

ipcc

INTERGOVERNMENTAL PANEL ON climate change



Update on Scenario Development: Socio-economic Aspects

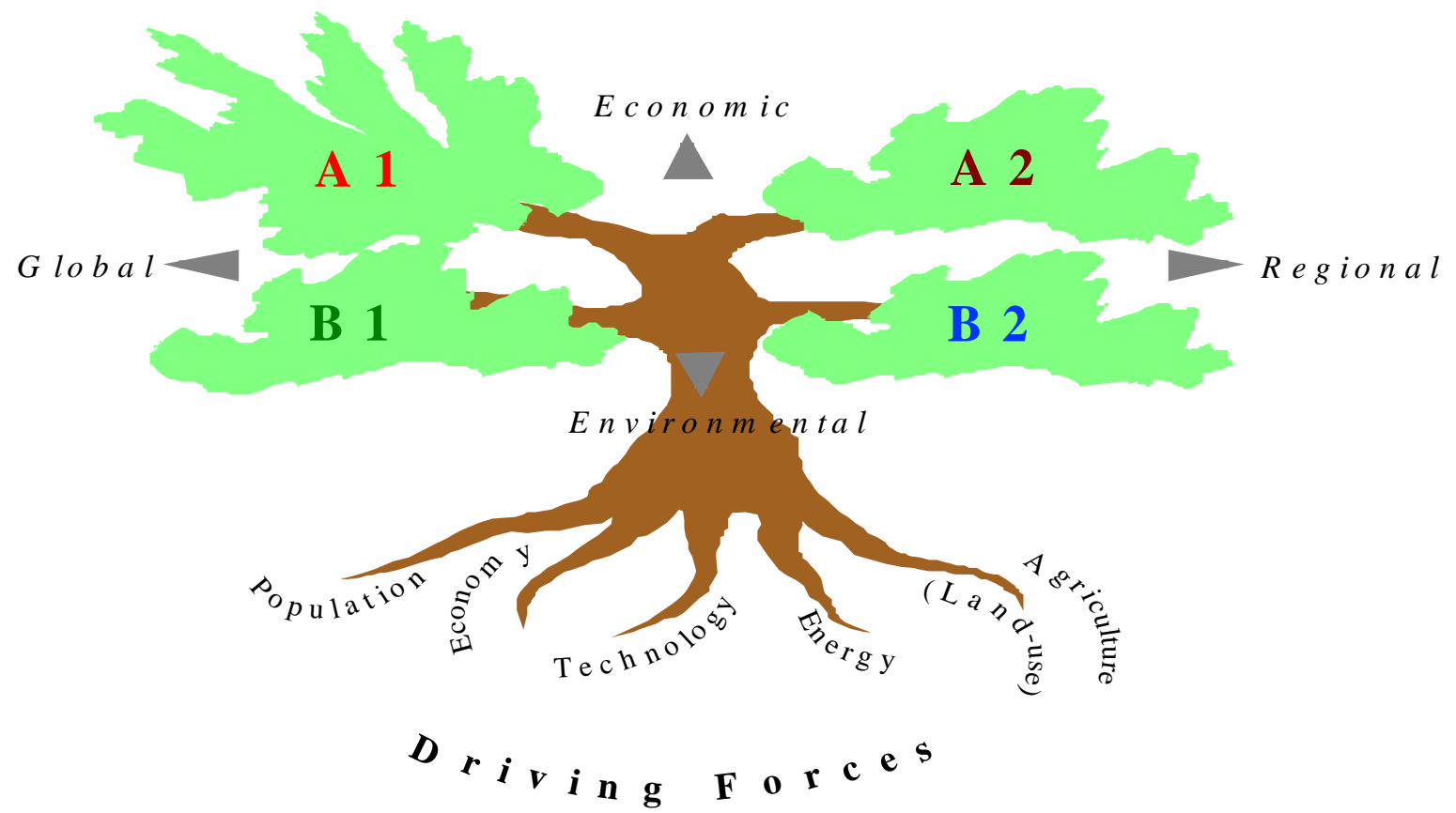
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WG III Co-Chair

Cancun, Mexico, 2 December 2010



SRES Scenarios: Extensively used in CC Research and Assessments since 2000



Diversity of perspectives – New Scenarios

Main research communities involved

- **CM: Climate Modelling Community**
- **IAM: Integrated Assessment Modelling Community**
 - The Integrated Assessment Modelling Consortium (IAMC) is coordinating the work on emissions and economic scenarios
- **IAV: Impacts, Adaptation and Vulnerability Community**

Need of full collaboration among them

New Scenarios & User Needs

- **Scenarios users:**
 - “End-users”: policy and decision makers
 - “Intermediate users”: researchers
- **Review of past scenarios**
- **Overview of the evolving plans in the research community**
- **Options for increasing participation of experts from the developing countries**
- **Policy making perspective**

Policy Perspective

IPCC: Policy relevant assessments, but not policy prescriptive

- **Exploring non-optimal situations or “imperfect worlds” (i.e., regarding technology availability/improvement; fragmented participation)**
- **Assessing the implications of applying different climate policies to baseline scenarios**

Needs and interests of policy communities: Examples

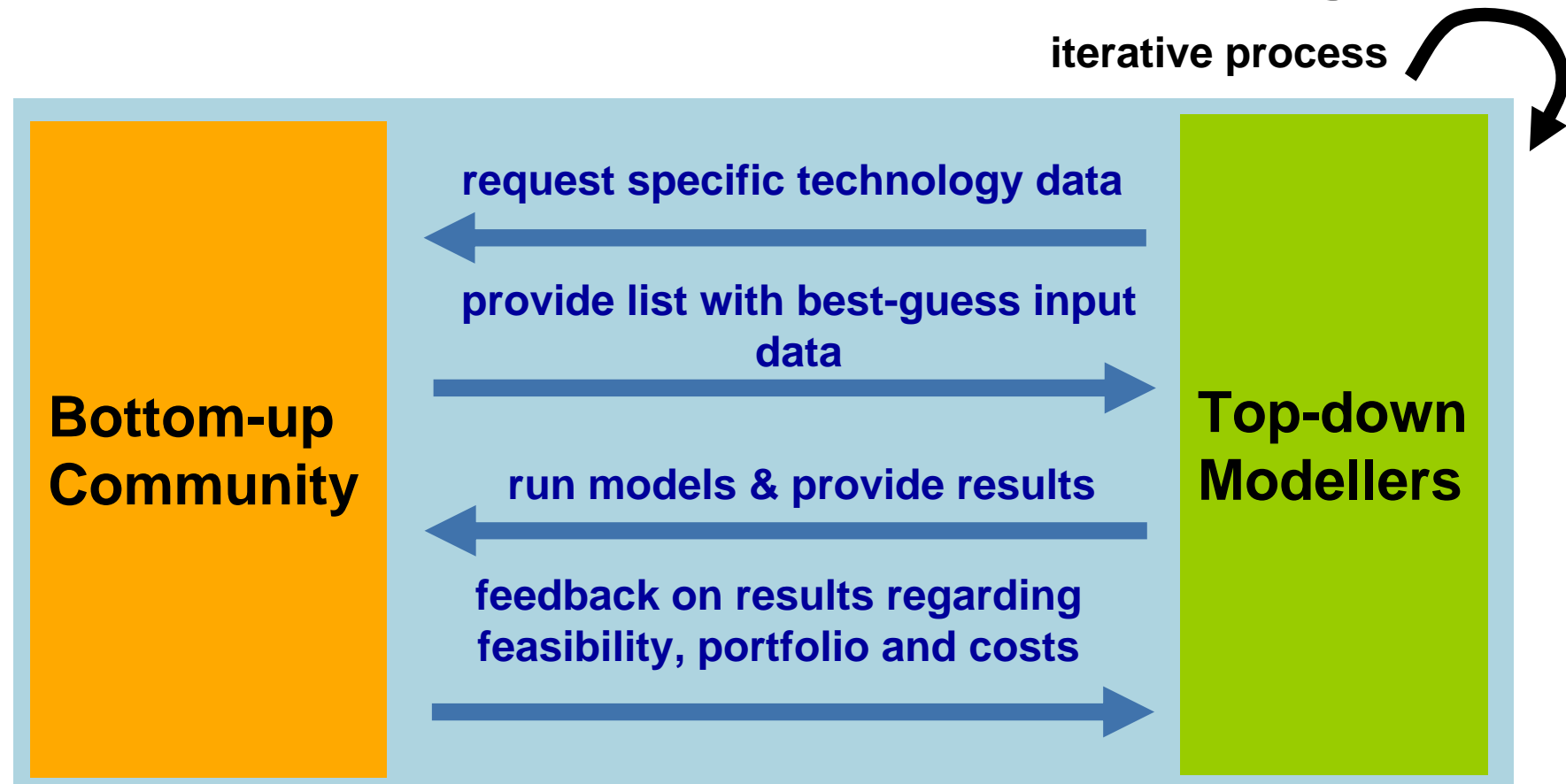
- **Representatives of the policy communities have expressed a strong interest in very low radiative forcing profiles, as a consequence of policy discussions moving towards increasing stringent emissions**
- **Interest of scenario users in the development of regional or national scale socioeconomic scenarios, that are consistent with global scenarios but that also reflect unique local conditions**

Assessing Scenarios. Lessons for AR5

- **Scenarios as key components for consistency among IPCC Working Groups**
- **Integrated Assessment Models (IAMs) allow for modelling different mitigation options**
- **Technology experts contribute to more realistic representation of mitigation options in models, with a long-term perspective**
- **Key role of scenario assessment in Chapter 6 of IPCC WG III AR5: Assessing Transformation Pathways**

Lessons for AR5: Bottom-up – Top-down Interaction

Outcome of SRREN Scenario Expert Meetings



Goal: More realistic representation of policy space

IPCC Workshop on Socioeconomic Scenarios for Climate Change Impact and Response Assessment (WoSES)

- **Berlin, 1-3 November 2010. Around 70 participants**
- **Jointly organised by IPCC WGs II and III**
- **Reference for AR5 authors**
- **General objectives:**
 - facilitate the discussions on new scenarios, as a cross-cutting issue for the IPCC AR5 Cycle
 - receive early inputs from the scientific community
 - enhance coordination across the IPCC WGs II & III

WoSES: Debate focus

- **WoSES as a key step in catalysing the research community to develop narratives and quantitative scenarios to support the AR5 process and identifying issues to be addressed in longer-term research**
- **Consistency with the “Representative Concentration Pathways” + Uncertainties**
- **Ensuring that a sufficient wide range of potential futures is considered**
- **Bridging geographical and temporal scales**
- **Policy perspective**

WoSES: Lessons for IAM & IAV Research Communities

- **Need for a common framework in mitigation and IAV research and assessment, avoiding oversimplification => allow for sufficient degrees of freedom for locally-driven analysis**
- **Exploring:**
 - **Shared Socioeconomic Pathways (SSP)**
 - **Shared Policy Assumptions (SPA)**
 - **Relationships between mitigation and adaptation capacity**
- **Close collaboration between IAM and IAV communities => Mechanisms for jointly developing narratives and scenarios that meet the needs of both groups**

"By assessing a wide range of possible futures through scenarios the IPCC is policy relevant without being policy prescriptive"