



Australian  
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## Environmental policy analytics and support for environmental decision-making: an agenda for innovation



**7-8<sup>th</sup> February 2017**

**The Australian National University, Canberra, Australia**

**Please note that program may be subject to last minute changes.**

## Forum background

Developing effective environmental policy and management is challenging due to high levels of complexity, uncertainty and conflict inherent in these processes. This includes the conflict over preferred directions for 'sustainable' development and coupled human and environmental futures under different scenarios of climate change and global population. There are now significant quantities of data and knowledge on the environment, including on human values related to the environment and their impacts upon it that have already been collected or could be obtained and brought together to inform decision-making processes. In recent decades many scientists, analysts and businesses have worked to transform this data into research and services, employing a range of *analytics* or tools and methods that can be drawn upon to inform decision-making processes. Despite rapid uptake and focus in the business sector of analytics to advance their place in the market, there has been more modest interest in the public sector where the most important decisions on policies affecting aspects of the environment are arguably made. Some analytics, for example, those managing certain types of 'big data' can be directly translated to the public sector if the right expertise and data management systems are available. However, others are more specific to the public sector and the value conflicts between parts of society over both desirable policy directions and how to achieve them. For example, analytics that can support democratization, legitimacy or accountability building, and/or identify and help to mediate value conflicts within policy processes, including between current and future generations, can all be important tools in helping to build more effective environmental policy and management decisions.

This forum seeks to explore the value of a focus on environmental 'policy analytics' for improving public policy and decision-making processes related to the environment and sustainability. It brings together leading thinkers and practitioners on the topic, as well as a range of contributions from ANU and external academics working in the area, in order to develop an agenda for innovation and future collaboration in the area.

The forum is a result of long-term European-Australian cooperation in the area and has been generously supported by the ANU Climate Change Institute, ANU Centre for European Studies and the Fenner School of Environment and Society.

# Environmental Policy analytics and support for environmental decision-making: an agenda for innovation

**Day 1: Tuesday 7 February, 9.30pm – 4.00pm**

## Part 1: The big picture – challenges and research directions

Location: Centre for European Studies, 1 Liversidge St, Acton, ANU

Chair: **Dr Katherine Daniell**

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9.30pm Welcome Tea and Coffee

10.00am Forum opening

**Prof Jacqueline Lo, Director of the Centre for European Studies**  
**Ms Anne Rouault, Attaché for Science and Technology, French Embassy**  
**Prof Mark Howden, Director of the ANU Climate Change Institute**

10.05am [Introduction to the discussion](#)

**Dr Katherine Daniell, Senior Lecturer, Fenner School of Environment and Society**

10.15am [Policy analytics and environmental policy innovation outcomes](#)

**Prof Alexis Tsoukias, Director of CNRS-LAMSADE, Université Paris Dauphine (PSL)**

Q&A with audience

11.00am [Bridging the policy-action gap for climate change adaptation: methods and innovations](#)

**Prof Mark Howden, Director of the ANU Climate Change Institute**

11.20am [Predictive analytics and artificial intelligence for renewable energy and smart buildings](#)

**Prof Sylvie Thiebaux, College of Engineering and Computer Science**

11.40pm [Facilitated panel discussion and Q&A](#)

Speakers and policy guests

12.20pm Lunch

## Part 2: Existing and potential French-Australian cooperation areas

**Chair: Prof Mark Howden**

- 1.50pm [The World Bank Coral Reef Project and other opportunities](#)  
**Prof Roger Bradbury (National Security College, ANU) and Prof Pascal Perez (University of Wollongong)**
- 2.15pm [Improving participatory decision-making using social psychology](#)  
**Dr Rebecca Colvin (ANU Climate Change Institute)**
- 2.30pm [Tools for supporting integrated catchment assessment and management: current and future work](#)  
**Prof Tony Jakeman (Director of the Centre for Integrated Assessment and Management, Fenner School, ANU)**
- 2.45pm [French-Australian cooperation in international development: natural resources management and irrigation in Africa](#)  
**Assoc Prof Jamie Pittock (Director of International Programs, UNESCO Chair in Water Economics and Transboundary Water Governance, Fenner School, ANU)**
- 3.00pm [Putting decision-support into practice – challenges and opportunities?](#)  
**Facilitated discussion and audience Q&A with presenters**
- 3.45pm Day 1 Close and afternoon tea

## Day 2: Wednesday 8 February 2017, 9.30am – 4.00pm

Location: ANU Centre for European Studies, 1 Liversidge St, Acton.

**Session Chair: Dr Bec Colvin**

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9.30pm Welcome Tea and Coffee

10.00am Introduction to Day 2 by Session Chair

### Part 3: Research and practice in environmental policy analytics: an agenda

10.05am *Systems models and politics of evidence in policy practice: the case of urban water in Australia*

**Prof Peter Coombes**, University of Swinburne and Director of Urban Water Cycle Solutions

10.30am *Supporting crisis and drought management in federations: an international comparison*

**Dr Daniel Connell**, Crawford School of Public Policy

10.45am *Theory and software for complex network analysis of social systems: bridging the 'soft' and the 'hard'*

**Dr Timothy Graham**, Research School of Social Sciences and Research School of Computer Sciences

11.00am *Cooperation on environmental analytics in the Transformative Adaptation Research Alliance (TARA)*

**Dr Matthew Colloff**, Fenner School of Environment and Society

11.15am *Barriers and opportunities to the adoption of environmental policy analytics for informing decisions and outcomes: an agenda for cooperation*

**Dr Katherine Daniell**, Fenner School of Environment and Society and European Research Development Manager

11.30am *Implementing and researching environmental policy analytics – pathways for collaboration*

**Facilitated discussion and audience Q&A with presenters**

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12.30pm Official close of day 2 public event and lunch

2.00pm Informal discussions on directions for cooperation

*All interested participants (internal ANU participants and invited guests)*

4.00pm Conclusions and close

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## CONTACT US

**For questions of logistics or program content, please contact:**

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