

ENERGY MODELING FORUM

Workshop on Climate Change Impacts and Integrated Assessment (CCI/IA)

Snowmass, Colorado

July 22–August 2, 2013

Preliminary Agenda

(as of July 20, 2013)

Sunday, July 21

6:00 - 8:00 PM *Registration and Informal Reception for Attendees and all Guests
Gatehouse, Top of the Village*

Monday, July 22

8:00 AM *Continental Breakfast-Gatehouse, Top of the Village*

8:45 AM John Weyant, Stanford University: Welcome & Introduction

SESSION #1: MODELING RENEWABLE ENERGY INITIATIVE

(Organized by Doug Arent, Patrick Sullivan and John Weyant)

*(Speakers: Unless otherwise specified please aim to limit your remarks to about two thirds
of the time allocation for your talk to allow ample time for discussion)*

9:00 Doug Arent, NREL: General introduction
Background , Motivation and working examples

Resource potentials (9:30-12:30)

9:30 Patrick Sullivan, NREL: New wind potentials, and how they were developed?

10:10 Shinichiro Fujimori, NIES: Integrating new wind potentials at NIES

10:40 *Morning Break*

11:10 Patrick Sullivan, NREL: Crosscut - IAM results on resource variation

11:40 IAM discussant, Nico Bauer

11:50 General discussion about next steps to improve resource potentials for IAMs
moderator: Bas van Ruijven, NCAR

12:30 *Lunch*

VRRE integration (1:30pm – 5:15pm)

Bottom-Up Experts and Synthesis (1:30-2:30)

1:30 Paul Denholm, NREL: Storage and flexibility options for the integration of VRRE?
(25min talk + 5min discussion).

2:00 Falko Ueckerdt, PIK: “The economics of variability and implications for IAMs”
(25min + 5min discussion)

2:30 Afternoon Break

Top Down IAM View: (3:00-5:15)

3:00 Robert Pietzcker, PIK: Results from IAM low/high integration scenarios; Current
integration mechanisms in IAMs: questionnaire replies (25min talk + 10min discussion)

3:35 Leon Clarke, JGCRI: IAM talk with some comments/content on integration

4:05 Paul Denholm, NREL: Bottom-Up Discussant on IAM VRRE integration

4:20 Discussion moderator: Leon Clarke, PNNL

Discussion of possible future integration constraints (15min)

Discussion of cost metrics for (and parameterization of) integration constraints (15min)

4:50 Next steps for VRRE Integration analysis – ADVANCE meeting in November

5:15 Adjourn

6:30 Opening Group Dinner

Tuesday, July 23

8:00 AM Continental Breakfast-Gatehouse, Top of the Village

Technology Characterization (9:00-10:45)

9:00 Nico Bauer, PIK: Crosscut - Competition and carbon: what determines wind deployment,
what technology is the competitor, and what are the impacts on mitigation
(25min talk+20 min discussion)

9:45 Tom Wilson, EPRI: Technology Characterization: costs/other parameters

10:15 Morning Break

10:45 Ian Sue Wing, Boston University: Technology characterization In hybrid top-down,
bottom-up models

11:15 Asami Miketa, IRENA: Importance of modeling renewables, a wide-angle perspective

12:00 *Lunch*

1:15 Group Discussion: Priorities, Reactions and Comments

John Weyant, Stanford University & Doug Arent, NREL (Moderators)

2:00 Next Steps for the Renewables Initiative – moderator: Doug Arent
Special Issue? Time frame. Next study operating committee.

3:00 *Afternoon Break*

3:30 Introduction to integrated climate change impacts session – John Weyant

4:30 *Adjourn & Informal Networking*

SESSION #2: INTEGRATED CLIMATE CHANGE IMPACTS ASSESSMENT

(Organized by Gary Yohe, Rich Richels, Tony Janetos, Max Tavoni and John Weyant)

Wednesday, July 24

7:45 AM *Continental Breakfast-Gatehouse, Top of the Village*

8:30 Introduction - John Weyant, Stanford University (Moderator)

8:45 What do Policy Makers want to know? How do we communicate it?

Panel (10-12 Minute Introductory Statement by Each Panelist):

Joe Aldy, Harvard University

Allen Fawcett, USEPA

Juan-Carlos Ciscar, IPTS

Saleem Huq, IIED & Independent University, Bangladesh

T.C. Richmond, Van Ness Feldman

10:00 Discussion (Led off by Richard Moss, JGCRI)

10:30 *Morning Break*

11:00 A scientific perspective on causes for concern (Tundra, Sea level rise, acidification, etc.)

Ken Kunkel, NCSU

Don Wuebbles, University of Illinois

12:00 Discussion (Led off by Detlef van Vuuren, PBL; Kathy Hibbard, PNNL)

12:30 Lunch

1:30 Examples of impacts experiences, analyses and what we have learned

- a. Irene and Sandy
William Solecki, CCNY

2:15 Discussion

3:00 Afternoon Break

3:30 b. The recent EPA analysis
Allen Fawcett, USEPA

4:15 Discussion

5:30 Adjourn & Informal Networking

Thursday, July 25

7:45 AM Continental Breakfast-Gatehouse, Top of the Village

8:30 AM Introduction - Gary Yohe, Wesleyan (Moderator)

8:45 Valuing market, nonmarket impacts
Charles Kolstad, Stanford University

9:30 The role of Adaptation
Tom Wilbanks, ORNL

10:00 Discussion (Led off by Gary Yohe, Wesleyan; David Anthoff, University of Michigan)

10:30 Morning Break

11:00 Approaches to modeling impacts (20 Minutes Each)

Rob Mendelsohn, Yale University
Anthony Janetos, Boston University
Patrick Reed, Cornell University
Karen Fisher-Vanden, Penn State University

12:30 Discussion (led off by Erwan Monier, MIT; Kate Calvin, JGCRI)

1:00 Lunch

2:00 Some Additional Attempts to Model Impacts

2:30 a. Modeling Catastrophes: Tom Rutherford, University of Wisconsin

b. Characterizing Impacts: Richard Richels, EPRI

2:45 Discussion

3:30 Afternoon Break

4:00 Take Home Messages for Policy Makers

T.C Richmond, Juan-Carlos Ciscar, Saleem Huq

5:00 Discussion

5:30 Adjourn

6:30 Western BBQ for Attendees and ALL guests, Snowmass Rodeo Grounds

Friday, July 26

7:30 AM Continental Breakfast-Gatehouse, Top of the Village

8:15 AM Introduction – Richard Richels, EPRI (Moderator)

8:30 The social cost of carbon – Stephanie Waldhoff, JGCRI

9:00 Discussion (Led off by Steve Rose, EPRI; Gary Yohe, Wesleyan)

10:00 Morning Break

10:30 The importance of scenarios in CC impacts analyses – Richard Moss, JGCRI

11:00 The following 4 panels are a review of all three days with a discussion of what we have learned relevant to informing policymakers:

a. A political economy panel

Joe Aldy, Harvard University

David Victor, U.C. San Diego

Jonathan Wiener, Duke University

Discussion (Led off by John Reilly, MIT)

12:00 Lunch

1:00

b. Science needs panel – Is the scientific community providing the information that is needed?

Ian Sue Wing, Boston University

Jae Edmonds, JGCRI
John Reilly, MIT
Discussion (Led off by Don Wuebbles, University of Illinois; Ken Kunkel, NCSU)

2:00

- c. IAM panel – What have we learned to inform the next round of modeling efforts – where we want to be in 5 years – Jae Edmonds, JGCRI; Detlef van Vuuren, PBL; John Reilly, MIT
Discussion

3:15 *Afternoon Break*

3:45 IAM panel (Continued) – Steve Rose, EPRI; Mikiko Kainuma, NIES;
Enrica De Cian, FEEM

Discussion

5:00

- d. “Representative consumers” panel – Are we on track? If not, why not?
Jonathan Pershing, USDOE
Juan-Carlos Ciscar, IPTS
David Victor, UCSD

5:30 Discussion

6:00 *Adjourn & Informal Networking*

Sunday, July 28

6:30PM *Informal Buffet -- including desserts & wine/cheese*