

The IPCC 5th Assessment Report (AR5) Jean-Pascal van Ypersele (@JPvanYpersele) IPCC Vice-chair

CORDEX 2013 Conference, Brussels, 4 November 2013

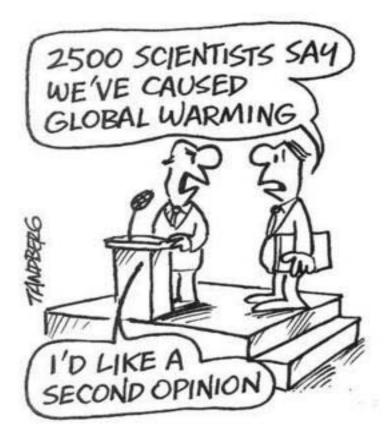


Thanks to the Belgian Federal Science Policy Office for its support

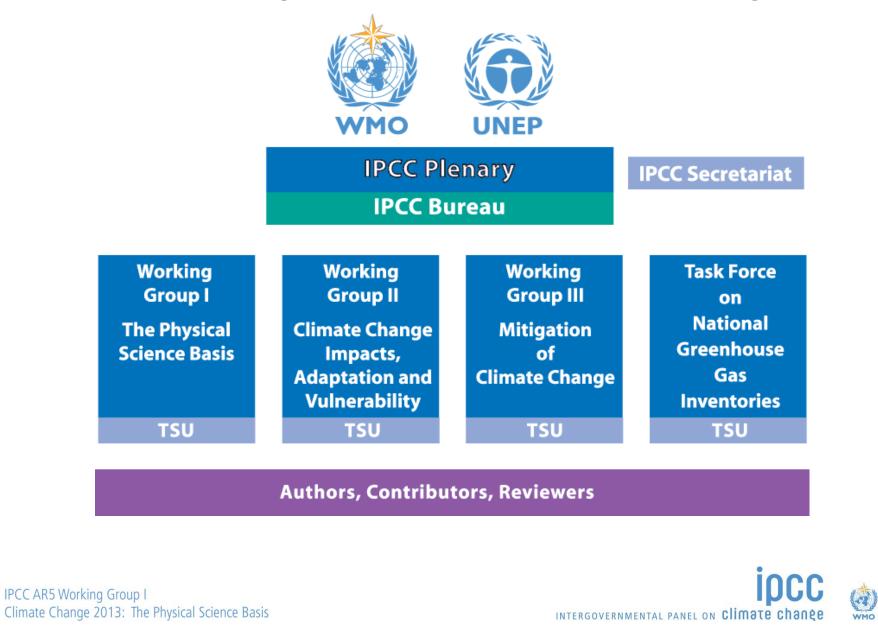
Why the IPCC ?

Established by WMO and UNEP in 1988

- to provide policymakers with an objective source of information about
- z causes of climate change,
- z potential environmental and socio-economic impacts,
- z possible response options.



Structure of the Intergovernmental Panel on Climate Change



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UNEP

IPCC writing cycle (4 years, 831 Lead authors)

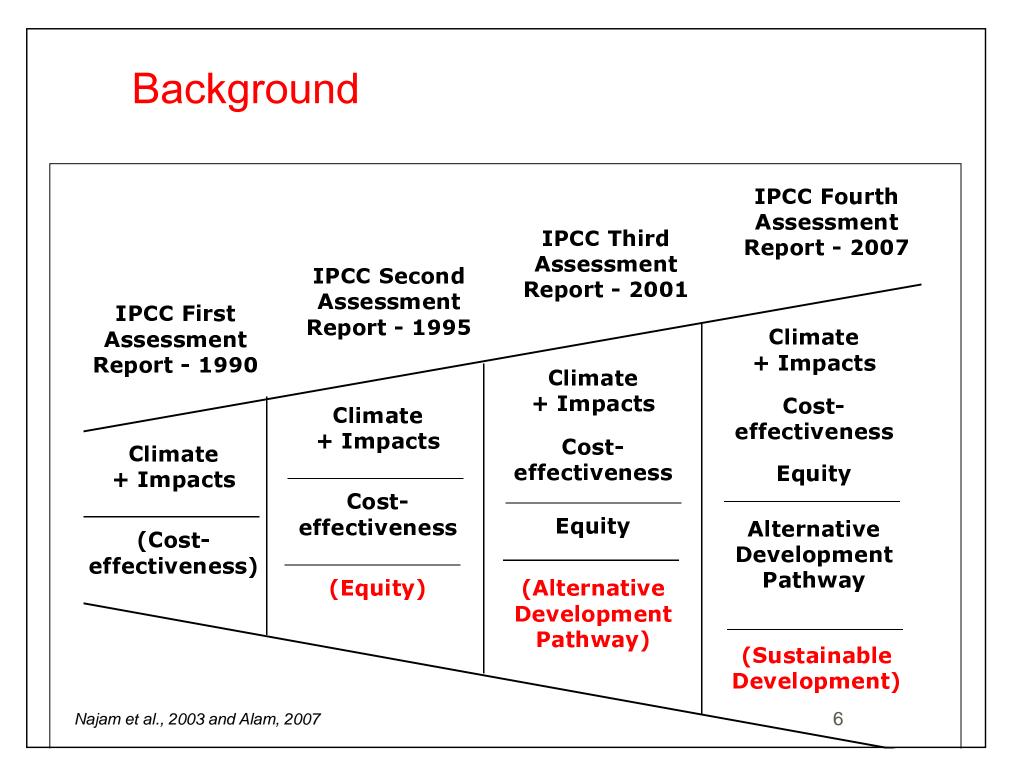
- Plenary decides table of content of reports
- Bureau appoints world-class scientists as authors, based on publication record
- Authors assess all scientific literature
- Draft Expert review (+ Review editors)
- Draft 2 (+ Draft 1 Summary for Policy Makers (SPM) – Combined expert/government review
- Draft 3 (+ Draft 2 SPM)
 Government review of SPM
- Approval Plenary (interaction authors governments) – SPM and full report
- NB: the scientists have the last word!

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Completed IPCC Reports

- 4 Assessment Reports (1990,1995, 2001, 2007)
- 1992 Supplementary Report and 1994 Special Report
- 8 Special Reports (1997,1999, 2000, 2005, 2011)
- Guidelines for National GHG Inventories, Good Practice Guidance (1995-2006)
- 6 Technical Papers (1996-2008)

CLIMATE CHANGE



AR5 is/will be the best ever

- Better integration of Mitigation and Adaptation
- Improved risk-management approach
- Evolving away from the non-mitigation SRES scenarios (SRES= Special Report on Emission Scenarios, 2000)
- Special effort to provide regional information when available
- Sustainable development & equity aspects
- More comprehensive treatment of economic aspects, and of cross-cutting issues
- Emerging issues handled (geo-engineering, …)
- Better handling & communication of uncertainties



TERGOVERNMENTAL PANEL ON Climate chan

The IPCC assessments have influenced global action on an unprecedented scale

1. The First Assessment Report (FAR, 1990) had a major impact in defining the content of the UNFCCC

2. The Second Assessment Report (SAR, 1996) was largely influential in defining the provisions of the Kyoto Protocol

3. The Third Assessment Report (TAR, 2001) focused attention on the impacts of climate change and the need for adaptation

4. The Fourth Assessment Report (AR4, 2007) informed the decision on the ultimate objective (2°C) and is creating a strong basis for a post Kyoto Protocol agreement

5. The Fifth Assessment Report (AR5, 2013-14) will inform the review of the 2° C objective, and be the context for preparing the Paris Paris 2015 agreement



Recent/Coming IPCC Products

- 2011: Special report on Renewable Energy Sources and Climate Change Mitigation
- 2011: Special Report on Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation
- 2013: AR5 WGI report (physical science)
- 2014: AR5 WGII (Impacts & Adaptation); WGIII (Mitigation), Synthesis Report
- All available on www.ipcc.ch



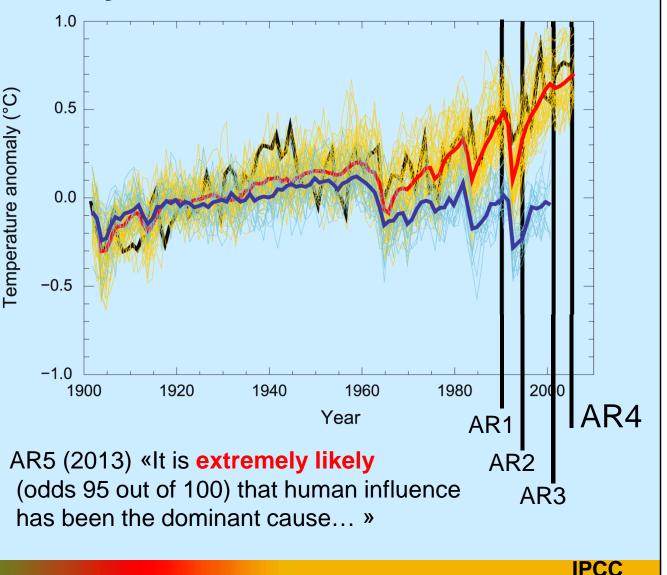
A Progression of Understanding: Greater and Greater Certainty in Attribution

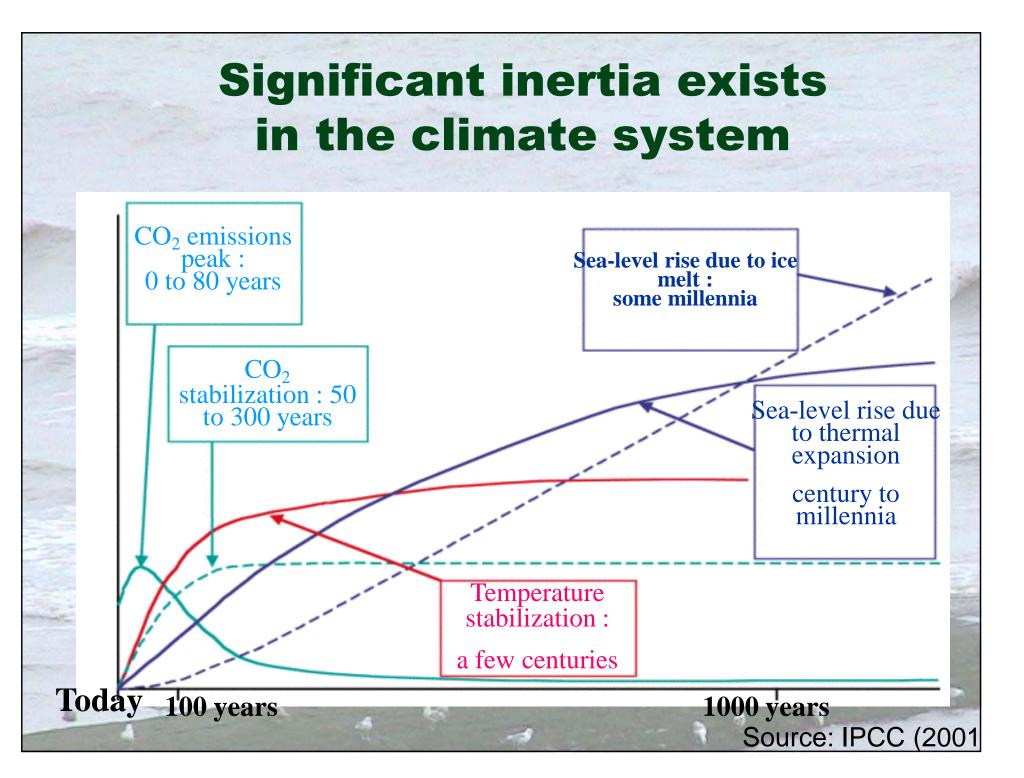
AR1 (1990): "unequivocal detection not likely for a decade"

AR2 (1995): "balance of evidence suggests **discernible** human influence"

AR3 (2001): "most of the warming of the past 50 years is **likely** (odds 2 out of 3) due to human activities"

AR4 (2007): "most of the warming is **very likely** (odds 9 out of 10) due to greenhouse gases"





Conclusion (1): Science has a lot to offer to understand better this un-named "Party" of UNFCCC, with whom one can*not* negotiate: The Climate System, governed by the laws of Nature



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INTERGOVERNMENTAL PANEL ON Climate cha

Conclusion (2): **IPCC** is eager to continue serving the climate and sustainable development process, with policy relevance, without being policyprescriptive



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Useful links:

- IPCC: <u>www.ipcc.ch</u>
- IPCC WGI contribution to AR5: www.climatechange2013.org
- On Twitter:
- @IPCC_CH
- @JPvanYpersele

