GLOBAL CARBON PROJECT AND IIASA
VULNERABILITY AND OPPORTUNITY OF METHANE HYDRATES
WORKSHOP

13-14 MARCH 2008, GVISHIANI ROOM, IIASA, LAXENBURG, AUSTRIA

Draft Meeting Agenda (as of 06 Feb 2008)

Day One

Opening / Welcome Statements
9:00–9:30
Introductory Address: Nebojsa Nakicenovic, Pep Canadell, Volker Krey – Background and goals of the workshop

9:30–10:15 Session 1: Methane Hydrates (Geochemistry and Occurrences)
    Kick-off Presentations (10 – 15 min)
    • Miriam Kastner - Distribution of occurrences [tbc]
    • Ray Boswell - Distribution of gas hydrate volumes by reservoir type or Description of the R&D path and remaining obstacles for gas hydrate production, and an assessment of the status of national programs [tbc]
    • Michael Riedel - Recent advances in our understanding of marine gas hydrate provinces

10:15-10:30 Coffee Break

10:30-12:00 General discussion with invited contributions from (Chair: [tba])
    • Harald Andruleit, Bruce Buffett, Nicholas Langhorne, William S. Reeburgh

12:00–14:00 Lunch at the Restaurant Gallo Rosso (hosted by the organizers)

14:00-15:30 Session 2a: Hydrates and Linkage to Climate Change and Carbon Cycle
    Kick-off Presentations (10 – 15 min)
    • Gerald R. Dickens - Methane hydrates, the global carbon cycle, and geological time
    • David Archer - Models of the global distribution of methane in the ocean and its response to climate warming.
    • Jean-Francois Lamarque - Methane clathrates in the past and future
    • Neil T. Hamilton - Methane hydrates and arctic climate change: What if the worst scenarios are true?
    General discussion with invited contributions from (Chair: [tba])
    • Euan Nisbet

15:30-15:45 Coffee Break

15:45-17:30 Session 2a: Hydrates and Linkage to Climate Change and Carbon Cycle
    General discussion continued
19:00  Social Event at the Restaurant Rathäuskeller (hosted by the organizers)

**Day Two**

9:00-10:30  **Session 2b**: Methane Fluxes, the Carbon Cycle and Climate Change  
*Kick-off Presentations (10 – 15 min)*  
- Walter Oechel - *Continuous measurements of methane fluxes by eddy covariance in the arctic: Results of a large scale manipulation of water status at Barrow Alaska*  
- Brian O’Neill - *Treatment of carbon cycle/climate change uncertainties [tbc]*  
General discussion (Chair: [tba])

10:30-10:45  **Coffee Break**

10:45-12:00  **Session 3**: Possible Implications for Energy Systems and Climate Mitigation  
*Kick-off Presentations (10 – 15 min)*  
- Arnulf Gruebler/Nebojsa Nakicenovic - *Implications of methane hydrates availability for future energy transitions*  
- Arthur Johnson - *Geological occurrences, scenarios for development, and risks of methane release from natural gas hydrate deposits*  
- Vladimir Yakushev - *Current view of upstream gas industry on gas hydrate studies*  
General discussion with invited contributions from (Chair: [tba])  
- Yuichi Abe, Ray Boswell, Hans-Holger Rogner, Hao Wen, Pacelli Zitha

12:00-14:00  **Lunch at the Restaurant Gallo Rosso** (hosted by the organizers)

14:00-15:15  **Session 3**: Possible Implications for Energy Systems and Climate Mitigation (continued)  

15:15-15:30  **Coffee Break**

15:30-17:30  **Session 4**: Concluding Session / Panel Discussion and Paper Outline  
- Review of major issues and research topics surrounding methane hydrates  
- Discuss possibility of putting together a “Special Issue”  
- Explore writing a short paper for Science or Nature

[tbc] – title to be confirmed  
[tba] – chair person to be announced  
[with invited contributions from] – participants are welcome to introduce additional information during the discussion sessions, including showing 1-3 slides  
[Session Discussions] – the aim is to identify major gaps and opportunities on methane hydrate research with particular attention to those liking the energy and climate agendas.

This is a Carbon Neutral Meeting (see also [http://www.globalcarbonproject.org/carbonneutral](http://www.globalcarbonproject.org/carbonneutral)).