

Melbourne Sustainable Society Institute

2019 | ANNUAL REPORT





Credits

Melbourne Sustainable Society Institute Annual Report 2019

The Melbourne Sustainable Society Institute (MSSI) is situated on the land of the Woiwurrung (Wurundjeri) people of the Kulin nation and conducts its activities on Aboriginal land. This land has never been ceded and the impacts of colonisation are ongoing. MSSI acknowledges Traditional Custodians' continual care for country, the importance of Indigenous sustainability practice and knowledge, and the Woiwurrung and Boon Wurrung's ongoing contributions to the life of this city and this region. MSSI pays respects to Elders past, present and emerging.

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From the Director & Deputy Director

Throughout 2019 MSSI continued to thrive in our mission to facilitate high impact sustainability research and engagement. We did so in our key strategic sustainability themes – climate change and cities – while making new efforts to enable and support work in the important areas of food and water. We are increasingly aware of the integrated nature of sustainability themes and have sought to take a holistic approach to sustainability in our place-based projects in the City of Melbourne and Latrobe Valley. We welcome the announcement of the new Indigenous Knowledge Institute, a timely and significant addition to the Melbourne Interdisciplinary Research Institutes, and look forward to working with our MIRI partners in 2020 and beyond.

We pay tribute to the industry of University of Melbourne researchers who collaborate across sustainability themes, including biodiversity, environmental humanities, forest and bushfire management, environmental health and law, to name a few. There is a broad spectrum of university endeavor in this space, and MSSI's ongoing challenge is to enable and coordinate the bringing to scale of research that is inclusive, insightful and impactful. This necessitates careful and strategic targeting of finite resources, guided in 2019 by the MSSI Strategic Plan 2018-2020.

Highlights of the year include a visit by the Honourable Al Gore to support the MSSI-based Climate Reality Project's Australia and Pacific branch, at the Leadership Training Corps event in Brisbane in June. The Queensland Government was a valued partner in this successful exercise which saw a new crop of over 800 climate leaders trained from more than 30 countries, including indigenous and regional/rural trainees. Mr Gore chaired a roundtable attended by high level decision makers including the Deputy Director of the Reserve Bank and sub-national Energy and Environment Ministers to discuss MSSI's modelling work led by Professor Tom Kompas on the costs of climate change inaction.

Professor Lars Coenen continued the admirable work of the Chair in Resilient Cities, a collaboration with the City of Melbourne, which was renewed for a further five years in October.

As always, we pay tribute to the hard work of the MSSI core staff who support the vibrant sustainability research community at the University of Melbourne. As we enter 2020 we look forward to working with our diverse partner and stakeholder community, to identify new, collaborative and innovative ways to meet the challenges of a sustainable future.

Prof Brendan Gleeson, Director Dr Sangeetha Chandrashekeran, Deputy Director



From the Chair

In 2019 many of the longer-term climate predictions started to visibly impact Australia and the world. The intensity, frequency and devastating impact of 'natural' disasters across the globe has clearly demonstrated that this is not simply an environmental issue. The impacts are felt in the economy, human and ecosystem health, national security, mental health, agricultural industries and they do not recognise geographical or cultural borders. We are all in this together and it is going to take a multi-disciplinary, cross-sector response based on sound research and data. This means the work of MSSI is arguably more important than ever.

I would like to thank the MSSI Advisory Board who give of their time and wisdom freely. I reserve my greatest appreciation for the MSSI staff, in particular our Director Professor Brendan Gleeson, who do such important work on behalf of all of us.

Arron Wood, Chair of MSSI Advisory Board, Deputy Lord Mayor of Melbourne.

About Us

As one of the University of Melbourne's Interdisciplinary Research Institutes, MSSI is designed to play a vital role in harnessing the University's research expertise to address the complex socio-environmental challenges and crises that we face. MSSI's mission is to activate and strengthen interdisciplinary sustainability research across the University and to promote sustainability research in a way that maximises engagement and impact.

MSSI brings together exceptional researchers from diverse disciplines across all faculties and centres at the University of Melbourne, and external partners to address the challenges of complex and compelling research problems. The Institute builds research capacity through fostering connections and collaborations, raising ambition, and supporting research activity and partnerships.

MSSI boosts the University of Melbourne's local, national and international reputation as a research leader through effective knowledge translation and communication. MSSI's strong relationships with industry and government stakeholders and communities beyond academia seek to ensure research is accessible and imparts societal benefits.

With the addition of a Water Futures Network and Sustainable Food Systems project to MSSI's core research pillars of cities and climate, the Institute looks forward to convening energy and expertise in 2020 on the issues central to a sustainable future.



Our Cross-Faculty Reach Facilitation through our Research Clusters

MSSI seeks to identify, connect and foster interdisciplinary research around sustainability-related themes across the University of Melbourne's vast academic ecosystem. We have achieved great success with this through the advancement of our Research Cluster model, the current foci of which is climate change, cities, and more recently water through the newly established Water Futures Network.

The cluster model is a cross-discipline research network and a key feature of MSSI's approach to convening researchers internally, and connecting them with external partners, funding opportunities and other sustainability focused activities.

A key cluster activity is facilitating interdisciplinary research projects across the university through seed funding. In 2019 MSSI funded ten projects via the Future Cities and Climate Transformations Clusters, and the Institute more broadly.

Future Cities

Many Future Cities seed funded projects that were supported in 2018 came to fruition in 2019, reporting excellent research and engagement outcomes. Two such projects are highlighted below.

The Social and Material Lives of Urban Soil

This project developed a case study of CERES (Melbourne), from a social theory perspective asking the key question: how does soil become understood and managed through everyday urban practices?

The research team conducted interviews, archival research and participant observation. Workshops held in early 2019 involved sharing of preliminary results with the CERES community, and fostering a more diverse conversation about soils. The study findings will inform on-site waste auditing and a series of efforts to better account for soil dynamics and site history.

Prosthetic habitats: Designing Urban Nests for the Powerful Owl

This project aims to develop novel urban biodiversity strategies through cross-disciplinary collaboration between design and science, specifically focused on improving habitat creation measures for the powerful owl population. In 2019 two trial nest boxes were placed on the outskirts of Melbourne and one on the University of Melbourne's Parkville campus. The team established techniques for urban-scale planning, site selection, tree-scale fitting and nest-scale form-making.

Water Futures Network

The Water Futures Network was established in 2019 and facilitates research and engagement on sustainable water futures. Water is a complex social and technical problem that requires interdisciplinary research efforts. The network cultivates cross-disciplinary water researchers across the University of Melbourne and supports their collaborative capacity. It is also a point of connection for water practitioners, researchers, and the broader public.

Climate Transformations

The Climate Transformations Cluster cultivates a network of cross-disciplinary climate change researchers across the University. This Cluster facilitates research and engagement on a socially-just transition to a zero-carbon society. Some of the seed funded projects completed in 2019:

Governance of Land-Based Carbon Dioxide Removal (LBCDR) in Australia

This project aimed to enhance understanding of Australia's potential as a global LBCDR 'resource', to explore the governance implications of such a development, and to contribute towards a larger ARC Linkage grant proposal. The project team conducted a literature review of Australia-wide LBCDR potential for forests and forestry agricultural practices. They used this review to develop a briefing paper focused on the potential of LBCDR to contribute to Victoria's

sectoral pledges under the Victorian Climate Change Act. These resources formed the foundations of a stakeholder engagement workshop which brought together representatives from government, industry, and the farming and environmental communities to discuss land sector climate policy.

Hacking the Anthropocene IV: Do-It-Together

Hacking the Anthropocene IV curated a series of research and engagement events in Melbourne, including a one-day symposium, two public lectures, workshops, lunches and reading groups. The events brought together artists, activists, academics and practitioners to develop and disseminate anti-colonial, queer, feminist and more-than-human approaches to ecological scholarship and action, with an emphasis on the environmental arts and humanities. These events created the foundations for the newly established Environmental Arts and Humanities Network, to be seed funded by MSSI in 2020.

2019 Future Cities Seed Projects

Biodiverse and multi-functional green spaces in cities. Dr Amy Hahs, Dr Judy Bush, Dr Jinlong Liu, Dr Suzanne Mavoa

Comparative evaluation of community bicycle workshops. Prof Simon Battenbury, Dr Derlie Mateo-Babiano and European collaborators

Exposure to greenery and PM2.5 during active transport modes. Prof Lu Aye, Dr Judy Bush, Dr Felix Hui, Alex Kennedy, Dr Patricia Lavieri, Sareh Naji, Dr Paulo Vaz-Serra

Understanding frames and values in suburban transport politics. Dr John Stone, Dr Crystal Legacy, Associate Prof David Bissell

2019 Climate Transformations Seed Projects

The value of our regional climate history

Dr Linden Ashcroft, Dr Stephanie Lavau, Prof Ruth Nettle, Dr Margaret Ayre, Ms Nikki Reichelt, Prof Howard Bridgman, Dr Ken Thornton, Mr Gionni de Gravio, Mr William Oates

Valuing the coastal protection services of green and grey habitats for public and private property

Dr. Elizabeth Strain, Dr. Pebecca Morris, Associate Prof

Dr Elisabeth Strain, Dr Rebecca Morris, Associate Prof Anthony Boxshall, Prof Tom Kompas, Dr Karl Mallon, Dr Georgia Warren-Myers, Dr Sareh Moosavi, Dr Gideon Aschwanden, Dr Judy Bush

Understanding aquifers through groundwater stories. Dr Deborah Wardle, Dr Eddie Paterson, Dr Amanda Johnson, Dr Tim Peterson, Associate Professor Peter Dahlhaus



Dr Sebastian Fastenrath
is a Postdoctoral Research
Fellow in Resilient Cities.
Following on from his
cooperative research with
Resilient Melbourne in 2019,
Sebastian recently joined
MSSI's Gippsland Smart Specialisation project to focus on regional resilience.

Research Initiatives

MSSI leads and facilitates highly impactful research initiatives that extend across the University, the Melbourne precinct, Australia and internationally. MSSI's research initiatives demonstrate a strong commitment to fostering enduring interdisciplinary connections with researchers from the University of Melbourne and other institutions, as well as with all tiers of government, industry, and partners from the community.

Sustainable Food Systems

In 2019 MSSI funded an interdisciplinary initiative on sustainable food systems that brings together researchers from across the University to develop a more integrated and inter-disciplinary 'food systems' perspective on research and engagement. Led by Professor Christine Parker (Melbourne Law School) and Dr Rachel Carey (Faculty of Veterinary and Agricultural Sciences) the project seeks to amplify the influence of the University's research to promote a transformation to more sustainable food systems (pictured below). As part of this project, in 2019 MSSI commenced a Sustainable Food Systems seminar series. The seminars addressed a diverse range of topics including food justice and the future of food system governance, and food security and Indigenous sovereignty in the global food system.



Documenting Indigenous Environmental Knowledge

In 2019 a team of geographers, seed funded by MSSI and the School of Geography, collected their first sediment cores from remnant billabongs across Melbourne to document the landscape as it was under Aboriginal Management.

The project team, led by geographer and Wiradjuri man Associate Professor Michael Shawn-Fletcher, in collaboration with Traditional Owners, will use scientific and Indigenous knowledge to analyse the sample cores. This project also encourages conversation and reflection about the different types of knowledge generated in local environments. Some of this conversation held during the collection process in the Bolin Bolin wetlands was documented in an article published in *The Guardian*.

Associate Professor Michael Shawn-Fletcher has since been awarded the Aboriginal and Torres Strait Islander Travelling Research Award by the Australian Academy of Science.



"It has been a remarkable year for the Gippsland Smart Specialisation Strategy that has seen a wide range of activities undertaken. More and more stakeholders have come together to create a unique Gippsland take on the original European concept of Smart Specialisation. Most significantly, the Strategy is increasingly leading to an accepted new way of working around regional development and innovation."

- Professor Leo Goedegebuure, Gippsland Smart Specialisation project

Gippsland Smart Specialisation Strategy

Initiated by the Victorian Latrobe Valley Authority. this project brings together government, business, research and education, and civil society in Gippsland to co-design a shared vision for the region's future prosperity, environmental sustainability and social wellbeing. In May 2019 entrepreneurial discovery workshops were undertaken with 70 stakeholders from across the region to identify priority areas for pilot projects in the energy and food and fibre sectors. The findings from the workshops informed recommendations on priority areas for pilot projects and opportunities for capability development and innovation partnerships. In June 2019 a study mission with delegates from Gippsland representing government, industry, education and community sectors visited the Netherlands and Germany to experience how these regions approach place-based innovation, with a focus on the agriculture/horticulture and new energy sectors. The European systems provided significant lessons for how the development of a regional innovation system in Gippsland could be supported (pictured above).

Healthy Cities for Adolescents Program

This research brought together MSSI, the Centre for Positive Psychology and the Graduate School of Education to advise on international standards for adolescents, as presented in the Sustainable Development Goals and the UN literature on Child Rights. The research team, which included MSSI Principal Research Fellow, Associate Professor Janet Stanley, designed projects for Ghana, Senegal and Columbia, and provided an evaluation framework for each project as well as evaluation instruments that could be used across the projects in order to build a body of knowledge.

This work, commissioned by the Swiss charitable trust Fondation Botnar, has led to a subsequent project designing the framework needed to establish Learning Centres within secondary cities in developing countries, and coordinate and facilitate urban planning and policy to improve the health and wellbeing of citizens. This is due to be completed in April 2020.



Supporting New Research

Postgraduates and Early Career Researchers

Supporting and facilitating opportunities for students and Early Career Researchers is an important pillar of MSSI's commitment to building the University's capacity for interdisciplinary research on sustainability themes. MSSI provides funding, thesis supervision, mentorship, networks and events, and project participation opportunities to support postgraduate researchers.

Undergraduate and Postgraduate Students

MSSI contributes to a wide range of networks and activities that enrich undergraduate and postgraduate students' sustainability-related educational experiences. In 2019, with a grant from Student Services and Amenities Fee funds, MSSI was able to send 20 undergraduate, Masters and PhD students and alumni to The Climate Reality Project's Leadership Training Corps held in Brisbane. The students submitted their ideas for climate impact initiatives and those with the most innovative and achievable ideas were selected to participate.

Our MSSI academics deliver best practice teaching to University of Melbourne students through guest lectures, formal supervision and mentorship. In 2019 Water Futures Network Coordinator Dr Stephanie Lavau, MSSI Research Fellow Dr Sam Alexander and teaching colleagues at the Office of Environmental Programs received the Melbourne Award for Excellence in Education for Sustainability.

PhD Researchers

MSSI facilitates research networks and events for PhD students and provides funding opportunities

to support student engagement on sustainability issues with communities beyond the University. In 2019 MSSI's Climate Transformations Research Cluster announced two new research translation grants enabling PhD students to communicate their climate change-related research in novel ways. Ceren Ayas will produce a decision-making tool on just energy transitions based on her research. Carolina Contreras will develop an online resource to map existing blue carbon projects and provide place-specific policy assessments.

In October MSSI convened a well-received, University-wide workshop for PhD students geared toward connecting postgraduate climate change researchers. The workshop incorporated themes of interdisciplinarity and research translation and included expert panellist input from industry specialists, government, the NGO sector, academics and early career researchers (ECRs) from a number of faculties.

MSSI academics supervise a number of graduate researchers across a range of University of Melbourne faculties as well as external institutions. In 2019 MSSI Director Professor Brendan Gleeson's PhD student



James Whitten, Future Cities Research Cluster convenor Dr Crystal Legacy, and Rebecca Clements won the Peter Harrison Memorial Prize for best paper at the State of Australian Cities conference (pictured below).



Early Career Researchers

MSSI is a member of the Victorian division of the Australasian Early Career Urban Research Network and channels significant energy into supporting ECRs, including through the Institute's close relationship with the Climate and Energy College. In 2019 MSSI funded four PhD students and ECRs to attend the 10th World Urban Forum held in Abu Dhabi.

In 2019 ecofeminist researcher Dr Lara Stevens joined MSSI as a Research Fellow (pictured above). She is currently working on an Australian Research Council (ARC) Discovery Early Career Researcher Award (DECRA) submission, focused on Australian Environmental Youth Activism and the Val Plumwood Legacy, through MSSI and the School of Culture and Communication. Using newly available Plumwood archives, Lara's project aims to assess Plumwood's global impact on environmental and social justice from a theoretical perspective and to explore how the environmental projects she spearheaded in Australia provided alternative practical models for engaging with the natural world.

Dr Svenja Keele joined MSSI in 2019 as a Postdoctoral Research Fellow in Resilient Cities, working in collaboration with the Resilient Cities Chair Professor Lars Coenen. Svenja's research looks for new ways to govern complex environmental problems like climate change adaptation, urban resilience and energy transitions. In 2019 her research on climate services and the shift from public to private science was published in the Climatic Change journal. At the end of 2019 Svenja farewelled MSSI to take up a role at Monash University as a Lecturer in Human Geography at the School of Social Sciences.



Partnerships and Collaborations

MSSI builds institutional research capacity and maximises engagement and impact through partnerships and collaborations with University of Melbourne colleagues and researchers from other institutions, and with partners from the community, three tiers of government, industry and other external organisations locally, nationally and internationally.

The Climate Reality Project

In 2019, MSSI continued its role as the host organisation for the local branch of The Climate Reality Project (TCRP) – Australia and Pacific. With the support of the Lord Mayors Charitable Foundation, TCRP Australia and Pacific increased its team capacity in 2019 and launched a small grants program, which enabled the development of collaborative climate initiatives across its local Climate Reality Leader network. To be rolled out in 2020, these initiatives aim to draw the attention of Australians to collaborative efforts to combat climate change in diverse locations including rural Australia, the Torres Strait, the Pacific Islands and online.

Cape York Tenure Resolution Program

Since 2000, an innovative program has purchased land from willing sellers and returned it to Traditional Owners (TOs) on Cape York without a native title test. Cape York is a region with substantial areas of international cultural and conservation significance. Many existing National Parks on Cape York have also been returned to TOs under this process, including over 4 million hectares of land which has been

returned to more than 20 TO groups. The tenure resolution process came out of and for much of its time was steered by an unusual collaboration of the Queensland Government, aboriginal representative bodies, and environment organisations.

Professor Don Henry has been involved in this program since its inception and is currently researching and documenting the process and its outcomes with traditional owner groups and others.

Resilient Cities

In 2019 the Resilient Melbourne team published the paper 'Urban Resilience in Action: The Resilient Melbourne Strategy as Transformative Urban Innovation Policy?' in the interdisciplinary journal *Sustainability*, providing insights into their ongoing work. Engagement and research throughout the year was focused on the strategy 'Living Melbourne – our metropolitan urban forest', the flagship action of Resilient Melbourne. In addition, Professor Lars Coenen and Dr Sebastian Fastenrath helped initiate the collaborative research project 'Resilient Communities' with RMIT, stakeholders from the property industry, and the public sector.



"Resilient Melbourne works with many universities, but its relationship with the University of Melbourne's City of Melbourne Chair in Resilient Cities, a co-funded position, has delivered particular value to Melbourne's work on resilience"

- Toby Kent, Chief Resilience Officer at the City of Melbourne

The project will explore models of participatory planning and their potential role in building resilience and social cohesion. First insights from this work were presented at the State of Australian Cities Conference, where MSSI and Resilient Melbourne co-organised a transdisciplinary panel with experts from academia and private and public sectors.

City of Melbourne Chair in Resilient Cities

The Chair in Resilient Cities is an innovative partnership between the City of Melbourne and the University of Melbourne that acknowledges the increased mutual dependence and close relationship between both organisations for the betterment of Melbourne. During his term, Professor Lars Coenen and his team built national and global awareness of Melbourne's work to become a more resilient city through continuous innovation, ambition and leadership. The Chair's knowledge based approach to resilience building and innovation has brought the Resilient Melbourne Strategy and the Knowledge City Strategy in closer conversation and initiated parallel efforts to build resilience in Regional Victoria with the Latrobe Valley Authority.

Making the City of Melbourne More Inclusive for People with Disability

This study brought together people with disability, City of Melbourne staff, disability advocates and academics, with the aim of generating ideas on how to make the City of Melbourne more inclusive for people with disability. It further aimed to ascertain which of these ideas were the most important and feasible to implement. The project team published a report on their findings from five workshops held in early 2019.

City of Melbourne People City Portfolio Chair, Councillor Beverley Pinder, said the study findings will inform the Council's future Disability Action Plan. This project was co-funded by the City of Melbourne, The Melbourne Disability Institute, Lord Mayor's Charitable Foundation and MSSI's Future Cities seed funding scheme.



Engagement

MSSI regards engagement on sustainability issues as central to our value in sharing knowledge. Extending our engagement with communities beyond the University is fundamental to increasing our impact and influence

Climate Change, Economics, and Business

MSSI led a number of projects engaging Australian State Governments and business with economic initiatives that advance climate action. Supported by Professor Don Henry, the Queensland Treasurer and Deputy Premier, the Honourable Jackie Trad, convened a roundtable to discuss economics and climate change and the role of State Treasuries. The roundtable was addressed by the Honourable Al Gore, former Vice President of the United States, and Dr Guy Debelle, Deputy Governor of the Reserve Bank of Australia, with representatives of the Queensland, Victorian, and ACT Governments and the Committee for the Economic Development of Australia attending. The discussion was informed by an MSSI Issues Paper Australia's Clean Economy Future: Costs and Benefits. At the conclusion of the meeting the Honourable Jackie Trad agreed to bring the issues forward to other State and Federal Treasurers and advance the discussions and action.

The topic of climate change and business action was the focus of a dinner convened by the Queensland Treasurer and Professor Henry, with

the Honourable Al Gore an invited speaker. Businesses and agencies attending included Suncorp, ANZ, Toyota, IAG, Adelaide Brighton, Officeworks, Infrastructure Australia, Clean Energy Finance Corporation, Australian Renewable Energy Agency, International Trade Union Confederation, Carbon Markets Institute and Queensland Treasury Corporation.

Foodprint Melbourne Recognised in Excellence Awards

The Foodprint Melbourne research team, hosted by MSSI, earned the Melbourne Engagement Excellence Award (Research). Foodprint Melbourne is helping government to secure Melbourne's fresh food supply while increasing public awareness and was designed with engagement and impact in mind from the outset. The research received wide media coverage, including from the ABC, The Age newspaper and industry publications, and the team published a number of articles about the research in The Conversation. The project team included Dr Rachel Carey, Dr Jen Sheridan, Kirsten Larsen and Dr Seona Candy.



"MSSI critically reflects, contributes to and impacts community processes and economic and political debates through research projects, public discussions, its wide network across sectors, and its embedded role in the University. Using MSSI as a case study has been exceptionally insightful and inspiring for developing, advancing, and integrating engagement and cooperation activities into my work."

- Dr Friederike Schroeder, Program Manager of Urban Planning, Hafen City University Hamburg

Partnerships for Sustainable Urban Development

Over 45 practitioners and academics from across the Melbourne Development community gathered at this day-long event to explore collaborative research and practice opportunities to contribute to the Sustainable Development Goal 11 focused on Cities and Communities. Discussions demonstrated a diversity of thinking and approaches to how organisations are engaging, and grappling, with the SDGs. There was broad agreement the agenda offered a common language and framework which lends itself to a collaborative approach and concerted action towards transformational change.

The Adam Majcher Legacy Program

This program honours the work of Adam Majcher and is delivered in partnership by ClimateWorks Australia, The Climate Reality Project, and Common Cause. The Adam Majcher Legacy Program is an annual fellowship opportunity offered to an outstanding university student or recent graduate in the early stages of their career, who are making an impact on climate change. In 2019 the recipient of the paid fellowship was Melissa Yoon.





Events

MSSI hosts, co-hosts and supports a significant number of events across the University, which are important vehicles for research translation, engagement and impact. MSSI's public lectures and seminars play a crucial role in making the University's sustainability research accessible and engaging for the general public.

The Climate Reality Leadership Corps Training - Brisbane

In June The Climate Reality Project welcomed over 800 people to Brisbane for their 41st Climate Reality Leadership Corps Training, to engage in conversations on climate change led by former US Vice President, the Honourable Al Gore (pictured above). The Climate Reality training was delivered in partnership with the Queensland Government as part of the inaugural Climate Week Queensland. Twenty students and alumni from across all faculties at the University of Melbourne were sponsored to attend the training. They joined participants from every state and territory in Australia, New Zealand, Pacific nations and countries further afield including India and Haiti, representing over 30 countries.

Biodiversity Seminar Series

Throughout the year, MSSI hosted a popular five-part Biodiversity Seminar Series which attracted large public audiences. The seminars addressed key topics such as extinction and the Intergovernmental Science-Policy Platform on Biodiversity and

Ecosystem Services (IPBES) Global Assessment, cultural landscapes and traditional knowledge, people power and business, and the intersections of the climate and biodiversity crises. Speakers included Damien Bell, CEO of the Gunditj Mirring, Traditional Owners Aboriginal Corporation, Emily Gerrard, Principal Lawyer and Director of Comhar Group Pty Ltd, and Brendan Wintle, Professor in Conservation Ecology in the Biosciences School at the University of Melbourne and Director of the National Threatened Species Recovery Research Hub.

Sustainable Food Systems Seminar Series

As part of this Sustainable Food Systems research project, MSSI commenced a seminar series on this topic. The aim of the series is to brings together researchers from across the University of Melbourne to develop a more integrated and inter-disciplinary 'food systems' perspective on research and engagement. The seminars addressed a diverse range of topics including food justice and the future of food system governance, and food security and Indigenous sovereignty in the global food system.



"The University of Melbourne is to be highly commended with it's efforts, through MSSI, to make cross-disciplinary knowledge accessible to all sectors of society on the great sustainability issues of our times"

- Sharan Burrow, General Secretary, International Trade Union Confederation

Annual MSSI Oration by Dr Rebecca Huntley

One of Australia's foremost researchers on social trends, Dr Rebecca Huntley, delivered the 2019 MSSI Oration. She drew on her extensive body of social research to paint a nuanced picture of Australian public sentiment about the environment. Rebecca examined how peoples' attitudes to democracy and the role of government impact their response to climate change. She argued that more effective communication strategies on climate change can renew public engagement with democracy itself. During her visit, Rebecca also recorded a podcast on this topic for the University's Eavesdrop on Experts series.

The Australian Paradox: smart resilient cities, in a rich but simple economy?

Professor Lars Coenen delivered his final lecture in his role as the inaugural 'City of Melbourne Chair of Resilient Cities'. In this seminar Prof Coenen reflected on the state of Australia as a knowledge economy and explored some of the ways in which innovation manifests itself, in particular, drawing on research conducted in collaboration with Resilient Melbourne.

Critical Reflections on Crisis and Emergency Framings: A Panel Discussion

MSSI hosted a panel discussion to examine the potentials and pitfalls of crisis and emergency framings of climate change. The panel brought together University of Melbourne researchers Jo Chandler, Dr Hayley Singer and Professor Jon Barnett, and Sally Moxham, Darebin Council's Manager of Climate Emergency and Sustainable Transport, to provide insights from different disciplines. The panellists had a passionate and nuanced discussion about the ways in which global crisis and emergency narratives can both drive and distract from important processes of change (pictured below).





Dr Laura Schuijers is an Environmental Lawyer and Postdoctoral Research Fellow in Climate Solutions at MSSI. Her research focuses on climate policy in pursuit of deep decarbonisation. In 2019 Laura worked closely with Professor Don Henry to urge state-level action on climate change.

Publications

MSSI showcases the University's sustainability research through a wide range of publications, available to the public on our website. MSSI academics are regularly published in international peer-reviewed journals and MSSI invests resources in ensuring our research is translated and communicated to the audiences it is designed for.

Australia's Clean Economy Future: a cost benefit analysis

This report offered the first-ever comparison of the costs of emission reduction in Australia relative to the potential damages from climate change under current policy settings. Co-authored by Professor Tom Kompas, Marcia Keegan and Ellen Witte, the report found that Australia is on track for \$584.5

billion in economic damage within a decade, if global emissions continue at their current rate. The cost – growing to more than \$5 trillion in cumulative damages by 2100 – can be avoided with a negligible impact on GDP of 0.14 per cent, estimated at \$35.5 billion from 2019 to 2030. This report was delivered to State Members of Parliament in a roundtable meeting with the Hon. Al Gore, organised by MSSI.





Melbourne: how big, how fast and at what cost?

In this MSSI Research Paper Associate Professor Janet Stanley, Dr Peter Brain and Professor John Stanley demonstrate that Metropolitan Melbourne's population growth over the last 25 years has been too high given the level of investment that was committed to support this growth, while regional Victoria population growth is too low to maximise overall gross state product per capita. The research found that residents in the six fastest growing outer suburbs went backwards in terms of capturing income from economic activity, relative to the state as a whole over the 1992-2017 period. A number of media pieces were produced from this research, including an article in *The Age* and *Sydney Morning Herald*.

Degrowth 'From Below'? The role of urban social movements in a post-capitalist transition

In this MSSI Research Paper Dr Sam Alexander and Professor Brendan Gleeson address the strategic question of how societal transformation beyond growth might be achieved. They examine degrowth through the lens of urban studies with a particular focus on how degrowth transition might be organised in urban landscapes and how this transition might affect social, economic and political organisations within cities. The paper sketches out a grassroots theory of change 'from below' and the authors conclude by outlining how early signs are emerging of what, tentatively, could be considered the birth of a 'degrowth urbanity'.

Growing a Clean Economy: Opportunities for Australian States and Territories

In this discussion paper MSSI researchers Dr Laura Schuijers and Professor Don Henry, with their colleague Dr Ben Parr, argue that now is a critical time to grasp opportunities for state-level action on climate change. The paper, published in conjunction with ClimateWorks, presents the broad range of powers that state and territory-level governments can harness across multiple sectors to deliver progress toward a clean, 'net-zero' economy by 2050. Focusing on key areas and sectors in which governments have regulatory power, the paper demonstrates how climate action can be complementary or independant of federal action and still lead to significant outcomes.

Healthy and Sustainable Cities

This scoping report was based on a collaboration between MSSI and the Connected Cities Lab at the University of Melbourne. The primary purpose of the report was to inform the Lord Mayor's Charitable Foundation (LMCF) on potential future themes and activities to support Melbourne transitioning toward a more sustainable and healthier city. Authored by Dr Sebastian Fastenrath, Anna Kosovac with Professor Brendan Gleeson, Professor Lars Coenen and Professor Michele Acuto. The report provided key recommendations to the LCMF about: 1) the knowledge system that produces and diffuses knowledge to shape and transition Melbourne to a healthy and sustainable city 2) issues and opportunities for future activities of the foundation which combine interdisciplinary, cross-sectoral activities with a range of social and environmental outcomes and co-benefits.



Media and Communications

MSSI's academics provide regular media commentary on a wide range of sustainability-related issues. Our interdisciplinary team are called upon by local, national and international media to inform print, radio and television news outlets, a snapshot of which is provided here.

Bushfire and Arson Prevention

The end of 2019 saw the beginning of Australia's worst bushfire season. As a leading expert in bushfire and arson prevention Associate Professor Janet Stanley frequently spoke to mainstream media in 2019 and was heard regularly on radio stations nationwide. Her article published in response to the bushfire crisis sparked national conversations about the scientific links between bushfires and climate change. The article was republished widely across multiple mainstream news platforms and social media platforms.

Reduced Carbon Emissions Would Save Australian Economy \$550b: Report

The Financial Review published an article based on an MSSI report of the first ever comparison of the costs of emissions reduction relative to the potential damages of climate change under current policy settings. The article highlights that the report was released a day after the latest Federal Government data showed Australia's greenhouse gas emissions rose by 0.8 per cent in the December quarter.

Revitalising a Diverse Place Like Dandenong

'The Collaborative Governance under Austerity: an eight city comparative case study' project was completed this year. This case study of collaborative governance in the process of revitalisation in Central Dandenong, Melbourne, formed part of a larger, comparative project funded by the Economic and Social Research Council (UK). Professor Brendan Gleeson, Dr Hayley Henderson, and Professor Helen Sullivan from ANU published a conclusive piece on the lessons learnt during the project in *The Conversation* and an article on cultural pluralism in urban revitalisation in Policy Forum.

Tiny House Living

In this article Dr Sam Alexander and Dr Heather Shearer discuss statistics on tiny house living in Australia and what to consider when choosing a tiny house. The original publication of this article in *The Conversation* was read more than 130 000 times and shared over 150 times. The article was also re-published in numerous places, including *ABC News*.

"The thing that MSSI does really well is communicate through their MiSSIve newsletter.

I use MiSSIve content regularly and circulate it widely"

- Kate Auty, ACT Commissioner for Sustainability and the Environment

AT A GLANCE



198

NEWS STORIES

Online and in print



26

MEDIA INTERVIEWS

Radio and TV



4300

SUBSCRIBERS

Our Missive newsletter reached over 4300 fortnightly



2588

FOLLOWERS

on Twitter



53

EVENTS

Seminars, book launches, conferences, symposia



58

PUBLICATIONS

Peer-reviewed journals, books, reports, papers



Our Team

As MSSI entered our tenth year in 2019, our core strength remained our dedicated team of academic and professional staff, and the diverse and multidisciplinary community of scholars and external stakeholders who also call the Institute home. MSSI achieved a positive triennial review which reflects the great work that each member of the immediate and extended MSSI team brings to the Institute's vision: to be a catalyst for a resilient and sustainable future. We extend our sincere thanks to all team members, including those engaged as casual Research Assistants and Research Fellows throughout the year to support MSSI projects and activities, for their sustained commitment to MSSI's purpose.

Team movements

MSSI welcomed a number of new team members to the Climate Reality Project in 2019 – Lisa Cliff, Liz Foley and Alex Rushan joined as Project Officers, and Hrefna Björg and Melissa Yoon spent time with us as interns. We were pleased to have Stephanie Lavau join MSSI as the inaugural Coordinator of the Water Futures Network and have Svenja Keele and Lara Stevens work with us as Research Fellows. Upon the departure of Professor Lars Coenen in his role as the City of Melbourne Chair of Resilient Cities at the end of 2019, MSSI acknowledges the highly connective and academically esteemed contribution Lars made through his work with both the City of Melbourne and the Latrobe Valley Region through the GS3 project focused on regional transitions. MSSI farewelled Caroline Veldhuizen early

in the year upon completion of her role on the GS3 Regional Transitions project. Thanks are extended to Pia Treichel for providing excellent support in semester one as the Coordinator for the Climate Transformations Research Cluster, with Anna Dunn taking over this role in the second half of the year. We also offer sincere thanks to Jen Sheridan for her extensive work on the Foodprint Melbourne project, Dr Svenja Keele for her contributions as Postdoctoral Research Fellow working in collaboration with the City of Melbourne Chair of Resilient Cities, and to Linh Do for her role as Australia and Pacific Lead for The Climate Reality Project.

Our Honorary Fellows

Professor Kate Auty, Honorary Professorial Fellow Martin Brennan, Senior Research Fellow Professor Jim Falk, Honorary Professorial Fellow Professor Tim Flannery, Honorary Professorial

Professor Boris Frankel, Honorary Principal Fellow **Kirsten Larsen**, Food Systems Research and Partnerships Manager

Associate Professor Kes McCormick, Honorary Senior Fellow

Carl Obst, Honorary Research Fellow Professor Chris Ryan, Honorary Professorial Fellow Dr Graham Turner, Honorary Senior Fellow Professor John Wiseman, Honorary Professorial Fellow



Executive Committee

The MSSI Executive Committee provides advice to the Director and acts as a conduit for communication across the various Faculties of the University.

Chair: Professor Brendan Gleeson

MSSI, Faculty of Architecture, Building and Planning

Dr Jeremy Baskin

Melbourne School of Government

Associate Professor Peter Christoff

School of Geography, Faculty of Science

Professor Richard Eckard

Primary Industries Climate Challenges Centre, Faculty of Veterinary & Agricultural Sciences

Professor Robyn Eckersley

School of Social and Political Sciences, Faculty of Arts

Professor Don Henry AM

MSSI, Faculty of Architecture, Building and Planning

Professsor Glenn Hoetker (new)

Melbourne Business School, Faculty of Business and Economics

Associate Professor David Kennedy

Office for Environmental Programs, Faculty of Science

Dr Jeana Kriewaldt

Melbourne Graduate School of Education

Dr Stephanie Lavau

School of Ecosystem and Forest Sciences, Faculty of Science

Associate Professor Malte Meinhausen

Climate and Energy College, School of Earth Sciences, Faculty of Science

Dr Ben Neville

Department of Management and Marketing, Faculty of Business and Economics

Professor Nikos Papastergiadis

Research Unit in Public Cultures, School of Culture and Communication, Faculty of Arts

Professor Stephan Winter

Department of Infrastructure Engineering, Melbourne School of Engineering

Professor Margaret Young

Centre for Resources, Energy and Environmental Law, Faculty of Law



Lucinda Corrigan is the Chair of Farmers for Climate Action and the Director or Chair of multiple other organisations and Councils, including the Chair of Animal Welfare Science Centre (AWSC) at Melbourne University and Animal Genetics and Breeding Unit (AGBU) at the University of New England.

Our Advisory Board

MSSI enjoys the support of a diverse and vibrant Advisory Board of experts, leaders and champions of sustainability. In 2019 we were thrilled to welcome to the Board Karen Cain from the Latrobe Valley Authority, Sue Cattermole from St Vincent De Paul and Lucinda Corrigan from Farmers for Climate Action.

Chair: Arron Wood

Deputy Lord Mayor of Melbourne

Rueben Berg

Director, Indigenous Architecture and Design Victoria

Rosemary Bissett

Head, Sustainability Governance and Risk, National Australia Bank

John Bradley

Secretary, Department of Environment, Land, Water and Planning, Victoria

Gerard Brown

Group General Manager, Corporate Affairs, ANZ Banking Group

Karen Cain

CEO, Latrobe Valley Authority

Sue Cattermole

CEO, St Vincent De Paul Society Victoria

Lucinda Corrigan

Chair, Farmers for Climate Action

Professor Peter Doherty AC

Laureate Professor, University of Melbourne

Graz van Egmond

CEO, Banksia Foundation

Adam Fennessy

Partner at EY, Advisory, Government and Public Sector

Megan Flynn

Executive Director, Pollination

Katerina Gaita

Director, Climate for Change

Rob Gell AM

Director, ReThink Sustainability

Emily Gerrard

Director, Comhar Group

Jeremy Hobbs

Director, Hobbs Consulting

Victoria McKenzie-McHarg

President, Climate Action Network Australia

Stan Krpan

CEO, Solar Victoria

Kane Thornton

CEO, Clean Energy Council

Mark Wakeham

Senior Policy Advisor, Climate, Energy and Just Transitions, ACTU

Professor Rachel Webster

Academic, Physics



Financial Statement

Internal Income

Core funding from Deputy Vice-Chancellor (Research)

DVC(R) Annual MRI Core Funding	\$1,127,000.00
DVC(R) Annual MRI Space Charge Subsidy	\$30,000.00
Other Income, Internal	\$137.15

Total Internal Income \$1,156,862.85

Expenditure

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Core staff salaries		\$565,118.88
Admin and operating		\$12,788.54
		\$18,894.46
Communications and events		\$291,782.41
Research project salaries		
Seed funding, partnership development and engagement		\$273,972.90
		\$30,000.00
Host Faculty space charge	Total Expenditure	\$1,192,557.19
	iotat Experiuiture	71,152,551.15
	Balance	-\$35,694.34
Adjustment based on 2018 seed funding (covered from 2018 c/f)		\$72,721.50
	Revised Balance	\$37,027.16



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Melbourne Sustainable Society Institute

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Director

Professor Brendan Gleeson brendan.gleeson@unimelb.edu.au

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