



Enhancing research (and observations) for climate change risks and solutions

Comments by the EU

SBSTA 28 Informal discussion on
Research and Systematic observations

Research efforts need to be fit for the task

Climate change is now a practical problem solving issue. Research programmes need to be re-orientated to meet this challenge:

- Our understanding of some key risks is still limited
- A major enhancement of research is urgently needed which focuses on policy needs.
- This implies a whole new level of engagement between the research community and policymakers, a likely significant increase in funding resources, and a truly interdisciplinary approach.
- Are we up to this?

Risks: Cracking some old chestnuts such as

- Reducing uncertainty in climate system sensitivity
- Ice sheet instability and risks to human populations of rapid and sustained sea level rise
- Carbon cycle feedback
- Joined up quantified assessment of impacts (e.g. food production)
- Methane Hydrates – effects of utilisation and CC
- Economic costs of climate change

Solving the problem

- Understanding the scale and nature of the transition to be made - Technology R&D
- Needs and means of adaptation
- Understanding and reducing barriers – economic, social and political
- Comparison of different options to respond to the climate challenge

Some important ongoing developments:

- Earth System Model development
- New stabilization scenarios
- Multi-disciplinary approach
- Developing GCOS

Resourcing an accelerated and stronger evidence base

- The move to problem solving will require a significant increase in human and financial resources
- Current expenditure on research?
- What will we need?
- Human resources - much greater participation of developing country experts.
- Broader financial base – Enhance normal governmental sources; add new sources (from trading for example?), industry engagement, private money and bequests.

How to move forward?

- Joint science/policy research planning conference?
- Consideration at the WCC3?
- Continuing dialogue through the UNFCCC?
- Policy consultation on new research plans?
- Funders meeting?
- Take account of AR5 timescale.