



EESI
CAROL WERNER
EXECUTIVE DIRECTOR

ENVIRONMENTAL AND ENERGY STUDY INSTITUTE

BRIEFING NOTICE

122 C STREET, N.W., SUITE 630 ■ WASHINGTON, D.C., 20001 ■ 202-628-1400 ■ www.eesi.org

Findings from the IPCC Working Group II Report: Climate Change Impacts, Adaptation and Vulnerability

Wednesday, April 18, 2007

10:00 - 11:30 a.m.

124 Dirksen Senate Office Building

The **Environmental and Energy Study Institute** (EESI) invites you to learn about the most recent report from the Intergovernmental Panel on Climate Change (IPCC), *Summary for Policymakers*, released April 6. The report sets out the key policy-relevant findings of Working Group II of the IPCC's Fourth Assessment Report (AR4). More than 2500 expert reviewers, 800 authors, 450 lead authors, and 130 countries participated in AR4. The *Summary* covers observed impacts of climate change on the natural and human environment, future impacts and responding to climate change. A global assessment of data since 1970 has shown it is likely that anthropogenic warming has had a discernible influence on many physical and biological systems. Of the more than 29,000 observational data series (from 75 studies) that show significant change in many physical and biological systems, more than 89 percent are consistent with the direction of change expected as a response to warming. Some 20-30 percent of all species face a "high risk of extinction" should average global temperatures rise another 1.5-2.5°C from their 1990 levels.

In North America, warming in western mountains is projected to cause decreased snowpack, more winter flooding, and reduced summer flows, exacerbating competition for over-allocated water resources. Disturbances from pests, diseases, and fire are projected to have increasing impacts on forests, with an extended period of high fire risk and large increases in area burned. Cities that currently experience heat waves are expected to be further challenged by an increased number, intensity and duration of heat waves during the course of the century, with increased potential for adverse health impacts. All of these are projected with very high confidence, that is, at least a 9 out of 10 chance of being correct.

- **Dr. Cynthia Rosenzweig**, Research Scientist, NASA Goddard Institute for Space Studies
- **Dr. Terry Root**, Senior Fellow, Center for Environmental Science and Policy, Stanford University
- **Dr. Roger S. Pulwarty**, Physical Scientist, NOAA/Office of Oceanic and Atmospheric Research
- **Dr. Anthony Janetos**, Director, Joint Global Change Research Institute

A wide array of adaptation options is available, but more extensive adaptation than is currently occurring is required to reduce vulnerability to future climate change. Adaptation alone is not expected to cope with all the projected effects of climate change, and especially not over the long run as most impacts increase in magnitude. For example, adaptation measures can be integrated within water resource management, coastal defense, and disaster planning. Sustainable development can reduce vulnerability to climate change, while climate change could impede nations' abilities to achieve sustainable development pathways. A portfolio of adaptation and mitigation measures can diminish the risks associated with climate change. Unmitigated climate change would, in the long term, be likely to exceed the capacity of natural, managed and human systems to adapt.

This briefing is open to the public and media. No reservations are required. Please feel free to forward this notice. For more information, contact Fred Beck (fbeck@eesi.org), 202-662-1892.

The Environmental and Energy Study Institute is a non-profit organization established in 1984 by a bipartisan, bicameral group of members of Congress to provide timely information on energy and environmental policy issues to policymakers and stakeholders and develop innovative policy solutions that set us on a cleaner, more secure and sustainable energy path.