



**First Australian Earth System Outlook Conference**  
**9 – 10 December, 2010**  
**Shine Dome, Australian Academy of Science, Canberra**

## *Program*

<b>DAY 1: THURSDAY 9 DECEMBER 2010</b>	
9.30am	Registration and Morning Tea
10.00am	Welcome and "house-keeping" matters – Dr Roger Gifford, Chair National Committee for Earth System Science (NCESS)
10.15am	Conference Opening – Ms Harinder Sidhu, First Assistant Secretary, Adaptation, Science and Communications Division, Department of Climate Change and Energy Efficiency
<b>Session 1 Chair – Professor Will Steffen, ANU Climate Change Institute</b>	
<i>Planetary Earth System boundaries: implications for Australia</i>	
10.30am	Keynote Address – Professor Johan Rockström, Stockholm Resilience Centre, Sweden
11.00am	Keynote Respondent – Dr John Finnigan FAA, CSIRO Marine and Atmospheric Research
11.10am	Discussion
<i>Issue 1: Climatic changes in Australia: what scope to mitigate effects and to benefit by adaptation?</i>	
11.30am	Speaker – Professor Jean Palutikof, National Climate Change Adaptation Research Facility, Griffith University
12 noon	Respondent – Dr Andrew Ash, Climate Adaptation Flagship, CSIRO
12.10pm	Discussion
<i>Issue 2: Australian biodiversity change: magnitude, Earth system significance, potential to arrest decline</i>	
1.30pm	Speaker – Professor Lesley Hughes, Macquarie University
2.00pm	Respondent – Dr Anthony Richardson, CSIRO Marine and Atmospheric Research
2.10pm	Discussion
<i>Issue 3: Fresh water supply, use and management regionally and continentally</i>	
2.30pm	Speaker – Dr Karen Hussey, Australian National University (ANU) Water Initiative
3.00pm	Respondent – Dr Mark Taylor, Macquarie University
3.10pm	Discussion
3.30pm	Afternoon Tea
<b>Session 2 Chair – Professor Andy Pitman, Climate Change Research Centre, UNSW</b>	
<i>Issue 4: Securing a sustainable food and fibre system under global change</i>	
4.00pm	Speaker – Dr Mark Howden, CSIRO Ecosystem Science
4.30pm	Respondent – Dr John Passioura FAA, CSIRO Plant Industry
4.40pm	Discussion
<i>Issue 5: Implications of Earth system issues for land use planning and land tenure arrangements</i>	
5.00pm	Speaker – Dr Kim Ritman, Australian Bureau of Agricultural and Resource Economics – Bureau of Rural Sciences (ABARE-BRS).
5.30pm	Respondent – Dr Brian Walker, CSIRO Ecosystem Sciences
5.40pm	Discussion
6.00pm	Formal Session Close – Dr Roger Gifford, Chair NCESS
<i>Launch of "To live within Earth's limits: An Australian plan to develop a science of the whole Earth system"</i>	
6.10pm	Plan Launch – Professor Penny Sackett, Chief Scientist of Australia
6.20pm	Poster Session, drinks and finger food
8.30pm	Day Close

<b>DAY 2: FRIDAY 10 DECEMBER 2010</b>	
8.30am	Welcome to Day 2 and brief summary of Day 1 – Dr Roger Gifford
<b>Session 4 Chair – Dr Tas van Ommen Antarctic Climate and Ecosystems CRC, Australian Antarctic Division</b>	
<i>Issue 6: Sea-level rise</i>	
8.45am	Speaker – Dr John Hunter, University of Tasmania
9.15am	Respondent – Dr Donna Green, University of NSW
9.25am	Discussion
<i>Issue 7: Ocean acidification: magnitude &amp; implications for Australia</i>	
9.45am	Speaker – Dr Richard Matear, CSIRO Marine and Atmospheric Research for Dr Andrew Lenton, CSIRO Marine and Atmospheric Research
10.15am	Respondent – Dr Ben McNeil, University of NSW
10.25am	Discussion
10.45am	Morning Tea
<b>Session 5 Chair – Dr Roger Gifford, Chair NCESS</b>	
<i>Issue 8: Australian human population trajectories consistent with Earth system boundaries and human health &amp; well being</i>	
11.15am	Speaker – Professor Colin Butler, ANU
11.45am	Respondent – Dr Bob Birrell, Monash University
11.55am	Discussion
<i>Issue 9: Energy futures for Australia</i>	
12.15pm	Speaker – Mr Ian Dunlop, Energy Consultant
12.45pm	Respondent – Mr Paul Graham, CSIRO Energy Transformed
12.55pm	Discussion
1.15pm	Lunch
<b>Session 6 Chair – Dr John Finnigan FAA, CSIRO Marine and Atmospheric Research</b>	
<i>Issue 10: Geoengineering</i>	
2.15pm	Speaker – Professor Katherine Richardson, University of Copenhagen, Denmark
2.45pm	Respondent – Professor David Karoly, University of Melbourne
2.55pm	Discussion
3.15pm	Wrap-up and “what next” – Dr Roger Gifford, Chair NCESS
4pm	Close

An activity of the National Committee for Earth System Science

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