

FUTURE EARTH AUSTRALIA YEAR IN REVIEW: 2019



futureearth
AUSTRALIA

Hosted by the Australian Academy of Science

© Australian Academy of Science 2020

ISBN 978 0 85847 678 3

This work is copyright. The *Copyright Act 1968* permits fair dealing for the purposes of research, news reporting, criticism or review. Selected passages, tables or diagrams may be reproduced for such purposes, provided acknowledgement of the source is included. Major extracts may not be reproduced by any process without written permission of the publisher.

This publication is also available at www.futureearth.org.au

Contents

DIRECTOR'S REPORT	1
A REFLECTION FROM THE CO-CHAIRS	2
URBAN SYSTEMS TRANSFORMATION	3
Melbourne workshop	3
Alice Springs workshop	4
Darwin workshop and yarning circle	4
Adelaide workshop	6
Perth workshop	6
CAPACITY BUILDING	7
Early-Career Researcher and Practitioner Program	7
The Future of Coasts	7
The Future of Food: Connecting the UN Sustainable Development Goals	8
Ian McDougall Bursary Program	9
Circular economy honours student mentoring and engagement workshop	9
Young Persons' Plan for the Planet	10
Sustainable Development Goals presentation	10
Lecture on Sustainable Development Goals in Practice for the Fenner School, ANU	11
GLOBAL ENGAGEMENT	13
Belmont Forum 10-year anniversary	13
Sustainability Research & Innovation Congress 2021	13
Our Coastal Future 2020	13
Urban Knowledge Action Network	14
NITRO–Oceania	15
GEO Week	15
WHO WE ARE	16
Future Earth Australia Secretariat	16
Steering Committee	17
Advisory Committee	17
Members	18
2019–2020 Collaborators	18
Partners	21

A large, stylized green leaf graphic is positioned on the left side of the page, extending from the top to the bottom. The leaf is composed of several overlapping, curved segments, creating a sense of movement and growth. The background is a solid light green color.

FUTURE EARTH AUSTRALIA YEAR IN REVIEW: 2019

Director's report

As I write the 2019 Director's report from Canberra, Australia, in early 2020, we are experiencing a summer that will not be soon forgotten. Catastrophic and unprecedented fires have burned across the country since September and continue to burn, and parts of Queensland are experiencing floods even as the nation's south east and other regions are experiencing crippling drought and river systems that have all but run dry. Families—including my own—have been forced to evacuate to beaches as skies blackened and firestorms crowned trees some 40 metres high. For other coastal localities, some families waited for days to be rescued as roads remained closed due to fire risk. Our volunteer and emergency services have been stretched beyond capacity, and our diverse and rich wildlife has suffered immensely, with millions upon millions of animals and plants perishing. This was a tough and sobering way to end 2019, and to welcome 2020.

The importance of sustainable development remains and across Australia we were engaged in and advancing sustainability-related science policy initiatives with achievable actions. To this end, we saw the culmination of our 'Sustainable Cities and Regions: 10 year strategy to enable urban systems transformation' process. The full strategy and roadmap for implementation was launched by the Expert Reference Group Chair Professor Jago Dodson at the State of the Australian Cities conference in Perth on

4 December. We consulted with over 1000 people across the country, including decision-makers, to inform the four pillars of the plan: a vision for our cities and places, enabling innovation, connecting knowledge, and building capacity, and we engaged extensively with decision-makers and the polity on the roadmap. 2020 will be a busy year for us in the urban space as we shift towards tangible implementation outcomes.

2019 also saw us engaging across our region and globally, with the formalisation of our co-hosting arrangements for the Urban Knowledge Action Network together with the University of Tokyo, attendance at the 10th anniversary of the Belmont Forum in Taipei City in Taiwan, and in bringing our global partners here to Australia via the exciting and inaugural Sustainability Research and Innovation (SRI) global congress. SRI2020 will occur over 4 days in June at the Brisbane Convention Centre, now postponed to 12–15 June 2021. We remain so excited and enthused to be connecting with global leaders representing all sectors together for this first sustainability focused congress.

Our Early-Career Researcher and Practitioner (ECRP) Program continued to expand and become more diverse, and in doing so remains a great source of pride for us and of value to our members and the broader sustainability community. Complementing this was our launch of the McDougall



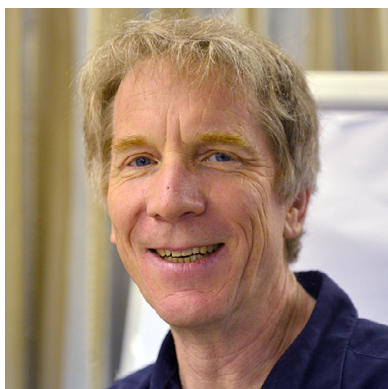
Sustainable Development Bursary Program, under which ECRPs can apply for \$4000 seed grant funding to enable cross-disciplinary, sustainability-related research projects. In a highly competitive round, we awarded two proposals with funding for 2020.

Our membership expanded and we had founding members renew with three or five year commitments. We thank you for your ongoing support for our important work and we are excited to continue to engage with more sectors working in sustainability. There has never been a more important time, as we recover from the impacts of COVID-19, to take advantage of this opportunity for a concerted effort on sustainability for Australia and the Oceania region.

Our work is more important now than ever. If you would like to contribute to our efforts or our organisation, please reach out to us. We'd love to have you on board.

Dr Tayanah O'Donnell

A reflection from the Co-Chairs



Last year we wrote that the 2018 Year in Review arrived as a range of critical environmental issues were devastating Australian communities. Sadly, this remains the message as we write this for the 2019 Year in Review, just with drought, fires, storms and now COVID-19 replacing 2018's litany. The need for Future Earth Australia's activities remains acute, as public discourse and action in the private sector continue to demand more action on environmental change. Perhaps more than anything, 2019 highlighted the devastating strength of systemic risks to Australia, and how difficult governments find these to deal with.

It is therefore encouraging that Future Earth Australia's systems emphasis has shone through the activities completed in 2019 and in those starting in the new year. Most notably, we have completed and released our strongly co-designed 'Sustainable cities and regions: 10-year strategy to enable urban systems transformation' which engaged the support of very diverse actors for some high-level visionary and systemic actions. Looking forwards, we are now embarking on another systems-oriented 10 year strategy for oceans and coasts, as well as contributing a systems approach to the national narrative on responding to climate change, both of which you will hear more about in 2020.

Meanwhile, Future Earth Australia has maintained its commitment to supporting the next generation of researchers and practitioners; the steering committee benefited hugely from the insights of our two ECRP representatives, who helped ensure the set of ECRP activities during the year continuously improved. It was exciting to be able to offer some small grants for some of our early-career participants. These grants enabled our early-career alumni to collaborate with their new colleagues and explore new ideas, forged at our workshops.

Overall, it was also encouraging to see the membership of universities and other organisations continue to rise, showing that Future Earth Australia is increasingly delivering value to its members. We hope you enjoy reading this Year in Review to show this value! And we look forward to building it further in 2020.

Professor Karen Hussey

Dr Mark Stafford-Smith



Urban systems transformation

A key outcome of 2019, 'Sustainable cities and regions: 10-year strategy for urban systems transformation' was launched at the State of Australian Cities conference on 4 December.

The strategy brings together the broad consultation work of more than 18 months, discerning the critical actions that we need to take in Australia to enable our cities and regions to achieve the Sustainable Development Goals (SDGs). It sets out recommendations and a roadmap for implementation, to be put into action by governments, the private sector, researchers, philanthropy and civil society.

This strategy is the first of its kind, with Future Earth Australia convening stakeholders and experts across sectors, disciplines and expertise to form a strategy that is co-produced from the earliest stages of design, to knowledge input, writing, and through to completion and implementation.

Transforming cities and regions into sustainable urban systems is touted as one of the critical areas which will determine Australia's trajectory to being a sustainable society, for example in CSIRO's 2019 National Outlook¹ and internationally in the United Nations' 2019 Global Sustainable Development Report.² This can only be achieved on a collaborative and inclusive basis, underpinned by science and other rigorously produced knowledge.

The Future Earth Australia team traversed Australia and in the span of a month did the final workshops in Melbourne, Alice Springs, Darwin, Adelaide and Perth, following those that began in 2018 (when workshops were held in Sydney, Canberra and South-East Queensland). Led by a transdisciplinary expert reference group, information gleaned from the workshops and stakeholder interviews was collated and synthesised by the writing and editing group.

It was subsequently grounded in two exposure draft roundtables with key government, industry and peak-body stakeholders defining this policy and practice space, one each in Canberra and Sydney, to produce the final strategy. Advice and suggestions contributed by these stakeholders were fundamental to shaping our final document and reflected the applied expertise and capacity in the Australian urban sustainability sector more broadly.

Prior to the launch, Dr Tayanah O'Donnell and Professor Jago Dodson met with a number of parliamentarians and their advisors to provide a detailed briefing of the outcomes and objectives of the strategy. The strategy was well received by both sides of the aisle and conversations continue into 2020 about implementation.

The Writing and Editing Committee consisted of Professor Jago Dodson (Chair), Professor Kate Auty, Dr Mark Stafford-Smith, Professor Chris Ryan, Honorary Associate Professor Bob Webb, Dr Tayanah O'Donnell and Eleanor Robson. Colleagues within the Australian Academy of Science provided invaluable support throughout the process.

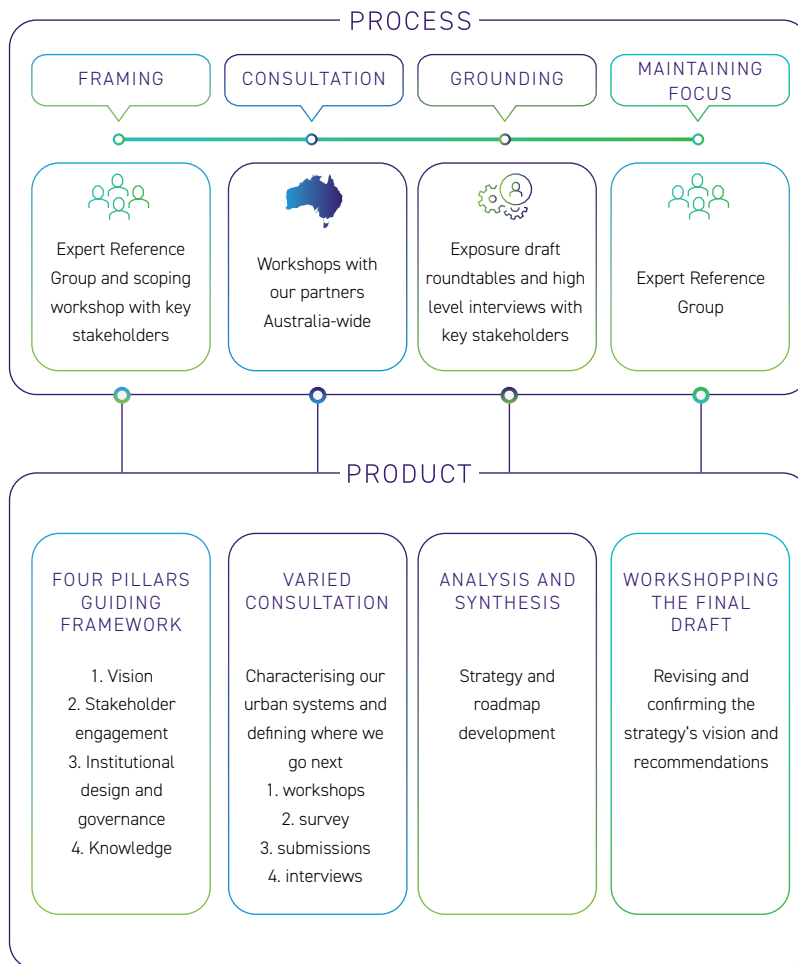
MELBOURNE WORKSHOP

On 8 February, we kicked off our consultation process with our first workshop at the Centre of Urban Research at RMIT University, a natural partner embedded in the urban research and practice space in Melbourne.

Experts from RMIT's Centre for Urban Research, RMIT's Urban Futures Enabling Capability Platform, the Centre for Research Excellence on Healthy, Liveable Communities, and the University of Melbourne's Victorian Eco-Innovation Lab provided the workshop participants a Melbourne-focused look at urban issues particularly relevant in that context.

1 See <https://www.csiro.au/en/Showcase/ANO>

2 See <https://sustainabledevelopment.un.org/gsd2019>



Co-production methodology of Future Earth Australia's urban systems transformation project

Workshops were structured to facilitate different ways for participants to contribute to the conversation; individual answers through the use of word polling technology as well as collaborative sessions by answering questions as a table group.

Participants included stakeholders from government, city councils, local businesses, NGOs and research groups. With such a wide range of expertise in the room, it wasn't surprising that some terms reflected this variety. When asked individually, "what is your vision of a sustainable future in Melbourne?" one of the top answers was equitable. However the term equitable had a slightly different meaning for different people. Some felt it was a synonym for

inclusive, for example, ensuring that all people in Melbourne have access to walkable areas and cycling paths, not just those in the inner city. Discussion highlighted that access to opportunity is not consistent across the urban landscape. People can lead very different lives in the same city.

ALICE SPRINGS WORKSHOP

Our stakeholder consultation was designed to incorporate and show the diversity of cities and regions across the country, and represent the story of urban areas which have a different experience, strengths and set of challenges to our coastal capitals. While Alice Springs doesn't immediately spring

to mind as a major urban centre, we believed it to be an important contributor to our consultation and knowledge gathering process.

The workshop was hosted by Desert Knowledge Australia at the Alice Springs Town Council. Mayor of Alice Springs, Damien Ryan, gave workshop participants an in-depth overview of the many sustainability programs across Alice Springs.

Whilst Alice Springs was our smallest workshop, guests made their voices heard. There was a noticeable tension between ongoing efforts for the integration and connection of Alice Springs with the rest of Australia, and how the needs of Alice Springs are often overridden by the needs of larger cities. The theme of the simultaneous connection and competition between large urban centres and the regions which support them, and the question of how to propagate relationships which are mutually beneficial in a sustainable future, would become a core theme of the final publication.

DARWIN WORKSHOP AND YARNING CIRCLE

An important part of the consultation process was to ensure that Australia's First Nations People were given the opportunity to contribute their expertise and perspectives in a way that was not dictated by Future Earth Australia. With this in mind, Future Earth Australia held a yarning circle prior to the Darwin workshop and held space for anyone who wished to attend.

Yarning circle attendees spoke about the struggles of the Indigenous population, both



Melbourne workshop



Alice Springs workshop



Darwin workshop and yarning circle



Adelaide workshop



Perth workshop

around Darwin and in the Northern Territory more broadly. The general consensus of the discussion was that climate change is not the most aggressive change that is taking place. Diet and lifestyle and changes in technology are the most aggressive and the rapid pace of technology change is leaving people behind and increasing inequality.

The Darwin workshop was held in partnership with Charles Darwin University and was opened by Professor Simon Maddocks, Vice-Chancellor and President. A comprehensive overview of the issues facing Darwin and the Northern Territory was provided through presentations from the Northern Institute at Charles Darwin University, the Northern Territory Government Department of the Chief Minister and the Council of Social Services Northern Territory.

Workshop participants were able to voice their biggest concerns for Darwin. They were most concerned about water scarcity, and the transient nature of the working population and how that affects Darwin's economy.

ADELAIDE WORKSHOP

In Adelaide, we were fortunate to be hosted by three of our partners. Our hosts opened the workshop with talks by Dr Tim Muster who leads CSIRO Future Cities, Dr Stephen Berry who is Manager of Renewable Energy and Decarbonisation at the University of South Australia, and Professor Chris Leishman from the Centre for Housing at the University of Adelaide.

Further expertise was contributed by a panel which featured Donna Ferretti from Donna Ferretti and Associates, Vaughan Levitzke from Green Industries South Australia, Professor John Boland from the University of South Australia, and Ross Womersley from the South Australian Council of Social Services.

Adelaide was an interesting city on which to hear local opinion, as unlike other states South Australia does not have a large secondary city like Geelong in Victoria or Newcastle in New South Wales. The views of the city, then, were uniquely representative of the

strengths and pressures experienced by a larger city in South Australia.

However, it also exemplified the extent to which the sustainability of Adelaide's metabolism relies on relationships with and impacts on its region and beyond. In envisioning a sustainable Adelaide as walkable, healthy, inclusive, green and resilient, workshop participants emphasised that pursuit of such a vision should factor in the impacts of centralisation on regional areas. While they see that Adelaide has richness in terms of available space for urban development, participants expressed the belief that this shouldn't distract from the need to focus on the people and ensure that the environment is still used in a responsible way.

PERTH WORKSHOP

The final workshop was held at the Old Perth Boys School by Curtin University on 22 February to wrap up our consultation process. The workshop began with presentations from Professor Peter Newman from Curtin University, David McLennan, CEO of the City of Vincent, and Piers Verstegen, CEO of the Conservation Council of Western Australia.

The Perth workshop saw vibrant debates around the transformational, even revolutionary, changes required to achieve the sustainable vision for the Perth they desired—a place that is connected, healthy, liveable, green, walkable and resilient.

Many participants agreed that passion and a focus on hope rather than fear would engender such change. For example, some discussion centred on Jeremy Rifkin's ideas about transformation of capitalism, industrial and extractive society as a result of developments in renewable energy, transport and information flow as a result of the internet. As the capital of a state which has an economy largely influenced by extractive industry, working through these ideas is not just a theoretical exercise for those who attended the Perth workshop.

Capacity building

EARLY-CAREER RESEARCHER AND PRACTITIONER PROGRAM

The Future Earth Australia Early-Career Researcher and Practitioner (ECRP) Program is a core pillar of Future Earth Australia's activity. It facilitates capacity building and, through our ECRP symposia, enables long-lasting relationships and opportunities for research and innovation collaboration. We define ECRPs as anyone in a masters or PhD program, or those in their first five years of research or practice.

In order to facilitate our desire to enable capacity building in the sustainability research and innovation field, and to reduce barriers to entry, all Future Earth Australia ECRP symposia are free to attend. In addition, ECRPs from Future Earth Australia member institutions are able to apply for a competitively assessed travel bursary which covers travel and accommodation costs.

In 2019 the Future Earth Australia Steering Committee decided to expand the remit of representatives on the committee to include two ECRP representatives from member institutions. Their role is to assist Sarah Crowe, who coordinates the program and its activities, by providing feedback and strategic advice on the range of ECRP activities that Future Earth Australia provides. From a competitive process, two representatives were elected, Dr Ray Maher from the University of Queensland and Chris Lewis from Geoscience Australia. Having Ray and Chris as the ECRP co-chairs has given the ECRP team a better understanding of the needs of both researchers and practitioners.

THE FUTURE OF COASTS

The first ECRP symposium of 2019 was 'The Future of Coasts', co-hosted by Future Earth Australia member Griffith University, the Australian Climate Change Adaptation Research Network for Settlements and Infrastructure, and Climate-KIC Australia.

Future Earth Australia ECRP symposia are designed to encourage cross-disciplinary capacity building and relationship building. To aid in this, they intentionally have cross-cutting themes. The Future of Coasts was no exception, and by encouraging cross-disciplinary collaboration amongst attendees who all work within the same general 'umbrella' theme, we saw strong collaboration opportunities develop, evidenced by our McDougall program.

Attendees represented a truly cross-disciplinary cohort, presented on research that encompassed the past and future of coasts, spanned from inland to the land-sea interface to the ocean, and included both highly technical and complex models of coastal change and broad discussions of social trends and theories of change. Institutions represented included



Sarah Crowe



Ray Maher



Chris Lewis



ECRPs at The Future of Coasts (above) and The Future of Food (left) symposia, which support collaboration on research and innovation



THE FUTURE OF FOOD: CONNECTING THE UN SUSTAINABLE DEVELOPMENT GOALS

The second ECRP symposium for 2019 was 'The Future of Food: Connecting the UN Sustainable Development Goals', co-hosted by the University of South Australia and the University of Adelaide.

The integration of the SDGs into this event was purposeful and achieved a remit of Future Earth Australia by enabling and translating the SDGs from research to practice to advance sustainability. This was evident in The Future of Food: Connecting the UN Sustainable Development Goals by both individual attendees presentations, and a presentation by Taryn Laubenstein which challenged attendees to delve deeper into their research to consider links to multiple goals.

Attendees at this event represented an interdisciplinary cohort with presentations ranging from technical biological sciences such as optimising photosynthesis in plants through to the science communication of food waste. A number of attendees focused on the SDGs themselves and how they can be applied within a food context.

The Future of Food: Connecting the UN Sustainable Development Goals was a three-day event which allowed for a field trip day to showcase sustainability initiatives around Adelaide and to give the attendees an opportunity to connect in a different setting. Activities on the field trip day included media training from the Australian Science Media Centre, 'Seven Siblings from the Future' at MOD and a sustainability cooking workshop at The Foodprint Experience.

ECRPs from Western Sydney University, the University of Newcastle, Geoscience Australia, the Australian National University, the University of New South Wales, Macquarie University, the University of Queensland, the University of Tasmania, CSIRO, Griffith University, Southern Cross University, and the Australian Institute of Marine Science.

IAN MCDUGALL BURSARY PROGRAM

In 2019, Future Earth Australia launched the Ian McDougall Bursary Program, made possible due to a philanthropic donation by the family of Professor Ian McDougall FAA.

This program aims to promote cross-institutional collaboration in ECRPs and is open to any topic in any discipline(s) that seeks to integrate the SDGs for societal transformation. In its first year of operation we allocated two grants, to Dr Cobi Calyx from the University of New South Wales and her team on stories of social impact and global health, and Mr Scott Spillias from the University of Queensland on the global expansion of seaweed farming.

Cobi and her team will use the Ian McDougall Bursary funding to enable early-career researchers on short-term postdocs to travel to the Australian Science Communicators conference at the Monash Sustainable Development Institute, for a session about how researchers are achieving social impact.

Scott and his team will use the Ian McDougall Bursary to bring together the leading voices and key industry players in seaweed aquaculture in Australia to discuss how this new industry can help Australia work towards the SDGs.



Cobi Calyx



Scott Spillias

CIRCULAR ECONOMY HONOURS STUDENT MENTORING AND ENGAGEMENT WORKSHOP

On 19–20 November, 20 honours-level students from across Australia and the South Pacific gathered in Canberra for 'Catalysing Change: Moving towards a circular economy'. This mentoring and engagement workshop was made possible thanks to the generous donation from the family of Professor Ian McDougall FAA. The focus of Catalysing Change



The Circular Economy workshop pushed honours students to get creative about their projects in several ways, with the aim of demonstrating the benefits of moving to a circular economy across different sectors

Future Earth Australia continued its support of the Young Persons' Plan for the Planet program



was to provide honours-level students with an indepth look at different facets of a circular economy and to demonstrate the benefits of moving to a circular economy across different sectors.

The event included presentations from Professor Veena Sahajwalla FAA, Dr Jennifer Yarnold, Kirilly Dickson, Anirban Ghose, and Dr Taylor Brydges. The day concluded with a workshop run by Mitchell Kardan which culminated in attendees using art and craft supplies to make physical representations of their ideas and concepts, spurring a range of creative and artistic interpretations of their projects.

Together, the speeches and workshop equipped students with a strong conceptual understanding of the circular economy, as well as real-world examples of circular economy concepts in action.

YOUNG PERSONS' PLAN FOR THE PLANET

Future Earth Australia continued its support of the Young Persons' Plan for the Planet (YPPP) program in 2019. Tayanah O'Donnell joined with a YPPP live

broadcast from Questacon to outline what Future Earth Australia does and how it works with YPPP.

YPPP also hosted its second international 'It's Our Future Earth Conference and SDG Challenge' in 2019. Building on the success of the conference in 2018, high school students from Australia, Mauritius, India, Kenya, Singapore and other ASEAN countries gathered in Singapore to focus on the theme of delivering the UN objective of achieving an economically, ecologically and socially sustainable Future Earth through the implementation within each country of the UN's 17 SDGs.

SUSTAINABLE DEVELOPMENT GOALS PRESENTATION

On 3 September, Future Earth Australia was invited to present to the Lindau Fellowship on the SDGs.

The Australian Academy of Science hosted alumni of the Lindau Fellowship, a group of Australia's emerging leaders in chemistry, physics and medicine who received mentorship from Nobel prize-winners in Germany. Innovators preparing for the Falling Walls

Lab Australia event also joined the presentation. Falling Walls Lab Australia is a competition for emerging Australian innovators to present their ideas, research and initiatives on the theme 'Which walls will fall next?'

Future Earth Australia worked with these excellent researchers and innovators to teach them about the SDGs, and ran an exercise to determine how each individual's research could align with many of the SDGs. Participants were often surprised how their so-called 'niche' research applied so widely across the SDGs, and to meet participants from disparate fields with overlapping interests around the SDGs.

LECTURE ON SUSTAINABLE DEVELOPMENT GOALS IN PRACTICE FOR THE FENNER SCHOOL, ANU

In mid-October, Future Earth Australia was invited by Professor Lorrae van Kerkhoff of the Fenner School, Australian National University, to give a guest lecture for her Sustainable Development students on how the SDGs are put into practice. Our secretariat teamed up to give a joint lecture, with Tayanah O'Donnell presenting on the international Future Earth network and Future Earth Australia's transdisciplinary, co-design approach to the SDGs, Taryn Laubenstein presenting on the SDGs and their origin, and Eleanor Robson giving a case study of the SDGs in practice as

the north star for Future Earth Australia's Urban Systems Transformation project. The students were put in the hot seat, being asked to participate in a poll about whether the SDGs are best implemented at national, regional or neighbourhood level, and why.

Lindau and Falling Walls Lab participants learning how to align their research with the SDGs



Future Earth Australia gave a guest lecture at the Fenner School, ANU



Eleanor Robson (on stage, left) with Belmont Forum stakeholders, where she discussed the importance for early career sustainability scientists and practitioners to hone their skills in strategic thinking, in order to ensure that codesigned research produces useable knowledge.

Global engagement

BELMONT FORUM 10-YEAR ANNIVERSARY

In October, Tayanah O'Donnell and Eleanor Robson had the pleasure of attending the Belmont Forum's 10-year anniversary celebration and annual plenary in Taipei, Taiwan, with Tayanah holding delegations for Australia.

The Belmont Forum is an international funding consortium which enables transdisciplinary sustainability research projects. The Belmont Forum is also a lead partner in the SRI2021 Congress to be held on 12–15 June 2021 (previously June 2020).

Reflecting on the past decade and then looking to the next 10 years, national representatives, researchers (both senior and those beginning their career) and Forum elders participated in a range of panels on critical issues. In the opening panel, Tayanah emphasised the vital need to ensure that Indigenous perspectives and knowledges are genuinely involved as standard practice in sustainability science. Eleanor, on the closing panel on training the cohort of the future, put forward the notion that when beginning their career, sustainability scientists and practitioners could use more training in strategic thinking to ensure that their research design produces knowledge that has the best possible uptake.

SUSTAINABILITY RESEARCH & INNOVATION CONGRESS 2021

In May 2019, it was announced that a consortium convened by Future Earth Australia and the Queensland Chief Scientist, comprised of five Queensland universities (including Future Earth Australia members the University of Queensland, Griffith University, and the University of the Sunshine Coast), along with CSIRO, won its bid to host the inaugural Sustainability Research & Innovation (SRI) Congress in Brisbane. In addition to the hosting consortium, this congress is being convened by The Belmont Forum and the global Future Earth program.

SRI2021 was scheduled to take place in Brisbane from 14 to 17 June 2020, however restrictions relating to COVID-19 means it will now take place from 12 to 15 June 2021.

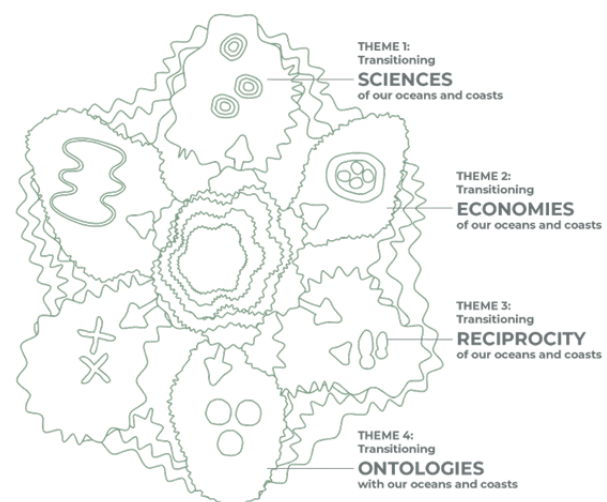
The congress welcomes practitioners, researchers, funders, innovators, thought leaders, policy-makers, and industry partners across the broad spectrum of communities working to solve local to global sustainability challenges.

SRI2021 exists to put knowledge into action and create rapid progress on the SDGs, to amplify sustainability approaches and expertise from the Global South, and incubate sustainability professionals from early to senior stages. It convenes to share successes, exchange views, and work across disciplines and sectors, and to establish a home for global transdisciplinary research and practice.

OUR COASTAL FUTURES 2021

In 2019, Future Earth Australia entered into a partnership with Future Earth Coasts, a project of the global Future Earth program, to host the 'Our Coastal Futures' conference. This event, which will be held at the Southern Cross University Gold Coast campus in October 2021, will be a transdisciplinary, multi-format, international conference centered around transitioning towards a respectful custodianship of our oceans and coasts. The conference has been endorsed by the United Nations, in recognition of the UN Decade of Ocean Science for Sustainable Development 2021–2030.

The conference is organised around four themes: transitioning sciences of our oceans and coasts,





The steering committee for the global Urban Knowledge-Action Network at the Australian Academy of Science in Canberra

transitioning economies of our oceans and coasts, transitioning reciprocities of our oceans and coasts, and transitioning ontologies with our oceans and coasts. The event is designed to foster a sense of trust and respect among all, emphasising diversity, innovation, and connections. The program will include traditional formats such as oral presentations and posters, as well as new creative expressions including yarning circles and artistic installations. Attendees will include researchers, practitioners, Indigenous peoples, activists, businesses, youth, and decision-makers.

URBAN KNOWLEDGE-ACTION NETWORK

Future Earth's Urban Knowledge-Action Network (Urban KAN) is a global network of researchers and other innovators in policy, business, civil society, and more. The Urban KAN is working to solve the most pressing challenges facing cities worldwide by building new knowledge and tools to accelerate real-world transitions and transformations toward cities that are sustainable and livable.

In November 2019 the Urban KAN held its annual Steering Committee meeting in Australia. The Urban

KAN Steering Committee is comprised of urban systems experts in research and practice from around the world, representing diverse geographic regions, urban challenges across the global north and south, and across disciplines.

Attendees included co-chairs Xuemei Bai and Timon McPhearson, and steering committee members Shu-Li Huang, Xiangzheng Deng, Noboro Zama, Jago Dodson, Kensuke Fukushi, Siir Kilgis and Tayanah O'Donnell. Inputs were contributed remotely by Harini Nagendra, Tischa Munoz-Erickson and Shuaib Lwasa. Thomas Elmqvist and Niki Frantzeskaki were special guests, and Giles Sioen and Eleanor Robson supported the meeting.

The steering committee worked over three days to elaborate on the Urban KAN's strategic priorities, key research priorities and areas for new scientific contribution to accelerate urban sustainability, and map the core activities for 2020. Some of the activities include drafting of the Urban KAN Science Plan to see research priorities come to life, further developing a formal governance plan, developing communications, contributing sessions to the Sustainability Research & Innovation 2021 Congress and scoping the Urban KAN's membership's interests and background with a

network survey. An outcome of the meeting was the Urban KAN planning to hold four webinars throughout 2020 on key strategic issues for urban systems.

Prior to the Steering Committee meeting, a public event was held in partnership with the Fenner School at the Australian National University on 'Connecting the Urban: Global perspectives and local initiatives'.

Following welcomes by Dr Joelle Gergis and Dr Tayanah O'Donnell, the event consisted of an expert panel comprised of Steering Committee members Professor Thomas Elmqvist from Stockholm Resilience Centre in Sweden, Associate Professor Timon McPhearson from New School in the United States of America and Mr Noboru Zama from UNHABITAT Nepal, along with ACT Sustainability Commissioner Professor Kate Auty.

NITRO–OCEANIA

The Network of Interdisciplinary and Transdisciplinary Research Organisations, Oceania (NITRO–Oceania) is a network of leaders fostering interdisciplinary and transdisciplinary research and education within and across organisations in the Oceania region.

Future Earth Australia in 2019 committed to deepening its support for NITRO–Oceania, with Tayanah O'Donnell being invited to serve on its Executive Committee. Eleanor Robson now dedicates part of her time to supporting NITRO–Oceania's events and initiatives, and growing its membership, network and visibility in the Oceania research-practice sector.

NITRO–Oceania was selected to deliver a 100-person training session at SRI2021 on how to create narratives and communicate the impact of transdisciplinary research for advancing sustainability and development. Eleanor has been working closely

with Professor Gabriele Bammer from the Australian National University and members of the NITRO–Oceania Executive to design, organise and facilitate this workshop.

GEO WEEK

In November 2019, Tayanah O'Donnell, Taryn Laubenstein and Sarah Crowe represented both Future Earth Global and Future Earth Australia at the Group on Earth Observations (GEO) Ministerial Summit in Canberra.

As part of the main GEO Week program, the team attended the GEO-XVI Plenary session, which included sessions on action on climate change, action on disaster risk reduction, broadening the impact of Earth observation, and delivering on the GEO strategic plan. There were also a variety of side events presented by experts from around the world, including those focusing on delivering on the SDGs and the UN Decade of Ocean Science for Sustainable Development, as well as an ideas stage with short presentations from global case studies in Earth observation technology.

In addition to the Plenary session, Taryn represented Future Earth Australia at the United Nations Science-Policy-Business Forum on the Environment. The Forum held a High-Level Working Group on Big Data and Frontier Technologies, with participants from top space agencies and Earth observation centres, frontier technology giants, start-ups and entrepreneurs, top UN officials, decision-makers, scientists, strategists, and non-government groups. The outcome of the session contributed to the design of the UN data strategy and relevant UN-backed projects and platforms for open data and analytics on the environment.

Who we are

FUTURE EARTH AUSTRALIA SECRETARIAT



Director

Dr Tayanah O'Donnell

Tayanah is an experienced science leader, communicator and collaborator, having worked in research and leadership roles in private practice, government and academia for more than 20 years. She has particular expertise in environmental and public policy governance, the legal, political and cultural aspects of climate change adaptation, and land use planning.



Research and Policy Officers

Dr Taryn Laubenstein

Taryn is a trained scientist and science communicator, having recently completed her PhD in marine biology at the ARC Center of Excellence for Coral Reef Studies. Taryn is the project lead on Future Earth Australia's 2020 Ocean and Coastal Systems Transformation, and is passionate about incorporating transdisciplinary and cross-sectoral knowledge sharing into Australia's ocean and coastal systems.



Eleanor Robson

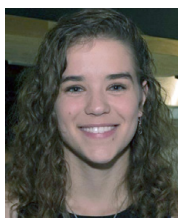
Eleanor is an urban geographer interested in citizen and stakeholder engagement in environmental governance, and building collaboration for sustainability. She has worked across research, consulting and teaching in geography and urban affairs, and more recently in politics, environmental policy, political advocacy and campaigning. Eleanor is based in Brisbane and is currently undertaking her Masters of Public Policy at the University of Queensland.



Policy and Events Coordinator

Sarah Crowe

Sarah has over 10 years of administrative experience and keeps Future Earth Australia running like a well-oiled machine. Sarah is the head of the Early-Career Researcher and Practitioner Program at Future Earth Australia, and is passionate about ECRP representation across all of the Future Earth Australia projects.



Research Officer

Georgie Juszczuk

Georgie is in her fifth year of Law and International Security Studies at the Australian National University. Originally from Townsville, Georgie moved to Canberra to pursue her studies, and has worked on a casual basis as a Research Officer at Future Earth Australia since 2019.

STEERING COMMITTEE

Future Earth Australia would like to thank all members of our Steering Committee for their continuing contributions. Our Steering Committee will be undertaking a renewal process throughout 2020, in line with our two-year term framework.

Professor Karen Hussey (Co-Chair)	University of Queensland
Dr Mark Stafford Smith (Co-Chair)	CSIRO
Dr John Finnigan FAA	Chair, National Committee for Earth System Science
Professor Lesley Hughes	Macquarie University
Professor Jago Dodson	RMIT
Professor Brett Bryan	Deakin University
Adrian Enright	Qantas
Professor Saul Cunningham	Australian National University
Professor Chris Turney	University of New South Wales
Professor David Schlosberg	Sydney University
Chris Lewis	ECRP Representative
Dr Ray Maher	ECRP Representative

ADVISORY COMMITTEE

Professor Ian Chubb AC FAA FACE FTSE	Chair
Professor Kate Auty	ACT Commissioner for Sustainability and the Environment
Professor Howard Bamsey	Global Water Partnership
Simon Corbell	Former ACT Minister for Environment and Climate Change
Adam Fennessy PSM	Partner at EY
Penelope Figgis AO	IUCN World Commission on Protected Areas
Virginia Haussegger AM	50/50 by 2030 Foundation Institute for Governance and Policy Analysis
Emma Herd	Investor Group on Climate Change
Dermot O’Gorman	World Wildlife Fund
Professor Will Steffen	Australian National University
Angharad Wyne-Jones	Arts Centre Melbourne

MEMBERS



2019–20 COLLABORATORS

Future Earth Australia would like to thank the following people for making our program a success.

SRI2021

Dr Erica Key	Belmont Forum
Professor Joshua Tewksbury	Future Earth Colorado
Professor Paul Bertsch	Queensland Chief Scientist
Dr Judit Ungvari-Martin	Belmont Forum
Dr Veera Mitzner	Future Earth Colorado
Jamie McDevitt-Galles	Future Earth Colorado
María Fernanda Enríquez Szentkirályi	Future Earth Colorado
Laurel Milliken	Future Earth Colorado
Dr Makyba Charles-Ayinde	Belmont Forum
Dr Yekaterina (Katia) Kontar	Future Earth Colorado

Urban Systems Transformation

Honorary Associate Professor Bob Webb Australian National University

Professor Jago Dodson RMIT University

Professor Kate Auty ACT Commissioner for Sustainability and Environment

Professor Xuemei Bai Australian National University

Guy Barnett CSIRO

Helen Bell Green Building Council of Australia

Dr Stephen Berry University of South Australia

Professor John Boland University of South Australia

Alicia Boyle Charles Darwin University

Professor Paul Burton Griffith University

Professor Tony Capon Monash University

Jimmy Cocking Desert Knowledge Australia

Professor Bob Costanza Australian National University

Dr Donna Ferretti Donna Ferretti and Associates

Dr Michael Fotheringham Australian Housing and Urban Research Institute

Distinguished Professor Billie Giles-Corti RMIT University

Dr Steve Hill FAusIMM Geoscience Australia

Professor Tom Kvan University of Melbourne

Kim Le Cerf City of Melbourne

Professor Chris Leishman University of Adelaide

Vaughan Levitzke PSM Green Industries South Australia

Professor Simon Maddocks Charles Darwin University

Ken Maher AO Hassell Studio

David MacLennan City of Vincent

Dr Alexandra Murray Charles Darwin University

Dr Tim Muster CSIRO

Professor Peter Newman AO Curtin University

Professor Peter Newton Swinburne University

Professor Barbara Norman University of Canberra

Caitlin Perry Northern Territory Council of Social Services

Professor Christopher Pettit University of New South Wales

Scientia Professor Deo Prasad AO University of New South Wales

Professor Rob Raven	Monash University
Mayor Damien Ryan	Alice Springs Town Council
Dr Jessa Rogers	Price WaterHouse Coopers
Professor Chris Ryan	University of Melbourne
Professor Chris Saint	University of South Australia
Professor Juan Salazar	Western Sydney University
Professor Neil Sipe	University of Queensland
Dr Mark Stafford Smith	CSIRO
Louise Taylor	Northern Territory Government Department of the Chief Minister
Piers Verstegen	Conservation Council of Western Australia
Ross Womersley	South Australian Council of Social Services

The Future of Coasts

Dr Chris Lee	Climate-KIC
Dr Johanna Nalau	Griffith University
Dr David Souter	Australian Institute of Marine Science
Matt Baldock	Livingstone Shire Council
Emeritus Professor Tor Hundloe	University of Queensland

Catalysing Change: Moving Towards a Circular Economy

Scientia Professor Veena Sahajwalla FAA	University of New South Wales
Ashleigh Morris	Coreo
Jaine Morris	Coreo
Dr Jennifer Yarnold	University of Queensland
Kirilly Dickson	ACT Office of Sustainability
Dr Taylor Brydges	University of Technology Sydney
Anirban Ghose	University of New South Wales
Mitchell Kardan	Visible Seas

The Future of Food: Connecting the Sustainable Development Goals

Dr Carly Rosewarne	University of South Australia
--------------------	-------------------------------

Dr Steven Lapidge	Fight Food Waste CRC
-------------------	----------------------

Dr Nathan O'Callaghan	CSIRO
-----------------------	-------

Professor Kerry Wilkinson	University of Adelaide
---------------------------	------------------------

Dr Joseph Milton	Australian Science Media Centre
------------------	---------------------------------

Melissa Rayner	The Foodprint Experience
----------------	--------------------------

Urban Knowledge-Action Network

Professor Xuemei Bai	Australian National University
----------------------	--------------------------------

Associate Professor Timon McPhearson	The New School
--------------------------------------	----------------

Dr Giles Bruno Sioen	University of Tokyo
----------------------	---------------------

PARTNERS



Young Persons'
Plan for the Planet Program



