

**NATIONAL SCIENCE BOARD  
TASK FORCE ON SUSTAINABLE ENERGY**

**Roundtable Discussion #1**

*Science, Engineering, and Education Challenges  
Related to the Development of Sustainable Energy*

National Science Foundation  
4201 Wilson Blvd., Room 1235  
Arlington, VA 22230  
February 8, 2008

**AGENDA**

- 8:00 a.m.      **Welcoming Remarks**
- Dr. Steven Beering, Chairman, National Science Board
- 8:05 a.m.      **Overview, Purpose, and Goals of the Roundtable Discussion**
- Dr. Dan Arvizu and Dr. Jon Strauss, Co-Chairmen, Task Force on Sustainable Energy, National Science Board
- 8:15 a.m.      **Process and Logistics for Board Roundtable Discussions**
- Dr. Craig Robinson, Acting Executive Officer, National Science Board
- 8:20 a.m.      **Introduction of Participants**
- 8:30 a.m.      **Presentation: *Facing the Hard Truths About Energy: A Comprehensive View to 2030 of Global Oil and Natural Gas***  
**Speaker: Mr. Rod Nelson, Vice President, Schlumberger**
- 8:50 a.m.      **Discussion Session 1: Sustainable Energy Research and Development**  
Discussion Co-Moderators: Dr. Arvizu and Dr. Strauss
- 10:15 a.m.     **Break**
- 10:30 a.m.     **Presentation: *IPCC IV Assessment Report: Synthesis Report on Climate Change 2007***  
**Speaker: Dr. Robert Corell, Program Director, Heinz Center**
- 10:50 a.m.     **Presentation: *NSF and Energy Research and Education***  
**Speaker: Dr. Richard Buckius, Assistant Director, Directorate for Engineering, National Science Foundation**
- 11:10 a.m.     **Working Lunch**  
**Discussion Session 2: NSF's Role in a National Sustainable Energy Initiative**  
Discussion Co-Moderators: Dr. Arvizu and Dr. Strauss

- 12:45 p.m.    **Break**
- 1:00 p.m.    **Presentation: *Reducing U.S. Greenhouse Gas Emissions: How Much at What Cost?***  
**Speaker: Mr. Kenneth Ostrowski, Director of the Americas Electric Power and Natural Gas Practice, McKinsey & Company**
- 1:30 p.m.    **Discussion Session 3: Recommendations for a National Research and Education Initiative in Sustainable Energy**  
Discussion Co-Moderators: Dr. Arvizu and Dr. Strauss
- 2:45 p.m.    **Summary and Next Steps for the Task Force**
- Dr. Arvizu and Dr. Strauss

**List of Participants: Roundtable Discussion #1**

<b>Name</b>	<b>Affiliation</b>
<i><b>National Science Board Participants</b></i>	
Dr. Dan E. Arvizu	Co-Chairman, Task Force on Sustainable Energy, National Science Board
Dr. Jon C. Strauss	Co-Chairman, Task Force on Sustainable Energy, National Science Board
Dr. Mark R. Abbott	Task Force on Sustainable Energy Member, National Science Board
Dr. Steven C. Beering	Chairman, National Science Board
Dr. Camilla P. Benbow	Task Force on Sustainable Energy Member, National Science Board
Dr. John T. Bruer	Task Force on Sustainable Energy Member, National Science Board
Dr. Patricia D. Galloway	Task Force on Sustainable Energy Member, National Science Board
Dr. José-Marie Griffiths	Task Force on Sustainable Energy Member, National Science Board

Dr. Daniel E. Hastings	Task Force on Sustainable Energy Member, National Science Board
Dr. Douglas D. Randall	Task Force on Sustainable Energy Member, National Science Board
Mr. Arthur K. Reilly	Task Force on Sustainable Energy Member, National Science Board
Dr. Arden Bement, Jr., <i>ex officio</i>	Director, National Science Foundation
<b><i>Participants</i></b>	
Dr. Ghassem Asrar	Deputy Administrator, U.S. Department of Agriculture
Dr. Sam Baldwin	Chief Technology Officer and Member, Board of Directors; Office of Energy Efficiency and Renewable Energy, U.S. Department of Energy
Dr. Jan Brecht-Clark	Associate Administrator, RD&T Research and Innovative Technology Administration, United States Department of Transportation
Dr. Richard Buckius	Assistant Director, Directorate for Engineering, National Science Foundation
Dr. Robert (Bob) Corell	Program Director, Heinz Center
Dr. Jon Creyts	Principal, McKinsey & Company
Dr. Patricia Dehmer	Deputy Director of Science Programs, Office of Science, U.S. Department of Energy
Mr. Chris DiPetto	Developmental Test and Evaluation Deputy Director, Defense Systems and Software Engineering, Deputy Under Secretary for Acquisition and Technology, United States Department of Defense
Dr. James (Jim) Dooley	Senior Staff Scientist, Joint Global Change Research Institute
Dr. Luis Echegoyen	Division Director, Division of Chemistry, National Science Foundation
Dr. Carolyn Fischer	Fellow, Resources for the Future
Dr. Alan Hecht	Director for Sustainable Development, Office of Research and

	Development, U.S. Environmental Protection Agency
Mr. Joe Loper	Vice President of Policy and Research, Alliance to Save Energy
Mr. Richard Mertens	Deputy Associate Director for Energy, Science, and Water, White House/Office of Management and Budget
Dr. Nebojsa Nakicenovic	Professor of Energy Economics, Vienna University of Technology
Mr. Rod Nelson	Vice President, Schlumberger
Dr. Robert O'Connor	Program Director, Decision, Risk and Management Sciences, Division of Social and Economic Sciences, National Science Foundation
Mr. Ken Ostrowski	Director of the Americas Electric Power and Natural Gas Practice, McKinsey & Company
Ambassador Richard Russell	Associate Director and Deputy Director for Technology, Office of Science and Technology Policy, Executive Office of the President
Mr. Jim Presswood	Energy Advocate, Natural Resources Defense Council
Dr. Harvey Sachs	Director, Buildings Programs, American Council for an Energy Efficient Economy
Mr. Jonathan Spector	Chief Executive Officer, The Conference Board, Inc.
<b><i>In Attendance &amp; Supporting a Confirmed Participant</i></b>	
Dr. Linda Blevins	Technical Advisor, Office of Basic Energy Sciences, U.S. Department of Energy
Mr. Brad Hancock	Associate Director for Energy and Utilities, U.S. Department of Defense
Dr. Kevin Hurst	Senior Policy Analyst, Technology Division, Office of Science and Technology Policy, Executive Office of the President
Dr. Tom Zimmerman	Fellow, Schlumberger