

JGCRI 2015 Integrated Assessment Workshop and GCAM Community Modeling Meeting

December 1-4, 2015

December 1-2: College Park Marriott & Conference Center, Room 2110

December 3-4: Joint Global Change research Institute, ESSIC Conference Room 4th floor.
College Park, Maryland

AGENDA

December 1, 2015

Tuesday

TIME TOPIC

8:45 – 9:00 am **Introduction**
Leon Clarke, Ghassem Asrar

Future Directions in Integrated Assessment Modeling (Chair: Leon Clarke)

9:00 – 9:15 am Gary Geernaert (DOE-Office of Science).

9:15 – 9:30 am Bob Vallario (DOE-Office of Science).

9:30 – 9:45 am Panel Discussion

Climate Impacts on Bioenergy and Agriculture (Chair: Kate Calvin)

9:45 – 10:15 am Dominique van der Mensbrugge (Purdue and GTAP): Lessons from the Agricultural Model Intercomparison Project (AgMIP)

10:15 – 10:45 am Alex Ruane (NASA-GISS): Agricultural Impacts of Climate Change: Site- and Grid-based assessments of Core Biophysical Responses

10:45 – 11:10 am Panel Discussion

11:10 – 11:30 pm *Informal Discussion*

Multi-Model Approaches to Energy-Water-Land Linkages (Chair: Mohamad Hejazi)

11:30 – 11:55 am Ian Kraucunas (PNNL-Richland): Integrated Multi-sector, Multi-scale modeling

11:55 – 12:20 pm Katherine Calvin (PNNL-JGCRI): Linking IA Models and ESMs

12:20 – 12:40 pm Panel Discussion

12:40 – 1:40 pm *Working Lunch and continued dialogue: Energy-Water-Land Linkages*

Analyzing Water from an Integrated Perspective (Chair: Ian Kraucunas)

- 1:40 – 2:10 pm Mohamad Hejazi (PNNL-JGCRI): Integrated Assessment of Water in the GCAM Framework
- 2:10 – 2:40 pm Andre Lucena (Federal University of Rio de Janeiro): Assessing Climate Change Impacts on Hydropower in Brazil
- 2:40 – 3:10 pm *Informal Discussions*
- 3:10 – 3:40 pm Nathalie Voisin (PNNL-Richland): Quantification of Interdependencies and Vulnerabilities Between Water and Energy in the Western Interconnection
- 3:40 – 4:10 pm Panel Discussion
- 4:10 – 4:30 pm *Informal Discussions*

Informal Reception and Poster Session

- 4:30 – 6:00 pm *Location: Room 2100 College Park Marriott and Conference Center*

December 2, 2015

Wednesday

New Developments in the Global Change Assessment Model (Chair: Steve Smith)

- 9:00 – 9:10 am Leon Clarke (PNNL-JGCRI). Introduction
- 9:10 – 9:30 am Robert Link (PNNL-JGCRI). Overview of Recent Developments in GCAM
- 9:30 – 10:00am Ross Maciejewski (ASU). Exploring GCAM Simulation Results in a Visual Analytics Environment
- 10:00 – 10:30 am Dan Loughlin (US EPA). Modeling U.S. Air Pollutant Emissions and Controls in GCAM-USA
- 10:30 – 11:00 am *Informal Discussions*

Understanding the Current Climate Discussions (Chair: Leon Clarke)

- 11:00 – 11:20 am Allen Fawcett (US EPA): Understanding the U.S. climate pledges
- 11:20 – 11:40 am Haewon McJeon (PNNL-JGCRI): Understanding the international climate pledges
- 11:40 – 12:00 pm Jae Edmonds (PNNL-JGCRI): Implications of the INDCs for Long-Term Climate Mitigation
- 12:00 – 12:30 pm Panel Discussion
- 12:30 – 1:30 pm *Working Lunch and continued dialogue: International Climate Discussions*

Accelerating Technology Deployment (Chair: Leon Clarke)

- 1:30 – 1:50 pm Meredydd Evans (PNNL-JGCRI): Accelerating International Technology Deployment

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- 1:50 – 2: 10 pm Vance Wagner (U.S. Department of State): Climate change mitigation: Perspectives on effective deployment in China
- 2:10 – 2:30 pm Ira Birnbaum, (DOE- Office of Energy Efficiency & Renewable Energy)
- 2:30 - 2:50 pm Panel Discussion
- 2:50 – 3:20 pm *Informal Discussions*

Technology, Resources, and Climate (Chair: Haewon McJeon)

- 3:20 – 3:45 pm Erin Baker (UMass Amherst). Synthesizing Conflicting Models and Beliefs: Climate Change R&D Policy
- 3:45 – 4:10 pm Andy Jones (LBNL): The Natural Gas Bridge for U.S. Climate Mitigation
- 4:10 – 4:35 pm Iñigo Capellán-Pérez (University of Basque Country). Probabilistic CO2 Emission Scenarios Under Uncertainty on Fossil Fuel Resources Availability
- 4:35 – 5:00 pm Matteo Muratori (PNNL-JGCRI): Pathways for CCS Deployment

December 3, 2015

Thursday

Introduction

- 9:00 – 9:15 am Leon Clarke (PNNL-JGCRI). Introduction

Research Activities in the GCAM Community (Chair: Robert Link)

- 9:15 – 9:45 am Rich Plevin (UC Davis). New tools for Monte Carlo analysis
- 9:45 – 10:15 am Alan Di Vittorio (LBNL). Uncertainty in Land Resource Projection Associated with Static Geographic Land Units in an Integrated Assessment Model
- 10:15 – 10:45 am Pierre-Alain Schieb (NEOMA Business School). Impacts of Energy Prices on the Competitiveness of Bio-based Products to 2050 Using GCAM
- 10:45 – 11:15 am *Informal Discussions*

Overview of GCAM (Chair: Katherine Calvin)

- 11:15 – 12:30 pm Introduction — Leon Clarke (11:15 – 11:25 am)
Overview of GCAM — Katherine Calvin (11:25 – 11:35 am)
Energy Supply — Marshall Wise (11:35 – 12:00 pm)
Energy Demand — G. Page Kyle (12:00 – 12:30 pm)
- 12:30 – 1:30 pm *Working Lunch and Open Discussion: GCAM*

1:30 – 3:00 pm AgLU — Katherine Calvin (1:30 — 2:05 pm)
Emissions — Katherine Calvin (2:05 — 2:20 pm)
Climate — Corinne Hartin (2:20 — 2:45 pm)
Trade, Solution, FAQs — Pralit Patel (2:45 — 3:00 pm)

Questions and Discussion (3:00 to 3:30)

3:30 – 4:00 pm *Informal Discussions*

Future GCAM Development Directions (Chair: Leon Clarke)

4:00 – 4:20 pm Overview of Future GCAM Directions (PNNL-JGCRI)

4:20 – 5:00 pm Discussion of Future GCAM Development Directions

December 4, 2015

Friday

9:00 – 10:30 am **GCAM Tutorial-** Page Kyle

10:30 – 11:00 am *Informal Discussions*

11:00 – 12:30 pm **GCAM Tutorial Continued-** Page Kyle

12:30 – 1:30 pm *Working Lunch and GCAM Tutorial Q&A*

1:30 – 2:30 pm **Hands On GCAM Support**

2:30 – 3:00 pm *Informal Discussions*

3:00 – 5:00 pm **Hands on GCAM Support Continued**