

IPCC Special Report

Carbon dioxide capture and storage: A scientific assessment of a climate change mitigation technology

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INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC)



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- Why a Special Report?
- How to write an IPCC Special Report, and who will be writing it?
- The IPCC review process - ensuring consensus on the results
- Contents of the Report

About IPCC

Established by WMO and UNEP 1988:

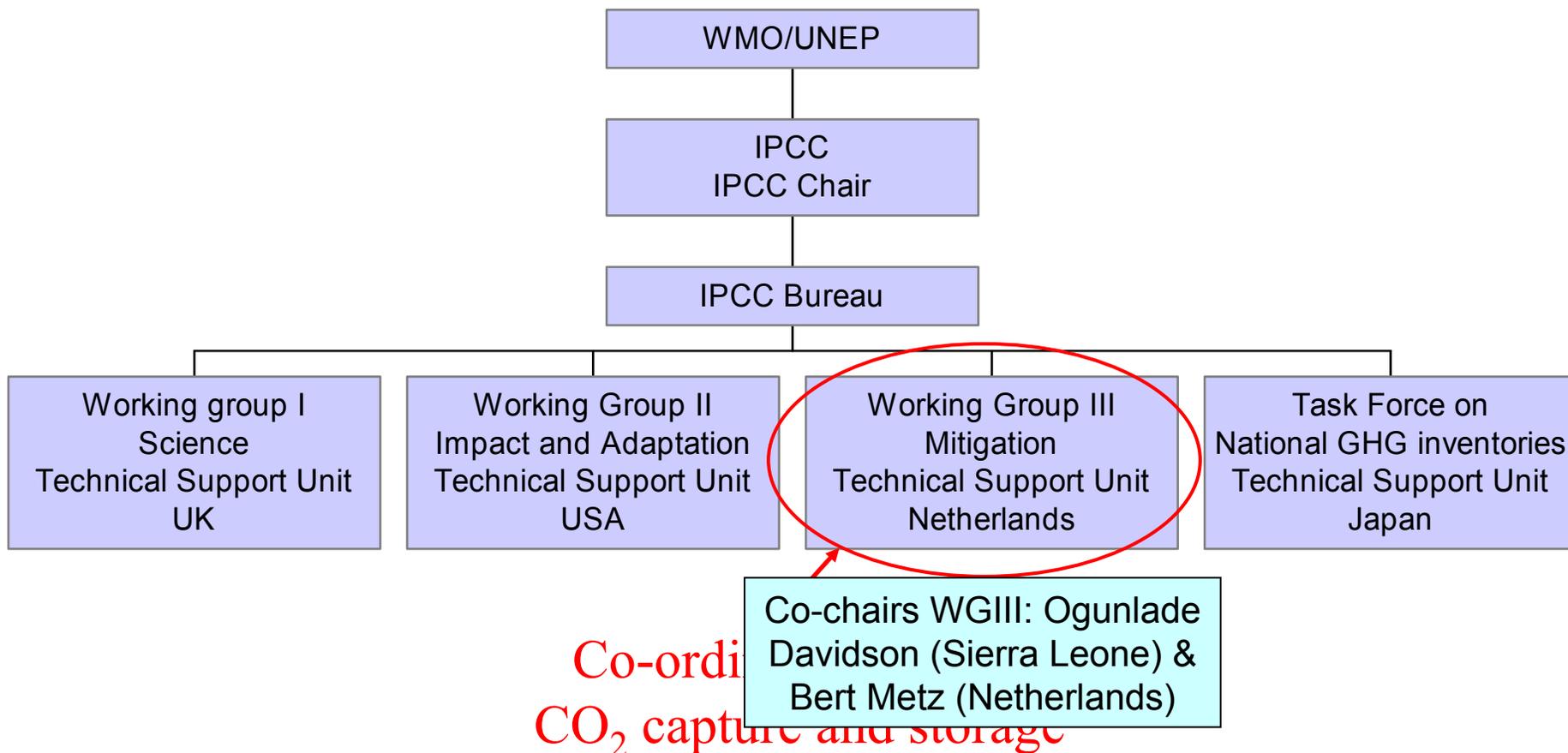
- Assess scientific, technical and socio-economic information on climate change, impacts and options for adaptation and mitigation
- No research, no monitoring, no recommendations; policy relevant but not policy prescriptive
- Publication of reports
- Extensive review processes of its reports
- Support to UNFCCC

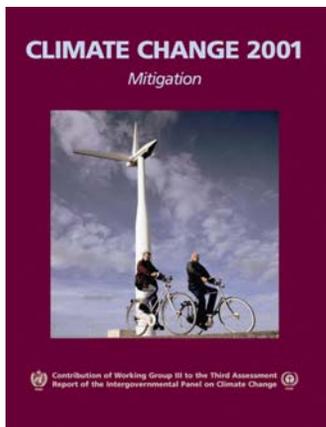


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About IPCC: organisation





About IPCC: Publications

- Assessment Reports (SAR, TAR, ..): State of knowledge on climate change, 3 parts (WG I, II, III); citation from peer-reviewed literature
- Synthesis Report (SyR): Linking assessment reports
- Special Reports (SR): Extended report on specific issue; citation from peer-reviewed literature
- Technical Papers (TP): Report on specific issue; citation from IPCC publications only
- Supporting material: Proceedings of workshops and expert meetings, not official review process

About IPCC impacts

- 1990: First Assessment Report
 - 1992: Framework Convention Climate Change
- 1995: Second Assessment Report
 - 1997: Kyoto Protocol
- 2001: Third Assessment Report
 - 2003: Kyoto Protocol entering into force (?)
- 2007: Fourth Assessment Report
 - 2009:

Why are IPCC publications so influential?

- World-wide effort to gather and combine all views and information on climate change
- Broad involvement of scientists
- Extensive review process
- Based on consensus - if no consensus reached, all opinions to be reflected in report
- Report: owned by authors
- Summary for Policymakers: owned by governments

Why a Special Report on CO₂ capture and storage?

- Request by UNFCCC at COP7 for report on mitigation option of CO₂ storage
- IPCC Plenary XIX (Geneva, April 2002): Workshop to prepare discussion
- Workshop in Regina (Saskatchewan, Canada) in November 2002
- Product Regina workshop: Scoping Paper for consideration at IPCC Plenary XX (Paris, February 2003)

Why a Special Report on CO₂ capture and storage?

- Advice: Contents of Special Report
- IPCC Plenary XX: approval Special Report; publication due for 1st half of 2005

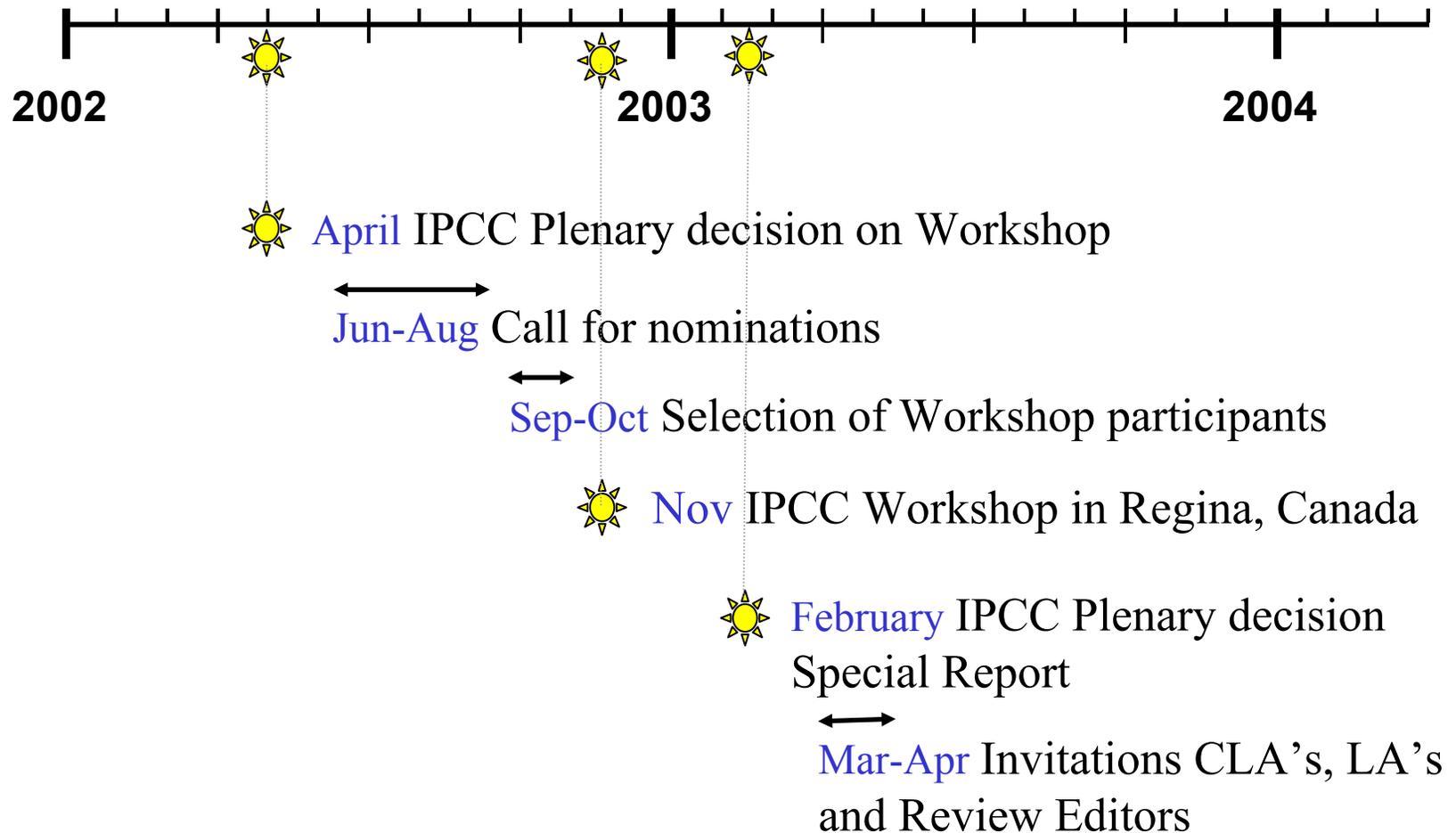
Expected deliverable:

Concise, complete, accessible and objective assessment of carbon dioxide capture and storage

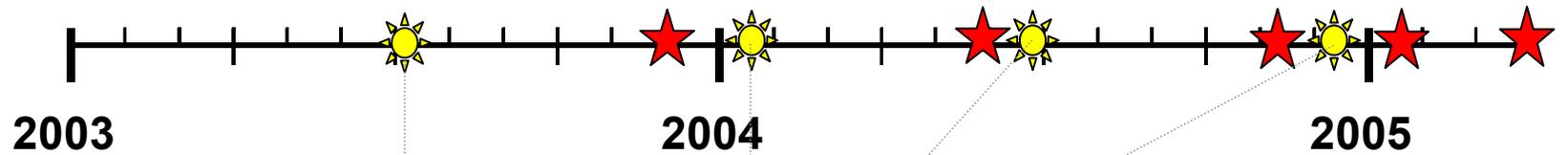
A Special Report on CO₂ capture and storage - Why now?

- Only 3 pages in Third Assessment Report
- Relatively new and unknown GHG mitigation option
- Lots of new information available
- CO₂ capture and storage is or will soon be implemented in many countries, e.g. to meet Kyoto obligations
- Inclusion in the Fourth Assessment Report (2007) is too late and too little room for extensive assessment

Process until now



Process from now



 2-4 July First lead author meeting - Oslo, Norway

 2nd, 3rd and 4th LA meetings

Review process

 Zero order informal draft

 1st order expert review

 2nd order draft
Gov/expert rev

Final government consideration 

Plenary IPCC approval 

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Summary

- The reports published by the IPCC are currently the most widely used reference material for policymakers
- A full assessment of CO₂ capture and storage according to the review procedures of the IPCC will be available in the second half of 2005

Contents of IPCC Special Report on CO₂ capture and storage

- Starting point: chain approach
- CO₂ source → capture → transport → storage
- Context: costs, public acceptance
- Related issues: environmental impacts, safety, inventories

Contents IPCC Special Report

Introduction

Sources

Capture

Transport

Geological storage

- potential
- technology
- environment & safety
- legal issues
- public acceptance

Ocean storage

- potential
- technology
- environment & safety
- legal issues
- public acceptance

Re-use and other storage options

Costs and modelling

Accounting and inventories

Chapters and crosscutting issues

- Chapters: discuss the chain issues; main writing
- Crosscutting groups: will address consistency and representation of issues that arise in different chapters
 1. Costs
 2. Environmental impacts and safety
 3. Legal issues and public perception

Challenges

- Represent balanced views of industry, academia and environmental NGOs
- Geographical balance (incl. developing countries)
- Technology transfer
- Use of ‘grey’ literature
- Strike a balance between understandable but concise wording for policymakers

More information?

- IPCC Workshop in Regina: proceedings, detailed Table of Contents, and Scoping paper
- IPCC in general

www.ipcc.ch

Input from you?

- As Expert Reviewer or Contributing Author during the writing process
- Inform with me!

www.ipcc.ch