

# **The Integrated Assessment Modeling Consortium**

Presented to the IAMC Membership

September 15, 2009  
Tsukuba, JAPAN

# The IAMC

- The Integrated Assessment Consortium (IAMC) was created in 2007 in response to a call from the IPCC for an organization to lead the integrated assessment modeling community in the development of new scenarios that could be employed by climate modelers in the development of prospective ensemble numerical experiments for both the near term and long term.
- Leaders from 3 institutions, John Weyant (EMF), Nebojsa Nakicenovic (IIASA) and Mikiko Kainuma (NIES), invited other research organizations to join with them to form the IAMC for the purpose of developing scenarios.
  - These became the 4 Representative Concentration Pathway scenarios.

# The IAMC

- Until now, the IAMC has been lead by its three founders—with advise from everyone—and funded by donations of time and money from its member organizations.
- The purpose of this presentation is to consider options for a more broadly based, self-perpetuating organization.

# The IAMC Members

## International Consortium

Facilitate the coordination of scenario development efforts

		
International Institute for Applied Systems Analysis (IIASA)	Energy Modeling Forum (EMF) Stanford University	National Institute for Environmental Studies (NIES)
<ul style="list-style-type: none"> <li>&gt; <b>Australian Bureau of Agricultural and Resource Economics (ABARE)</b> - Helal Ahammad, Hom Pant</li> <li>&gt; <b>Bundeswehr University, Munich</b> - Stefan Pickl</li> <li>&gt; <b>Business Council for Sustainable Development – Argentina</b> - Virginia Vilariño</li> <li>&gt; <b>CEA-LERNA, University of Social Sciences</b> - Marc Vielle</li> <li>&gt; <b>Centre for International Climate and Energy Research (CICERO), University of Oslo</b> - H.Asbjorn Aaheim</li> <li>&gt; <b>Argonne National Laboratory</b> - Donald Hanson</li> <li>&gt; <b>Centre International de Recherche sur l'Environnement et le Développement (CIRED)</b> - Jean-Charles Hourcade</li> <li>&gt; <b>CRA International</b> - Brian Fischer</li> <li>&gt; <b>DIW Berlin</b> - Claudia Kemfert</li> <li>&gt; <b>Electric Power Research Institute (EPRI)</b> - Richard Richels, Francisco de la Chesnaye</li> <li>&gt; <b>Energy Research Institute, National Development and Reform Commission (NDRC)</b> - Kejun Jiang</li> <li>&gt; <b>Energy Technology Systems Analysis Programme (ETSAP)</b> - Richard Loulou, GianCarlo Tosato</li> <li>&gt; <b>ETH Zurich</b> - Thomas Rutherford</li> <li>&gt; <b>Hamburg University and Economic and Social Research Institute (ESRI)</b> - Richard Tol</li> </ul>	<ul style="list-style-type: none"> <li>&gt; <b>Indian Institute of Management</b> - Priyadarshi R. Shukla</li> <li>&gt; <b>Institut d'Economie et de Politique de l'Energie (IEPE-CNRS)</b> - Patrick Criqui</li> <li>&gt; <b>Institute of Applied Energy</b> - Atsushi Kurosawa</li> <li>&gt; <b>International Institute for Applied Systems Analysis (IIASA)</b> - Nebojsa Nakicenovic, Keywan Riahi</li> <li>&gt; <b>IPCC and San Marcos University</b> - Eduardo Caivo</li> <li>&gt; <b>National Institute for Environment Studies (NIES)</b> - Mikiko Kainuma</li> <li>&gt; <b>National Center for Atmospheric Research (NCAR)</b> - Brian O'Neill</li> <li>&gt; <b>Ohio State University</b> - Brent Sohngen</li> <li>&gt; <b>Pacific Northwest National Laboratory, Joint Global Change Research Institute at the University of Maryland</b> - Jae Edmonds, Hugh Pitcher, Ronald Sands, Steve Smith</li> <li>&gt; <b>Potsdam Institute for Climate Impact Research (PIK)</b> - Ottmar Edenhofer, Elmar Kriegler, Brigitte Knopf</li> <li>&gt; <b>Programa de Planejamento Energético - PPE/COPPE/UFRJ</b> - Emilio Lèbre La Rovere</li> <li>&gt; <b>Purdue University</b> - Thomas Hertel</li> </ul>	<ul style="list-style-type: none"> <li>&gt; <b>RAND</b> - Rob Lempert</li> <li>&gt; <b>Research Institute of Innovative Technology for the Earth (RITE)</b> - Keigo Akimoto</li> <li>&gt; <b>Stanford University</b> - John Weyant</li> <li>&gt; <b>Tellus Institute</b> - Richard Rosen</li> <li>&gt; <b>Texas A&amp;M University</b> - Bruce McCarl</li> <li>&gt; <b>The Netherlands Environmental Assessment Agency (MNP)</b> - Detlef van Vuuren, Tom Kram</li> <li>&gt; <b>Tyndall Centre for Climate Change Research, The University of East Anglia</b> - Andrew Watkinson, Robert T. Watson</li> <li>&gt; <b>Universidad de Los Andes / Universidad Nacional de Colombia</b> - Jose Eddy Torres</li> <li>&gt; <b>Universidad Iberoamericana Puebla</b> - Maria Eugenia Ibarra Viniestra</li> <li>&gt; <b>University of Cambridge</b> - Andreas Schaefer</li> <li>&gt; <b>University of Oldenburg</b> - Christoph Boehringer</li> <li>&gt; <b>US Environmental Protection Agency</b> - Allen Fawcett, Steven Rose</li> <li>&gt; <b>VTT</b> - Sanna Syri</li> <li>&gt; <b>World Bank</b> - Dominique van der Mensbrugge</li> </ul>

# Aims of the IAMC

- The Integrated Assessment Modeling Consortium (IAMC) exists to facilitate and foster the development of integrated assessment models (IAMs), peer interaction and vetting, and the conduct of research employing IAMs, including model diagnosis, intercomparison, and coordinated studies.
- The IAMC also exists to facilitate and coordinate IAM research with research conducted in both the Climate Modeling (CM) and the Impact, Adaptation, and Vulnerability (IAV) research communities.
- The IAMC also exists to provide a point of contact with other institutions and organizations interacting with the IAM community, e.g. the IPCC.

# The IAMC

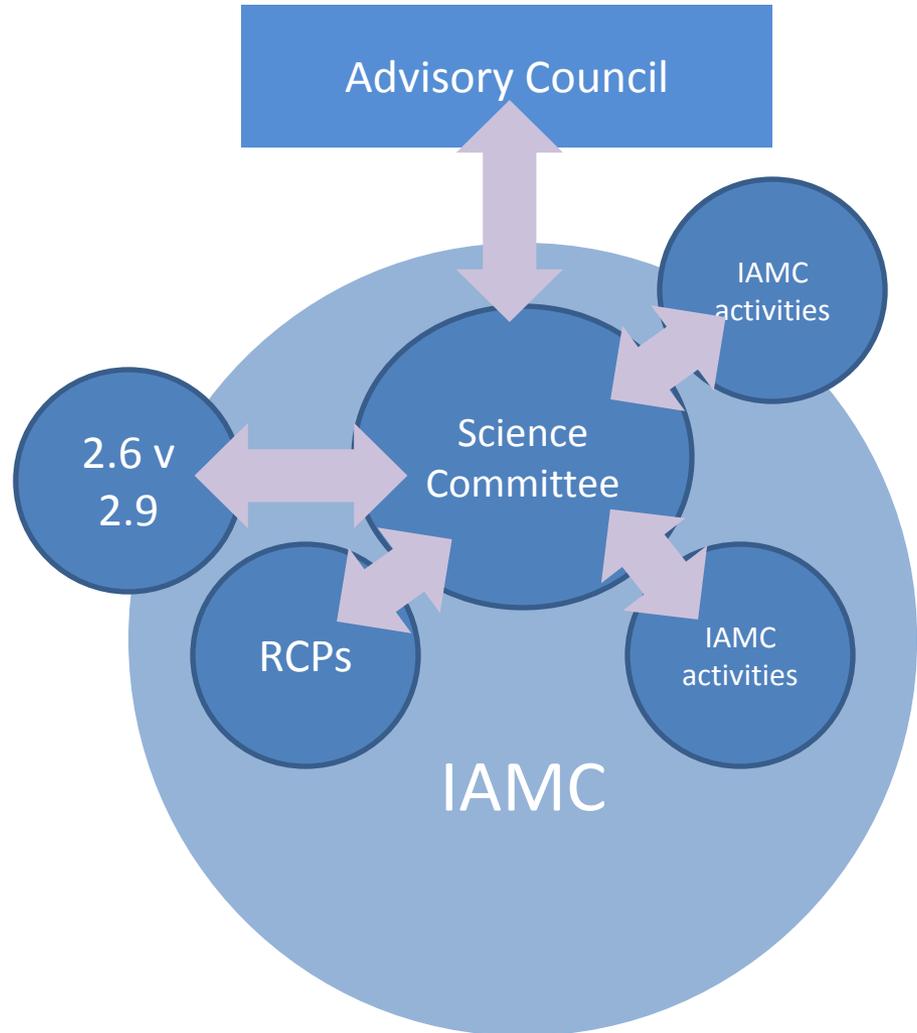
- The IAMC exists to further scientific research.
- The IAMC does not take political positions, nor does it exist to further political agendas.

# Membership

- Membership is open to organizations whose work helps further the goals of the IAMC.
- Terms and conditions of membership are established by the Scientific Committee.

# Governance

- The IAMC Organization
  - Scientific Committee
  - Advisory Council
- Conduct of IAMC work
  - The work of the IAMC is conducted through committees chartered by the Scientific Committee and
  - Community research programs undertaken by IAMC member organizations
  - Collaborations with other organizations



# The Scientific Committee

- Responsibilities of the Scientific Committee
  - Pursue the goals of the IAMC
  - Form and oversee work by IAMC sub-committees
  - Identify potential research priorities and opportunities.
    - Based on input from IAMC member organizations and the IAMC Advisory Council.
  - Endorse (or not) activities brought to it by IAMC member organizations
  - Enhance communication between IAMC members
    - Annual IAMC meeting
    - IAMC website
    - Recommend data protocols and formats
  - Communicate the results of the work of the IAMC to other research communities and to policy makers (e.g. RCP scenario data base)
  - Secure and shepherd the resources necessary to successful conduct the business of the IAMC.
  - Report Annually to the Advisory Council

# The Scientific Committee

- Membership
  - The initial set of Scientific Committee (SC) members will be appointed by mutual agreement by the founders of the IAMC: Mikiko Kainuma, Nebojsa Nakicenovic, and John Weyant.
    - Initial SC Members should be drawn from the leadership of the teams which created the Representative Concentration Pathways plus other leaders of the IAM community.
    - Subsequent SC Members should be drawn from the leadership of the leaders of the IAM community.
    - The number of members is to be set by the SC.
  - The term of a membership will be 3 years. Membership is renewable. (Initial memberships will be staggered in such a way that approximately 1/3 expire each year)
  - The committee shall appoint a chairperson, who is charged with insuring that the Scientific Committee meets as necessary to execute the business of the IAMC and at least annually.

# Subcommittees

- Not all activities will be undertaken by the Scientific Committee (SC).
  - The SC will draw on its members to undertake various tasks as subcommittees.
    - Subcommittees are chartered by the SC,
    - Serve at the pleasure of the SC, and
    - Report to the SC.
  - E.g. the IAMC may want to form subcommittees on such topics as: reporting conventions, or the “Parallel Phase”, or climate modeling contact group or an IAV contact group.
  - The SC may also draw members for its subcommittees from outside the IAMC, e.g. the 2.6 vs. 2.9 committee.

# Working with Others

- The IAMC will also work with and through other organizations.
  - Member organizations may propose to undertake activities that benefit the community and the IAMC may choose to recommend to its members, e.g. the EMF or FEEM or AIM may choose to undertake a coordinated exercise on a topic that would potentially execute an element of the “Parallel” phase.
  - The IAMC may also team with other organizations, e.g. AIMES to undertake programs of mutual interest.
  - The IAMC may also work with external organizations such as the IPCC to produce products of mutual interest.

# The Advisory Council

- Responsibilities of the Advisory Council
  - Provide counsel to the IAMC Scientific Committee (e.g., input on potential research priorities)
  - Provide information about activities in other research communities that are relevant to IAMC activities (users of IAMC information and communities upon which IAMC draws information)
  - Assist the IAMC Scientific Committee in coordinating with and communicating results to other research communities.
  - Assist the IAMC and the Scientific Committee in identifying potential resources to help the IAMC fulfill its mission.

# The Advisory Council

- Membership
  - The initial set of Advisory Council members will be appointed by the Scientific Committee of the IAMC.
    - One member will be designated the Advisory Council Chairperson
  - The term of a membership will be 3 years. Membership is renewable. (Initial memberships will be staggered in such a way that approximately 1/3 expire each year)
  - The Advisory Council shall appoint a chairperson, who will serve as the point of contact for the Scientific Committee.

# Discussion

