July 23 – August 3, 2012
Snowmass, Colorado
*Presentations**

 *Please note that some participants only gave verbal presentations, without powerpoint.

Monday, July 23

Morning:

Welcome & Introduction

○   **John Weyant, Stanford University** (68.7KB)
Overview of Spatial Land Use in Integrated Assessment Models:

▪   **Brian O'Neill, NCAR** (1.4KB)
REV-GLOBIOM Model

○   **Petr Havlik, IIASA** (6.0KB)
GCAM-Model

○   **Kate Calvin, PNNL** (6.5KB)
Agent Based Modeling of Lane Use Change

○   **Dan Brown, University of Michigan** (4.1KB)
Generalizing Agent Based Models of Land Use Change

○   **Steve Manson, University of Minnesota** (6.2KB)

Afternoon:

Deforestation Econometric Approaches
○   **Alex Pfaff, Duke University** (1.3KB)
Incorporating land markets in agent-based models

○   **Dawn Parker, University of Waterloo** (5.0KB)
Modeling land and water use in agriculture at the river basin level

○   **Tom Hertel, Purdue University** (3.7KB)
Land use/land cover typologies & nested modeling approaches for use in IA modeling

○   **Peter Verburg, Vrije University** (26.1KB)

Tuesday, July 24

Morning:

Biophysical effects of land use change on climate

○   **Peter Lawrence, NCAR** (4.3KB)

Land use, carbon and water in the integrated Earth System Model (iESM)

- **Bill Collins, U.C. Berkeley** (4.5KB)
Land use, biogeochemistry, and climate

- **Atul Jain, University of Illinois, Champaign-Urbana** (1.3KB)
Data availability and constraints for modeling land & water use

- **Tom Hertel, Purdue University** (5.1KB)

Afternoon:

Land Data Differences panel

- **Johan Feddema, University of Kansas** (2.6KB)
Land Use & Biophysical Carbon Cycling panel

- **Derek Robinson, University of Waterloo** (262.1KB)
Final discussion on spatial land use in IAM's

- **Brian O'Neill, NCAR** (39.5KB)

Wednesday, July 25

Morning:

Overview on Shared Socio-economic Pathways (SSP's)

- **Brian O'Neill, NCAR** (961.6KB)
IAM Overview

- **Detlef van Vuuren, PBL** (1.6KB)
Scenarios from ReMIND-MagPIE group

- **Elmar Kriegler, PIK-Potsdam** (3.1KB)
GCAM scenarios based on SSP Elements

- **Jae Edmonds, PNNL** (1.7KB)
Scenarios from AIM Group

- **Shinichiro Fujimori, NIES** (2.1KB)
Scenario work from IMAGE

- **Detlef van Vuuren, PBL** (1018.2KB)

Afternoon:
Measuring the challenges to mitigation & adaptation

- **Jae Edmonds, PNNL** (1.0KB)
Priority needs for IAV Researchers & Decision Makers

- **Marc Levy, Columbia University** (2.0KB)
  Income Distribution in Large Scale Models

- **Bas van Ruijven, NCAR** (995.7KB)
  Projecting Income Distribution

- **Erik Kemp-Benedict, Stockholm Environment Institute** (1.5KB)
  Improved Method for Projecting Spatial Population

- **Bryan Jones, NCAR** (6.4KB)

Thursday, July 26

Morning:

Radiative Forcing Overview

- **Phil Rasch, PNNL** (19.6KB)
  Introduction to IAM's

- **John Weyant, Stanford University** (2.8KB)
  IAM forcing modeling overview

- Steven Rose, EPRI

Afternoon:

What do we know about Emissions?

- **Steven J. Smith, PNNL** (7.1KB)
  Key uncertainties in future non-Kyoto emissions (inventories, observations, processes)

- **Steven J. Smith, PNNL** (85.4KB)
  Key uncertainties in historic non-Kyoto emissions

- **Zig Klimont, IIASA** (5.6KB)
  Air pollution policy formation

- **Kevin Culligan, U.S. EPA** (213.1KB)

Friday, July 27

Morning:

Aerosol forcings and non-linear climate response

- **Mark Flanner, University of Michigan** (6.1KB)
  Radiative Aerosol Indirect Effects overview

- **Phil Rasch, PNNL Phil Rasch, PNNL** (6.0KB)
  Ozone and Chemistry

- **Jean-Francois Lamarque, NCAR** (10.3KB)
Co-Benefits of Global Greenhouse Mitigation

- **Jason West, University of North Carolina** (699.7KB)
Aerosol Particles: The Big Picture

- **Bill Collins, U.C. Berkeley** (7.2KB)

Afternoon:
IAM modelers: questions for the science community

- **Discussion: IAM Modelers' Questions, Challenges, and Priorities** (80.6KB)

Monday, July 30

Morning:

Introduction, Motivation, and Background on MUG

- **Bill Nordhaus, Yale University** (1.8KB)
MUG Round 1 Scenarios in MERGE

- **Geoff Blanford, EPRI** (1.8KB)
MUG results from Page09 Model

- **Chris Hope, University of Cambridge** (1.8KB)
Uncertainty and Sensitivity Analyses in Integrated Assessments

- **Klaus Keller, Penn State University** (1.5KB)
MUG-WITCH

- **Massimo Tavoni, FEEM** (637.3KB)
Sensitivity and Uncertainty Analysis with FUND

- **Richard Tol, University of Sussex** (467.4KB)

Afternoon:
Uncertainty Analysis Panel: MUG Issues and Questions

- **John Weyant, Stanford University** (36.5KB)
MUG-RICE model runs

- **Bill Nordhaus, Yale University** (494.7KB)
MUG: A Sensitivity Experiment with GCAM

- **Leon Clarke, PNNL** (4.0KB)
MUG-Phoenix

- **Kathryn Daenzer, Penn State University** (449.5KB)
MUG MIT-IGSM

- ○ **John Reilly, MIT** (3.6KB)
  Uncertainty Analysis Panel in IAM's: Next Steps

- ○ **Ken Gillingham, Yale University** (59.2KB)

<u>T</u>uesday, July 31

Morning:

TEaM Overview

- ○ Valentina Bosetti, FEEM and Erin Baker, UMass at Amherst |**Bosetti Bosetti** (1.0KB)|
  Expert Elicitations: Introduction to Megajoule

- ○ **Max Henrion, Lumina Decision Systems** (2.3KB)
  Meta Analysis of Elicitation Results

- ○ Gregory Nemet, University of Wisconsin and Elena Verdolini, FEEM |**Nemet Nemet** (2.1KB)|
  Harmonization and Aggregation

- ○ **Max Henrion, Lumina Decision Systems** (1020.9KB)
  Uncertainty Analysis and Expert Elicitation: Comments

- ○ **Detlof von Winterfeldt, USC** (931.6KB)

Afternoon:

WITCH Model:

- ○ Valentina Bosetti, FEEM
  Markal Model:

- ○ Chip Friley, Brookhaven National Laboratory
  GCAM Model:

- ○ Haewon McJeon, PNNL and Leon Clarke, PNNL
  Overview of Comparison Exercise

- ○ Max Henrion, Lumina Decision Systems
  Discussant

- ○ John Weyant, Stanford University

<u>Wednesday, August 1</u>

Morning:

Overview of Decision Analysis Framework

- ◦ Erin Baker, UMass at Amherst and Valentina Bosetti, FEEM
  Decision Analysis Framework from Umass Study

- ◦ **Erin Baker, UMass at Amherst** (891.5KB)
  Decision Analysis Framework from Harvard study

- ◦ **Gabe Chan, Harvard University** (980.5KB)
  Approximate Dynamic programming application to WITCH

- ◦ **Gauthier de Maere, FEEM-CMCC** (680.8KB)
  GCAM Application

- ◦ **Haewon McJeon, PNNL** (4.9KB)
  Discussant:

- ◦ Robert Lempert, Rand Corporation

Afternoon:

Opening Comments on Institutions in Mosaic World

- ◦ John Weyant, Stanford University
  Introduction: Scene set and Overview Past Sessions

- ◦ Brian Flannery, Retired
  New Institutionalism: Implications for Climate & Climate Policy Analysis

- ◦ **Lee Lane, Hudson Institute** (254.4KB)
  Opening Comments on Investment in major facilities and infrastructure

- ◦ Brian Flannery, Retired
  Power Sector Investments and Linkages: OECD

- ◦ John Parsons, MIT
  Power Sector Investments and Linkages: Developing World

- ◦ **David Victor, U.C. San Diego** (1023.8KB)

Thursday, August 2

Morning:

Opening Remarks

- ◦ John Weyant, Stanford University
  Scene Set & Modeling Water in IAM's #1

- ◦ **Ken Strzepek #1, MIT** (2.0KB)
  Scene Set & Modeling Water in IAM's #2

- ◦ **Ken Strzepek #2, MIT** (1.8KB)

Institutional Issues in Global Water Management: Case study of Africa

- **Ruhiza Boroto, FAO** (6.8KB)
Institutional issues in North American water management: Can we model them?

- **Paul Flack, University of Colorado** (55.9KB)
GAP-Water

- Richard Tol, University of Sussex
Water in GCAM

- **Jae Edmonds, PNNL** (4.2KB)

Afternoon:

New Institutional Economics perspective on adaptation (paper by Oliver Williamson)

- **Lee Lane, Hudson Institute** (301.6KB)
Enablers and impediments to adaptation

- **Rob Mendelsohn, Yale University** (728.3KB)
Links in requirements for economic growth and adaptation

- **David Montgomery, NERA** (313.1KB)

Friday, August 3

Morning:

Opening Remarks

- John Weyant, Stanford University
Scene Set

- **Brian Flannery, Retired** (4.4KB)
Trade and climate change: existing issues and tensions

- **Niven Winchester, MIT** (866.5KB)
Stabilizing GHC concentrations: implications for trade and competitiveness

- **Brian Fisher, BAEconomics** (89.9KB)
Implications for IPCC Assessment and Scenarios

- Kristie Ebi, Stanford University
Industry Perspective

- Haroon Kheshgi, ExxonMobil
Rules or Markets and how to represent them

- ◦   John Weyant, Stanford University

  Future Directions: Modeling real world, non-optimal policies

- ◦   Jae Edmonds, PNNL

Afternoon:

      Overview of Modeling RETs in IAMs

- ◦   **Doug Arent, JISEA/NREL** (96.7KB)

  Resource Supply Curves & Initial IAM Results

- ◦   **Leon Clarke, PNNL** (16.1KB)
- ◦   Patrick Sullivan, NREL

  Global Atlas for Solar & Wind Energy

- ◦   **Carsten Hoyer-Klick, German Aerospace Center** (1.1KB)
- ◦   **David Renne, NREL** (2.2KB)

  Renewable Electricity in Computable General Equilibrium Models

- ◦   **Niven Winchester, MIT** (2.8KB)
- ◦   **Patrick Sullivan, NREL** (3.8KB)
- ◦   **Chip Friley, Brookhaven National Laboratory** (902.8KB)

  High Renewable Energy Scenarios: Global Energy Assessment

- ◦   **Nebojsa Nakicenovic, Vienna University of Technology** (8.6KB)
- ◦   **Nate Blair, NREL** (6.5KB)