems (BAS) strategies to reduce outdoor air intake during bushfire events > Grounds maintenance to reduce fire risk on campus > Close buildings as required due to poor air quality
	Severe weather event jeopardising wellbeing of researchers, research participants and animals in research settings, with impacts on ongoing studies and ethical concerns	Research	> Comprehensive emergency response protocols for bushfire events, including evacuation plans and provisions for animal care and relocation > Hazard / fire prevention measures within research facilities, e.g. vegetation management strategies and fire-resistant building materials, to minimise risk of bushfire impacts on animal welfare
	Negative impacts on health and wellbeing for students and staff involved in teaching and learning due to severe weather-related risks (e.g. heat events, air quality)	Teaching	> Counselling services in place for staff and students across Monash campuses > Diverse learning and wellbeing services in place to support students, e.g. peer support, counselling, peer mentoring, study advice and co-curricular programs > Health and Wellbeing Strategic Action Plan to foster supportive teaching and learning environment > Assessing Achievement Relative to Opportunity program for academic staff promotion and special consideration programs for students
	Extreme weather event causing increase in risks of gender-based violence among staff and students (including family violence at home)	Gender Equality	> Support services are in place > Supports provided by Monash have capability to grow in service provision quickly in response to a crisis

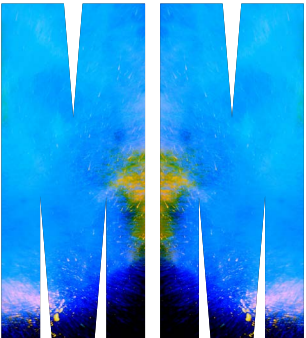


THEME	RISK	ESG PRIORITY	MITIGATION / INITIATIVES IDENTIFIED
Impacts on wellbeing and safety (continued)	Extreme weather event causing restricted access for students and staff to essential provisions, including sanitary supplies	Gender Equality	> Procedures and systems offering free access to provisions in place > Maintain access where possible on-campus, including provision free of charge where necessary > Emergency payments available for students in distress
	Extreme weather event causing reduced access to reproductive healthcare for students and staff	Gender Equality	> Procedures and systems offering free access to provisions in place > Maintain access where possible on-campus, including provision free of charge where necessary > Emergency payments available for students in distress
	Increased risk to Monash personnel in situ at climate-vulnerable locations	Engagement	> Procedures and systems in place
Disruption to core University business / operations	Severe weather event impeding fieldwork, affecting research data collection and analysis	Research	> Implement robust risk management plan incorporating monitoring weather forecasts and contingency plans for adverse conditions > Investment in resilient infrastructure and equipment, e.g. weather-resistant field stations and durable research tools, to minimise impact of severe weather on fieldwork operations
	Climate-related disruption leading to decreased research productivity and extended project timelines, affecting academic schedules and / or funding allocations	Research	> Diversification of research projects to spread risk and minimise impact of climate-related disruptions on overall research productivity > Foster interdisciplinary collaborations and knowledge-sharing initiatives to streamline research efforts and mitigate delays through resource pooling and joint problem-solving
	Climate event affects planning and running of engagement events	Engagement	> Consideration of weather during engagement planning > Ensure incident and stakeholder communication plans are in place to minimise financial, physical or reputational damage
	Severe climate event affecting viability of major partnership	Engagement	> Contractual provisions, procedures and systems in place
	Severe weather event makes it impossible, difficult or dangerous for students and/or staff involved in learning and teaching or related activities to attend campus	Teaching	> Use of asynchronous content and activities supported by online synchronous learning as well as increased availability of online resources (e.g. LearnHQ, Student Academic Support) and services > Operational Resilience programs in place to temporarily allow teaching and learning to continue at limited scale
	Impacts of extreme weather event lead to increased inequity in access to education and employment opportunities	Gender Equality	> Strategies in place to address through Gender Equality Action Plan > Scholarships for students targeting women in underrepresented faculties > Reduce gender bias in recruitment in underrepresented areas > Scholarships for underrepresented and disadvantaged cohorts in place

ACUTE PHYSICAL RISKS ARISING FROM CLIMATE AND WEATHER-RELATED EVENTS
CONTINUED

THEME	RISK	ESG PRIORITY	MITIGATION / INITIATIVES IDENTIFIED
Impacts on Monash infrastructure	Supply chain disruption to essential research equipment and materials (e.g. isotopes, laboratory supplies) due to climate-related impacts on transportation networks and infrastructure	Research	> Diversification of supply chain sources through multiple suppliers / distributors to reduce exposure to region-specific events > Inventory management systems / contingency stockpiling of critical research materials to mitigate potential delays and maintain project continuity
	Cascading failures due to impact of severe weather event on infrastructure networks (water, energy, transport, ICT)	Campus	> Procedures and systems in place > Staff and students work and study from home > Maintain continual communications with eSolutions during recovery program > Back-up generators installed in buildings identified as critical for operations and incident response (e.g. Chancellery)
	Extreme weather - hail storms - damage to solar panels	Campus	> Procedures and systems in place > Solar panels are protected by insurance cover
	Severe weather events result in a disruption to infrastructure underpinning teaching and learning (e.g. ICT, energy, transport, learning spaces)	Teaching	> Future buildings designed to better withstand climate extremes > Operational Resilience programs in place to temporarily allow teaching and learning to continue at limited scale
Supply chain disruption	Supply chain disruption to essential research equipment and materials (e.g. isotopes, laboratory supplies) due to climate-related impacts on transportation networks and infrastructure	Research	> Diversification of supply chain sources through multiple suppliers / distributors to reduce exposure to region-specific events > Inventory management systems / contingency stockpiling of critical research materials to mitigate potential delays and maintain project continuity
	Extreme weather event causing restricted access for students and staff to essential provisions, including sanitary supplies	Gender Equality	> Procedures and systems offering free access to provisions in place > Maintain access where possible on-campus, including provision free of charge where necessary > Emergency payments available for students in distress
	Climate and weather-related events disrupt supply chains, therefore impairing the ability to monitor and/ or mitigate modern slavery risks	Modern Slavery	> Procedures and systems already in place for electronics. Utilise prioritised risk-based approach for remainder as appropriate > As suitable monitoring solutions are identified, they can be put in place for other supply chains
	Supply chain or business disruption from severe climate event that impacts ability of partner to engage with the University	Engagement	> Contractual provisions, procedures and systems in place.
	Extreme weather events or rising sea levels affect the supply chain of companies that managed funds are invested in	Investment	> Prioritisation of fund managers that incorporate ESG integration factors into portfolio construction and asset selection process (e.g. strong governance around supply chain management, including diversification of sourcing and investment in supply chain resilience technologies)

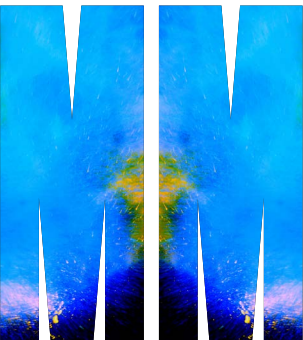
THEME	RISK	ESG PRIORITY	MITIGATION / INITIATIVES IDENTIFIED
Costs / funding / financial impacts	Climate-related disruption leading to decreased research productivity and extended project timelines, affecting academic schedules and funding allocations	Research	> Diversification of research projects to spread risk and minimise impact of climate-related disruptions on overall research productivity > Foster interdisciplinary collaborations and knowledge-sharing initiatives to streamline research efforts and mitigate delays through resource pooling and joint problem-solving
	Severe climate event affecting viability of major partnership	Engagement	> Contractual provisions, procedures and systems in place.
	Extreme weather event causing damage to physical assets of companies that managed funds are invested in	Investment	> Diversification of portfolio across sectors and geographies less vulnerable to extreme weather
Travel disruption	Disruption in research-related travel due to severe weather events causing delays to conferences, collaborations or data collection	Research	> Increase utilisation of virtual collaboration tools and remote data collection methods to reduce reliance on physical travel during extreme weather events > Establish alternative travel routes and flexible scheduling options to mitigate impact of travel disruptions and ensure continuity in research activities
	Weather-related event causing delays and/or disruption to overseas study experiences	Teaching	> Risk and critical incident plans and procedures are in place > Virtual learning



CHRONIC PHYSICAL RISKS

RISKS ARISING FROM LONGER-TERM CLIMATE SHIFTS

THEME	RISK	ESG PRIORITY	MITIGATION / INITIATIVES IDENTIFIED
Impacts on wellbeing and safety	Higher average summer temperatures and increase in frequency of heat waves, driving increase in cooling loads with associated energy cost	Campus	> Procedures and systems in place > Energy efficiency upgrades being rolled out to building HVAC > New buildings are passive house designed and built to utilise passive cooling
	Increase in frequency of extreme weather events, e.g. storms, high wind events, droughts, heat waves	Campus	> Climate adaptation and resilience designs incorporated into campus masterplans > Monash Design and Construction Standards updated 2024 > Minimise heat island effects by maintaining canopy cover, green roofs and walls > Nature+ campus ecosystem strategy sets out targets and ambitions for flora and fauna, including canopy cover, soil health, citizen science and water management > Ecology and biodiversity improvements incorporated into campus masterplans
	Campus attendance declines due to climate impacts on the safety and privacy of women (e.g. unusable or overcrowded facilities)	Gender Equality	> Ensure women are engaged in decision-making regarding their safety and privacy on campus
	Locations in the Pacific become unsafe or uninhabitable due to environmental impacts of climate change	Engagement	> Procedures and systems in place > Ongoing monitoring of conditions and adaptiveness to changing conditions
	Impacts on overseas study experiences associated with climate change (e.g. geopolitical instability, increased frequency and severity of weather events)	Teaching	> Risk and critical incident plans and procedures are in place > Geographic diversification of overseas study locations
	Impacts on health and wellbeing of students and staff involved in learning and teaching due to climatic shifts (e.g. "climate anxiety", mental health impacts for those in or with families in dangerous climate-affected areas)	Teaching	> Counselling services in place for staff and students across Monash campuses > Diverse learning and wellbeing services in place to support students, e.g. peer support, counselling, peer mentoring, study advice and co-curricular programs > Health and Wellbeing Strategic Action Plan to foster supportive teaching and learning environment > Assessing Achievement Relative to Opportunity program for staff and special consideration programs for students
	Increased disruption / reduced on-campus attendance by students and staff due to increased frequency and risk of severe weather events	Teaching	> Increasing development of virtual classroom and online learning resources for students and staff studying / working remotely



THEME	RISK	ESG PRIORITY	MITIGATION / INITIATIVES IDENTIFIED
Disruption to core University business / operations	Disruption to infrastructure underpinning teaching and learning (e.g. ICT, energy, transport, learning spaces) due to increased frequency of severe weather events	Teaching	> Comprehensive response plans in place to minimise impacts of disruption and maintain teaching and learning programs
	Increased disruption / reduced on-campus attendance by students and staff due to increased frequency and risk of severe weather events	Teaching	> Increasing development of virtual classroom and online learning resources for students and staff studying / working remotely
	Disruption from increased frequency of severe weather events and related events contributes to University's failure to deliver gender equity commitments	Gender Equality	> Ensure accountability and transparency are maintained in relation to progress to meet gender equality annual targets
	Campus attendance declines due to climate impacts on the safety and privacy of women (e.g. unusable or overcrowded facilities)	Gender Equality	> Ensure women are engaged in decision-making regarding their safety and privacy on campus
	Increased energy, water and infrastructure costs associated with a changing climate affects ability to attract partners to Monash Technology Precinct	Engagement	> Incentivisation measures and engagement with State Government (coupled with continued shift to sustainable energy and infrastructure)
	Key engagement locations in the Pacific become unsafe or uninhabitable due to environmental impacts of climate change	Engagement	> Ongoing monitoring of conditions and adaptiveness to changing conditions
Costs / funding / financial impacts	Increased energy costs due to higher summer cooling loads	Campus	> Energy efficiency upgrades being rolled out to building HVAC > New buildings are passive house designed and built to utilise passive cooling
	Increased budget costs of cooling for high-performance computing and other research equipment	Research	> Investment in energy-efficient cooling systems and equipment to minimise electricity consumption and associated costs for maintaining optimal operating conditions > Implementation of temperature control strategies, e.g. adjusting operating schedules or utilising passive cooling techniques, to reduce reliance on active cooling methods and mitigate cost escalation
	Increased difficulty and costs to conduct research in climate change-affected regions	Research	> Prioritisation of research projects and collaborations that focus on understanding and addressing climate change impacts in vulnerable regions, fostering interdisciplinary approaches and community engagement > Establish partnerships with local stakeholders, governmental agencies, and international organisations to access resources, funding and logistical support for conducting research in climate -affected regions, sharing expertise and leveraging collective efforts
	Increased energy, water and infrastructure costs associated with a changing climate affects ability to attract partners to Monash Technology Precinct	Engagement	> Incentivisation measures and engagement with State Government (coupled with continued shift to sustainable energy and infrastructure)
	Sociocultural shifts away from traditional office working model reduces demand from organisations in physical infrastructure, resulting in a reluctance to co-locate within Monash Technology Precinct	Engagement	> Ensure precinct activation measures clearly communicate the value of presence or co-location in Monash Technology Precinct

RISKS ARISING FROM LONGER-TERM CLIMATE SHIFTS CONTINUED

THEME	RISK	ESG PRIORITY	MITIGATION / INITIATIVES IDENTIFIED
Costs / funding / financial impacts (continued)	Funds under management over-exposed to industries affected by rising temperatures and/or water scarcity.	Investment	> Prioritise fund managers that Incorporate ESG integration factors into portfolio construction and asset selection process (e.g. assess environmental risk factors of underlying assets)
	Downturn in international student enrolments due to geopolitical instability associated with climate change (e.g. response to climate migrants and refugees in Pacific)	Teaching	> Diversification of source countries for international enrolments
	Increasing costs associated with online and on-campus teaching modes (e.g. energy use for cooling spaces, redesign of spaces to account for longer-term climate shifts)	Teaching	> Investment in systems and equipment to minimise energy use and associated costs for maintaining optimal teaching environment > Implementation of temperature control strategies, e.g. adjusting operating schedules or utilising passive cooling techniques, to reduce reliance on active cooling methods and mitigate cost escalation
Impacts on Monash infrastructure	Failure of ageing research platforms to meet emerging emission standards	Research	> Implement systematic assessment of existing research platforms to identify potential upgrades or retrofiting opportunities to enhance energy efficiency and reduce emissions > Develop long-term sustainability plan that includes regular maintenance, monitoring, and replacement schedules for ageing infrastructure, ensuring compliance with emerging emission standards
	Increased costs of cooling for high-performance computing and other research equipment	Research	> Investment in energy-efficient cooling systems and equipment to minimise electricity consumption and associated costs for maintaining optimal operating conditions > Implementation of temperature control strategies, e.g. adjusting operating schedules or utilising passive cooling techniques, to reduce reliance on active cooling methods and mitigate cost escalation
	Disruptions to infrastructure underpinning teaching and learning (e.g. ICT, energy, transport, learning spaces) due to the increased frequency of severe weather events	Teaching	> Comprehensive response plans in place to minimise impacts of disruption and maintain teaching and learning programs
	Increased energy, water and infrastructure costs associated with a changing climate affects ability to attract partners to Monash Technology Precinct	Engagement	> Incentivisation measures and engagement with State Government (coupled with continued shift to sustainable energy and infrastructure)
Other	Increased costs associated with a changing climate impacts external stakeholders' ability to engage in adoption of sustainability principles	Engagement	> Positioning Monash as thought and practical leader that collaborates / supports external stakeholders in climate change adaptation, e.g. living labs
	Changing climate causes increase in human trafficking and forced labour in supply chain	Modern Slavery	> Ongoing checking into high risk supply chains and suppliers, including based on industry and country > Monash Retail has been briefed on high risk imports and certifications > Avoid "lowest cost" approach to buying > By the end of 2024, a tender will be run for a key high risk area to pre-qualify suppliers, including reviewing and checking certificates and to test the market

TRANSITION RISKS

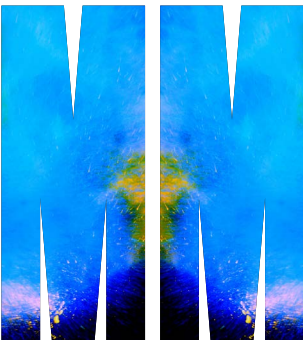
RISKS ARISING FROM THE TRANSITION TO LOWER-CARBON ECONOMY

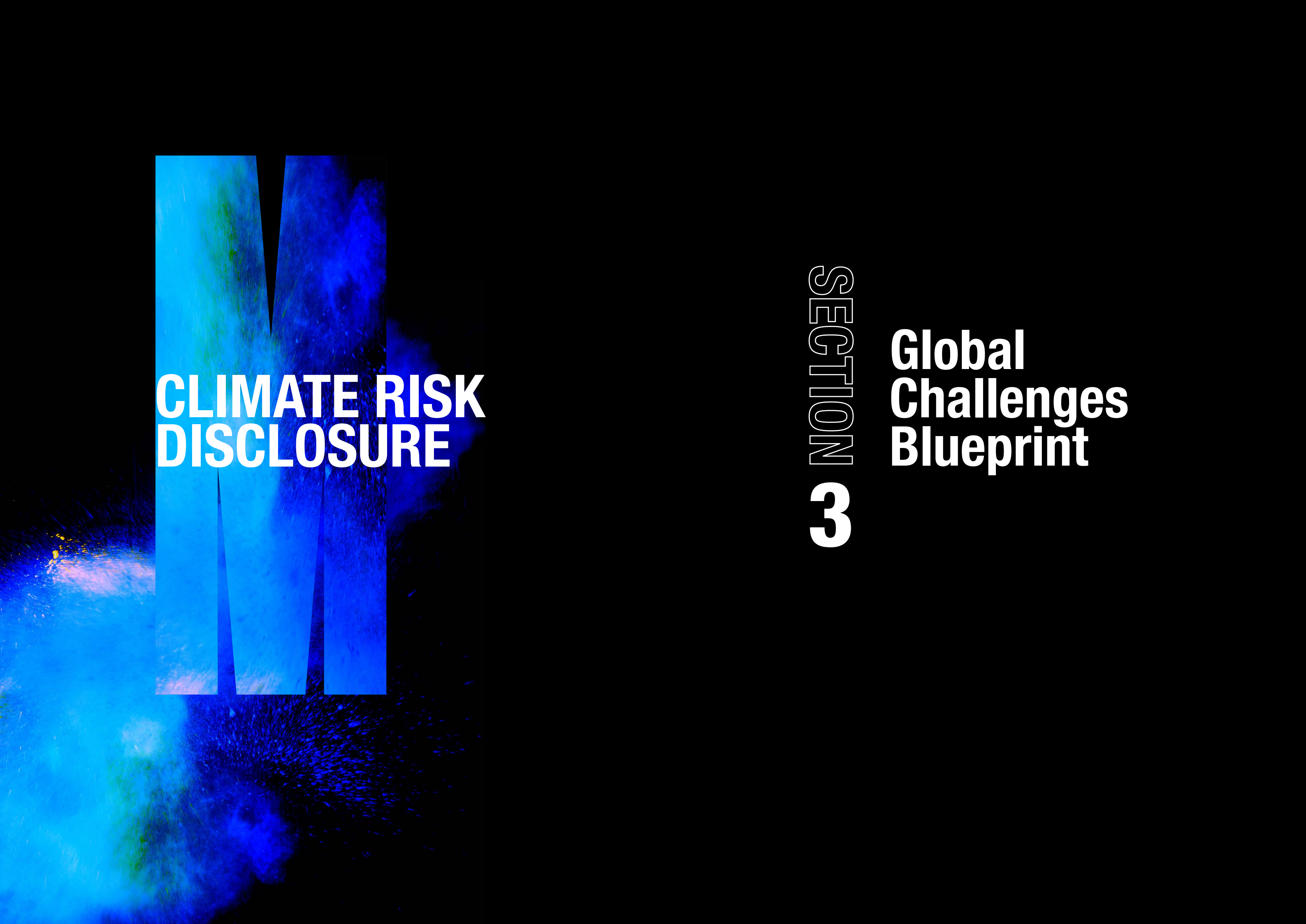
THEME	RISK	ESG PRIORITY	MITIGATION / INITIATIVES IDENTIFIED
Failure to adjust to climate obligations	Budget constraints impact transition of all Australian campuses to Net Zero by 2030	Campus	> Review the best means to achieve energy transition to ensure net zero carbon emissions > Review the timing of replacement of gas boilers with electric heat pumps > Continue to investigate options for external sources of funding to support campus energy transition (e.g. Clean Energy Innovation Fund)
	Reputational impact from lack of equitable responses to climate change	Gender Equality	> Gender balance in decision-making and problem solving in relation to climate change responses
	Transition to low carbon economy leads to explosion in grey market employment	Modern Slavery	> Use of reputable suppliers at fair market prices as standard business practice > Monitoring services to ensure reasonable workloads, training and certification of staff > Increased diligence and protections against subcontracting > Fairly define work and workloads and use 3rd party experts to better understand fair productivity levels
	Scrutiny of industry partnerships with high carbon polluter causes reputational impact	Engagement	> Due diligence and governance structures and mechanisms to ensure new and existing partnerships align with the University's risk appetite and purpose
	Reputation impact caused by failure to divest from major emitters	Investment	> Monitor Weighted Average Carbon Intensity (WACI) of managed funds and either divest or engage in active ownership (i.e. the use of influence of large investors)
	Downturn in student enrolments caused by reputational impact from climate change response	Teaching	> Net Zero target > Close monitoring of implementation of climate-related commitments
	Curriculum not aligned with new and emerging workforce needs and skills gaps related to the transition to a lower-carbon economy, and not reflecting issues of "climate justice" and global inequality	Teaching	> Review of curriculum through 'Professions of and for the Future' initiative
Costs / funding / financial impacts	Reputational impact of emissions from campus energy use, travel.	Teaching	> Net Zero target
	Underperformance of investment returns due to under-exposure to technology advancements within climate change.	Investment	> Give consideration to sustainable thematic investments as part of investment allocation
	Policy and Regulatory changes affect financial performance of companies that managed funds are invested in.	Investment	> Prioritise fund managers that incorporate ESG integration factors into portfolio construction and asset selection process (e.g. assess environmental risk factors of underlying assets)
	Budget constraints impact transition of all Australian campuses to Net Zero by 2030	Campus	> Investigate options for grants and funding to support campus energy transition (e.g. ARENA)
	Additional costs related to transitions to carbon-neutral research systems and supplies	Research	> Cost-benefit analysis to evaluate long-term financial implications of transitioning to carbon-neutral research systems and supplies, identifying opportunities for savings and investment > Explore funding opportunities, grants, and incentives specifically tailored for implementing sustainable practices and technologies in research operations, offsetting additional transition costs and promoting innovation

RISKS ARISING FROM THE TRANSITION TO LOWER-CARBON ECONOMY CONTINUED

THEME	RISK	ESG PRIORITY	MITIGATION / INITIATIVES IDENTIFIED
Costs / funding / financial impacts (continued)	Increased research infrastructure and research operational costs as net zero building standards are implemented	Research	> Integrate sustainability considerations into campus development plans and infrastructure projects from outset, optimising design choices and construction practices to minimise lifecycle costs and achieve net-zero building standards > Implement energy-efficient technologies, renewable energy systems and smart building technologies to reduce operational costs and enhance resilience of campus infrastructure to future climate impacts
	Transition to low carbon economy leads to marked price increases	Modern Slavery	> Flexibility in University processes and operations to assess and address changes as new laws or prices occur > Minimise, when possible, reliance on particularly destructive climate-dangerous gases in research (e.g. SF6) > Shifting additional cost onto user (e.g. carbon tax on flights)
	Increased costs associated with the delivery of teaching activities, e.g. higher energy costs	Teaching	> Investment in systems and equipment to minimise energy use and associated costs for maintaining optimal teaching environment > Implementation of temperature control strategies, e.g. adjusting operating schedules or utilising passive cooling techniques, to reduce reliance on active cooling methods and mitigate cost escalation
	Reduced government funding for higher education due to changed funding priorities	Teaching	> Advocacy to Federal Government on importance of higher education
Impacts on partnerships	Impact on research partnerships and networks (and hence research quality) caused by reduced travel frequency	Research	> Embrace virtual collaboration platforms and digital communication tools to facilitate remote collaboration and knowledge exchange and reduce need for frequent travel > Foster alternative modes of engagement, e.g. virtual conferences, workshops, and seminars, to sustain research partnerships and networks
	Scrutiny of industry partnership with high carbon polluter causes reputational impact	Engagement	> Due diligence and governance structures and mechanisms to ensure partnerships align with University's risk appetite and mission
	Increased regulatory compliance obligations result in increased costs for the University and potential partners, impacting ability to pursue engagement commitments	Engagement	> Amplify Monash capabilities that offer a competitive advantage
	Disruption to markets as a result of the adjustment to a low-carbon economy impacts partner business viability, resulting in the inability to engage with the university	Engagement	> Diversification of partners
	Reputational impact from failure to curb emissions etc affects ability to attract or retain partners	Engagement	> Net Zero target > Close monitoring of implementation of climate-related commitments

THEME	RISK	ESG PRIORITY	MITIGATION / INITIATIVES IDENTIFIED
Regulatory impacts	Fewer international student enrolments due to distance and emissions / travel restrictions to reduce travel emissions or from increased natural disasters	Campus	> Ensure adequate ICT tech for remote learning > Continue to grow international campuses
	Transition to a low carbon economy results in products currently utilised being banned.	Modern Slavery	> Bans will typically occur at global, industry or use-case level with significant warning to allow planned transition to an alternate. Exclusions may also apply for R&D > Monash works with suppliers to ensure it meets bans by stopping purchases or providing product substitution > Monash is able to stop specific items appearing in online purchasing catalogues where necessary
	Increased regulatory compliance obligations result in increased costs for the University and potential partners, impacting ability to pursue engagement commitments	Engagement	> Amplify Monash capabilities that offer a competitive advantage
	Policy and Regulatory changes affect financial performance of companies that managed funds are invested in.	Investment	> Prioritise fund managers that incorporate ESG integration factors into portfolio construction and asset selection process (e.g. assess environmental risk factors of underlying assets)





CLIMATE RISK DISCLOSURE

SECTION 3

Global Challenges Blueprint

IMPACT 2030 GLOBAL CHALLENGES

ALL GLOBAL CHALLENGE ACTIONS WILL BE IMPLEMENTED IN LINE WITH IMPACT 2030'S GOALS, AND COMPLEMENT MONASH'S OTHER EXISTING PLANS

IMPACT 2030 PURPOSE Through excellent research and education, and the strength and diversity of our staff, students and alumni in collaboration with our partners, Monash University will meet the challenges of the age for the benefit of our national and international communities.



VALUES STATEMENTS
GOALS

PRIORITIES

MAINTAIN FOCUS

ENHANCE

KEY ACTIVITIES

CLIMATE CHANGE By 2030, Monash will deliver transformative knowledge, innovation and practice through our people, campuses and partners for catalysing the transition to Net Zero in our region and beyond.		GEOPOLITICAL SECURITY Monash will be globally recognised for actively contributing to peace and sustainable prosperity across the Indo-Pacific through our graduates, research and campuses.		THRIVING COMMUNITIES Monash will be recognised as a leader in working with the communities we serve to support their evolving needs and ensuring we can all live well and live well together.			
EXCELLENT		INTERNATIONAL		ENTERPRISING		INCLUSIVE	
EDUCATION The Monash Graduate Monash Community Global Outreach		RESEARCH The Monash Researcher Transdisciplinary Research for Global Impact Global Networks		OPERATIONS Indigenous Self–Determination and Sovereignty Sustainable Finance, Investment and Operations Enhanced Equity, Engagement and Inclusion			
> Provide students with increased visibility and accessibility to a wide range of curricular and co-curricular activities related to the global challenges. > Integrate high quality, scalable in-curricular experiences so that all students have the opportunity to develop understanding, relationships and networks across the region focused on the global challenges through internships, community engagement programs and enriching educational experiences. Examples include: • Global Immersion Guarantee (GIG) • Monash Innovation Guarantee (MIG) • Research, Experimentation and Discovery (RED) • Monash Volunteer Program		> Develop a staff talent enhancement program designed to uplift leadership, promote growth and collaboration, and engage capabilities to support the development and successful delivery of major transdisciplinary research programs. > Enhance the presence of Indigenous researcher led activities that prioritise mutually-beneficial partnerships that address and serve the needs of Indigenous people and communities.		> Commit to sustainable finance and investment through supporting the principles, actions and initiatives articulated in our Environmental, Social and Governance (ESG) Statement. > Monash leaders and managers demonstrate equity in their work, policies and practices. > Prioritise Indigenous participation in entrepreneurship programs. > Develop a Monash University Strategy to engage with the Uluru Statement from the Heart and Victorian Treaty process.			
FOUNDATION / > USING OUR CONVENING POWER / > ADVOCACY							
> Indigenous knowledges and understandings are meaningfully embedded in the curriculum, including establishing clear benchmarks and developing a method to measure progress. > Grow the Net Zero Academy to develop oversight, coordination and leadership on climate change literacy education to enhance external engagement to contribute to climate adaption, mitigation and resilience. > Grow the Monash Virtual School, a provider of equitable online learning opportunities. Monash educators can actively contribute to peace and prosperity through providing the continuity of education in conflict, post conflict and disaster situations.		> Foster greater collaboration through developing a formal community of practice to better communicate Monash’s research capabilities to the external world and facilitate internal collaboration. > Support a global challenge research agenda that accelerates research with a focus on: • Net Zero / Energy Transitions • Climate and Health • Best Start to Life • Healthy Hearts, Healthy Ageing • Digital and Future Healthcare • Combating Infectious Diseases • MedTech and Sovereign Manufacturing • Women, Peace and Security • Critical Minerals / Advanced Materials • Cybersecurity / Misinformation • Safeguarding Antarctica and Oceans • Urban Transformation Hubs > Establish flagship institutes and programmatic structures to drive impactful research, foster collaboration, enhance visibility and provide innovative solutions to the global challenges.		> Develop a circular economy strategy and bolder net zero ambition for the whole of University. Examples include: • Include scope 3 emissions (indirect greenhouse gas emissions as a consequence of activities outside the control of the company) to align with best practice emerging in many industry sectors. • Build a global network of net zero precincts that includes a framework for living lab opportunities and expanding our microgrid across our global network > Embed respecting and working in partnership with Indigenous communities across our global network. > Develop measures of social justice and equity within Monash and monitor progress. > Appoint representatives to support staff with a disability. > Develop online access and visibility of our Indigenous self-determination and sovereignty and equity and social justice initiatives. > Nurture connectivity and fostering engagement: Cultivate an engaging online presence to enhance visibility on access, capabilities, opportunities, resources, and information for each campus related to the global challenges.			
FOUNDATION > BUILDING PARTNERSHIPS							

PRIORITIES

EDUCATION	RESEARCH	OPERATIONS
The Monash Graduate Monash Community Global Outreach	The Monash Researcher Transdisciplinary Research for Global Impact Global Networks	Indigenous Self-Determination and Sovereignty Sustainable Finance, Investment and Operations Enhanced Equity, Engagement and Inclusion

NEW INITIATIVES FOR FUTURE CONSIDERATION

> Introduce the 'Monash Challenge' to all students, staff and alumni to engage with partners in our community and regions to solve specific cross-disciplinary problems related to the global challenges. > Develop an Indo-Pacific Scholarship Program to actively contribute to peace and prosperity in the region through attracting the best students from around our region and providing them with the opportunity to build understanding and strengthen relationships and networks across the Indo-Pacific region.	> Develop an Indigenous Data Sovereignty Policy and associated procedures for collection and use of research data. > Establish a global network of Urban Transformation Hubs to grow and enhance our transdisciplinary capabilities around cities, and to develop complementary partnerships between all levels of government. > Establish a global challenges innovation fund to support: • Undergraduate and graduate student research that addresses the global challenges • A talent pipeline of interdisciplinary cohort of PhD students working across three global challenges • Cross-campus undergraduate research collaboration.	> Establish programs focused on building strategic program focused on strategic partnerships with Indigenous communities. > Monash convenes university-wide coordinated initiatives to support, empower and excite members of the Monash community with the global challenges. Activities include: • Increased coordinated engagement at key international events such as COP, G20, World Economic Forum, etc. • Global Challenge Summits Monash organises annual or triennial summits on each of the global challenges. • Monash Global Challenges Dialogue Series. • Monash Impact Prize – open to anyone globally and awarded by Monash to reward, recognise and elevate impact in the community.
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FOUNDATION > PROSPECTING FOR NEW PARTNERS

APPENDICES

APPENDIX 1: ESG & Estates Committee Terms of Reference

NOTE: Sections marked in italics were added or revised following a review of the Terms of Reference on 22 May 2024 and approved by University Council on 19 June 2024.

1. OVERALL PURPOSE AND OBJECTIVES

- 1.1. The ESG & Estates Committee (the "Committee") shall be appointed by Council to assist Council in discharging its responsibilities in:
- a. planning and managing the University's estate, and
 - b. overseeing the implementation of the University's commitment to the United Nations'
 - c. ensuring the University is meeting environmental, social and governance obligations, relating to sustainability.

2. AUTHORITY

- 2.1. The Committee is a Standing Committee of Council, established pursuant to Schedule 1, Clause 15(1) of the Monash University Act 2009.
- 2.2. The Committee has delegated authority from Council in accordance with Section 18(1)(b) of the Monash University Act 2009, in respect of the functions and powers set out in these Terms of Reference.
- 2.3. In exercising their responsibilities and in carrying out their functions and duties, the Committee must at all times act in accordance with the provisions set out under Section 15 of the Monash University Act 2009 and in the Monash University Council Charter, including obligations in respect of confidentiality and conflict of interest.

3. MEMBERSHIP

- 3.1. Categories of membership

CLASS	SUMMARY
Committee Member	The Chancellor (ex officio)
	The Vice-Chancellor & President (ex officio)
	At least two Council members
	Two University Professors, one with architecture expertise and the other with expertise relevant to ESG
In attendance	Two external members, one with architecture expertise and the other with expertise relevant to ESG
	Senior Vice-President & Chief Operating Officer
	Senior Vice-President & Chief Financial Officer
Secretary	University Architect
	Executive Director, Buildings and Property Division

- 3.2. The Committee must comply with composition rules that exist in the Act and Monash University (Council) Regulations.

- 3.3.

Chairperson

The Chairperson will be an appointed member of Council who is appointed by Council on the recommendation of Membership Committee.

In the event the Chair is unavailable at short notice (for any reason) at the appointed time for the commencement of a meeting, then members in attendance can select another member, who must be a Council member to become the Chair for the meeting.
- 3.4.

Council Members

Each year Council members are invited to nominate for membership of Committees of Council. Nominations are considered by Membership Committee and recommendations on membership forwarded to Council for its consideration and approval.

The duration of term shall be one year or until Membership Committee and Council have considered and approved revised memberships, whichever is later.

In the event that Council member positions become vacant outside of annual membership process managed by the Membership Committee, Council will appoint a new member.

Given the long-term nature of master planning, the Membership Committee shall give consideration to continuity of service by members of the Committee.
- 3.5.

Other Committee Members

For University Members: Duration of service in relevant position. A maximum duration of appointment of six years shall apply to:

- The two external members, one with architecture expertise and the other with expertise relevant to ESG – two 3-year terms.

In the event that the external member with architecture expertise is the Victorian Government Architect, the duration of service for that Committee member shall extend for their term as Victorian Government Architect.
- 3.6.

Co-option of members

The Committee may co-opt additional persons, whether or not members of Council, who have expertise of particular value to the Committee's proceedings.

Approval of each such co-option shall be reported to the Council meeting following the decision to co-opt. At least one third of the members of the Committee must be Council members and thus any such co-option is made subject to this requirement.
- 3.7.

Observers

Others may be invited to attend meetings as observers from time to time at the discretion of the Chair. Observers will not be actively involved in the deliberations of the Committee unless invited by the Chair.

4. ROLES AND RESPONSIBILITIES

- The Committee shall:

4.1

Values and Vision

4.1.1.

Oversee the implementation of the University's commitment to the United Nations' Sustainable Development Goals and to be a leader in meeting environmental, social and governance obligations.

4.1.2.

Provide oversight to ensure that the vision embodied in the campus master plans is expressed in new buildings, major refurbishments and enhancements to campus public spaces.

4.1.3.

Oversee the development of the physical form (including design) and infrastructure of the estate to ensure the campuses effectively enable and support the core current and future pursuits of the University (teaching, research and engagement) in an environmentally and financially sustainable manner.

4.2

Environment, Social and Governance Obligations

4.2.1.

Oversee the periodic review of the University's Environmental, Social and Governance (ESG) Statement.

4.2.2.

Receive and consider reports from management on the implementation of the ESG Statement, including the incorporation of ESG principles into the University's planning, budgeting and reporting frameworks and its investment decisions.

4.2.3.

Review at least annually reports from management that:

a)

identify any material risks relating to achievement of the University's commitment to the United Nations' Sustainable Development Goals, or its environmental, social and governance obligations relating to sustainability that are within the Committee's purpose and objectives,

b)

articulate the risk management strategies, controls and assurance applied to these risks, and

c)

set out how these risks are captured and considered in the University's Group Risk Profile and Operational Risk Profile.

4.2.4.

Review and recommend to Council for approval disclosures regarding the University's progress in implementing the ESG Statement and the Sustainable Development Goals in the Annual Report and other public documents, including reviewing verification and assurance processes for their disclosure.

4.2.5.

Review and recommend to the Council for approval the University's annual reporting against the Modern Slavery Act.

- 4.3

Masterplans

4.3.1.

Maintain, endorse and oversee 5-yearly reviews of Campus Master Plans.

4.3.2.

Monitors and report to Council on University building developments as they relate to the Campus Master Plans.

4.3.3.

Monitor and report to Council on issues relating to heritage listing.

4.4

Architects and Designers

4.4.1.

Endorse the policy framework for the selection of architects, planners and designers.

4.5

Property Management and Development

4.5.1

Provide oversight to ensure that all relevant Council and management committees and activities in property management and development – for example land and property acquisitions – are undertaken in accordance with the aims and objectives of the overall campus master-planning framework.

4.5.2.

The Committee's purview includes all domestic and international campuses, including non-university buildings on University campuses. In those cases where the physical infrastructure of a University campus or off-campus site is wholly owned by third-parties, the Committee's oversight is advisory.

5. MEETINGS

- 5.1

Frequency of meetings

Meetings shall be held as required to consider any matters falling within these Terms of Reference. Meetings shall normally be held four times a year. Special meetings are permitted with approval from the Chair.
- 5.2

Quorum and Decision-Making

The quorum necessary for transaction of business is four members of the Committee, including at least one member of Council other than the Chancellor and Vice-Chancellor. Meetings shall not proceed if a quorum is not present within half an hour after the appointed commencement time of the meeting.

Committee members are expected to contribute to the Committee quorum and, unless a conflict of interest exists, can vote on items of business.

A decision is deemed to have been passed at a meeting if the majority of members in attendance support the recommendation. In the event that members' votes result in a tie (50% each way), the Chair will have the casting vote.

- 5.3

Meeting Conduct

The Chair is responsible for the conduct of the meeting in accordance with the Monash University Council Charter, article 7.3.
- 5.4

Use of Technology

A meeting may be convened or held using any technology, agreed upon by the Chair of the Committee. Members located at another physical location are deemed to be present at the meeting, if they are connected by such technology.
- 5.5

Notice of a Meeting

The Secretary must give at least 7 days' notice of a meeting of the Committee to each member, specifying the time, place and agenda of the meeting.

The period of notice specified in this clause may be dispensed with in the case of a meeting called by the Chair as a matter of urgency.
- 5.6

Minutes

The Secretary of the Committee shall circulate minutes of Committee meetings to all members of the Committee.
- 5.7

Resolutions without a Meeting

If the Chair determines that a matter is urgent and cannot wait until the next scheduled meeting, documentation and a recommendation may be circulated via email to all members for consideration, on the terms set by the Chair. If a majority of members support the recommendation, it will be deemed to have been passed at a meeting of the Committee. The results of all resolutions will be reported at the next ordinary meeting of the Committee.

6. REPORTING TO COUNCIL

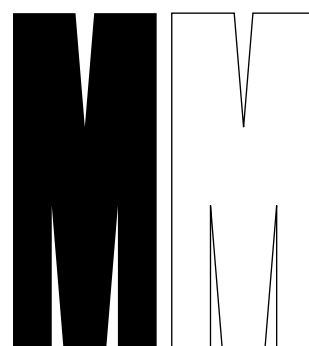
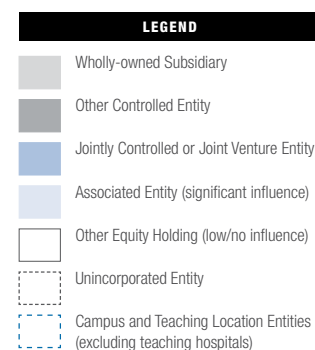
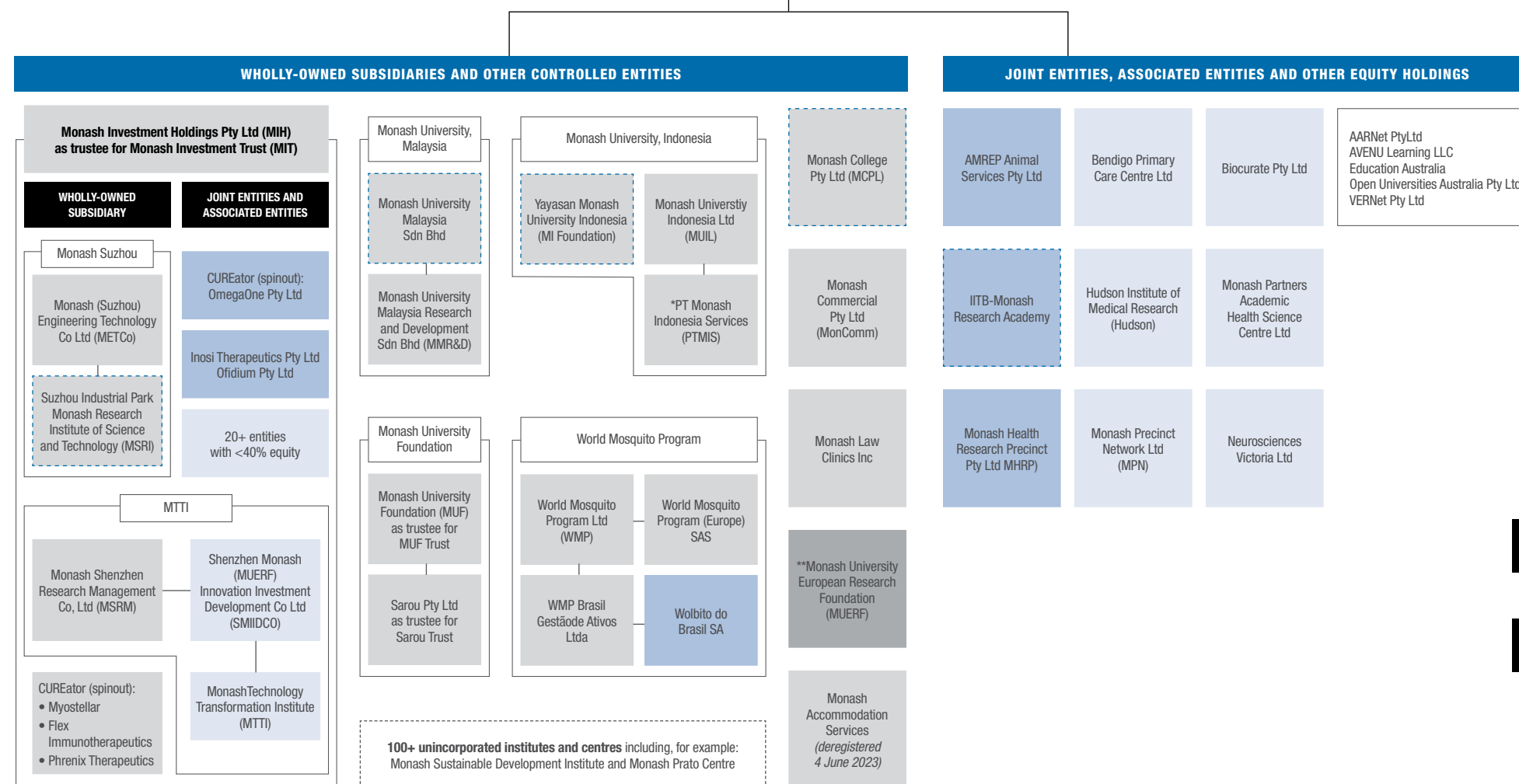
- Following each meeting, the Committee shall submit a written report to the next meeting of Council.
- The Chair shall use the report as a basis for an oral presentation to Council on major decisions and outcomes from each meeting of the Committee.

7. REVIEW OF TERMS OF REFERENCE

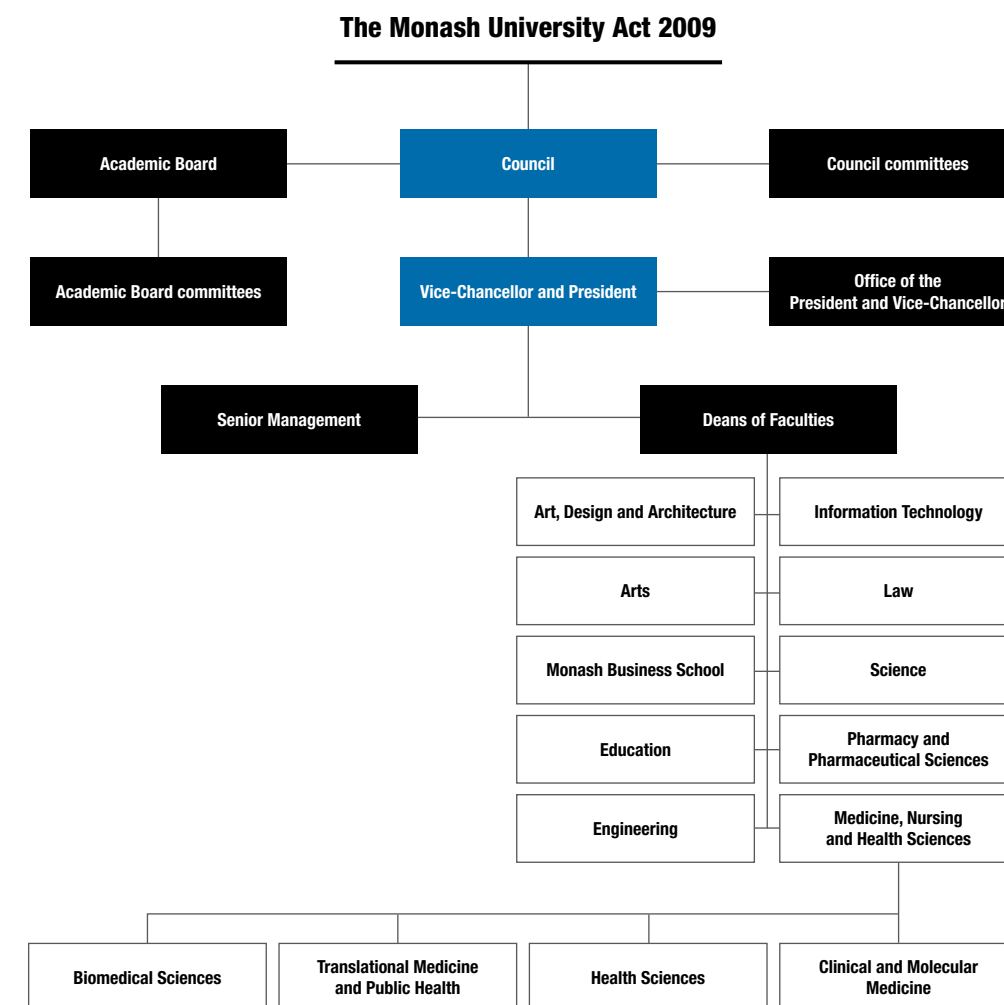
- The Committee shall review the Terms of Reference annually and submit any proposed changes to Council for approval.

Monash Group Structure
as at 7 December 2023

MONASH UNIVERSITY



APPENDIX 2: Overall governance and management



APPENDIX 3:

Sustainability data

ENERGY

FACILITY	TOTAL ENERGY(GJ)				CHANGE IN ENERGY 2022 – 2023%
	2020	2021	2022	2023*	
Caulfield	66,925	69,326	76,517	71,424	-6.7
Clayton	490,696	492,348	560,055	585,054	4.5
Gippsland (MARP)	12,625	10,346	7,337	8,746	19.2
Parkville	41,235	41,685	43,548	42,282	-2.9
Peninsula	20,781	22,998	27,134	24,926	-8.1
The Alfred hospital	23,285	23,233	23,520	23,382	-0.6
Monash Medical Centre	2,514	2,621	2,934	2,842	-3.1
Monash College	8,861	12,705	19,264	24,950	29.5
Melbourne City Sites				3,094	
Monash Rural Health				6,363	
Monash Uni Foundation				7,544	
Other (prev. Monash City Sites, Rural Health & MU Foundation combined)	12,333	12,998	17,772		
Total	679,255	688,260	778,081	800,608	2.9

EMISSIONS

SCOPE		2019	2020	2021	2022	2023
Scope 1: On-site emissions from gas and fuel combustion, and the use of refrigerants		22,137	20,385	21,757	23,242	25,278
Scope 2: Indirect emissions from generating imported electricity	Location-based reporting	110,101	92,992	95,516	88,620	84,646
	Market-based reporting	70,078	46,067	41,423	24,809	20,924
Scope 3: Indirect emissions from our value chain		75,849	34,030	23,312	218,687	264,680
TOTAL EMISSIONS (Market-based)		208,087	147,407	140,585	330,549	310,882
Offsets						415
Total Emissions with (including Offsets)		168,064	100,482	86,492	266,738	310,467

WATER

FACILITY	"TOTAL KILOLITRES (KL) 2018-19	"TOTAL KILOLITRES (KL) 2020	"TOTAL KILOLITRES (KL) 2021	"TOTAL KILOLITRES (KL) 2022	TOTAL KILOLITRES (KL) 2023	CHANGE IN WATER CONSUMPTION (%)
Caulfield	49,078	27,426	28,161	31,566	15,932	-49.5
Clayton	518,706	286,744	291,309	345,726	407,022	17.7
Parkville	10,479	8,737	6,259	7,450	7,562	1.5
Peninsula	26,395	20,293	16,691	25,823	28,914	12
Other	4,115	12,347	16,450	21,804	21,384	-1.9
Total	608,773	355,547	358,870	432,369	480,815	11.2

NOTE: Water consumption data is reported as provided by the relevant water authority.

HARVESTED WATER

FACILITY	TOTAL KILOLITRES (KL) 2021	TOTAL KILOLITRES (KL) 2022	TOTAL KILOLITRES (KL) 2023	CHANGE IN HARVESTED WATER (%)
Caulfield	6,800	8,259	3,574	56.7
Clayton	43,400	76,742	107,653	40.3
Peninsula	2,400	2,106	2,154	2.3
Total	52,600	87,107	113,381	30.2

WASTE

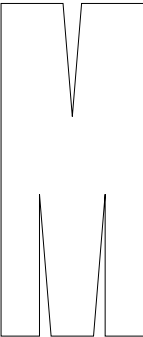
CATEGORY	2023 (TONNES)	% OF 2023 TOTAL WASTE
Landfill	1833.9	59%
Comingled	227	7%
Cardboard	309.6	10%
Paper	67.2	2%
Confidential paper	22.3	1%
Food/Organics	13.9	0%
Green Waste	231.7	7%
Pallet Recycle	89.5	3%
Metal	115	4%
eWaste	86	3%
Battery Alkaline	2.2	0%
Lamps / Fluorescent	1.2	0%
Organic Solvents	7	0%
Non Hazardous Liquid	25.3	1%
Drums / Containers	0.1	0%
Expanded Polystyrene (EPS)	2.6	0%
Residential/ Commercial Soil	28.8	1%
Concrete/Bricks	3.5	0%
Soft Plastic	0.4	0%
Furniture Reuse Sold	53	2%
Free Reuse Items	1.4	0%
Mattress	4.8	0%
Total waste	3121.6	
Total diverted	1292.5	41%

More waste streams are now being tracked, with improved reporting from our waste contractor. Aside from landfill, all streams contribute to our diversion %

PAPER

TYPE	2019	2020	2021	2022	2023
Recycled	28,030	9,524	8,609	10,593	5,292
Virgin	62,868	13,755	12,740	10,814	15,875
Total (Reams)	90,898	23,279	21,349	21,407	21,167

NOTES:
> Sharp decline in total paper usage after 2019 reflects behavioural change by staff and students which arose during the COVID pandemic and remained following the return to campus.
> A 2022 Victorian Supreme Court decision regarding forestry regulations resulted in market changes that impacted the production and availability of inventory from the University's paper supplier. Impacted products included many carbon-neutral (virgin and recycled) and recycled-content paper options, which is reflected in the significant reduction of carbon-neutral and recycled paper purchased in 2023.



SCOPE 1-3 EMISSIONS FOOTPRINT

EMISSION SOURCE	CALCULATED EMISSIONS (tCO2-e/yr)
SCOPE 1 DIRECT EMISSIONS*	
Natural Gas	20,347
Liquid fuel for transport	471
Liquid fuels for stationary energy	30
Refrigerants	4,339
Commercial Carbon Dioxide	91
TOTAL Scope 1	25,278
SCOPE 2 INDIRECT EMISSIONS*	
Electricity - all sites Location-based calculation	84,646
Electricity - all sites Market-based calculation	20,924
TOTAL Scope 2 Location-based	84,646
TOTAL Scope 2 Market-based	20,924
SCOPE 3**	
Category 1: Purchased Goods and Services	167,926
Category 2: Capital goods	9,695
Category 3: Fuel- and energy-related activities (not included in scope 1 or scope 2)	12,270
Category 4: Upstream transportation and distribution	2,544
Category 5: Waste generated in operations	2,513
Category 6: Business travel	10,261
Category 7: Employee commuting	48,763
Category 13: Downstream leased assets	10,708
TOTAL Scope 3	264,680
TOTAL Emissions for Monash University (Using Location-Based Emissions For Scope 2)	374,604
TOTAL Emissions for Monash University (Using Market-Based Emissions For Scope 2)	310,882
EMISSIONS OFFSETS	
Greenfleet	415
TOTAL OFFSETS	415
TOTAL Emissions for Monash University (using Market-based emissions for Scope 2 and including Offsets)*	310,467

- NOTES:
- > Scope 3 emissions reporting has been expanded to include more categories from the GHG Protocol Framework. Emissions included for the first time in 2022 include Goods and Services and Capital Goods purchased by Monash, staff and student commute emissions and other transport and travel emissions.
 - > Scope 1 and 2 data is collected and calculated according to the National Greenhouse and Energy Reporting (Measurement) Determination 2008, the National Greenhouse Accounts Factors, August 2023 and the Australian Standard ISO 14064.1-2006.
 - > Data from previous years has been recalculated as more accurate data became available.

CIRCULAR ECONOMY FRAMEWORK TARGETS

PILLAR	SUMMARY
Waste Transformation	1. Reduce waste generated per person by 15% 2. Divert 72% of operational waste from landfill 3. Reduce contamination in mixed recycling to 5% or below
Regenerating Nature	1. Halve organic material going to landfill 2. Reduce food waste generated by 15% from 2024 baseline
Sustainable Buildings	1. Circular design principles including adaptive reuse and design for disassembly, material reuse/efficiency are integrated into the design and decision making processes. 2. Reduce upfront carbon emissions by 20% 3. 90% of construction and demolition waste diverted from landfill
Net Zero Transport	1. Offset all flight emissions by 2030 2. Encourage the use of public transport 3. Encourage the use of active transport 4. Transition the Monash fleet and community to electric vehicles
Responsible Procurement*	1. Indigenous People 2. Empowerment 3. Thriving Communities 4. Climate Change 5. Circularity 6. Human Rights and Modern Slavery

* NOTE: Separate endorsement pathway led by Strategic Procurement, expected by Q2 2024.

APPENDIX 4:

Gender Equality Action Plan 2022-2025 objectives

RECRUITMENT	
1.1	Seek talented staff irrespective of gender, sexuality, race, ethnicity, disability, cultural background
1.2	Enhance Monash University's reputation as an exemplar and inclusive employer of choice
1.3	Promote inclusive selection and hiring practices
1.4	Conduct targeted recruitment
1.5	Data analysis and reporting
CAREER PROGRESSION, PROMOTION AND DEVELOPMENT	
2.1	Support women's academic success
2.2	Promote equitable decision-making
2.3	Improve access to professional development
2.4	Provide Diversity and Inclusion training
2.5	Data analysis and reporting
GENDER COMPOSITION AT ALL LEVELS OF THE WORKFORCE	
3.1	Increase the representation of women in leadership roles
3.2	Data analysis and reporting
GENDERED WORK SEGREGATION	
4.1	Raise awareness of gendered segregation of occupations within the workplace
4.2	Engage all colleagues in the collective effort to challenge gender stereotypes
4.3	Leadership support to redress gendered segregation
4.4	Data analysis and reporting
WORKPLACE SUPPORT, LEAVE AND WORK FLEXIBILITY	
5.1	Promote flexible work within the workforce
5.2	Equip supervisors with relevant knowledge of available support
5.3	Support parents and carers
5.4	Support for staff who experience family violence, and staff who provide care for those experiencing family violence
5.5	Data analysis and reporting
WORKPLACE CULTURE, LEADERSHIP AND DIVERSITY	
6.1	Promote a safe, respectful and inclusive culture for staff free from discrimination and harassment
6.2	Promote equal opportunity principles and understanding of ethical and respectful conduct
6.3	Develop inclusive leadership capabilities
6.4	Support staff in building meaningful connections and sense of belonging at Monash
6.5	Data analysis and reporting
GENDER PAY EQUITY	
7.1	Close the organisation-wide gender pay gap
7.2	Visible leadership commitment to pay equity
7.3	Data analysis and reporting

APPENDIX 5:

First Nations senior leadership positions, December 2023

- > Senior Lawyer (Research & Education) - Office of the General Counsel - Office of the COO & Senior Vice-President
- > Indigenous Cultural & Community Engagement Lead - Office of the Pro Vice-Chancellor (Indigenous) - Office of the DVC Education & Senior Vice-President
- > Senior Strategic Adviser Education Portfolio - Office of the Pro Vice-Chancellor (Indigenous) - Office of the DVC Education & Senior Vice-President
- > Indigenous Student Services Manager - William Cooper Institute - Office of the DVC Education & Senior Vice-President
- > Senior Indigenous Ethics & Integrity Special - Office of Research Ethics & Integrity, Office of the DVC (Research) & Senior Vice-President
- > Senior Program Manager - Fire to Flourish - Office of the DVC (Research) & Senior Vice-President
- > Aboriginal Communities Engagement Lead - Centre to Impact AMR - Faculty of Medicine Nursing & Health Sciences
- > Indigenous Employ & Engagement Manager - Staff Equity Diversity & Inclusion - Office of the COO & Senior Vice-President
- > Director Indigenous Research - Office of the DVC (Research) & Senior Vice-President
- > Director Community - Fire to Flourish - Office of the DVC (Research) & Senior Vice-President
- > Director William Cooper Institute - William Cooper Institute - Office of the DVC (Education) & Senior Vice-President
- > Associate Professor - School of Curriculum Teaching & Inclusive Education - Faculty of Education
- > Sir John Monash Distinguished Professor - Monash Indigenous Studies Centre - Faculty of Arts
- > Professor - Monash Indigenous Studies Centre - Faculty of Arts
- > Professor - MNHS Education Portfolio - Faculty of Medicine Nursing & Health Sciences
- > Professor - Department of Human Centred Computing - Faculty of Information Technology
- > Professor - Department of Fine Art - Faculty of Art, Design & Architecture
- > Pro Vice-Chancellor (Indigenous) - Office of the Pro Vice-Chancellor (Indigenous) - Office of the DVC Education & Senior Vice-President

APPENDIX 6:

Official statement on Indigenous Voice to Parliament

The following statement by the University of its commitment to support and contribute to the process outlined in the Uluru Statement from the Heart was released 28 February 2023, with the unanimous support of Monash University Council.

In August 2021, Monash University committed, via its Strategic Plan, Impact 2030, to supporting and contributing to the Uluru Statement from the Heart process including a First Nations' Voice to the Commonwealth Parliament of Australia. The process outlined in the Uluru Statement from the Heart is intended to empower Indigenous Australians and contribute to justice and self-determination.

Since 1964 Monash University has demonstrated its commitment to Indigenous peoples and cultures from the creation of the Centre for Research into Aboriginal Affairs to the more recent establishment of the William Cooper Institute, a hub for Aboriginal and Torres Strait Islander research, learning, and engagement. William Cooper in 1937 petitioned King George V for Aboriginal representation that would give Aboriginal people a voice in federal parliament.¹ Monash University supports Indigenous peoples having meaningful input into decisions that affect their lives and their futures.

In February 2023 Monash University reaffirms its commitment to contributing to the process outlined in the Uluru Statement from the Heart. We look forward to a future where Indigenous and non-Indigenous Australians walk together toward a fair and truthful relationship and create a vibrant and prosperous future.

1. Bain Attwood (2021), *William Cooper: An Aboriginal Life Story*, Melbourne: Melbourne University Press.

APPENDIX 7:

Modern slavery training module participation

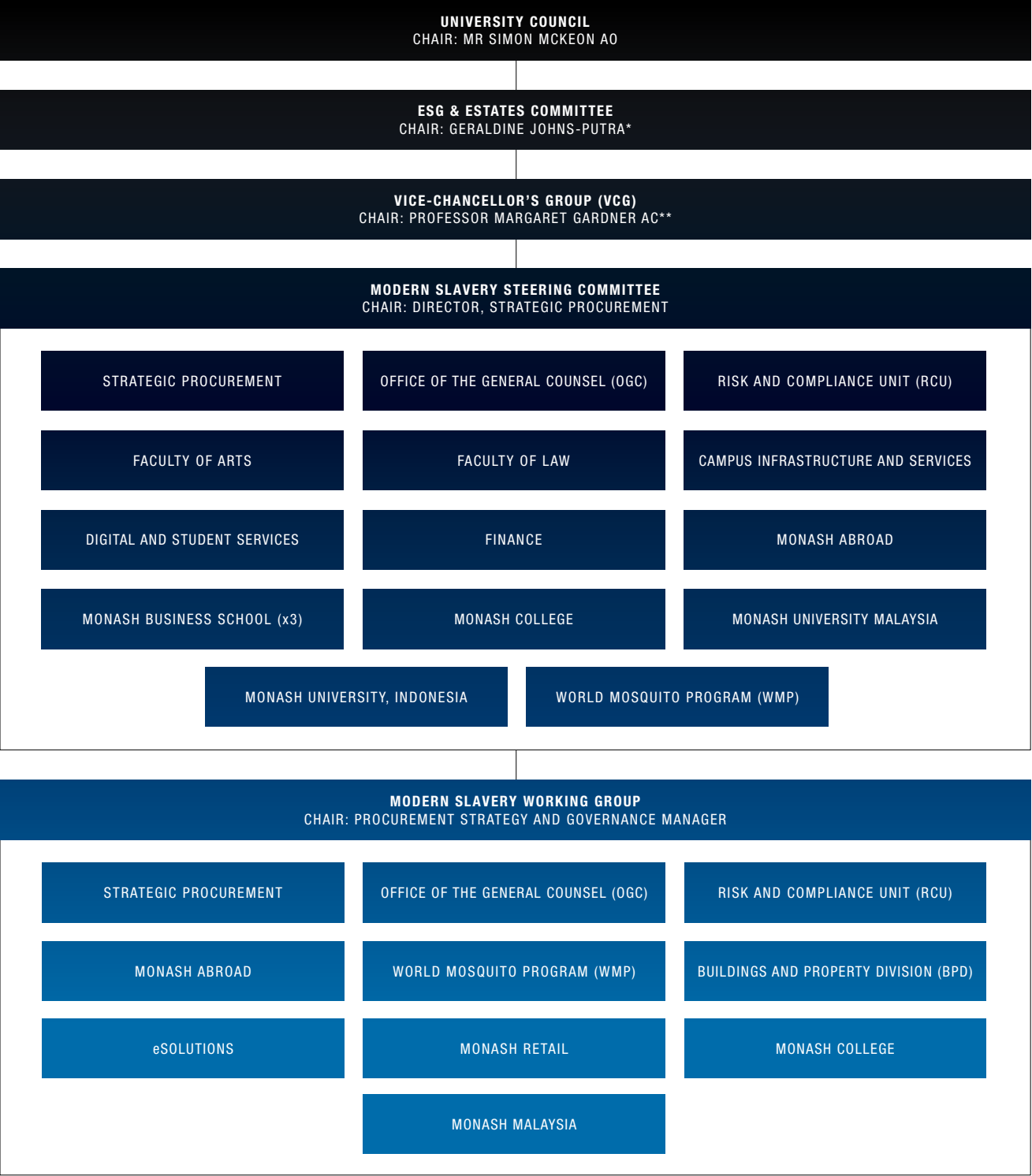
Overall training module compliance participation rate for key Monash University staff.

MODERN SLAVERY TRAINING KPIS*	2022		2023	
	Total	%	Total	%
KEY PROCUREMENT AND LEGAL STAFF	105	100	136	100
MODERN SLAVERY STEERING COMMITTEE	16	94	18	100
MODERN SLAVERY WORKING GROUP	14	100	17	100
MONASH SENIOR STAFF	45	69	55	100
TOTAL CUMULATIVE TRAINING COMPLETION (NO KPIS)				
TOTAL STAFF TRAINED IN YEAR	4789	NA	3761	NA
CUMULATIVE TOTAL MODERN SLAVERY TRAINING COURSES COMPLETED	5162	NA	8923	NA

* Training KPIS are to reach 100 per cent training completion for each of the above identified key staff groups each year.

APPENDIX 8:

Modern Slavery Program governance structure



*Noting that The Hon Simon Crean held the position initially in 2003 and sadly passed away on 25 June 2023.
**VCG was chaired by Professor Susan Elliott AM following the resignation of Professor Margaret Gardner AC in August 2023.

APPENDIX 9:

Commercialisation data

	2020	2021	2022	2023
Invention disclosures	117	115	89	73
New patents	52	42	23	22
New deals	33	31	31	30
Commercialisation revenue (\$K)	4019	5069	4718	3474
New spinouts / start-ups	7	5	7	11
Total active spinouts based on Monash IP				50
Total companies in which Monash holds equity				29

