ASILOMAR INTERNATIONAL CONFERENCE ON CLIMATE INTERVENTION TECHNOLOGIES

March 26, 2010

Statement from the Conference's Scientific Organizing Committee

More than 175 experts from 15 countries with a wide diversity of backgrounds (natural science, engineering, social science, humanities, law) met for five days (March 22-26, 2010) at the Asilomar conference center in Pacific Grove, CA. The participants explored a range of issues that need to be addressed to ensure that research into the risks, impacts and efficacy of climate intervention methods is responsibly and transparently conducted and that potential consequences are thoroughly understood. The group recognized that given our limited understanding of these methods and the potential for significant impacts on people and ecosystems, further discussions must involve government and civil society. Such discussions should be undertaken with humility and recognition of the threats posed by the rapid increase in atmospheric greenhouse gas concentrations.

Participants reaffirmed that the risks posed by climate change require a strong commitment to mitigation of greenhouse gas emissions, adaptation to unavoidable climate change, and development of low-carbon energy sources independent of whether climate intervention methods ultimately prove to be safe and feasible.

The fact that humanity's efforts to reduce global emissions of greenhouse gases (mitigation) have been limited to date is a cause of deep concern. Additionally, uncertainties in the response of the climate system to increased greenhouse gases leave open the possibility of very large future changes. It is thus important to initiate further research in all relevant disciplines to better understand and communicate whether additional strategies to moderate future climate change are, or are not, viable, appropriate and ethical. Such strategies, which could be employed in addition to the primary strategy of mitigation, include climate intervention methods (solar radiation management) and climate remediation methods (carbon dioxide removal).

We do not yet have sufficient knowledge of the risks associated with using methods for climate intervention and remediation, their intended and unintended impacts, and their efficacy in reducing the rate of climatic change to assess whether they should or should not be implemented. Thus, further research is essential.

Recognizing that governments collectively have ultimate responsibility for decisions concerning climate intervention and remediation research and possible implementation, this conference represented a step in facilitating a process involving broader public participation. This process should ensure that research on this issue progresses in a timely, safe, ethical and transparent manner, addressing social, humanitarian and environmental issues.

Asilomar International Conference on

Climate Intervention Technologies

SCIENTIFIC ORGANIZING COMMITTEE

Dr. Michael MacCracken, Chief Scientist, Climate Institute, Chair

Dr. Paul Berg, Professor Emeritus, Stanford University, Advisor and Honorary Chair

Dr. Paul Crutzen, Max Plank Institute, Germany, and Scripps Institution of Oceanography, US (corresponding member)

Dr. Scott Barrett, Lenfest Professor of Natural Resource Economics, Columbia University, US

Dr. Roger Barry, Director of the World Data Center for Glaciology and Distinguished Professor of Geography, University of Colorado, US

Dr. Steven Hamburg, Chief Scientist, Environmental Defense Fund, US Dr.

Richard Lampitt, Senior Scientist, National Oceanography Center and associated professor, University of Southampton, UK

Dr. Diana Liverman, Co-Director of the Institute for Environment and Society and Professor of Geography and Regional Development, University of Arizona, US; Professor of Environmental Science at the University of Oxford and Senior Fellow in the Environmental Change Institute, Oxford University, UK

Dr. Thomas Lovejoy, Heinz Center Biodiversity Chair at the Heinz Center for Science and the Environment, US

Dr. Gordon McBean, Professor, Departments of Geography and Political Science and Director of Policy Studies at the Institute for Catastrophic Loss Reduction, The University of Western Ontario, London, Canada

Dr. John Shepherd, Professorial Research Fellow in Earth System Science, School of Ocean and Earth Science, National Oceanography Centre, University of Southampton, and Deputy Director (External Science Coordination) of the Tyndall Centre for Climate Change Research, UK

Mr. Stephen Siedel, Vice President for Policy Analysis and General Counsel at the Pew Center on Global Climate Change, US

Dr. Richard Somerville, Distinguished Professor Emeritus and Research Professor at Scripps Institution of Oceanography, University of California, San Diego, US

Dr. Thomas Wigley, Professor, University of Adelaide, Australia

The Asilomar International Conference on Climate Intervention Technologies *was developed by* ***the Climate Response Fund*** *in partnership with* ***Guttman Initiatives*** *and organized by the Scientific Organizing Committee for the* ***Climate Institute****. For further information contact the Climate Institute at asilomar@climate.org or visit the Climate Response Fund website at www.climateresponsefund.org*

Supporters of the Conference Statement

The following Asilomar Conference participants have declared their individual support for the above Statement of the Scientific Organizing Committee. Affiliations listed in this section are provided for identification purposes only and do not indicate the organization's stance on this statement.

Thomas Ackerman, University of Washington

Roger Aines

Jim Amonette

G. Bala, Center for Atmospheric and Oceanic Sciences, Indian Institute of Science, Bangalore

Richard Elliot Benedick, National Council for Science and the Environment

Robert J. Berg, World Federation of United Nations Associations; World Academy of Art and Science

Robert Bindschadler, NASA (emeritus) and University of Maryland, Baltimore Campus

Jason Blackstock, Centre for International Governance Innovation and International Institute for Applied Systems Analysis

Daniel Bodansky

Peter Boyd

Max Boykoff, University of Colorado-Boulder

Stewart Brand, Global Business Network

Mark B. Brown, Department of Government, California State University, Sacramento

Wil Burns

Fei Chai, University of Maine

Elizabeth Chalecki, Boston College

Paul Craig

Jim Fournier

Bill Fulkerson

Alan Gadian

Alfonso M. Gañán-Calvo, Universidad de Sevilla

Joseph H. Golden

David G. Hawkins

Marty Hoffert

Rob Jackson, Center on Global Change, Duke University

David Keith

Ben Kravitz

Tim Kruger, Oxford Geoengineering

Margaret Leinen, Climate Response Fund

Chris Lennard

Andrew Lockley

Jane C. S. Long

Douglas MacMynowski, California Institute of Technology

Andrew S. Mathews

Bryan Martel, Environmental Capital Group

Janot Mendler de Suarez, Working Group on Climate, Oceans and Security; Global Forum on Oceans, Coasts and Islands

Ashley Mercer, UC Berkeley

Juan B. Moreno-Cruz, ISEEE-Energy and Environmental Systems Group and Department of Economics, University of Calgary

David Morrow

Armand Neukermans, Silver Lining

John A. Orcutt, Scripps Institution of Oceanography, University of California, San Diego

Andreas Oschlies, IFM-GEOMAR, Kiel, Germany

Edward A. Parson, University of Michigan

Graeme Pearman, Graeme Pearman Consulting Pty Ltd, Melbourne

Seth Perlman

Arthur Petersen

Phil Rasch

Steve Rayner, James Martin Professor of Science & Civilization, University of Oxford

Jennie Rice

Alan Robock, Department of Environmental Sciences, Rutgers University

Daniel Rosenfeld

Lewis M Rothstein, Graduate School of Oceanography, University of Rhode Island

Stephen H. Schneider

Jerry Schubel

Sybil P. Seitzinger, International Geosphere-Biosphere Programme (IGBP) Steven Smith, University of Maryland

Robert Socolow

J. Srinivasan, Divecha Centre for Climate Change, Indian Institute of Science, Banaglore

Stuart Strand, University of Washington

Pablo Suarez ,,Frederick S. Pardee Center for the Study of the Longer-Range Future, Boston University

Masahiro Sugiyama

Judith Swift, Coastal Institute, University of Rhode Island

Samuel Thernstrom, American Enterprise Institute

Bob Thronson

Simone Tilmes, National Center for Atmospheric Research

Dennis Tirpak

William R. Travis, Center for Science and Technology Policy Research; Department of Geography, University of Colorado at Boulder

David Victor

Chris Vivian, Cefas (Centre for Environment, Fisheries and Aquaculture Science), Lowestoft Laboratory

Gernot Wagner

James S. Wang, Climate and Air Program, Environmental Defense Fund

Andrew Watson, School of Environmental Sciences, University of East Anglia

Dan Whaley

Kevin Whilden

Oliver Wingenter, Geophysical Research Center, New Mexico Tech

David Winickoff

Oran R. Young, Bren School of Environmental Science and Management, University of California, Santa Barbara, CA

Charlie Zender