## COP13 Side event Wednesday 12 Dec, 18.00-19.30, Room Biofuel, Grand Hyatt

# Global Mitigation Strategies for Climate Change

## Panel discussion on results from the ADAM project organised by the Tyndall Centre

Coordinated by the UK's Tyndall Centre for Climate Change Research, ADAM (Adaptation and Mitigation Strategies: Supporting European Climate Policy) is a European Commission funded integrated research project running from 2006 to 2009 that is leading to a better understanding of adaptation and mitigation policies and the development of post-2012 mitigation policies and adaptation strategies.

#### Long Term Climate Change Mitigation Scenarios

Detlef van Vuuren

The 21st century climate may develop in very different ways. Scenarios without mitigation show temperature increase in the order of  $2-5^{\circ}$ C – requiring substantial adaptation. Ambitious mitigation policies could limit temperature rise to  $1.5^{\circ}$ C. Scenarios developed in ADAM to explore these ranges are introduced and compared to recent overviews by IPCC.

## Global Governance Architectures to Combat Climate Change

#### Frank Biermann

Deliberations and negotiations about a post-2012 climate regime concern not only the detailed policies, but also the larger, long-term architectures of climate governance. This presentation will focus, first, on recent research on the promise and perils of a fragmented diversity of approaches and regimes on climate change, as opposed to an inclusive, integrated climate regime. Second, it will report on the potential of private institutions and public-private partnerships to combat climate change, drawing on preliminary results of a Global Sustainability Partnership Database that collects data on more than 300 of such partnerships. Finally, we will present research on possible elements of a global governance architecture on adaptation.

#### Costs and Strategies for Climate Policy Ottmar Edenhofer

Achieving low stabilization scenarios that avoid dangerous climate change requires drastic reductions in anthropogenic emissions. This implies restructuring the global energy system in the course of the 21st century, beginning in the next years already. Understanding the interrelation of investment, technological change, and economic growth is the key to the assessment of the available mitigation options including energy efficiency, CCS, solar or nuclear power. We present a portfolio of mitigation options for low stabilization scenarios. Moreover, we calculate the option values of different mitigation technologies.

#### **The Electricity Sector: Politically Feasible Mitigation** Gunnar S. Eskeland

The electricity sector provides a window into the adaptation and mitigation aspects of climate change. Mitigation in Europe will make electricity more expensive, depending on the type of policy instruments used. Political feasibility is important, and in Europe a web of supportive policy instruments play various roles. One effect is to subdue the tariff increases that would be required if the sector were to be transformed merely by emission quotas. An important warning lies in the way emission quotas have been allocated for free in Europe.

#### Panel

- Ottmar Edenhofer, PIK Potsdam Institute for Climate Change Research, Germany
- Michel den Elzen, MNP Environmental Assessment Agency, The Netherlands
- Frank Biermann, IVM Institute for Environmental Studies, Free University Amsterdam, The Netherlands
- Gunnar Eskeland, CICERO Center for Climate Change, Norway
- Daniel Bodansky, University of Georgia School of Law, USA
- Jiahua Pan, Research Center for Sustainable Development, Chinese Academy of Science, China
- Nitu Goel, TERI The Energy and Resources Institute, India
- Henry Neufeldt, Tyndall Centre for Climate Change Research, UK (Chair)

## www.adamproject.eu

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This research is supported by the European Commission under the 6<sup>th</sup> Framework Programme Priority Global Change and Ecosystems