As Australia’s largest tertiary institution, we are uniquely positioned to promote and influence sustainable behaviour through our campuses, research, teaching and education programs, investment decisions and our extensive partner networks spanning industry, government and community; both locally and abroad.
In December 2016, we released our Environmental Social Governance (ESG) Statement and accompanying strategy after a Working Group - assembled initially to consider the ESG aspects of Monash’s investment decisions - noted our significant capacity to influence ESG outcomes on a much larger scale.

As Australia’s largest tertiary institution, we are uniquely positioned to promote and influence sustainable behaviour through our campuses, research, teaching and education programs, investment decisions and our extensive partner networks spanning industry, government and community; both locally and abroad.

This capacity to work and influence beyond our borders was critically important to the creation of this Statement and the commitments contained within.

As a community leader, our ESG Statement also responds to the 2015 United Nations Paris Agreement and the Sustainable Development Goals (SDG) outlined as part of the wider 2030 Agenda for Sustainable Development which both call for urgent action on climate change.

A year on from the release of our Statement, we have made solid ground embedding sustainability into all aspects of our operations; financial, social and environmental.

We have reviewed and updated our investment policies, influenced change amongst our fund managers and added to our teaching and education programs. We have determined a road map and time frame to achieve net zero emissions by 2030. Our research is addressing social, economic and environmental challenges in our region and around the world and we led the Sustainable Development Solutions Network Australia / Pacific Region - an international initiative mobilising scientific and technical expertise in support of SDG problem solving.

Our Statement and accompanying strategy outlined an implementation approach which encompasses 5 key areas of operation:

- Research
- Teaching
- Engagement
- Campus
- Responsible Investment

This inaugural report highlights progress stories from each of these areas, and outlines next steps for the year ahead.
RESEARCH

AIM

To undertake research in sustainable development and in environmental, social and governance investment.

OBJECTIVES

Sustainable development research
- undertake research to further understand ESG risks and solutions
- utilise interdisciplinary research resources to develop solutions and coordinate a regional response to the sustainable development problems identified in the United Nations Sustainable Development Goals

ESG investment research
- undertake research to identify gaps in Australian and international ESG investment policies and processes
- use research resources to investigate improved approaches to ESG investment standards, indexes and processes
Monash aspires to demonstrate the fundamental role that universities play in mobilising scientific and technical expertise in support of sustainable development problem solving. To facilitate greater interdisciplinary collaboration, our Sustainable Development Institute (MSDI) undertook an ambitious University-wide mapping project to identify researchers and research areas undertaking work aligned with the Sustainable Development Goals. The complex project took many months to complete and required interrogation of University data, research publications, awards won and submissions to government using a set of 795 key words.

The results of the 2017 project revealed some 1700 Monash researchers working in SDG related fields. It also showed that Monash research is achieving local and regional impact across multiple Goals.

The project has provided us with a snapshot of our SDG research capability and a data set capable of being updated and interrogated for a range of purposes. Most importantly, knowing where SDG research is taking place across our University will facilitate stronger interlinkages and collaborative interdisciplinary knowledge sharing; an approach fundamental to achieving sustainable development solutions to effect lasting change.
A collaborative research effort 20 years in the making received a $14 million grant in 2017 to advance human health and well-being in selected urban informal settlements of Fiji and Indonesia. Awarded by the Wellcome Trust (UK), the prestigious ‘Our Planet, Our Health’ grant was won by a consortium led by Monash Sustainable Development Institute alongside the faculties of Art, Design and Architecture; Business and Economics; Engineering; Medicine, Nursing and Health Sciences; and Science, whose research innovations and technologies will see water management and sanitation practices transformed for the world’s most vulnerable people.

Revitalising Informal Settlements and their Environments (RISE) was one of only four chosen by the Wellcome Trust from over 600 global applicants and showcases the breadth and capability of Monash’s capacity to support sustainable development solutions beyond our borders. The five-year research program will see Monash-developed water sensitive technologies implemented in the roll-out. The project will include:

– Upgrades to dwellings including installation of rainwater tanks, septic tanks, toilets and communal latrines
– Faecal-contaminated water conveyed to biofilters and surface wetlands for cleaning, and containment of livestock contamination
– Installation of rainwater tanks, toilets, dwellings and communal latrines
– Storm water capture for use in urban agriculture

The ambitious program will deliver the first public health and environmental data of this kind, capturing results before, during and post implementation of the alternative water management approach. The focus is on improving the health of children under five, using markers including quality of life, environmental health, generation of productive sources of work (e.g. transforming wetlands into places to grow food, earn an income etc.) as measures of success.

Now in year one of implementation, the 24 settlements have been chosen for upgrade, and revitalisation work will begin on the first 12 in close consultation with local communities and governments. Using a Randomised Control Trial approach, the remaining 12 settlements will be upgraded two years later.

In addition to infrastructure upgrades, the program will also influence water policy, regulation and practice in these settlements, further supporting the transformation of the health and well-being of these communities, as well as serving as proof of concept for replication elsewhere in the world.
BREATHING NEW LIFE INTO OXYTOCIN

CROSS-SECTOR COLLABORATION TO PREVENT MATERNAL DEATHS IN DEVELOPING COUNTRIES

Universities are an important partner to government, business and the wider community in achieving the Sustainable Development Goals. Researchers at our Monash Institute of Pharmaceutical Sciences are showing the power of cross-sector partnerships by working with international collaborator GlaxoSmithKline, the philanthropic and development sectors as well as in-country research and community groups to innovate the delivery of oxytocin.

SDG 3.1 aims to significantly reduce global maternal mortality by 2030. Every year over 300,000 women die of postpartum haemorrhage – excessive blood loss after childbirth – making it the largest single contributor to maternal mortality.

Postpartum haemorrhage is overwhelmingly concentrated in the poorest countries of the world and is also strongly correlated with infant mortality. Postpartum haemorrhage can be effectively prevented or treated with an injection of oxytocin. However, access to this drug is limited in poor, remote communities due to the requirements for refrigeration and the need for trained medical personnel to administer the drug via injection. Monash research to develop a new drug delivery system by inhaling oxytocin rather than it being injected, has recently entered a crucial phase of clinical trials with GlaxoSmithKline. Results to date are proving that this innovation of inhalable medication has the potential to positively impact millions of new mothers in resource-constrained countries.

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TEACHING

AIM

To improve the understanding of environmental, social and governance investment issues, risks and sustainable finance in the student population and future managers.

OBJECTIVES

Become a signatory to the Principles for Responsible Management Education (PRME) and thereby committing to determining the most appropriate means of applying those principles to teaching and research, being cognisant of differing relevance from faculty to faculty.

Increase the understanding of ESG investment issues and sustainable finance throughout the University’s curriculum to improve ESG investment approaches and the knowledge of future investors.
MEANINGFUL SKILLS FOR THE REAL WORLD

FOSTERING THE SUSTAINABILITY LEADERS OF TOMORROW THROUGH TAILORED UNDERGRADUATE COURSES

Environmental Policy & Management

Facilitated through the Faculty of Arts, our long-running Environmental Policy & Management course continued its popularity in 2017 with cross-faculty uptake by hundreds of Monash undergraduate students.

The unit provides an introduction to different perspectives and issues that influence environmental policy and management in Australia and abroad. Ideas of sustainability are examined as an approach to policy with the aim of identifying how the integration of environmental, social and economic issues may best be achieved.

The course introduces students to the concept of environmental governance and the many different aspects for consideration in policy decision-making. It instils an understanding of how environmental policy-making and management is positioned within governance structures and provides an understanding of the geographical relationship between environmental issues, policy and management at local, national and global levels. Running for more than two decades, course graduates have gone on to pursue government and environmental engineering roles both nationally and globally. With a third of enrolments comprising overseas students, many return upon completion, to government or NGO roles in Asia and South East Asia where learnings are applied directly to real-world settings.

Ideas of sustainability are examined as an approach to policy with the aim of identifying how the integration of environmental, social and economic issues may best be achieved.
GENERATION CHANGE THE WORLD

FOSTERING THE SUSTAINABILITY LEADERS OF TOMORROW THROUGH PRACTICAL, EXPERIENTIAL DEGREES

Bachelor of Science Advanced - Global Challenges (Honours) Degree

Now in its fifth year, and the first of its kind, our Advanced Science Honours degree continues to create leaders and thinkers armed with the technical knowledge and commercial know-how to address some of the world’s biggest environmental, social and governance challenges.

Designed for high-achieving students, this undergraduate degree recognises that to create real change, the world needs more than just brilliant scientific minds. It needs leaders, deep-thinkers, adventurers, boundary-pushers, inspirers, innovators, entrepreneurs and game-changers. As such, the degree features all the technical material of a standard Bachelor of Science, but includes practical, real-world behaviour and attribute training like how would you go about approaching members of local government vs. how would you approach a senior influencer in big business vs. how would you influence change within a local community?

Amongst many other practical skills, the degree teaches students how to work around roadblocks, how to write business case reports, how to make a ‘Freedom of Information’ request and how to gather evidence holistically. It provides students with an awareness of cultural sensitivities and behaviours when dealing with international parties, and most importantly, the skills required for today’s graduates to succeed: adaptability, a growth mindset and the ability to continuously incorporate emerging technologies and best practices into their thinking. It equips students with self-efficacy, confidence and resiliency to tackle the big challenges of today and the future.

As part of the degree, students are exposed to leaders in industry through regular industry dialogues and are required to undertake a leadership quest on a sustainability issue close to their heart. In their second year - with University and investor support - students are encouraged to launch and grow a business which addresses an environmental, social or governance need. All students are also required to organise and complete an international internship which yields real-world experience abroad, and often results in employment opportunities following graduation.

The Global Challenges degree represents a new breed of educational program and due to its popularity, will expand from 2019 onwards.
The course takes an interactive, collaborative approach to analysing the interdependence of nature, society and the economy.

Through teaching we play a vital role in equipping the next generation of leaders and innovators with the knowledge and skills to address sustainable development challenges.

In line with our commitment to improving the understanding of ESG investment issues, risks and sustainable finance, we expanded our extensive graduate education opportunities in 2017 to include purpose-designed programs dedicated to fostering the sustainability leaders of tomorrow.

Our ‘Master of Environment and Sustainability’ is a forward-thinking, interdisciplinary, two-year course that integrates the knowledge needed to mitigate and adapt to global change with sustainability principles.

It is the first cross-faculty Master at Monash, run by Monash Science, Arts and Business School together with Monash Sustainable Development Institute. It is also the first and only Master course in Australia to offer a program specialising in sustainable development leadership.

The course takes an interactive, collaborative approach to analysing the interdependence of nature, society and the economy. Students are provided with an opportunity to specialise in one of five areas:

- Corporate environmental and sustainability management
- Environment and governance
- Environmental security
- International development and environment
- Leadership and sustainable development

As a signatory to the Principles for Responsible Management Education (PRME), we prepare graduates to be responsible and effective global citizens who engage in an internationalised world, exhibit cross-cultural competence, and demonstrate ethical values. Applying knowledge and skills through internships, industry-linked projects, or a research thesis provides our students with job opportunities across business, governments, in national and international NGOs, at universities, think tanks, or in consulting.
ENGAGEMENT

AIM

To be a key influencer in local, regional and international networks that result in improved adoption of sustainable development solutions.

OBJECTIVES

Leading the SDSN Network Australia Pacific Region that aims to mobilise scientific and technical expertise in support of sustainable development problem solving

Becoming a signatory to the ‘Universities commitment to the SDG’ charter when finalised
GETTING STARTED WITH THE SDGS

SHARING KNOWLEDGE AND FOSTERING LEADERSHIP ON IMPLEMENTATION OF THE SUSTAINABLE DEVELOPMENT GOALS

The United Nations Sustainable Development Solutions Network (SDSN) mobilises scientific and technical expertise from academia, civil society and the private sector to support sustainable development problem solving around implementation of the SDGs. It engages scientists, engineers, business and civil society leaders and promotes technical and business innovations which support sustainable development.

The SDSN is a global network headed by regional leads charged with developing and promoting solutions, policies and public education in their allocated regions. As host of the Australia / Pacific hub, Monash University leads a membership comprising universities and other knowledge institutions on how government, business, communities and the academic sector can embrace the SDGs.

To this end, Monash Sustainable Development Institute worked with our regional network to produce ‘Getting Started with the SDGs in Universities’ in 2017. The publication provides practical guidance on how organisations like ours can accelerate their contributions towards economic prosperity, social inclusion and environmental sustainability for all through research, teaching, operations and community leadership.

The guide has already been translated into Japanese, Spanish and Chinese with other translations to follow.

Monash’s involvement in this guide is the latest example of our leadership on SDG implementation, but we continue to lead and participate in a wide range of initiatives to foster local and international implementation of the SDGs.

In March 2018, the SDSN Australia / Pacific network co-hosted Australia’s second Sustainable Development Goals Summit. The summit brought together over 260 leaders and decision makers from over 200 Australian Government, business, civil society, academia and youth organisations to assess where we are and discuss how we can further advance action.

The network also helped coordinate input and case studies from the university sector to Australia’s first National Voluntary Review on SDG implementation, which the Government presented to the United Nations in July 2018.
Over the last year, our partnership with Oxfam Australia has continued to support positive change globally through pairing our academics with Oxfam’s field-based teams and communities to address the root causes of poverty.

Now in its eighth year, the relationship is built on a simple premise - that working in partnership can achieve more than working on one’s own. A first of its kind, the Oxfam-Monash Partnership is a long term initiative designed to enable easy reach between research and practitioners to inform meaningful, real world change. It is a key example of cross-sector collaboration to achieve the SDGs through the Partnership’s four thematic areas: Gender Equality; Climate Change and Resilience; Migration and Displacement; and Accountability.

Most recently, academics from Monash Arts worked with Oxfam field-teams to undertake a study in post-war Sri Lanka focused upon the participation and recognition of rural women in sustainable agricultural livelihoods.

Despite being ever-present in agricultural economies, the labour participation and contribution of rural Sri Lankan women is invisible in agricultural policy. The purpose of the study was to generate insight, data and evidence to inform policy and advocacy on the ground, and to promote more equitable participation and recognition of rural Sri-Lankan women in agriculture.

In March 2018, a comprehensive list of recommendations were published and provided to Sri Lankan Governments, policy makers, planners, implementers and advocacy groups to bring about systemic change.
LEAVE NO ONE BEHIND

GIVING FLIGHT TO CREATIVE ENTERPRISES WHICH ADDRESS SOCIAL DISADVANTAGE IN OUR COMMUNITIES

Launched in 2017, ‘Leave No One Behind’ is a social entrepreneurship competition for students and recent graduates to showcase their business ideas for addressing social disadvantage and inequality in the community.

It encourages problem-solving, creative thinking and teamwork to help solve some of the most pressing challenges of our time through development of a new process, service, business model or method of delivery. The initiative is a collaboration between Monash Sustainable Development Institute, Monash Business School and the faculties of Art, Design & Architecture, Arts, Law and Education with support from Grameen Australia.

In its inaugural year, Leave No One Behind provided funding to four teams.

Winnie Wong took first prize for her social business ‘Assisted Outing’ - a crowdsourced community marketplace providing tailored trips and outings for people with special needs.

Other awarded enterprises included:
- Grounded – a company repurposing used coffee grounds into exfoliator scrub bars, with profits directed towards existing service providers working with at-risk youth
- Room & Board - Australia’s first social business hotel that reinvests profits into Victoria’s leading homelessness prevention service
- Operation Mobilise – a video production agency that profiles and tells the stories of people experiencing homelessness

As a signatory to the Universities Commitment to the Sustainable Development Goals, we are committed to supporting and promoting the principles of the Goals. Through Leave No One Behind, Monash is enabling students to develop local solutions to these universal challenges, with a particular focus on social inclusion.

It encourages problem-solving skills, creative thinking and teamwork to help solve some of the most pressing challenges of our time through development of a new process, service, business model or method of delivery.
AIM

To measure and monitor the transition to a net zero carbon emissions organisation.

OBJECTIVES

- Determine a road map and time frame to achieve Net Zero emissions
- Application of the ClimateWorks Pathways to Deep Decarbonisation to achieve the ambitious changes in energy efficiency, low carbon electricity, electrification, fuel switching and offset tree planting in pursuit of this goal
- Set five-year infrastructure investment goals to measure and monitor our transition to a net zero carbon emissions organisation
- Utilise our research and teaching capability to develop our campuses as exemplars of environmental practice
TARGETING 100% RENEWABLE POWERED CAMPUSES BY 2030

ClimateWorks Australia’s research under the United Nations’ Sustainable Development Solutions Network (SDSN) ‘Deep Decarbonisation Pathways Project’ has been translated into an implementation strategy to enable net zero emissions across our Australian campuses by 2030.

The strategy targets the adoption of deep energy efficiency programs, electrification of our campuses to eliminate dependency on natural gas, on-site renewable energy generation and transition to a 100% renewable electricity supply.

Implementation of the strategy will see our campuses transform into living laboratories for net zero emissions at a city scale and expose our students to an energy revolution; arming them with learnings they can take to industry and out into communities.

To enable our transition to net zero emissions, the last year has seen us continue our infrastructure upgrades including:

- Buildings transformed into efficient micro-power plants through installation of LED lighting, rooftop solar, building control optimisation, and integration of energy storage capacity
- Electrification of essential services including heating and cooling as well as upgrades to efficient electric heat pumps for hot water services to eliminate reliance upon natural gas
- Implementation of Passive House principles for all new buildings and building retrofits to ensure comfortable healthy environments for building occupants whilst radically reducing our heating and cooling demands

Where our energy requirements exceed onsite generation, we will be sourcing renewable power from an offsite wind farm to meet demand and are in the process of putting a corporate power purchase agreement in place.

In the last year an investment plan to support our Net Zero strategy has been developed and this includes tapping into the global climate bond market to finance our new high performance buildings.

It encourages problem-solving skills, creative thinking and team work to help solve some of the most pressing challenges of our time through development of a new process, new service, business model or method of delivery.
INTERDISCIPLINARY AND INDUSTRY COLLABORATION YIELDS DEVELOPMENT OF A SCALABLE ENERGY NETWORK

A key component of our Net Zero strategy is development of the Monash Microgrid; a scalable embedded energy network which will control the supply and demand of energy across our campuses.

Beginning with Clayton, the Monash Microgrid will be able to detect when the broader power network is under stress and switch off, power-down, or re-prioritise energy across our campus accordingly.

As it will be interconnected with our smart buildings and assets, the Microgrid will also be able to determine the best times to initiate our generation capacity, or charge our batteries for storage. This means that during peak periods of energy consumption, we can reduce our energy demand or switch to stored power; alleviating strain on the distribution system and helping to stabilise the broader network.

Our Microgrid will be designed as a model for communities, cities and other organisations to replicate. In collaboration with the Monash Energy Materials and Systems Institute (MEMSI), the Microgrid’s performance will be analysed to determine network optimisation, policy & regulation, consumer behaviour and network reliability.

It is our hope that lessons learned through analysis of our journey will prove valuable to the development of energy networks around the world; both urban and rural.

Through demonstrating what’s possible on our campuses, we aim to inspire other communities to harness greater control over their energy supply, to develop a level of self-sufficiency in generating and storing their own power, and to encourage the development of community based energy markets where individuals will be able to sell the surplus energy they generate back into the broader grid.
**RESPONSIBLE INVESTMENT**

**AIM**

*To incorporate implementation details of the ESG Strategy into our Investment Policy and Procedures.*

**OBJECTIVES**

- Update the terms of reference of the Investment Advisory Committee to reflect the ESG Statement
- The University and investment fund managers to be signatories to the United Nations’ Principles for Responsible Investment (PRI)
- Actively work with fund managers to exclude companies whose primary activity is coal production from its indirect investment portfolio
- Determination, development utilisation of a best practice investment rating / assessment scheme to be used to select investment fund managers and / or investment funds (i.e. positive and exclusionary screening of the University’s investment portfolio)
- Annual review of current ESG risks and investment, including positive or exclusionary screening processes and low-carbon assets, technologies and renewable energies
- Annual reporting by external fund managers addressing ESG integration; changes in material ESG risks, activities, and low carbon investment
In 2017 the ‘Terms of Reference’ by which our Investment Advisory Committee operate was updated to reflect the ESG commitments made in our Statement. As part of these commitments, we became a signatory to the United Nations’ “Principles of Responsible Investment” (PRI) and in doing so, the first Australian university to commit to the PRI.

As a signatory, we commit to incorporating ESG factors into our investment and ownership decision making and to seek appropriate disclosure on ESG issues from the entities in which we invest. We also commit to promoting implementation of the Principles within the investment industry.

In 2017, we advised our fund managers that we would only do business going forward with signatories of the PRI. As a result, we are pleased to report that all fund managers engaged by Monash University are now signatories to the PRI and integrate ESG considerations into their portfolio decision-making.

All fund managers selected by our Investment Advisory Committee are assessed against a comprehensive set of criteria of which ESG forms a decisive component. We are interested in the ESG rigour applied to investment decision-making and make this clear when reviewing our existing managers annually and assessing suitability of managers for the future.
PROACTIVELY SEEKING LOW-CARBON ALTERNATIVES

CONSISTENTLY REVIEWING OUR INVESTMENTS TO ENSURE AN OPTIMISED PORTFOLIO

In the last year, we have made significant steps to reduce the carbon footprint of our portfolio; going further than many of our global peers. We have committed to no direct investment in companies whose primary business is the production of fossil fuels, and beyond this, have requested our fund managers remove any coal investments from our largest portfolios.

We have re-benchmarked our core portfolio against the MSCI Indices to exclude exposure to coal, tobacco, uranium and controversial weapons and in September 2017, we proactively lowered the carbon footprint of our investment portfolio by investing a significant portion into the Russell Investments Low Carbon Global Shares Fund; a fund possessing half the carbon footprint of a typical fund of its size.

The low carbon fund targets a portfolio exposure with a 50% reduction in carbon emissions and carbon reserves relative to the MSCI ACWI ex-Australia benchmark and invests in a broad range of international shares listed on stock exchanges in developed and emerging international markets.

Whilst maintaining a reduced carbon exposure, the fund also increases our exposure to renewable energy and takes into account other ESG considerations including the exclusion of controversial weapons, uranium and tobacco companies.

Our smaller managed funds (approximately 12% of our total investments) are distributed across fixed income and emerging markets. It is possible that these funds may hold investments in coal producers from time to time. As coal producers represent just 1.3% of market indices, our indirect exposure to such companies at any given time, constitutes between zero and 0.2% of our total portfolio.

In the last year, we have made significant steps to reduce the carbon footprint of our portfolio; going further than many of our global peers.
LOOKING AHEAD
LOOKING AHEAD TO THE NEXT 12 MONTHS

Whilst we have made significant headway against our objectives in the last year, the real success story has been taking stock of the breadth and depth of the varied, and significant ESG work already taking place across the many corners of our organisation. Identifying synergies and opportunities for collaboration will only strengthen our influence, and further our impact.

We look forward to showcasing many new and meaningful collaborative ESG stories in the year ahead.

We will seek growth in research opportunities and collaborative partnerships with industry around the micro-grid and other sustainable and renewable energies and technologies.

We look forward to identifying new opportunities to embed and apply the United Nations’ Principles for Responsible Management Education within our teaching and research programs to continually improve the understanding of ESG issues, risks and sustainable finance amongst our leaders of tomorrow.

In our role as leader of the Asia / Pacific hub of the United Nations’ Sustainable Development Solutions Network, we’ll continue to engage, knowledge share and mobilise scientific and technical expertise in collaboration with our global counterparts towards sustainable development problem solving. While closer to home, we’ll continue our progress towards net zero emissions across our Australian campuses by 2030.

And as a global investor, we will continue to consider low carbon global equity funds where it makes financial sense to do so, as well as only doing business with investment managers who are signatories to the Principles for Responsible Investment. We will continue to include the ESG maturity of our fund managers in every investment decision we make.

We will seek growth in research opportunities and collaborative partnerships with industry around the micro-grid and other sustainable and renewable energies and technologies.