

Reporting and review of GHG inventories under the Convention and the Kyoto Protocol

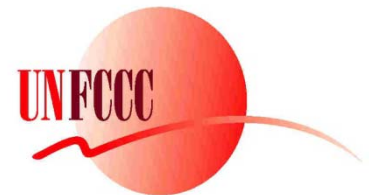
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Overview

- Background
- Reporting requirements Annex I Parties
- Non-Annex I Parties reporting requirements
- Review of Annex I Parties' GHG inventories
- Lessons learned
- Statistical data in the reporting and review process

Background (1)

- Requirement in the United Nations Framework Convention on Climate Change for **all** Parties to develop, periodically update, publish and make available to the COP national inventories on GHG not controlled by the Montreal Protocol, using comparable methodologies, as agreed by the COP (Articles 4 & 12)
- The first COP (1995) decided that Annex I Parties shall submit a GHG inventory annually (on 15 April)
- COP 5 (1999) decided that Annex I Parties' GHG inventories shall be reviewed annually
- Kyoto Protocol (Annex I Parties) reporting and review processes build on the Convention, supplementary information to be reported and reviewed (Articles 5, 7 & 8)
- No reviews of non-Annex I Parties

Background (2)

- Methods agreed by the COP
 - Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories (IPCC 1996)
 - Mandatory for **all** Parties
 - IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories (2000)
 - Mandatory for Annex I Parties
 - Non-Annex I Parties encouraged to use
 - IPCC Good Practice Guidance for land use, land-use change and forestry (2003)
 - Mandatory for Annex I Parties
 - Non-Annex I Parties encouraged to use
- 2006 IPCC guidelines
 - Not adopted under the UNFCCC process
 - Parties can use the available methodologies; need to be justified
 - Have to report in current reporting framework ≠ 2006 IPCC guidelines

Reporting requirements Annex I (1)

- Convention
 - COP 5 (1999) adopted reporting guidelines on annual greenhouse gas inventories ⇒ Common Reporting Format tables and National Inventory Report
 - Reporting guidelines updated several times (COP 8 (2002), COP 9 (2003) and COP 11 (2005))
- Principles
 - **Transparency**: assumptions and methodologies are clear
 - **Consistency**: all inventory years internally consistent – data/methods
 - **Comparability**: IPCC methods and UNFCCC reporting guidelines used
 - **Completeness**: all sources/sinks, gases, years and territories
 - **Accuracy**: promoted via Good Practice Guidance

Reporting requirements Annex I (2)

- Parties are to report on annual basis (15 April) Common Reporting Format (CRF) tables and a National Inventory Report (NIR)

→CRF – Data

- Standardized framework of 40+ tables
- Almost completely quantitative information
- Emissions, Activity Data, Implied Emission Factors, Methodologies, Documentation, Recalculations
- Coverage:
 - Base year to submission year minus two
 - CO₂, CH₄, N₂O, HFCs, PFCs, SF₆ (reported but not reviewed CO, NO_x, NMVOC, SO₂)
 - Cross-sectoral/general; Energy; Industrial processes; Agriculture; Land use, Land-use Change and Forestry; Waste

Reporting requirements Annex I (3)

→ National Inventory Report – descriptive report of inventory

- Description of methodologies:
 - Assumptions
 - References of sources, emission factors, activity data and rationale for their selection
- Key categories analysis
- Uncertainties
- Quality assurance/quality control (QA/QC) procedures
- Improvements & changes in response to findings of previous reviews

Reporting requirements Annex I (4)

- Kyoto Protocol
 - The COP/MOP 1 (2005) adopted Guidelines for the preparation of the information required under Article 7 of the Kyoto Protocol which build on Convention reporting
 - Supplementary information:
 - GHG inventory information, including steps to improve estimates in previously adjusted areas
 - Separated estimates for Article 3, paragraphs 3 and 4, of the Kyoto Protocol activities (KP LULUCF)
 - Information on Art. 3.3 and 3.4 activities (methodologies, location, area, etc.)
 - Information on Kyoto Protocol units
 - Changes in National System
 - Changes in National Registries
 - Information on minimization of adverse impacts in accordance with Article 3, paragraph 14)

Non-Annex I reporting requirements (1)

- Report inventories of GHG in national communication
 - Requirement for reporting
 - COP 2: Initial National Communication inventory for 1994 (1990)
 - COP 8: (Initial, Second, Third) National Communication inventory for 2000
 - Parties are welcome to report for other years than 1990, 1994 and 2000
 - Gases (COP 8)
 - Mandatory to report CO₂, CH₄ and N₂O
 - Encouraged to report HFCs, PFCs and SF₆
 - Encouraged to report CO, NO_x and NMVOCs
 - SO_x included at discretion of Parties

Non-Annex I reporting requirements (2)

- Encouraged to :
 - Use the IPCC good practice guidance
 - Report on institutional arrangements
 - Use of reference and sectoral approaches
 - Report emissions from international bunker fuels (if possible)
 - Report on methodologies used, including brief explanation on emission factors and activity data used
 - Provide a key category analysis
 - Include sectoral tables and worksheets of the IPCC
 - Provide information on level of uncertainty associated with inventory data

Review process (1)

- Convention

- COP 5 (1999) adopted review guidelines

- Review guidelines updated at COP 8 (2002)

- Purpose of review

- Ensure that the COP has adequate and reliable information on annual inventories and emission trends
 - Provide the COP with an objective, consistent, transparent, thorough and comprehensive technical assessment of annual inventory information and a technical assessment of implementation of commitments under the Convention
 - Examine in a facilitative and open manner, reported inventory information for consistency with the UNFCCC reporting guidelines and the IPCC Guidelines and good practice guidance

Review process (2)

- Kyoto Protocol
 - COP/MOP 1 (2005) adopted review guidelines under Article 8 of the Kyoto Protocol
 - Purpose of review:
 - Establish a process for a thorough, objective and comprehensive technical assessment of all aspects of the implementation of the KP
 - Promote consistency and transparency in the review of information submitted by KP Annex I Parties
 - Assist Parties in improving their reporting of information under Article 7 and implementation of commitments under the KP
 - Provide the COP/MOP and the Compliance Committee with a technical assessment of the implementation of the KP
 - Critical for Kyoto Protocol – compliance, participation in emissions trading

Review process (3)

- Trial period established for 2000-2002 inventory submissions, extended to 2003 (first reviews conducted in 2001)
- From 2004 mandatory review of all Annex I Parties annually
- 3-stage approach
 - Initial check ⇒ Status Report
 - Convention: Prepared by secretariat
 - KP: Prepared by expert review teams (ERT)
 - Synthesis and assessment report, parts I and II
 - Part I approximately 170 tables, across Parties comparisons
 - Part II identification of potential problems for individual Parties, not published on secretariat's web site
 - Both prepared by the secretariat;
 - Individual review

Review process (4)

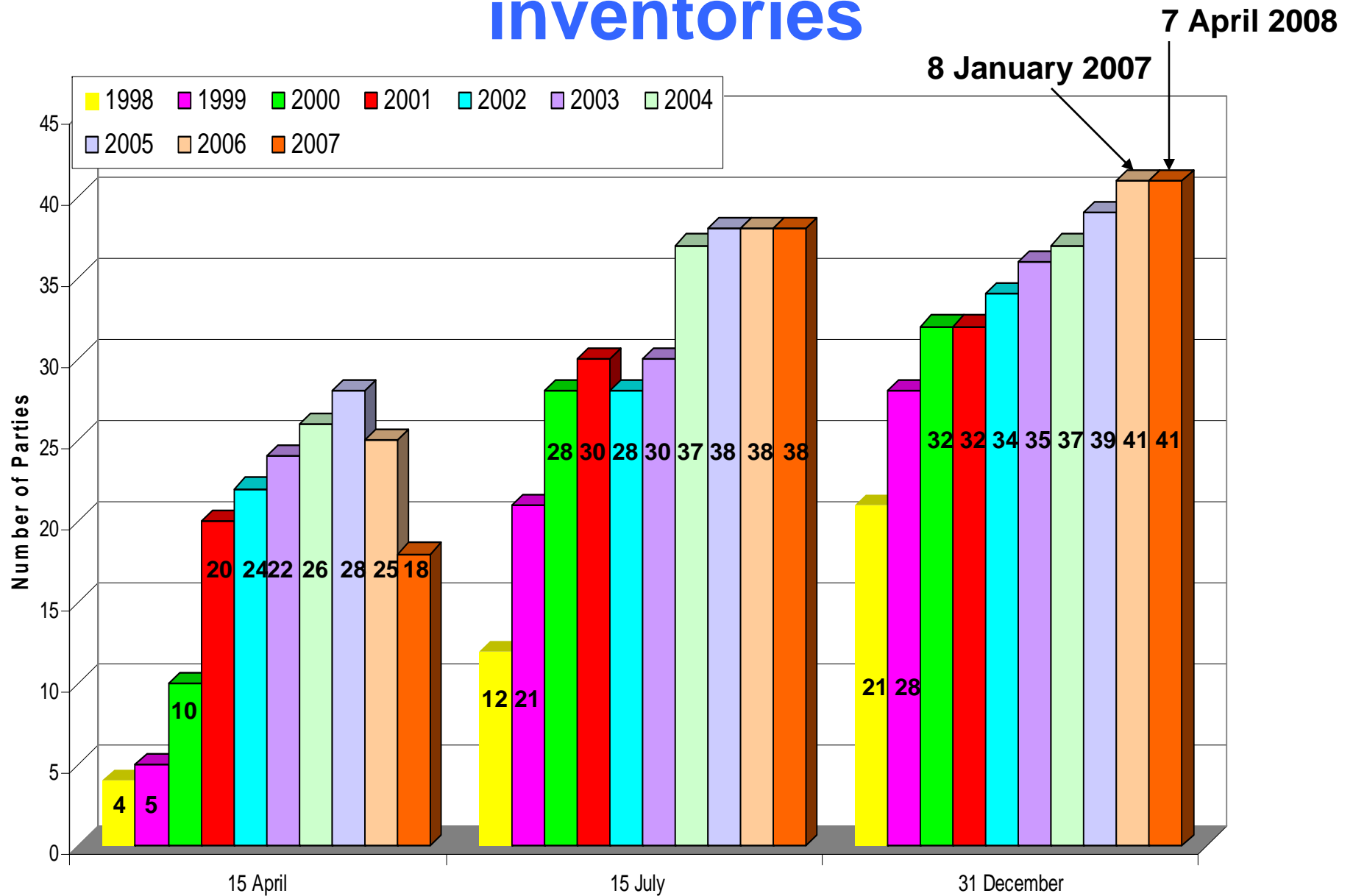
→ Individual reviews

- Experts review teams conduct the review, coordinated by the secretariat
 - Desk, centralized or in-country reviews
 - In-country review for a Party every 5th year
 - Finalization of individual reviews within 3-6 months
 - Different time-frames for different review types
 - Different time-frames between the Convention and the KP
- Parties get an opportunity to comment all reports, *i.e.* all three review stages, before they are published on the secretariat's web site

Lessons learned (Annex I Parties)

- ↑ Number of reporting Parties has increased
- ↑ 2006 inventory submissions from all Annex I Parties
- ↑ Quality and completeness of Annex I Parties' inventories have improved over time
- ↑ Review process is a capacity-building exercise for all involved
 - Party under review
 - Review experts (non-Annex I and Annex I)
- ↓ Challenges
 - Timelines for reporting by Parties (availability of activity data)
 - Timelines in review guidelines, very tight
 - Availability of review experts

Submissions of annual GHG inventories



Statistical data in reporting and review (1)

- Secretariat uses statistical data from other international organizations in the review process, especially the synthesis and assessment report, parts I and II
 - International Energy Agency
 - Food and Agriculture Organization of the United Nations
 - World Bank
 - Montreal Protocol
 - (UN Statistical Division)
- Challenges in comparison with Party data and official statistics
 - Different definitions used
 - Different agencies within a country reporting to UNFCCC and other international organizations

Statistical data in reporting and review (2)

- Challenges with official statistics
 - Confidentiality
 - Availability of statistics for the first years of the time-series (common for EIT Parties, especially where the geographic coverage of the country has changed)
 - Definitions of categories
 - Timeliness of statistical data

Summary

- Reporting requirements different for Annex I and non-Annex I Parties
 - Strict requirements for Annex I Parties
 - Requirements for non-Annex I are more flexible
- Reporting of GHG inventories by Annex I Parties has improved
 - Number of Parties
 - Quality and completeness
- Review process for Annex I Parties only
- Review process has helped in improving Annex I Parties GHG inventories
- National official statistics play an important role in all countries
 - Need to be available on time
 - Definitions need to be the same
- International official statistics used in the review process



Takk!
Thank you !

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