

# Introduction to the IPCC and its Task Force on National Greenhouse Gas Inventories (TFI)

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**ipcc**

INTERGOVERNMENTAL PANEL ON climate change

# Contents

- The Intergovernmental Panel on Climate Change (IPCC)
  - ❖ Background and how it works
- The National Greenhouse Gas Inventories Programme (NGGIP)
  - ❖ Development of programme and guidelines

## Intergovernmental Panel on Climate Change

IPCC

# The IPCC

- The IPCC is an intergovernmental body that:
  - ❖ provides scientific, technical and socio-economic advice
  - ❖ to the world community, and in particular to the 170-plus Parties to the United Nations Framework Convention on Climate Change (UNFCCC).
  - ❖ It is open to all Members of UNEP and of WMO.

# IPCC

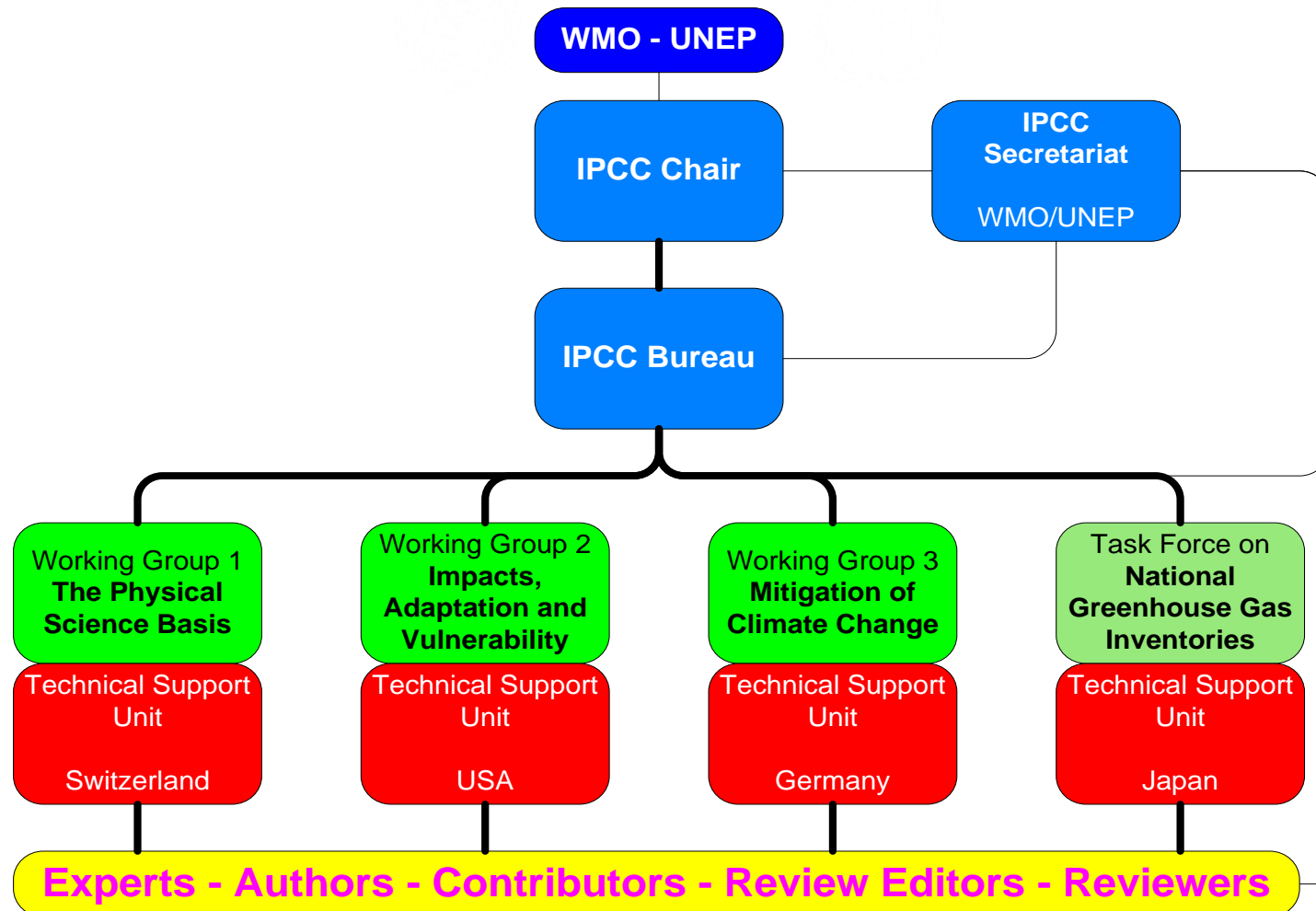
- Established by WMO (World Meteorological Organization) and UNEP (United Nations Environment Programme) in 1988 to;
  - ❖ Make periodic assessments of the science, impacts and the socio-economic aspects of climate change and of adaptation and mitigation options to address it;
  - ❖ Assess, and develop as necessary, methodologies such as the IPCC Guidelines for National Greenhouse Gas Inventories;
  - ❖ Provide, on request, scientific/technical /socio-economic advice to the Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) and its bodies.

# Why?

- Human induced climate change is starting to occur.
- The climate system is so vast and complex that much uncertainty remains.
- Climate change poses a serious challenge to policymakers.
- Policymakers cannot rely on popular interpretations of the evidence or on the views of an individual expert.
- They need an objective summary of all the available research.

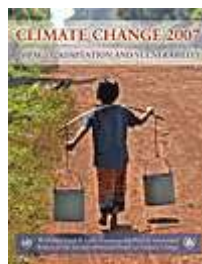
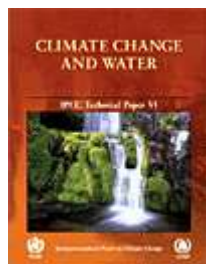
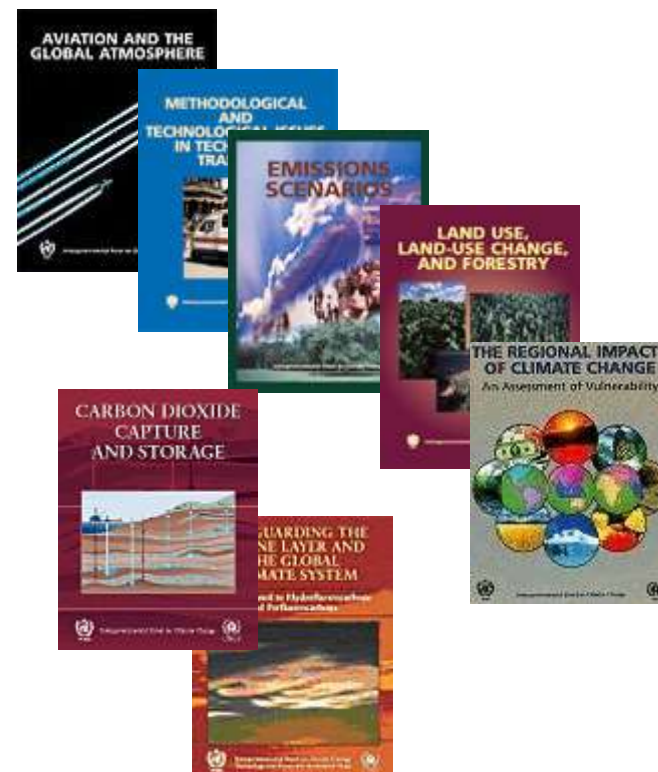


# IPCC – Organisation



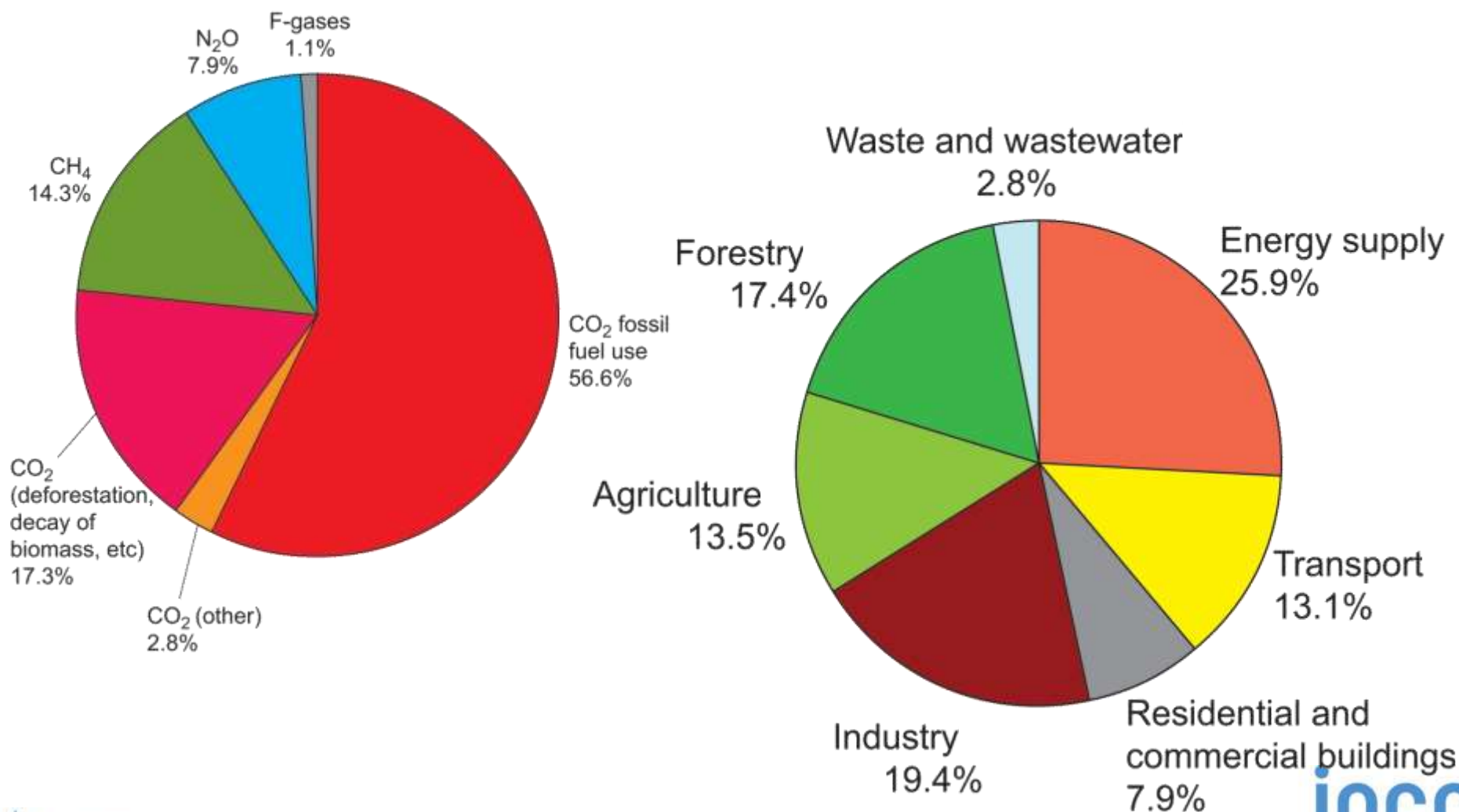
# Non-TFI Products

- Special Reports
  - Aviation
  - Carbon Capture and Storage
- Technical Papers
  - Water
- IPCC Fourth Assessment Report
  - WGI – The Physical Science Basis
  - WGII – Impacts, Adaptation & Vulnerability
  - WGIII – Mitigation of Climate Change
  - Synthesis Report

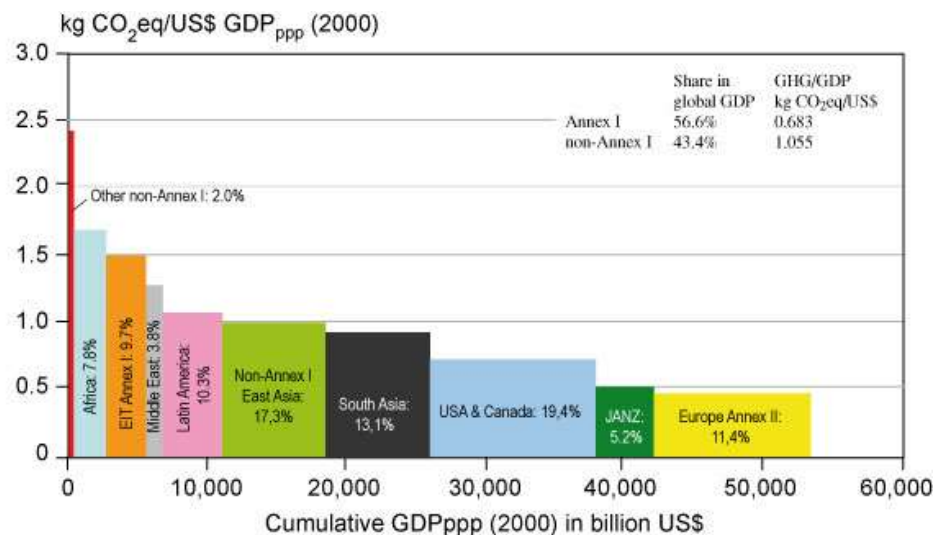
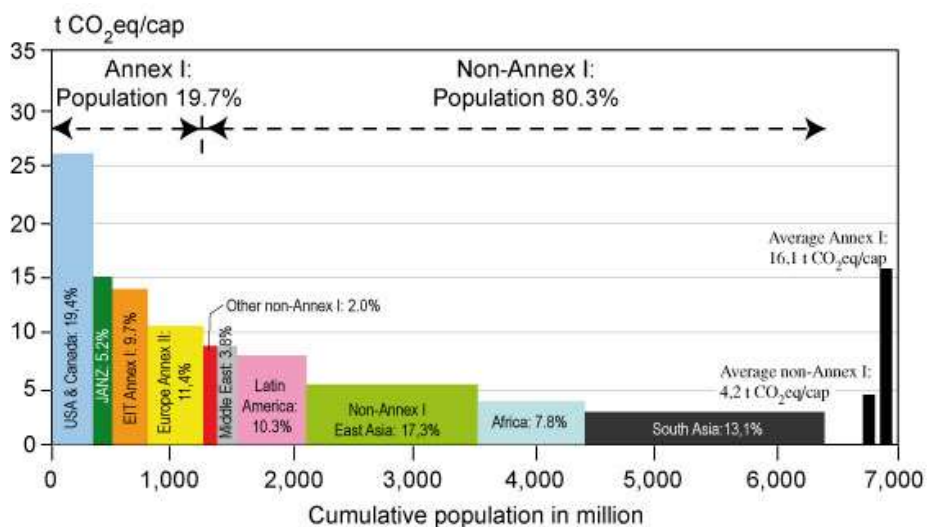




# 2004 – Global Emissions



# Global Emissions



# Task Force on National Greenhouse Gas Inventories

TFI

# Task Force on National Greenhouse Gas Inventories - TFI

- IPCC/OECD/IEA GHG Inventories programme started 1991
- Since 1999 IPCC TFI (TSU at IGES/Japan)
- Objectives and activities
  - to develop and refine an internationally-agreed methodology and software for the calculation and reporting of national GHG emissions and removals;
  - to encourage the widespread use of this methodology by countries participating in the IPCC and by Parties of the United Nations Framework Convention on Climate Change (UNFCCC).





# Inventory Guidelines

- Guidelines give best practice methods
  - ❖ Virtually all sources covered
  - ❖ Alternative methods of different complexity and data needs may be provided with guidance on choice
- These have been developed aiming to be applicable in all countries (both methods and default data are provided)
  - ❖ Ensure best use is made of resources
  - ❖ Can be used with few resources, if necessary
- Have been extensively reviewed to ensure the widest applicability

# IPCC Guidelines for National Greenhouse Gas Inventories

- 1995 Guidelines
- 1996 Revised IPCC Guidelines
- 2000 Good Practice Guidance and Uncertainty Management
- 2003 Good Practice Guidance for Land Use, Land-Use Change and Forestry
- 2006 IPCC Guidelines





# Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories

- Vol 1 Reporting Instructions
- Vol 2 Workbook and Software
- Vol 3 Reference Manual



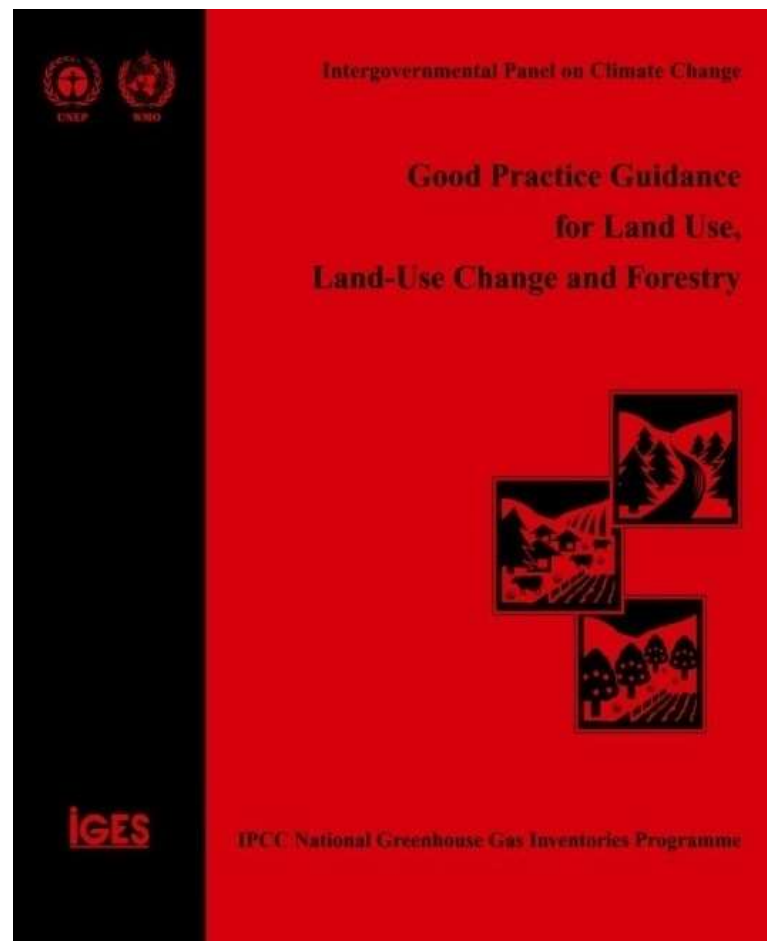
# Good Practice Guidance (1)

- Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories “GPG 2000”
- Complements 1996 Guidelines, pub 2000
- **good practice guidance** defined as: inventories that are neither over nor underestimates so far as can be judged, and in which uncertainties are reduced as far as practicable



# Good Practice Guidance (2)

- Good Practice Guidance for Landuse, Landuse Change and Forests - “GPG LULUCF” - Published in 2003
- Extends Good Practice to LULUCF sectors
- Provides supplementary methods and good practice guidance for estimating, measuring, monitoring and reporting on carbon stock changes and greenhouse gas emissions from LULUCF activities under Article 3, paragraphs 3 and 4, and Articles 6 and 12 of the Kyoto Protocol



# 2006 IPCC Inventory Guidelines

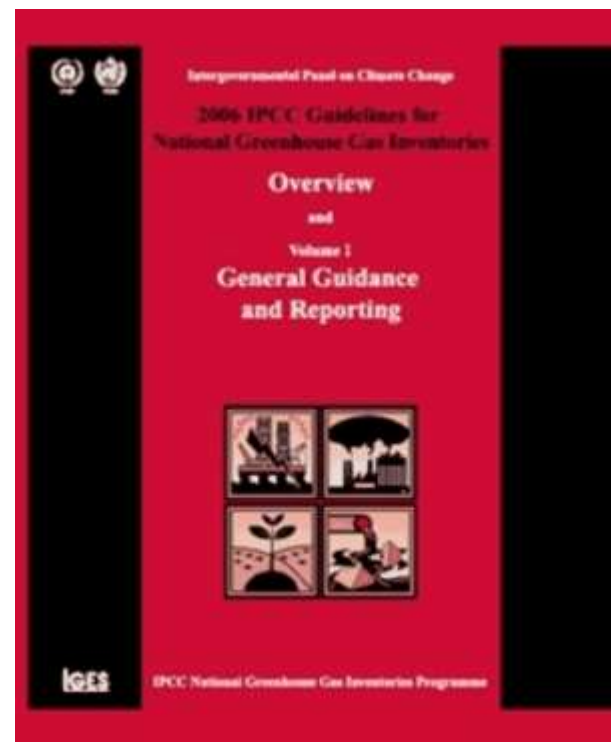
- In 2001, SBSTA17 invited the IPCC to revise the Revised 1996 IPCC Guidelines, taking into consideration the relevant work under the Convention and the Kyoto Protocol, and to aim to complete the work by early 2006.
- IPCC Panel XXI (Vienna, November 2003) approved the Table of Content and Terms of Reference.
- IPCC Panel XXV, (Port Louis, Mauritius, April 2006) accepted and adopted the 2006 IPCC Guidelines
- This was based on:
  - ❖ Revised 1996 IPCC Guidelines, GPG 2000, GPG-LULUCF, 2003,
  - ❖ IPCC Emission Factor Database,
  - ❖ The experience in the use of GLs/GPGs as well as experience from UNFCCC inventory reviews (e.g. FCCC/SBSTA/2003/INF.10),
  - ❖ Advances in science and technology.

# 2006 IPCC Inventory Guidelines

The 2006 Guidelines consists of 5 volumes based on cross-cutting issues and individual sectors:

## Overview

1. General Guidance and Reporting
2. Energy
3. Industrial Processes and Product Use (IPPU)
4. Agriculture, Forestry and Other Land Use (AFOLU)
5. Waste



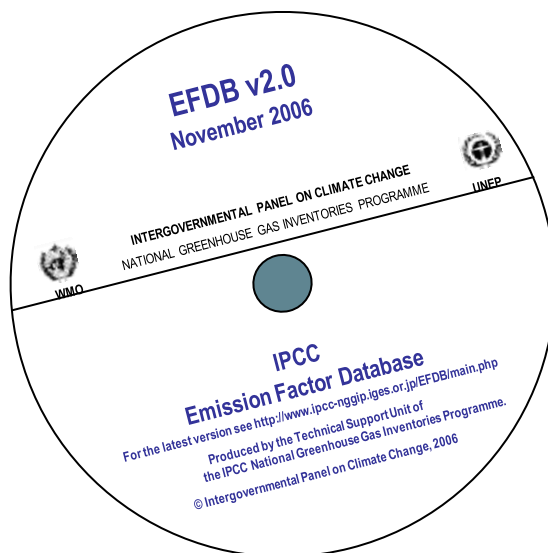
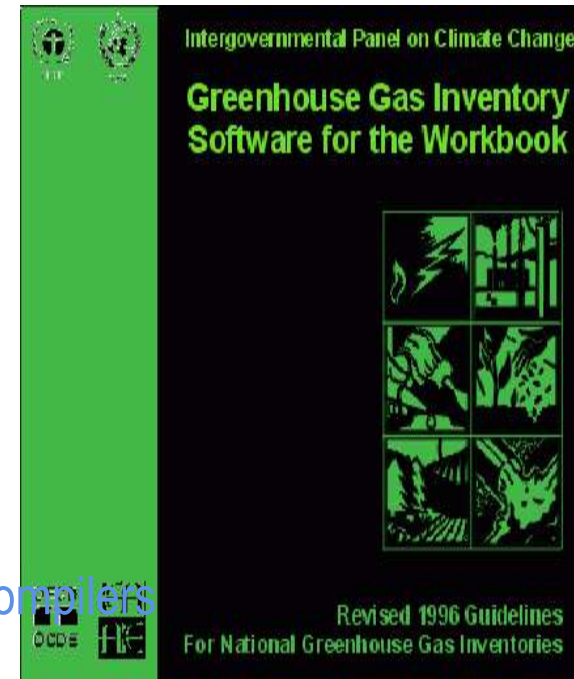
# New Sources and Gases

- New gases and sources are added where they are judged to be significant and there is sufficient technical information (including a GWP in the TAR) available to justify reliable methods. [Developed countries are now using GWPs from the Fourth Assessment Report.
- Development of new methods for ozone precursors will be addressed under other agreements and conventions (e.g. UNECE/TFEIP Guidebook on Emission Inventories).



# Other Products

- IPCC Software
  - Implements methodologies
- Emission Factor Database (EFDB)
  - Repository of emission factors for use by compilers



# Existing IPCC Tools

- Software
  - ❖ Finalize software for the 2006 Guidelines.
    - More robust
    - Keep simple approach
    - Software easily downloadable
- EFDB
  - ❖ Continue improvement (e.g., more user-friendly interface)
  - ❖ More actively search out data (e.g., data meetings, literature search)
  - ❖ Publicise
- Response to request from UNFCCC
  - ❖ Methodological work produced a supplement to the 2006 Guidelines for wetlands
  - ❖ Scope of work planned to address Gaps in other parts of the 2006 IPCC Guidelines
- Awareness Raising
- Support to users of the guidelines

# Summary

- The IPCC produces methodology reports on GHG Inventories as well as assessment reports on climate change.
- IPCC reports are based on the available literature and information sources and are extensively reviewed prior to acceptance.
- The latest IPCC Assessment report emphasises the significance of emissions of greenhouse gases
- The IPCC approach has evolved over time as experience and knowledge has grown
- IPCC methodologies are used for reporting to the UNFCCC
- The latest guidance, the 2006 IPCC Guidelines for National Greenhouse Gas Inventories represent the best available methods applicable globally for comparable and consistent inventories

**Thank You**

**Any Questions?**