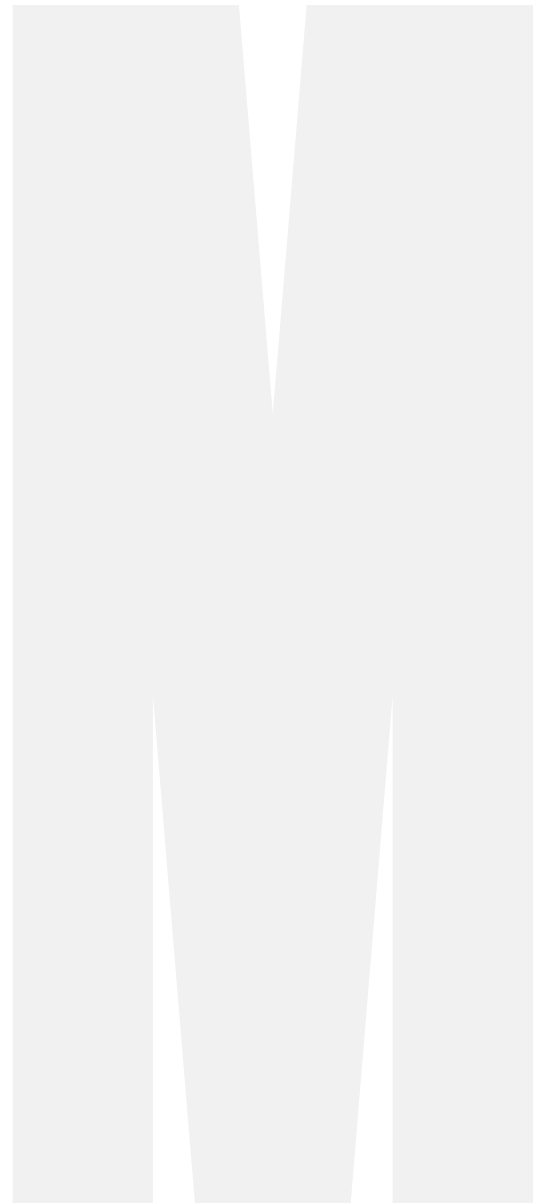


IMPACT 2030

SUPPORTING STATEMENT
FOR THE MONASH UNIVERSITY
STRATEGIC PLAN 2021-2030



INTRODUCTION



This supporting statement has been created to capture the context, perspectives and evidence which shaped *Impact 2030*, Monash University's Strategic Plan 2021 – 2030. During the next decade, the moment when this Plan was created will seem distant and the story about how the COVID pandemic-caused crisis relates to the present will seem obvious and settled.

In the next decade much will change, including the people making significant decisions for Monash. I am confident Monash will endure and thrive. This supporting statement is to assist in achieving the aspirations laid out in *Impact 2030*.

A strategic plan is a plan for action that, through its goals and priorities, attempts to achieve its purpose. But *Impact 2030* is also more than a plan. Much of its power lies in telling the story of the hopes and values of the Monash University community – telling of what they believed was possible.

Our ability to achieve our aspirations and serve our purpose depends on the commitment of the Monash community to what should be done and how it should be achieved.

In the consultations that preceded development of this Plan and the discussions immediately after, the University community helped shape the story of the future we wished to see. The shared meaning found in this Plan made the pledge to this path by the University seem not only possible, but worthy of strong commitment.

In the years ahead, this paper will be there to testify to and capture the moment, the shared meanings and, most of all, the aspirations on which *Impact 2030* rests. Aspirations that, in a time of crisis, Monash could and should rise to “meet the challenges of the age” through its education and research.

Impact 2030 is a story that declares it is our purpose which should drive our actions.

There is agreement that as we enter this next decade, the major challenges before us are global, rather than local, signalling great shifts in our environments, both physical and social, and calling for a response from the University.

The previous strategic plan, *Focus Monash 2015-2020*, changed the University in ways that lifted our capabilities and capacities, while reinforcing the values and vision that fuel our purpose and our goals.

Impact 2030 commits Monash 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, to contribute to geopolitical security and to foster thriving communities.

No strategic plan can anticipate the uncertainties and instabilities, the changes and revisions, that will affect the University in the decade ahead. Nor can the circumstances in which Monash will operate in the years to come be predicted by this Plan. Yet this does not deter us from being clear about our aspirations and goals. Monash has the capabilities, the range and the aspiration to create the positive impact to which this Strategic Plan directs us.

My thanks to all the members of the University community who contributed to the development of *Impact 2030*. It is now for Monash to make an impact for good.

A handwritten signature in black ink that reads "Margaret Gardner". The signature is fluid and cursive.

Professor Margaret Gardner AC
President and Vice-Chancellor

SECTION 1

IMPACT 2030: SUPPORTING STATEMENT FOR
THE MONASH UNIVERSITY STRATEGIC PLAN 2021-2030

NEW DIRECTIONS 2021-2030: CHALLENGES AND OPPORTUNITIES

This supporting statement provides information, commentary and narrative to explain the context which informed *Impact 2030*, Monash University's Strategic Plan, and to outline the capability and performance on which the aspirations of *Impact 2030* build. It also provides more background on the challenges and goals outlined in the Strategic Plan. It is not the Monash Strategic Plan, *Impact 2030*, but a context to inform understanding of it.

In the first section of the paper, the purpose of the Plan and the challenges which give thematic content to that purpose are explored. The four goals, which set the direction and outline the key priorities of Monash education, research and service, set the path for implementation and the ways to measure and assess performance and outcomes.

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 national and international communities.”

The second section of the paper describes the outcomes of the previous strategic plan, *Focus Monash 2015-2020*. This outlines the capabilities and outcomes on which the new strategic plan has been built.

Context, as well as institutional capabilities, are the elements that underpin the goals and aspirations identified. The global challenges are derived from the context in which the University operates and to which its education and research contribute. The four goals outline the characteristics and priorities in addressing the University's purpose. Key aspects of the University's operations, its culture and values, support and reinforce the University's purpose and the implementation of the Strategic Plan.

Impact 2030 sets the purpose, goals, priorities and outcomes Monash is seeking. It will be implemented through a University-wide Implementation Plan with a three-year rolling horizon. This Implementation Plan provides a means to identify initiatives to achieve strategic goals and oversight of progress to meet key performance measures and outcomes. The relationship of the Strategic Plan to the planning and reporting framework of the University can be found online.

THE CHALLENGES OF THE AGE

Every age grapples with a range of issues, and those of major significance are evident sometimes only in retrospect or through the lens of another time and order. For example, poverty has persisted through the ages, but the ways it manifests has changed within and across nations.

The research and education Monash undertakes must engage with the challenges that require understanding and action in these times.

In educating our students, our attention must be on their future lives as well as their future careers. We must provide graduates with the ability to understand and engage with the challenges and changing circumstances of their world. Our graduates must be prepared to contribute in many ways to the communities in which they live.

Monash research must build the knowledge and solutions to assist not only our graduates but our communities to meet the challenges of this age. Fundamental to that research is supporting discovery and scholarly questioning of how we understand and explain our world. It also means interrogating and advancing explanations and solutions from different disciplinary perspectives and gathering evidence from multiple sources.

And in the testing and experimentation with knowledge gained, we must engage with collaborators, including those practicing in professions and organisations and living and working in the circumstances that will be affected.

Whatever the difficulties involved in comprehending the challenges of the age, taking action in the world in which we find ourselves cannot wait for retrospective assessments.

As a university we must draw on the evidence and knowledge that informs our understanding of the major challenges before us, and identify the ways in which we can enhance our understanding and address the problems and impediments to providing better solutions and outcomes for us all.

Monash's Strategic Plan, *Impact 2030*, defines priorities and actions for the University for the next decade. It builds on current research and understanding of major challenges – locally, nationally and internationally – to chart those requiring the University's effort and attention for the betterment of our communities.

In this third decade of the 21st century, among many challenges, three challenges, global in their scale and implications, **responding to climate change, preserving geopolitical security and fostering thriving communities** have been chosen as the challenges *Impact 2030* will address.

- › **Climate change** threatens the fabric of our planet, the quality of air, water and biodiversity that sustains us. From its adverse consequences unchecked come natural disasters, issues of food and energy security, planetary health for our human populations, habitats for living species and forced migrations of all living species, among others.
- › **Geopolitical security** is being challenged by disruption to established institutional orders across nations and within nations. Mechanisms for international security are undermined; conflicts and their consequences for national, ethnic and religious groups become seemingly intractable; digital disruption is felt within and across borders; and trust in institutions and processes, which once bound people across nations, is eroded.

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- › **Thriving communities** hold the promise of the ‘good life’ we seek. It challenges how we live well and how we live well together. This challenge covers the medical and health issues of communicable and non-communicable disease, and also systemic social issues of inequality and disadvantage requiring understanding and solution.

There is much still to be understood about these three challenges and effective ways of addressing them, but our recent experience has sharply drawn their outlines for us.

While this Strategic Plan was being developed, various parts of the world experienced the impacts of climate change, from the raging bushfires which spread across large parts of Australia in early 2020 to the unprecedented rainfall in Greenland in August 2021. The Intergovernmental Panel on Climate Change (IPCC) released its latest report on 7 August 2021 warning that the evidence on the impact of climate change and the contribution of human action to it is clear, with global temperatures and sea levels rising, and extreme weather events more common.

Areas of continuing tension within and between nations have been with us since nations emerged. From 2020 the increasing tensions in relations between the US and China have been felt across a range of global issues from trade to foreign relations and defence. Yet the withdrawal of the US and allies, including Australia, from Afghanistan in 2021, and the rapid retaking of that nation by the Taliban, starkly revealed the fragility of peace and geopolitical security, and highlighted again the forced and unforced migrations of peoples in the face of conflict and changes of regime.

And while the challenges of climate change and geopolitical security were matters of intense debate in the early decades of the 21st century, the emergence in 2020 of a new pandemic, COVID-19, suddenly swept across the world changing more than could have been imagined in 2019. This pandemic demonstrated the abilities of medical science to understand and mitigate through vaccines and public health measures the impact of a new communicable disease, while revealing the vulnerabilities of our societies, economies and governments to new pandemics.

The experiences of 2020 and 2021 heightened and clarified the impetus for this Strategic Plan to affirm that our purpose is more than education and research, but education and research through the scale and reach of our communities, locations and partnerships to make an impact for the better on these challenges before us.

All three global challenges contain within them a thread that goes to the uneven impact of each within and across nations. In all three, the already disadvantaged, underserved or vulnerable people are those most likely to be negatively affected and to have least access to the solutions that mitigate their effect. Inequality, particularly socioeconomic inequality, persists. Its effects on life circumstances are also felt in the overall quality of life for humans on our planet, and in the quality of life of our communities.

In bringing our education and research to bear on these three global challenges, we understand that they cut across domains of knowledge and practice in the University. While climate change draws many of its understandings and evidence from the sciences, its consequences and remedies are social and economic, as much as physical. Geopolitical security depends largely on the humanities and social sciences for its understandings and evidence, but its mechanisms and consequences are physical, as well as social. We recognise that to foster thriving communities new medical solutions to illness are vital, but much of their impact depends on our social ability to transmit solutions to whole populations. And we know that the social health of communities is a key concern in which the collective or public good is fundamental to its success.

Climate change

In August 2021 the Intergovernmental Panel on Climate Change (IPCC) released the first instalment of its Sixth Assessment Report, drawing on the research of thousands of scientists to assess the accelerating impact of human influence through greenhouse gas emissions on the climate. The report found that the previous five years had been the hottest on record, with heatwaves and extreme weather events including cyclones, bushfires and droughts increasing in frequency and intensity since the 1950s¹. In the past two decades sea levels have risen at a rate that nearly triples the rate of increase in 1901-1971, while glaciers are retreating globally². The IPCC concluded that, even under the most optimistic scenario – with CO₂ emissions declining to net zero around 2050, followed by net negative CO₂ emissions – temperatures are likely to reach 1.5°C above 1850-1900 levels by 2040³. The Arctic will likely be ice-free at least once before 2050, and the occurrence of extreme events “unprecedented in the observational record” will increase^{4,5}.

While the complexity of the climate system means not all effects can be predicted confidently, the implications of the rapid change are catastrophic and wide-ranging. The World Health Organization forecasts climate change will cause around 250,000 additional deaths per year between 2030 and 2050⁶. Direct damage to health will cost between US\$2-4 billion per year by 2030⁷.

In addition to loss of life, the coming decades will be characterised by increased stress on ecosystems and biodiversity, food and water crises, forced human displacement, economic impacts and other risks, direct and indirect, as a consequence of a rapidly changing climate.

Almost all nations on Earth are now party to The Paris Agreement, established in 2015 to reduce the impacts of climate change by keeping the increase in mean global temperature well below 2°C and preferably limit the increase to 1.5°C. Australia has pledged to reduce greenhouse gas emissions by 26-29 per cent below 2005 levels by 2030⁸. However, the Climate Targets Panel, an independent group of senior Australian climate scientists and policymakers, maintains Australia’s 2030 emissions reduction target must be 50 per cent below the 2005 level to be consistent with The Paris Agreement⁹. Both China and the US have committed to achieving carbon neutrality within the next three to four decades, while New Zealand declared a climate emergency in late 2020.

With risk comes the need for action in mitigation, and the next 10 years is what the World Economic Forum describes as the ‘resilience decade’ – shaping the outlook for climate risk for the rest of this century and likely well into the next.

¹ IPCC, 2021: Summary for Policymakers, In: Climate Change 2021: The Physical Science Basis, Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change, Cambridge University Press, In Press, p8.

² IPCC, 2021, p7.

³ IPCC, 2021, p17.

⁴ IPCC, 2021, p20.

⁵ IPCC, 2021, p35.

⁶ World Health Organization, https://www.who.int/health-topics/climate-change#tab=tab_1

⁷ World Health Organization, https://www.who.int/health-topics/climate-change#tab=tab_1

⁸ <https://www.environment.gov.au/system/files/resources/f52d7587-8103-49a3-aeb6-651885fa6095/files/summary-australias-2030-emissions-reduction-target.pdf>

⁹ <https://www.asbec.asn.au/news-items/climate-targets-panel-australias-paris-agreement-pathways-updating-the-climate-change-authoritys-2014-emissions-reduction-targets/>

Geopolitical insecurity

Transformation of the global economy is shifting the locus of the world's productivity and wealth. By the end of this decade, consumers in the Asia-Pacific region are forecast to make up more than half of the world's consumption growth¹⁰. The rise of new stars in trade and influence to rival the old has profound implications for the established global order, presenting challenges to territory and sovereignty in many regions.

The recapture of Afghanistan by the Taliban in 2021 has been one signal of change in the engagement and influence of the US and its allies. The fall of the Afghan government before the North Atlantic Treaty Organization (NATO) had completed its withdrawal and chaotic scenes of the evacuation, combined with concerns for the fate of Afghans under Taliban rule, provoked criticism of the United States' handling of the occupation and its commitments as peacekeeper. The situation has renewed concerns internationally about worsening geopolitical polarisation, rising extremism and risk of future conflict. Chinese media cited the Afghanistan situation to question the United States' ability to defend Taiwan from China taking it by force, in turn adding to growing tensions in relations between China and its neighbours in the Indo-Pacific.

These and other changes in geopolitical influence and strength are unfolding at the same time that well-established international paradigms face historic disruption. Today we see the ties binding national prosperity to international participation scrutinised and challenged, even by those nations that have benefited most from decades of open trade. Old debates are being reignited over the influence of global markets on domestic labour, the value of strategic alliances and trade partnerships, and the contribution and role of established institutional orders such as the World Health Organization and NATO.

Amid global shifts such as these, surging domestic polarisation is occurring over matters of national and cultural identity. The closing years of the last decade have been characterised by escalating nationalist rhetoric and policy across many parts of Europe, Asia and the Americas. The COVID-19 pandemic has compounded this, forcing disruptions to international travel and borders and an unprecedented disruption to trade and lifestyle. The result is a fractious geopolitical landscape, increasingly riven by political volatility and waning public trust and engagement in institutions of government worldwide; bellicose territorial disputes, a technological arms race between world powers, and increasing use of the internet as a weapon for domestic and international coercion.

Anxiety over the threat of international conflict grows, as does the potential for an uncoupling of economic and cooperative and legal systems¹¹. This instability in turn is driving people to seek refuge and safety away from their homes. 2020 was the ninth year of uninterrupted rise in forced displacement due to increasingly interconnected and mutually reinforcing factors such as poverty, food insecurity, climate change and conflict. The number of forcibly displaced people reached 80 million for the first time in recorded history in 2020, with more than 26 million refugees seeking resettlement outside of their country of origin¹². The Institute for Economics and Peace has warned that more than one billion people face being displaced by 2050 due to ecological threats.

Global challenges by their nature demand global cooperation and endeavour to solve them. As the levers that previously enabled successful cross-border cooperation become strained, the demands or impacts on individual nations caused by such challenges as climate change, infectious disease, modern slavery or extremism will become more urgent.

¹⁰ <https://www.mckinsey.com/featured-insights/asia-pacific/asia-future-is-now#>

¹¹ World Economic Forum, The Global Risks Report 2020, Geneva: WEF, p14

¹² <https://news.un.org/en/story/2021/06/1094292>

Thriving communities

Challenges to human health and wellbeing, and the development of scientific and social advances to address them, have defined the course of human history. In 1920 the life expectancy at birth in Australia was 59 years for men and 63 years for women¹³. A child born in Australia today can expect to live well into their 80s¹⁴. In the past several decades alone we have witnessed remarkable discoveries spanning in-vitro fertilisation, artificial organs and highly active antiretroviral therapies to innovative public health campaigns and policies driving a transformation in social behaviour and culture.

Coming decades will demand further advances to improve human health and wellbeing. Some pressing challenges and opportunities – managing an ageing population, improving treatments for mental illness and addiction, confronting antibiotic resistance and delivering access to clean water, for example – are global priorities today. Others, such as genome editing, stem cell treatments, robotic surgery and use of AI, are only now beginning the transition from the lab to the clinic and the home. Still, other opportunities to transform human health, some scarcely conceivable today, will define our progress further in this century.

COVID-19 has cast new light on the way matters of health are interwoven with social, economic and environmental concerns. By September 2021, COVID-19 had claimed more than 4.5 million lives worldwide and forced more than one-third of the global population into lockdown to contain spread of the disease. The World Health Organization attributes the most probable source of the outbreak to human spillover via an intermediate animal host, with direct spillover from bats and introduction through the food supply chain also cited as plausible explanations.

The economic, political and social impact of COVID-19, as well as the pandemic response, have been immense and multidimensional, exacerbating issues of racial and geographic discrimination, health equity and the balance between public health imperatives and individual rights. Border closures and disruption to trade routes, lay-offs and job disruption due to lockdowns have contributed to the most severe global recession since the Great Depression of the 1930s. The worst of these impacts have fallen on those least able to absorb the economic shocks – notably women, informal workers, youth and the world's poorest, among other vulnerable groups with less access to social protections.

Uncertainty in government response to the disease, combined with polarisation of debate about the pressure on individual rights through public health measures, has worked to further the erosion of public trust and harm to our social fabric.

Achieving the advances needed to address these and other health challenges rests on the ability of our communities to work together. For people to contribute to their community, they must feel they belong and have sufficient opportunities to make a meaningful contribution to the shape and direction of it. Engrained systems of inequality and injustice are corrosive to this endeavour. Yet, despite decades of progress towards social inclusion since the White Australia Policy was renounced, nearly one in four Australians experience major discrimination, such as being unfairly denied a job based on their background¹⁵. These problems are not unique to Australia; they are repeated worldwide.

Individuals cannot flourish in isolation from the health and cohesion of the communities they inhabit. This understanding underpins the United Nations Sustainable Development Goals, which recognise that ending poverty and reducing inequality must go hand-in-hand with improving health and education and spurring economic growth. While many nations are making progress to improve the health of their communities, there is a great deal more that can be achieved.

¹³ <https://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4102.0Main+Features10Mar+2011>

¹⁴ <https://www.aihw.gov.au/reports/life-expectancy-death/deaths-in-australia/contents/life-expectancy>

¹⁵ Measuring social inclusion – The Inclusive Australia Social Inclusion Index: 2019 Report (pp.10-11)

This paper cannot unpack the many and different ways that a university may bring its collective capacities to understand these challenges and their consequences. Suffice to say that it requires involvement across many fields of study and practice – and that in looking through and dissecting these challenges we are always aware of the consequences of what we seek to understand and how we might make a difference in our world.

As we are all living through the unexpected consequences of a global pandemic, in the context of an increasingly uncertain geopolitical environment, surrounded by physical evidence of climate change from the Arctic to the Antarctic, we cannot but experience these challenges of our age.

Many of the most pressing challenges and opportunities facing our communities are those that universities are not only capable of addressing but needed for their knowledge generation and education. They cannot be solved only by governments or industry; they require the engagement of communities, collaboration at scale, as well as a commitment to the public good. Universities, through their education and research, in collaboration nationally and internationally, are a key part of the means to address these challenges.

What do they mean for how we operate?

For Monash, a university with campuses in Australia, China, India, Malaysia and Indonesia, and with relationships across the world, these major challenges not only provide a focus to how we engage with and contribute to our communities, they also affect how we operate.

The impacts of geopolitical insecurity go to the ability to conduct education and research across borders in ways consistent with our values and purpose. Climate change raises questions of global health, our energy and water use, our carbon emissions and modes of operation – and the impact of all of these across the inequalities of wealth and opportunity of our societies. And the necessity to foster thriving communities not only demands innovation and further advances to improve and transform human health and wellbeing for generations to come, but also requires us to support our communities to live well together.

It is not only through our education and research, but through our operations that we should address these challenges by reducing our emissions, contributing to peace and security in our region and attending to the wellbeing of our University community.

These three global challenges operate alongside the continuing organisational challenges for universities in the shifting mix of market and regulatory settings in which we operate. They shape our operations and finances, as well as the application of technological and policy advances that are both opportunities and tests for our research, education and services.

Market and regulatory environments shape the University's fields of operations in ways that cannot be ignored and which need regular monitoring and timely tactical shifts. They require major choices for the University in this next decade, as they did in the previous one. The choices posed by the shape of markets, technological advances and government regulation will not disappear. They could, if we are not attentive, overwhelm the broader purpose that we should pursue. This Strategic Plan places their significance for our future operations within the broad purpose and attention to the three global challenges outlined above.

Monash's purpose is to reach for what is best for our communities.

SHAPING OPPORTUNITIES AND REFINING GOALS

The four goals set out in the current Strategic Plan are to be excellent, international, enterprising and inclusive in the terms described below.

Excellent

Undertaking education and research of the highest international quality that addresses global challenges and develops understanding and solutions for the betterment of our communities.

International

Building the strength and scale of our international research and education programs to ensure they respond to the challenges and opportunities of our nation, our region and the world.

Enterprising

Developing enduring alliances and partnerships with industry, government and other organisations, including philanthropic partners, that will enrich our ability to innovate, to infuse our students and staff with enterprising capabilities, and provide opportunities to apply our research to make a significant impact by developing solutions for the betterment of our communities.

Inclusive

Seeking talented students and staff, irrespective of gender, sexuality, race, ethnicity, disability, cultural, social or economic circumstances and any other protected personal characteristic, and building a diverse and connected community of students, staff and alumni who are deeply engaged with the wider community and supporting the dissemination of University knowledge and practice.

These goals were built from the University's prevailing culture and values as they had developed since its beginnings in the 1960s.

Together these four goals, outlined in the previous Strategic Plan, *Focus Monash*, defined the way Monash would shape its education and research, becoming in this process a distinctively modern, international university.

These goals differentiated and sharpened what Monash should do, and they remain core to the way Monash will achieve its purpose in *Impact 2030*.

These goals outline priorities for the University, as well as how we assess our performance in meeting our goals, and the outcomes and impact they have for meeting our overall purpose.

Education

Defining excellent university education is a challenge, which remains subject to contestation. Unlike research, international communities have not settled on ways to measure educational excellence, reflecting in part the breadth of the endeavour and the outcomes being sought.

The priorities outlined for ensuring excellent education at Monash in *Impact 2030* combine the fundamental and the strategic. Fundamental is providing a curriculum that satisfies the disciplinary and professional expectations of the knowledge and skills expected on graduation. But our strategic focus is on the way a Monash education will ensure our graduates are prepared to navigate the future as the understandings and circumstances following their degree change.

And significantly in this Strategic Plan, we are harnessing and enhancing the learning experiences for our students that give them the ability to more deeply understand and contribute to the challenges of climate change, geopolitical security and thriving communities. These are experiences that reach across student cohorts, beyond their particular fields of study, to build connections across the student community engaging with these challenges internationally, as well as nationally.

This is an ambition to inject a transformative element into Monash education, a vein of experience that takes students into new domains which are as important for their future lives as citizens as they are for their future careers.

Australian universities, such as Monash, were designed around models of education derived from Britain principally, overlaid with a strong pragmatic public goal of providing sufficient professionals in the fields of law, medicine, engineering and commerce to fuel the growing economies into which those graduates were released.

Admission standards are set to ensure sufficient preparation to gain advantage from the education provided. Assessment is a guarantee of the expertise and qualifications of those graduated in their fields. There are other vital elements (beyond field or discipline expertise) that a degree might be expected to provide to prepare students for the environments in which they will live and work – and it is these elements which are an important part of the impact on which this Strategic Plan concentrates.

Monash will continue to rely on the collegial academic governance that sets admission standards and monitors their effectiveness to guarantee a student population that is prepared effectively for a Monash education. And similarly, the guarantees on assessment are assured through academic governance – with the added oversight of professional accrediting bodies for those students seeking admission to such professions.

From *Impact 2030*, Monash's strategic focus will be on the type of educational capabilities and experience we provide for our students for their future lives.

Excellent education provides learning and the ability to learn. Inherent in this understanding is recognition that excellent university education may prepare people to enter specific professions, but it is not training only for that profession. The motto of Monash University, *Ancora Imparo* ("I am still learning"), must underpin the education quality we provide.

A clear focus on how we retain students so they successfully complete their studies is the bedrock of our commitment to an excellent education through retaining a very high proportion of the excellent students we admit until their completion, and managing the differing circumstances that affect the preparation and engagement of a diverse student body. A necessary outcome being sought in this next decade is maintaining high levels of retention and success, in the face of the rigorous standards guaranteed through academic governance.

But beyond this necessary outcome is designing and providing an education that will offer our students transforming understandings and experiences to build broad capabilities for whatever their future may hold.

Professions of the future

These capabilities must meet the changing demands likely to be encountered in the future by our graduates, particularly continuing to learn anew and to deal with uncertainty. Much has been said in recent debates¹⁶ about the changing skills needed for more rapidly changing jobs, and of the greater likelihood of people changing jobs and careers across their working lives.

Monash currently provides a rich suite of undergraduate and postgraduate degrees covering general fields of knowledge, such as arts and sciences, through to professions such as law, engineering and medicine, and a series of specialist fields from communications through finance to allied health, as well as specialist fields within these areas. In 2021, Monash provides students a choice of 138 undergraduate degrees and 222 postgraduate degrees, and more than 4,500 units or subjects within them. This provides a wealth of possibilities and choices in our students' education.

For some time, over a third of Monash undergraduates have chosen to undertake a double degree, which has evolved to offering 68 double degree combinations to Monash undergraduates. The increasing focus of Monash students on a double degree effectively allows the breadth of a generalist degree in Arts, Business or Science to be added to a professional qualification in Law or Engineering, Architecture or Medicine.

Students undertaking these double degrees have expanded the range of capabilities and possibilities for their future through this choice. Of Australian universities, Monash has the largest cohort of students combining undergraduate degrees.

There is clear evidence double degrees can greatly enhance new graduates' prospects of finding full-time work, with the success rate in employment outcomes increasing by as much as 40 per cent for some degree combinations compared to students with a single, "generalist" degree¹⁷. The benefits were most significant for students in the arts and sciences.

This cohort is effectively creating the liberal or general education plus graduate professional qualifications that is a recognised path of students seeking to enter the professions in the Northern Hemisphere. But the double degree path is more than a different approach for those entering a particular profession; it allows students to build cross disciplinary knowledge that provides more breadth and flexibility in the careers they choose to follow or create.

In this next decade Monash has decided to more explicitly emphasise the capabilities this path provides and make it more available to address the future for our students. We will

¹⁶ The diversity of opinions in this area are demonstrated through the volume of submissions to the Job-Ready Graduates Senate inquiry, available for viewing here: https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Education_and_Employment/JobReadyGraduates/Submissions

¹⁷ <https://theconversation.com/want-to-improve-your-chances-of-getting-a-full-time-job-a-double-degree-can-do-that-157306>

reshape our educational profile to maximise this opportunity for students. This will be an important part of the curriculum design of Monash undergraduate degrees to provide not only strong general foundations alongside professional specialisation, but also combinations of degrees that speak to new areas of cross and interdisciplinary knowledge.

Rich learning experiences: global immersion and enterprising creativity

The major strategic focus of Monash's education in this next decade, however, will reach beyond the commitment to providing for the professions and careers of the future.

Students completing a Monash degree will be prepared to meet the challenges of the age. Rich learning experiences will build capabilities to understand and address those challenges, not only through their working lives but also as members of their communities.

Facing geopolitical insecurity, graduates need high levels of understanding of cultural diversity and competence to operate in different cultures. Graduates need the independence and creativity to use their expertise in the face of complex and unexpected situations and demands created by fluid and changing circumstances, not only in the world of work but in the world. They need independence and creativity to respond to and mitigate the way climate change is reshaping our environments and our communities. They need to be able to reconsider the products and services, the structures and governance that assist or stand in the way of building thriving communities.

In this next decade Monash will ensure every graduate has had the opportunity to develop these capabilities through rich learning experiences that are embedded in or added to the degrees they undertake.

Until the pandemic-induced border closures of 2020, Monash had extensive mobility programs to offer students an experience and understanding of other cultures and environments. In 2019, more than 5,700 students undertook such a program. From 2018, the Global Immersion Guarantee (GIG), offered to every first-year Arts student, demonstrated the extension of immersive internationalisation of the education experience to a whole undergraduate cohort of Monash students. The educational outcomes of the GIG transformed the academic results and the sense of belonging and engagement of nearly 1,000 undergraduates who were part of this new program¹⁸.

As one element of rich learning experiences, Monash will offer global immersion across our undergraduate degrees. This experience will be embedded in the curriculum and its outcomes. It will draw on the set of campuses and locations in which Monash operates, from Point Nepean on the Mornington Peninsula through the Pacific, India, China, Indonesia and Malaysia, to Prato in Italy and the UK Midlands through our partnership with the University of Warwick, providing students the ability to understand and learn in and with other cultures, and to explore the implications of global challenges in those settings.

Monash has had a series of entrepreneurship programs and team projects which encourage students to develop new ideas or projects, individually and in groups, across many sectors, from profit to not-for-profit. These programs involve national and international experiences.

¹⁸ Student survey data, including Student Experience Survey outcomes, show that participation in a period of overseas study has a significant positive impact on academic performance and retention, as well as on quality of the entire student experience. Monash University's portfolio of rich global experiences, including the Global Immersion Guarantee, is transforming academic performance, engagement and sentiment of our undergraduates who participate in these programs.

The entrepreneurship experience offered through The Generator builds creativity and independence by taking students through the steps to develop start-ups and take ideas into action. This program provides a different learning experience to give impact to the knowledge students gain through their degrees.

The Monash Law Faculty's Clinical Guarantee program ensures every Law student has a period of legal experience providing advice (supervised by a legal practitioner) to clients seeking assistance on matters from civil to criminal. In 2021, more than 770 Law students provided legal assistance and advice under professional supervision on matters ranging across public, private, criminal, family and even international law. In addition, they were involved in legal work for real clients and client organisations in areas as diverse as climate justice, human rights, international economic trade, health justice, social security rights, capital punishment and law reform, either through our Monash Law Clinics or with partner organisations such as the Victorian Bar Association and the Australian Law Reform Commission¹⁹. These are all examples of how effective practice skills are built in real-life laboratories and transformational client-focused experiences to sharpen the capabilities and outlooks of our graduates.

Industry teams partnering with organisations through programs such as the Monash Industry Team Initiative, or on international challenges and projects such as Mars University Rover Challenge or the Formula SAE competition, engage students in learning experiences that require thinking through the requirements and problems of clients and situations and designing solutions.

These 'enterprising' programs provide students with ways to test their capabilities in settings that require imagination, creativity, flexibility and problem-solving where the consequences are clear and real. In this next decade, Monash will ensure that every undergraduate has an opportunity to engage in these enterprising programs embedded in their degree.

The foundations of an excellent education lie in the quality of curriculum and pedagogy to ensure successful completion of a degree that provides students with the knowledge and skills to effectively use and renew the field/s of study they have chosen.

The promise of this Monash education is that beyond those foundations, the range of the curriculum will give a mix of generalist and specialist understanding to not only embrace but build professions of the future.

And beyond these elements, a set of rich learning experiences embedded in and with the curriculum will provide an immersion in international cultural understanding, and forge creative and enterprising capabilities that extend the possibilities before our students and engage them in addressing the global challenges of the age.

¹⁹ In a wonderful example of how our students contribute to addressing global challenges, one of our 2021 graduating students from the Faculty of Law, Nick Young, provided research assistance and was acknowledged for his contribution in a ground-breaking public legal opinion by two of Australia's leading barristers on the legal liabilities of company directors for corporate statements and disclosures about climate change, which has become a significant starting point for advising businesses, lawyers and regulators on this particular global challenge.

Research

Research excellence is core to breaking new ground in understanding and devising new ways to address the issues and circumstances of our world. It underpins not only the future development of our communities but the education we provide to our students.

Internationally high-quality research is marked out by the judgements of peers. The broad consensus in international research about the markers of excellence reflects the quality assessments of the scholarly community in a field of study.

Foundational to excellent research is being part of those international scholarly communities and providing researchers with the ability to pursue new knowledge and learn from the scrutiny of and engagement in those scholarly communities.

Impact 2030 sets out as a key priority the development and renewal of research discovery and the research community at Monash, and makes clear that this relies on being part of international networks of excellent research and researchers.

However, the priorities in this goal reach beyond that focus to ways that research questions and solutions are developed in partnership with other organisations and communities. The development of research that grows from the questions raised in clinical practice in medicine or in devising products and services to meet community needs is not only the application of research to new settings, but a means of translating research beyond the scholarly community.

Most important in this new Strategic Plan, Monash has committed to supporting research that builds new knowledge and new solutions that address the challenges of the age. There are many different ways from discovery to application and translation that research addresses climate change, geopolitical security and thriving communities.

This Plan puts focus on building programmatic and thematic responses in order to make a positive impact; harnessing multidisciplinary teams and working with other organisations and communities to bring research to bear on these challenges.

The purpose of *Impact 2030* cannot be realised without excellent research, but the commitment of the Plan is to combine the quality of research with thematic focus and the scale of programmatic endeavour to address the global challenges.

Monash's research must reach beyond the quality of research to the impact it may have on our communities, particularly through addressing the challenges of the age.

Monash's strategic focus will build from the quality of our research to concentrate on the impact of the research we undertake.

The priorities assume that quality of outcome will proceed from quality of output. It is important to maintain and enhance this foundation of excellent research, since the outcomes of new discoveries in changes in practice or technology or process may take time to be achieved or not be easily inferred from the discovery made. Research is not a direct line from discovery to application, but finds new discoveries in the process of applying findings and the intersection of re-examination or consideration of 'old' ideas in new contexts. The quality of research being undertaken is the foundation on which the impact Monash seeks to make will be built.

In general, field-weighted citations are an accepted way of gauging the quality of research output – assumed to be more likely to denote high-quality outcomes from research. Essentially, we rely largely on peer assessment by field to substantiate quality. This has clear numerical markers in some fields, although less easily quantified in all fields. Focusing on this indicator as the necessary measure of our excellence, alongside the international assessment of the scholarly peers in the field where citations do not apply, concentrates on quality of output.

Themes, programs and platforms

Monash has been committed for much of its recent history to interdisciplinary research, because it is seen as fundamental to addressing grand challenges – which necessarily reach beyond the outcomes and findings in particular fields or disciplines.

Thematic research programs, expressed often through Monash research institutes and centres, have enhanced the multidisciplinary research projects and teams that Monash has built.

The capacities and outcomes of the Monash Sustainable Development Institute, which was officially launched in 2016, has kept a strong focus on research programs concerned principally to address climate change and, in particular, transitions to net zero emissions, planetary health, circular economy and sustainable cities and regions, as well as on programs working with partner organisations and communities, through ClimateWorks Australia and BehaviourWorks Australia, to deliver solutions.

Across the breadth of research in medical, pharmaceutical and health sciences, there are multiple existing large teams from the Biomedicine Discovery Institute (founded in 2016), and the Monash Institute of Pharmaceutical Sciences (founded in 2008) to the Australian Regenerative Medicine Institute (formed in 2009) and the National Centre for Healthy Ageing (established in 2019). These programs contribute discoveries and solutions to understand and mitigate disease and improve community health.

Fire to Flourish Program

Launched in 2021, the Monash University-led Fire to Flourish Program is a multi-million dollar five-year program designed to grow community leadership and action in bushfire-affected communities.

Established in partnership with Paul Ramsay Foundation and Metal Manufactures Pty Ltd as co-funders, as well as the Australian Centre for Social Innovation, the Fire to Flourish Program harnesses the multidisciplinary expertise of Monash researchers and their partners to develop, test and refine a new model for community-led resilience, supporting vulnerable communities severely affected by the 2019/2020 summer bushfires to solve complex problems such as generational disadvantage and co-creating the foundations of long-term resilience and wellbeing.

The University also has a series of significant research platforms that support researchers from multiple fields and faculties with key equipment, technical expertise and resources to advance their research. Across six interdisciplinary themes²⁰, a total 43 research platforms across Australia and Monash University Malaysia operate to enhance research, including through facilitating access for industry partners to pursue research and development in these facilities.

New University research institutes and centres, such as the Monash Data Futures Institute (established in 2019), Better Governance and Policy, Monash Gender and Family Violence Prevention Centre, and Turner Institute for Brain and Mental Health are focused on thematic interdisciplinary research in areas key to thriving communities. And often they are linked to key action programs and research platforms that translate their findings to policy and practice.

The evidence of the increasing quality and scale of Monash research over the past decade is clear. The increasing impact of that research can be seen in the increasing support from and partnerships with industry, as well as large international projects.

In order to develop research that addresses significant global challenges and develops understanding and solutions for the betterment of our communities, we need to address the scale and impact of our research, as well as its quality. As is clear above, conventional measures of research success will not necessarily support this strategic ambition.

The ability to harness the expertise across the University and to conceive and execute significant research programs, with the impact we hope to secure, requires shifts in the way we support researchers and research. This does not replace the investigations and results rightly pursued through research grants and publications in a range of fields. However, the multidisciplinary research concentrations of the scale and depth outlined above are necessary for significant mission-based programs of research with impact. It is in these large multidisciplinary teams (in alliance with partners) that high-quality research can be built into research programs with major goals aimed at addressing the challenges of the age.

To this end, *Impact 2030* focuses on developing those programs within and across our research institutes with the support of our research platforms and industry, government or community partners. This means meeting rigorously the conventional measures of research quality, but also demonstrating the reach and impact of major research programs addressing the issues associated with major challenges such as climate change, geopolitical security and thriving communities.

The support for major programs of research, addressing global challenges, does not replace development of disciplinary depth and discovery. However to develop and execute major programmatic research with impact requires conversation, development and planning across schools, faculties and institutes. A process for supporting these deliberations with partners needs to draw input from many parts of the University and its communities.

²⁰ The six themes are: discover and develop cures, accelerate innovations in health, materialise ideas, cultivate sustainable practices, maximise resource potential, and improve living.

Universities were, from their foundation, generally open to scholars from outside their city or nation. The bounds of intellectual inquiry are not constrained by geographic or political borders. The commitment to the international flow of scholarly exchange is at the heart of the institutional goals of universities for research and education.

The way this is realised has altered over time and depends in part on the particular culture and approach of a university. Monash has been particularly committed to broad international engagement from its beginnings.

The reach and scale of Monash's internationalisation is extensive. Close to one-third of students on Australian campuses are from other nations and a further 12 per cent (about 10,000) of Monash students are on its offshore campuses in Malaysia, India, China and Indonesia²¹. Among the total international students at Monash, approximately 40 per cent are postgraduates. Taking onshore and offshore students together, more citizens of nations other than Australia enrol at Monash than any other Australian university²².

Staff at Monash are drawn from 141 countries.

Monash has had the highest level of international research income in Australian universities since 2010.

A continuing increase in the level of outbound mobility of Monash students (until the pandemic-induced border closures of 2020) meant over 5,000 students had an overseas study experience in each of 2018 and 2019, showing the commitment of the University to shaping a global experience for its students.

Monash has built major alliances and partnerships, which are deeper and more strategic than the standard memoranda of understanding, with a small number of universities overseas.

For example, the Monash-Warwick Alliance (established in 2011) has ongoing research team partnerships, as well as a major mobility program and cooperation and collaboration across many parts of each university. In the past eight years, the Alliance produced 930 joint research publications, 895 student exchanges, created ongoing joint research programs in the fields of antimicrobial resistance, particle physics and other areas such as healthcare, engineering, chemistry and sustainable development, and an annual international research conference for undergraduates which has reached more than 2,100 participants worldwide (in 2020, despite the conference being entirely virtual due to COVID-19, 450 students from across 12 universities participated in the event, an increase from 400 students across nine institutions in 2019). The Alliance has attracted \$95 million from collaborative projects over the past decade.

In recent years, with a small number of universities in North America and Europe, Monash has developed targeted bilateral research projects as the basis for building longer-term and larger collaborations on areas of high research salience. This network of research partnerships is building the depth of alliance that can be seen in the relationship pioneered with Warwick.

This program of alliances is known as **networks of excellence**.

²¹ In 2019, 8,986 students were enrolled at the Monash University Malaysia campus, 186 at the IITB-Monash Academy in India, and 296 at the Southeast-Monash University Joint Graduate School in China. As at 14 September 2020, these enrolment numbers were 8,735, 163 and 406 respectively.

²² In 2019, University of Sydney had the highest number of international students onshore in Australia; Federation University in Victoria (public), closely followed by Torrens University in South Australia (private), had the highest proportions of international students in their onshore student populations at over 49 per cent.

As indicated above, the scale of the educational endeavour in this campus network is significant and is complemented by increasing research, including with industry partners, in these locations.

The potential for networked postgraduate education across Monash's offshore campuses, beyond the joint PhDs that are part of the IITB-Monash Academy and the Southeast-Monash University Joint Graduate School, is a key priority in the development of international education in *Impact 2030*.

To address Monash's aspirations to be international is not only to embrace particular cohorts of students, or types of projects or experiences. It is based on strong international networks and partnerships to ensure our understanding of and response to major challenges is built on a truly global perspective and can work on global solutions. To be international is and must be part of the University's character.

Monash's strategic focus will be embedded in broad and diverse internationalisation, infusing the character and approach of education and research being undertaken, through stronger networks of campuses and alliances.

It is necessary, as a base for this internationalisation, that the experience of students and staff reflects the diversity required for such a focus. Our staff and the student body are and must continue to be diverse. A necessary goal is therefore to set a profile for a diversified student body to ensure all students experience the benefits of diversity in their Monash education.

To be truly international, it is important that the education and research undertaken at Monash is anchored in experiences and perspectives drawn from working in other nations and contexts, including Monash's permanent presence in other nations. As the impact of border closures has stopped much international travel and is likely to restrict its flow for some time, the University has developed virtual mobility experiences to complement an ongoing commitment to assisting students and staff to move between our campuses and our international partners.

Alliances and networks

Alliances with key universities in Europe and North America, as well as in our region, provide a vital set of relationships to ensure researchers are developing and testing their ideas in international high-quality settings, and that students are gaining study experiences preparing them for globally competitive futures.

Monash's Prato Centre provides a place to explore engagement principally with Europe, but also with researchers from other parts of the Northern Hemisphere.

Monash campuses in the Indo-Pacific region are and should be a unique resource set in the economic, social and political contexts of India, Indonesia, China and Malaysia.

The offshore campuses provide a context for increased mobility of our students and staff, but more importantly they also build engagement with industry, government and community in each of the places in which they are located. They must be a strong network complementing and sharing research and education between campuses, which also supports the internationalisation of each of them, as well as of our Australian campuses.

This network must be built and supported to give tangible form to a deeper internationalisation. Furthermore, Australia's location-based advantages, its vibrant and strong Indigenous culture and history, variety of ecosystems and broad demographic have the potential to provide a stronger platform for ensuring our international partners also engage with Australia.

The network of university alliances has the objective of building sustained research programs from the research projects that are seeded in them. These alliances are a source for a sustainable set of research programs and educational exchanges anchored in the overall research and education of the University.

The offshore campuses will be sites of important research and education in the nations in which they are located. Each can be expected to develop and demonstrate strengths in research and education that are significant for their particular location, but also to share education and research programs across the campus network, including those in Australia.

Together they provide a complex of research and education outcomes and mobility that embeds the University in the Indo-Pacific region in the key nations that will shape not only the future of the region, but the regional response to climate change, geopolitical security and thriving communities.

To be diversified is necessary to internationalisation, but the significant impact of internationalisation will be realised through the alliance network of university partners and the campus complex, focused in the Indo-Pacific.

The advances we have made and momentum we have gained in recent years towards this goal are reflected in the growth of cross-border collaborations. The proportion of Monash publications jointly co-authored with an international researcher or researchers has been increasing steadily and consistently year on year, from 54 per cent of papers in 2016 to 61 per cent in 2020.

The development of Revitalising Informal Settlements and Environments (RISE) with work in communities across Indonesia and Fiji; of the World Mosquito Program (WMP) with active sites in 11 nations across Asia, Oceania and Latin America; and the Eleos Justice project which seeks to abolish the death penalty in the Asia-Pacific region, all exhibit the international impact being sought.

Universities serve local, national and international communities. Traditionally these aims have been served through the way they operate as independent communities of scholars, which have at their core values that support freedom of intellectual inquiry. The quality of research and education rests on this culture that supports questioning, development and dissemination of new knowledge, and through this the betterment of communities.

However, universities may and do undertake research and education that is directly assisting other organisations, industry, government or community, to answer questions of specific relevance to them, or to build capabilities that meet specific needs.

Universities also support the development of new enterprises, spinouts or start-ups, and license aspects of their research and education to others to allow the creation of new products or services.

These aspects of universities have been growing in scale and importance, as the premium from knowledge as an engine in economies has grown. The profound impact of universities on productivity and societal outcomes has become of increasing relevance to governments in recent decades.

Monash has had increased support from industry for its research, such that by 2020 research income from 'industry' was higher than the funding coming from national competitive grants (funded through government).

The number of licences, options and assignments, spinouts and start-ups – the markers of research 'commercialisation' – has grown at Monash in recent years. The licensing of educational material and the development of digital education have also added to the commercialisation of the University's activities.

Monash's pipeline of new spinouts, in particular, has expanded considerably, with seven spinouts and start-ups created in 2020 compared to two in the previous year. In total, 12 spinouts and start-ups (five spinouts, seven start-ups) have launched in the last two years. A further 20 new companies are on track to be formed by 2023.

The support for these new organisational forms and endeavours has not been purely in the for-profit field, as the same elements have been brought to producing social enterprises and open-access arrangements in Monash education and research.

Addressing major global challenges clearly requires collaboration with others – government, industry and community. This depends on a university culture that values an enterprising approach, and one that captures and recognises the value of the collaborations created.

While the research and education undertaken must be of quality, the outcomes of the collaboration must also be recognised and rewarded.

A necessary first step is measuring the industry income derived from building strong partnerships. This is not about measuring the amount of revenue derived from these partnerships as an end in itself, but in understanding the value and longevity of the partnerships created.

We must also have ways to demonstrate the impacts and benefits of partnerships and collaborations to addressing global challenges, such as climate change, geopolitical security and fostering thriving communities. Significant outcomes in enterprise rely on major collaborative initiatives that have clear and tangible outcomes.

Ecosystems and precincts

The foundations for stronger achievement in this space are based in local engagement, which leverages the interchange between industry, government organisations and communities and the University. One important initiative to be developed through *Impact 2030* is the Monash Technology Precinct (or Enterprise Quarter). This is based in effective and enterprising exchange of research and education in our region – by providing spaces for other organisations to thrive and draw upon the University; by nurturing partnerships with the organisations around us; by ensuring the region demonstrates the best of environments for testing new systems, in energy, in transport and in building; and by modelling the environmental and social outcomes we seek.

This Precinct will reach out to our Indo-Pacific locations through the shape of our postgraduate education. The Graduate Research Industry Programs (GRIPs) that bring PhD students together on significant research problems, that need to be addressed in collaboration with industry, government or community, is an important initiative that builds new connected generations of researchers, educators and industry professionals.

A set of GRIPs spread across our campuses and into the Monash Technology Precinct (or Enterprise Quarter) will deepen the University's partnerships with our communities, and work on the solutions to the great challenges we seek to address.

Monash's strategic focus is to ensure that an enterprising approach is nurtured and supported, and that we have a clear program to build an ecosystem of partnerships with industry in our regions and across our campus locations.

Monash has been building partnerships with industry, government and other organisations to enrich our ability to innovate, to infuse our students and staff with enterprising capabilities, and to apply our research for the benefit of the community. Over the past few years, the University has created deeper partnerships, more engagement with industry and more enterprise, commercialisation and translation among staff and students.

Our strategic task is to nurture those enterprising capabilities to achieve greater scale and impact through a clear program that builds an ecosystem of partnerships in our regions and across our campus network.

INCLUSION

To address the major challenges of climate change, geopolitical security and fostering thriving communities means building communities that reach across traditional distinctions. Nation, race, ethnicity, religion, gender and sexuality can create barriers that prevent the collective understanding and action necessary for global solutions to global challenges. Poverty and other forms of disadvantage deprive people of the opportunity and agency they need to contribute to solutions, and often put them at greater risk.

Bushfires and floods do not discriminate on the basis of nationality, ethnicity, religion, gender, sexuality or race. Disasters, however, tend to have more profound and detrimental effects on those most vulnerable in our societies. The effects of conflicts and wars are similarly inequitably distributed and experienced. Thriving communities must be built on systems that secure the elements of a good life, and these must address disadvantage and its impacts on life itself and its opportunities.

In order to draw on the expertise and power of inclusive communities of students, staff and alumni in addressing global challenges through our education and research, we must, as a university, nurture an inclusive community.

The University must have clear targets to increase the representation of those underrepresented in our communities. This means action to improve the access, participation and success of students from disadvantaged and underserved communities, as well as ensuring effective and appropriate representation of Aboriginal and Torres Strait Islander peoples. It is necessary not only that we measure the outcomes of this action, but that we have clear plans to achieve this goal.

Yet, having a diverse student and staff body, while vital, is not of itself enough. The University has to be inclusive – listening and drawing on the knowledge and experience of the whole community as we attempt to meet and shape effective responses to global challenges.

As part of the University's commitment to recognising, understanding and celebrating Aboriginal and Torres Strait Islander peoples, the University must not only support education and research programs that advance the knowledge and understanding of our communities, but also develop effective engagement with the communities surrounding our campus locations. There are many forms of this engagement, which include the University's contributions to the Treaty discussion and the Yoo-rrook Justice Commission in Victoria, as well as the First Nations Voice to the Parliament of Australia.

Point Nepean is an example of a research and education site (jointly operated with University of Melbourne) that provides a place for the pursuit of educational programs to extend the knowledge of students about the people of the Kulin nations. It is also significant for developing greater knowledge with local communities about the land and its peoples before European settlement.

Wunungu Awara

When the British flag was raised at Sydney Cove in 1788, approximately 275 languages – and at least 600 dialects – were spoken on the continent that was to become known as Australia. Fewer than 100 of those languages are spoken today, with the number declining further every year.

In 2011 Monash University launched Wunungu Awara to support the work of Indigenous Australian communities in preserving these unique languages. Building on systems for intergenerational learning already in place across Indigenous communities, Wunungu Awara utilises 3D animation as tools to re-engage and revitalise interest in language continuation by reconnecting language and its people. Animations developed with Wunungu Awara provide material for Elders and younger generations to sit together to share knowledge. The animations help to build a sense of belonging, pride and identity in young Indigenous people for those who may be connected with the community and those who may have lost their connection with their history, language and Country. The program has also allowed non-Indigenous people in Australia and internationally to gain a deeper understanding and picture of Australia's Indigenous cultures.

The University's long-standing commitment to building a diverse community also relies on strong programs that support equality of opportunity and treatment, and which ensure its diversity and inclusion programs and those preventing discrimination, vilification, harassment and violence are subject to review, renewal and effective engagement with the diverse circumstances of our students and staff, as well as the broader community.

Inclusion, representation and debate

Accompanying the commitment to diversity is one of inclusivity in which a sense of belonging is created for the diverse community of students and staff. This means not only providing the means for recognising and addressing the diverse circumstances of our students and staff, but also finding ways to build connection across groups and cohorts. The University must be transformed into a place that welcomes its diversity and makes connections across it.

Monash Indigenous Studies Centre

Monash has the longest history of engagement in Indigenous education in Australia and was the first university to have a dedicated Australian Indigenous centre – the Monash Centre for Research into Aboriginal Affairs, established in 1964.

The Monash Indigenous Studies Centre, as it is today known, provides students with opportunities to gain knowledge and understanding of Australian Indigenous cultures, traditions and histories, as well as hosting an active research and engagement program.

The Monash community must see that diversity reflected in the knowledge and representations of the University. And the University must build campus environments that encourage diversity of perspective and mutual understanding. The hallmark of an inclusive community is the space that is given for respectful debate, where evidence is assessed free of cultural and other biases.

Monash's strategic goal is to build stronger platforms for inclusive engagement through effective engagement of diverse communities and the dissemination of ideas, evidence and respectful debate.

The University must participate in and develop platforms that encourage informed and respectful debate in the wider community, and provide broadly for access to our research and education into our communities – all assisted by our access to media, our partners and our alumni.

We must build engagement with ideas, not only through our students and the traditional means for dissemination of knowledge through education and research, but through our engagement with alumni and partners.

Without attention to the way our education and research can draw from diversity and build inclusivity, the ability to ensure we can effectively contribute to addressing global challenges will be diminished.

FOUNDATIONS: CULTURE AND CAPABILITY

The previous section discussed the four goals of the Strategic Plan and how they help to give effect to the purpose of *Impact 2030*. These goals are the key elements in responding to the opportunities and challenges in our environment.

However, the culture and capabilities of the University underpin our ability to effectively address those goals and deliver the outcomes we seek.

The goals cannot be defined and erected without the support and reinforcement of the culture and values of the University, and the programs, projects and initiatives that support our priorities rely fundamentally on the capabilities of the University.

CULTURE

Values

The following values will underpin the behaviours and actions of the University. They will be evident in both the way we treat each other and in the way we conduct ourselves with external partners.

Discovering

We nurture curiosity and innovation in the pursuit of new knowledge to build our understanding of national and social environments and their peoples.

Learning

We are open to experiment and testing our understanding with evidence; we adapt and learn from experience, others and new circumstances; we are always 'still learning'.

Purposeful

We aspire to use our knowledge and learning to improve our communities; we strive to transform our understanding and engagement to make an impact through contributing to solutions to significant challenges and persistent problems.

Collaborative

We seek to work with others to achieve our goals, and commit to engaging cooperatively, collegially and responsively to developing shared aims and benefits.

Honest

We commit to acting in good faith with integrity and transparency in our relations within and outside the University community.

Fair

We pledge to treat all people justly and with respect, making objective and unbiased decisions, and to preventing behaviours such as discrimination, vilification, harassment and violence that inhibit the full engagement of people in our community.

As cultures build organically and change slowly, it is wise to seek continuities as well as change in the values that guide behaviour and action in our community. It is also important that we reflect the underlying values common to autonomous universities.

The University's motto *Ancora Imparo* ("I am still learning") is an injunction to a culture of constant inquiry and discovery. The deliberate choice of Italian, rather than Latin, for the University's motto was a gesture to the modernity underpinning its culture.

Longstanding members of the University and alumni often speak fondly of the 'restless modernity' they experienced as Monash found its feet in the 1960s and early 1970s.

This was expressed in the early ambitions for Monash to provide a modernising and highly-professional university responding to Australia's post-war needs. This included embracing the opportunities of university education for a broader population – answering demands for increased opportunity and social equity, deeper awareness and recognition of Aboriginal and Torres Strait Islander peoples' ways of knowing and culture, as well as new approaches to education and research that engaged more strongly with community from the first legal clinics and the special environmental issues of Australia to understanding of the Asia-Pacific region.

The professional and modernising mission of those early years over time found expression in the more global space that Monash came to inhabit. The idea of restless modernity remains relevant to our purpose and culture, and has been captured in the values outlined in *Impact 2030*.

In recent years Monash turned particularly through its philanthropic campaign to speak more directly of how the University could contribute to change for good. The campaign urges us all to "Change It. For Good." This in part captured Monash's history and our purpose to address the challenges of the age.

Within these values is also the notion that our culture should support agency, encouraging our community, staff, students and alumni to make change. Monash's early history was marked by the activism of its times. In framing *Impact 2030*, there was clear endorsement of a culture that supports solutions and action, so the exhortation to address global challenges has impact.

CAPABILITY

Three major features of university capability underpin our ability to influence the uncertain and global environment in which we operate.

The three elements are:

- › staff expertise;
- › organisational sustainability; and
- › financial sustainability.

Monash was founded as a public university, shaped by the prevailing organisational assumptions about universities, dependent on government funding, and expending its resources primarily for public benefit. The circumstances in which Australian universities now operate have changed substantially in the intervening decades.

Staff expertise

Monash's education, research and services rely on the quality and expertise of its staff.

Effective programs of recruitment, development, recognition and reward need to be maintained to ensure we attract and retain excellent staff. Decisions about priority areas for staff renewal or for recruitment of new areas of expertise will be based on evidence of strategic need.

Crucial areas related to our goals need additional recruitment and development to support programmatic and thematic attention to addressing the global challenges. Two broad areas for development attention are collaboration and effective leadership, as well as inclusivity and respect.

Considerable resource has been invested in reinforcing a culture of respect and inclusivity, including the Respect. Now. Always. campaign, the Athena Swan program, the Ally network, and the Aboriginal and Torres Strait Islander Framework. This Strategic Plan reconsiders and extends elements of staff development to produce a framework to support and reinforce a culture of inclusivity and respect among staff as well as students.

We are also re-examining the policies and practices that create the conditions of employment for all our staff. While many areas are best practice and in excess of community standards, others need reconsideration, such as the bases for contract and casual employment. The different locations of campuses and support for mobility between them, the mix of academic and professional staff needed in programmatic research and education endeavours, and the ecosystem of enterprise require roles and policies that can deal with the new demands created.

Most staff work in groups or teams, but that does not mean people work effectively across internal or external organisational boundaries. Monash prides itself on the quality of its partnerships. These are as important inside as outside the University. This is an area that needs direct attention to support our goals, particularly to support responsiveness and resilience in the face of projects or circumstances requiring major change. It is also vital to building the multi-partner programs of research and education that are central to making an impact in relation to our purpose and goals. The needs, as well as opportunities for development, to build strong project development and collaborative cross-partner team capabilities is a vital set of capabilities for achieving the outcomes sought from this Strategic Plan.

Finally, the scale, complexity and volatility of the University's operations mean the demands on staff holding formal leadership and management positions have increased significantly and will continue to do so. Academic staff in crucial positions – such as Heads of School, Heads of Institutes or Associate and Deputy Deans – have generally been offered only limited support to prepare them for these roles. Yet their leadership is critical to the University achieving its goals.

Within the professional and administrative fields, specialism has increased and many more management positions have been recruited from outside the university sector. There is a need for structured support to ensure familiarity with the University and the policy and cultural settings in which it operates. Similarly, to gain the benefit of experience in other sectors and organisations, we have to provide the opportunity for all our leaders and managers to share expertise, and question assumptions and ways of working.

To achieve against the goals of this Strategic Plan, the University must provide more coordinated and specific support to our leaders and managers across the University to deal with the increased unpredictability, high levels of differentiation and specialism, differences in culture and other factors that complicate leadership in this contemporary University.

Organisational sustainability

The governance, structures and policy framework of the University must support its culture, values and goals.

The University must continue to improve its sustainable and ethical development in conformity with its desire to address the global challenges of the age. This will be reflected in our commitments to an ethical framework for action, to the advancement and wellbeing of Aboriginal and Torres Strait Islander and Indigenous peoples, to achieving our current goal of net zero emissions by 2030, and to the United Nations Sustainable Development Goals (SDGs). The SDGs have grown in significance since Monash became a signatory in 2016, becoming a new international benchmark against which to assess organisational performance. Our commitment to them intersects with our commitment to addressing the great challenges of climate change, geopolitical security and thriving communities.

Effective governance and oversight are required to meet these commitments. In the complex, multi-campus, multi-partner world in which Monash now operates, these functions will need reshaping and realignment to secure this end.

Our existing organisational structures and modes of operation will not be sufficient to meet our goals and purpose.

Our structures must be able to build and maintain major strategic multi-party programs of research and education, while responding with agility and resilience to the large and sometimes unexpected challenges and changes in our operating environment.

Major Opportunities Group

The Major Opportunities Group (MOG) is a novel example of a dynamic and responsive Monash initiative that facilitates creativity and innovation outside traditional university structures, while allowing considered assessment and curation of new opportunities.

The MOG is a multidisciplinary team of University-wide experts responsible for driving and supporting the University to grow and convert major projects that offer impact, revenue, surplus and leveraging opportunities from across Monash.

Since 2018, the MOG has facilitated the pipeline creation of 28 major projects by providing a University-wide approach to support the qualification and success of major initiatives, including Cooperative Research Centre submissions, creation of new business models and multinational partnerships.

The existing structures of the University are highly effective for the pursuit of our current strategic goals. They buttress the quality and depth of expertise that exist in our major fields of study and research. They provide effective support for our education, research and our student and staff environment. And they have adapted over time as we have grown in scale and complexity, while maintaining the University's traditions of academic governance, collegiality and autonomy.

As we pursue new University-wide, multi-faculty or multi-organisation initiatives in Australia or elsewhere, we must be able to make effective strategic judgements about a number of matters, including:

- › which opportunities should be pursued, in which form and at what levels in relation to our traditional structures; and
- › whether we keep an initiative within an existing traditional structure or create/commission new structures, including joint ventures, new controlled entities or time-limited cross-University or cross-border programs.

Any of these judgements or subsequent changes requires strengthening our strategic project and program development and management capacity.

Organisational sustainability requires clarity about how values are captured and enacted, and how goals are effectively pursued and aligned. High-quality governance and oversight are necessary for both tasks.

In general, we must be sure that adequate consideration is given to governance and structural arrangements, so that our capacity to realign our activities to achieve our goals and purpose is not compromised.

Financial sustainability

The current funding profile relies more heavily on private contributions, principally in the form of student fees, but also philanthropy, investment and commercial income and industry support for research, than on government contributions to education and research.

The break-up of Monash income in 2020 is shown in Figure 1²³.

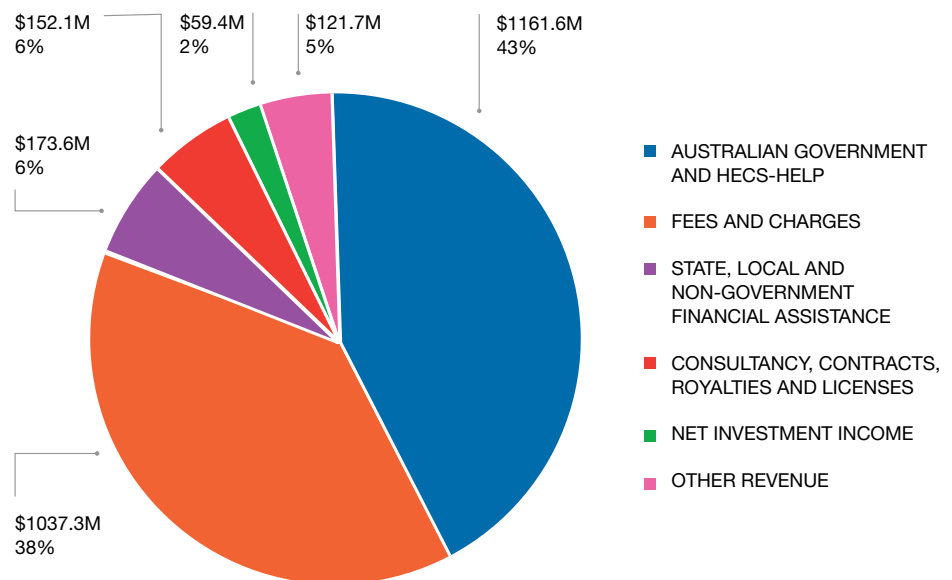


Figure 1 – 2020 Monash University revenue (University only).

The University must maintain an operating surplus to sustain its ongoing operations as a viable public entity.

²³ Despite the severe disruption and impact of COVID-19 and its consequences on the University's income outlook, the overall breakdown of funding by source for 2020 remains broadly comparable to its pre-pandemic profile.

This minimum operating surplus has been set at 5 per cent of revenue for the previous five years, and this will be a minimum expectation in the decade ahead (recognising the need to repair our financial sustainability in the coming three years will mean the need for a three-year perspective on overall financial sustainability in light of maintaining core capability in education, research and supporting services).

This operating surplus provides the assurance that we can spend and invest in the operating and capital needs for quality education and research, while mitigating volatility in our funding sources. In recent years we have experienced cuts to our government funding and falls in revenue from student fees through changes to student contributions (set by government), as well as declines in overseas and domestic fees and investment income. We can expect challenges in the future to sources of income from industry support for research through to philanthropy.

To remain in a sustainable position, the University must diversify sources of revenue to produce and protect long-term capacity to invest in quality education and research.

Put simply, Monash cannot be too dependent on the Australian Government for research funding, and we cannot rely too heavily on student fees from one region or in one field of study.

Monash also needs to build on its current success in philanthropic funding that has been directed to supporting student scholarships and research. To sustain a diverse student community, the University needs to further enhance its scholarship support. To ensure research remains vibrant and can support scholarship, including in significant areas that might not be attracting significant support from government or industry, there must be funding from philanthropic sources.

And in order to enable the University to assure the long-term quality of its education and research, as well as to secure its ability to support its strategic goals, enhancement of its foundation is needed.

Comprehensive planning and execution are required to ensure Monash has diversified revenue sources, budget models that align with the outcomes being sought, and an investment philosophy that safeguards the autonomy and integrity of the University.

CONCLUSION

Impact 2030, Monash's new Strategic Plan, has been developed in the midst of the most significant external crisis the University has ever faced.

We have had to transform almost every element of the way we operate in the face of the COVID-19 pandemic. The pandemic's effects on national economies, including Australia's, has been profound and will be felt for a number of years. Some of those effects will have transformed elements of the way we educate, research and operate – others will become memories of constraints we hope never to experience again.

The intersection of this crisis with the increasingly urgent global challenges of climate change, geopolitical security and fostering thriving communities is threatening many elements of how we have previously undertaken education and research and, in some cases, open scholarly exchange.

Our assumptions of future modes of university action are being contested by circumstance, as much as by our own questions. Equally, the experience has sharpened our appreciation of the fragility of our environments, economies and societies, and the global nature of the impacts of our past and future actions.

Monash begins implementation of *Impact 2030* fortunate in being able to build on past successes. As the evidence suggests, our previous Strategic Plan largely succeeded and Monash advanced in some areas further than we imagined against our goals of being excellent, international, enterprising and inclusive. We begin well-positioned to pursue our purpose of addressing the great challenges of the age outlined in this paper: climate change, geopolitical security and thriving communities.

And the disruption of this global pandemic and the associated global economic downturn and impact on the health of communities, as well as heightened geopolitical tension and increasing evidence of damaging climate change, brought all the global elements we wished to address not just to our doorstep but inside the house.

The need for greater internationalisation, enterprise and inclusion in our education and research could not have been demonstrated more starkly. The means to pursue these goals, as well as maintain excellence, while reaching more ambitiously to fulfil a purpose committed to global impact became immediately more urgent.

The purpose remains worthy, the goals to be achieved more necessary and the task before us, due to current circumstances, perhaps more challenging than we envisaged.

The Monash wheel must turn with more force and tighter focus on its future direction. The impetus of current circumstances, as is common in crisis, tends to be to preserve rather than challenge and extend; for communities and nations to turn inwards and to strengthen divisions and borders.

We must commit more strongly to innovate and extend the impact of our education and research – we must reach out. Monash must focus on providing understanding of and solutions to the major global issues of the age and drive its excellence to these ends.

Our purpose is to use the great advantages provided by excellent education and research, the international diversity of our students, staff and alumni, and our network of campuses and organisational partners to support the global creation and dissemination of knowledge for the benefit of our communities.

SECTION 2

**REPORTING ON FOCUS MONASH 2015-2020:
INTENT AND OUTCOMES**

REPORTING ON FOCUS MONASH 2015-2020: INTENT AND OUTCOMES

The strategic intent of *Focus Monash*, the previous strategic plan, was to enhance the quality of the University's education and research with and through the development of its distinctive profile.

The strategy was to achieve excellence, but to do so through heightening those elements of the University that differentiated its approach and profile.

In turn, this differentiation relied on and demanded the University bring clarity and coherence to its undertakings. This required clearer focus on areas of strength and relevance in research and education, and in its engagement with its communities.

Monash's purpose from 2015 was to extend beyond its 1958 establishing legislation²⁴ to more explicitly extend that initial purpose to the broader communities, nationally and internationally, which Monash should serve, based on its expanded communities and locations²⁵.

The ambition of *Focus Monash* did not confine the purpose of modern Monash to the nation, but set its place among universities internationally.

Monash's purpose was re-expressed to capture this intent by inserting a stronger emphasis on collaboration with partners, and to place an international lens on the challenges of the age.

The purpose was:

“Through excellent research and education... discover, teach and collaborate with partners to meet the challenges of the age in service of national and international communities.”

There were four goals described to capture the elements of that purpose. They were to be:

- › Excellent
- › International
- › Enterprising
- › Inclusive.

²⁴ This establishment Act [*Monash University Act 1958 (Vic)*] had features in common with the legislation establishing land grant universities such as University of Illinois and University of Wisconsin in the US. This legislation committed those universities to supporting their state or provincial communities in the provision of particular professions and related research. The 1958 Act listed among the objects of Monash University “to give instruction and training in all such branches of learning [including] Pure Science, Applied Science and Technology, Engineering, Agriculture, Veterinary Science, Medicine, Law, Arts, Letters, Education and Commerce”; to “aid by research and other means the advancement of knowledge and the pursuit of the benefits of its practical application to primary and secondary industry and commerce”; and “to promote critical enquiry within the university and in the general community”.

²⁵ This broader mission encompassing national and international communities is part of the legislative objects of the University in its current Act [*Monash University Act 2009 (Vic)*].

A DISTINCTIVE PROFILE

By 2020, the distinctiveness of the profile of Monash was clear.

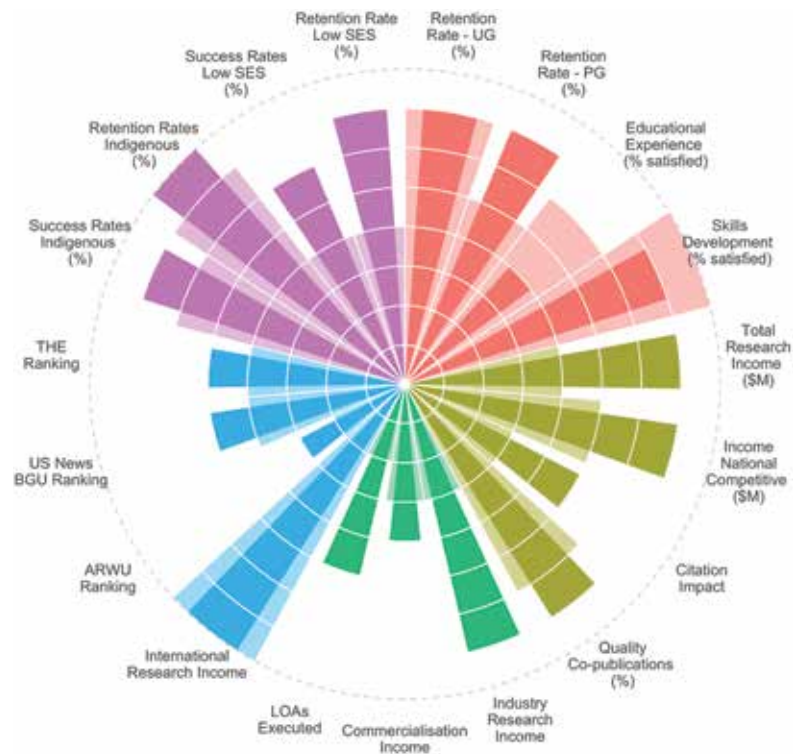


Figure 1 – Monash's rank among the Go8 for selected indicators across the four goals, comparing most recent results (brighter colours) to 2013 (pale colours).

No set of standard indicators, such as those captured in Figure 1 above, can fully capture the range of internationalisation or of enterprise, nor the nuance of research impact or educational experience. They are necessarily rough approximations of the character of a university.

Nevertheless, the conclusion that can be drawn from Figure 1 is that Monash became more international and more enterprising, as well as more inclusive between 2015 and 2020, while ensuring the quality of research and education was enhanced or maintained at high levels.

A change that refined and accentuated a distinctive profile for Monash compatible with very high national and international levels of excellence was given effect.

This shift in performance and profile was accompanied by significant structural change.

STRUCTURE

Monash has made deliberate changes to its structures, fundamentally altering the foundations on which the execution of *Impact 2030* is erected. These structural changes provided for greater coherence in the quality of students and staff, as well as research and education, across the total network of campuses.

In 2013 Monash had six domestic campuses: Clayton, Caulfield, Parkville, Peninsula, Gippsland and Berwick. It also had four international campuses: Malaysia, India, China and South Africa, as well as an international centre in Italy.

In 2013 Gippsland and Berwick had between them close to 4,500 student enrolments, and South Africa more than 2,700 students. These three campuses together represented over 10 per cent of total Monash enrolments.

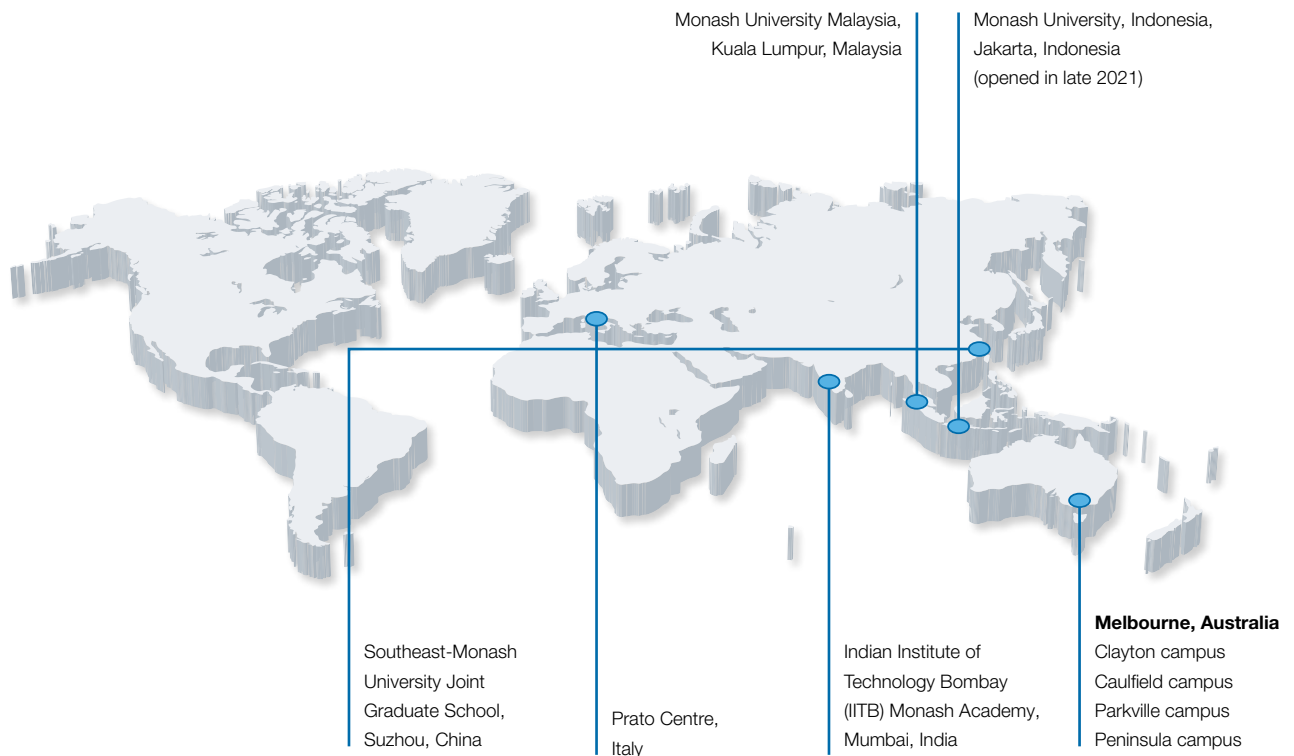
By 2019 Monash had divested all three campuses (which are now being operated by other higher education providers) and had no new commencing students in these locations²⁶.

Monash enters its new strategic plan with four domestic campuses – Clayton, Caulfield, Parkville and Peninsula – and four international campuses – Malaysia, India, China and Indonesia, the last of which opened in late 2021, and a continuing international centre in Italy.

This major structural change ensured all Monash campuses, whether in Australia or elsewhere, were offering postgraduate education, coursework and research degrees. All had the foundations and infrastructure to provide quality higher education and to undertake internationally high-quality research.

Campuses were able to build specialised areas of focus, limiting duplication of resources and infrastructure, while ensuring effective combined scale of research and educational offering and outcomes across the whole group. For example, the international campuses between them had 670 PhD students, beyond the 4,386 enrolled at Monash Australian campuses.

Quality of student intake was very high. Student retention and outcomes were also high, with research students from all these campuses being accepted into postdoctoral or academic positions across the world.



²⁶ Gippsland was completing the last of the transitional cohort (last commencements were 2016, apart from MBBS); Berwick had no further Monash students on campus (last commencements were 2016); and South Africa had 2,101 transitional students (last commencements were January 2019). In 2020, South Africa had 1,334 transitional students.

In all the campuses, partnerships with industry for research degree students or research programs were in evidence, from the Department of Biotechnology Indian Government, one of Monash's largest supporters of PhDs in India, to the Collaborative Research in Engineering, Science and Technology Centre (CREST) and Chemical Company of Malaysia, strong industry research supporters in Malaysia.

The structural change ensured the quality of students, staff and outcomes were consistent with an internationally high-quality university across all campuses.

PERFORMANCE

Performance against the four goals outlined in *Focus Monash* is a platform for future achievement and a demonstration of the capabilities upon which *Impact 2030* is built.

Excellence in education and research are core elements of university performance, and speak to the quality the community can expect from Monash outcomes. In these two areas, there are a range of common measures used to understand and benchmark the quality delivered.

Universities account for their international achievements in different ways. Monash began with a commitment to an international outlook and has built all aspects of this commitment over the ensuing decades. Conventional measures describe the diversity of student and staff populations, although this is not internationalisation in its fullest sense.

The importance of effective internationalisation of curriculum for student outcomes has still not produced clear measures recognised across the world, even though this is key to international outcomes in education. Through its broad educational footprint, however, Monash has developed curriculum that addresses its domestic and international student cohorts and campuses across the world, and its degrees are accepted worldwide.

In recent years, Monash has emphasised the international experience it provides to its students through opportunities to study in other countries, as well as its international networks of scholars across the world. From establishment of its first offshore campus in Malaysia in 1998, undertaking research and education on its own campuses in other nations added to the depth of Monash international engagement. In these latter elements, Monash has aspects of deep and embedded international engagement beyond Australia that provide a comprehensive internationalisation.

The third goal – to be enterprising – required the development of new cultures of engagement with industry and community. The conventional measures of an effective enterprising culture in universities are commercialisation of knowledge and industry research income as a proxy for engagement with industry.

In education in Australian universities, professional education and the accreditation that accompanies it has been a dominant form of education at undergraduate and postgraduate levels. This traditionally covered law and medicine, followed by an increasing range of other fields from accounting and business through computer science, education and engineering to psychology and social work, as well as allied health professions.

Attention to the elements of practical or clinical experience through the educational process has come to be covered in Australia by the term 'work-integrated learning', and the incorporation of these experiences within the education program. Monash engaged with all these aspects of defining its approach to enterprise and its outcomes, as well as adding a new focus on entrepreneurship.

To be inclusive had in 2015 richer meaning than the intention of providing access to education for those from disadvantaged circumstances, which was important from Monash's early days. In ensuring educational opportunity, Monash worked to ensure that traditional benchmarks of excellence in areas such as student admissions did not bias towards socio-economic advantage over talent and capability.

All the programs through which Monash had reached out to the community, from its early engagement with Aboriginal and Torres Strait Islander peoples to its commitment to gender equity, needed to be re-examined and renewed.

To be inclusive relied on development of cultures to support students, scholars and alumni in their diversity and in their shared community.

The outcomes of this focus on excellence in and through a distinctive profile can be seen in the changes wrought in Monash through to 2020.

EXCELLENCE

Excellence was a goal that affirmed continuing to reach for and sustain outstanding international quality in both education and research. In research there are many ways of measuring that quality, through international rankings as well as national benchmarks. In education the measurements are less internationally uniform and more varied in their application. There are no international rankings measuring education quality. However, Monash turned its attention to how it might be sure of excellence in both domains.

International rankings

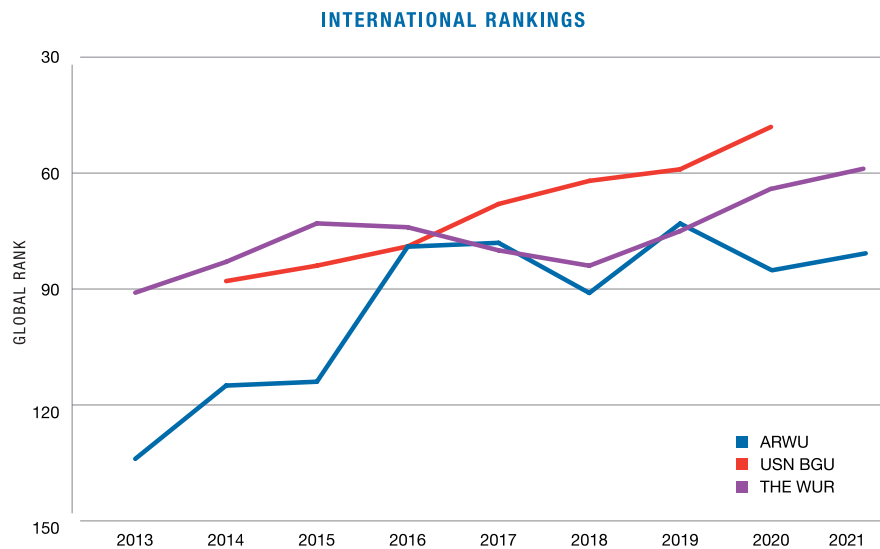


Figure 2 – Monash's trajectory in the major international rankings by year of announcement. 2021 results refer to ARWU 2021, USN BGU 2022, THE WUR 2022 (2022 USN BGU not yet available) (ARWU – Academic Ranking of World Universities; USN BGU – US News Best Global Universities; THE WUR – Times Higher Education World University Rankings).

From 2014 to 2020, Monash moved to 48th in the world in the US News and World Report Best Global Universities (Australian rank 4), to 64th in the Times Higher Education World University Ranking (Australian rank 5), and to 80th in the Academic Ranking of World Universities (Australian rank 6).

In an aggregated ranking of four major international ranking systems (USN BGU, THE WUR, ARWU and QS World University Ranking), Monash is among the most improved of the Group of Eight (Go8), rising from 76th globally in 2014 to 51st globally in 2020.

Monash also entered the top 50 for the first time in 2020 in two rankings – first in the 2020 National Taiwan University Performance Ranking of Scientific Papers for World Universities, ranking 45th globally and 4th in Australia; and in the USN BGU, where Monash ranked 48th in the world and 4th in Australia.

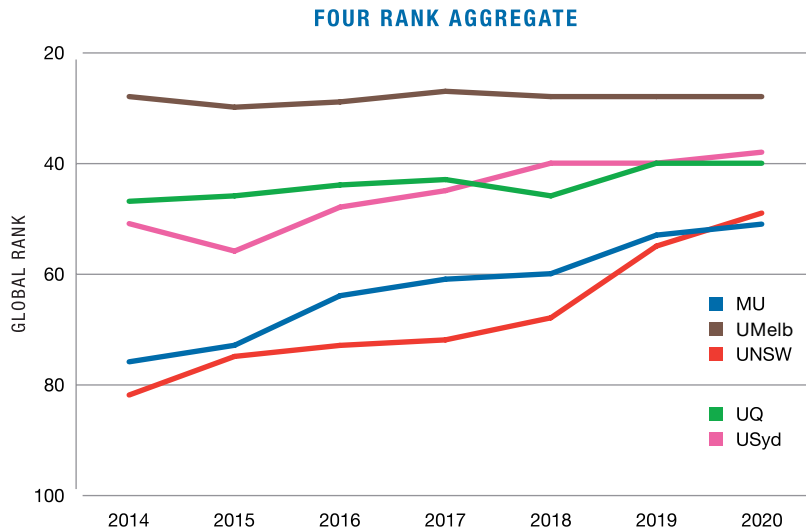


Figure 3 – The trajectory of Monash and its four main Go8 peers in an aggregated ranking of the ARWU, USN BGU, THE WUR, and QS World University Rankings by year of announcement. 2020 results refer to ARWU 2020, USN BGU 2021, THE WUR 2021, and QS WUR 2021. Monash is 6th in the Go8 in 2020 with a rank of 51.

Improvement into the top 100 of world universities has been driven overwhelmingly by improved research performance.

This improved research performance has begun to be reflected in measures of international reputation, as can be seen through the THE surveys. Monash secured a place in the top 100 of the THE Academic Reputation Survey for the first time in 2019 and reached 78th in 2020.

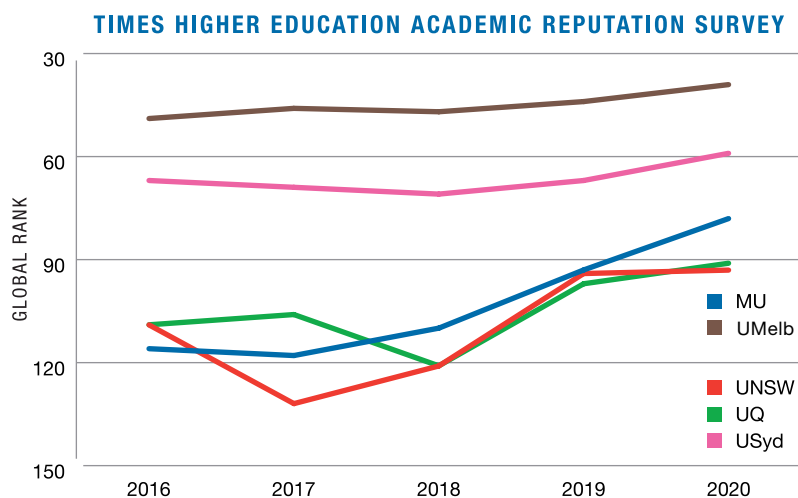


Figure 4 – The trajectory of Monash and its four main Go8 peers in the THE Academic Reputation Survey. Only ranking bands are available prior to 2016. Monash is currently ranked equally with Australian National University.

The importance of research performance (particularly citations and publications in influential journals) in improved rankings is clear in the outcomes for Monash.

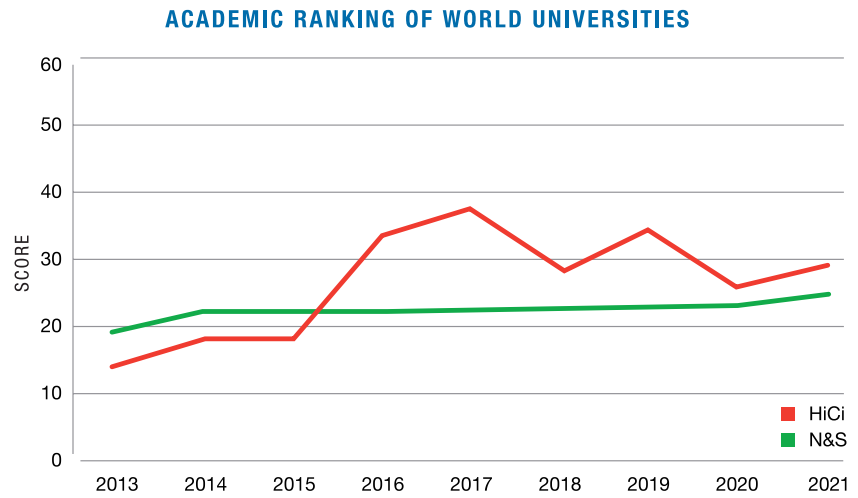


Figure 5 – Monash's scores in the Highly Cited (HiCi) and Nature and Science (N&S) components of the ARWU.

Highly Cited Researchers

In 2020, 16 global research and social scientists from Monash University were recognised in the Web of Science Group's annual list of Highly Cited Researchers. This list identifies the world's leading researchers who have demonstrated significant and broad influence through publication of multiple highly cited papers ranked in the top 1 per cent over the past decade.

Nature Index performance

Monash University places firmly among the world's elite research institutions in the global rankings of the influential Nature Index, which measures contributions to high-quality scientific research papers. In 2020, Monash ranked in the top 20 per cent at 98th globally and 2nd in Australia.

National performance

The measurement of education quality relies on national benchmarks and data. Quality Indicators for Learning and Teaching (QILT) has, since 2013, provided national benchmarks and transparent data on performance across student experience, satisfaction and employability. National statistics made public by the Department of Education and Training show other outcomes such as completions, retention and success.

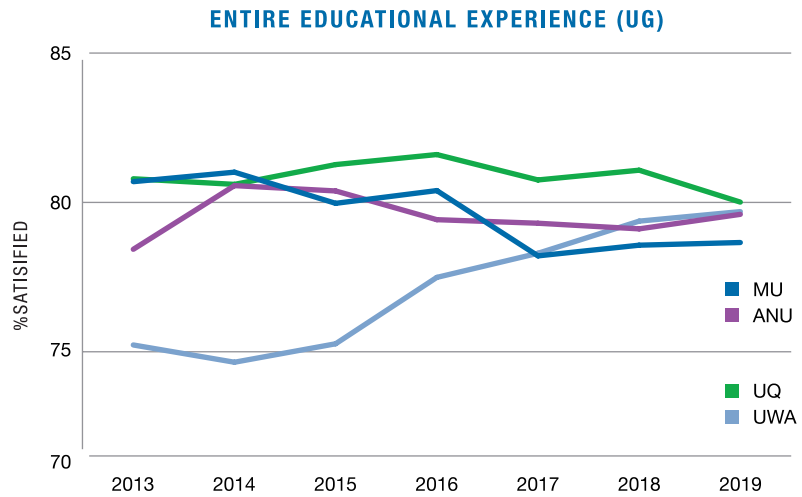


Figure 6 – Undergraduate student satisfaction with the entire educational experience for Monash and the top three Go8 institutions. Onshore only. From the QILT Student Experience Survey 2019, Monash is ranked 5th in the Go8; University of Adelaide (79.6%) is ranked 4th. All universities suffered a decline in 2020, attributed to the pandemic. Monash, in a city locked down for the majority of 2020 (unlike other Australian cities), dropped to 60.5% and a ranking of 6th in the Go8.

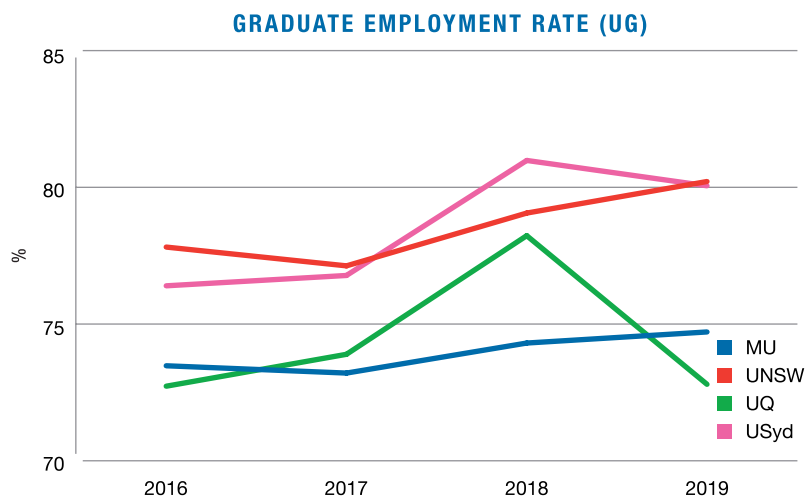


Figure 7 – Graduate employment rate for the top four Go8 institutions. Onshore domestic bachelor only. Comparable data prior to 2016 are not available.

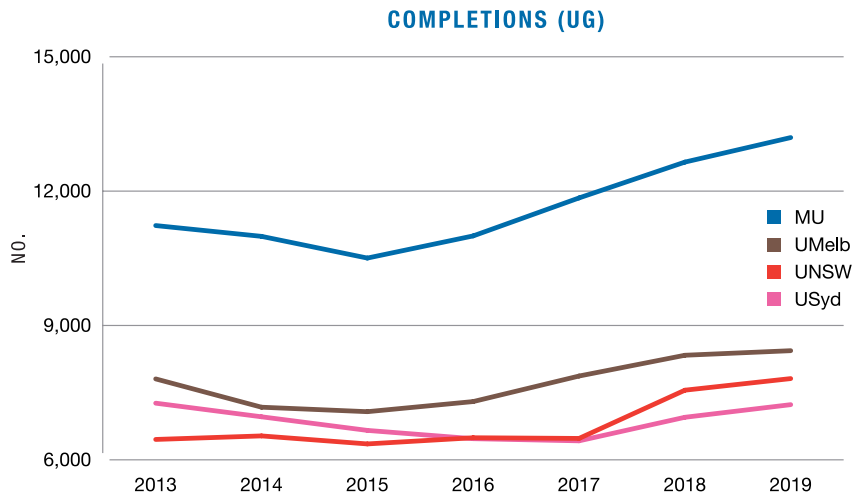


Figure 8 – Number of undergraduate completions for the top four Go8 institutions. Includes domestic and international; onshore and offshore.

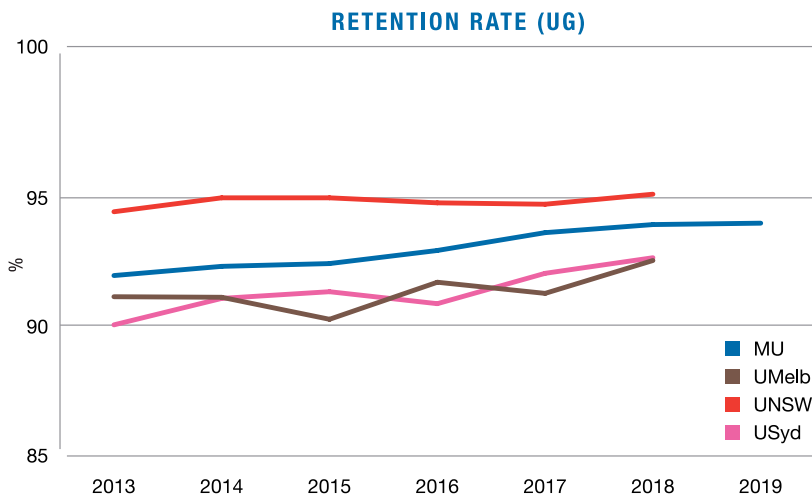


Figure 9 – Undergraduate retention rate of the top four Go8 institutions. Includes domestic and international; onshore and offshore. 2018 data are unverified by Go8; 2019 data are preliminary.

It is clear that in education outcomes measures, such as completions and retention of students, Monash has improved over time and is among the top three institutions in Australia.

Indeed, on some of the measures, such as retention, there is very little room for further improvement and the maintenance of high-quality outcomes must now be the goal.

While there is no international ranking that captures these outcomes, evidence from other nations suggests that these outcomes are on par with those from the highest quality institutions internationally²⁷.

On the other areas of education performance, such as student experience, satisfaction and employability, national benchmarks reveal that improvement is needed. There have been improvements in performance over the past five years, most notably in learner engagement, skills development and student support, yet there is still some distance to go to meet Monash's expressed aspirations.

²⁷ Sources include UK HESA, US Common data sets, QS World University Survey academic reputation and employer reputation measures.

Monash legal clinics

The Monash Law Clinics are a long-running example of Monash success in implementing high-quality, large-scale, work-integrated learning experiences for students. Monash Law offers a Clinical Guarantee to students undertaking the Bachelor of Law and Juris Doctor programs, that they will have as part of their degree a clinical legal placement in the Monash Law Clinics.

A partnership between Monash Law School and Victoria Legal Aid, the Law Clinics offer community members free legal advice on a variety of legal matters. The legal service is substantially run by students under the supervision of solicitors employed by Monash Law School and volunteers from the legal industry who also offer free legal advice.

Monash Law Clinics have been operating in Clayton since the late 1970s, and in July 2018 the service opened a clinic at the Monash University Law Chambers in Melbourne's CBD. The initial areas of practice were in general law and family law, but this has been significantly expanded to specialise in trade, Australian law reform, anti-death penalty, modern slavery, climate defence, and innovation and start-up. Virtual clinics were also introduced for clients who are unable to attend the Clayton clinic in person. Approximately 500 Monash students participated in the program in 2020.

The national research performance measures show significant improvement in the quality of research over the period, with a pattern of improvement clearly into the top cohort of universities within Australia.

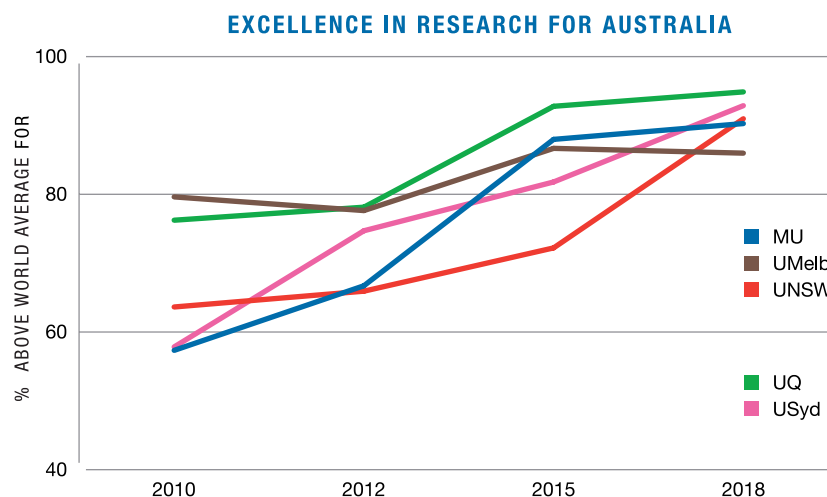


Figure 10 – Excellence in Research for Australia results for Monash and its four main Go8 peers. Monash is ranked 5th in the Go8; Australian National University (95.8%) ranks 1st.

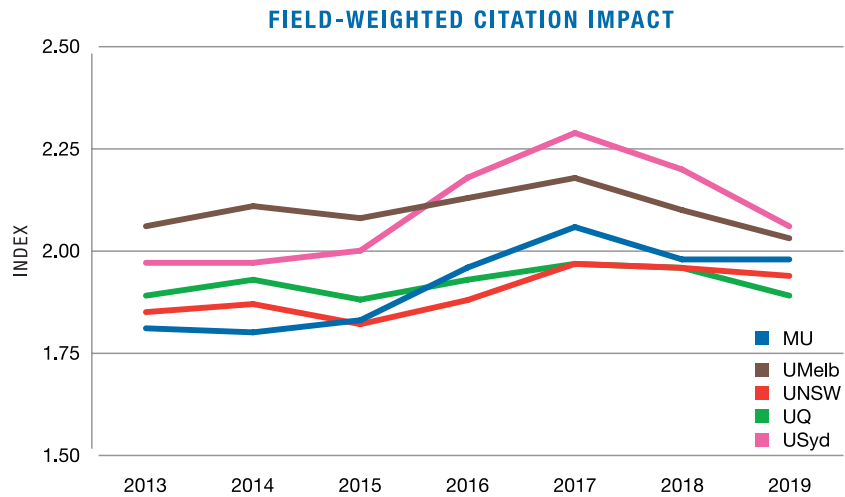


Figure 11 – Field-Weighted Citation Impact index for Monash and its four main Go8 peers (three-year rolling averages). Monash is ranked equal 5th in the Go8, together with Australian National University. University of Adelaide (2.32) ranks 1st.

In general, Monash has had a significant improvement in performance and has accelerated its improvements to place it among the top six universities in Australia in 2019. Embedding and improving on this level of performance must now be key.

INTERNATIONAL

The increasing internationalisation of Monash is revealed in the increased proportion of international students on Monash campuses in Australia, which rose from 22 per cent to 33 per cent over the period 2013 to 2020.

National statistics record all Monash students from campuses within Australia and beyond, and as a result the national statistics record a much higher proportion of international students than is being educated on the Australian campuses. Since the majority of Malaysian, Chinese and Indian students on the campuses in Sunway, Suzhou and Mumbai are nationals of the relevant country, being educated on a Monash campus in their home country, they are domestic students studying at an international university, rather than international students.

Overall in 2020, Monash had 47.3 per cent of students, onshore and offshore, drawn from countries other than Australia.

To produce an international experience that transforms the educational outcomes for Monash students requires a diverse student and staff population, an internationalised curriculum and student mobility, such that educational experience is gathered in locations outside the home campus and home nation.

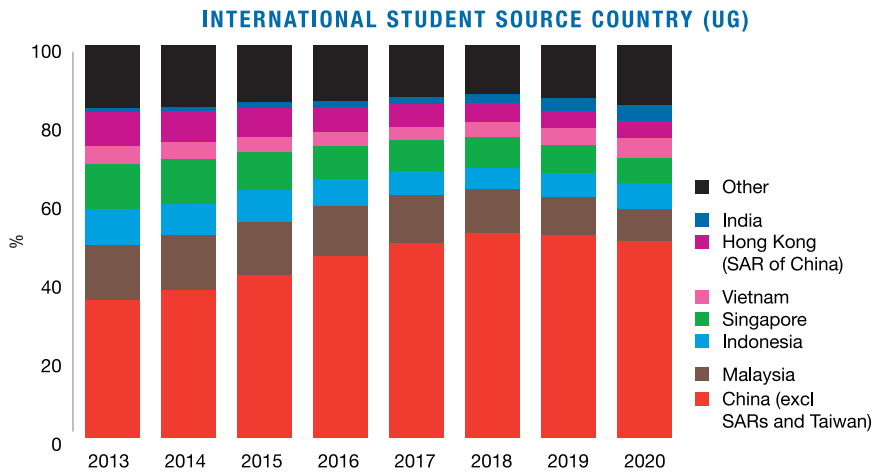


Figure 12 – Undergraduate international student source country. Onshore only; commencing and returning. 2020 data are preliminary as at 14 September 2020.

The growth in international student numbers, married to the dominant presence among international students of those coming from mainland China, has led to increased internationalisation but not increased international diversity, although both were desired objectives.

The data in Figure 12 show the impact of increased internationalisation of the student body and then in recent years the increasing dominance of Chinese nationals, as they overtook the cohorts from Southeast Asia (Malaysia, Hong Kong and Singapore) who had previously dominated the international student population. Prior to the impact of the COVID-19 pandemic closing Australia’s borders, increased numbers of students from other nations, principally India, were addressing the goal for increased diversity of the student body and its experience.

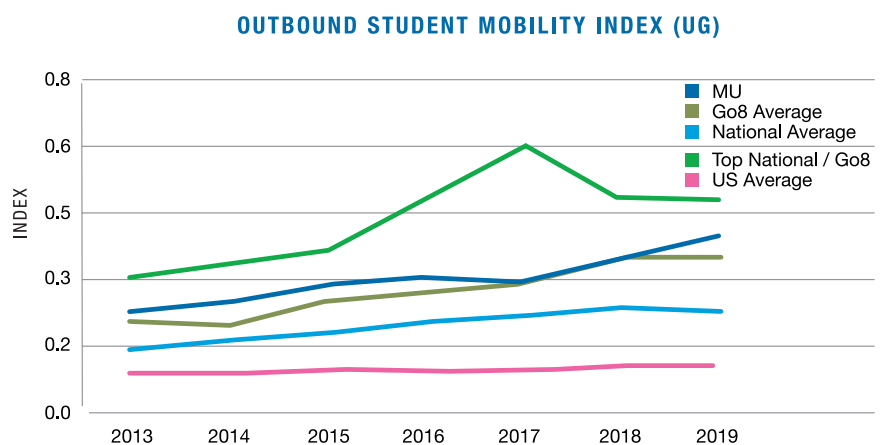


Figure 13 – Outbound Student Mobility Index (number of outbound international learning experiences / number of completions). Domestic undergraduate students only. From the AUIDF Mobility Survey, which does not identify individual institutions.

The number of students proceeding from Monash on mobility experiences to other nations grew considerably from 2,770 students in 2013 to 5,641 students in 2019, and then abruptly stopped in the face of the pandemic with mobility experiences becoming virtual from early 2020. The proportion of students receiving such an experience had grown to approximately 40 international learning experiences per 100 domestic undergraduate completions in 2019, compared to 23 international learning experiences per 100 completions in 2013.

As Figure 13 shows, student mobility was considerably enhanced and a feature of education for an increasing proportion of Monash students.

Global Immersion Guarantee

The Global Immersion Guarantee (GIG) is a funded, international for-credit study experience for all first-year students enrolled in the Faculty of Arts or one of its associated double degrees. In February 2020, 534 students returned from travelling to one of five countries, where approximately 12 cities and more than 40 collaborating partners were engaged with the groups. In total, almost 1,000 students have taken part in the program since its launch in 2018, with significant levels of achievement and satisfaction in the experience. Students who completed the GIG had an average higher grade at the end of their second semester, compared to students that did not complete the GIG.

Launched in November 2018, the Global Immersion Guarantee (GIG) provided to first-year Arts students has extended and integrated this experience into a very large cohort, and anchored their studies and experiences in the countries in which Monash has a campus or significant presence, namely Malaysia, China, India, Indonesia and Italy²⁸.

Through the Monash Prato Centre in Italy, Monash provided approximately 700 students from across the University annually with access to specialised courses and experiences in Europe.

Monash has also increased its collaborations in research and mobility with universities across the world. In particular, the Monash-Warwick Alliance has secured more than 100 externally-funded grants worth \$74 million plus £6 million to Monash and Warwick, produced over 600 co-published journal articles, and enabled in excess of 1,000 students to undertake an exchange between the two universities since 2011.

Monash co-publications with internationally high-quality universities have grown to 48 per cent of total publications, and the depth of links with a number of universities in key research projects has been strengthened.

²⁸ Other degree programs, principally the Bachelor of Global Studies, Bachelor of Science – Global Challenges, and the Global Executive Master of Business Administration, offer mandatory structured curriculum in other countries as part of the program. The numbers of students (as with many programs such as these) are relatively small, usually less than 100 students. However the GIG is offered to many hundreds of students each year as the first-year Arts degree has a commencing cohort in excess of 1,400 students.

ASPREE

Research programs such as ASPREE (ASpirin in Reducing Events in the Elderly) demonstrate the capabilities of Monash for leveraging partnerships and funding at scale to deliver truly international impact. With a budget in excess of \$A100 million, from the US National Institutes of Health and the National Health and Medical Research Council, ASPREE is one of the largest clinical research studies undertaken in Australia, and it was undertaken with international funding and international partners.

The ASPREE study was conducted to determine whether daily low-dose aspirin prolonged good health by preventing or delaying age-related illness such as cardiovascular disease, dementia, depression and certain cancers in the healthy elderly.

Results showed that low dose (100mg) aspirin did not prolong life free of disability, or significantly reduce the risk of a first heart attack or stroke in healthy people aged 70-plus over the duration of the trial. ASPREE is the largest primary prevention aspirin study ever undertaken in healthy people aged over 70 years and the first to weigh the benefits versus the risks.

The dramatic impact of the COVID-19 pandemic on international mobility, inbound and outbound from Australian campuses, changed the whole landscape of internationalisation. Numbers of international students on Australian campuses dropped by 7 per cent in 2020. And although China was the first country to which Australia closed its international borders, the diversity of the international student population represented in the proportion of students from different countries did not change markedly from the pattern of 2019. Thirty-three per cent of students studied online at Monash from their home countries outside Australia, and no students were able to undertake mobility experiences during 2020.

Monash remains committed to internationalisation and faces the challenge of reshaping the means by which it attains its current goals, given the effects of the pandemic and restrictions on international travel in the current period.

Monash is unique among Australian universities, however, in the number of campuses established in other nations. By 2019 there were three offshore campuses offering several undergraduate and postgraduate programs and collectively enrolling some 9,600 students, including 8,100 undergraduates, 787 postgraduate coursework and 697 higher degree research students.

These campuses provide a mechanism for embedding Monash education and research in the context of the nations in which they are located. This enriches the understanding (as expressed in curriculum and research projects) of international issues and makes them available across the University.

This is a deliberate extension of the goal of internationalising Monash education and research. Monash has been building a set of international campuses that both complement and extend the excellence of its education and research, through embedding a genuinely international context and experience.

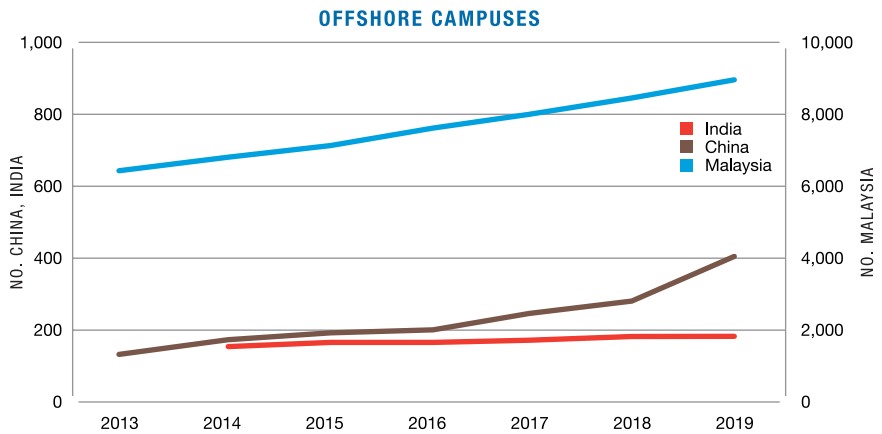


Figure 14 – Total number of students at Malaysia, India and China campuses.

ENTERPRISING

The major aim of this goal was to build strong collaborative partnerships with industry in research and education. In doing so the quality and relevance of education and research would be enhanced, as well as its impact, through more effective dissemination to industry and community.

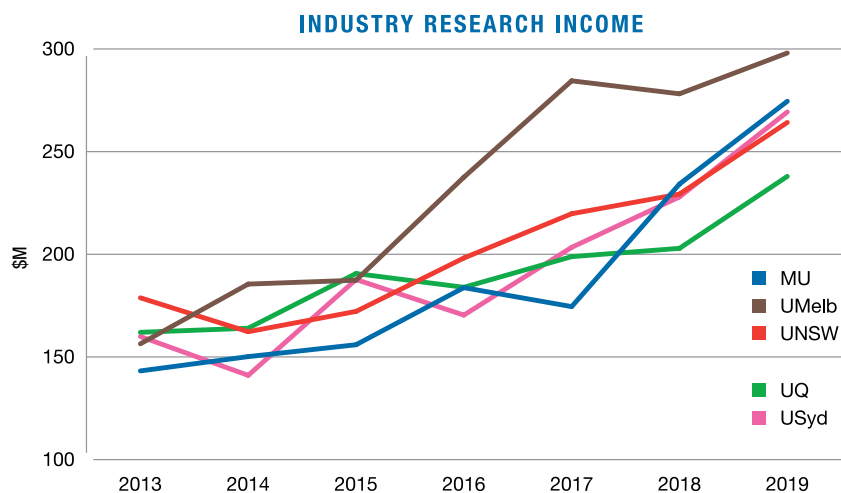


Figure 15 – Industry research income (HERDC Cat 2-4) for Monash and its four main Go8 peers.

During this period Monash has also demonstrated, through a small number of very significant major research projects funded by partners, that it can work collaboratively to deliver the benefits of its research, not only to but with international communities.

Revitalising Informal Settlements and their Environments (RISE)

Led by the Monash Sustainable Development Institute and funded by the Wellcome Trust and the Asian Development Bank, the Revitalising Informal Settlements and their Environments (RISE) program continues to achieve remarkable success in its mission to transform human, environmental and ecological health in informal settlements across the world.

The global RISE team has now expanded to 170 staff across nine countries, and in 2019 three new partners – the United Nations Human Settlements Programme, the Australian Department of Foreign Affairs and Trade, and the New Zealand Ministry of Foreign Affairs and Trade – were added, and more than \$9 million in new funding was secured.

In February 2020, New Zealand Prime Minister the Rt Hon Jacinda Ardern officially launched construction to improve water and sanitation for more than 3,000 people living in informal settlements in Fiji. The design and build of water-sensitive infrastructure with Indonesian communities also commenced in 2020.

World Mosquito Program

Established in 2017 following decades of research into using wolbachia bacteria to prevent mosquito-borne diseases such as dengue, Zika, chikungunya and yellow fever, the World Mosquito Program (WMP) continues to make progress in protecting communities around the world from devastating diseases.

In August 2019, the WMP was awarded \$10 million in new funding over five years as one of five winners of Macquarie Group's 50th Anniversary Award. The funding enabled rapid global scale-up of the program's long-lasting method, and helped to set the foundation for governments to continue to scale the intervention to protect their own people from the deadly diseases.

In July 2020, the WMP was shortlisted for the Macarthur Foundation 100&Change initiative, where an organisation receives a \$US100 million grant to expand their work worldwide. Of the more than 700 applications received, WMP was only one of six shortlisted applicants for the \$100 million grant. While it did not win, the very high profile of the 100&Change initiative further amplified the global scope of the WMP's work, increasing opportunities for future funding.

In August 2020, WMP announced the results of its Randomised Control Trial in Yogyakarta, Indonesia. Over 27 months, areas of the city that received WMP's wolbachia method had 77 per cent less cases of dengue than areas that received routine dengue control measures. This is the largest-ever trial of its kind targeting the *Aedes Aegypti* mosquito that transmits dengue, and this positive result has potentially huge implications for the 40 per cent of the world's population at risk from dengue.

The WMP has also opened a regional office in Vietnam, with an additional new office opening in Ho Chi Minh City. It plans to expand its work to protect 50 million people worldwide over the next five years.

The second aim of this goal was to build an enterprising and innovative culture in the University. Over the past five years, The Generator has been established to assist in developing the capability to create start-ups among students, alumni and staff, and the support for commercialisation of research has also been enhanced. This can be seen in the data on licences, options and assignments, which increased from 10 in 2013 to 33 in 2020, and in active spinouts.

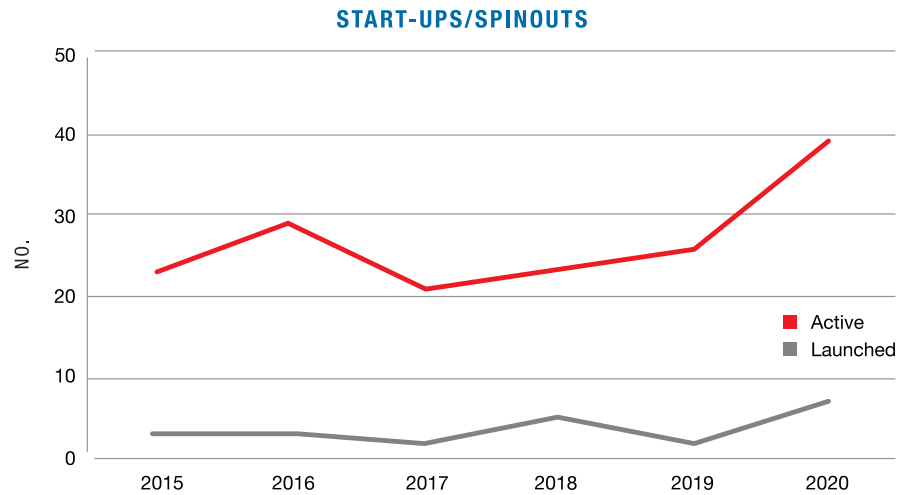


Figure 16 – Number of Monash start-ups and spinouts.

There is much to be done to build an effective and self-sustaining ecosystem that will assist innovation through industry collaborations as well as start-ups, spinouts and commercialisation of research. However, the elements to build such an environment have been put in place with the introduction of The Generator set of programs:

- › The Validator (taking an idea to launch in five weeks);
- › Startup sprint (a five-week program to rapidly progress ideas already launched);
- › The Accelerator (a 12-week program to scale a start-up or research innovation for financial growth or to attract investment); and
- › Researcher-To-Innovator (an eight-week program for research to deep-dive into the commercial pathway for research innovations).

INCLUSIVE

The University needed to renew its commitment to embracing diversity by providing opportunity based on talent and creating an inclusive culture that would nurture that outcome.

Increased focus on recruitment and retention of students from disadvantaged backgrounds, as well as increased attention to building the numbers and outcomes for Aboriginal and Torres Strait Islander peoples, were the first priorities.

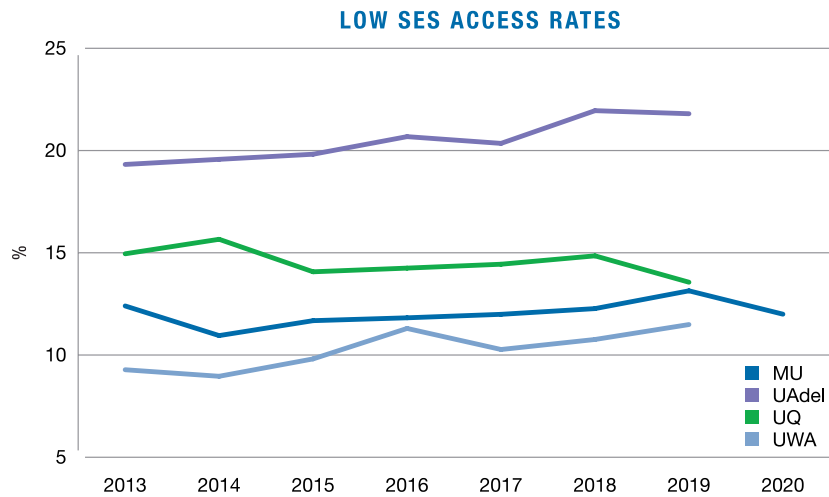


Figure 17 – Access rates of students from the lowest SES quartile for the top four Go8 institutions. Domestic undergraduates only. 2019 data are unverified by Go8; 2020 data are preliminary.

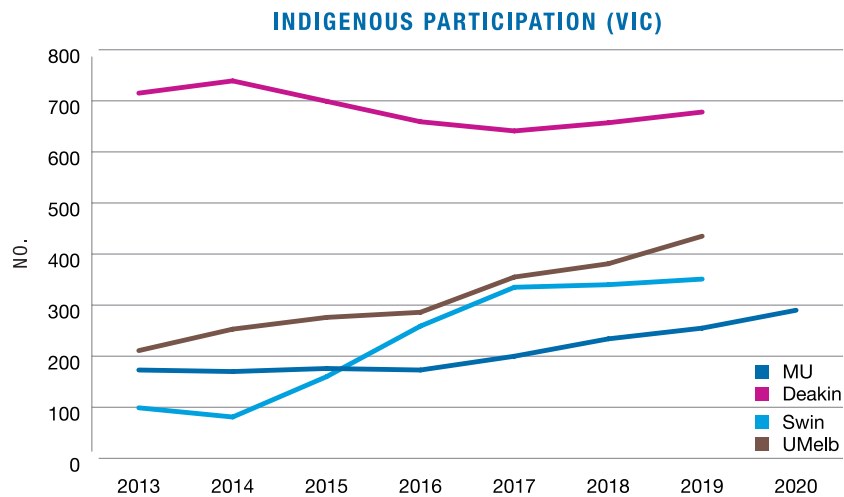


Figure 18 – Number of Indigenous students at Monash and the top three Victorian institutions. Undergraduate and postgraduate. 2019 data are unverified by Go8; 2020 data are preliminary. Monash is ranked 5th in Victoria; La Trobe University (266 in 2019) ranks 4th.

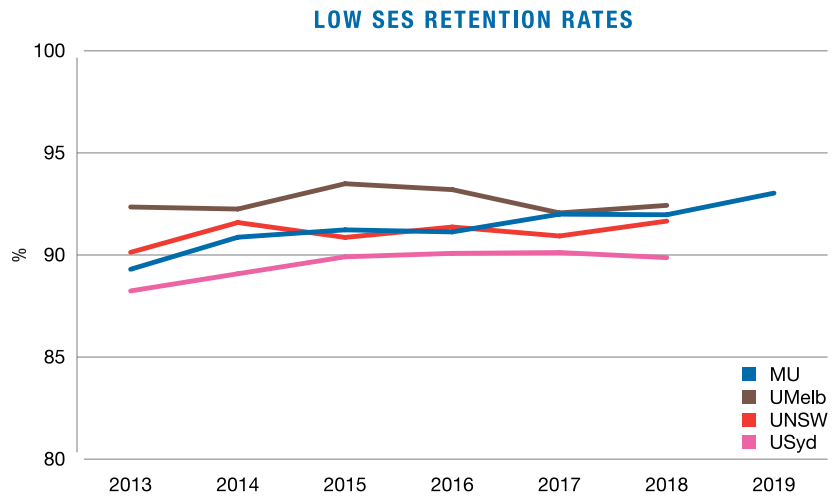


Figure 19 – Retention rates of students from the lowest SES quartile for the top four Go8 institutions. Domestic undergraduates only. 2018 data are unverified by Go8; 2019 data are preliminary.

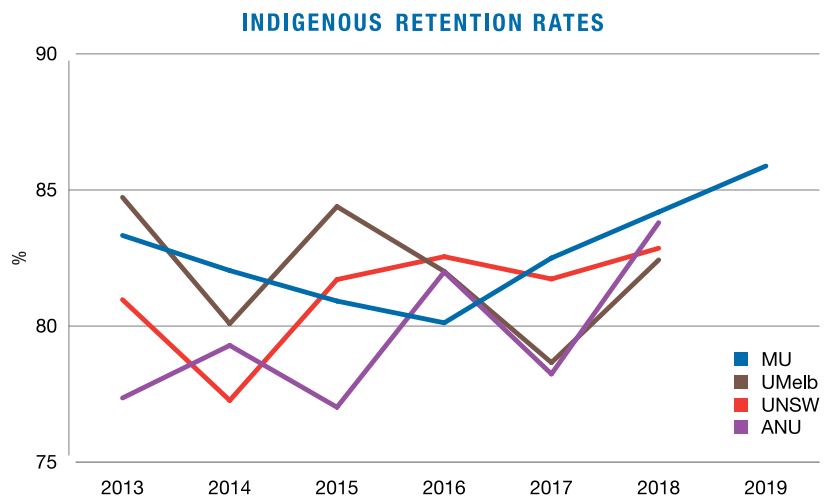


Figure 20 – Retention rates of Indigenous students from the top four Go8 institutions. Undergraduate and postgraduate. 2018 data are unverified by Go8; 2019 data are preliminary.

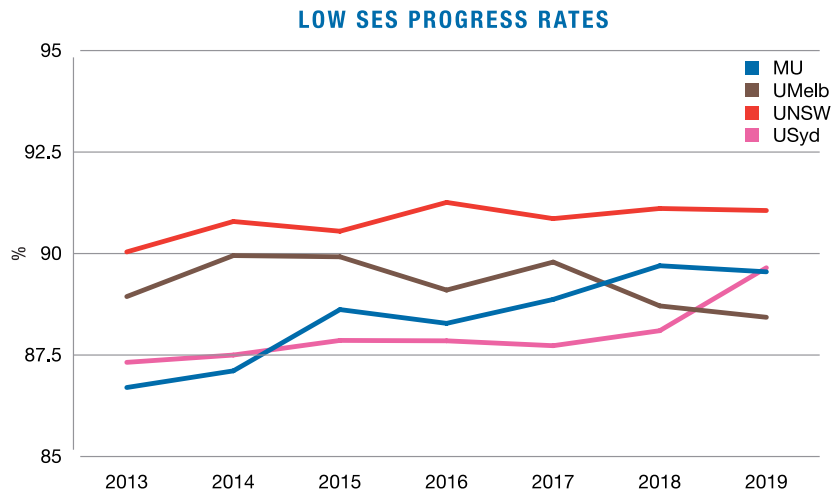


Figure 21 – Progress (success) rates of students from the lowest SES quartile for the top four Go8 institutions. Domestic undergraduates only. 2019 data are unverified by Go8.

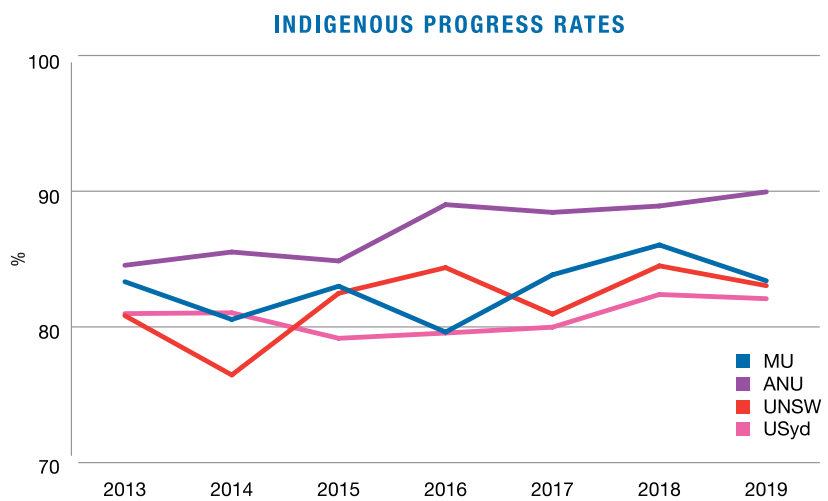


Figure 22 – Progress (success) rates of Indigenous students from the top four Go8 institutions. Undergraduate and postgraduate. 2019 data are unverified by Go8.

Over the past five years there have been increased numbers and success for students from disadvantaged backgrounds and for Aboriginal and Torres Strait Islander students. Both need continued attention and renewed focus, but neither access nor success are enough to build an inclusive community.

Scholarships

Monash offers one of the most generous scholarship programs in Australia to attract and enable talented students to study. Our Achieving Potential Scholarships support students from underrepresented communities to meet their basic living and education costs, while also being able to engage with the richness and breadth of opportunity available to a Monash student. In 2020, the University awarded approximately \$200 million across a variety of coursework, research and other scholarships and awards.

Access, Inclusion and Success

Access, Inclusion and Success is responsible for leading the University's Widening Participation Strategy to improve the access, participation, retention and success in higher education and beyond for students from underrepresented communities. In 2020, more than 2,400 undergraduate students were admitted.

A Monash education can offer students life-changing opportunities. We aim to give every student equal access to all the benefits of studying at Monash. This includes the rich experiences that develop their leadership, cooperation and creativity within industry and communities in Australia and across the world, which have a positive impact on employability outcomes.

There was also a need to reach into the broader community through our alumni to build the connective tissue of a multigenerational and diverse alumni and student community. Global networks of alumni leaders were built in key locations, and the means to establish and maintain contact with alumni, and connect them with one another and with our students, were put in place. Monash now has an ability to contact 83 per cent of its alumni and a significant cohort in excess of 18,000 highly-engaged alumni across 70 countries.

The alumni mentoring of students and their engagement with Monash research and philanthropic endeavours across the world assists in building a more connected and engaged University community.

ENABLING ELEMENTS

Focus Monash also recognised two important enabling elements to attaining its four goals – these were staff and sustainability.

The reliance of the ambitions of the Strategy on the ability to “attract, develop and retain the best academic and professional staff” was seen as vital. And to that end, attention was paid to four areas:

- a) Strengthening the academy;
- b) Building a contemporary professional workforce;
- c) Shaping the workforce profile, not only to drive excellence but to achieve equity and diversity in that workforce; and
- d) Leadership.

The quality of the academy can, in part, be seen in the quality of the research and education outcomes outlined above. Some clear evidence can be seen in the success of individually-awarded national research fellowships, such as Australian Laureate Fellows, Future Fellows and Discovery Early Career Researcher Awards, and in national awards for teaching excellence.

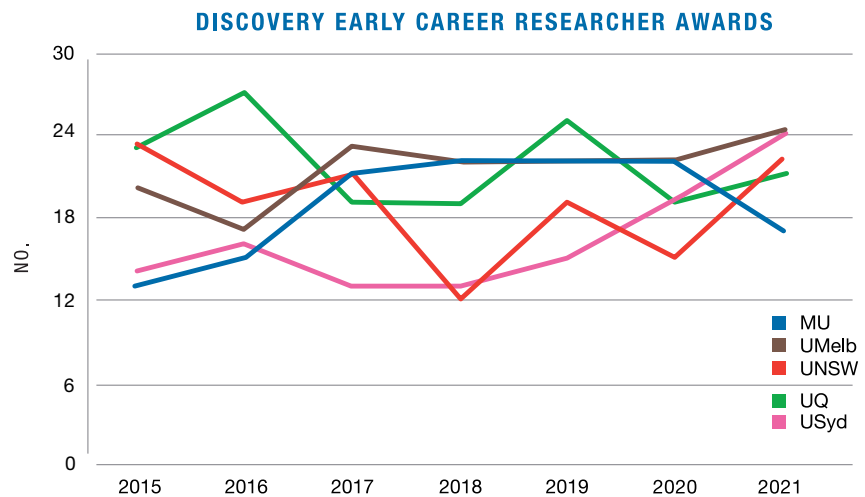


Figure 23 – Number of Discovery Early Career Research Awards awarded to Monash and its four main Go8 peers by year of funding commencement. Based on 2021 funding, Monash is ranked 6th in the Go8 with 17 DECRA; Australian National University is ranked 5th with 18.

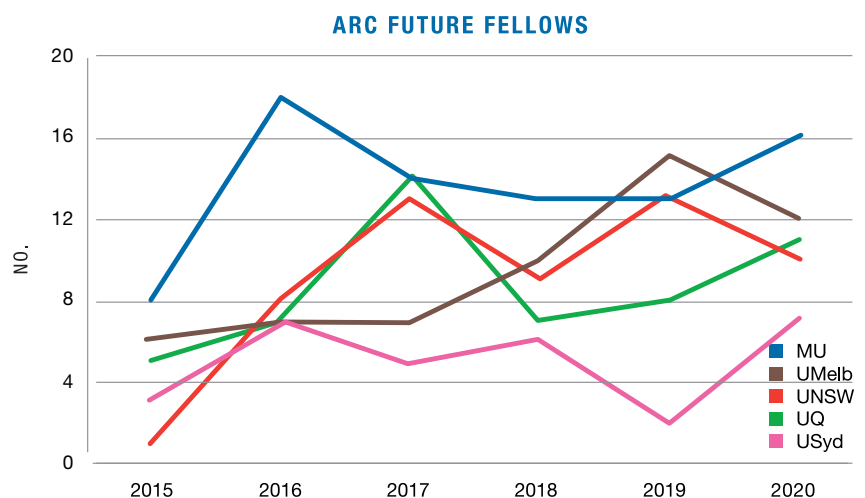


Figure 24 – Number of Australian Research Council Future Fellowships awarded to Monash and its four main Go8 peers.

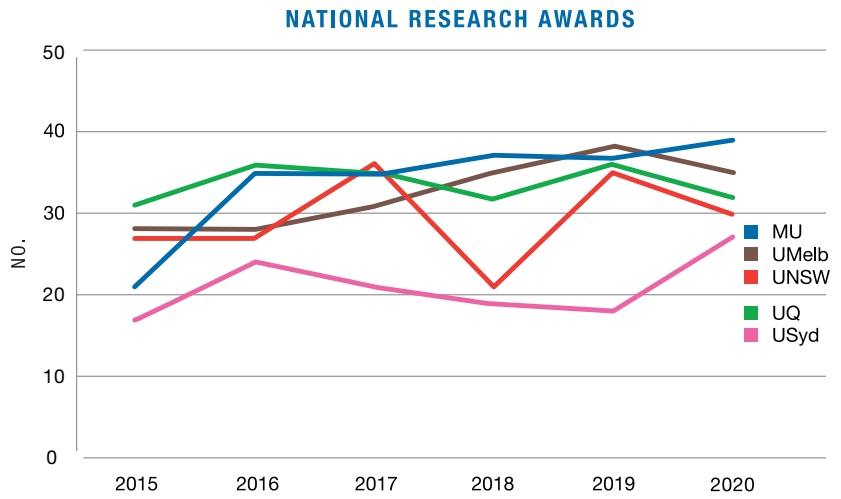


Figure 25 – Total number of national research awards (DECRA, ARC Future Fellowships and Australian Laureate Fellowships) for Monash and its four main Go8 peers.

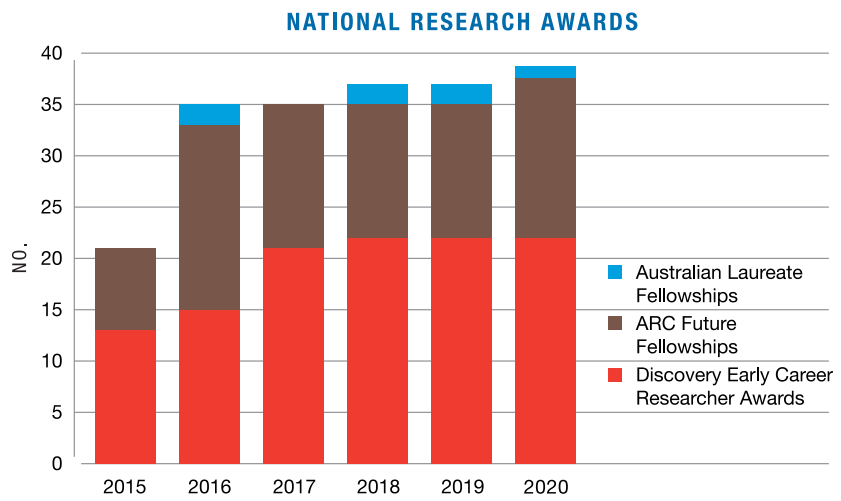


Figure 26 – Monash's national research awards.

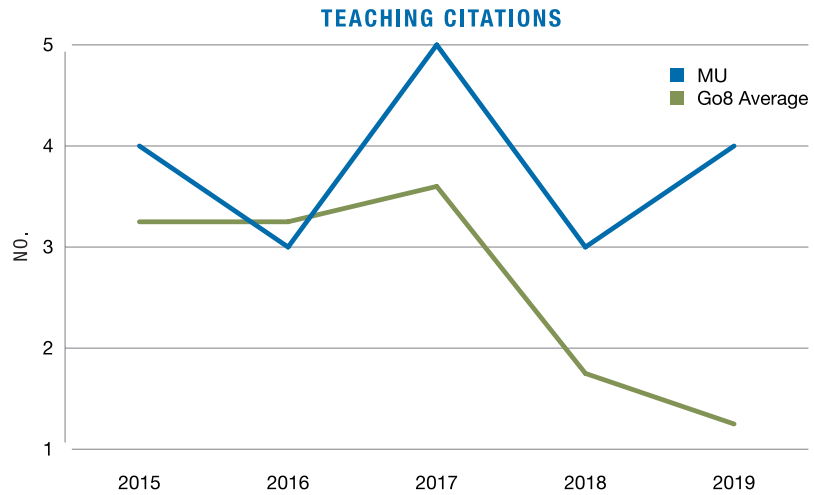


Figure 27 – Number of Teaching Citations received by Monash compared to the Go8 average. Monash citation fields: 2015 – Science and Health Sciences; 2016 – Arts, Medicine, Nursing and Health Sciences (MNHS), and Science; 2017 – Science, Arts, Law and MNHS; 2018 – Business and Economics, and Arts; 2019 – MNHS, Arts, and Business and Economics. Data from the Australian Awards for University Teaching.

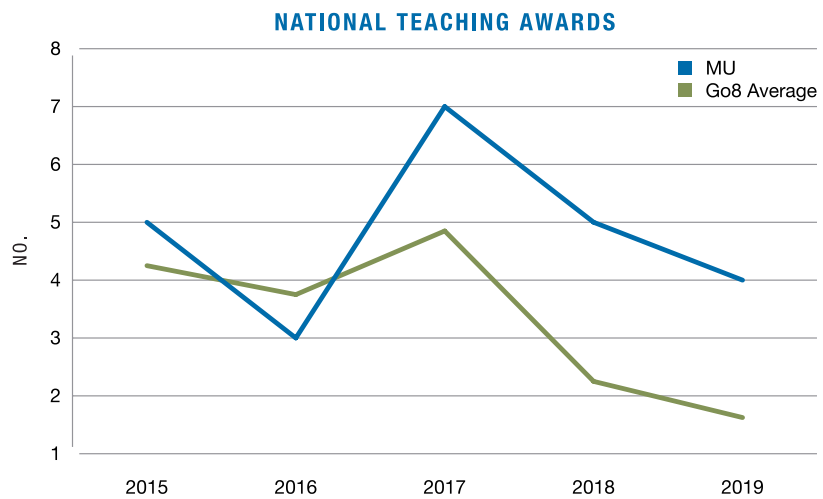


Figure 28 – Total number of National Teaching Awards (Teaching Excellence Recipients and Citations for Outstanding Contribution to Student Learning) received by Monash compared to the Go8 average. There are a total of 13 awards in HASS fields and 11 in STEM fields over this period. Data from the Australian Awards for University Teaching.

But also in this time, significant changes were made in the policies supporting evaluation of academic staff performance and innovation in the delivery of our teaching and learning, particularly as a result of the COVID-19 pandemic.

As part of our eAssessment platform, rolled out over an 18-month period and converted to remote online, we also developed a platform for remote exam supervision and assessment; established Academic Safety Net assessment standards for lockdown/online teaching and assessment; all teaching and learning was transitioned to online; and a new November intake into the first year of undergraduate and graduate studies in some courses was added.

The shift in the professional workforce has also been marked as the percentage in specialised professional fields increased compared to generalist skills. HEW 8 and HEW 9 staff have increased from 21 per cent to 27 per cent of the professional workforce, whereas HEW 2 to HEW 5 staff have decreased from 31 per cent to 25 per cent of the professional workforce.

Transactional effort (as a proxy for generalists) has decreased from 39 per cent of administrative effort in 2014 to 33 per cent in 2019, and non-transactional or value-added activities have increased to 52 per cent of our professional staff effort in 2019.

And finally, the changes in the overall shape of the workforce show the increasing diversity in terms of gender equity and the international mix of the staff. Female representation in senior roles (academic Level D+ and professional HEW 10+) increased from 35.1 per cent in 2015 to 39.8 per cent in 2020, while female representation in all roles increased from 55.5 per cent in 2015 to 56.4 per cent in 2020. International staff hires increased between 2015 and 2020, representing 7.4 per cent of all hires in 2015 and 10 per cent in 2020.

Since 2015, 2,886 casual and sessional staff commenced in fixed-term and ongoing roles across the University (to 2020). Casual and sessional FTE, however, decreased to 15 per cent of the total workforce FTE from a high of 18 per cent in 2017.

The significant work in building inclusive and safe workforce culture programs (such as Respect. Now. Always.) and professional development of the workforce have buttressed the ability to not only build but retain excellent staff. In 2019, with 847 voluntary departures from a total 8,059 fixed-term and ongoing staff, a strong retention rate of 89.7 per cent was attained.

Leadership development is part of that success. The number of emerging and existing leaders supported through development programs increased from 79 in 2016 to 425 in 2019.

Just as Monash's ambitions and its performance rely substantially on the quality and engagement of all its staff, its performance in part relies on and is supported by the overall sustainability of the environment in which staff work.

Without financial sustainability, the ability of Monash to recruit and support excellent staff is impaired, as is its ability to invest in a high-quality environment for delivery of education, research and services. To this end, clear targets for financial sustainability were set and achieved over the five years of *Focus Monash*.

Key Performance Indicators

Indicators	2016 Actual	2017 Actual	2018 Actual	2019 Actual	Internal Target
Core operating margin	6.9%	4.4%	6.1%	7.2%	>5%
Debt/core operating cash flow	1.8	3.3	2.7	1.9	<3.5
Free cash flow	(\$122m)	(\$214m)	(\$35m)	\$3m	NA
Interest coverage	6.0	5.2	6.6	6.4	>3
Liquidity ratio	1.3	1.6	1.6	1.5	>1.5 & <3
Core operating cash flow margin	13.3%	9.6%	12.1%	15.6%	>11%
Debt to equity ratio	20.5%	28.3%	30.2%	28.9%	NA

Indeed, without the strong financial performance of the previous five years, the impact of the financial downturn consequent on the pandemic would have been much more deleterious than it was.

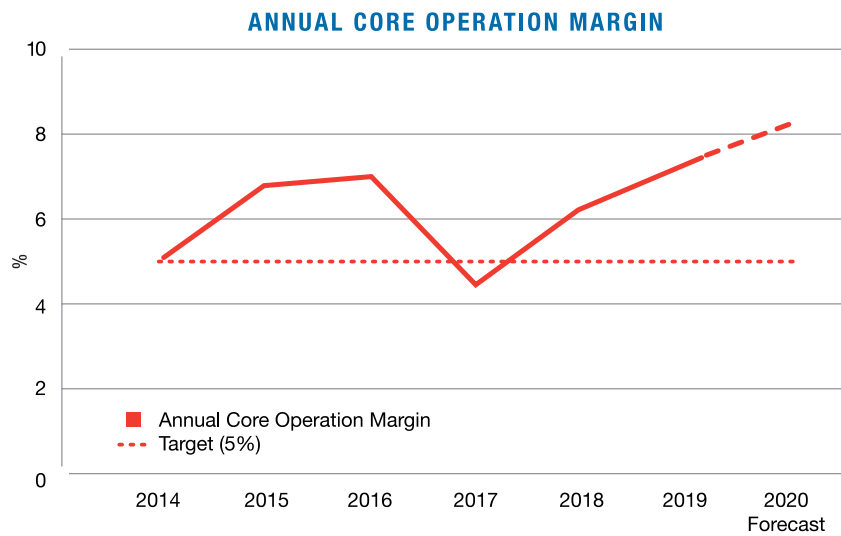


Figure 29 - Annual Core Operating Margin. *2020 figure is forecast as at November; audited results for 2020 will be available later in 2021. We expect these results to exceed forecast due to an increased rate of retention for students studying online, improved research funding, successful implementation of non-salary savings, and the savings realised as a result of the Enterprise Agreement Variation. The 2020 operating surplus will provide a buffer for the future as the effect of reduced student enrolments in 2020 and 2021 will continue to be felt through 2022 and 2023.

This sustainability was extended across the whole of Monash, including its offshore campuses and wholly-owned entities such as Monash College.

Monash College and Monash University Malaysia

The financial stability of operating subsidiaries such as Monash College and Monash University Malaysia is managed through the setting of financial operating margin targets to ensure there is sufficient surplus to fund their respective capital and other investment requirements. Revenue, expenses and other financial commitments are periodically reviewed and updated through formal financial forecasts. This, together with the holding of sufficient cash reserves for buffer funding, aids in their ongoing financial stability.

Over this period Monash also embarked on a major program of building philanthropy to support its goals, with most effort focused on development of scholarship support for students and research funding. This involved the launch of the campaign 'Change It. For Good.' in 2018 to raise \$500 million and involve 50,000 donors by 2022. The success of this campaign has built a platform to invest in student success and research for the future, as Figure 30 shows. The success of philanthropy is one example of the way Monash has contributed to its long-term financial sustainability by diversifying its sources of revenue. This philanthropy has particularly been focused on supporting scholarships for students and research, and has therefore enhanced both the student experience and the research environment.

Monash has also invested for long-term sustainability through a substantial investment program in its infrastructure, both physical and digital. Monash has invested \$822 million in buildings and property over the period 2015-2019, not including equipment, IT and other facilities. This investment in infrastructure ensures a quality environment in which students can learn and staff can work, educate and research. In developing this infrastructure, a key element has been its contribution to environmental sustainability.

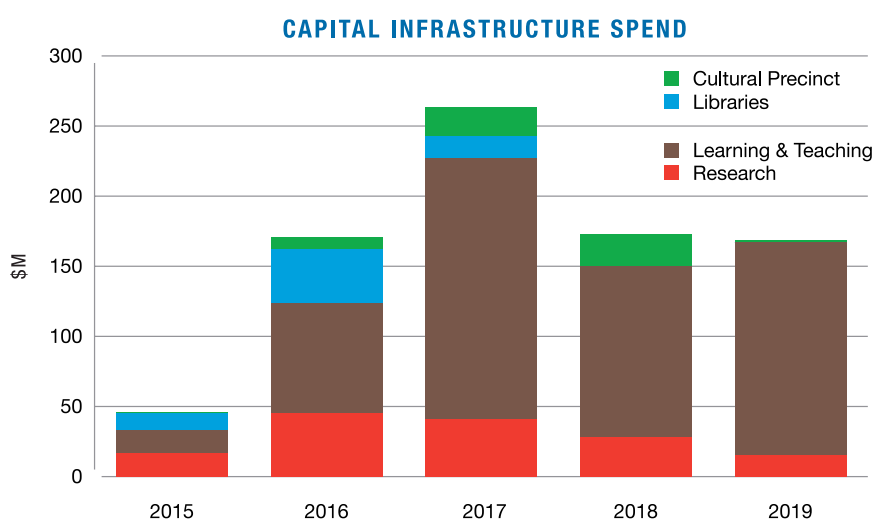


Figure 30 – Capital infrastructure spend.

Commitment to sustainability (the second major enabling element) was enshrined in the first Environmental Social and Governance (ESG) Statement of Monash Council, adopted at the end of 2016. An annual report documents progress against the aims of the statement, including in relation to responsible investment. This ESG Statement has embedded a broad commitment to the Sustainable Development Goals (SDGs) across the University's activities, including research and education. Some of the major achievements have been:

- › establishing a governance structure which monitors and guides the implementation of the ESG actions;
- › Monash becoming a signatory to the 'Universities commitment to the SDGs' charter in December 2016; and
- › Monash becoming a signatory to the UN Principles for Responsible Investment.

In 2017, Monash also committed to net zero emissions by 2030, and has been tracking progress against this goal to be exemplary in environmental practice across our campuses. Significant investment in environmental sustainability has been made, and the environmental performance to date has shown the University to be on track to meet its commitments.

In 2018-19, Monash commenced its energy efficiency program, which has seen the:

- › installation of more than 10,000 solar panels;
- › signing of a long-term power purchase agreement with the Murra Warra wind farm to help meet our 100-per-cent renewable power target;
- › continued roll-out of the Thermal Precinct Electrification strategy;
- › installation and commissioning of a 1MWh hybrid energy storage system at the Clayton campus;
- › installation and commissioning of four new electric vehicle charging facilities;
- › securing of funding from State and Federal governments and industry to develop a market-leading microgrid that will enable the University to control how and when energy is used; and
- › commenced installation of microgrid equipment and integration with the building automation systems on selected buildings at the Clayton campus.

These enabling programs have enabled Monash to achieve its strategic goals and have been developed effectively over these last five years. They have become the background assumptions on which new aspirations and ambitions can be built.

CONCLUSION

Focus Monash was a strategy to sharpen and deepen the University's key goals to be excellent, international, enterprising and inclusive. Achieving the goals of this Strategic Plan meant creating a clear character for Monash that developed its modern approach to education and research, by building a truly international engagement, strengthened enterprising partnerships and endeavours, and improved access and inclusion for all in our education and from our research.

Thirty-five performance targets for 2020 were set at the beginning of *Focus Monash 2015-2020*, and 28 of these (or 80 per cent) have now been met or are on track to be met.

The test of achievement of these goals is in the extent to which Monash can provide excellent education and research that is international, enterprising and inclusive.

Those goals define Monash's distinctive contribution to its communities and its students and staff.

They also build capabilities that allow Monash to respond to increasing globalisation and the challenges of globalisation in the years ahead.

They build a culture that can respond flexibly and innovatively to the technological changes that challenge education, research and the services that sustain them.

The changes wrought in Monash by Monash over the last decade, and the last five years described here, are the changes that prepare the University for the decade ahead.

They mark a modern university with a scale, reach, ambition and culture able to work with others and through others to make the excellence of its education and research count. This is the foundation on which *Impact 2030* has been built.

APPENDIX

POSTGRADUATE FIGURES

**APPENDIX –
POSTGRADUATE FIGURES**

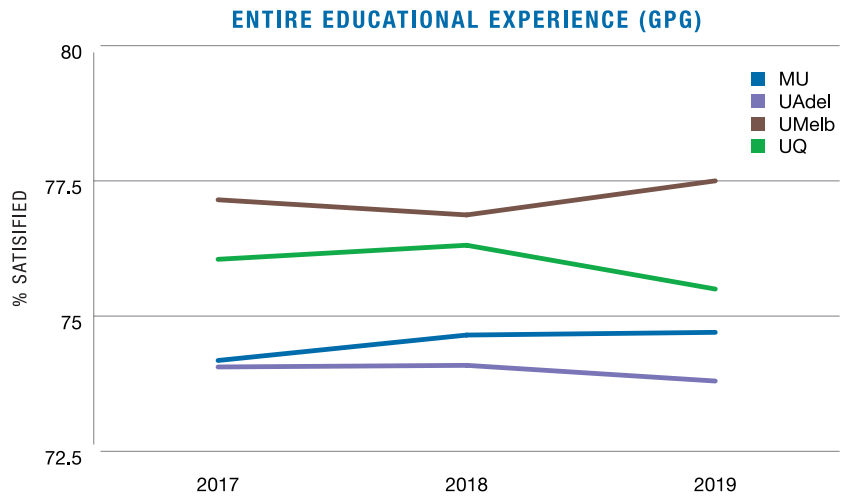


Figure 31 – Graduate/postgraduate student satisfaction with the entire educational experience for the top four Go8 institutions. Onshore only. From the QILT Student Experience Survey. GPG data not collected prior to 2017.

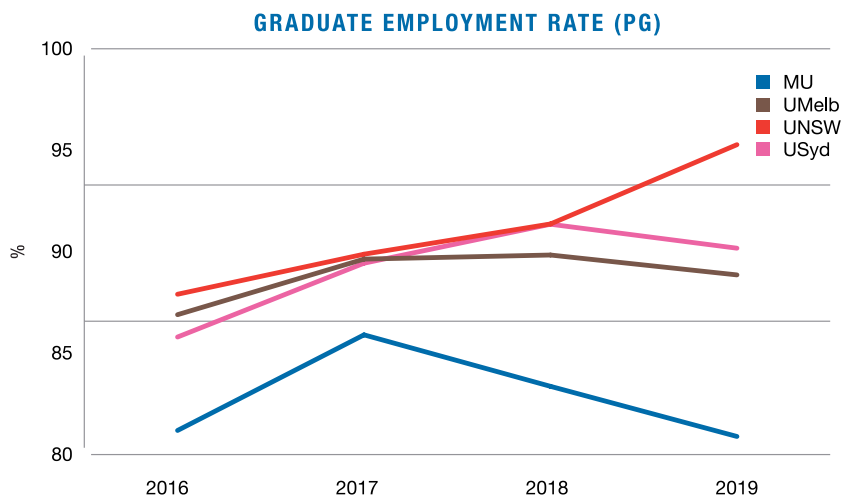


Figure 32 – Graduate employment rate of Monash and the top three Go8 institutions. Onshore domestic postgraduate only. Monash is ranked 6th in the Go8. Australian National University (86.2%) and University of Queensland (83.2%) are also above Monash.

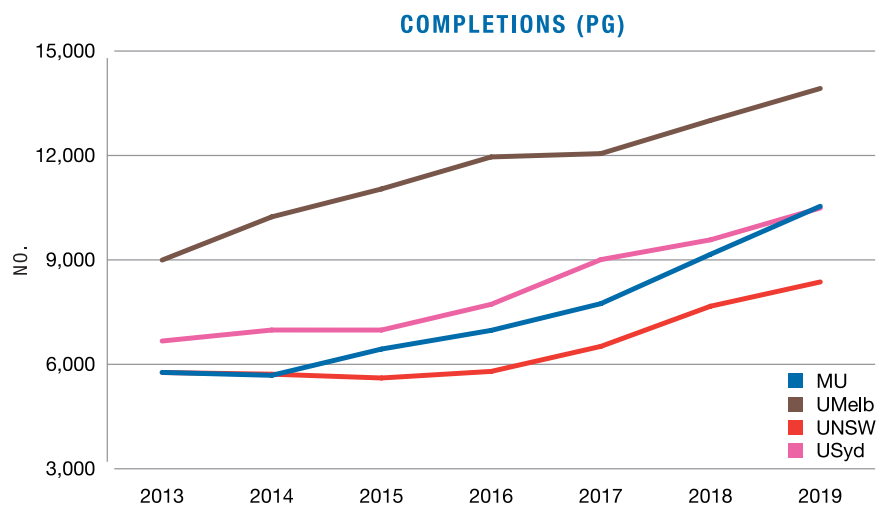


Figure 33 – Number of postgraduate completions in the top four Go8 institutions. Includes domestic and international; onshore and offshore.

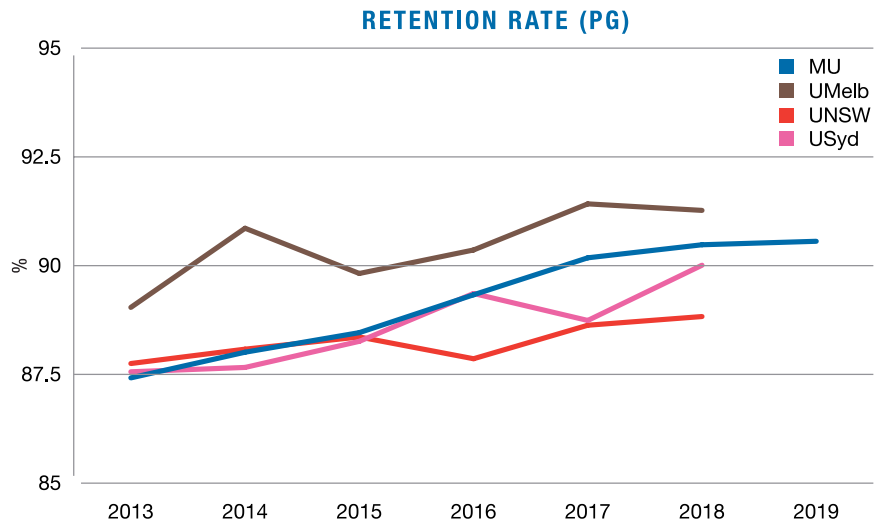


Figure 34 – Postgraduate retention rate of the top four Go8 institutions. Includes domestic and international; onshore and offshore. 2018 data are unverified by Go8; 2019 data are preliminary.

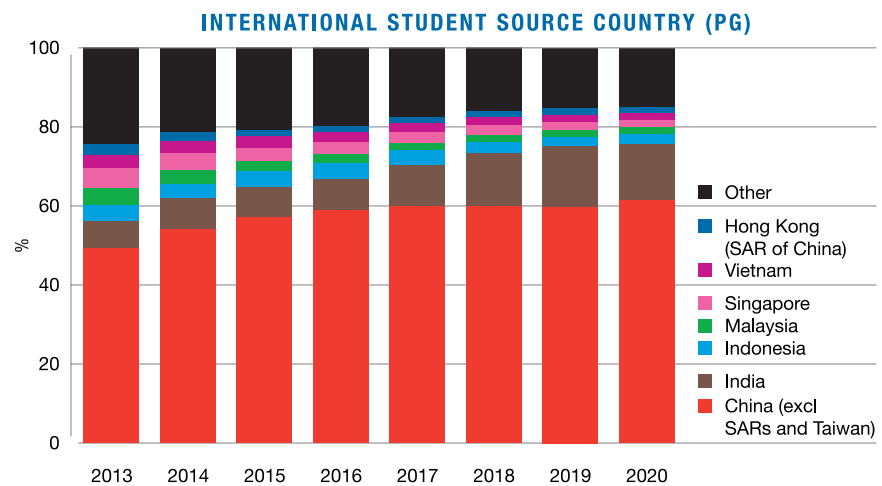


Figure 35 – Postgraduate international student source country. Onshore only; commencing and returning. 2020 data are preliminary as at 14 September 2020.

FOCUS MONASH 2015-2020 INDICATOR PERFORMANCE

Goal and Indicator	Base result	Latest result	2020 Target	Status against target	% Change in perf
EXCELLENT					
RESEARCH					
ARWU	115	85	92	■	↑ 26.1
THE WUR	83	64	66	■	↑ 22.9
US NEWS BGU	88	48	50	■	↑ 45.5
ERA	66.7	90.3	100.0	■	↑ 35.4
CITATION IMPACT (FWCI)	1.81	1.98	2.0	■	↑ 9.4
RESEARCH INCOME – TOTAL *	343.8	462.1	420	■	↑ 34.4
RESEARCH INCOME – NCGI *	193.7	187.6	200.0	■	→ -3.2
EDUCATION					
VTAC ENTRANTS	55.0	62.8	55.0	■	↑ 14.1
TIMELY HDR SUBMISSIONS	54.7	68.3	70.0	■	↑ 24.9
UG RETENTION RATE	92.3	93.7	95.0	■	→ 1.5
GPG RETENTION RATE	87.2	89.7	92.0	■	→ 2.9
GRADUATE EMPLOYMENT	73.5	74.7	74.5	■	→ 1.7
GRADUATE FURTHER STUDY	22.8	20.5	32.0	■	↓ -10.1
INTERNATIONAL					
MOBILITY INDEX	0.3	0.4	0.3	■	↑ 51.7
OUTBOUND STUDENTS	3,175	5,747	5,000	■	↑ 81.0
INBOUND STUDENTS	1,098	898	1,150	■	↓ -18.2
RESEARCH INCOME – INTERNATIONAL	47.0	94.1	65.8	■	↑ 100.1
QUALITY CO-PUBLICATIONS	41.2	48.2	50.0	■	↑ 16.9
ENTERPRISING					
INVENTIONS	67	125	140	■	↑ 86.6
LOAs	11	34	30	■	↑ 209.1
COMMERCIALISATION INCOME	1.4	25.1	6.4	■	↑ 1659.1
RESEARCH INCOME – INDUSTRY	150.2	274.5	243.5	■	↑ 82.8
INCLUSIVE					
LOWER HALF SES ACCESS	27.4	26.9	36.0	■	→ -2.0
LOWER HALF SES RETENTION	89.5	92.7	95.0	■	→ 3.6
LOWER HALF SES SUCCESS	89.2	91.8	93.2	■	→ 3.0
INDIGENOUS PARTICIPATION	169	290	200	■	↑ 71.6
INDIGENOUS RETENTION	83.3	85.9	87.0	■	→ 3.1
INDIGENOUS SUCCESS	87.9	87.2	92.0	■	→ -0.9
ALUMNI DONATIONS	5.1	13.2	-		↑ 160.4
ALUMNI DONORS	2,768	3,836	-		↑ 38.6
CONTACTABLE ALUMNI	258,277	388,356	300,000	■	↑ 50.4
MEDIA CITATIONS	44,752	61,994	49,800	■	↑ 38.5
EDUCATIONAL EXPERIENCE	80.7	78.7	85.0	■	→ -2.5
SKILLS DEVELOPMENT	78.9	81.4	84.0	■	→ 3.1
LOW SES EDUCATIONAL EXPERIENCE	82.0	78.4	85.0	■	→ -4.4
INDIGENOUS EDUCATIONAL EXPERIENCE	77.8	86.3	85.0	■	↑ 10.9
CO-CURRICULAR PARTICIPATION	65.5	68.7	75.0	■	↑ 5.0

* Metrics from Academic Plan 2015-2020

■ Target met or on track to meet
 ■ Target unlikely to be met

↑ > = +5%
 → -5% to +5%
 ↓ < = -5%

NOTES



Information published in this Supporting Statement is correct as at September 2021.