



Geoengineering Options to Respond to Climate Change: Steps to Establish a Research Agenda

A workshop to provide input to the America's Climate Choices suite of activities

June 15-16, 2009

Agenda

WASHINGTON COURT HOTEL

525 New Jersey Avenue, NW, Washington, DC 20001

MONDAY, June 15 (*Atrium Ballroom – Mezzanine Level*)

8:00 REGISTRATION

8:30 Welcome

Ralph Cicerone, National Academy of Sciences

8:45 Meeting Overview – Day 1: “Getting the Issues on the Table”

Pam Matson, Stanford Univ.

9:00 Survey of Geoengineering Options (including estimates of effectiveness, risk, and cost)

Ken Caldeira, Carnegie Institution

9:40 Engineering: Important questions, state of knowledge, and major uncertainties related to selected geoengineering options

David Keith, Univ. of Calgary

10:20 BREAK

10:50 Physical Science: Important questions, state of knowledge, and major uncertainties related to selected geoengineering options

Dan Schrag, Harvard Univ.

11:30 Terrestrial Ecosystems, Complexity, and Geoengineering

Tony Janetos, Univ. of Maryland

12:00 INFORMAL DISCUSSIONS OVER LUNCH

1:00 From Research to Field Testing and Deployment: Ethical Issues Raised By Geoengineering
Panel Discussion Moderated by *Martin Bunzl, Rutgers Univ.*

Panelists: *Stephen Gardiner, Univ. of Washington; Dale Jamieson, NYU; and William Travis, Univ. of Colorado*

- 2:00 **Governance and Geoengineering: Who Decides and How**
Panel Discussion Moderated by *Granger Morgan, Carnegie Mellon Univ.*
Panelists: *John Steinbruner, Univ. of Maryland; Jason Blackstock, IIASA; Jay Apt, Carnegie Mellon Univ.*
- 3:00 **Assignments/Instructions to breakout groups and 20-minute break**
- 3:30 **Breakout Session 1. (*Lower Lobby Level*)**
Breakouts will consider critical questions about a geo-engineering research agenda. Detailed instructions will be provided at the meeting.
- 5:30 **ADJOURN FOR THE DAY**
(Note: Breakout moderators should plan to meet with meeting organizers from 5:30-6:00 to discuss morning presentations)

TUESDAY, June 16 (*Atrium Ballroom – Mezzanine Level*)

- 8:30 **Summary of Day 1 / Plan for Day 2: “The way forward”**
Pam Matson, Stanford Univ.
- 8:45 **Report back from breakout groups and discussion**
Detailed instructions will be provided at the meeting.
- 10:15 **BREAK**
- 10:45 **Reactions / Perspectives on Geoengineering**
Moderator: *Rob Socolow, Princeton Univ.*
Panelists: *James Fleming, Colby College; Michael Oppenheimer, Princeton Univ.; Alan Robock, Rutgers Univ.; Brian Toon, Univ. of Colorado*
- 11:45 **Assignments/instructions to new breakout groups**
- 12:00 **WORKING BUFFET LUNCH (*Lower Lobby Level*)**
- 1:00 **Breakout Session 2. (*Lower Lobby Level*)** Each group addresses a new set of questions, informed by the feedback from the first set of breakouts and morning discussion. Detailed instructions will be provided at the meeting. Includes 20 minute break.
- 2:45 **Report back from breakout groups leading to open discussion (*Atrium Ballroom*)**
Detailed instructions will be provided at the meeting.
- 4:00 **WORKSHOP ADJOURNS**
(Note: ACC committee and panel members will meet in closed session from 4:15 – 5:45 in the Executive Room on Lower Lobby Level)