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We recognise and pay respect to the Elders and communities – past, present, and emerging – of the lands that the University of Sydney's campuses stand on. For thousands of years they have shared and exchanged knowledges across innumerable generations for the benefit of all.

SEI has been instrumental in establishing the University's reputation as a leader in multidisciplinary research in climate change.

Foreword

One of the most exciting aspects of my role as Deputy Vice-Chancellor (Research) at the University of Sydney is supporting the innovative work our multidisciplinary research centres undertake to tackle society's greatest and most complex challenges for the benefit of us all. The Sydney Environment Institute (SEI) is an exemplar of this effort, harnessing the inspiring capabilities of our researchers working on and around the most urgent challenges facing the world, including climate change and biodiversity loss.

SEI is one of the Multidisciplinary Initiatives which have been a standout feature of the University over the past decade, enacting a bold new way of thinking about and conducting research. As we look to the next decade in our *Sydney in 2032* strategy, one of our principal aspirations is to enable research that "is excellent, tackles the greatest challenges and contributes to the common good". This relationship between outstanding, transformational research and the public good is central to SEI's mission. SEI has been instrumental in establishing the University's reputation as a leader in multidisciplinary research in climate change, environmental justice, sustainability, and a range of other pressing issues.

One of the most important things about the Institute is that it sets out to change not just the way we think but the way we act as well. Its research is designed with the express purpose of having a positive impact on public discourse, decision-making, and action on the ground.

In 2023, SEI demonstrated this translational strength through multiple partnerships with government, industry and communities developing climate adaptation strategies and strengthening community resilience in preparation for worsening climate-related disasters.

SEI has also expanded its work in systems transition, embarking on a new multidisciplinary research partnership that aims to reduce the healthcare system's carbon footprint – a project which was recognised for its innovation and potential for large-scale impact with a generous philanthropic grant.

I am delighted to see that SEI's established expertise and reputation in raising issues of social and environmental justice has continued to grow through explorations of our responsibilities to each other, to other species, to the environment and the planet. This work is crucial - we need to transform the human relationship with the environment and change the way we think about the world around us if we are to effectively tackle the climate and biodiversity crises.

What strikes and inspires me the most is the deep connection to community and place that characterises SEI's approach to all of its work. Its researchers put communities at the heart of what they do and that results in symbiotic relationships between SEI's research and those communities. This is the essence of what we strive for in all our research partnerships.

The Sydney Environment Institute has played a critical role in the University's climate research ecosystem in 2023 and it will continue to do so in the years to come. We are fortunate that SEI can always be relied on to be thought-provoking, to look at issues from a unique perspective, and to challenge the accepted beliefs that need to be challenged if we are to make a better future together.



Professor Emma Johnston AO

Deputy Vice-Chancellor (Research), The University of Sydney

Sydney Environment Institute

Director's Note

While the impacts of climate change and biodiversity loss continue, making SEI's mission more important than ever, 2023 was an incredibly productive year with continued growth and diversification in our membership and activities. SEI's 2023 strategic plan was focused on expanding our multidisciplinarity, and as a result we grew our community by 200 people and now have 500 members working towards a just environmental transformation. We are especially delighted to see our targeted efforts to engage with researchers right across the University and beyond resulting in growth in our STEM membership.

This diversification has also been reflected in our research and its impact, with multidisciplinary projects spanning community disaster response, the decarbonisation of the healthcare industry, climate change displacement in the Global South and the intersection of culture and biodiversity loss. Importantly, the success of all projects continued to be underpinned by strong partnerships with community, government, and industry, as well as international collaborators.

Our Collaborative Grants Program has continued to grow in scale and scope. In 2023, 15 recipients spanned seven faculties and schools, working on projects from switching to low-carbon alternatives to "laughing gas" to understanding human-shark relations. We were delighted to see the achievements of recipients including events, workshops, exhibitions, funding applications and academic outputs. Congratulations to both the 2023 Collaborative grant recipients on a successful year, and to those awarded grants for 2024.

Congratulations also to the many SEI members who were recognised for their outstanding work in 2023. SEI's Deputy Directors Professor Thom van Dooren was shortlisted for a Prime Minister's Literary Award, Professor Danielle Celermajer, alongside Professor David Celermajer, was awarded \$1.56m in philanthropic funding to investigate the carbon cost of cardiology procedures and Associate Professor Rosanne Quinnell was again recognised with a Green Gown award for an Aboriginal cultural heritage landscape project. You can read more about our members' achievements in 2023 on page 15.

However, it was also a challenging year with the defeat of The Voice here in Australia, the outbreak of war in the Middle East and increasingly frequent and intense climate disasters. These set-backs for justice, sovereignty, sustainability, and inclusive democracy have strengthened SEI's resolve and vision for a just environmental transformation, as reflected in our 2024–2025 strategic plan.

Looking ahead to 2024, we are excited for what is to come. We will be welcoming the inaugural cohort of Sydney Horizon Fellows and supporting those with shared research interests in their multidisciplinary growth. We will also focus on expanding our work in biodiversity, conservation and culture, and on strengthening partnerships with local and state governments on adaptation strategies and disaste response.



Professor David SchlosbergDirector, Sydney Environment Institute

The success of all projects continued to be underpinned by strong partnerships with community, government, and industry, as well as international collaborators. Sydney Environment Institute

The University of Sydney

2023 at a glance

SEI 2024 Annual Report



Membership

SEI's membership grew from







Events & communications

events hosted by SEI

2,586 people attended SEI's events

18

of these were partnered events



€ 7,426 podcast listens

> 11,000 social media fans

and followers

101,000 social media page and profile impressions

100,200 website views

partners

Collaborative grants Research research: program supports: projects **9** 43 23 research researchers, from: projects all 8 faculties/schools at the University \$7m+ in funding active projects **HDRs** supported

Partner engagement

11

Partners actively engaged in research projects:

government

partners

◎ 32

University partners, of which:

Australian international partners partners

> 30 community

Highlight achievements

- **Professor Thom van Dooren** Shortlisted for the Prime Minister's Literary Award 2023.
- **Director David Schlosberg** Appointed as a Visiting Fellow at the Helsinki Collegium for Advanced Studies.
- **Deputy Director Rosanne Quinnell** Won the 2023 Green Gown Award for Diversity, Equity and Inclusion (mapping, protecting and enriching Aboriginal cultural heritage landscapes).
- **Dr Blanche Verlie** Won the Environmental Politics Article of the Year award.

About the Sydney Environment Institute

The Sydney Environment Institute (SEI) is a world-leading Social Sciences and Environmental Humanities research institute, tackling a range of environmental crises, including climate change and biodiversity loss, through multidisciplinary collaboration.

Working with partners in community, government, and industry, SEI's work focuses on understanding complex environmental, sustainability, and climate challenges, and develops transformational pathways in both thought and action.

As outlined in the University of Sydney's 2032 strategy, SEI's research tackles the world's greatest challenges for the common good. SEI leverages its networks and expertise in pursuit of impact on climate solutions and leads research contributing to the Sustainable Development Goals.

Our vision

SEI's vision is for a just and sustainable environmental transformation in which all life can flourish.



How we work

SEI identifies matters of critical environmental concern and engages with them through creative, collaborative projects designed for real impact.



Facilitate connections: SEI builds relationships across the University of Sydney and beyond to help facilitate connections and identify opportunities for collaboration.



Build community: Through seminars, public events, workshops and symposia, SEI profiles researchers and builds flourishing working communities among academics, policymakers, cultural institutions, students and NGOs.



Support and mentor: SEI supports and mentors students, scholars, and practitioners through funding schemes, grants, training programs and targeted mentorship.

SEI's research is organised across four research themes:



Climate disaster and adaptation

Examining disaster response and designing climate adaptions.



Environmental justices

Understanding and addressing environmental, multispecies and climate injustices.



Biodiversity, conservation and culture

Understanding ecosystems, interconnections and finding inclusive solutions to loss.



Transformative governance

Transforming the governance of biodiversity, climate and society, and their interactions.











In line with the Sustainable Development Goals (SDGs), SEI's research recognises the need for interconnected, systemic shifts across social and environmental systems to achieve a just environmental transformation. SEI's research engages in multiple and varied SDGs, with an increasing focus on SDG 13: Climate Action. Responding to the climate crisis requires significant social, economic, and political change.

SEI's research collaborations also have substantive impact towards SDG 3: Good health and wellbeing, SDG 7: Affordable and Clean Energy, SDG 11: Sustainable cities and communities, and SDG 15: Life on Land, among others.

The University of Sydney

Our community

The SEI team brings expertise from a broad range of academic and professional backgrounds to enable our robust multidisciplinary research and impact.

SEI Directors and Deputies

SEI is led by researchers striving to challenge disciplinary boundaries through purposeful, multidisciplinary research that contributes to the academy, communities, and industry.



Professor David Schlosberg Discipline of Government and International Relations



Professor Danielle Celermaier Deputy Director Academic, Discipline of Sociology and Social Policy



A/Professor Rosanne Quinnell Deputy Director Education, School of Life and **Environmental Sciences**



Professor Thom van Dooren Deputy Director Member Engagement, Discipline of Gender and Cultural Studies

SEI Research Theme Leads

SEI research communities are collaborative and dynamic networks of multidisciplinary research, led by outstanding scholars.



Professor Danielle Celermajer

SEI Deputy Director, Department of Sociology and Social Policy. Research lead: Environmental Justices



Professor Thom van Dooren

SEI Deputy Director, Department of Gender and Cultural Studies. Research lead: Biodiversity, Conservation and Culture



Professor David Schlosberg

SEI Director, Department of Government and International Relations, Research lead: Climate Disaster and Adaptation, Environmental Justices



Dr Sophie Chao

DECRA Fellow and Lecturer, Department of Anthropology Research lead: Biodiversity, conservation and culture



Professor Rosemary Lyster

Law School Research lead: Climate Disaster and Adaptation



Professor Susan Park

Department of International Relations Research lead: Transformative Governance

SEI Advisory Committee

Linking research, industry and community. The SEI Advisory Committee brings together leading thinkers from around the world to provide insight and advice on our strategic direction, research, and partnerships.

Ali Abbas

Director of the Laboratory for Multiscale Systems, University of Sydney

Melissa Haswell

Professor of Practice (Environmental Wellbeing), University of Sydney

Peter Lipman

Founder, Anthropocene Actions

lain McCalman

Emeritus Professor of History, Australian Catholic University

Joel Negin

Professor and Acting Deputy Executive Dean - Academic, University of Sydney

Jenny Newell

Curator, Climate Change Projects, The Australian Museum

Dagmar Reinhardt

Associate Professor, School of Architecture Design and Planning, University of Sydney

Tim Stephens

Professor of International Law, University of Sydney

Glenda Wardle

Professor of Ecology and Evolution, University of Sydney

Zoe Whitton

Managing Director, Head of Impact, Pollination

Bhiamie Williamson

Research Associate, **Australian National University**

Christine Winter

Senior Lecturer in the Politics Programme, University of Otago

Georgina Woods

Head of Impact, Climate Risk Pty Ltd

Professional staff team

Bringing a wealth of expertise and professional knowledge to support multidisciplinary environmental research.

Emma Bones

General Manager

Eloise Fetterplace

Senior Project Officer

Suhasini Gunatillaka

Administration and Events Officer

Kirsten Jackson

Program Manager

Saimi Jeong

Communications and **Engagement Officer**

Maria Paula Cardoso Nunez

Administration Officer

Thanh Whittam

Finance and Administration Officer

Genevieve Wright

Senior Project Officer

The University of Sydney Sydney Environment Institute

Membership

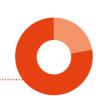
In 2023, SEI grew its membership to:

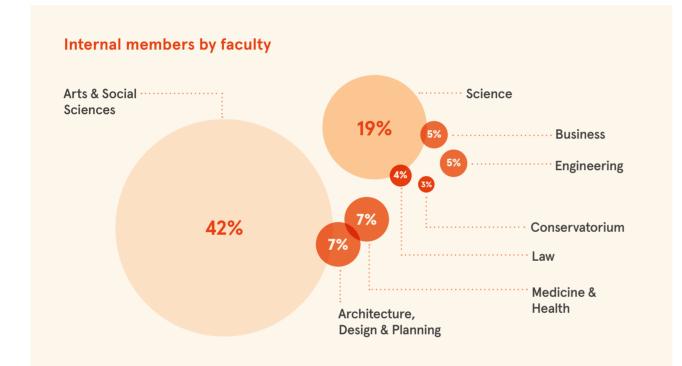
500

researchers, policymakers and practitioners

78%

are internal University members







2023 Member achievements

SEI celebrates the achievements of all our members in 2023 whose fantastic research, collaborations and commitment to environmental issues has been acknowledged and celebrated through awards, promotions and funding. A small sample of 2023 awards follow.

Highlight achievements

- Professor Ali Abbas
 Finalist for the University of Sydney Eureka Prize
- Professor Warwick Anderson
 The 2023 Bernal Prize
- Professor Danielle Celermajer and Dr Sophie Chao Runner-up for the Council of Editors of Learned Journals Best Special Issue Award
- Dr Sophie Chao
 Association for Legal and Political Anthropology's
 Book Prize in Criminal Anthropology
- Dr Sophie Chao
 FASS Early Career Research (ECR)
- Dr Sophie Chao
 The American Ethnological Society's Sharon
 Stephens Prize
- A/Professor Penelope Crossley
 Discovery Early Career Researcher Award (DECRA)

 Fellowship Excellence Award
- Professor Dieter Hochuli
 2023 Ecological Society of Australia Gold Medal
- A/Professor Arunima Malik
 Discovery Early Career Researcher Award
 (DECRA) Fellowship
- A/Professor Kate Owens
 Sydney Research Accelerator (SOAR) Fellowship
- A/Professor Rosanne Quinnell 2023 Green Gown Award
- A/Professor Dagmar Reinhardt ARC Discovery Project
- Professor David Schlosberg
 Appointed as a Visiting Fellow at the Helsinki Collegium for Advanced Studies.



 Professor David Schlosberg and FoodLab (Jamie Loveday)
 FASS Research Impact Award

 A/Professor David Ubilava ARC Discovery Project

- Professor Thom van Dooren Humboldt Research Award
- Professor Thom van Dooren
 Shortlisted for the Prime Minister's Literary Award 2023
- Professor Thom van Dooren
 The Elsevier's World Animal Protection Day Atlas Award and was shortlisted for a Prime Minister's literary award for non-fiction
- Professor Thom van Dooren, A/Professor Dinesh Wadiwel, and Dr Jaqueline Dalziell ARC Discovery Project
- Dr Blanche Verlie
 The Environmental Politics Article of the Year award.

to all of our members

Research Program Highlights

In 2023, SEI and its members conducted world-leading multidisciplinary research across a broad range of areas, focused on tackling the climate and related environmental crises.

SEI's research projects continued to centre community engagement and partnership and strive to translate research into real-world impact. They also had substantive impact towards the United Nations' Sustainable Development Goals.

A selection of highlights from SEI's research projects in 2023 follows, demonstrating a huge breadth and depth of activity and expertise.

"Through this partnership between the National Museum of Australia and the Sydney Environment Institute, we are working to gather stories from around the country about threatened species and places, what they mean to communities, and why they matter so much."

- Thom van Dooren, about the Living on the Edge Program

Living on the Edge: Caring for Australia's Threatened Places



Living on the Edge is a public engagement program, produced in partnership with the National Museum of Australia (NMA). Led by Professor Thom van Dooren (SEI) and Dr Kirsten Wehner (NMA), this initiative examines Australia's threatened ecological communities and endangered species.

Focused on the imminent risk of irreversible environmental change and mass extinction, the program aims to build public awareness, fostering regenerative action through stories of care and hope. The multi-form initiative involves public events, community activation days, digital features, a classroom resource, and a Festival of Ideas to be delivered between 2023 and 2025.

It explores eight focal ecological communities, emphasising cultural, emotional, and ethical connections to non-human species. The program targets diverse audiences, including adults, families, and academics, with outputs including podcasts, digital features, classroom resources, and potential touring exhibitions. The program launched in October 2023, with the hugely successful River Country Community Day.

Partnerships with the Commonwealth Department of Climate Change, Energy, Environment, and Water, as well as the Australian Academy of Humanities continue to enhance the program's reach and impact.

Unearthing critical minerals



In 2023, Professor Susan Park expanded SEI's critical minerals research, exploring the global repercussions of mineral extraction for the renewable energy transition. The research conducted with national and international collaborators delved into the political economy, regulation, and environmental and social consequences of mining these minerals, vital for technologies like wind, solar photovoltaic, and lithium-ion batteries. With countries competing for finite mineral supplies to transition to low-carbon economies, the research investigates the challenges of a mineral-intensive shift, exploring the sustainability-security nexus and geopolitical tensions over supply chains.

The Critical Minerals Symposium, hosted by the SEI in September 2023, gathered scholars to examine the impacts of mineral extraction, considering diverse state visions and approaches. The symposium emphasised the ethical and environmental considerations of mining practices, including Indigenous land rights, environmental toxicity and social impacts.

Complementing the symposium, SEI produced a four-part podcast series, inviting experts to discuss critical mineral supply chains, compare mining industries internationally, and explore renewable energy regulation. The project also welcomed a new PhD candidate and congratulated another awarded a doctorate in 2023.

"Indeed, the impacts of mining for critical minerals cannot be overstated. They not only are often located on Indigenous Peoples' land, raising questions of Free, Prior and Informed Consent, they also have significant environmental and social impacts..."

- Susan Park













The University of Sydney Sydney Environment Institute

Reducing the healthcare system's carbon footprint



The Sydney Environment Institute is undertaking a multidisciplinary project led by Professors Danielle Celermajer and David Celermajer, addressing the intersection of health care emissions and climate change. The health and medical sector is responsible for 7% of Australia's greenhouse gas emissions, so this research seeks to contribute to reducing these emissions. It does so by measuring emissions from medical procedures to enable carbon costs to be factored into decision making, and identifying pathways for policy development.

The pilot study in 2022–2023 compared emissions from cardiovascular procedures and revealed significant differences between two common treatments. In 2023. \$1.56m in funding was secured to extend the project for another three years. The collaborative project brings together researchers from medicine, public health, physics, sociology and policy studies, to ensure translation of findings and benefits to government, the healthcare system, healthcare professionals, and patients.

The ongoing project will generate emissions data, create a medical procedure carbon footprint calculator, develop pilot interventions, and empower healthcare practitioners to reduce emissions. The project seeks to influence policy in response to growing concerns about climate action and sustainability in healthcare.

Emotions, young people and climate distress



In response to the pressing need for addressing climate distress within the field of clinical psychology, SEI supported Professor Paul Rhodes and Dr James Dunk through the 2022 SEI Collaborative Grant Scheme. The project aimed to empower youth leaders to create resources for headspace clinicians. The collaborative effort resulted in creative forms of dialogue being identified for clinicians and youth to guide climate distress conversations. These resources address topics including understanding how climate distress is experienced by the youth, integrating interdisciplinary knowledge on climate emotions into clinical approaches, and incorporating critical issues highlighted by young people into practice.

Building on the connections made and a desire to continue this work, the project leads established 'Climate Distress, Art and Open Dialogue: A Community of Practice' in collaboration with project partners in 2023. The group secured \$25,000 in funding from the Jan de Voogd Peace Fund, and published the paper 'Climate Distress: A Review of Current Psychological Research and Practice,' (Professor Paul Rhodes, Dr. James Dunk, Mr. Jordan Koder).

SEI continues to lead the way in developing the field of multispecies justice



To combat the degradation of environments, including biodiversity, we must continue to extend justice beyond the interests of humans. This year SEI researchers published several highly cited publications on multispecies justice across leading journals including a special issue of Cultural Politics, which was recognised in the Council of Editors of Learned Journals 2023 Awards. and an article in Environmental Politics on climate justice in more-than-human worlds, which was named the journal's 2023 Article of the Year. This scholarly work has culminated into a field defining book 'Institutionalising MSJ' (Cambridge University Press), which will be published in early 2024.

Locally, SEI researchers applied this work by continuing their ground-breaking research on community protection of animals during catastrophic fires in partnership with Shoalhaven City Council. This project facilitated workshops with communities to identify effective support systems and develop plans for formalising animal protection processes before, during and after climate events. Internationally, the Institute embarked on work with philosophers, scientists, and animal welfare specialists from across the globe to develop models for representing non-human animals in decision-making.

SEI works with policy makers to develop just adaptation frameworks



In 2023, SEI held two workshops that brought together 33 key stakeholders working in government policy development and application at local, state, and national levels. The purpose of the workshops was to consider to what degree environmental justice is currently present in principle or action in adaptation planning in NSW, and crucially, to identify opportunities for more just adaptation policy frameworks and practices throughout in NSW and Victoria.

Workshop participants provided key insights into the key drivers of adaptation policy in their organisational contexts, the intersections between environmental justice and climate change adaptation, and the key barriers and enablers of just adaptation in their area of work.

Run as part of SEI's ARC funded project exploring environmental justice in contemporary climate policy in Australia, the findings from these workshops will contribute to the project's broader objective to develop innovative approaches, engagement, and theories for embedding environmental justice into climate change adaptation. In 2024, this will include the development of 'Just Adaptation' guidelines, for policy makers at both the local and federal level – an important step towards addressing this goal.





















The University of Sydney Sydney Environment Institute -

Examining community responses to shock climate events



The multidisciplinary research project, <u>Self-organising</u> <u>systems to minimise future disaster risk</u>, involves researchers from five faculties collaborating with three disaster-affected communities in New South Wales: the Blue Mountains, Hawkesbury, and the Northern Rivers. The project seeks to improve state-wide disaster risk reduction by sharing insights from disaster-affected communities engaged in community-led responses, recovery, and adaptation.

The project interviewed 68 community members and facilitated peer-learning and community networking between community organisers. Research findings have been shared through reports, presentations, and policy submissions. The research has also shaped the creation of Stories are the Toolkit, a 10-part vignette series illustrating disaster-affected communities' actions and experiences. It showcases their reliance on social connections and local knowledge in preparing for, responding to, and recovering from catastrophic fire and flood events.

The project's impact has led to the formation of a regional alliance of community-led disaster and resilience groups in the Northern Rivers. Hosted by the University Centre for Rural Health, this alliance deepens relationships, facilitates resource sharing, and engages in advocacy work that prioritises community resilience amid worsening climate disasters.

Harnessing the transformative potential of climate governance



The climate crisis is a wicked governance problem, its scale transcending national borders and magnifying underlying inequalities. Associate Professor Kate Owens addressed this challenge at the 2023 lain McCalman Lecture, explaining how we can effectively harness climate governance to achieve deep coordination and sustained change.

The lain McCalman Lecture celebrates SEI co-founder and former co-director lain McCalman's dedication to fostering and pioneering multidisciplinary environmental research. The lectures aim to highlight the work of early to midcareer researchers working across disciplinary boundaries to impact both scholarship and public discourse.

A/Prof Owens explored how Australia could successfully transition and adapt its interconnected social and technological systems as the climate crisis intensifies. Drawing on a variety of research themes that have informed her work, A/Prof Owens used examples from the renewable energy and rural water sector to explore the foundations of future climate governance in Australia. She demonstrated how the tensions and complexities involved in managing systemic climate risk and climate-led transitions in Australia can inform transformative governance frameworks and Australia's role in supporting developing nations.

Listen to the lecture <u>here</u>.

Experts unpack how different sectors are adapting to climate change impacts



In 2023, SEI hosted a new Climate Adaptation series exploring the strategic measures needed to protect individuals and communities from the adverse impacts of climate change. As climate disasters increase in severity and frequency, nations must adapt all sectors of society from infrastructure and food supply chains to investment strategies in a just and sustainable manner. This series, led by SEI Postdoctoral Fellow Dr Justin See, featured thought leaders across research, business, policy and communities, exploring opportunities in climate change adaptation across different scales.

The series began by featuring leading political scientist.

Professor Daniel Aldrich who highlighted the important role that social networks play in building adaptive capacity and resilience. This was followed by panel discussions on how the financial sector and food systems are adapting to climate change risks and opportunities. The series concluded by returning to the experience of communities after catastrophic climate-driven disasters and presenting new research from the SEI project Self-organising systems to minimise future disaster risk. Voices from the Northern Rivers, Hawkesbury and Blue Mountains revealed the essential role of spontaneous community organising underpinned by strong local knowledge and connection.

The power of imagination in the face of ecological collapse



The climate emergency poses a crisis of imagination, and hence of action. The <u>Grounded Imaginaries</u> project, funded by the V Kann Rasmussen Foundation, explores how dominant narratives of the future empower communities to take meaningful collective action to create real and sustainable futures. A team of researchers and 14 youth fellows worked with eight communities across Australia and India to understand and share their stories to inspire other communities and influence policy.

The project produced over 43 research outputs including a podcast series, short films, community radio programs, artworks, policy briefs, media articles and two academic articles, as well as collaborating in community-based activities such as festivals and events in India and Australia. Each youth fellow has developed a broad range of skills in facilitating, researching and documenting community transformative action.

One output, the <u>Reimagined Futures</u> podcast series, follows five communities from India and Australia who are facing challenges of food and water insecurity, deforestation, and climate migration. Featuring community leaders envisioning alternative futures, the series explores scenarios where local food systems are led by women, supported by regenerative farming, and forests are cultivated through learning from the earth.



















Researcher support & development

The Sydney Environment Institute is dedicated to fostering ambitious, creative, and collaborative initiatives among students, scholars, and practitioners. Our goal is to equip and empower our members, spanning from students to senior researchers, to become versatile scholars and multidisciplinary problem solvers.

SEI provides a range of schemes and programs tailored to support researchers at various career stages. These initiatives encompass professional development and capacity building activities, such as training in multidisciplinary research methodologies, guidance on career pathways, personalised mentoring for funding submissions and project proposals, advice for writing across different platforms, as well as logistical support for members' research dissemination and engagement efforts.

Members of SEI enjoy access to a network of over 500 mentors and collaborators. This network extends beyond experienced academics across all faculties at the University of Sydney to include a broader alliance of external researchers, policymakers, consultants, community-based organisations, and representatives from non-profit and government bodies.

"The SEI undergraduate fellowship was an invaluable opportunity for my honours year in engineering. I gained access to a network of brilliant academics and generous funding, both of which made my research possible."

- Grace Barrett-Lennard, 2023 Honours Research Fellow

Honours Fellows

In 2023, the Sydney Environment Institute welcomed three students, completing their honours year at the University of Sydney on topics aligned to SEI's research themes. The SEI Honours Research Fellowship Program is designed to provide a supportive environment and community for emerging researchers and expose them to multidisciplinary thinking and methodologies to address critical environmental issues. Honours Fellows are provided with additional mentoring from SEI members, opportunities to present their work and participate in roundtable discussions, a desk in the SEI office, and a bursary.

The three honours projects for 2023 were:



Elizabeth Newton, Sydney Law School Are Rights of Nature "Right" for Nature? Operationalising Wild Law Principles in International Environmental Law



Grace Barrett-Lennard, Faculty of Engeering Understanding Climate Change Flood Impact Scenarios using Serious Games



Mikaela Barrow, Faculty of Science Biodiversity in Urban Spaces

Postgraduate Students

In 2023, the Sydney Environment Institute funded three Doctor of Philosophy (PhD) students and one Masters student. SEI Executives and Research Theme Leads also provided supervision for students working on projects that closely align to SEIs Research Themes.

Doctor of Philosophy Candidates:

Freya MacDonald

Environmental Fiction and Future Environmental Imaginaries: close reading contemporary Environmental Fiction and Creative non-fiction written during and in the wake of the 2019/2020 Black Summer Bushfires in Australia

Ana Maria Ulloa
 The Roles of NGOs in Fostering Multi-level
 Accountability: Can Learning Improve Biodiversity
 Loss and Climate Change?

Muhammad Sikandar Ali Chaudary
 Climate Change Mitigation: The Politics of
 Extraction for a Just Energy Transition

Caitlin Anderson
 For the Beauty of the Earth: Ecological Encounters in Contemporary Climate Fiction

Darren Chang
Decolonial Animal Sanctuaries: Prefiguring
Multispecies Justice

Hannah Della Bosca
 For Colony and Empire: The Lifeways and Lifeworlds of Ants as Paradox and Paradigm of Terrestrial Resilience

• Philip McKibbin
The Politics of Love and Multispecies Justice

Myles Oakey
 The Death of a Songbird: An arts of listening
 in a time of extinctions

Oliver Summerfield Ryan
 What Explains Slow Energy System Transitioning?
 The Case of Australia's Electricity Sector

Sam Widin
Cockatoo Cultures and Edge
Effects in Tropical Science.

CONGRATULATIONS
DR GEMMA VINEY
Who was awarded her
PhD in 2023 for her thesis
Developing Environmental
Justice in the Australian
Context.

Masters Students

Dayana Brook
 Making flights the exception – not the default –
at universities

Costanza Chittaro
 Sustainable and ethical food on campus:
 creating a roadmap

Tom Connell
 Climate resilience and adaptation strategies
for the University of Sydney

David Toogood
 Sustainability in commercial kitchens with FoodLab Sydney

Sheryn See
 Understanding Humanitarian Responses to
 Complex Displacement Situations in the
 Context of Climate Change.

"In my time, I was particularly impressed by the multidisciplinary approach to environmental research, which I find so immensely important... SEI's emphasis on collaboration, not just across universities and disciplines, but also beyond the work of the university is something I find very inspiring. Universities can be a stranger place, especially for a PhD student, however at SEI I always felt welcome and appreciated."

- Ingrid Jensen (Visiting PhD Fellow in 2022)

Postdoctoral Research Fellows

The Postdoctoral Research Fellows at the Sydney Environment Institute have played a crucial role in advancing projects within the Research Themes, establishing networks and support systems for SEI members and collaborators, securing research funding for the Institute, and contributing to various research dissemination and translation activities.

Dr Justin See - 2023-current

Dr Anna Sturman - 2022-current

• Dr Scott Webster - 2022-current.

The University of Sydney Sydney Environment Institute

Support for Early Career Researchers

The Sydney Environment Institute is dedicated to supporting Early Career Researchers (ECRs). SEI has established ambitious goals to ensure that researchers gain exposure and valuable experience through collaboration with the Institute.

Mentoring and research training

In 2023, SEI launched a Funding and Pitching series of workshops and presentations, designed to support members as well as any early career research at the University of Sydney understand the researchers funding landscape and receive guidance on apply, or pitching for funding. Over 150 early and mid-career researchers (EMCRs) participated in this series.

In addition to one-on-one support and the training opportunities provided by Faculties and Central Services at the University, SEI ran eight sessions across the year including research funding 101, understanding the ARC process and op-ed training.

Deputy Director Member Engagement, Professor Thom van Dooren ran workshops dedicated to guiding EMCRs through the research funding process, including; a series of six workshops to guide prospective applicants through the process of applying for an Australian Research Council DECRA, a series of sessions to help researchers plan and develop a research strategy for their career stage, and a brainstorming session for those planning to submit an application to the Australian Research Council's Discovery Project Scheme.



Career Pathways series

The Sydney Environment Institute continued its Career Pathways series to provide HDRs and ECRs with insight and advice from researcher who had progressed their careers through differing pathways. Former students, employees, and current collaborators were invited to speak at two sessions in 2023. These sessions were attended by over 160 students and EMCRs

Collaborative Grant Program

The Sydney Environment Institute's Collaborative Grant Program supports the development of new, collaborative, multidisciplinary projects at the University of Sydney. The program provides funding for project teams working across faculties, on topics aligned to SEI research themes in two forms:

- Collaborative fellowships funds for teaching relief of the successful applicants, to provide them with the time needed to establish a new research project.
- Collaborative seed funding funding for a multidisciplinary project to develop new ideas and methods, or link existing individual projects with collaborators across campus.

In mid-2023, a call for applications for the 2024 program was announced, with 14 applications for Collaborative Seed Funding, and four applications for Collaborative Fellowships.

2023 Collaborative Projects

SEI supported seven new collaborative projects in 2023.

Listening to the Earth

Dr Diana Chester and A/Prof Damien Ricketson were awarded Collaborative Fellowships for their project Listening to the Earth. The project aimed to deploy a speculative process to the discipline of listening via the design of unique instruments that listen. The goal of the project is to engage with environmental concerns through the medium and metaphor of sound.

"The Collaborative Fellowship facilitated a valuable partnership with a fellow researcher. The opportunity and space to explore related interests via different perspectives enabled me to reconsider and enrich aspects of my own research and creative practices. The supportive staff and engaging activities provided a nurturing environment to develop and test ideas. The impact of the fellowship will undoubtedly be felt in many projects over the coming years."

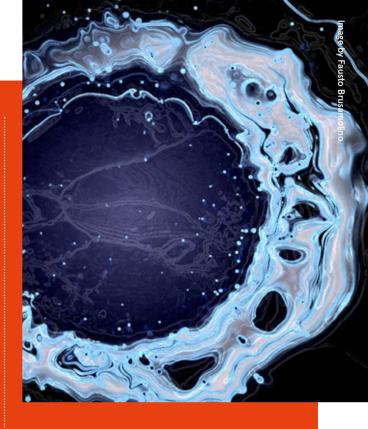
– A/Prof Damien Ricketson, 2023 Collaborative Fellowship recipient

Repairing Australia's climate economies

Dr Sophie Webber (Faculty of Science) and Dr Gareth Bryant (Faculty of Arts and Social Sciences).

"SEI have provide incredibly supportive and encouraging project management skills that have been crucial to keeping our project on track (amidst several personal and professional movements), and we have enjoyed thinking with them about creative ways to achieve research impact. We are excited about the ways SEI can help us reach across faculties within the University and even beyond the University through their broad and engaged networks of academics, professionals, practitioners and activists working towards more just climate futures."

- Dr Sophie Webber, 2023 Collaborative grant recipient



Restoring rural places: stewardship, story, connection and Country

Ms Katie Moore (Sydney Policy Lab), Dr Rebecca Cross (Faculty of Science) and A/Professor Rosanne Quinnell (Faculty of Science)

Exploring use of "laughing gas" in maternity units and clinician and patient views on transitioning to low carbon alternatives

Dr Kristen Pickles (Faculty of Medicine and Health) and A/Professor Arunima Malik (Faculty of Science)

Human-Shark Relations: Coexistence and conservation based on better understandings, public education, and policy change

Dr Chris Pepin-Neff (Faculty of Arts and Social Sciences) and Professor David Raubenheimer (Faculty of Science)

Climate Imaginaries Exhibition and Workshop

Dr Jennifer Ferng and Dr Daniel Ryan (School of Architecture, Design and Planning)

Places of Refuge amidst Climate Change in Complex Displacement Contexts

Dr Susan Banki (Faculty of Arts and Social Sciences) and Dr Aaron Opdyke (Faculty of Engineering).

The University of Sydney Sydney Environment Institute

2024 and beyond

In 2024 and beyond, SEI will continue to lead on research addressing climate change and the Sustainable Development Goal (SDGs) and play a key role in the delivery of the University of Sydney's (USYD's) 2032 strategy.



The Sydney Environment Institute (SEI) is a world-leading Social Sciences and Environmental Humanities research institute, tackling a range of environmental crises, including climate change and biodiversity loss, through multidisciplinary collaboration.

SEI's vision is for a just environmental transformation in which all life can flourish. We work to extend and amplify engagement on environmental issues and bring together expertise from across disciplines to tackle the greatest challenges.



2024-2025 **STRATEGIC GOALS**

Academic reputation

Significant contributions to the academy, significant partnerships, a global reputation for academic excellence.

Research impact

The translation of multidisciplinary research for impact, grounded in community engagement.

Researcher support

An intellectual home for researchers working on environmental research that effectively supports ECRs.

Internal ecosystem

A leader in the USYD climate and biodiversity research ecosystem, facilitating collaboration and coordination.



RESEARCH THEMES



Climate disaster and adaptation

Examining disaster response and designing climate adaptions



Environmental justices

Understanding and addressing environmental. multispecies and climate injustices.



Biodiversity, conservation and culture

Understanding ecosystems, interconnections and finding inclusive solutions to loss.



Transformative governance

Transforming the governance of biodiversity, climate and society, and their interactions.



First Nations knowledges and engagement

Environmental imaginaries and storytelling

Building community and supporting ECRs

Community engagement, collaboration and partnerships

PRINCIPLES & APPROACHES

The University of Sydney Sydney Environment Institute

This work is crucial - we need to transform the human relationship with the environment and change the way we think about the world around us if we are to effectively tackle the climate and biodiversity crises.

- Emma Johnston

Thank you

The achievements of the Sydney Environment Institute are made possible by the community of SEI, including all our members and staff. We would like to thank you all for your hard work, passion and commitment to the mission of SEI in 2023.

Partner with us

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Support our work

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