

Revision of the UNFCCC Annex I reporting guidelines – part I

Workshop 1 – SBSTA work programme

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1. Background (Overview of FCCC/SBSTA/2006/9)

2. Views of Parties

Additional slides



UNFCCC Annex I reporting guidelines

- Objectives:
 - a) Assist Annex I Parties to the Convention in meeting their commitments under Articles 4 and 12 of the Convention, and Annex I Parties to the KP in preparing to meet commitments under Articles 3, 5 and 7 of the Kyoto Protocol.
 - b) To facilitate the process of considering annual national inventories, including the preparation of technical analysis and synthesis documentation.
 - c) To facilitate the process of verification, technical assessment and expert review of the inventory information
- Principles and definitions (TACCC)
- Content (national inventory report (NIR) and common reporting format tables (CRF))
- Base year
- Methods
- Key category analysis
- Uncertainty analysis



UNFCCC Annex I reporting guidelines

- Recalculations
- Quality assurance / quality control
- Reporting – general guidance
- Notation keys
- Adjustments (not Article 5.2 under KP)
- NIR requirements
- CRF Requirements
- Record keeping
- Global warming potentials (GWPs) from 2AR
- Annex I – structure of NIR
- Annex II – CRF templates



UNFCCC Annex I reporting guidelines

- *This presentation excludes views of Parties on the CRF templates contained in Annex II of the reporting guidelines (will be presented later in agenda)*
- Parties expressed views on:
 - a) General reporting issues
 - b) Coverage of reporting
 - c) Role of previous IPCC guidelines in the revised UNFCCC Annex I reporting guidelines
 - d) NIR outline

General reporting issues

- TACCC needs to be maintained as a key underlying principle to preparing and reporting of GHG inventories.
- Resolve inconsistencies and ambiguities contained in the current UNFCCC Annex I reporting guidelines, for example:
 - a) Clarity on whether for a given category it is mandatory or non-mandatory to report in an annual inventory submission (*examples provided in next slides*)
- Reflect changes introduced by the 2006 IPCC guidelines with respect to:
 - a) Defining total net emissions
 - b) Additional guidance on recalculations and time-series consistency (to overcome back-casting of new methods to earlier years when no data available)
- Global warming potentials (3AR, 4AR, metric issues)
- Clarification on the use of notation keys



Coverage of reporting

- Reflect changes introduced by the 2006 IPCC guidelines with respect to:
 - a) Sectors (AFOLU and IPPU)
 - b) Categories (e.g CO₂ capture and storage)
 - c) Gases (fluorinated gases (F-gases))
 - d) Methodologies
- Base year and coverage of years in a reported inventory time series, including for F-gases
- F-gases
 - a) Review of coverage of F-gases in current UNFCCC Annex I reporting guidelines
 - b) Which F-gases in 2006 IPCC Guidelines are to be reported
 - c) Potential F-gas emissions



Coverage of reporting

- Guidance on mandatory and non-mandatory reporting:
 - a) Indirect CO₂ emissions from oxidation of CO, NMVOC and CH₄
 - b) N₂O emissions from atmospheric deposition of N₂O and NH₃, and where these emissions are to be reported
 - c) Accounting of emissions from an agriculture category that is mandatory in the current IPCC GPG remains mandatory when required to be reported under the AFOLU construct and in a non-mandatory LULUCF activity
 - d) Reporting of emissions from methodologies contained in the appendices of the 2006 IPCC Guidelines is mandatory



Coverage of reporting

- Specific methodological issues, in the context of coverage of reporting:
 - a) AFOLU
 - Non-anthropogenic emissions
 - Managed land proxy

View expressed that the revised UNFCCC Annex I reporting guidelines should allow Parties to remove non-anthropogenic emissions resulting from natural disturbances and climate variability

- b) Energy/Waste and double-counting:
 - Allocation to the energy sector of emissions from waste used for energy purposes and emissions from waste combustion associated with energy recovery

Role of previous IPCC guidelines

- Need to clarify the:
 - a) The role of the previous IPCC Guidelines in the preparation of annual inventory submissions
 - b) The relationship between the 2006 IPCC Guidelines and the revised UNFCCC Annex I reporting guidelines
 - c) Variation in methodologies introduced by the 2006 IPCC Guidelines when compared to the previous IPCC Guidelines (e.g. LULUCF and inter-annual variability)



NIR

- Merging of reporting requirements under the Convention and KP with respect to institutional arrangements and national inventory systems.
- Improvements:
 - a) Revise structure/outline in-light of the 2006 IPCC Guidelines
 - b) Limiting sub-headings
 - c) Re-organization of outline (e.g. order of annexes)



UNFCCC Annex I reporting guidelines

- Objectives:
 - a) Assist Annex I Parties to the Convention in meeting their commitments under Articles 4 and 12 of the convention, and Annex I Parties to the KP in preparing to meet commitments under Articles 3, 5 and 7 of the Kyoto Protocol.
 - b) To facilitate the process of considering annual national inventories, including the preparation of technical analysis and synthesis documentation.
 - c) To facilitate the process of verification, technical assessment and expert review of the inventory information
- Principles and definitions (TACCC)
- Content (NIR and CRF)
- Base year



UNFCCC Annex I reporting guidelines

- Methods:
 - a) Use IPCC Guidelines to estimate and report anthropogenic emissions/removals
 - b) In preparing inventories Parties shall adhere to the IPCC GPG to improve TACCC
 - c) Parties may use different tiers included in the IPCC Guidelines, in accordance with the decision trees, and may use country-specific methods provided that these methods are compatible with the IPCC Guidelines and the IPCC GPG and are well documented and scientifically based
 - d) For key categories, Annex I Parties should endeavor to use a recommended method, in accordance with the corresponding decision trees of the IPCC GPG, and endeavor to develop EFs and collect AD in accordance with the IPCC GPG
 - e) Use country-specific default EFs that are considered to be more accurate, and transparently reported.



UNFCCC Annex I reporting guidelines

- Key category analysis:
 - a) Shall identify KCs for the base year and the latest inventory year, as described in the IPCC GPG, using the tier 1 or tier 2 level and trend assessment.
- Uncertainties:
 - a) Shall quantitatively estimate uncertainties in the data used to estimate emissions/removals using at least the tier 1 method, as provided in the IPCC GPG.
 - b) Uncertainty in data for all source and sink categories should also be qualitatively discussed in a transparent manner in the NIR, in particular for those categories identified as key.
- Recalculations:
 - a) Time series consistency – same method should be used for all years, with underlying AD and EFs used in a consistent manner.
 - b) In the absence of historical data, alternative methods to recalculate emissions



UNFCCC Annex I reporting guidelines

- QA/QC:
 - a) Shall elaborate a QA/QC plan and implement general inventory QC procedures (tier 1) in accordance with QA/QC plan following IPCC GPG
 - b) Should apply category-specific QC procedures (tier 2) for categories in which significant methodological changes and/or data revisions have occurred.



UNFCCC Annex I reporting guidelines

- Reporting – general guidance
 - a) CO₂, CH₄, N₂O, PFCs, HFCs and SF₆.
 - b) Reported on a gas-by-gas basis in units of mass. F-gases to reported on a disaggregated basis, except when confidentiality provisions are impacted.
 - c) Shall report aggregate emissions and removals (in CO₂ equivalents) at a summary level, using GWP from the SAR (IPCC, 1995)
 - d) Should report actual emissions of F-gases, but can report potential emissions if necessary data not available
 - e) Should report F-gases for all years of the inventory time series
 - f) International bunkers (air and marine) excluded from national totals
 - g) Account for feedstocks and non-energy use of fuels
 - h) Transparent reporting of effects of CO₂ capture from flue gas and subsequent CO₂ storage (which category such effects are included)



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- Completeness:
 - a) Gaps in the inventory should be reported in a transparent way.
 - b) Should use notation keys to fill in blanks in CRF tables:
 - Not occurring (“NO”)
 - Not estimated (“NE”)
 - Not applicable (“NA”)
 - Included elsewhere (“IE”)
 - Confidential (“C”)
- Key category analysis:
 - a) Individual and cumulative percentage contribution to national totals, with respect to level and trend, should be reported in the NIR using tables 7.1-7.3 of IPCC GPG and the CRF (table 7)
 - b) Incorporate LULUCF categories in line with IPCC GPG for LULUCF



UNFCCC Annex I reporting guidelines

- Verification:
 - a) Shall compare estimates of CO₂ from fuel combustion with those obtained using the IPCC reference approach
 - b) Report on any peer review of inventory
- Uncertainties:
 - a) Shall report uncertainties in NIR as well as methods and underlying assumptions
 - b) Report using tables 6.1 and 6.2 of the IPCC GPG and add LULUCF categories as indicated in section 5.2.5 of IPCC GPG for LULUCF
- Recalculations: shall report quantitative information as well as justification for recalculation
- QA/QC: shall on their QA/QC plan and information on QA/QC procedures implemented
- Adjustments:
 - a) Not related to adjustments under Article 5.2 of the KP
 - b) Related to reporting of adjustments to estimate (e.g. climate variations or trade patterns with electricity)



UNFCCC Annex I reporting guidelines

- NIR should include:
 - a) Descriptions, references and sources of information of the specific methodologies, assumptions, EFs and AD, as well as rationale for their selection.
 - b) Indication of the level of complexity (IPCC tiers) applied and a description of the methodology used
 - c) Description of key categories
 - d) Double counting or non-counting of emissions-
 - Whether feedstocks and non-energy use of fuels have been accounted for and where.
 - Whether CO₂ from biomass burning has been estimated and where is it accounted
 - Whether emissions of CO₂ corresponding to atmospheric oxidation of CO, NMVOC and CH₄ emissions from non-combustion and from non-biogenic processes have been accounted for in the inventory
 - Information on missing categories



UNFCCC Annex I reporting guidelines

- NIR should include (c'tnd):
 - e) Information on effects of CO₂ capture from flue gas and subsequent CO₂ storage are accounted for.
 - f) Information on changes in methodologies
 - g) Information on institutional arrangements for inventory preparation



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- CRF should include:
 - a) Summary, sectoral and trend tables for all GHG emissions and removals
 - b) Sectoral background data tables for reporting of:
 - Implied emission factors
 - AD
 - Comparison between sectoral and reference approaches
 - Fossil fuel consumption for non-energy feedstocks, international bunkers and multi-lateral operations
 - c) Tables for reporting, *inter alia*, key categories, recalculations and completeness
 - d) Tables for the latest year and for those years for which any change in any sector has been made
 - e) Trend tables, completeness table, documentation boxes



UNFCCC Annex I reporting guidelines

- Record keeping:
 - a) Relevant information, data, reference material etc should be archived
- Table 1 1995 IPCC global warming potentials values
- Annex I: structure of the annual inventory report
- Annex II: common reporting format tables