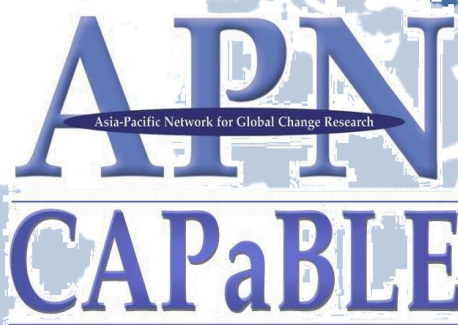


FINAL REPORT for APN PROJECT

Project Reference Number: CBA2011-11NSY-Tienhaara

Climate Change Governance in the Asia-Pacific Region: Agency, Accountability, and Adaptiveness



- Making a Difference -

Scientific Capacity Building & Enhancement for Sustainable Development in Developing Countries

The following collaborators worked on this project:

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Australian
National
University



Earth
System
Governance

Climate Change Governance in the Asia-Pacific Region: Agency, Accountability and Adaptiveness

Project Reference Number: CBA2011-11NSY-Tienhaara
Final Report submitted to APN

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OVERVIEW OF PROJECT WORK AND OUTCOMES

Non-technical summary

Responding to climate change is likely to be the defining challenge of this century. The next generation of scholars that will be at the forefront of mitigation and adaptation research in the pivotal period leading up to 2050 is now entering academia. Young researchers are tackling a wide range of climate issues from a variety of disciplinary perspectives. Although much important work focuses on the development of new technologies and improved understanding of the underlying biogeophysical systems, it is clear that effective and accountable governance systems will also be required to ensure that mitigation and adaptation strategies are implemented in a timely and equitable manner. The Asia-Pacific region will face particularly grave challenges, including significant displacement of human populations, human health issues and loss of valuable ecosystem services, if climate change continues unabated. In order to address the challenges of responding to climate change in Asia and the Pacific, we organized a workshop to build capacity amongst early career governance researchers in the region, held at the Australian National University in Canberra, Australia from 14-16 March 2012.

Objectives

The main objectives of the project were:

1. To bring together a community of researchers working on earth system governance in general and responses to climate change in particular to jointly learn, stimulate dialogue and initiate new research endeavours.
2. To enable early career researchers from the Asia-Pacific region to participate in an international workshop and to receive feedback and support from established colleagues and their own peers.
3. To contribute to improved awareness and skills in science-policy and science-society dialogue at all (analytical and institutional) governance levels.

Amount received and number years supported

The Grant awarded to this project was:

US\$ 32,000 for Year 1

Activity undertaken

A three-day workshop was held from 14-16 March 2012 at the Australian National University (ANU). Three keynote speakers presented lectures on climate change governance, 17 early career researchers from Australia and the Asia-Pacific region presented papers and participants also joined in an ANU-wide Climate Expo.



Results

The workshop was very well received by the participants. Discussions on possible outlets for the publication of some of the papers are ongoing. A large number of participants have expressed their interest in further collaboration under the Earth System Governance Project umbrella and intend to meet again at the 2013 Tokyo Conference on Earth System Governance (delayed from 2011 as a result of the earthquake/tsunami).

Relevance to the APN Goals, Science Agenda and to Policy Processes

The workshop succeeded in enhancing collaboration between researchers (both leading scientists and early-career researchers) in the region. It built capacity amongst early-career researcher participants to better understand and shape future research on responses to climate change on all scales in the Asia Pacific region. The workshop also provided an opportunity for all participants to create new networks, strengthen existing connections and develop new ideas that could lead to greater synergies and improved research findings within the research community. The workshop thus directly addressed APN's goal to support regional cooperation in global change research on issues relevant to the region (APN Strategic Plan, goal 1, instruments a and b), and through developing capacity of individual early career researchers the workshop will also contribute to improving the scientific capabilities of nations in the region (APN Strategic Plan, goal 3).

Self evaluation

The workshop was well structured to allow for detailed discussions on a range of topics from a variety of disciplinary perspectives. In addition, the overall setting allowed for good network development between participants and between participants and senior scholars and organisers. Good on-site logistics and planning made the workshop effective. Collaboration between the involved institutional actors (APN, multiple ANU entities, Earth System Governance Project) went very smoothly in the preparation and implementation phase. However, unprofessional communication and attitudes by a few participants in regard to logistical, financial, and other technical matters caused significant additional work by the organisers. One of the lessons learned is that more emphasis is needed for capacity building related to technical (communication) skills of participants and that hence 'capacity building' starts with the application process.

Potential for further work

There is a great potential for further work. The diversity of the participants and research topics was crucial to the success of the workshop, but initial ideas of collaborative post-workshop work proved unrealistic. Instead, a number of bilateral and smaller group collaborations emerged and have been encouraged by the organizers. The Earth System Governance Project will follow-up on these collaborations and provide support and coordination when needed. The Tokyo Conference on Earth System Governance (28-31 January 2013) is envisaged by many as next venue and opportunity to meet and present work resulting from or inspired by the workshop.

Publications (please write the complete citation)

This workshop did not produce any publications directly. Inspired by the exchanges of knowledge and information, and enabled by the new collaborations and connections from the workshop, a number of publication ideas have emerged and will be followed up by the participants, if necessary with the support of the organizing institutions. Current publication results include:

- Bowen, Kathryn J., Sharon Friel, Kristie Ebi, Colin D. Butler, Fiona Miller and Anthony J. McMichael. 2012. Governing for a Healthy Population: Towards an Understanding of How Decision-Making Will Determine Our Global Health in a Changing Climate. *International Journal of Environmental Research and Public Health*, 9: 55-72. 2012.
- Mayer, Benoît. 2012. Environmental Migration in Asia and the Pacific: Could We Hang Out Sometime? *Earth System Governance Working Paper No. 22*. Lund and Amsterdam: Earth System Governance Project.

Consultations with participants on publication opportunities for their papers presented at the workshop, and revisions of these papers are ongoing.

Acknowledgments

We would like to acknowledge the generous funding of the Research School of Asia and the Pacific in the College of Asia and the Pacific, ANU. Their contribution of AU\$13,000 enabled the participation of many of the presenters based in institutions around Australia as well as a workshop dinner and the Climate Expo held on the final day of the workshop. We would also like to acknowledge the work of the ANU's Climate Change Institute, which organized the Climate Expo and invited our workshop participants to attend and contribute in a special 'Asia and the Pacific' panel.



Preface

The next generation of scholars will be at the forefront of climate change mitigation and adaptation research in the pivotal period leading up to 2050 in which the Asia-Pacific region will face particularly grave challenges if climate change continues unabated. In order to address the challenges of responding to climate change in Asia and the Pacific, a capacity building workshop for early career governance researchers in the region has been held successfully at the Australian National University in Canberra, Australia from 14-16 March 2012. The workshop enabled joint learning and network development, stimulated dialogue and initiated new research endeavours.

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1.0 Introduction

Responding to climate change is likely to be the defining challenge of this century. The next generation of scholars that will be at the forefront of mitigation and adaptation research in the pivotal period leading up to 2050 is now entering academia. Young researchers are tackling a wide range of climate issues from a variety of disciplinary perspectives. Although much important work focuses on the development of new technologies and improved understanding of the underlying



biogeophysical systems, it is clear that effective and accountable governance systems will also be required to ensure that mitigation and adaptation strategies are implemented in a timely and equitable manner.

Earth System Governance — a global research alliance — is the largest social science research network in the area of governance and global environmental change. The Earth System Governance research alliance takes up the challenge of exploring political solutions and novel, more effective governance mechanisms to cope with the current transitions in the biogeochemical systems of the planet. The normative context of this research is sustainable development; earth system governance is not only a question of institutional effectiveness, but also of political legitimacy and social justice.

The Earth System Governance Project — a long-term research project and global research network under the auspices of the International Human Dimensions Programme on Global Environmental Change (IHDP) — is open to all social and natural scientists who are engaged in research on the governance of coupled socio-ecological systems, at all levels. Its global network includes many of the most prominent scientists in the field, along with numerous PhD students and early-career researchers. The Earth System Governance Project already plays an important role in conducting, synthesizing, and sharing research on environmental governance including climate governance at all levels, from the local to the regional and global, and emphasizes the inclusion of young scholars in these endeavours.

The Earth System Governance Project has a strong presence in Asia and the Pacific and recognizes that this region will face particularly grave challenges, including significant displacement of human populations and loss of valuable ecosystem services, if climate change continues unabated. To facilitate strategic thinking about how to address the governance challenges of responding to climate change in Asia and the Pacific, and to better prepare the next generation of scholars for the task, we held a three-day workshop to build capacity amongst early career governance researchers in the region at the Australian National University in Canberra, Australia, 14-16 March 2012. Three keynote speakers presented lectures on climate change governance, 17 early career researchers from Australia and the Asia-Pacific region presented papers and participants also joined in an ANU-wide Climate Expo.

1.1. Thematic Focus

The Earth System Governance research alliance advances a research strategy (Biermann 2007, Biermann et al. 2009, Biermann et al. 2010a, 2010b) that is organized around five analytical problems: The problem of the overall architecture of earth system governance, of agency beyond the state and of the state, of the adaptiveness of governance mechanisms and processes and of their accountability and legitimacy, and of modes of allocation and access in earth system governance. These research problems have been identified based on an analysis of the current state of research, of recent theoretical developments, as well as societal demands.

In addition, the research strategy emphasizes four crosscutting themes that are crucial for the study of each analytical problem but also for the integrated understanding of earth system governance:



The role of power, knowledge, norms, and scale.

Finally, the Earth System Governance research alliance advances the integrated, focused analysis of case study domains in which researchers combine research on the analytical problems and crosscutting themes, and collaborate with the natural sciences.



Figure 1: Earth System Governance Research Framework

The Earth System Governance Science and Implementation Plan (Biermann et al. 2009) outlines the research programme in detail and is available in English, Japanese, and Spanish at www.earthsystemgovernance.org.

The workshop was inspired by and structured along three of the pillars of this analytical framework: agency, accountability and adaptiveness and focused on the research domain climate system.

1.1.1. Agency

Large and complex problems, such as climate change, challenge the capacity of traditional state structures of governance. Moreover, this capacity varies greatly among nation-states, with developing country governments typically dealing with substantial restraints on resources and limited access to information and expertise. Cooperation with other states, but also with local, domestic and transnational non-state actors, appears to be imperative. Additionally, many institutions of climate governance have already emerged ‘beyond the state’; that is, they are



already inclusive of, or even driven by, non-state actors such as corporations, scientific networks, non-profit organizations, banks, etc. In some instances, these actors have taken on authoritative roles in which they substantively participate in the creation of rules. As such, they can be considered ‘agents’ of climate change governance. Papers presented at the workshop on this theme aimed at identifying the key agents of climate change governance in Asia and the Pacific, their sources of authority, and their significance in the region.

1.1.2. Accountability

Accountability is closely related to the legitimacy of governance processes, which in turn substantially determines the compliance-pull and effectiveness of rules. Traditional forms of democratic accountability that operate when governments are the sole or central actors do not apply when new forms of governance emerge of a public-private or private nature. Issues of participation and inclusiveness, transparency and openness are important in all forms of governance but become particularly critical when state actors are marginalized. Although none of the accepted papers directly focused on the issue of accountability, one of the keynote speakers – eminent scholar Prof John Dryzek – did discuss this pillar in his talk on *Democratizing Climate Change Governance*.

1.1.3. Adaptiveness

Adaptiveness is an umbrella term for a set of related concepts— vulnerability, resilience, robustness, adaptive capacity and social learning— to describe changes made by social groups in response to, or in anticipation of, challenges created through environmental change. Within the framework of earth system governance, the term adaptiveness includes the governance of adaptation to social-ecological change as well as the processes of change and adaptation within governance systems. Adaptation to climate change has been a contentious topic in political debates with many fearing that it would divert attention from the need to address the underlying causes of rising atmospheric greenhouse gas concentrations. However, the IPCC Fourth Assessment Report highlights the developing international consensus on the need to build adaptive capacity, particularly in poor countries. The need for greater adaptiveness is especially evident in the Asia-Pacific region, in light of the damage inflicted by recent extreme climatic events as well as the looming threat to the very existence of small low-lying island states posed by climate change. This was the most popular theme of the workshop, with a large number of papers addressing the politics of adaptiveness (i.e. adaptiveness for whom?), the current adaptive capacity of countries in the region, and the governance processes that could best enhance adaptiveness.



1.1.4. Climate System

In particular, the workshop contributed to enhancing the capacity for the development of the Earth System Governance research domain on the Climate System. Whilst the science plan of the Earth System Governance Project (Biermann et al. 2009) can be applied to any given problem of global and local environmental change, the project emphasis empirical research on a number of case study areas, the so called 'flagship activities' or 'research domains' of the Earth System Governance Project - which all are linked with joint ESSP projects to ensure the crosscutting nature of the this research. The climate system is one of these flagship activities and is linked to and developed in collaboration with the Global Carbon Project. In this regard, the workshop benefitted as well from the experience gained in capacity building on climate change and governance by the APN Supported Capacity Building Workshop on "Carbon Governance in Asia: Bridging Scales and Disciplines". That workshop was jointly organized by the ESSP Global Carbon Project, the Earth System Governance Project, together with the United Nations University Institute for Advanced Studies (UNU-IAS) held 1-3 November 2010, Yokohama, Japan (CBA2010-04NSY-Dhaka).

1.1.5. Paper topics

The presented papers at workshop addressed one or more of the themes above, and all related to climate change governance in the Asia-pacific region. The paper topics covered a wide range of themes, applied a variety of methodologies and theories, and looked in to case studies all over the region. Roughly, the papers could be clustered in five groups:

First, a set of papers addressed case studies on adaptiveness ('Adaptation approach for slum dwellers in India'; 'Assessing adaptiveness, social capital, and quality of life: toward sustainable community', 'Adaptive governance and managing resilience to natural hazards').

Second, a set of papers looking into the financial and technical aspects of governing and enabling adaptation, especially at a local or sub-regional scale (Pacific Islands) and the cross-scale interactions, e.g. in context of the Rio+20 United Nations Conference on Sustainable Development ('Adaptation finance in the Asia-Pacific region: strengthening fairness, effectiveness and transparency in allocation'; 'Writing the fine print: effective climate risk insurance for pacific island states'; 'Strengthening the institutional framework for sustainable development: climate governance in Indonesia').

Third, a set of papers focused on and provided a more regional specific perspective on climate refugees / environmental migration - a topic that is generally strongly represented in the research of the Earth System Governance Project ('Climate change, adaptation and climate induced migration: the adaptiveness to governance process'; 'Environmental migration: prospects for a regional governance in the Asia-Pacific region').

Fourth, a large group of papers addressed the interlinkages between climate change and health in the Asia-Pacific region based on empiric field research in a number of countries. ('A new paradigm of climate awareness and response: assessing the capacity to adapt in the health and water sectors in Fiji'; 'Adaptive capacity and governance of climate change vulnerability in Vietnam: results of a study of the health and water sectors'; 'Changing climates: how climate



change governance mechanisms are effecting vulnerability reduction in the Asia-Pacific’ ; ‘Assessing the capacity to adapt to climate change: a Cambodian case study in the health and water sectors’; ‘Climate change and health in northern Micronesia: an examination of governance issues related to adaptation planning in small island developing states’; ‘Enabling environments? Insights into the policy context for adaptation decision-making in Cambodia’).

The fifth set of papers emphasized the analytical problem of agency, including various state actors, non-state actors and networks (‘Institutional setting-ups of climate change governance in China: central vision, local constraints and tensions identified’; ‘Manoeuvres for a low carbon state in India: identifying agency, authority and accountability in governance of clean energy development’; ‘Transnational advocacy network in climate change action: an exploratory research on agency in Earth System Governance’).

1.2. Objectives

The main objectives of the workshop were:

- To bring together a community of researchers working on earth system governance in general and responses to climate change in particular to jointly learn, stimulate dialogue and initiate new research endeavours.
- To enable early career researchers from the Asia-Pacific region to participate in an international workshop and to receive feedback and support from established colleagues and their own peers.
- To contribute to improved awareness and skills in science-policy and science-society dialogue at all (analytical and institutional) governance levels.

2.0 Methodology

2.1. Scheduling of the workshop

Originally, the workshop had been planned to precede and tie into the Tokyo Conference on Earth System Governance, which was originally scheduled for December 2011. However, following the tragic earthquake and tsunami in Japan, the organizers of that conference decided to delay the conference until 2013. As such, we also had to rethink the timing of our workshop.

Based on the availability of speakers, we decided to organize the workshop in the first semester of the Australian university calendar in 2012. This also permitted us to collaborate with the ANU Climate Change Institute to develop a second event (the ANU Climate Expo) in the same week as the workshop.

The new dates for the workshop made another link to the 2013 Earth System Governance Tokyo Conference possible: At the time of the workshop, the call for papers for the Tokyo Conference just opened (www.tokyo2013.earthsystemgovernance.org). The call has been presented at the workshop



and participants actively discussed ideas for joint paper proposals to the conference. Many participants indicated their intention to – inspired by the workshop – attend the 2013 Earth System Governance Tokyo Conference hence taking the discussions, contacts and ideas from the workshop in Canberra to the larger but related venue of the annual Earth System Governance open science conferences.

The delay also permitted us time to seek further funding. This was particularly important given the rise in the Australian dollar against the American currency in which the APN funding was provided (several thousand dollars were lost in the exchange). We secured \$13,000 of additional funding from the Research School of Asia and the Pacific (RSAP), permitting us to proceed with a larger workshop.

2.2. Application and Selection Process

We put out a call for applications in August 2011 (see Appendix 3). It was distributed widely and was posted in the APN newsletter, the Earth System Governance Newsletter, on the Earth System Governance Project website and throughout the ANU's and Earth System Governance project's networks in the region as well as extensively via social media.

We received over 100 inquiries and formal applications. The applications included a CV and abstract of 500 words as well as a writing sample. These applications were evaluated by the project collaborators first against basic criteria (i.e. applicant is 'early career', abstract is on climate governance rather than climate science, etc.). We then closely evaluated each application based on a further set of criteria (academic merit, need for capacity building, 'fit' with workshop themes).

Although we did not specifically aim for a broad distribution of scholars in terms of their country of residence, we did end up with a healthy mix. In line with the mandate of the Asia-Pacific Network for Global Change Research, we intended to give priority to applications from developing countries in the Asia-Pacific region. But also in this regard, the selection procedure as described above, already resulted in a group of candidates with a clear strong representation of early-career researchers from developing countries.

The selected group of participants also represented a wide range of academic disciplines (including various social sciences but also medical and natural sciences), and came from a variety of different institutions (mainly regular universities but also nursing schools and international organisations).

We accepted applications from nine scholars based in the region and nine based in Australia (five of whom were Australian and four of whom were originally from other countries in the region). The nine based in the region were funded by the APN CAPaBLE grant, while the nine based in Australia were funded by the RSAP grant.

The selected participants for support by APN were:

1. Ashwini Swain, University of York
2. Benoit Mayer, National University of Singapore
3. Elenoa Puamau, Fiji National University
4. Joni Jupesta, United Nations University



5. Larissa Gata, University of the Philippines
6. Mohammad Khan, Centre for International Sustainable Development Law
7. Quynh Anh Nguyen, Vietnam Directorate for Standards and Quality
8. Sohail Ahmad, United Nations University
9. See footnote¹

The selected participants for support by other sources were:

1. Charlotte Catmur, University of Melbourne
2. Dany Va, Bond University
3. Hao Zang, University of Melbourne
4. Riyante Djalante, Macquarie University
5. Hitomi Nakanishi, University of Canberra
6. Liam Phelan, University of Newcastle
7. Kathryn Bowen, ANU
8. Jonathan Pickering, ANU
9. Lachlan McIver, ANU and WHO

Following the selection procedure, the results were communicated to all applicants and Letters of Invitation were provided to all those requiring assistance with visa applications. We also liaised with the Australian Department of Immigration to ensure that there were no obstacles to the participation of any of the applicants.

¹ As noted in a communication to the APN Secretariat, we had to discontinue the participation of one of the APN-funded candidates because of his failure to communicate with the ANU travel agent in a timely manner (resulting in a significant rise in the price of his airfare) and his failure to commit to providing his draft paper in a timely manner.





Figure 2: Graphic overview of the diversity in country of residence of participants

Map created with: [© worldmapmaker.com](http://worldmapmaker.com)

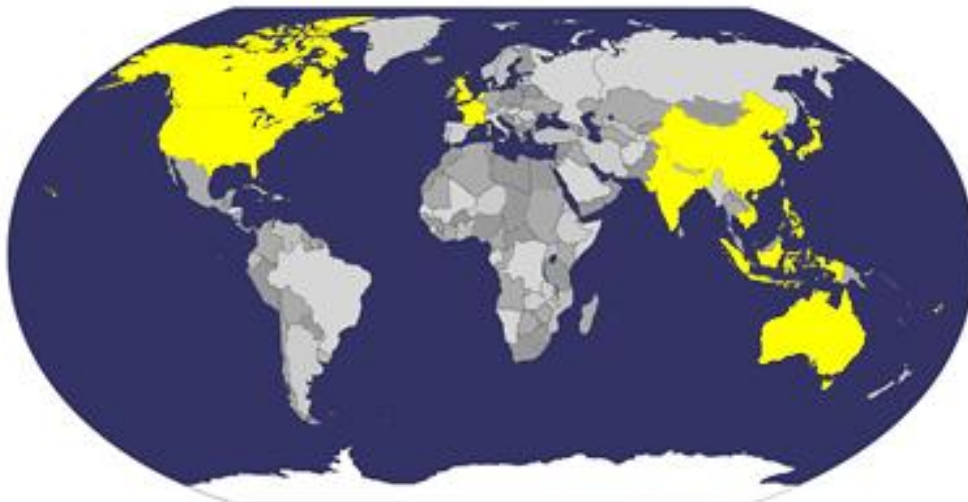


Figure 3: Graphic overview of the diversity in nationality of participants

Map created with: [© worldmapmaker.com](http://worldmapmaker.com)

2.3. Preparation Process

This workshop has been the first capacity building activity initiated, conceptualized, and implemented in a participatory approach within the Earth System Governance Project and in particular the global network of Earth System Governance Research Fellows.

Earth System Governance Research Fellows and Senior Research Fellows are early to mid-level career scientists who seek to link their own research projects with the broader themes and questions of earth system governance. Through a bottom-up, dynamic, and active network they collaborate on research, debate ideas and disseminate information on relevant events and opportunities in the field. The technical coordination of the network is done by the Project's



executive director, Ruben Zondervan. He co-chaired the workshop together with Kyla Tienhaara who is one of the two global coordinators of the Research Fellow Network.

When the call for applications for CAPaBLE projects was released in 2010, the co-chairs circulated the call to all Research Fellows in the APN region to solicit suggestions for topics they wanted a capacity building workshop to address. Based on their suggestions, the proposal was then drafted. These Earth System Governance Research Fellows were also kept in the loop regarding preparations and some actively supported the organizational process as well as implementation on site, e.g. as session or breakout group chairs.

Project Activities	2011-2012												
	(from 01 May 2011 – 1 June 2012)												
	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Organisation (logistics, administration, content preparation, communication et al.)													
Invitation of and arrangements with leading researchers.													
Distribution of the Call for Applications for the early-career researchers & application period													
Review process of the application of early-career researchers.													
Online content preparation, discussion, and information sharing													
Reporting (content), preparation of eventual policy briefs, workshop follow up, publicity													
APN project & financial reporting													

Figure 4: Project time table (adjusted to re-scheduling of workshop dates)



By the close of 2011, keynote speakers and panel discussants and chairs had been secured and a preliminary program prepared. In early January 2012 travel arrangements were made for participants through the ANU branch of STA Travel.

Full papers were due one month prior to the workshop. This allowed for all of the papers to be distributed to the participants, chairs and discussants ahead of time. This was important as one of the skills we hoped to build through the workshop was the ability to effectively conduct peer review. This was incorporated directly in the workshop through the 'breakout sessions' discussed further in the next section. All of the papers are provided in the CD attached to this report.

2.4. Workshop Program

The workshop program was built around a set of sessions with five different formats:

2.4.1. Short Presentations

We decided against the 'traditional' format of paper presentations of 20-30 minutes or longer followed by question and answers and discussion. Instead, we asked the participants to present their paper in a well prepared presentation ('sales pitch') of maximum 10 minutes. The rationale behind this has been threefold:

First, based on previous experiences with capacity building workshops and summer schools of the co-chairs (Tienhaara and Zondervan), there was a desire to avoid longer detail-rich presentations on topics not familiar or relevant to all participants. The aim of the 10 minute format was to force speakers to present in such a manner that the key take-home messages were clearly communicated (or even 'sold'), which opened up more opportunities for the participants to discuss how their interests intersected.

Second, due to budgetary and scheduling constraints, limited time (two full days) was available for presentations. The short format allowed sufficient time for discussion and tutoring (which were the main priority), while still enabling all of the participants to hear all of the presentations (i.e. no breakout groups for presentations).

Third, based on previous experiences with capacity building in the Asia-Pacific region, the co-chairs understood the need for capacity building beyond purely academic writing and networking. Presentation skills and the ability to communicate with a wide audience are particularly important for those operating in the field of environmental governance. In our view, the shorter a presentation, the better considered and prepared the presentation needs to be. The short format does not permit presentations with numerous data-heavy slides that lack reflection or context. The ability to give a short talk also translates well into science-policy communication (government officials often don't have the time to hear a 20-30 minute presentation) and work with the media.

During the preparation phase of the workshop, we have repeatedly stressed the importance of a good and above all short presentation. Participants came well prepared and without



exception managed to present their papers within the given time limit without sacrificing content.

2.4.2. Breakout Groups

After each session with short presentations, sets of 2-3 thematically related papers were discussed in breakout groups. All participants (except the authors) could decide which breakout session to attend based on their interest in a paper or by having been convinced by the short presentation. Each group was chaired by a participant who had read the full papers in advance and thus also acted as discussant. The groups served as venue for questions and answers on each paper but also to discuss the topics in a more general sense.

2.4.3. Keynote Speakers

We invited three distinguished scholars to give a keynote presentation at the workshop.

- John Dryzek, Australian National University, on '*Democracy and Effectiveness in Climate Governance*'
- Clive Hamilton, Australian National University, Charles Sturt University and the University of Melbourne, on '*The Governance of Geoengineering*'
- Will Steffen, Australian National University, on '*Climate Change as a Diabolical Problem*'

John Dryzek and Will Steffen are also members of the Lead Faculty of the Earth System Governance Project. The Earth System Governance Lead Faculty is a group of scientists of high international reputation who take (shared) responsibility for the development of research on particular analytical problems, crosscutting themes or flagship activities. With these speakers at the workshop, we were also able to support the overall network consolidation and strengthening for the Project. In addition to this, the Climate and Environmental Governance Network (CEGNet) at the Australian National University (the host) is a Research Centre in the project's network. Earth System Governance Research Centres are hubs that support the implementation of specific parts of the Earth System Governance Science Plan and act as focal points for earth system governance research in their geographical and thematic area.

We are grateful to the three keynote speakers for giving highly relevant and very interesting presentations that have been well received by all participants.

Please refer to Appendix 1 for more information about the speakers.

2.4.4. Social and Networking events

As one of the objectives of the workshop has been to "bring together a community of researchers working on earth system governance in general and responses to climate



change in particular to jointly learn, stimulate dialogue and initiate new research endeavours”, we have placed emphasis on and provided opportunities for social interaction and network development. This included long, well catered coffee breaks and lunches in a convenient setting at the Australian National University campus. In addition, with funding support of the Research School of Asia and the Pacific (RSAP), Australian National University (ANU), we have been able to invite all participants to a dinner.

2.4.5. ANU Climate Expo

On the 16th of March the ANU Climate Change Institute held a Climate Expo for PhD students and early career researchers working on climate change issues. There were six themes:

1. Science
2. Adaptation
3. Energy Change
4. Law and Economics
5. Asia and the Pacific
6. Human Dimensions

Typically, such an event would be restricted to ANU staff and students. However, because we worked closely with the organizers and helped to fund the event through our RSAP grant, we were able to have a special panel (Asia and the Pacific) where our APN-funded participants could present again to a different audience than the workshop. Other participants chose not to present, but did take advantage of another opportunity to network with senior and early career scholars at the ANU. The full Expo program is included in Appendix 5.

3.0 Results & Discussion

In total, 20 presentations were made in this two-day-workshop, out of which 17 by the early career researchers. The workshop brought together a balanced, interesting and collaborative group of early career researchers from across the region and various academic disciplines to enhance their interdisciplinary capacity, stimulate dialogue, and initiate disciplinary synergies. The process of engagement and interaction before the workshop and during the workshop, including over lunches and dinners, built the capacity of young researchers. It enabled them to present their research at an international workshop and to receive feedback and support from each other and from established colleagues, and bringing these young researchers in contact with the regional and global research communities and projects. The human network developed in this program has potentials to harness further with focused and thematic work on climate governance in Asia-Pacific.

An obvious venue to continue and strengthen the network and collaborations inspired by this workshop is the 2013 Earth System Governance Tokyo Conference (see section 2.1.)



This activity clearly demonstrated the need for capacity building for young researchers in the region. The workshop participants were selected through a rigorous process of evaluation. Nevertheless, the co-chairs found that many of them require more support to focus their research and hone their writing and presentation skills than they are currently receiving at their academic institutions. Furthermore, a significant amount of the submitted applications (less so the accepted abstracts) showed that young scholars are not targeting their research outputs in appropriate venues, and that they have difficulty with preparing applications and communicating professionally during the application process. One of the lessons learned is that more emphasis is needed for capacity building related to technical (communication) skills of participants and that hence ‘capacity building’ starts long before an activity like a workshop actually takes place.

In this respect, the decision to have short presentations (see 2.4.1.) followed by sufficiently long and well prepared breakout groups (see 2.4.2.) has been advantageous. For most presenters this format required from them to prepare their presentation differently than they would usually do. This led them to (re) consider routines in presentations and clearly provided them new knowledge and experience. The participants who also presented at the Climate Expo illustrated this new (technical) capacity by delivering short, to the point but comprehensive presentations there as well.

Although initially envisaged otherwise, this workshop did not produce any publications directly. Partly due to quality of the papers presented but mainly because of the wide range of topics addressed in the papers under the overarching theme of climate governance in Asia-Pacific. While the variety of topics was beneficial to the discussions and aided learning during the workshop, the papers were too disparate to be brought together as a special issue or edited volume.

Inspired by the exchanges of knowledge and information, and enabled by the new collaborations and connections from the workshop, a number of publication ideas have emerged and will be followed up by the participants, if necessary with the support of the Earth System Governance Project in general and the co-chairs of the workshop in particular. They will also stay in contact with participants about publication plans for the papers presented at the workshop.

Already before the workshop, one of the papers was published:

- Bowen, Kathryn J., Sharon Friel, Kristie Ebi, Colin D. Butler, Fiona Miller and Anthony J. McMichael. 2012. Governing for a Healthy Population: Towards an Understanding of How Decision-Making Will Determine Our Global Health in a Changing Climate. *International Journal of Environmental Research and Public Health*, 9: 55-72. 2012.

Meanwhile, a further paper has been published as Earth System Governance Working Paper and is in revision with a peer reviewed journal:

- Mayer, Benoît. 2012. Environmental Migration in Asia and the Pacific: Could We Hang Out Sometime? *Earth System Governance Working Paper* No. 22. Lund and Amsterdam: Earth System Governance Project. A revised version of this working paper will soon be published in a peer reviewed journal.

A third paper has also been submitted to a journal already but will first be published as discussion document on the website of the Earth System Governance Project’s initiative of International Environmental Governance and Institutional Framework for Sustainable Development towards



Rio+20 - www.ieg.earthsystemgovernance.org:

- Jupesta, Joni. (submitted) Strengthening the Institutional Framework for Sustainable Development: Climate Change Governance in Indonesia.

4.0 Conclusions

The Workshop on Climate Change Governance in the Asia-Pacific Region: Agency and Adaptiveness brought together a community of researchers working on earth system governance in general and responses to climate change in particular to jointly learn, discuss research, and initiate new research endeavors.

With the generous support of the Asia-Pacific Network for Global Change Research and the Research School of Asia and the Pacific, ANU, the Workshop on Climate Change Governance in the Asia-Pacific Region: Agency, Accountability and Adaptiveness enabled early career researchers from the Asia-Pacific region to participate in an international workshop and to receive feedback and support from established colleagues and their own peers.

The Workshop contributed to improved awareness and skills in research and research presentation and communication (science-policy and science-society) at all (analytical and institutional) governance levels.

As such, the workshop met the objectives. The workshop was well structured to allow for detailed discussions on a range of topics from a variety of disciplinary perspectives. In addition, the overall setting allowed for good network development between participants and between participants and senior scholars and organisers.

5.0 Future Directions

As outlined in sections 2.1 and 3.0 above, a substantial number of the workshop participants will continue collaborations leading to abstract submissions to and participation in the Earth System Governance Tokyo Conference in 2013.

The involvement of Earth System Governance Research Fellows (see section 2.3.) in preparations for this activity has strengthened the network considerably, even amongst fellows that could not attend the workshop. Furthermore, several workshop participants have recently applied to become Research Fellows in the Earth System Governance Project thereby becoming engaged in this field of research in a more structural way. This contributes to our conclusion that this workshop is evolving from a one-off successful event to the start of a long-term research collaboration in a global network with a strong (and growing) regional presence in the Asia Pacific.



References

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- Biermann, Frank, Michele M. Betsill, Susana Camargo Vieira, Joyeeta Gupta, Norichika Kanie, Louis Lebel, Diana Liverman, Heike Schroeder, Bernd Siebenhüner, Pius Z Yanda, and Ruben Zondervan. 2010b. Navigating the anthropocene: the Earth System Governance Project strategy paper. *Current Opinion in Environmental Sustainability*, 2 (3): 202-208.
- Bowen, Kathryn J., Sharon Friel, Kristie Ebi, Colin D. Butler, Fiona Miller and Anthony J. McMichael. 2012. Governing for a Healthy Population: Towards an Understanding of How Decision-Making Will Determine Our Global Health in a Changing Climate. *International Journal of Environmental Research and Public Health*, 9: 55-72. 2012.
- Mayer, Benoît. 2012. Environmental Migration in Asia and the Pacific: Could We Hang Out Sometime? *Earth System Governance Working Paper No. 22*. Lund and Amsterdam: Earth System Governance Project.



APPENDICES

Appendix 1 – Workshop program

Appendix 2 - Participants list

Appendix 3 - Call for Papers

Appendix 4 - Funding sources outside the APN

Appendix 5 – Climate Expo program



APPENDIX 1: WORKSHOP PROGRAM



Climate Change Governance in the Asia–Pacific Region: Agency, Accountability and Adaptiveness

14–16 March 2012, Australian National University (ANU), Canberra

PROGRAM

**Organized by the Climate and Environmental Governance Network (regnet.cegnet.anu.edu.au)
and the Earth System Governance Project (earthsystemgovernance.org)**

**Sponsored by the Asia-Pacific Network for Global Change Research (apn-gcr.org) and the
Research School of Asia and the Pacific, ANU (asiapacific.anu.edu.au/researchschool/)**



Workshop aims:

- To bring together early career researchers (late-stage PhDs and academics that completed their PhD no more than 5 years ago) from the Asia-Pacific Region to discuss the challenges of climate governance;
- To connect senior researchers and eminent scholars based in Australia with early career researchers in the wider region.

Workshop themes:

(The following themes draw upon the Earth System Governance Science and Implementation Plan, available at www.earthsystemgovernance.org)

Agency

Large and complex problems, such as climate change, challenge the capacity of traditional state structures of governance. Moreover, this capacity varies greatly among nation-states, with developing country governments typically dealing with substantial restraints on resources and capacity and limited access to information and expertise. Cooperation with other states, but also with local, domestic and transnational non-state actors, appears to be imperative. Additionally, many institutions of climate governance have already emerged 'beyond the state'; that is, they are already inclusive of, or even driven by, non-state actors such as corporations, scientific networks, non-profit organizations, banks, etc. In some instances, these actors have taken on authoritative roles in which they substantively participate in the creation of rules. As such, they can be considered 'agents' of climate change governance. The papers in this thematic area will be aimed at identifying the key agents of climate change governance in Asia and the Pacific, their sources of authority, and their significance in the region.

Accountability

Accountability is closely related to the legitimacy of governance processes, which in turn substantially determines the compliance-pull and effectiveness of rules. Traditional forms of democratic accountability that operate when governments are the sole or central actors do not apply when new forms of governance emerge of a public-private or private nature. Issues of participation and inclusiveness, transparency and openness are important in all forms of governance but become particularly critical when state actors are marginalized. This session of the workshop will address the potential sources of accountability in climate change governance in the Asia-Pacific region, the role of transparency in fostering accountability, and how mechanisms for enhanced accountability enhance or detract from the effectiveness of governance systems.

Adaptiveness

Adaptiveness is an umbrella term for a set of related concepts— vulnerability, resilience, robustness, adaptive capacity and social learning— to describe changes made by social groups in response to, or in anticipation of, challenges created through environmental

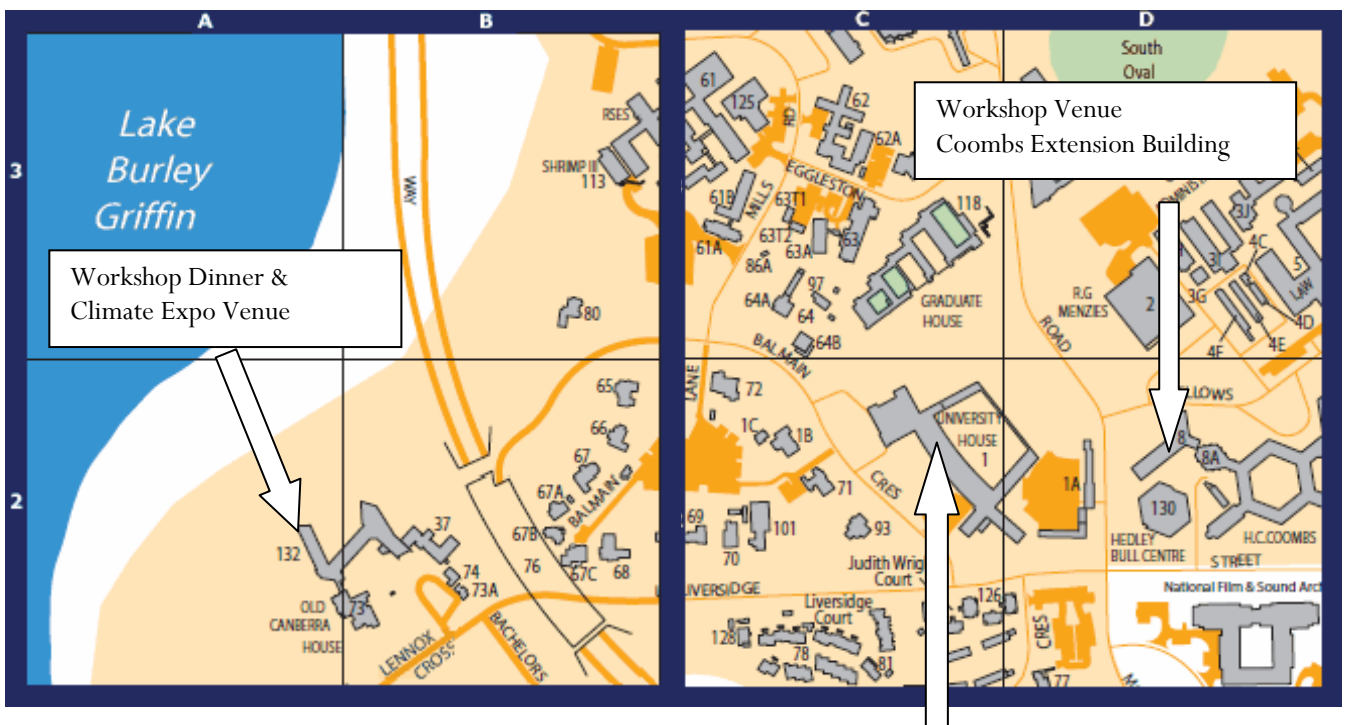
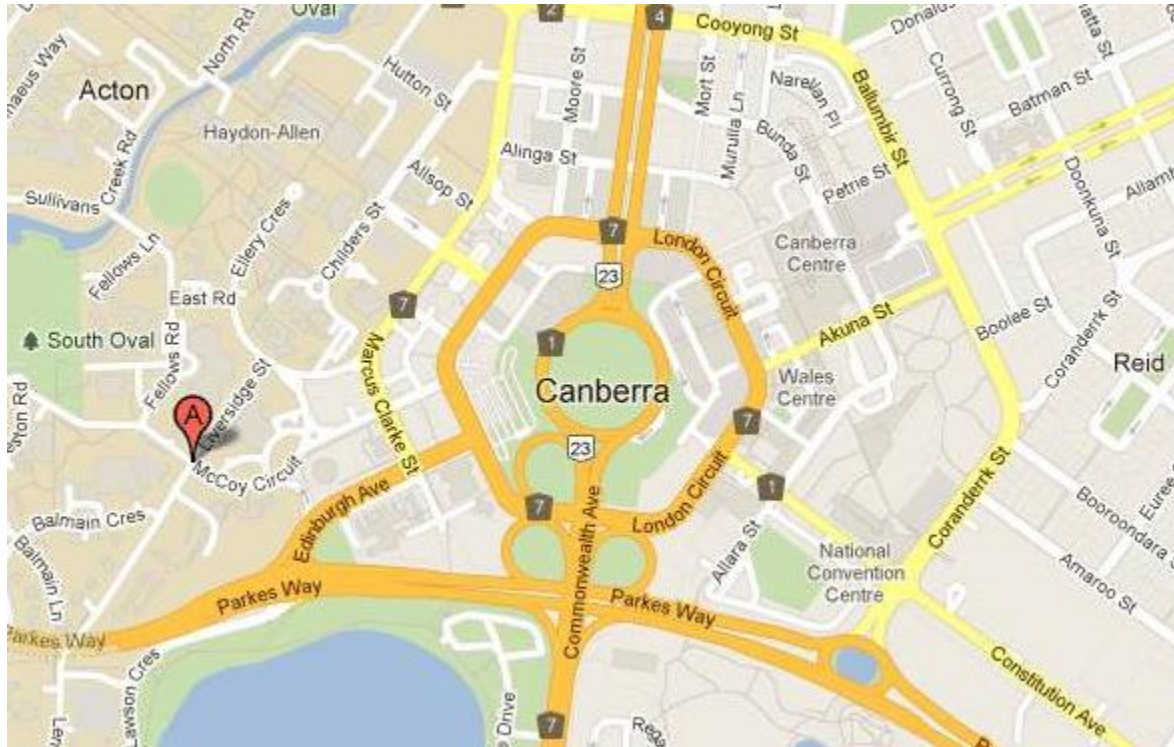


change. Within the framework of earth system governance, the term adaptiveness includes the governance of adaptation to social–ecological change as well as the processes of change and adaptation within governance systems. Adaptation to climate change has been a contentious topic in political debates with many fearing that it would divert attention from the need to address the underlying causes of rising atmospheric greenhouse gas concentrations. However, the IPCC Fourth Assessment Report highlights the developing international consensus on the need to build adaptive capacity, particularly in poor countries. The need for greater adaptiveness is especially evident in the Asia–Pacific region, in light of the damage inflicted by recent extreme climatic events as well as the looming threat to the very existence of small low–lying island states posed by climate change. The papers in this thematic area will address the politics of adaptiveness (i.e. adaptiveness for whom?), the current adaptive capacity of countries in the region, and the governance processes that could best enhance adaptiveness.



Location:

Coombs Extension LT 1.04 (Building 8), Garran Rd (between Fellows Rd and Liversidge St)
Australian National University



Speaker Accommodation
University House



Agenda – Day 1

08.30 – 09.00	Registration and Coffee/Tea	
09.00 – 09.30	Workshop opening and welcome Welcome on behalf of the College of Asia and the Pacific Welcome on behalf of ESG <i>and short presentation of ESG research framework</i>	Chair: Kyla Tienhaara Andrew Macintyre, Dean Ruben Zondervan
09.30 – 10.30	Keynote 1 <i>'Democracy and Effectiveness in Climate Governance'</i>	Chair: Noelyn Dano John Dryzek
10.30 – 11.00	Coffee / Tea	
11.00 – 12.00	Panel 1: Short Presentations <ul style="list-style-type: none"> 1. Adaptation approach for slum dwellers in India 2. Assessing adaptiveness, social capital, and quality of life: toward sustainable community 3. Climate change and health in northern Micronesia: an examination of governance issues related to adaptation planning in small island developing states 4. Institutional setting-ups of climate change governance in China: central vision, local constraints and tensions identified 5. Manoeuvres for a low carbon state in India: identifying agency, authority and accountability in governance of clean energy development 	Chair: Ruben Zondervan Sohail Ahmad Hitomi Nakanishi Lachlan McIver Hao Zhang Ashwini K. Swain
12.00 – 13.00	<i>Breakout Session 1A: Local Adaptation</i> Discussion on papers 1–3	Chair: Tom Measham
	<i>Breakout Session 1B: Agents in Multilevel Adaptation</i> Discussion on papers 4–5	Chair: Liam Phelan
13:00 – 14:00	Lunch	
14.00 – 15.00	Keynote 2 <i>'The Governance of Geoengineering'</i>	Chair: Ruben Zondervan Clive Hamilton
15.00 – 15.30	Coffee / Tea	



15.30 – 16:15	Panel 2: Short Presentations 6. Transnational advocacy network in climate change action: an exploratory research on agency in Earth System Governance 7. Adaptive governance and managing resilience to natural hazards 8. Climate change, adaptation and climate induced migration: the adaptiveness to governance process 9. Environmental migration: prospects for a regional governance in the Asia-Pacific region	Chair: Rakhyun Kim Larissa Gata Riyanti Djalante Mohammad Khan Benoit Mayer
16.15 – 17.00	<i>Breakout Session 2A: Networks and Adaptation</i> Discussion on papers 6–7	Chair: Ruben Zondervan
	<i>Breakout Session 2B: Environmental Migration</i> Discussion on papers 8–9	Chair: Jeroen van der Heijden
19:00	Workshop Dinner (for speakers and chairs)	Ivy Café

Agenda – Day 2

08.30 – 09.00	Coffee/Tea	
09:00 – 10:00	Keynote 3 <i>'Climate Change as a Diabolical Problem'</i>	Chair: Neil Gunningham Will Steffen
10.00 – 10:45	Panel 3: Short Presentations 10. Adaptation finance in the Asia-Pacific region: strengthening fairness, effectiveness and transparency in allocation 11. Writing the fine print: effective climate risk insurance for pacific island states 12. Strengthening the institutional framework for sustainable development: climate governance in Indonesia	Chair: Lorrae van Kerkhoff Jonathan Pickering Liam Phelan Joni Jupesta
10:45 – 11.15	Coffee / Tea	



11.15 – 12.15	<p>Panel 4: Short Presentations</p> <p>13. A new paradigm of climate awareness and response: assessing the capacity to adapt in the health and water sectors in Fiji</p> <p>14. Adaptive capacity and governance of climate change vulnerability in Vietnam: results of a study of the health and water sectors</p> <p>15. Changing climates: how climate change governance mechanisms are effecting vulnerability reduction in the Asia-Pacific</p> <p>16. Assessing the capacity to adapt to climate change: a Cambodian case study in the health and water sectors</p> <p>17. Enabling environments? Insights into the policy context for adaptation decision-making in Cambodia</p>	<p>Chair: Lachlan McIver</p> <p>Elenoa Puamau</p> <p>Quynh Anh Nguyen</p> <p>Charlotte Catmur</p> <p>Dany Va</p> <p>Kathryn Bowen</p>
12.15 – 13.15	Lunch	
13.15 – 14.30	<p><i>Breakout Session 3: Funding, Finance and Frames</i></p> <p>Discussion on papers 10–12</p>	Chair: Kyla Tienhaara
	<p><i>Breakout Session 4: Water and Health Vulnerability</i></p> <p>Discussion on papers 13–17</p>	Chair: Sharon Friel
14:30 – 15:00	Coffee / Tea	
15.00 – 16.00	<p>Workshop Wrap-Up</p> <p>Follow-up activities</p> <p>Official closing</p>	Chair: Ruben Zondervan

Day 3: ANU Climate Expo

Time: 8.45am – 4.00pm

Location: Molonglo Theatre, JG Crawford Building, Lennox Crossing

Further information: http://cci.anu.edu.au/events/?filter_month=03&year=2012#day_16



Registration: <http://cci.anu.edu.au/events/?register=yes&event=81>

Keynote Biographies

Professor John Dryzek

John Dryzek is Professor of Political Science and Australian Research Council Federation Fellow. He is a Fellow of the Academy of Social Sciences in Australia, former Head of the Departments of Political Science at the Universities of Oregon and Melbourne and the Social and Political Theory program at ANU, and former editor of the Australian Journal of Political Science.

Working in both political theory and empirical social science, he is best known for his contributions in the areas of democratic theory and practice and environmental politics. One of the instigators of the 'deliberative turn' in democratic theory, he has published five books in this area with Oxford University Press, Cambridge University Press, and Polity Press. His work in environmental politics ranges from green political philosophy to studies of environmental discourses and movements, and he has published three books in this area with Oxford University Press and Basil Blackwell.

He has also worked on comparative studies of democratization, post-positivist public policy analysis, and the history and philosophy of social science. His Federation Fellowship funds work on deliberative global governance (with special reference to climate change) and democratization interpreted in deliberative terms (with special reference to East Asia).

One of his recent publications is his edited *The Oxford Handbook of Climate Change and Society* (2011); and he is working on two co-authored books this year, *Climate-Challenged Society* and *Democratizing Global Climate Governance*.

Professor Clive Hamilton

Clive Hamilton is an Australian author and public intellectual. In June 2008 he was appointed Professor of Public Ethics at the Centre for Applied Philosophy and Public Ethics, a joint centre of the Australian National University, Charles Sturt University and the University of Melbourne.

For 14 years, until February 2008, he was the Executive Director of The Australia Institute, a progressive think tank he founded. He holds an arts degree from the Australian National University (majoring in history, psychology and pure mathematics) and an economics degree from the University of Sydney (majoring in economics and government, with first class honours in the former). He completed a doctorate at the Institute of Development Studies at the University of Sussex with a thesis titled 'Capitalist Industrialisation in Korea'.

Before establishing The Australia Institute he taught in the Graduate Program in the Economics of Development at the ANU then joined the Australian Public Service, first with the Bureau of Industry Economics and then at the newly formed Resource Assessment Commission. He also worked as a resource economist in Indonesia.

Clive has held visiting academic positions at Yale University, the University of Sydney, the Australian National University, and the University of Cambridge.



He has published on a wide range of subjects but is best known for his books, a number of which have been best-sellers. They include *Growth Fetish* (2003), *Affluenza* (with Richard Denniss, 2005), *What's Left: The death of social democracy* (2006), *Silencing Dissent* (edited with Sarah Maddison, 2007) and *Scorcher: The dirty politics of climate change* (2007).

Clive's latest book, titled *Requiem for a Species: Why we resist the truth about climate change*, was published by Earthscan and Allen & Unwin in 2010.

Professor Will Steffen

Will Steffen has a long history in international global change research, serving from 1998 to 2004 as Executive Director of the International Geosphere–Biosphere Programme (IGBP), based in Stockholm, Sweden, and before that as Executive Officer of IGBP's Global Change and Terrestrial Ecosystems project.

Prior to taking up the ANU Climate Change Institute Directorship in 2008, Steffen was the inaugural director of the ANU Fenner School of Environment and Society. From 2004 to 2011 he served as science adviser to the Australian Government Department of Climate Change. He is currently a Climate Commissioner with the Australian Government Climate Commission; Chair of the Antarctic Science Advisory Committee and Co-Director of the Canberra Urban and Regional Futures (CURF) initiative.

Steffen's interests span a broad range within the fields of sustainability and Earth System science, with an emphasis on the science of climate change, approaches to climate change adaptation in land systems, incorporation of human processes in Earth System modelling and analysis; and the history and future of the relationship between humans and the rest of nature.

List of Presenters and Chairs

Ashwini Swain, University of York

Benoit Mayer, National University of Singapore

Charlotte Catmur, University of Melbourne

Dany Va, Bond University

Elenoa Puamau, Fiji National University

Hao Zang, University of Melbourne

Hitomi Nakanishi, University of Canberra

Jeroen van der Heijden, Australian National University

Jonathan Pickering, Australian National University

Joni Jupesta, United Nations University

Kathryn Bowen, Australian National University

Kyla Tienhaara, Australian National University

Lachlan Mclver, Australian National University

Larissa Gata, University of the Philippines



Liam Phelan, University of Newcastle
Lorrae van Kerkhoff, Australian National University
Mohammad Khan, Centre for International Sustainable Development Law
Neil Gunningham, Australian National University
Noelyn Dano, Australian National University
Quynh Anh Nguyen, Vietnam Directorate for Standards and Quality
Rakhyun Kim, Australian National University
Riyante Djalante, Macquarie University
Ruben Zondervan, Earth System Governance Project
Sharon Friel, Australian National University
Sohail Ahmad, United Nations University
Tom Measham, CSIRO



APPENDIX 2: WORKSHOP PARTICIPANT LIST

Name	Nationality	Organisation	Address	Phone	Email	Funding	Status
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Clive Hamilton	Australian	Australian National University	Centre for Applied Philosophy and Public Ethics, LPO Box 8260 Canberra ACT 2601 Australia	+61 2 6125 8467	mail@clivehamilton.net.au	None	Senior scholar
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Joni Jupesta	Indonesian	United Nations University	United Nations University, Institute of Advanced Studies 1-1-1, Minato Mira Nishi-ku, Yokohama 221-8501 -Japan		jupesta@ias.unu.edu	APN	ECR
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Kyla Tienhaara	Canadian	Australian National University	Regulatory Institutions Network, College of Asia and the Pacific, ANU, Canberra ACT 0200 Australia	+61 2 6125 3813	kyla.tienhaara@anu.edu.au	None	ECR
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		University	Building 48 Linnaeus way Canberra, ACT, 0200 Australia				
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Ruben Zondervan	Dutch	Earth System Governance Project	Lund University P.O. Box 170 SE-221 00 Lund, Sweden	+46 (0)46 222 0478	ruben.zondervan@esg.lu.se	APN	Research manager



Sharon Friel	Scottish	Australian National University	College of Medicine, Biology and Environment, Linnaeus Way, The Australian National University Canberra ACT 0200 Australia	+61 2 6125 0721	sharon.friel@anu.edu.au	None	Senior scholar
Sohail Ahmad	Indian	United Nations University	United Nations University - Institute of Advanced Studies 6F, International Organizations Center Pacifico-Yokohama 1-1-1, Minato Mirai Nishi-ku, Yokohama 220-8502 Japan	+81 45 221 2345	ahmad@ias.unu.edu	APN	ECR
Tom Measham	Australian	CSIRO	CSIRO Ecosystem Sciences, Bellenden Street Crace ACT 2911 Australia	+61 2 6242 1789	Tom.Measham@csiro.au	None	Senior scholar
Will Steffen	American	Australian National University	Climate Change Institute, The Australian National University, Canberra ACT 0200 Australia	+61 2 6125 726 5	will.steffen@anu.edu.au	None	Senior scholar



APPENDIX 3: CALL FOR APPLICATIONS



Workshop on Climate Change Governance in the Asia-Pacific Region: Agency, Accountability and Adaptivness

16-18 March 2011, Australian National University (ANU), Canberra

Organized by the Climate and Environmental Governance Network (cegnet.anu.edu.au)
and the Earth System Governance Project (earthsystemgovernance.org)

Sponsored by the Asia-Pacific Network for Global Change Research (apn-gcr.org) and the College of Asia and the Pacific, ANU (asiapacific.anu.edu.au)

Workshop aims:

- ❖ To bring together early career researchers (late-stage PhDs and academics that completed their PhD no more than 5 years ago) from the Asia-Pacific Region to discuss the challenges of climate governance;
- ❖ To connect senior researchers and eminent scholars based in Australia with early career researchers in the wider region;
- ❖ To produce an edited volume addressing the key themes of the workshop.

Workshop themes:

Agency

Large and complex problems, such as climate change, challenge the capacity of traditional state structures of governance. Moreover, this capacity varies greatly among nation-states, with developing country governments typically dealing with substantial restraints on resources and limited access to information and expertise. Cooperation with other states, but also with local, domestic and transnational non-state actors, appears to be imperative. Additionally, many institutions of climate governance have already emerged 'beyond the state'; that is, they are already inclusive of, or even driven by, non-state actors such as corporations, scientific networks, non-profit organizations, banks, etc. In some instances, these actors have taken on authoritative roles in which they substantively participate in the creation of rules. As such, they can be considered 'agents' of climate change governance. This session of the workshop will be aimed at identifying the key agents of climate change governance in Asia and the Pacific, their sources of authority, and their significance in the region.



Accountability

Accountability is closely related to the legitimacy of governance processes, which in turn substantially determines the compliance-pull and effectiveness of rules. Traditional forms of democratic accountability that operate when governments are the sole or central actors do not apply when new forms of governance emerge of a public-private or private nature. Issues of participation and inclusiveness, transparency and openness are important in all forms of governance but become particularly critical when state actors are marginalized. This session of the workshop will address the potential sources of accountability in climate change governance in the Asia-Pacific region, the role of transparency in fostering accountability, and how mechanisms for enhanced accountability enhance or detract from the effectiveness of governance systems.

Adaptiveness

Adaptiveness is an umbrella term for a set of related concepts— vulnerability, resilience, robustness, adaptive capacity and social learning— to describe changes made by social groups in response to, or in anticipation of, challenges created through environmental change. Within the framework of earth system governance, the term adaptiveness includes the governance of adaptation to social-ecological change as well as the processes of change and adaptation within governance systems. Adaptation to climate change has been a contentious topic in political debates with many fearing that it would divert attention from the need to address the underlying causes of rising atmospheric greenhouse gas concentrations. However, the IPCC Fourth Assessment Report highlights the developing international consensus on the need to build adaptive capacity, particularly in poor countries. The need for greater adaptiveness is especially evident in the Asia-Pacific region, in light of the damage inflicted by recent extreme climatic events as well as the looming threat to the very existence of small low-lying island states posed by climate change. This session of the workshop will address the politics of adaptiveness (i.e. adaptiveness for whom?), the current adaptive capacity of countries in the region, and the governance processes that could best enhance adaptiveness.

Who should apply?

Early-career researchers working in the field of climate change governance from the following countries are encouraged to apply: Bangladesh, Bhutan, Cambodia, China, Fiji, India, Indonesia, Lao PDR, Malaysia, Mongolia, Nepal, Pakistan, Philippines, Republic of Korea, Sri Lanka, Thailand and Viet Nam.

Application Process

Please submit the following:

- ❖ CV
- ❖ Abstract (300-500 words)
- ❖ Writing sample (e.g. journal article or chapter of thesis)

The organizers expect to be able to provide funding for up to 10 participants, covering travel expenses, accommodation and full catering. Logistic support will be provided including travel arrangements and visa procedure.

Deadline for applications is 30 September 2011.

Applications should be send electronically to Kyla Tienhaara, Co-Director of CEGNet (kyla.tienhaara@anu.edu.au). Please do not hesitate to contact her with any questions.



APPENDIX 4: FUNDING SOURCES OUTSIDE THE APN

Activity	Organisation	In-Kind (US\$)	Cash (AU\$)
Travel, accommodation & catering for Australia-based participants, workshop dinner	Research School of Asia and the Pacific (RSAP), Australian National University (ANU)		13000
Planning workshop	Regulatory Institutions Network (ANU) – Tienhaara (@ \$700/day – consultancy rate)	3500	
Workshop venue	Australian National University (@\$200/day)	400	
Planning and communication	ESG International Project Office – Zondervan	4400	
Total		8300	13000



APPENDIX 5: CLIMATE EXPO PROGRAM

ANU CLIMATE CHANGE INSTITUTE PHD EXPO

WESTON THEATRE, ANU CRAWFORD SCHOOL OF ECONOMICS AND GOVERNMENT LENNOX CROSSING

8:45 – 8:55

WELCOME AND OVERVIEW

Janette Lindesay

8.55 – 9:00

REMARKS BY DEPUTY VICE-CHANCELLOR

Professor Marnie Hughes-Warrington

9:00 – 09:30

SCIENCE

Chair: Michael Roderick

The Aerodynamics of Pan Evaporation

Wee-Ho Lim

Deep See Coral Archives – What can the past reveal about recent climate change?

Aimée Komugabe

The vertical transport of nutrients in the ocean: a pump driven by fine scale structures

Isabella Rosso

9.30 – 10:30

ENERGY and ADAPTATION

Chair: Bob Webb

Rooftop solar energy generation

Nicholas Engerer

Viticulture – climatic variability and climate change

Miriam Dunn

Agricultural innovation

Julia McKay



Is water demand management a no-regrets adaptation action?

Walter Reinhardt

Equity as a means and goal of climate adaptation: a case study in Indigenous health

Devin Bowles

The essence of an integrated approach to climate change adaptation for rural water resources management in Bangladesh

Md Zillur Rahman

10:30 –11:00

LAW AND ECONOMICS

Chair: Frank Jotzo

Economic fundamentals of leakage

Patrick Doupe

Role and motivations of the banking industry in facilitating climate change mitigation

Megan Bowman

Climate change law and governance with the focus on the voluntary carbon emissions trading scheme in China.

Hao Zhang

11:00 – 12:00

Early lunch

12:00 – 12:45

ASIA PACIFIC

Chair: Kyla Tienhaara

Asia and the Pacific (and their sub-regions) should determine the content of regional legal approaches of environmental migration

Benoit Mayer

Environmental implications of land use policies in a decentralised Indonesia

Fitrian Ardiansyah

Informal settlements and climate change issues in urban India.

Sohail Ahmad



Cultural Politics of Climate Change in India'

Ashwini Swain

Climate change adaptation in the South Pacific – responses to natural disasters in Fiji and Tonga

Ingrid Johnston

12:45 – 13:45 HUMAN DIMENSIONS

Chair: Barry Newell

The health impacts of climate change in the South Pacific

Dr Lachlan McIver

Fairness in international funding for developing countries to address climate change

Jonathan Pickering

The effect of weather on *Salmonella* food poisoning

Ainslie Butler

Impact of climate change on air quality and health effects in the Greater Melbourne area

Sarunya Sujaritpong

The untold story of woody energy crops: Farmers' role in energy change in rural Australia

Sandra Velarde

13:45 – 13:50 Closing Remarks

Will Steffen



GLOSSARY OF TERMS

ANU Australian National University
RSAP Research School of Asia and the Pacific

