



UNIVERSITY OF COPENHAGEN

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CLIMATE CHANGE

Global Risks, Challenges & Decisions

COPENHAGEN 2009, 10-12 March

The main findings of this Congress will, after agreement with the Danish Government, be handed over to the participants at the COP15

The Danish Government as host of the UN Conference on Climate Change (COP15) to be held in Copenhagen at the end of 2009 supports this Congress organised by IARU as part of the run-up to the COP15. The purpose of the Congress is to try and capture some of the enormous research energy currently being devoted to the elucidation, mitigation and adaptation to climate change. Thus, the focus of the Congress is on providing a picture of the "big issues" that the scientific community feels is necessary that policy makers are aware of in order to make enlightened decisions with respect to the balancing of adaptation and mitigation in the societal response to climate change.

Prof. Katherine Richardson
Chair of The Scientific Steering Committee



INTERNATIONAL ALLIANCE OF
RESEARCH UNIVERSITIES

Australian National University, ETH Zürich, National University of Singapore, Peking University, University of California - Berkeley, University of Cambridge, University of Copenhagen, University of Oxford, The University of Tokyo, Yale University

Confirmed Keynote and Plenary Speakers

Keynote Speakers

Dr. Rajendra K. Pachauri,
Chairman of the IPCC
Mr. José Manuel Barroso,
President of the European Commission

Plenary Speakers

Prof. Thomas Homer-Dixon,
University of Toronto
Prof. Dan Kammen, University of
California – Berkeley
Prof. Amanda Lynch, Monash University
Prof. Diana Liverman, Oxford University
Prof. Nebojsa Nakicenovic,
The International Institute for Applied
Systems Analysis (IIASA)
Prof. William D. Nordhaus,
Yale University
Prof. Stefan Rahmstorf,
Potsdam Institute for
Climate Impact Research
Prof. John Schellnhuber, Potsdam
Institute for Climate Impact Research &
visiting professor at the
University of Oxford

What is IARU?

IARU is an alliance of ten of the world's leading research universities: Australian National University, ETH Zürich, National University of Singapore, Peking University, University of California - Berkeley, University of Cambridge, University of Copenhagen, University of Oxford, The University of Tokyo, Yale University

Review procedures

The Scientific Committees of the four global climate change programmes (WCRP, IGBP, Diversitas, and IHDP) will take on part of the responsibility for the review of the synthesis of the Congress that will be passed on to the COP. In addition, each IARU University has been asked to find 3 - 4 reviewers.

Location

The congress is held in Copenhagen, the capital of Denmark. With a population of 1.7 million people and a wide range of conference facilities, Copenhagen is in many ways the ideal host of the congress – a statement supported by the recognition of Copenhagen as one of the top ten conference destinations in the world.

Denmark and Copenhagen are hosting the COP15 in December 2009

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Venue

The International Scientific Congress 10-12 March will take place at the Bella Center in Copenhagen, Denmark. For further information, please visit www.bellacenter.dk/english/bella+center

Registration, abstract and poster submission

Registration is open at www.climatecongress.ku.dk. Here you will also find the abstract and poster submission. Deadline 1 September 2008.

10 March Framing the Issues

Opening session

Global Warming: How to Solve an Intractable Problem?

Theme 1

Exploring the Risks: Understanding Climate Change

- Cryosphere, Instabilities, Sea Level Rise.
- Global/Regional Climate State in 2030.
- Changes in Ocean Circulation Related to Regional Climate.
- Vulnerability in Carbon Sinks.
- Developing a Spectrum of Models to Describe the Earth System.
- Tipping Elements in the Earth System.
- Informing the Future by Understanding the Past.
- Earth System Feedbacks from Carbon Sequestration.
- Detection and Attribution: State of Play in 2009.

Theme 2

Sharing the Burdens and Opportunities: Equity Issues

- Equity between Sectors and Individuals within Countries.
- Equity between Nations and Regions.
- Equity in Time: Past, Present and Future Emitters and Victims.
- Equity between Humans and the Rest of Nature.
- Differential Effects of Climate Change on Human Health and Well-Being.
- Avoiding Land-Cover Change to Reduce Carbon Emissions.

11 March From Knowledge to Action

Theme 3

Reducing the Risks of Climate Change: Opportunities for Mitigation

- Integrating Economic Models and the Dynamics of the Carbon Sinks.
- Carbon Capture and Storage: Technology, Economy, Social Attitudes.
- Potentials and Limitations of Biofuels.
- Renewable Energies: How Far Can They Take Us?
- Enhancing Energy Conservation and Efficiency.
- Integrated Energy Mixes from a Socio-Economic and Environmental Perspective.
- Transforming Institutions to Managing a Carbon Constrained World.
- Integrating National and International Approaches to Emission Caps and Trading: Developing a Global Framework.
- The Role of Agriculture in Mitigating Climate Change.
- The Role of Forests in Mitigating Climate Change.
- Beyond Technology: Changing the Way We Live?
- Low Carbon Science, Technology Policies.
- Climate Change and Air Pollution: The Role of non-CO2 Atmospheric Pollutants. (CH4, Halocarbons, N2O, Ozone, Aerosols) in Climate Stabilization.

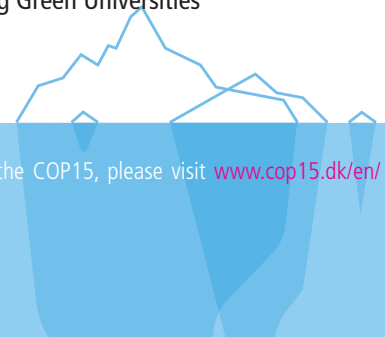
Theme 4

Preparing for Impacts: Adapting to the Inevitable

- Climate Change and Water Systems.
- Impact of Climate Change on Ecosystem Services.
- Biodiversity: Enhancement of Resilience or Facilitating Transformation.
- Economic Costs of not Adapting to Climate Change.
- Adapting Urban Areas to Climate Change.
- Adapting Human Land Use to Climate Change
- Adapting Coastal Zone and Marine Resources to Climate Change.
- Approaches to Measuring and Enhancing Adaptive Capacities.
- Adapting Future Agricultural Production to Climate Change.
- Adapting Forests to Climate Change.
- Climate Tools and Information to Support Adaptation.
- Learning from Ongoing Adaptation: A Comparative Study
- **Adaptation to Climate Change in Least Developed Countries – Challenges, Experiences, and Ways Forward**
- **Adaptation and Climate Risk Insurance.**

Workshop: Creating Green Universities

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12 March

From High-End Scenarios to Sustainable Solutions

Theme 5

Managing the Planet

- Integrating Climate Change into Global Sustainability.
- Filling in the Gaps between IA (Integrated Assessment), GCM (General Circulation Model), Economic and ES (Earth System) Models.
- From Geo-Perturbation to Geo-Management.
- Consequences of Acidification of Land and Ocean.
- Optimizing Food and Agricultural Production: Climate Constraints
- Earth System Governance.
- The Role of Integrated Assessment Models in Handling Climate Change.

Theme 6

Mobilising the Populace: Human Dimensions of Climate Change

- Optimizing Food and Agricultural Production: Food Security
- Economic Costs of not Mitigating Climate Change.
- Role of Media in Contributing in Combating Climate Change.
- The Role of non Nation State Actors (Cities, NGOs, Business) in Combating Climate Change.
- Resources in a Changing Climate: Building Collaboration and Avoiding Conflict.
- Human Migration - Geopolitical Conflicts.
- Cultures, Values and World Perspectives as Factors in Responding to Climate Change.

Closing session

Synthesis and Summary

The IARU International Scientific Congress on Climate Change is sponsored by:

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For further information about Copenhagen, please visit www.visitcopenhagen.dk. For further information about the COP15, please visit www.cop15.dk/en/