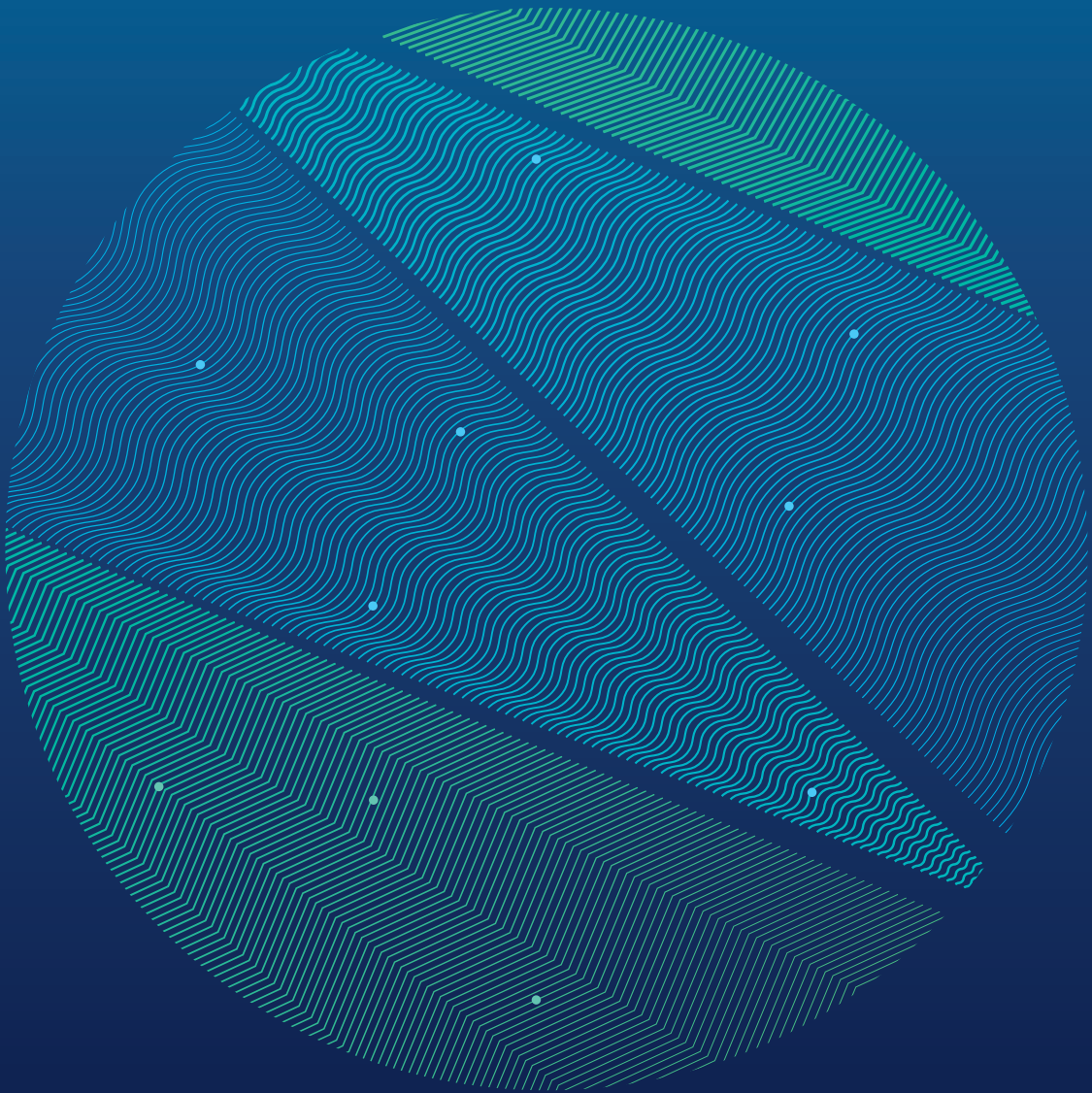




SUSTAINABILITY PLAN

2017 – 2020







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1.0 MESSAGE FROM THE VICE-CHANCELLOR

THE UNITED NATIONS AGREEMENT REACHED IN PARIS IN LATE 2015 MARKS AN IMPORTANT MOMENT IN THE GLOBAL RESPONSE TO CLIMATE CHANGE. AFTER PARIS, THE MESSAGE OF CHANGE – AND HOPE – RINGS TRUE NOT JUST FOR GLOBAL GOVERNMENTS, BUT LIKEWISE FOR INSTITUTIONS THROUGHOUT SOCIETIES.

Important among these institutions are higher education providers. As Nobel Laureate and University of Melbourne scientist Professor Peter Doherty has rightly said: "Universities can contribute massively to building a more sustainable world."

The Sustainability Plan for the University of Melbourne details this institution's commitment to this important task. It sets out an ambitious path towards new modes of governance and operations in a warming world.

The Plan is based on the principles and commitments of the Sustainability Charter, and identifies targets and priority actions for the University in the period 2017 to 2020. It provides the sustainability practitioners of the University – students and staff alike – with benchmarks and an overview of where we are headed. Our progress on the targets in the Plan will be tracked in the annual Sustainability Report, providing an opportunity to refine and redirect our efforts most effectively.

As this Plan shows, we are taking action across all areas of institutional activity in order to tackle the impacts of climate

change. From solar panels and geothermal systems on campus, to long term renewable energy supply contracts, we are mapping out pathways to minimise emissions. Our research expertise is being brought to bear in partnerships with industry, government and communities to create the social transition required for a sustainable future.

Meanwhile our campuses increasingly provide a blueprint for 'living laboratories' of sustainability, to inspire others and help re-imagine community approaches to energy use. An Education for Sustainability project will be established, to aid students in developing knowledge and skills to be leaders for sustainability.

This Plan is not only a public statement of our commitment to sustainability. It also reflects the consolidated efforts and collective will of the University community, responding to public expectations of the role we should play as a university in helping meet a grand challenge of our age.

Accordingly on behalf of the institution, I am proud to present the University of Melbourne Sustainability Plan.





2.0 SUSTAINABILITY @ MELBOURNE

AS A DISTINGUISHED RESEARCH AND TEACHING INSTITUTION, THE UNIVERSITY OF MELBOURNE HAS A SOCIAL RESPONSIBILITY TO LEAD STRONGLY AND ACT DECISIVELY IN ADDRESSING THE MOST PRESSING OF GLOBAL SOCIETAL CHALLENGES.

Our vision is to be one of the finest universities in the world, contributing to society in ways that enrich and transform lives.

We are privileged to be home to some of the great environmental and social thinkers. Our students are active and engaged with social and environmental issues. We are positioned to shape public thought and practices to achieve a sustainable future. Sustainability has developed in the University over recent years to sit at the heart of all our activities. Sustainability now exists as a guiding principle of the University's strategic plan, *Growing Esteem*.

In March 2016, the University adopted a Sustainability Charter which sets out our values, principles, and commitments. The Sustainability Plan 2017-2020 ("the Plan") flows from the Charter¹ and addresses environmental and social sustainability across all these activities – together with the enabling functions of Operations and Governance. It articulates the priority actions and targets required to achieve the Charter commitments.

The Plan has been designed with involvement from the University community – staff, students, alumni, and external stakeholders. There is an emphasis on reducing the impacts of our operations and developing our campuses as sustainable and resilient communities.



Growing Esteem pays particular attention to the many different dimensions of sustainability. Our aspirations for society and environment inform the values of the University and are reflected in turn in our work. There are opportunities to embed sustainability objectives in infrastructure planning and service delivery, in developing and supporting the capabilities of staff, and in our commitment to building a robust and financially viable organisation.

¹ For more information about the Sustainability Charter and Plan development, see: <http://ourcampus.unimelb.edu.au/sustainability-plan>

HOW WE DEVELOPED THE SUSTAINABILITY PLAN

We recognise that our staff and students care deeply about sustainability. Since mid-2015, we have consulted extensively to develop both the Sustainability Charter and the Sustainability Plan. We wanted all the University community to contribute to the discussion about how the University can shape its sustainability approach and future. We are proud to say that the University community as a whole was keen to be involved in setting our agenda to 2020 and beyond. There is scope to extend our consultation as we work through the more detailed development and implementation of this Plan over coming years.

The public consultation phase for the Sustainability Plan ran from April to August 2016. We acknowledge and thank the hundreds of people who have contributed to the development of realistic and meaningful priority actions and targets to 2020. Consultation included students, staff, alumni, and other stakeholders with 475 attendees over two forum events, 72 feedback e-mails and 30 Hackathon workshop participants engaging the University community in designing this Plan.

This process has enabled us to establish the issues of greatest importance to our community, to understand more clearly and address the University's material impacts and to consider the commitments required to make the greatest contribution to addressing sustainability issues.

All feedback received has been synthesised into a feedback report. This community feedback, together with key existing University strategies has informed the development of this report.



This Plan was endorsed by the Sustainability Executive and University Executive in October 2016 and approved by the University Council in November 2016.

At The University of Melbourne, the principles of our Sustainability Charter are applied across our five integrated activity areas:

Research, Teaching & Learning, Engagement, Operations, and Governance.



THE SUSTAINABILITY CHARTER

Our sustainability commitments are enshrined in the Sustainability Charter. An enduring statement of the University's sustainability values and principles, the Charter applies to all our activities.

The Sustainability Charter identifies principles to be applied consistently across all our activities – Research, Teaching & Learning, Engagement, Operations, and Governance. It includes specific commitments for each activity area, which we must deliver if we are to truly model ourselves as a sustainable community and a leader in societal transition to a sustainable future.

The following chapters address each activity area and identify the targets and priority actions to 2020 required to deliver on the commitments of the Charter. Various frameworks and standards are required to support these commitments. Performance against the commitments of the Charter and Plan will be reported through the University's annual Sustainability Report, currently using the Global Reporting Initiative framework.

OUR CONTRIBUTION TO GLOBAL GOALS FOR SUSTAINABLE DEVELOPMENT

The University is an active member of the United Nations Global Compact (UNGC) and is committed to both local and global action on sustainability. We support the United Nations Sustainable Development Goals (SDGs) as a global pathway to equitable development. The SDGs were launched and unanimously adopted by 193 countries in late 2015.

In September 2016, we signed the 'University commitment to the Sustainable Development Goals'. This commitment calls upon universities to use their unique position in society to drive adoption of the Sustainable Development Goals.



THE SUSTAINABLE DEVELOPMENT GOALS REPRESENT THE ASPIRATIONS OF THE PEOPLE OF THE WORLD – THEY CLEARLY DEFINE THE WORLD WE WANT.²

² Australian SDGs Summit, Sydney, September 2016

THE UNIVERSITY OF MELBOURNE SUSTAINABILITY CHARTER

THE EARTH IS A FINITE ENVIRONMENT, WITH ITS PHYSICAL SYSTEMS TIGHTLY INTERCONNECTED WITH ALL LIFE ON THE PLANET. HUMANITY IS NOW IN THE HISTORIC POSITION OF CHANGING THE GLOBAL BALANCE OF BOTH THE PHYSICAL AND BIOLOGICAL ENVIRONMENTS, WITH UNINTENDED CONSEQUENCES.

Achieving a sustainable Earth requires global values and actions that are ecologically sound, socially just and economically viable. As a distinguished research and teaching institution, The University of Melbourne has a social responsibility to lead and engage in public debate and action. Through knowledge, imagination and action the University will help shape a sustainable planet and will be an international exemplar of an ecologically sustainable community.

The University's obligations in relation to sustainability are to:

- » demonstrate leadership, globally, nationally and locally;
- » generate interdisciplinary knowledge to underpin community action;
- » enable active global citizenship for all students and staff;
- » recognise the past and future contribution of Australian Indigenous peoples to custodianship of the environment;

- » promote equity in the use of global resources; and
- » ensure transparency and accountability in all institutional activities

As committed to in *Growing Esteem*, this Charter frames the values and principles to be embedded throughout the University's operations, and identifies the commitments required to achieve a sustainable future.

COMMITMENTS



Research underpins the University's contribution to creating a sustainable world. The University will:



- » conduct research that contributes significantly to knowledge and action across the interdisciplinary dimensions of sustainability;
- » support researchers across different fields to work collectively on environmental problems; and
- » use sustainability principles to guide decisions about research funding, conduct and communication

The teaching and learning programs of the University inspire and support students to be leaders for a sustainable future. The University will:



- » offer an education that enables graduates from all disciplines to contribute to change for sustainability;
- » provide specialist interdisciplinary education in the environment and sustainability; and
- » develop people who have the skills to create, define and succeed in the future careers and industries of sustainable societies

The University's staff and students actively engage with all sectors to drive progress towards sustainability. The University will:



- » be a leading voice in raising public awareness and advancing and influencing policy discussion and debate;
- » work strategically with partners to create innovative solutions to sustainability challenges; and
- » engage in ongoing dialogue and collaboration with the community on the University's environmental impact and performance

Sustainable practices are embedded in all of the University's operations, modelling innovative ways to maximise social and environmental value. The University will:



- » develop and maintain its campuses as living laboratories of sustainable communities;
- » lead technological, financial and social innovation through applied sustainability projects;
- » instil sustainability principles in procurement decisions, across product life cycles and supply chains; and
- » implement investment strategies consistent with the University's commitment to sustainability and its financial and legal responsibilities

The University integrates sustainability principles into its decision-making and the management of the organisation. The University will:



- » build and maintain the planning, decision-making and governance framework required to enact the commitments of this Charter; and
- » involve the University community in decision-making and ensure transparent reporting on progress towards delivering these commitments

IN ACHIEVING THE COMMITMENTS OF THIS CHARTER WE WILL FULFILL THE ASPIRATION OF THE UNIVERSITY'S MOTTO: POSTERA CRESCAM LAUDE – WE SHALL GROW IN THE ESTEEM OF FUTURE GENERATIONS.

3.0 TARGETS AT A GLANCE

RESEARCH

- » Equip ourselves to be a prominent actor in annual global sustainability policy development
- » Develop industry partnerships that emphasise our resources for sustainability research including the campus as a living laboratory
- » Ensure strong research links to campus sustainability operations and planning
- » Communicate University sustainability research knowledge to the broader community

TEACHING & LEARNING

- » By 2020, all undergraduate degree programs can demonstrate (at the course and/or major level) that core and compulsory curriculum enable students to understand and apply sustainability knowledge and values to practice in their field, consistent with the Melbourne graduate attributes
- » Increase the number of University of Melbourne graduates who can demonstrate a specialisation in environment and sustainability as defined by the National Learning and Teaching Academic Standards Statement for Environment and Sustainability, thereby contributing to their employability
- » Evidence of increased student engagement with organisations positively contributing to sustainability through work-integrated and classroom activities

ENGAGEMENT

- » Ensure the University's convening power is used to bring together policy leaders, industry and academic experts to advance issues of sustainability
- » Deeply embed sustainability considerations within the six University-wide Keystone Engagement Programs of the Engagement Strategy

OPERATIONS

Energy & Emissions

- » Achieve carbon neutrality before 2030
- » Achieve zero net emissions from electricity by 2021
- » Reduce emissions by 20,000 tonnes of carbon per year by 2020 through on-campus energy projects

Water

- » Reduce mains water usage by floor area by 12% from 2015 baseline by 2020

Waste and Recycling

- » Reduce waste to landfill to 20kg per person by 2020

Travel and Transport

- » Complete a Sustainable Transport Strategy for all University campuses by end-2017
- » Offset staff air travel emissions – 50% by 2018, 100% by 2020
- » Reduce air travel emissions per staff member by 5 to 10% for international, 10% for domestic by 2020

- » Reduce fuel emissions from fleet vehicles by 25% from the 2015 baseline by 2020
- » Offset 100% of remaining fleet emissions annually
- » Reduce the University's car fleet by 20% from 2015 baseline by 2020
- » Replace 10% of University car parking spaces with bicycle parking by 2018

Biodiversity

- » Publish a university-wide Biodiversity Management Plan by March 2017
- » Establish biodiversity baseline data for Parkville and Southbank campuses by mid-2017
- » Establish biodiversity baseline data for the remaining campuses by end-2018
- » Complete campus-specific plans and commence implementation by end-2020

Sustainable Buildings and Communities

- » Maintain minimum five-star Green Star 'Design and As Built' rating (or equivalent) for all new buildings, achieving a minimum six-star or equivalent by 2020

- » Achieve Green Star Communities accreditation for the Parkville Campus by mid-2017

Climate Adaptation and Resilience

- » Develop and implement Climate Adaptation Plans for each University campus by 2020

Goods and Services

- » Develop and implement a Supplier Code of Conduct by March 2017
- » Achieve commitments under the University's Fair Trade certification

Campus Engagement

- » Awareness: increase staff/student 'level of awareness in University sustainability issues' to over 15% with high level of awareness and 70% with moderate awareness or higher
- » Participation: Increase staff/student 'level of participation in Sustainability initiatives'
- » Action: Increase staff/student 'personal undertaking of sustainability activities'
- » Perception: Increase staff/student 'satisfaction with University efforts' in each of the surveyed fields

INVESTMENTS

- » By 2021 the University's investment portfolio will:
 - Have divested from, or be in the process of divesting from within a reasonable period, any material holdings that do not satisfy the requirements of the University's sustainable investment framework for managing material climate change risk
 - Incorporate a meaningful allocation of impact investments in the strategic asset allocation, potentially in partnership with peer organisations
- » Establish a separate specific investment fund where a donor wishes to stipulate (subject to certain conditions) investment parameters for their endowment that are not accommodated through the existing portfolio
- » Become a direct signatory to the United Nations Principles for Responsible Investment

GOVERNANCE

- » Ensure that sustainability remains enshrined at the highest level of University strategies
- » Report annually and publicly on the University's sustainability impacts and performance using global best practice standards
- » Uphold the principle of stakeholder inclusiveness in our reporting and decision making processes

4.0 OUR OPERATIONS AND THEIR IMPACT



CHARTER COMMITMENTS

SUSTAINABLE PRACTICES ARE EMBEDDED IN ALL OF THE UNIVERSITY'S OPERATIONS, MODELLING INNOVATIVE WAYS TO MAXIMISE SOCIAL AND ENVIRONMENTAL VALUE. THE UNIVERSITY WILL:



As Australia's leading university with a community of more than 53,000 students and staff³ across seven campuses, the University is focussed on leading by example in its own operations. Developing our campuses as sustainable and resilient communities, and protecting and enhancing biodiversity, are aspects highly valued for their positive impact and contribution to the University of Melbourne experience.

Embedding sustainability practices into everything we do has enabled significant reductions in resource consumption, carbon emissions and waste over many years. The commitments of the Sustainability Charter signal the strengthening of our resolve to conduct our operations in the most

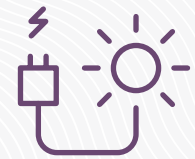
environmentally and socially responsible manner. We are prepared to set bold targets and ambitious priority actions to model sustainability and resilience through our operations.

In this Plan we commit to achieving zero net emissions from electricity by 2021 and to bring forward our 2030 carbon neutral target. We are undertaking an unprecedented scale of energy reduction and generation and water capture and reuse projects on campus. We are positioning ourselves to accurately measure and address the emissions from business air travel and to understand more clearly our supply chain impacts.

³ Annual Report 2015: 45,411 student EFTSL & 8,063 staff FTE

4.1 ENERGY & EMISSIONS

WE HAVE SET AMBITIOUS ENERGY TARGETS TO FOCUS OUR EFFORTS OVER COMING YEARS AND DEMONSTRATE THE LEADERSHIP ROLE OF UNIVERSITIES IN THE SOCIETAL TRANSITION AWAY FROM RELIANCE ON FOSSIL FUELS.



The University is strengthening its commitment to minimise fossil fuel use and exploit opportunities to access emissions-free energy, both on and off campus. The University is a large-scale consumer of energy for its power requirements, predominantly from electricity and gas. This demand has a material impact through the global warming effects of fossil fuel use.

Electricity consumption generated 90 per cent of our Scope 1 and 2 carbon emissions⁴ – 114,000 tonnes (around 100,000 MWh) in 2015. Two large projects in progress⁵ are expected to reduce emissions from electricity by around 17 per cent from 2015 levels by end-2018. The 'Carbon Reduction Pathways' preliminary report identifies, analyses and ranks the potential options to reduce the University's net emissions from electricity to zero by 2021.

Carbon reduction opportunities fall into four main categories:

- » **demand management:** Reducing electricity usage on campus
- » **on campus generation:** Installations on campus buildings
- » **off campus generation:** purchase agreements for generation of clean energy (wind or solar) off campus
- » **market mechanisms:** purchase of green power offsets or carbon market products⁶

SUSTAINABILITY IN ACTION ↓

In 2015, the University obtained finance from the Clean Energy Finance Corporation (CEFC) to undertake a suite of renewable energy generation and energy efficiency projects on our campuses. These projects include rooftop solar generation, voltage optimisation, and efficient freezer upgrades and are expected to reduce the University's carbon emissions by over 9,000 tonnes per annum. Opportunities for micro-wind and concentrated solar technologies are being investigated.

The University is also participating in the landmark Melbourne Renewable Energy Project (MREP). This group procurement partnership with leading Melbourne businesses, councils, cultural institutions and other universities provides a supply model which enables additional renewable energy capacity in Victoria. Once complete, this initiative is expected to reduce the University's carbon emissions by 10,000 tonnes per annum.

PRIORITY ACTIONS

- » Further develop and implement the Carbon Neutrality strategy⁷
- » Model off-campus renewable energy supply options
- » Complete a full energy audit across all campuses by end 2017
- » Develop new buildings on campus with 'zero emissions-ready' approach
- » Complete Greenhouse Gas Inventory by mid-2017, to be included in annual Sustainability Report
- » Monitor and report energy intensity⁸

The University of Melbourne is registered under the National Greenhouse and Energy Reporting Act 2007, and is accordingly obliged to report information on greenhouse gas emissions, energy production, and energy consumption.

TARGETS ↓

1.

ACHIEVE CARBON
NEUTRALITY BEFORE

2030⁹

2.

ACHIEVE ZERO
NET EMISSIONS FROM
ELECTRICITY BY

2021

3.

REDUCE EMISSIONS BY

20,000

TONNES OF CARBON
PER YEAR BY 2020
THROUGH ON-CAMPUS
ENERGY PROJECTS¹⁰

⁴ Scope 1: All direct GHG emissions (e.g. mains gas); Scope 2: Indirect greenhouse gas emissions from consumption of purchased electricity, heat or steam. Emissions figures are represented as tonnes of carbon dioxide equivalent

⁵ CEFC and MREP – see Sustainability in Action box

⁶ Carbon market products will be used as a balancing item to further reduce emissions as required

⁷ Includes further stages of Carbon Reduction Pathways project

⁸ Energy intensity is defined as energy usage by external gross floor area (GJ/m² GFA), which was 0.705 GJ/m² GFA as at end 2015

⁹ Scope subject of further analysis as per priority actions

¹⁰ Comprising 9,500 tonnes (8,850 MWh) per year from committed projects and 10,500 tonnes from additional projects to be developed from the Carbon Reduction Pathways work. Projects include renewable energy (increase from 210kW capacity as at end 2015 to over 2,500 kW by 2018), energy reduction and efficiency initiatives

4.2 WATER

A WARMING AND DRYING CLIMATE PLACES GREAT PRESSURE ON WATER RESOURCES IN BOTH URBAN AND RURAL AREAS. SOUTH-EASTERN AUSTRALIA IS PARTICULARLY IMPACTED BY CLIMATE CHANGE. THE UNIVERSITY IS COMMITTED TO WATER CONSERVATION, CAPTURE AND REUSE ON CAMPUS.



TARGETS

1.

REDUCE MAINS WATER USAGE BY FLOOR AREA BY

12% FROM 2015 BASELINE BY 2020*

THIS IS EQUIVALENT TO A
40% REDUCTION FROM OUR ORIGINAL 2006 BASELINE

The University is a significant consumer of water in Melbourne, using 447,000 kilolitres of mains water in 2015. Over the next four years, the focus will be on fully reviewing and implementing the Water Management Plans for each campus. These plans cover water conservation, distribution, harvesting, measurement, and quality. An important first step will be to implement an appropriate metering and monitoring system to enable data capture and inform decision-making.

PRIORITY ACTIONS

- » Complete annual report and review of Water Management Plans for each campus
- » Commission the existing Parkville purple pipe¹² network to facilitate use of harvested water
- » Implement infrastructure to monitor all harvested water usage

The University has obligations to water authorities and participates actively as a key stakeholder in voluntary collaborative programs and initiatives.

- » Obligations as a customer in City West Water's Customer Charter, and other Water Authority requirements, as applicable
- » Obligations with respect to trade waste discharges from sites are outlined in the Trade Waste Customer Charter
- » The University is a key stakeholder in the City of Melbourne Elizabeth Street Catchment Integrated Water Cycle Management (IWCM) Plan

¹¹ 2015 baseline is 0.53 kilolitres per square metre of external gross floor area (kL/m² GFA). The 2020 target is equivalent to a 40% reduction in mains water usage from the original 2006 baseline of 0.78 kL/m² GFA

¹² The 'purple pipe' is installed along the Parkville fire ring main to enable distribution of captured water across the campus

4.3 WASTE & RECYCLING

THE UNIVERSITY IS STRENGTHENING ITS LONG-STANDING COMMITMENT TO WASTE MANAGEMENT ON CAMPUS.



The challenging nature of the University environment, with a constantly changing population, has resulted in an adaptive response to waste management that trials, tests and monitors different approaches. The University will draw on this experience to implement the most effective methods to reduce waste to landfill, increase the overall recycling rate, and improve data collection and contractor management.

PRIORITY ACTIONS

- » Ensure waste minimisation considerations are incorporated into procurement decisions
- » Maximise recycling rate by enhancing bin labelling and placement
- » Expand the Reuse Program to include recovery of all equipment¹⁴ and furniture
- » Investigate broader scale organics recycling options
- » Measure waste data by disposal method daily¹⁵, with regular reporting
- » Improve contractor management to ensure effective waste disposal

The University complies with government obligations relating to waste and develops strategy in alignment and collaboration with key stakeholders.

- » National – Environment Protection and Heritage Council National Waste Policy: "Less Waste, More Resources" November 2009
- » State – Victorian Government Getting Full Value: The Victorian Waste and Resource Recovery Policy
- » Local – City of Melbourne Waste and Resource Recovery Plan 2015-18

¹³ Equivalent to a reduction of 33% from 2015 baseline of 30kg and a 70% reduction from the original 2012 baseline of 66.35kg per person

¹⁴ including "e-waste" – electronic and electrical equipment

¹⁵ Eg. TEFMA – mixed recycling, office paper, cardboard, food organics, garden waste and e-waste

TARGETS

1.

REDUCE WASTE
TO LANDFILL TO

20KG PER PERSON
BY 2020¹³

THIS IS EQUIVALENT TO A
70% REDUCTION
FROM OUR
ORIGINAL 2012
BASELINE

4.4

TRAVEL &
TRANSPORT

THE UNIVERSITY IS COMMITTED TO PROMOTING SUSTAINABLE TRANSPORT OPTIONS FOR ALL STUDENTS, STAFF, AND VISITORS.



A university-wide sustainable transport strategy will be developed, to reduce our environmental impact and optimise the unique University of Melbourne experience at our seven campus locations across Melbourne and regional Victoria.

AIR TRAVEL

Air travel by staff on University business is estimated to be our second largest source of carbon emissions, in the order of 60,000 tonnes in 2015. A bold commitment to reducing air travel will underpin University-wide action to provide flexible alternatives to air travel, such as high quality teleconferencing facilities. Remaining emissions will be offset progressively to 2020. Implementation of the new travel management system 'Easier Travel' will provide comprehensive and complete air travel information from 2017.

VEHICLE FLEET

Reducing our vehicle fleet emissions is an important part of the University's overall commitment to sustainability. Since 2007, the University has offset all motor vehicle carbon emissions with Greenfleet. Initiatives such as the pool car system implementation and sustainable vehicle recommendations have helped reduce the fleet size and realise a 13 per cent saving on carbon emissions over the last five years. Implementation of the Sustainability Plan will realise further opportunities to reduce the impact of our vehicle fleet.

STUDENT AND STAFF COMMUTING

The manner in which we commute is arguably one of the biggest impacts we have as individuals in our daily lives. The collective impact of our travel behaviours is considerable. The University does

not have operational control over these choices, however we are in a position to greatly influence, engage, and support positive change through policy input, advocacy and collaboration with the University community, relevant institutions and authorities. The provision of cycle parking and end of trip facilities and the rationalisation of existing car parking on campus is a strategic priority to 2020.

Promoting efficient, sustainable travel and transport options is vitally important to minimise the environmental impact of commuting trips to University campuses for our 50,000 students, 7,400 staff and our visitors.

PRIORITY ACTIONS

- » Report air travel emissions derived from University business, starting 2017 calendar year
- » Investigate opportunities to reduce air travel through enhanced teleconferencing facilities and other means
- » Optimise composition and management of vehicle fleet and increase pooling of vehicles¹⁶
- » Improve the pool car booking system and automated pickup process to facilitate higher utilisation
- » Review the University Fleet Vehicle policies to promote timely uptake of sustainable vehicle options (eg. hybrid and electric vehicles)
- » Prioritise pedestrian and bicycle transit and end of trip facilities as a strategic priority across our campuses
- » Provide greater sustainable transport choices for students, staff and visitors
- » Actively manage staff and student incentives that contribute to transport emissions

¹⁶ Faculty vehicles are included in the pool car booking system where possible

TARGETS



1.

COMPLETE A SUSTAINABLE
TRANSPORT STRATEGY¹⁷
FOR ALL UNIVERSITY
CAMPUSES BY END OF

2017

2.

OFFSET STAFF AIR
TRAVEL EMISSIONS

50% BY 2018

100% BY 2020

3.

REDUCE AIR TRAVEL EMISSIONS
PER STAFF MEMBER BY

5-10%

FOR INTERNATIONAL,

10% FOR DOMESTIC
BY 2020¹⁸

4.

REDUCE FUEL EMISSIONS
FROM FLEET VEHICLES BY

25% FROM THE 2015
BASELINE BY2020¹⁹

5.

OFFSET

100%

OF REMAINING FLEET
EMISSIONS ANNUALLY²⁰

6.

REDUCE THE UNIVERSITY'S
CAR FLEET BY

20%

FROM 2015
BASELINE BY 2020²¹

7.

REPLACE

10%

OF UNIVERSITY CAR
PARKING SPACES WITH
BICYCLE PARKING BY 2018

THIS IS EQUIVALENT TO A

40%

REDUCTION
FROM OUR
ORIGINAL 2010
BASELINE

THIS IS EQUIVALENT TO A

33%

REDUCTION
FROM OUR
ORIGINAL 2010
BASELINE

SUSTAINABILITY IN ACTION



The Bike Co-op²² has found a new home in the John Smyth basement. Still run through the University of Melbourne Student Union (UMSU) Environment Office by a hard working group of student volunteers and with help from the sustainability operations team, the Co-Op is open most days of the week so anyone can come and learn how to fix and tune their bikes and have a lot of fun while doing it! The aim is to expand service and activities as more people join in and get involved. Beyond making bike riding cheaper and more accessible, the space is also a place to make things out of old bike parts, watch documentaries and give advice for bike riding in Melbourne.

Rethinking end-of-trip facilities

Southbank will be home to the University's first complete stand-alone bicycle hub. This innovative facility will service all the campus and is part of the western side redevelopment. It incorporates bicycle storage, showers, lockers and a bicycle repair stand.

The heritage listed car park under South Lawn is to be transformed into a flexible-use undercover student space. End-of-trip bicycle facilities, activity and event spaces will be incorporated, activating the area while respecting the unique space and architecture.

¹⁷ Including University fleet vehicles, EV charging stations, bike parking, End of Trip facilities, car parking, motorbike/scooter facilities, carshare, carpooling, public transport, business flights and other relevant options

¹⁸ From 2015 baseline carbon emissions of 60,000 tonnes (estimated), which is equivalent to over 7.4 tonnes per staff FTE

¹⁹ From 2015 baseline carbon emissions of 573 tonnes

²⁰ Fleet emissions have been 100% offset since 2006-07

²¹ From end-2015 baseline of 183 vehicles

²² www.umsu.unimelb.edu.au/be-yourself/environment/bike/ or www.facebook.com/melbunibikecoop

4.5 BIODIVERSITY

THE UNIVERSITY WILL ESTABLISH AND IMPLEMENT A BIODIVERSITY MANAGEMENT PLAN FOR ALL CAMPUSES.



Biological diversity is the term given to the variety of life on Earth. It is the variety within and between all species of plants, animals and micro-organisms and the ecosystems within which they live and interact. Biodiversity knows no boundaries: the plants, animals, and microorganisms that inhabit our campuses are part of the overall ecology of our planet. Biodiversity on campus does not form a stand-alone system that can be managed by the University in isolation.

The Biodiversity Management Plan (BMP) will contribute to developing and maintaining the University's campuses as living laboratories of sustainable practice. The University's biodiversity-related research on campus will be applied to improve biodiversity management techniques. Specific advice will be sought from Murrup Barak (Melbourne Institute for Indigenous Development) on the pre-European ecosystem and its management by the first people, as some culturally important wildlife (such as short-finned eels and traditional food plants) still survive in and around the University's campuses.

PRIORITY ACTIONS

- » Adopt a 'no net loss' approach to arrest the decline of the number of trees on campus
 - » Integrate biodiversity considerations in campus planning and design
 - » Maintain or increase the number of species to ensure the health of ecosystems and aid in resilience to climate change
 - » Establish a 'Research Action Partnership'²⁴ to integrate ecological and biodiversity research findings and expertise with the BMP
 - » Share outcomes of developing and implementing the BMP with our community, other universities and organisations
- Our Biodiversity Management Plan aligns with the following frameworks:
- » **National** – Biodiversity Conservation Strategy and Environment Protection and Biodiversity Conservation Act 1999
 - » **State** – Victoria's Biodiversity Plan "Protecting Victoria's Environment – Biodiversity 2036", draft 2016
 - » **Local** – City of Melbourne Draft Urban Ecology and Biodiversity Strategy and other local government policies as applicable

TARGETS

1.

PUBLISH A UNIVERSITY-WIDE BIODIVERSITY MANAGEMENT PLAN BY MARCH

2017

2.

ESTABLISH BIODIVERSITY BASELINE DATA FOR PARKVILLE AND SOUTHBANK CAMPUSES BY MID

2017²³

3.

ESTABLISH BIODIVERSITY BASELINE DATA FOR THE REMAINING CAMPUSES BY END OF

2018

4.

COMPLETE CAMPUS-SPECIFIC PLANS AND COMMENCE IMPLEMENTATION BY END

2020

SUSTAINABILITY IN ACTION

Billibellary's Walk

The importance of understanding a landscape in a cultural context is exemplified in Billibellary's Walk – a cultural interpretation of the University's Parkville campus landscape that provides an experience of the Wurundjeri peoples' physical and spiritual connection to Country.

Beekeeping

Bees@UniMelb is a new initiative that aims to educate staff and students about bees and beekeeping on campus. Bees pollinate one third of all the food we eat. Many of the fruits, vegetables, and tree nuts we consume rely on the interaction of blossom and bee. The University has several beehive sites on campus and, in 2016, launched Bees@UniMelb Honey. In addition to making delicious honey, the bees contribute to inner city fruit and vegetable production by providing a valuable pollination service to the neighbouring gardens.

²³ in partnership with the City of Melbourne

²⁴ including University researchers and Infrastructure Services Grounds Team

4.6 SUSTAINABLE BUILDINGS & COMMUNITIES

THE GUIDING PRINCIPLES OF THE UNIVERSITY ARE MOST CLEARLY VISIBLE IN CAMPUS DESIGN AND DEVELOPMENT.



TARGETS

1.

MAINTAIN MINIMUM FIVE-STAR GREEN STAR 'DESIGN AND AS BUILT' RATING (OR EQUIVALENT) FOR ALL NEW BUILDINGS, ACHIEVING A MINIMUM SIX-STAR OR EQUIVALENT BY

2020

2.

ACHIEVE GREEN STAR COMMUNITIES ACCREDITATION FOR THE PARKVILLE CAMPUS BY MID

2017

Our values of environmental and social sustainability are reflected in the experience of students, staff and the community in their daily activities on campus. While innovative space management techniques optimise the use of existing buildings, ageing infrastructure requires adaptive reuse and renewal.

The University adopts a precinct approach to maintaining world-class campus environments, with a number of precincts undergoing development over coming years. By 2020, the University will undertake the following major campus development projects in alignment with the commitments of the Sustainability Charter and Plan:

- » Western Edge Biosciences Precinct
- » Carlton Connect
- » Southbank Precinct
- » Parkville Student Precinct
- » Melbourne School of Engineering – MSE 2025
- » Student Accommodation Program

The Melbourne Metro Rail project implementation will have a significant impact on the Parkville campus over the coming years. A project team has been established to manage the impacts of construction and operations and to communicate progress to the University community. Opportunities for positive environmental outcomes, such as geothermal heat exchange, are being explored.

The functionality of places is based not just on the initial capital investment but also on how the spaces are used and enjoyed by those who live, work or play in them. Optimising use of our spaces relies on assets evolving with the changing needs and requirements of the University community. Buildings and spaces need to work in unison with their surrounding area.

The Parkville Precinct has been recognised in the State Government strategy as a National Employment Cluster and a focal point for transformation and economic development. The University of Melbourne, particularly the Parkville Campus is a cornerstone to the cluster and is embarking on the Smart Campus initiative to provide more integrated use of space data, growth projections and resource consumption data to support decision making and pave our way towards a smarter campus.

The University is examining key interventions to position the campus through the 21st century as a resilient and sustainable community with enhanced experiences for students, staff and the community.

PRIORITY ACTIONS

- » Embed Environmentally Sustainable Design (ESD) principles throughout project lifecycles
- » Investigate leading global standards applicable to precinct-level design and development
- » Review and update the University's Design Standards to enable integration of sustainability commitments
- » Develop guidelines for ESD standards for both major and minor refurbishments
- » Apply 'zero emissions-ready' approach to all campus development projects



SUSTAINABILITY IN ACTION ↓

The Old Quadrangle, the oldest building on the Parkville campus is being redeveloped as the key cultural, civic, engagement and ceremonial heart of the University. The development is to include enhanced ceremonial spaces and a mix of event, teaching and academic spaces. Adaptive reuse

and innovative heating & cooling techniques are being applied to maximise sustainability outcomes while respecting the heritage and identity of this important precinct.

4.7 CLIMATE ADAPTATION AND RESILIENCE

THE UNIVERSITY IS POSITIONED TO LEAD IN THOUGHT AND ACTION ON CLIMATE CHANGE THROUGH ADAPTING OUR CAMPUSES TO THE EFFECTS OF CLIMATE CHANGE AND PURPOSEFULLY TRANSITIONING TO MODELS OF RESILIENT COMMUNITIES.



The Sustainability Charter highlights our commitment to addressing global sustainability challenges, such as climate change. Ensuring the University's resilience over the long term requires planning for climate change impacts. Climate Adaptation Plans (CAPs) are tools to help manage this risk. The University will use CAPs to analyse risk levels and identify the adaptive actions to address climate change risks that are detrimental to communities and infrastructure. Incorporating climatic risks into all future campus development is the most effective way to reduce future impacts and losses.

A CAP for the Parkville campus was developed and implemented in 2015²⁵. It explores the primary effects of temperature, precipitation and sea-level rise and the secondary effects relating to relative humidity, drought, floods, wind, storm events and fire danger. Responsibilities are assigned across the University's operations to manage the climate change risks identified as high risk.

TARGETS



1.

DEVELOP AND IMPLEMENT CLIMATE ADAPTATION PLANS FOR EACH UNIVERSITY CAMPUS BY

2020

SUSTAINABILITY IN ACTION



The Clean Air and Urban Landscapes Hub (CAUL) is a University consortium established in December 2014 and led by Professor Peter Rayner of the School of Earth Sciences. The mission of the CAUL Hub over its six year lifespan is to take a comprehensive view of the

sustainability and liveability of urban environments. As part of the CAUL Hub and in partnership with the City of Melbourne, the University is measuring climate and air quality during the re-landscaping of University Square to measure and report the benefits of increased urban green space.

²⁵ Parkville CAP based on the AS/NZS ISO 31000 'Risk management – principles & guidelines'



4.8 GOODS & SERVICES

THE UNIVERSITY COMMITS TO PROCUREMENT ACTIVITIES THAT MEET THE HIGHEST STANDARDS OF ETHICAL AND SUSTAINABLE CONDUCT THROUGHOUT THE SUPPLY CHAIN.



The University purchases a wide range of essential goods and services that support its teaching and learning, research and campus operations. Procured goods include stationery and office supplies, furniture, food and cleaning supplies. We source external professional services in areas such as information and telecommunications, building construction, waste management, and travel.

Procurement decisions must consider economic, social and environmental impacts, and how they affect the University's financial position, reputation and progress towards sustainable development. The procurement process provides the entry point of goods into the University's waste streams. Therefore, the importance of procurement choices is recognised as significant in the University's commitment to reduced consumption and waste.

PRIORITY ACTIONS

- » Review implementation and governance of the University's Procurement Policy, ensuring procurement processes fulfil the University's social and environmental obligations established through the Sustainability Charter and Plan
- » Review existing procurement contracts and practices, relative to supply chain and product life cycle sustainability requirements
- » Procure only certified²⁶ tea and coffee products as listed by the University's supplier

STANDARDS AND FRAMEWORKS

Fair Trade Association of Australia and New Zealand

TARGETS



1.

DEVELOP AND IMPLEMENT
A SUPPLIER CODE OF
CONDUCT BY END OF

2017

2.

ACHIEVE COMMITMENTS
UNDER THE UNIVERSITY'S
FAIR TRADE CERTIFICATION

²⁶ Currently Fair Trade, Rainforest Alliance and Utz

4.9 CAMPUS ENGAGEMENT

WE ARE BUILDING A COMMITTED AND ENGAGED UNIVERSITY COMMUNITY THROUGH KEY PROGRAMS AND INCREASED AWARENESS OF THE UNIVERSITY'S COMMITMENT TO ENVIRONMENTAL AND SOCIAL SUSTAINABILITY.



Engagement through key programs leads to positive environmental outcomes and cultural change. Facilitating on-campus research opportunities involves working with the University community to promote the campus as a living laboratory of sustainability – utilising the campus as a test bed for research projects and teaching and learning opportunities with both environmental and social benefits.²⁷

We measure engagement and awareness through our annual staff and student sustainability survey.

PRIORITY ACTIONS

- » Build community capacity and engagement through the number and quality of engagements (through events, programs and online) and key programs: Sustainability Advocates; Sustainability Advocates Forum; Fair Trade Steering Committee; Engagement Working Group, and C16Hack
- » Facilitate on-campus research opportunities by working with the University community to promote a living laboratory and to lead Australia in terms of categorisation, evaluation and implementation of the Campus as a Living Lab – utilising the campus as a test bed for research projects and teaching and learning opportunities
- » Promote behaviour and policy within the University community towards more environmentally sustainable ways of studying and working
- » Utilise the University's academics and their expertise to create best-practice University operations

²⁷ Section 7.0 Engagement explores the University's Engagement Strategy and its links to Sustainability

SUSTAINABILITY IN ACTION ↓

"What could a Fair Food University look like?" The student-led 'Fair Food Challenge' has engaged in a co-design process to draft a series of fair food principles to make positive changes in the campus food systems of Australian Universities. The seven pillars of this vision are: sustainability; access & equity; health; education; innovation & opportunity; procurement and retail; resourcing and accountability.

The 'Nitrogen Footprint Project' is a PhD study within the Faculty of Veterinary and Agricultural Sciences, engaging operational staff and the

student union to calculate the amount of reactive nitrogen³⁰ ('Nr') released to the environment as a result of our resource use. Nr plays a central role in food production. However, it can also be a significant pollutant with substantial effects on air and water quality, biological diversity, and human health. The two major Nr-releasing sectors are food and energy use. Understanding our nitrogen footprint is necessary to optimise the benefits, while minimising the negative environmental impact – a valuable tool in achieving campus sustainability!

²⁸ 2014 survey results: High (10%) – Moderate (43%) – Limited (40%) – None (8%)

²⁹ Targets 1-4 are based on 2014 Sustainability Survey results

³⁰ Reactive nitrogen, 'Nr', is all species of N except N₂

TARGETS ↓

1. AWARENESS:

INCREASE STAFF/STUDENT 'LEVEL OF AWARENESS IN UNIVERSITY SUSTAINABILITY ISSUES' TO OVER

15% WITH HIGH LEVEL OF AWARENESS &
70% WITH MODERATE AWARENESS OR HIGHER²⁸

2. PARTICIPATION:

INCREASE STAFF/STUDENT 'LEVEL OF PARTICIPATION IN SUSTAINABILITY INITIATIVES'

3. ACTION:

INCREASE STAFF/STUDENT 'PERSONAL UNDERTAKING OF SUSTAINABILITY ACTIVITIES'

4. PERCEPTION:

INCREASE STAFF/STUDENT 'SATISFACTION WITH UNIVERSITY EFFORTS' IN EACH OF THE SURVEYED FIELDS²⁹

5.0 RESEARCH



CHARTER COMMITMENTS

RESEARCH UNDERPINS THE UNIVERSITY'S CONTRIBUTION TO CREATING A SUSTAINABLE WORLD. THE UNIVERSITY WILL:

CONDUCT RESEARCH THAT CONTRIBUTES SIGNIFICANTLY TO KNOWLEDGE AND ACTION ACROSS THE INTERDISCIPLINARY DIMENSIONS OF SUSTAINABILITY



SUPPORT RESEARCHERS ACROSS DIFFERENT FIELDS TO WORK COLLECTIVELY ON ENVIRONMENTAL PROBLEMS



USE SUSTAINABILITY PRINCIPLES TO GUIDE DECISIONS ABOUT RESEARCH FUNDING, CONDUCT AND COMMUNICATION

As outlined in *Growing Esteem*, the University has articulated its research priorities in three 'Grand Challenges', which underpin cross-disciplinary research efforts. These are: *Supporting Sustainability and Resilience*; *Understanding our Place and Purpose*; and *Fostering Health and Well Being*.

While one of these explicitly identifies sustainability, all three have aspects that centrally impact, or respond to, sustainability issues. The University brings sustainability into its research practices in a range of different ways. It conducts cutting-edge research on direct sustainability challenges and applications, such as new energy development or waste and recycling technologies; it considers sustainability issues that arise in connection with other, non-sustainability research questions; and it scrutinises the sustainability impacts of our research activities as a whole.

The University has a long and substantial record of contributing to local, national and global sustainability knowledge and action, through improving fundamental understanding of the issues, generating landmark research and policy reports, and developing technologies and tools to improve sustainability outcomes across society.

In translating our Sustainability Charter into actions, this Plan commits the University, including our world-leading research groups, to a deepening contribution on critical sustainability issues such as climate change mitigation and adaptation.

The momentum behind this strengthened and ongoing commitment can be seen in the existing work of the University's research institutes and centres. Already, the University is leading technological and policy development of energy resources and efficiency, sustainable economic transition, climate resilient farming and water use, smart and green urban design, sustainable products such as solar cells, thermal heating and green roofs, food security, bushfire monitoring software and emergency response modelling, sustainable corporate law and regulations, and much more.

The University's sustainability research agenda is carried out by individual researchers in diverse areas and faculties, as well as explicitly mandated research centres including the Melbourne Sustainable Society Institute, the Primary Industries Climate Challenges Centre, the Peter Cook Centre for Carbon Capture and Storage Research and the Australian-German Climate and Energy College. These flagship multi-disciplinary research efforts, along with many others, regularly bring industry, government and civil society together to challenge current thinking and offer new, evidence-based solutions to rising climate challenges.

In this next planning period, the University will foster and enable increasing research activity to address the three Grand Challenges, with a focus on supporting action-led change, and extending the use of our campuses as laboratories in support of this research.



ACTIONS

Chancellery will:

- » Develop methods and metrics to measure research outcomes and positive impacts relating to sustainability
- » Promote and support University of Melbourne research initiatives, institutes and entities that deliver partnerships and sustainability policy advancement
- » Continue to share and communicate the University's sustainability research to the broader community and key policy influencers, for example through collaboration and engagement, effective policy advocacy and evidence-based input to government processes, and circulation of publications covering our research such as the Sustainability at Melbourne brochure

Academic Divisions will:

- » Promote these targets, where appropriate to disciplinary context, to extend and deliver on research in sustainability
- » Consider the sustainability impacts of research activities, pursuing sustainable alternatives where possible
- » Work closely with alumni and partners to connect our research in sustainability to action and outcomes

University Services will:

- » Support and identify opportunities for 'campus as a laboratory' in support of research activity
- » Develop actions informed by our research

TARGETS



1.

EQUIP OURSELVES TO BE A PROMINENT ACTOR IN ANNUAL GLOBAL SUSTAINABILITY POLICY DEVELOPMENT

2.

DEVELOP INDUSTRY PARTNERSHIPS THAT EMPHASISE OUR RESOURCES FOR SUSTAINABILITY RESEARCH INCLUDING THE CAMPUS AS A LIVING LABORATORY

3.

ENSURE STRONG RESEARCH LINKS TO CAMPUS SUSTAINABILITY OPERATIONS AND PLANNING

4.

COMMUNICATE UNIVERSITY SUSTAINABILITY RESEARCH KNOWLEDGE TO THE BROADER COMMUNITY

SUSTAINABILITY IN ACTION



Informing policy through research

The University contributed activities and a sizeable delegation to the watershed UNFCCC COP21 climate change conference in Paris, December 2015. Researchers prepared a suite of briefing papers on crucial issues and key countries, providing participants and the general public alike with research-based perspectives and interpretations. The delegation created a blog, wrote articles and gave interviews to a wide range of media in real time while the historic 'Paris Agreement' was being brokered.

A University of Melbourne delegation has received official UN accreditation for the UN Habitat III Conference on Housing and Sustainable Urban Development – 'The New Urban Agenda', held in Quito, Ecuador in October 2016. Habitat III aims to reinvigorate a global political commitment to the sustainable development of towns, cities and other human settlements and will set new goals and priorities aligned with the Sustainable Development

Goals. Our delegation provided research expertise and participated in discussions that will shape the future of cities and human settlements for the next 20 years.

The campus is our laboratory for all aspects of sustainability research. We are investing in ground source heat exchangers to examine the potential for reducing carbon emissions while increasing thermal comfort of our buildings and are equipping buildings with sensors to improve data capture for research.

Sustainability research thrives in an exploratory, interdisciplinary space. The pairing of climate science and the fine arts has created an ongoing partnership with local arts organisation, CLIMARTE. In 2015, the Art+Climate=Change festival brought together 25 Australian and international exhibitions to harness the creative power of the arts to inform, engage and inspire action on climate change. We will continue to be a principal knowledge partner for future festivals.

6.0 TEACHING AND LEARNING



CHARTER COMMITMENTS

THE TEACHING AND LEARNING PROGRAMS OF THE UNIVERSITY INSPIRE AND SUPPORT STUDENTS TO BE LEADERS FOR A SUSTAINABLE FUTURE. THE UNIVERSITY WILL:

OFFER AN EDUCATION THAT ENABLES GRADUATES FROM ALL DISCIPLINES TO CONTRIBUTE TO CHANGE FOR SUSTAINABILITY



PROVIDE SPECIALIST INTERDISCIPLINARY EDUCATION IN THE ENVIRONMENT AND SUSTAINABILITY



DEVELOP PEOPLE WHO HAVE THE SKILLS TO CREATE, DEFINE AND SUCCEED IN THE FUTURE CAREERS AND INDUSTRIES OF SUSTAINABLE SOCIETIES

TARGETS



1.

BY 2020, ALL UNDERGRADUATE DEGREE PROGRAMS CAN DEMONSTRATE (AT THE COURSE AND/OR MAJOR LEVEL) THAT CORE AND COMPULSORY CURRICULUM ENABLE STUDENTS TO UNDERSTAND AND APPLY SUSTAINABILITY KNOWLEDGE AND VALUES TO PRACTICE IN THEIR FIELD, CONSISTENT WITH THE MELBOURNE GRADUATE ATTRIBUTES

2.

INCREASE THE NUMBER OF UNIVERSITY OF MELBOURNE GRADUATES WHO CAN DEMONSTRATE A SPECIALISATION IN ENVIRONMENT AND SUSTAINABILITY AS DEFINED BY THE NATIONAL LEARNING AND TEACHING ACADEMIC STANDARDS STATEMENT FOR ENVIRONMENT AND SUSTAINABILITY, THEREBY CONTRIBUTING TO THEIR EMPLOYABILITY

3.

EVIDENCE OF INCREASED STUDENT ENGAGEMENT WITH ORGANISATIONS POSITIVELY CONTRIBUTING TO SUSTAINABILITY THROUGH WORK-INTEGRATED AND CLASSROOM ACTIVITIES



The University has made significant progress towards supporting students to be leaders for a sustainable future by committing to this as an attribute of the Melbourne Graduate, establishing 'flagship' interdisciplinary undergraduate and graduate programs in sustainability, and progressing sustainability curriculum in key professional areas such as engineering, architecture and law. The University has also made positive steps to integrate the explicit and implicit curriculum, providing many opportunities for students to learn and apply sustainability knowledge through University campus experiences.

The priority is now to ensure that sustainability knowledge and values are embedded in all undergraduate degrees and majors. Achieving this depends on significant, whole-of-University action to inspire and enable Academic Divisions to develop curriculum that explores sustainability in the context of specific disciplinary or professional practices. The four-year University of Melbourne 'Education for Sustainability Project' will provide the leadership for coordinated action across all areas of the University, enabling education for sustainability to become simply 'the way we do things at Melbourne'.

PRIORITY ACTIONS

In order to achieve these targets, the four-year University of Melbourne Education for Sustainability Project will be established to provide leadership and coordinated action to embed sustainability in teaching and learning.

Chancellery will:

- » ensure appropriate leadership of the project
- » establish baseline knowledge by mapping current teaching and learning courses and subjects that develop sustainability values and knowledge
- » make sustainability curriculum innovations a priority area for teaching and learning innovation and engagement grants
- » support faculty-based Education for Sustainability leaders and activities

Academic Board will:

- » ensure all formal course proposal and review processes require Academic Divisions to identify how graduate attributes relevant to sustainability are developed through teaching and learning
- » encourage graduate attributes, including leadership for sustainability, to be documented in students' Australian Higher Education Graduation Statements

Centre for the Study of Higher Education will work with Academic Divisions to:

- » communicate a clear vision of how knowledge and values for sustainability can be practically incorporated in diverse curricula
- » provide annual professional development opportunities for Education for Sustainability
- » recognise and reward good practice through establishment of a named award for excellence in advocacy and innovation in Education for Sustainability

Academic Divisions will:

- » ensure mechanisms are in place to enable integration of sustainability in curriculum
- » ensure Associate Deans (Teaching and Learning) and Directors of Teaching have responsibility for Education for Sustainability and work with staff and students to advocate and lead action for embedding sustainability in teaching and learning in courses
- » review course level curriculum to ensure sustainability values and knowledge are fostered through core and compulsory curriculum, and in ways that are relevant to the profession or discipline
- » initiate and support development of teaching and learning support packages (see following page) and the potential for new dedicated units that enable a wider range of undergraduate and graduate students to apply sustainability knowledge and values to practical, campus-based problems
- » identify course pathways and options, either through distinct majors or recommended elective and breadth sequences, to allow all bachelor degree students to study the environment and sustainability, and to promote these specialist options to potential and current students and to employers

University Services will:

- » support student awareness of environmental and sustainability specialist pathways through dedicated marketing and course advising materials and events
- » assist with development of teaching and learning support packages
- » investigate provision of student record software that will enable documentation of curricular and extracurricular activities demonstrating graduate attributes such as sustainability leadership



TEACHING AND LEARNING SUPPORT PACKAGES ↓

The University of Melbourne campuses provide a 'living laboratory', allowing students to explore sustainability issues relating to energy, waste, food, biodiversity and more. Many academics and students are engaging with the University's Sustainability Team as part of classroom and individual research projects. To encourage and practically support this engagement, University

Services will work with Academic Divisions to develop materials for problem-based learning on key themes related to sustainability. For example, a data and activity-learning package on campus biodiversity might include a video of interviews with experts and stakeholders, a self-guided campus biodiversity tour, as well as maps and other data on campus flora and fauna.

SUSTAINABILITY IN ACTION ↓

Sustainability Teaching and Learning – Carbon Count

The Melbourne Business Practicum (MBP) is an intensive subject that assigns a small team of Masters students to an industry partner to address a current, pressing need of the partner. In one of the first projects, MBP students worked with the Royal Botanic Gardens Victoria to begin a carbon audit for the gardens' entire operations. As a complex, urban ecosystem, the Gardens stretch the limits of existing approaches to carbon accounting, which have primarily focused on energy use and transport.

The project developed into a unique collaboration between scientists and accountants, with the audit data being used to create a process-based model for managed urban environments. This model can be used by businesses and organisations to better

understand, measure and report carbon emissions, enabling organisational leaders to make more informed decisions to effectively manage their carbon emissions.

Sustainability Teaching and Learning – Research and Demonstration Program

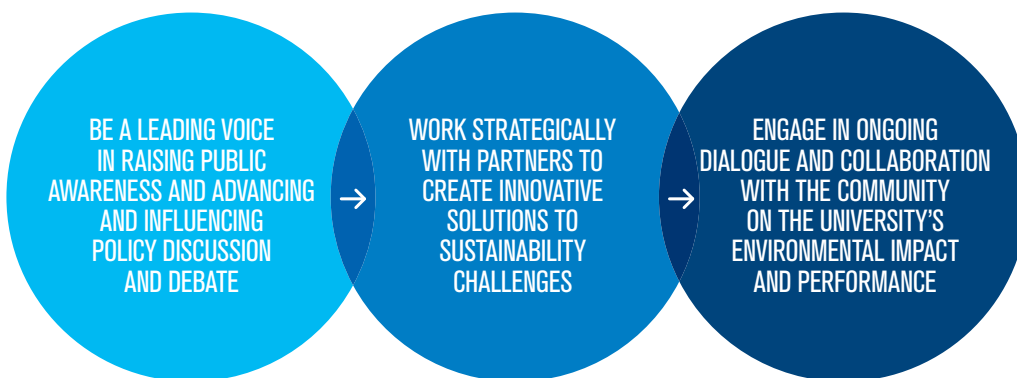
The Early Learning Centre (ELC) is a specialised research and demonstration kindergarten attached to the University of Melbourne. It is situated in Abbotsford, Melbourne – next to the Collingwood Children's Farm and the Abbotsford Convent. The ELC is a vibrant learning community where children, families, teachers and researchers work together to contribute new knowledge and understandings to the theory and practice of instilling environmental values via early childhood education.

7.0 ENGAGEMENT



CHARTER COMMITMENTS

THE UNIVERSITY'S STAFF AND STUDENTS ACTIVELY ENGAGE WITH ALL SECTORS TO DRIVE PROGRESS TOWARDS SUSTAINABILITY. THE UNIVERSITY WILL:



TARGETS ↓

1.
ENSURE THE UNIVERSITY'S CONVENING POWER IS USED TO BRING TOGETHER POLICY LEADERS, INDUSTRY AND ACADEMIC EXPERTS TO ADVANCE ISSUES OF SUSTAINABILITY

2.
DEEPLY EMBED SUSTAINABILITY CONSIDERATIONS WITHIN THE SIX UNIVERSITY-WIDE KEYSTONE ENGAGEMENT PROGRAMS OF THE ENGAGEMENT STRATEGY

Engagement encompasses the interactions between the University and wider society for the enrichment of both. For an academic institution with a public mission, engagement extends across the full breadth of the University's teaching and learning, research and operations, focusing on where and how external relationships can strengthen our institution and deepen our social contribution. The University's Engagement Strategy, Engagement at Melbourne 2015–2020 is strongly inter-related with the Sustainability Plan 2017-2020.

The University is developing a prominent leadership position in the development of public policy that will achieve sustainability outcomes. The University is a member, signatory or participant of many national and international multi-stakeholder initiatives.

These strategic relationships enable us to leverage our influence and drive collective action on sustainability. Engaging in global and local partnerships is an important means of knowledge exchange to advance sustainability thinking.³¹

Our Keystone Engagement Programs (KEPs) exemplify the present and future diversity and depth of the University's engagement practice and our strengthened commitment to sustainability integration in response to the Sustainability Charter.

³¹ Section 4.9 Campus Engagement explores our commitments to campus operations-focussed activities

THE UNIVERSITY OF MELBOURNE KEYSTONE ENGAGEMENT PROGRAMS

Exemplifying the present and future diversity and depth of the University's engagement practice

| Keystone Engagement Programs | Embedding a sustainability focus |
|---------------------------------------|--|
| An influential Public Policy Precinct | <p>The goal of this program is to position the University at the centre of one of Australia's most influential public policy precincts, enabling us to advance policy discussion and debate on important social and environmental challenges. Current and recent examples include:</p> <ul style="list-style-type: none"> » The University, through Melbourne Sustainable Society Institute, is working in partnership with the City of Melbourne on the Resilient Cities project. A joint Chair in Resilient Cities appointment was announced in 2015 and will work to support and enhance many initiatives developing resilience in the City, the University, their partners and communities |
| Engaging Melbourne's West | <p>The University is working in partnership with the community, government, industry, health and education providers in Melbourne's west to advance issues of socio-economic sustainability for the region. This will focus on supporting cooperative efforts to enhance prosperity, health and equity in the region.</p> <p>This commitment is exemplified by the University's participation on the Sunshine Health, Wellbeing and Education Precinct Board; a partnership with Western Regional Development Authority, to deliver the Healthy Communities in the West Program which involves medical and dental students providing health screenings; and a three-year partnership with the Hobson's Bay Community Fund to improve the inclusion of young people in services and opportunities in the Western suburbs.</p> |
| Engaged Campus Neighbourhoods | <p>This program aims to strengthen our contribution to our immediate precinct, engaging constructively with campus neighbours. For example, the Parkville campus is in the second year of the weekly farmers market, which promotes sustainable and locally produced food to the University community but also surrounding communities.</p> <p>Melbourne Engagement Grants have been awarded to projects that work with strategic partners to create innovative solutions to local campus neighbourhood sustainability challenges including:</p> <ul style="list-style-type: none"> » A horticultural training program for the Carlton Neighbourhood Learning Centre to expand Burnley's Novel Crops Project, which investigates culturally traditional plants that have great potential in domestic, community and public food gardens » The Digital Dookie farm that engages the community in conversations about agricultural impact in their area |
| Goulburn Valley | <p>Strengthening the University's long-term relationship with the Goulburn Valley region, this place-based program aims to support social, cultural and economic development and sustainability in the region.</p> <ul style="list-style-type: none"> » Working in partnership with community organisations such as the Committee for Greater Shepparton and the Algabonyah Regional Indigenous Forum, the University has facilitated roundtable discussions focussed on improving education outcomes and economic development for the Goulburn Valley » The annual Dungala Kaiela Oration, co-hosted by the Kaiela Institute and the University celebrates Indigenous cultural identity and addresses themes that underpin the sustainability of the region more generally; culture, climate change, economic and regional development, legal issues, health and society » A project funded under the Melbourne Engagement Grants program in 2016 will use Object-Based Learning to broaden educational outcomes and career pathways for disadvantaged rural students across nine schools in the Goulburn Valley |
| Cultural Impact | <p>The University recognises the potential to realise significant impact on key sustainability issues through cultural programs. Our activities in this area include:</p> <ul style="list-style-type: none"> » The establishment of Science Gallery Melbourne at the University provides an international platform for engaging the public on the collision of art and science to stimulate research impact, as well as encouraging dialogue around long term environmental and social sustainability issues such as women in STEM » The development of partnerships that enable exploration of sustainability through cultural programs |
| Reconciliation Action Plan | <p>The University's Reconciliation Action Plan (RAP) documents the University's commitments to redressing Indigenous disadvantage. The University is now in its second RAP (2015-2017) and publicly reports its progress against the plan each year.</p> <p>For example, a new Indigenous internationalisation program is in development to strengthen the participation rate of Indigenous students and staff in international mobility experiences. The program will enhance connection, interaction and research opportunities with Indigenous peoples internationally.</p> |



PRIORITY ACTIONS

- » Position the University at the centre of one of Australia's most influential public policy precincts, enabling us to advance policy discussion and debate on important social and environmental challenges
- » Explore the potential for an advanced leadership program to assist established professionals to transition their careers toward areas of public priority, including those redressing complex social and environmental challenges
- » Make publicly accessible the University's sustainability expertise and resources, engaging the public in our work to address sustainability challenges
- » Articulate a social compact that expresses the University's commitment to developing relationships with communities of place and interest, providing a framework for engagement and setting core principles for developing mutually beneficial, multilateral partnerships
- » Develop a framework for understanding and reporting on the value and impact of strategic partnerships for the University and its partners
- » Establish a Sustainability Excellence Award open to students and staff





SUSTAINABILITY IN ACTION ↓

Pathway to Politics Program for Women

The Melbourne School of Government's inaugural Pathway to Politics Program for Women, in partnership with the Trawalla Foundation, addresses the long-term sustainability challenge of gender balance and representation in Government.

Indigenous representation

The University has reviewed and strengthened staff and student targets to increase Indigenous representation in the University community. The sustainability of our Indigenous staff profile is supported by the Indigenous Australian Employment Development Program, which recruits additional Indigenous staff into the University community each year.

Sustainability through cultural impact

The University's partnership with City of Melbourne contemporary arts organisation Arts House, to present Performing Climates in 2016, explored environmental sustainability and climate change through performance arts.

8.0 GOVERNANCE



CHARTER COMMITMENTS

THE UNIVERSITY INTEGRATES SUSTAINABILITY PRINCIPLES INTO ITS DECISION-MAKING AND THE MANAGEMENT OF THE ORGANISATION. THE UNIVERSITY WILL:



Effective governance is critical to the success of sustainability as by its nature, sustainability is integral to all the University's activities and is continuously evolving in reach and expectations. Sound governance requires structure and processes to be regularly reviewed.

PRIORITY ACTIONS

- » Integrate sustainability principles and practices with Academic Division business planning
- » Ensure through periodic reviews that the governance structure remains fit for purpose
- » Ensure effective coordination for sustainability across the whole University
- » Incorporate the UN Global Compact principles and Sustainable Development Goals into strategies, policies and procedures
- » Maintain appropriate memberships and relationships with leading organisations in the sustainability field
- » Ensure there are appropriate mechanisms for students and staff to raise sustainability issues
- » Ensure appropriate data monitoring and collection
- » Work collaboratively across the University to ensure effective communication of sustainability information

- » Involve the University community in decision-making during the periodic reviews of the Sustainability Plan
- » Strengthen the link between the Sustainability Advocates Forum and the Sustainability Executive to improve two way communication and transparency



TARGETS

1.
ENSURE THAT SUSTAINABILITY REMAINS ENSHRINED AT THE HIGHEST LEVEL OF UNIVERSITY STRATEGIES

2.
REPORT ANNUALLY AND PUBLICLY ON THE UNIVERSITY'S SUSTAINABILITY IMPACTS AND PERFORMANCE USING GLOBAL BEST PRACTICE STANDARDS

3.
UPHOLD THE PRINCIPLE OF STAKEHOLDER INCLUSIVENESS IN OUR REPORTING AND DECISION MAKING PROCESSES

OUR TEAM

The Chancellery Administration and Finance portfolio has overall accountability for the University's sustainability approach and leads the university-wide governance and strategy development of sustainability.

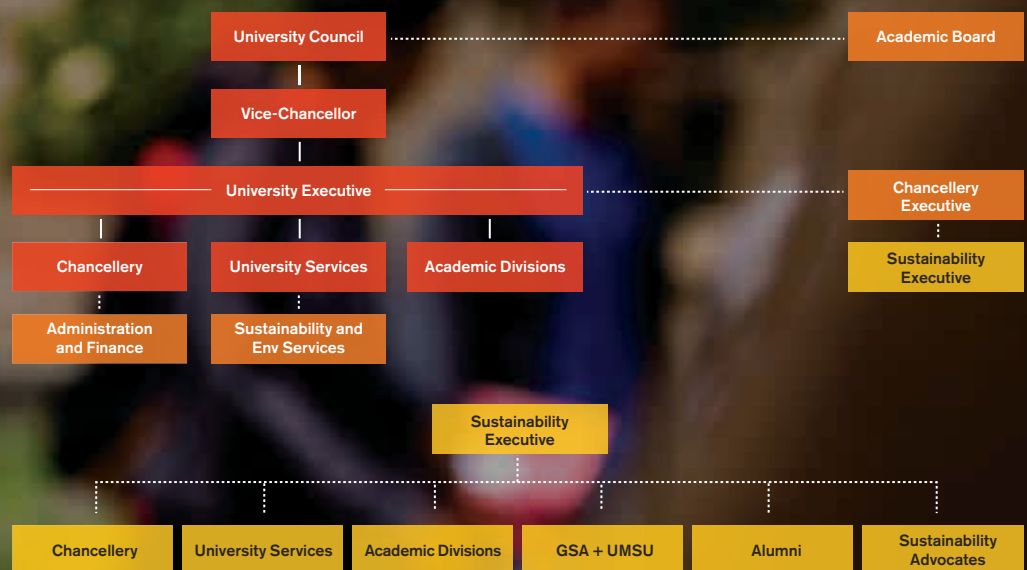
The Sustainability Executive provides the leadership to deliver the University's sustainability agenda. This group comprises executives, academic and professional staff and presidents (or nominees) of the two major student associations and reports to University Executive. The Principal Advisor, Sustainability leads sustainability governance and strategy development.

The Sustainability Team based in University Services manages all operational aspects of

environmental sustainability at the University. The team implements the University's commitments to reduce resource use, runs sustainability projects on campus and engages students, staff and the community on sustainability issues. This group of dedicated staff drives performance improvement to enable the University to be a global leader in campus sustainability.

The Sustainability Advocates Forum is a group of staff and students who are passionate about sustainability. The forum members are active participants in the University's sustainability endeavours and have a direct link to the Sustainability Executive through the Sustainability and Environmental Services Manager.

SUSTAINABILITY GOVERNANCE STRUCTURES



STRATEGY HIERARCHY

This Plan is informed by the University strategy, *Growing Esteem*, the Sustainability Charter, and other key University strategies, such as: Research Strategy, Engagement Strategy, People Strategy and the Campus Development Framework.

Standards and frameworks – a number of global and local frameworks and standards are used to support our sustainability activities and fulfil related obligations. These standards and frameworks are identified in the relevant sections of this Plan and a list can be found in Section 10.0.

SUSTAINABILITY IN ACTION ↓

Victorian Government Climate Change Pledge

The University of Melbourne is pleased to announce that it has signed the 'TAKE2' Victorian Government's collective climate change pledge initiative. The University is committed to showing leadership on climate change and stands together with the Victorian Government as a founding partner of TAKE2.

The pledge signals Government action to legislate ambitious targets to achieve net zero greenhouse gas emissions in Victoria by 2050 and aligns with the commitments enshrined in the University's Sustainability Charter.

9.0 INVESTMENTS



CHARTER COMMITMENTS

SUSTAINABLE PRACTICES ARE EMBEDDED IN ALL OF THE UNIVERSITY'S OPERATIONS, MODELLING INNOVATIVE WAYS TO MAXIMISE SOCIAL AND ENVIRONMENTAL VALUE. THE UNIVERSITY WILL:

IMPLEMENT INVESTMENT STRATEGIES CONSISTENT WITH THE UNIVERSITY'S COMMITMENT TO SUSTAINABILITY AND ITS FINANCIAL AND LEGAL RESPONSIBILITIES

BACKGROUND

As set out in *Growing Esteem*, the Sustainability Charter and other sections of this Plan, the University has a significant role in addressing the challenges of environmental sustainability, including climate change. This encompasses educating future leaders, undertaking ground breaking research,³² partnering on technological solutions, generating public debate, influencing policy development and managing its own emissions and carbon footprint. This section focuses on the implications of climate change for the management of the University's investment portfolio. In summary, it proposes that the University develop a sustainable investment framework for evaluating and managing material climate change risk, to be completed by end-2017. Over time the University proposes to divest from any material shareholdings that do not satisfy the requirements of this framework.

To put this in context, the University currently has an investment portfolio of around \$2 billion, with a target allocation of 45% to listed equities, 30% to cash and other liquid assets and 25% to illiquid assets. Currently the structure of the University investments is predominantly via holding units in pooled investment trusts controlled and managed

by its primary investment manager the Victorian Funds Management Corporation (VFMC).

The University no longer directly holds any listed equities. The University is able to determine retrospectively the percentage of its funds under management that are pro rata allocated to the Carbon Underground (CU200).³³ In recent times this has equated to between 3% and 5% of the total investment portfolio, which is reasonably typical of the sector.³⁴

As set out earlier in this Plan, the University acknowledges the seriousness and urgency of the threats posed by climate change and fully supports a lower emissions future. Emissions from the consumption of fossil fuels cannot continue to rise. It recognises that climate change impacts also result in increased risk (and potential opportunities) for its investments. As noted by the Australian-German Climate & Energy College, July 2016,³⁵ "Taken together, the Paris Agreement, the urgency of mitigation action to achieve those goals and the changing international climate and energy landscape present a number of risks for an investment portfolio, such as the one of the University of Melbourne". The University accepts that it must act to mitigate this risk. The University further recognises that it has a fiduciary duty to address how the risk adjusted performance of assets may change over time. The Statement of Investment Objectives and Policy (SIOP) sets out that companies which effectively manage environmental, social and governance responsibilities should yield better risk adjusted returns over the long term. The University is therefore committed to integrating climate change risk more systematically into its investment strategies and decision-making and to commence forthwith to address this risk.

The targets and actions to address this are set out in this section of the Plan. This includes the development and introduction of a framework to assess companies' progress on mitigating climate change risk noting that, ultimately, this would lead to divestment if satisfactory progress is not demonstrated against the parameters established. Implementation will involve working with VFMC and, potentially, interaction with VFMC's other major clients. The University will apply this framework to the listed equity portfolio as a whole and not just fossil fuel producers.

The fossil fuel divestment movement contends that a further implication of the need for urgent

action to mitigate climate change is an obligation on the University to divest over time of its investments in the CU200. The campaign in this regard has been undertaken on campus by the student led group, Fossil Free Melbourne University (FFMU). As stated previously by the Vice Chancellor, the work and involvement in the sustainability debate of FFMU has raised important questions and this has contributed to the actions included in this plan.

FFMU's view³⁶ is that "When a respected institution such as the University of Melbourne commits to divest, this revokes the social licence of the fossil fuel industry" and that divestment "is a broad statement of support for action on climate change". It further notes that this "sends a significant message to other organisations and policy makers that ongoing fossil fuel use is incompatible with a safe climate" and "In market terms, divestment can encourage the development of fossil free investment products and new forms of climate risk assessment".

This is one of a range of views on divestment within and outwith the University, and there is a broad spectrum of positions taken by other universities and organisations, with no clear common approach. What is clear is that each organisation should act to mitigate climate change risk in the most effective way possible taking into account its particular capacity and capability.

The table to the right provides a sample of the varying approaches to investments taken by universities in Australia and around the world.

³² Sustainability Report 2015 – approximately 1,300 researchers working in fields relevant to sustainability and resilience, and approximately \$218 million p.a. in research expenditure on sustainability projects

³³ The CU200 is comprised of the top 100 publicly-listed coal companies and top 100 publicly-listed oil and gas companies in the world, ranked by the CO2 emissions potential of their listed reserves

³⁴ "...on average, university endowments in the US have 2-3% of their assets committed to investable fossil fuel public equities. The proportion in the UK is higher with an average of 5%...", Stranded Assets and the fossil fuel divestment campaign: what does divestment mean for the valuation of fossil fuel assets? Stranded Assets Programme, University of Oxford, October 2013

³⁵ 'What does the Paris Agreement mean for the University of Melbourne's investment strategy?', Dooley & Meinshausen, 2016. http://ourcampus.unimelb.edu.au/application/files/2014/7141/0903/090816_Investments_Forum_Information_Pack.pdf

³⁶ As set out in FFMU's 'The Case for Divestment', submitted to the University in June 2016

SOME APPROACHES TO INVESTMENTS FROM OTHER UNIVERSITIES

| University | Investments (indicative only) | Our snapshot |
|------------|-------------------------------|--|
| MIT | US\$14 billion | "a symbolic public move to divest is not the most effective way for MIT to drive progress on the climate challenge" |
| Harvard | US\$38 billion | "we maintain a strong presumption against divesting assets for reasons unrelated to the endowment's financial strength" |
| Stanford | US\$22 billion | divestment of companies whose primary business is oil sands extraction (noting it has nil such holdings) but not from the fossil fuel industry more broadly |
| Cambridge | GBP6 billion | divestment considered "neither an appropriate ethical, nor indeed a practical, policy", but will engage on long-term climate-related risks |
| Oxford | GBP2 billion | supports the continued inclusion of a broad range of energy investments, where financially prudent, but encourages maintenance of the rigorous assessment of potential investments across a number of risk criteria, particularly social and environmental impacts, alongside other investment criteria, and specifies no direct investments in coal and oil sands |
| Edinburgh | GBP400 million | will scrutinise fossil fuel investments and "divest from the highest carbon-emitting fuels where alternatives exist", while committing to low or zero carbon investments that deliver the same return and level of risk as existing investments |
| Glasgow | GBP200 million | will fully divest from the fossil fuel extraction industry within 10 years, subject to reassurance that the financial impact for the university will be acceptable |
| Sydney | A\$1.5 billion | committed to reducing the carbon footprint of its share portfolio by 20% over 3 years |
| ANU | A\$1.5 billion | excludes investments in companies that derive more than 20% of revenue from coal and seeking to reduce the carbon intensity of the portfolio to 25% less than that of the ASX200 |
| La Trobe | A\$100 million | committed to divesting from the CU200 within 5 years |
| Queensland | A\$170 million | applying engagement and a commitment to sustainable investment principles, not divestment |

In carefully considering this question the University has consulted widely and brought a range of perspectives to the table through, for example, holding two public forums that included leading University academics³⁷, independent external experts³⁸ and FFMU student representatives³⁹. It also undertook a stakeholder mapping exercise to better understand the depth of its relationships with the CU200 component of the fossil fuel industry, which extends beyond investments. As reported at the public Investment Forum held by the University in August 2016, the University has non-investor based relationships with at least 19 of those companies, including: research agreements; scholarships; internships/work placements; graduate employment; alumni; advancement; and other interactions.

In this context, it is important to recognise the fundamental role of a university, in particular a research-intensive one, and its relevance to the discussion. As set out in *Growing Esteem*, the University believes that the “essence of a university is its mission to develop and share knowledge”. Engagement is seen to be an integral part of this mission and “the lens through which we view all of our activities”. It “connects our learning and research work with communities, helping us to achieve academic aspirations and create economic, social and cultural value” and, quoting Woodrow Wilson’s commemorative address at Princeton in 1896, “universities must not stand aloof but should be bound intimately to the practical world”.

Further:

- » the Sustainability Charter specifies that the University “has a social responsibility to lead and engage in public debate and action”; and
- » the inaugural Sustainability Report 2015 outlines that the University is a public spirited institution that works with external stakeholders like governments, industry and communities to meet global societal challenges and that it engages in thought leadership shaping the global conversation and public policy debate about sustainability

The role that the fossil fuel industry itself may have in enabling the reaching of the targets set at COP21 is also relevant. For example, Professor Robin Batterham (Kernot Professor of Engineering, University of Melbourne) has

concluded that, while increasing in importance as the costs fall, renewables make up only one tranche of the required emissions reductions and alone they are not enough. Professor Batterham notes that technologies for fossil fuels must be included in the discussion as it is technological innovation that will drive emissions down. University researchers are working with industry and governments on such innovations and many other aspects, such as population, land use, production and consumption. For example, the University is working with BHP Billiton to optimise the contribution of carbon capture and sequestration as a transitional technology.

A similar view is reported by:

- » the Oxford Martin School⁴⁰ – “Fossil fuel companies and related industries may have an important role to play in the transition, and need shareholders’ capital, license and encouragement to play that role. Significant carbon dioxide sequestration capacity is likely to be needed to reach net-zero emissions, or to support net-negative emissions should the safe carbon budget be exceeded. The skills and expertise required for large-scale carbon dioxide disposal are currently found within the oil, gas and fossil fuel utility sectors. Some uses of fossil carbon, such as for air and water transport, currently have no substitutes and the involvement of the hydrocarbon industry is likely to be essential to rapid development of synthetic substitutes”; and
- » research recently published in *Nature*⁴¹ – “Systemic climate risk arises from damage to the economy as a whole and therefore the risk cannot be reduced by hedging investments or limiting exposure to particular assets. . . . Investors should actively encourage the companies they own to reduce emissions, for example by urging profitable investment in energy efficiency or emissions-reducing changes to processes and by discouraging risky capital expenditure on fossil fuel exploration and production”

As such, fossil fuel companies will need to redefine their roles and be part of the solution. Among other things, they may need to scale up investment in renewable energy (but beyond simply green washing), while developing methods to reduce the carbon footprint of fossil fuel production. The University has a major part to play in this by, for example, undertaking research

and partnering with companies to develop solutions to the problems presented, such as new energy sources, new ways to harness renewable energy, more efficient ways to use energy, securing energy waste, and framing laws and regulations. As Australia’s leading research university with over 10,000 world class researchers and an annual research budget of around \$1 billion, it can draw on these considerable resources to support meeting the challenge of climate change.

The University believes that all of these and other activities (such as education in sustainability and environmental thinking and management, encouraging public debate and influencing policy development) require serious engagement and collaboration, including with elements of the fossil fuel industry, and cannot be delivered in isolation. The University’s investment strategy is peripheral to its core purpose and is not where it can exercise its greatest influence on solutions to climate change. Consequently, divestment for purposes other than the appropriate management of its investments would not be the most effective way for the University to drive progress on climate change mitigation and would impair the other ways that it can make a more meaningful difference.

The University’s investment capacity can however be used in a positive sense. The approach adopted by the University of California (UCal)⁴² is instructive in this regard. UCal’s investment approach⁴³ includes the belief that, as the transition to low carbon fuels will require multi-generational effort, investing in solutions will have more impact than decisions about how and when to exit certain markets. It believes that access to long term capital will be critical to the success of low carbon fuels, renewable energy assets, energy storage and emerging energy efficient technologies. Investing in climate solutions will have a greater and more positive impact on future generations than simply exiting fossil fuel holdings. UCal concludes that a small set of new ventures related to resource innovation can scale over time to become some of the most profitable companies.

Set out to the right are the targets and actions overleaf that the University believes reflect the most effective way the University can approach its investment portfolio to address the impacts of climate change.

³⁷ Including Professors Ross Garnaut, David Karoly, Don Henry, Dr Roger Dargaville, and Dr Ben Neville

³⁸ Professor Cameron Hepburn (University of Oxford), Mr Martijn Wilder AM (Partner, Baker & McKenzie), Dr Leeora Black (ACCSR) and Ms Ellen Sandell MLA

³⁹ Ms Anisa Rogers and Mr Matthew Clare

⁴⁰ Terms of Investment in Fossil Fuels, Oxford Martin Safe Carbon Investment Initiative, Oxford Martin School, University of Oxford, November 2015

⁴¹ Howard Covington (Chair, Alan Turing Institute), James Thornton (Chief Executive, ClientEarth), Professor Cameron Hepburn (Professor of Environmental Economics, University of Oxford) – *Nature* 530, February 2016

⁴² Ranked highest university and 17th in the Asset Owners Disclosure Project (AODP) index (2016 & 2015)

⁴³ Sustainability Impacts Investing, University of California

TARGETS



1.

BY 2021 THE UNIVERSITY'S INVESTMENT PORTFOLIO WILL:

A. HAVE DIVESTED FROM, OR BE IN THE PROCESS OF DIVESTING FROM WITHIN A REASONABLE PERIOD, ANY MATERIAL HOLDINGS THAT DO NOT SATISFY THE REQUIREMENTS OF THE UNIVERSITY'S SUSTAINABLE INVESTMENT FRAMEWORK FOR MANAGING MATERIAL CLIMATE CHANGE RISK

B. INCORPORATE A MEANINGFUL ALLOCATION OF IMPACT INVESTMENTS⁴⁴ IN THE STRATEGIC ASSET ALLOCATION, POTENTIALLY IN PARTNERSHIP WITH PEER ORGANISATIONS

2.

ESTABLISH A SEPARATE SPECIFIC INVESTMENT FUND WHERE A DONOR WISHES TO STIPULATE (SUBJECT TO CERTAIN CONDITIONS) INVESTMENT PARAMETERS FOR THEIR ENDOWMENT THAT ARE NOT ACCOMMODATED THROUGH THE EXISTING PORTFOLIO

3.

BECOME A DIRECT SIGNATORY TO THE UNPRI⁴⁵

PRIORITY ACTIONS

- » Develop by end-2017 a sustainable investment framework for assessing material climate change risk and how this risk has been incorporated into the risk and return assessment of whether to buy or sell underlying investments. Incorporated within this assessment, the framework will set out the criteria for divestment from and investment in companies in this regard. The framework will include as far as possible mechanisms to assess/measure a company's emissions intensity, emissions reduction plans, alignment to the outcomes of global climate change agreements (such as COP21), investment in/transition to renewable energy, exposure to and impact of other material climate change-related risks, and therefore the level of risk to the University's investment portfolio
- » The process for developing the framework will be determined and communicated at the latest by the end of quarter 1 2017
- » Actively engage with VFMC (and potentially its major institutional clients) and, where relevant, other fund managers to better understand their ongoing positions on and prioritisation of issues related to climate change, assess the appropriateness of climate risk management, and implement the University's approach
- » Enhance reporting/disclosures relating to climate change risk on the University's portfolio, including exposure to the CU200
- » Conduct scenario analysis on the impact climate change could have on the University's investment portfolio, including measuring the potential impact and cost of divestment (full or partial) over time from CU200 companies and the reduction by varying degrees of the carbon emissions intensity of listed equity investments incorporated in the portfolio
- » Reflect the University's climate-related investment beliefs in the Statement of Investment Objectives and Policy (SIOP)
- » Engage specialist advisors to provide on-going advice to University governance bodies and management on global developments and best practice relating to managing climate change risk and associated fiduciary duties
- » Investigate the most effective means of integrating impact investments into the University's strategic asset allocation within overall investment risk and return parameters
- » Work with peer organisations to build strategic partnerships and increase the aggregate influence of the group, including consideration of a joint approach to impact investing and a fund to provide additional support for sustainability and resilience related ventures

⁴⁴ "Impact investments are investments made into companies, organizations, and funds with the intention to generate social and environmental impact alongside a financial return." Global Impact Investing Network, <https://thegiin.org/impact-investing>, accessed 1/11/16

⁴⁵ United Nations Principles for Responsible Investment

10.0

OUR REPORTING AND NETWORKING COMMITMENTS



LEGISLATIVE COMPLIANCE

The University of Melbourne is accountable under various pieces of state legislation. Compliance requirements can impact the University Risk Management Strategy. Governance of this strategy is the responsibility of a number of Council committees and groups as identified in our Annual Report.

VOLUNTARY REPORTING

The University commits to the following voluntary reporting, standards and frameworks:

- » United Nations Global Compact and Global Compact Network Australia (GCNA) – biennial Communication on Engagement
- » UN Sustainable Development Goals – regularly report on activities in support of the SDGs
- » Global Reporting Initiative – annual sustainability reporting
- » Tertiary Education Facilities Management Association – annual reporting on operational performance
- » Victorian Government Climate Change Pledge Program ('TAKE2') – commitment and report against actions
- » Universitas Indonesia Green Metric ranking – annual sustainability benchmarking survey
- » GBCA Green Star Buildings
- » GBCA Green Star Communities
- » Fair Trade Association of Australia & New Zealand – certification

The University also participates in the following networks and associations:

- » UN Sustainable Development Solutions Network (SDSN)
- » International Sustainable Campus Network (ISCN)
- » Universitas 21 – Declaration on Sustainability
- » Group of Eight (Go8) Australian research universities
- » Australasian Campuses Towards Sustainability (ACTS)
- » Tertiary Education Facilities Management Association (TEFMA)
- » Tertiary Sustainability Network (TSN)
- » Green Alliance of Universities for a Sustainable Future (GAUSF)





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