

Comments on Robert Nicholls and Stephen Schneider papers

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- Thank both presenters for interesting, thought-provoking papers.
- Sea level rise is of concern to Canada. We have 3 coasts, and one of the world's longest coastlines. In some areas, sea level fall is an issue (because the land is lifting); the geological processes dominate the impact from climate change.
- The sea level paper did a good job of bringing out some of the issues that this workshop was set up to discuss. For example, Nicholl's paper pointed out some gaps in the research that has been conducted to date on sea-level rise:
 - None of the papers surveyed by Nicholls addressed the possibility of abrupt changes to sea level;
 - Much of the research is based on relatively simple assumptions, ignoring landscape dynamics and interacting factors, such as salinisation and rising water tables;
 - Regional variations in sea level rise have been largely ignored in national and global studies;
 - Researchers have not examined the full range of climate scenarios.
- There are also gaps in the methodology:
 - How to integrate other impacts, such as increased frequency of extreme events;
 - How to frame the analysis of adaptation response?
- Some questions for the author, and also for general discussion:
 - How to frame the analysis of adaptation response? Should we be aiming for more consistency in assumptions, e.g., how adaptation is treated in the analysis?
 - Should we be aiming towards consistency in analytical methods? For example, would it be worthwhile to develop consistent climate/socio-economic scenarios at the global level, which countries would use as a basis for further regional/sectoral disaggregation, so that it would be easier to compare local, regional and sectoral studies from different parts of the world?
 - Is it time to push the IPCC guidelines further as a way to achieve more consistency in scenarios and assumptions? (Ref: Carter, TR; Parry, ML; and Harasawa, H; and Nishioka, S, "IPCC Technical Guidelines for Assessing Climate Change Impacts and Adaptations", IPCC, Dept of Geography, UCL, UK, 1994.)
- Schneider's paper presents a very clear explanation of the challenges related to irreversible changes and unpredictable events.
- We need to be able to communicate these uncertainties in clear terms, so that policy makers can factor in the risk of extreme/catastrophic events in their decision-making . It would also

be useful for policy makers to be able to communicate these risks to others. There may be lessons on risk communication that could be learned from other public policy issues, such as bio-engineered foods.

- Regarding discount rates, most environmental economists would agree that using the rate of return on investment as the discount rate would be inappropriate for analyzing future damages from climate change. However, since it is difficult to arrive at a consensus on what the "right" discount rate should be, it is important to do sensitivity analysis and determine how the results of the analysis change as the discount rate is varied.