



THE UNIVERSITY OF  
MELBOURNE

Climate  
CATCH Lab

# Impact Report 2024-2025

# Contents



*The University of Melbourne and the Climate Collaborative Action for Transformative Change in Health and Health Care (CATCH) Lab acknowledge the Traditional Owners of the unceded land on which we work, learn and live: the Wurundjeri Woi-wurrung and Bunurong peoples (Burnley, Fishermans Bend, Parkville, Southbank and Werribee campuses), the Yorta Yorta Nation (Dookie and Shepparton campuses), and the Dja Dja Wurrung people (Creswick campus).*

*The University also acknowledges and is grateful to the Traditional Owners, Elders and Knowledge Holders of all Indigenous nations and clans who have been instrumental in our reconciliation journey.*

*We recognise the unique place held by Aboriginal and Torres Strait Islander peoples as the original owners and custodians of the lands and waterways across the Australian continent, with histories of continuous connection dating back more than 60,000 years. We also acknowledge their enduring cultural practices of caring for Country.*

*We pay respect to Elders past, present and future, and acknowledge the importance of Indigenous knowledge in the Academy. As a community of researchers, teachers, professional staff and students, we are privileged to work and learn every day with Indigenous colleagues and partners.*

Director's Report	2
A word from our Academic Convener	3
About the Climate CATCH Lab: Strategy and vision	4
Our Research Streams	5
Impact snapshot	8
Impact case studies	10
Health impacts	10
Sustainable healthcare	11
Mitigation	12
International engagement and adaptation	13
Policy and politics	14
Just energy transitions	14
Creativity and imagination	14
Resilience	15
Intergenerational justice	15
Student Engagement	16
Awards and Recognition	16
Expanding our network	17



# Director's Report

Since its launch in mid-2023, the Climate Collaborative Action for Transformative Change in Health and Healthcare (CATCH) Lab has firmly established itself as a leader in climate and health research, education, and policy engagement — locally, nationally, and across the Indo-Pacific.

A joint initiative of the Melbourne School of Population and Global Health, Melbourne Medical School, the Faculty of Medicine, Dentistry and Health Sciences, and Melbourne Climate Futures, the Lab represents the University of Melbourne's flagship, interdisciplinary hub for researchers, educators, practitioners, students and innovators advancing knowledge and action at the complex intersection of climate change and human health.

As Director, I'm proud to reflect on the Lab's achievements over the past 12 months, building on our inaugural [2023–2024 impact report](#). In the last year, we have experienced rapid growth in our collaborative networks, collective impact, and strategic influence – testament to the dedication and vision of our interdisciplinary stream leads and leadership team, including Eugenie Kayak, Belle Workman, and Rebecca Patrick. As global climate records continue to tumble, with ever-increasing and inequitable impacts on human health and wellbeing, this work has never been more urgent.

## Driving Interdisciplinary Research and Innovation

A central focus of the Lab has been supporting high-impact, scalable research aligned with critical issues and questions, from health systems and mental health, to disaster preparedness and creativity and imagination. Through the MDHS Climate Change and Health Seed and Sapling funding schemes, the Lab supported five interdisciplinary projects led by University of Melbourne researchers over 2024 and 2025. These initiatives strengthened cross-faculty collaborations

and fostered innovation, with several going on to achieve significant policy and practice change, as showcased in this report's impact case studies.

Beyond fostering new ideas and solutions within the University, we collectively mobilised more than \$10 million in multi-year research funding from external grants and funding agencies. Highlights include a \$4.8 million grant to enhance Pacific populations' resilience to climate-related health impacts ([PAVE-Health](#)) with our partners at the Pacific Climate Change Centre, representing Wellcome's first-ever climate and health specific investment in the Pacific.

Our researchers also secured funding from the Australian Government's National Health and Medical Research Council (NHMRC) for two projects, aimed to deliver youth mental health interventions that address the increasing impact of climate change on young people ([PRIME](#)), and drive adoption of high-value healthcare sustainability initiatives in Australian hospitals ([Healthcare Environmental Sustainability](#)) respectively. Importantly, we are working with the World Health Organization (WHO) to support consultation, analysis and co-development of First Nations guidance on implementing climate and health research and policy initiatives, in collaboration with Onemda, the Pacific Climate Change Centre, and the Climate and Health Alliance.

## Thought Leadership

Over the past twelve months, Climate CATCH Lab researchers have published more than 70 peer-reviewed articles, reviews and policy papers across leading climate change, health and environmental journals. We have launched practitioner-focused resources for sustainable healthcare, climate-health policy integration, reducing nitrous-oxide leaks in hospitals, and case studies of low-carbon, climate-resilient health systems.

## Strategic engagement and influence

The Climate CATCH Lab has maintained a strong international presence, contributing to major global forums and policy dialogues. We are an active contributor to global, regional and national climate change and health scientific assessment and technical bodies, including:

- The Intergovernmental Panel on Climate Change (IPCC)
- WHO's Alliance for Action on Climate Change and Health (ATAACH) and Asia-Pacific Centre for Environment and Health
- Planetary Health Alliance
- The Lancet Countdown on Climate Change and Health (Global and Oceania networks)
- The Australian Government's Climate and Health Expert Advisory Group (CHEAG)
- The Climate and Health Alliance (CAHA)
- Doctors for the Environment Australia (DEA)
- Better Futures Australia
- World Adaptation Science Programme
- Future Earth
- Australian Department of Foreign Affairs and Trade.

## Student and Early Career Researcher Development

Nurturing the next generation of climate-health leaders remains central to the Climate CATCH Lab's mission. We hosted our second annual Climate and Health Careers Nights, connecting students, early to mid-career researchers (EMCRs) and practitioners to career pathways and professional networks. The Lab has actively supported postgraduate subjects within the flagship Graduate Certificate of Climate Change and Health, and established an early-career climate change and health researcher network. Regionally, we co-chair the Climate and Public Health Education Network (CPHEN), helping to shape education and training across Australia, New Zealand, Fiji and Papua New Guinea.

## Looking Ahead

As we enter our third year, the Climate CATCH Lab will consolidate and scale our research through long-term partnerships and regional programs. We will deepen engagement across the Indo-Pacific, with a focus on capacity-building, generating new evidence and insights, and co-designing innovations for policy and practice. Our commitment to equity, justice and sustainability remains at the heart of everything we do. We look forward to the opportunities ahead and are grateful to our collaborators, students, and funders who continue to champion our vision for climate-resilient, sustainable and equitable health systems.

## Professor Kathryn Bowen Director, Climate CATCH Lab

# A word from our Academic Convener



This year has been one of exciting growth and deepening collaboration. We've welcomed five new stream co-leads – including three EMCR representatives – across key areas: Health Impacts, Creativity and Imagination, Policy and Politics, and International Engagement and Adaptation. Their leadership is helping shape a more inclusive and dynamic alliance of researchers, practitioners, and educators.

We've also engaged a dozen research assistants across various research, education and engagement activities, strengthening our capacity and supporting emerging leaders. Notably, EMCRs like Sam Eala and Urvi Thanekar have represented our work at international conferences, showcasing the global relevance of our research.

Cross-stream collaboration remains central to our approach, with regionally significant new foci emerging from Just Energy Transitions, Sustainable Healthcare and International Engagement and Adaptation streams – highlighting the strength of interdisciplinary engagement.

Together, we're building a vibrant, interdisciplinary alliance – one that's grounded in shared purpose, respect and reciprocity, and driven by collective impact on public health and the building of resilient health systems in a climate-impacted world.

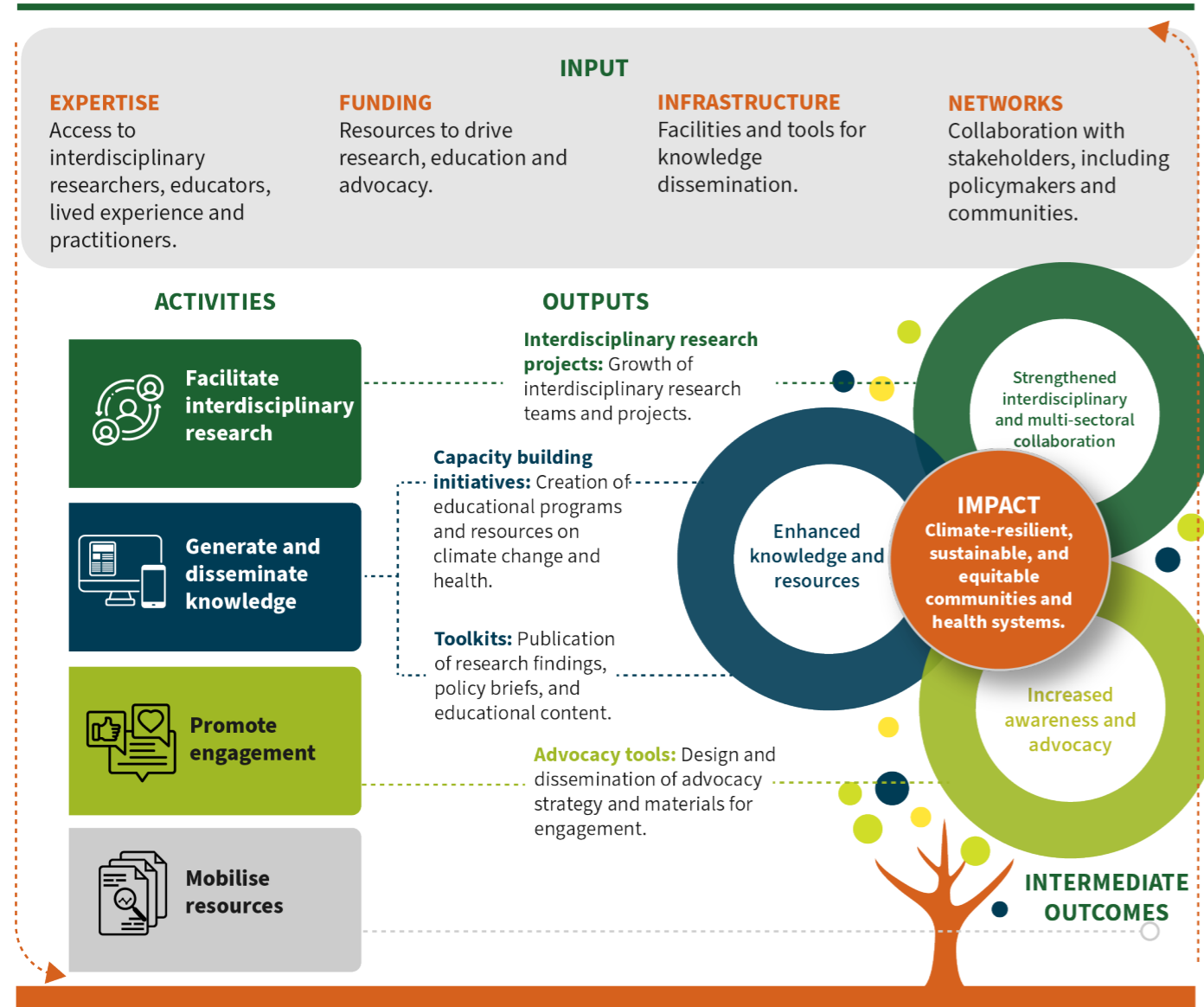
## Associate Professor Rebecca Patrick Academic Convener, Climate CATCH Lab

# About the Climate CATCH Lab: Strategy and vision

## CONTEXT

Climate change poses the most significant threat to public health. Collective action, interdisciplinary research, creativity and a focus on equitable solutions are needed to drive population-wide health system transformation and resilience. The time is now to ramp up our policy-relevant research and related education and advocacy activities.

## THEORY OF CHANGE



## OUR APPROACH

A collaborative interdisciplinary network of researchers, educators, practitioners and strategic thinkers, advancing knowledge and action at the nexus of climate change and health across nine streams.

# Our Research Streams



# Our people



**Professor Kathryn Bowen**  
Director and Co-Lead (International  
Engagement and Adaptation)



**Enterprise Professor  
Eugenie Kayak**  
Deputy Director and Co-Lead  
(Sustainable Healthcare)



**Dr Belle Workman**  
Deputy Director and Co-Lead  
(Policy and Politics)



**Dr Claire Leppold**  
Co-Lead  
(Resilience)



**Professor Ajay Mahal**  
Co-Lead  
(Just Energy Transitions)



**Dr Katitza Marinkovic Chavez**  
Co-Lead  
(Intergenerational Justice)



**Associate Professor  
Rebecca Patrick**  
Academic Convenor



**Hannah Morrice**  
Coordinator and Co-Lead  
(Policy and Politics)



**Kristine Jover**  
Administration and  
Project Officer



**Associate Professor  
Forbes McGain**  
Co-Lead  
(Sustainable Healthcare)



**Professor Celia McMichael**  
Co-Lead (International  
Engagement and Adaptation)



**Dr Reihana Mohideen**  
Co-Lead  
(Just Energy Transitions)



**Professor Gary Anderson**  
Co-Lead (Creativity and  
Imagination)



**Professor Peter Annear**  
Co-Lead  
(Just Energy Transitions)



**Stephanie Campbell**  
Co-Lead (Creativity and  
Imagination)



**Elise Moo**  
Co-Lead (International  
Engagement and Adaptation)



**Phoebe Quinn**  
Co-Lead  
(Intergenerational Justice)



**Dr Lennart Reifels**  
Co-Lead (Health Impacts)



**Dr Sonia Chanchlani**  
Co-Lead  
(Sustainable Healthcare)



**Dr Julieta Galante**  
Co-Lead (Creativity and  
Imagination)



**Professor Lisa Gibbs**  
Co-Lead  
(Resilience)



**Professor Mark Stevenson**  
Co-Lead (Mitigation)



**Professor Iain Walker**  
Co-Lead (Health Impacts)



**Dr Clare Walter**  
Co-Lead (Mitigation)



**Arthur Wyns**  
Co-Lead  
(Policy and Politics)

# Impact snapshot

## Research and Resource Mobilisation



**>A\$10M**

in competitive multi-year funding for climate and health initiatives across 27 internal and external projects



**7 major grants**

including from Wellcome, NHMRC, DFAT, ADB and the Disaster Ready Fund



Commissioned research consultancies and technical advice for national and international partners, including the WHO, ADB, Seed Global Health, and NSW Health



**\$200K**

in climate and health sapling funds provided



**5**

interdisciplinary projects co-led by EMCRs



**30+**

researchers and practitioners driving real-world policy and practice change.



**>70**

peer-reviewed research publications and reports authored by our 25 stream leads



*The inaugural Climate CATCH Lab Oration, featuring the Hon. Ged Kearney MP, Prof Kris Ebi, Prof Jane Gunn, and Prof Kathryn Bowen, brought together 100 participants to discuss the transformative changes needed for climate-resilient and responsive health systems*

*“The Lab is here as a collective to actively contribute to the rapid acceleration of tangible solutions in the race towards healthy and sustainable societies.”*

*—Professor Kathryn Bowen*

## Collaboration and Engagement



**12**

memberships in strategic global, regional and national climate change and health networks



**> 80**

members of Health, Environment, Research and Action (HERA) collaborative network



**> 650**

attendees across 13 climate change and health research seminars, workshops and events.

## Policy and Advocacy



**4**

policy briefs, toolkit and discussion papers published on Health in all Policies, Anti-Idling, Federal Election Policy Priorities and Healthcare Sustainability



**6**

policy-focused events, including roundtable on Australia's Health National Adaptation Plan, Idle-off campaign launch, MJA-Lancet Oceania report launch, and climate and health litigation webinar

Expert guide on healthcare nitrous oxide leaks published with Australian Government Department of Health and Aged Care

Appointment to expert advisory bodies, including Australian Government Climate and Health Expert Advisory Group (Bowen and Kayak); MJA-Lancet Countdown (Oceania: Bowen, McMichael and Stevenson); and Council of Climate and Public Health Education Network (Patrick).

**Expert Panel on Climate and Health Vulnerability, Capacity and Adaptation Assessment**

Hosted by MCF, MSPGH and Climate CATCH Lab



Climate and health Vulnerability, Capacity and Adaptation (VCA) assessments are the cornerstone of developing evidence-based, just and healthy climate-related policies. We hosted world-leading VCA expert and 2024 University of Melbourne Miegunyah distinguished visiting Fellow Professor Kristie Ebi for an expert panel with speakers from the Australian and Victorian Governments, to understand how VCAs support climate-responsive health adaptation policies.



The Climate CATCH Lab hosted a climate, health and environment careers night, attracting 45 current and former students, practitioners and early-career researchers. The event featured industry representatives from across academia, health services, not-for-profit, government/policy and private sectors, and was an enlightening evening of conversation and career insights

## Education, teaching and learning



**>65**

students enrolled in specialised subjects in the Graduate Certificate of Climate Change and Health



New Climate, Environment and Health specialisation stream within the Master of Public Health



**18**

postgraduate climate change and health research project supervisions



**>100**

students and early-career researchers participating in 3 climate change and health careers and student-led events

# Impact case studies

## Health impacts

### First Impacted, First Heard: Prioritizing First Nations People’s Knowledge on Climate and Health in Research and Policy Action

Patrick R, Bowen K, Workman A, Taylor S, Bones J

In partnership with the Pacific Climate Change Centre, Onemda and the Climate and Health Alliance this project explores ways of partnering with First Nations (or Indigenous) people of Australian and Pacific Island countries and territories to set and influence the climate and health research and policy agenda. One of the project’s aims is to develop guidance to enhance future research and policy-making processes. Alongside other First Nations community-determined outcomes from the project, this guidance may also be helpful to other jurisdictions.

### Supporting Youth Mental Health in a Changing Climate: PRIME

Patrick R, Gibbs L, Marinkovic Chavez K, Quinn P, Gunasiri H, Nguyen S

Climate CATCH Lab researchers were awarded nearly \$1 million from the NHMRC to co-lead a major new project tackling climate-related mental health challenges in young people. The Platform for Research and Interventions in Youth Mental Health and the Environment (PRIME), led by Orygen’s Associate Professor Caroline Gao, will accelerate the development and evaluation of practical mental health interventions in real-world settings such as schools, community and clinical settings.

With rising rates of climate distress among youth, PRIME will support innovative approaches like ‘climate cafés’ and the Climate Superpowers tools, and streamline how outcomes are measured to enable rapid improvement and scale-up. The project will also establish a youth and community advisory network to guide the design and delivery of targeted support.

Backed by a consortium of university and sector partners, PRIME aims to close the gap between research and action – positioning Australia as a leader in climate change and mental health research and innovation.

## One Health: Interconnected solutions for a healthy Australia

Kathryn Bowen joined an expert panel convened by the Australian Institute for Infectious Disease to explore the interconnectedness of human, animal, and environmental health (October 2024). The panel featured leading voices from the University of Melbourne, Peter Doherty Institute, and Burnet Institute, and underscored the critical importance of holistic, cross-sector collaboration for pandemic resilience, equity, and public trust.

Panelists highlighted how climate change, land-use change, and globalisation are accelerating the emergence and spread of several infectious diseases, while compounding existing health inequities. They stressed that protecting human health requires action across sectors to address root causes such as biodiversity loss, unsafe food systems, and environmental degradation. By investing in prevention, strengthening intersectoral governance, and embedding equity in health responses, the One Health framework provides a powerful foundation for reducing the health impacts of future pandemics and building long-term resilience.



Panel from left to right: Professor Jodie McVernon, Professor Kathryn Bowen, Associate Professor Suman Majumdar, Dr Alicia Arnott and Dr Sandra Steele.

## Sustainable healthcare

### Transforming Environmental Sustainability in Hospitals: A toolkit to facilitate change

Dunne B, Chanchlani S, Kayak E, Patrick R, Nguyen S

In a period of changing safety and quality standards and unprecedented attention towards healthcare’s contribution



Hospital Sustainability Toolkit

to the climate crisis, the [University of Melbourne Hospital Sustainability Toolkit](#) was developed by Sonia Chanchlani (MD) and Ben Dunne (MD) to support health services in their transition towards environmental sustainability. The Toolkit’s resources are wrapped within an advisory service delivered by our Sustainable Healthcare team to enable the implementation of the Doctors for the Environment Australia (DEA) Project Tracker, integration of DEA climate, health and environment resources into clinical education, participation in a Health Service Environmental Sustainability Competition, and training from the Sustainability in Quality Improvement (SusQI) Workshops. With support from a Climate CATCH Lab sapling fund grant, the Toolkit is currently being implemented in two hospitals operated by Mercy Health, building on an earlier pilot with the Northern Territory Department of Health.

## Healthcare Carbon Lab

McGain F, McAlister S, O’Shea C

The [Healthcare Carbon Lab \(HCL\)](#) confronts the pressing challenge of healthcare’s environmental footprint. With healthcare responsible for a significant portion of Australia’s carbon emissions and waste, the HCL aims to revolutionise sustainability within the sector. Launched in 2024 under the leadership of Associate Professor Forbes McGain, the HCL pioneers innovative solutions to mitigate environmental harm while upholding patient care standards.

In collaboration with other Climate CATCH Lab researchers (Patrick R, Dunne B, Kayak E), HCL researchers secured the first ever NHMRC grant devoted to sustainable healthcare, commencing in 2025. The project, Healthcare Environmental Sustainability: Creating the evidence to drive adoption of high value initiatives in Australian Hospitals, will generate critical data and strategies to reduce the environmental footprint of the Australian healthcare system. This work is vital to ensuring the health system can remain both environmentally and economically sustainable, recognising that climate and sustainability challenges are deeply linked to health system resilience and quality of care.

### Sustainable Healthcare Research and Implementation Priority Setting Workshop

Kayak E, Patrick R, Nguyen S, Thanekar U

In October 2024, the Climate CATCH Lab hosted the [Sustainable Healthcare Research and Implementation Priority Setting Workshop](#), to identify and prioritise key research directions to advance environmental sustainability in healthcare, with funding support from MDHS schools for Medicine, Dentistry, Health Sciences, and Population and Global Health.

Using systems science, the workshop supported actionable research and implementation strategies across three key areas: digital innovation and data science; materials efficiency and circularity; and workforce and quality improvement. Outcomes have guided resource allocation to support the development of collaborative proposals, with the aim to initiate flagship research and implementation projects across MDHS. Priority activities include:

- Integrating environmental, financial, and patient outcome data into digital health platforms to create effective decision support systems
- Defining clear indicators for product circularity and local production to inform sustainable procurement choices
- Supporting widespread adoption of sustainable practices through targeted education on the co-benefits of environmentally responsible healthcare.

## Mitigation

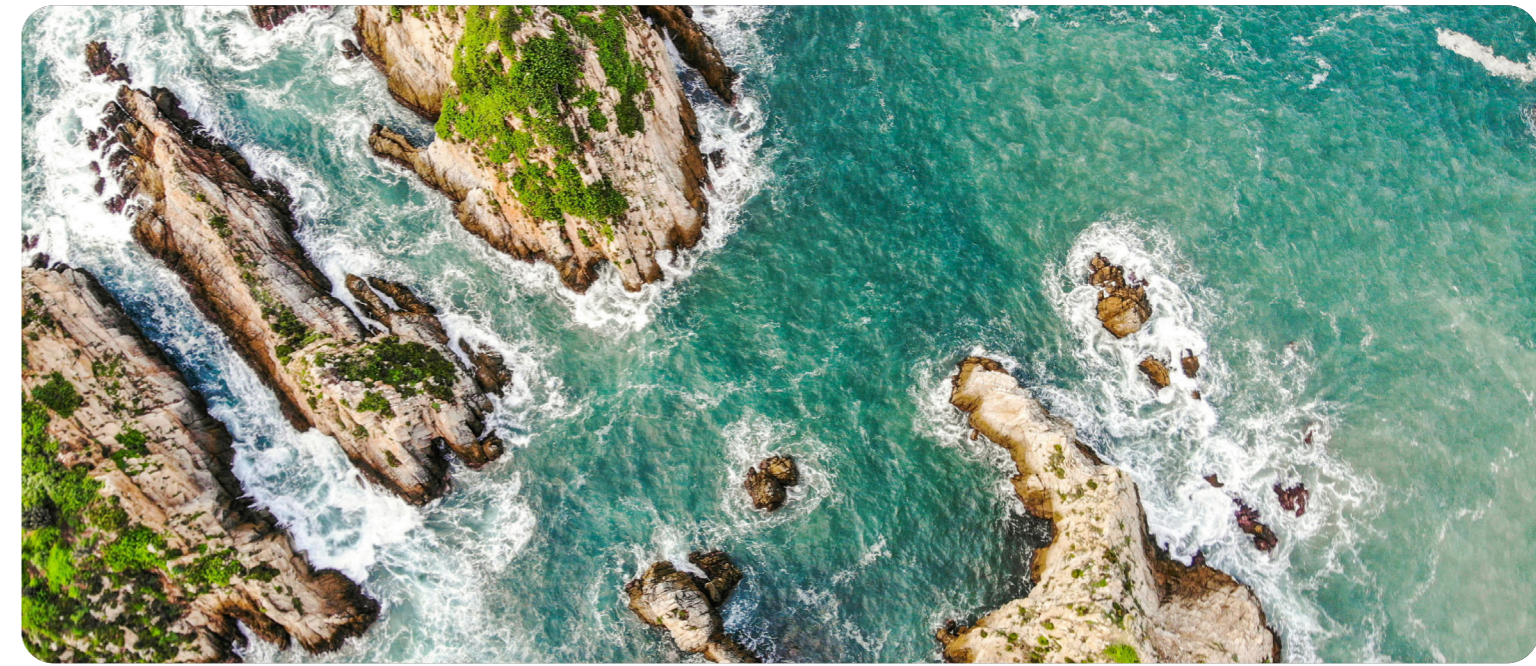
### Idle Off: Establishing a national anti-idling campaign to address the health impacts of traffic-related air pollution on Australian children

Walter C, Morrice H, Workman B

Exposure to traffic-related air pollution significantly increases the incidence and severity of childhood asthma in Australia, with young children particularly vulnerable near idling vehicles outside schools and childcare centres. Traffic emissions also contribute substantially to climate change, with the transport sector projected to become Australia's largest emissions source by 2030, demanding urgent action.

In response, the Climate CATCH Lab expanded and scaled up Idle Off from a small pilot into a national campaign framework aimed at reducing vehicle idling and protecting children's health. In its first year, Idle Off combined evidence-based research, strategic advocacy, and creative campaigning to broaden its reach, build cross-sector momentum, and draw attention to this neglected public health issue.

A policy brief and economic analysis demonstrated the urgency and cost-effectiveness of anti-idling action. Stakeholder workshops in late 2024 engaged major health and climate organisations, local councils, and government representatives, while partnerships with CAHA, DEA, Deakin University and others are now being formalised. Backed by creative assets from marketing agency VML and strong public engagement through a high-profile public lecture that drew more than 50 online and in-person participants, the campaign is ready to pilot. With a Federal Budget proposal submitted and additional funding sought, Idle Off is poised to deliver cleaner air, healthier children, and long-overdue policy reform.



## International engagement and adaptation

### PAVE-Health: Pacific Action to enhance the Visibility of Evidence on Health and Climate Impacts

Bowen K, Patrick R, Iese V, Workman B, Moo E, Wyns A, Jover K

The University of Melbourne and the Pacific Climate Change Centre (PCCC) secured \$4.8 million from Wellcome to launch PAVE-Health: Pacific Action to enhance the Visibility of Evidence on Health and Climate Impacts (2025-2028). The project aims to strengthen health resilience in four Pacific Island nations (Samoa, Solomon Islands, Kiribati, and the Federated States of Micronesia), by rapidly building local capacity to respond to climate-induced health risks.

PAVE-Health will generate locally grounded data on climate-related health vulnerabilities and translate it into accessible evidence for policymakers, health practitioners, and global climate finance bodies. Its goal is to close critical gaps in data, capacity, and advocacy that currently hinder Pacific countries from accessing climate-health funding. In partnership with local communities, the initiative will create sustainable pathways for evidence-informed planning, adaptation strategies, and strengthened health systems, ensuring that some of the world's most climate-vulnerable populations are no longer overlooked.

An inception workshop, hosted by PCCC in March 2025, brought together more than 20 representatives from the PAVE-Health partners and project countries to co-design and tailor project activities towards evidence gaps, policy opportunities, and existing climate and health initiatives.



PAVE-Health inception workshop participants in Samoa

## Advancing Climate Adaptation, Resilience and Just Transitions in the Indo-Pacific

Bowen K, Workman B

Building on a successful Australia Awards Fellowship program in 2023, Melbourne Climate Futures and the Pacific Climate Change Centre hosted a second fellowship program focussed on climate adaptation, resilience and just transitions (2024-2025). Featuring 15 fellows from small island developing states in the Indo-Pacific, including Fiji, Samoa, Tonga, PNG, Tuvalu, Kiribati, the Maldives, Madagascar, Mauritius, Solomon Islands, and Vanuatu, the program delivered comprehensive specialist training on:

- Climate and governance structures for implementing policy, covering the latest evidence on climate, adaptation and resilience and just transitions in the Indo-Pacific region
- Research gaps and considerations
- Leadership and advocacy needs
- Policy and program development, including accessing finance
- Communication and knowledge translation.

With funding recently secured for a third Fellowship program in 2025-26, PCCC and the University of Melbourne have established a sustainable and high-impact model for capacity development, knowledge co-creation, and partnerships, realising a shared vision to nurture current and emerging climate leaders who are working collaboratively across sectors.

## Policy and politics

### Implementing a Health in All Policies Approach in Australia

Workman B, Morrice H, Medcalf S, Bowen K



Climate change has significant direct and indirect impacts on human health in Australia, requiring coordinated policy action across health and other sectors. In response, the Australian Government Department of Health and Aged Care (DHAC) has committed to a Health in All Policies (HiAP) approach through its National Health and Climate Strategy.

To support this commitment, we developed a comprehensive, evidence-

based discussion paper. This resource outlines key steps, practical assessment tools, and targeted policy recommendations to assist state and federal government agencies in implementing the HiAP approach effectively.

### Federal Election Policy Priorities

In the lead up to the 2025 Australian election, Climate CATCH Lab 'policy and politics' leads coordinated a [Federal election policy brief](#) and [accompanying article](#) outlining six priorities to ensure the health of all Australians is protected throughout economic and environmental crises:

- Reducing air pollution
- Ensuring children's mental health is supported through trauma-informed care
- Investing in sustainable healthcare
- Strengthening health systems for climate resilience
- Building community preparedness
- Embedding health co-benefits into climate decision-making.

Together, these measures not only improve health and wellbeing but also boost economic productivity and long-term budget sustainability, and we will continue to work our partners and allies to advocate for evidence-backed policies that protect our health amid a rapidly changing climate.

## Just energy transitions

### The (Just) Energy Transition for Climate-Resilient and Low Carbon Healthcare in the Asia-Pacific: A rapid scoping review

Mohideen R, Annear P, Netherclift S, Kayak E, McGain F, Moo E, Patrick R, Bowen K

Healthcare is a major energy consumer, with fossil fuels accounting for over half its global carbon footprint and up to 40 per cent of emissions in Australian hospitals. While reliable electricity is critical for safe care, many health facilities in low- and middle-income regions still lack consistent power.

Recognising healthcare's dual responsibility to reduce emissions and respond to climate impacts, our Just Energy

Transitions, Sustainable Healthcare and International Engagement and Adaptation streams partnered to conduct a rapid review of energy transitions in the sector, screening over 1,700 studies. Early findings suggest that just energy transitions can improve health and service delivery, offer long-term cost savings despite upfront investments, and support gender equity and community inclusion.

## Creativity and imagination

### Leveraging contemplative practices to promote community mental health

Galante J, Campbell S

This innovative pilot project explores how contemplative practices can be co-designed with communities to strengthen mental health and climate resilience. In the bushfire-affected Huon Valley, Climate CATCH Lab Creativity and Imagination co-leads are working with local residents to develop and trial a community-led, nature-connected intervention that promotes mental wellbeing and recovery. By integrating contemplative practices into climate-impacted settings, this approach offers a low-cost, scalable, and environmentally attuned strategy to support mental health in the face of growing climate disruptions

### Sonic Youth Project: DuskLit

Bowen K, Young M, Medcalf S

Sonic Youth is a participatory sound-music project that engages young Victorian people (aged 12–25 years) with issues of ecology and sustainability, using music as the connector. Through targeted calls to the public, we invited a youthful audience – particularly those in climate change-affected communities – to participate in the project by engaging with the sound of their environment. We hoped this might be a way to transform anxieties around climate change into agency, by focusing on their relationship to place, belonging, hope and rejuvenation. We asked them to submit a recording of up to three minutes, made simply on their phone, and uploaded to a portal. Contributors were also invited to share with us some of their thoughts around the place they recorded, what it means to them, and how they feel about climate change more broadly.

From these recordings, composer Miriama Young has woven a soundscape, which is integrated into her piece titled DuskLit for the [Omega Ensemble's](#) May tour, Distant World, performed for live concert audiences in Melbourne and Sydney. DuskLit draws on the energy of youthful exuberance, the power of emotional force, and a sense of hope for our shared future to create a piece that joins us in a collective ambition to find renewal and hope in a swiftly changing world.



## Resilience

### Pilot trial of the COORDINATE (Co-Occurring Disasters and Infectious Disease Outbreaks) Policy Toolkit

Leppold C



Climate change is projected to increase the risk of infectious disease outbreaks and weather-related disasters, however there are few resources for health organisations to prepare for handling these concurrent emergencies. This project aims to test scenarios for how infectious disease outbreaks and weather-related disasters may co-occur in Victoria in the next five years and identify ways of building capacity.

Working with local public health units at the forefront of climate impacts in rural and regional Victoria, this project draws on wind tunnelling approaches that test how existing practices would work in simulated future scenarios and identifies strengths and capacity-building opportunities for climate adaptation. This project focuses on testing a scenario of high-pathogen Avian Influenza outbreak with spread to humans that co-occurs with a major flood, developed in year one of the project through Climate CATCH Lab Funding.

Over the past year, the project has established a partnership with the Loddon Mallee Public Health Unit, developed a scenario-testing workshop protocol and an interactive board game resource for local staff, and shared emerging findings through an oral presentation at the World Association for Disaster and Emergency Medicine Congress and an invited talk at Harvard University, with further scenario testing and outputs planned for late 2025.

### EviMaPS: Evidence mapping of psychosocial supports in relation to disasters

Gibbs L

Mental health and psychosocial support policies and programs are becoming increasingly important for supporting resilience by preventing and reducing the escalation of disaster-related mental health problems. The EviMaPS project aimed to identify the state of international knowledge, guidance and practice through a collaboration between a multi-national investigator team (Australia, Japan, Italy, USA) and the WHO Centre for Health Development (WHO Kobe Centre).

EviMaPS identified how mental health and psychosocial support approaches are being transformed across different sociocultural contexts and addressing different levels of need. It evaluated evidence typically related to reducing symptoms of mental health conditions, learning about coping, social support, and managing stress and difficult experiences after disasters. Evidence gaps demonstrated the important role of WHO and Inter-Agency Standing Committee (IASC) Guidelines that provide both evidence-informed and expert consensus-based direction to policy and practice.

## Intergenerational justice

### Teacher wellbeing through climate change and disasters

Quinn P, Barker N, Marinkovic Chavez K, Vella-Brodrick D, Gibbs L

This project explores teacher experiences and wellbeing in the context of climate change. Through 14 interviews with teachers across Australia, along with analysis of four workshops with a further 56 participants, it explores what is helpful and unhelpful in navigating climate change as professionals and as citizens of a changing world.

Teachers described balancing complex and sometimes conflicting demands around student wellbeing and education as well as broader civic, environmental, and moral responsibilities. When these demands outstrip the support and resources available, they can lead to stress, burnout, and moral injury. Some teachers also reported struggles relating to political and social contexts, direct environmental impacts such as heatwaves, bushfires and storms, and teachers' own concerns about the future. Yet teachers also shared strategies and supports that help them manage these challenges, offering pathways to job satisfaction and broader fulfilment while supporting students and nature.

Findings are being integrated into the [Teacher Climate Superpowers](#) platform, co-created with participants and supported by the Teachers Health Foundation. This resource extends the interactive, strengths-based [Climate Superpowers](#) website and the classroom resources co-developed with students and teachers. The team is now piloting Teacher Climate Superpowers, including through a series of webinars, building on strong engagement to date including an invited session at the 2025 Resource Smart School Awards with 250 students and teachers. Future plans include broader pilot research across schools, including via newly funded projects led by the Victorian Department of Education and Orygen.



# Student Engagement

## Global climate negotiations simulation

Climate CATCH Lab hosted the 2024 Association of Pacific Rim Universities (APRU) Student Global Climate Change Simulation, a role-playing exercise in which students form multi-country, multi-disciplinary teams to play the role of delegates to the UN Climate Change Negotiations. Over two sessions, 12 University of Melbourne students participated in an online simulation activity using materials from the World Climate Interactive and the EN-ROADS simulation model developed by MIT. Live sessions were supplemented with short lectures and other materials developed and curated by the APRU experts. This immersive experience strengthened students' skills in climate policy negotiation, systems thinking, cross-cultural collaboration, and real-time decision-making under pressure.

## Students in Sustainable Healthcare Symposium

The Climate CATCH Lab co-sponsored the second Melbourne Medical School Students in Sustainable Healthcare symposium. Curated by current Medical and Public Health students, the program featured 12 student presentations on real-world sustainable healthcare initiatives. Presentations highlighted innovative and impactful approaches being developed to tackle the environmental challenges faced by the healthcare industry, including biophilic design principles for hospitals, environmental co-benefits of breastfeeding, environmental sustainability audits, and reusable surgical equipment and protective gear.



# Awards and Recognition

- Melbourne School of Population and Global Health 2024 Engagement Impact Award – Climate CATCH Lab
- Melbourne School of Population and Global Health 2024 Mentor Achievement Award – Associate Professor Rebecca Patrick
- University of Melbourne 2024 Sustainability Award – Staff Changemaker – Dr Sonia Chanchlani
- Victorian Public Healthcare 2024 Award Finalists
  - Reusable Gowns project – Associate Professor Forbes McGain
  - Health Service Environmental Sustainability Competition – Dr Ben Dunne and Dr Sonia Chanchlani
- Frontiers Planet Prize – 2023 Lancet Countdown on Climate Change and Health Co-Authors – Professor Kathryn Bowen, Professor Celia McMichael, Mr Arthur Wyns

# Expanding our network

The Climate CATCH Lab is a member of national, regional and international collaborative networks driving collective action at the nexus of climate change and health.





THE UNIVERSITY OF  
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Climate  
CATCH Lab



Collaborative Action for Transformative Change in  
Health and Healthcare

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