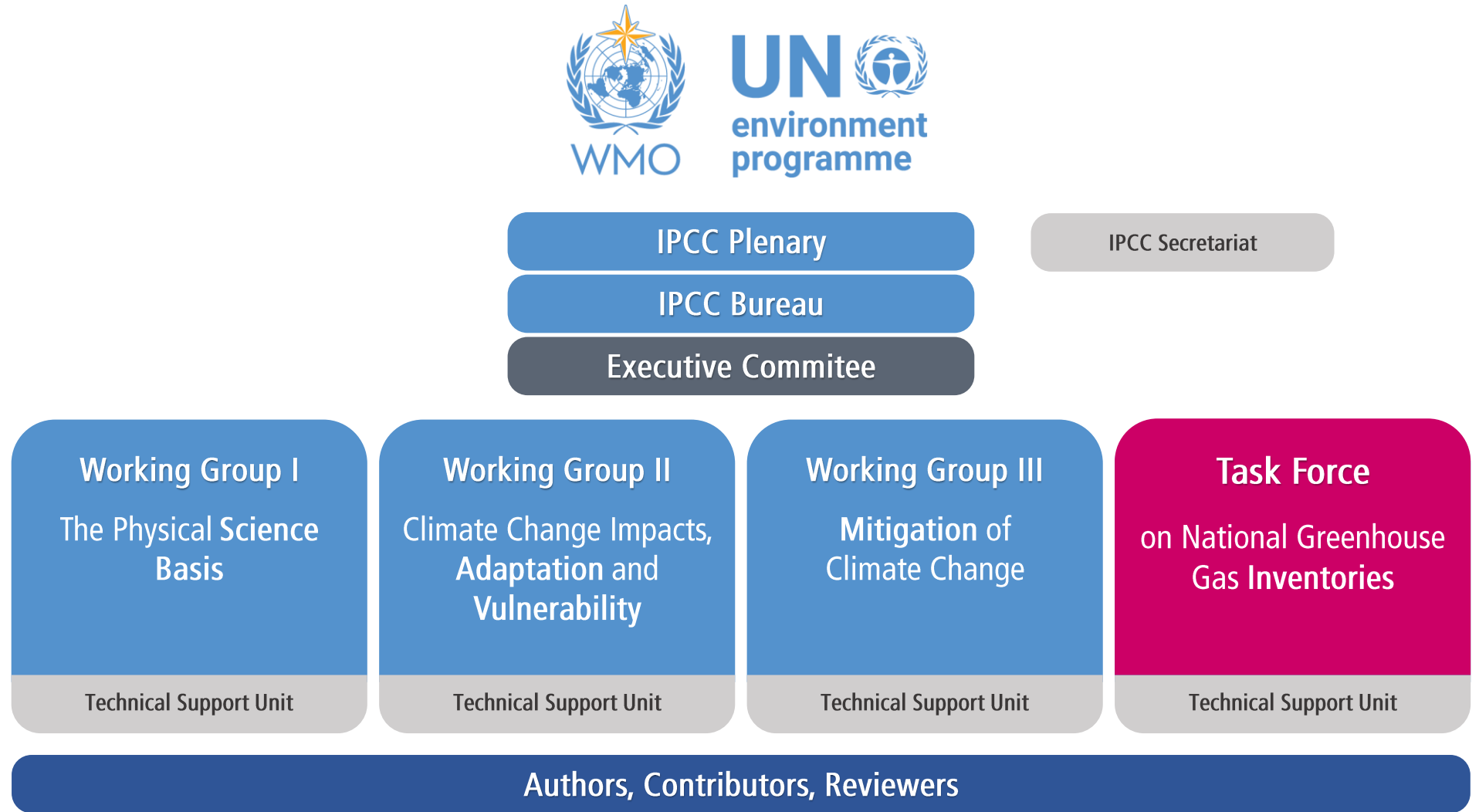


## The Seventh Assessment Report Cycle of the IPCC:

### Activities of the Task Force on National Greenhouse Gas Inventories (TFI) as supported by TSU

IPCC TFI TSU

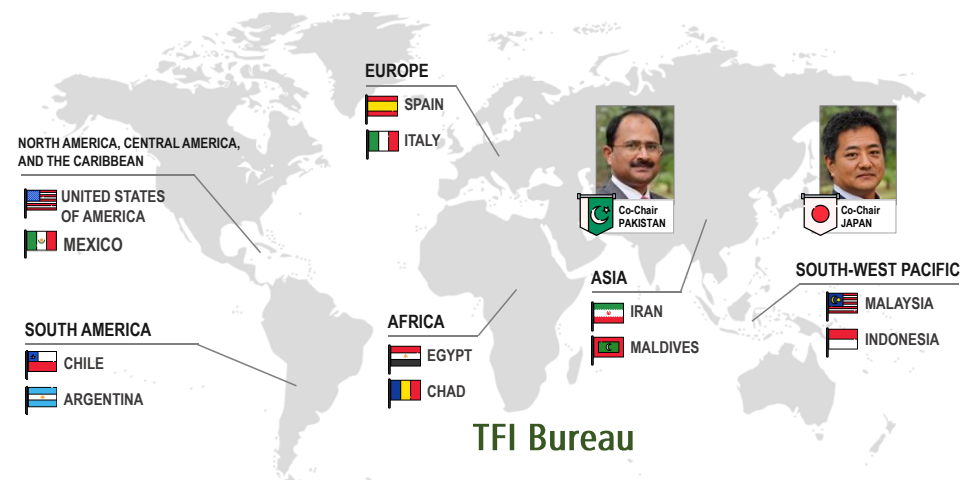
## IPCC Governance structure



The IPCC was created in 1988 by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP)

# Task Force on National GHG Inventories (TFI)

- The TFI produces **methodologies** for the estimation of national GHG emissions and removals by governments.
- The TFI also encourages the widespread use of the IPCC methodologies through **expert meetings, information materials**, and the production of the **IPCC inventory software**, which facilitates easy and accurate use of the methodologies.
- The work of the TFI is undertaken at the request of IPCC member governments and is managed by two elected Co-Chairs and an elected Bureau with twelve members supported by a **Technical Support Unit** based in Japan.

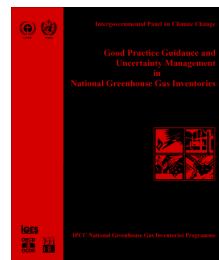


# History of TFI Guidance on national GHG inventories

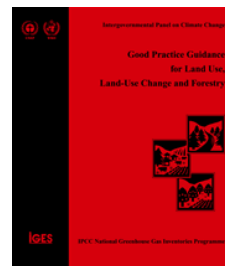


1995 IPCC Guidelines

**Revised 1996 IPCC Guidelines for National GHG Inventories**



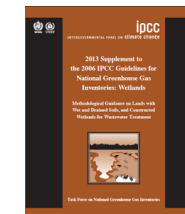
Good Practice Guidance and Uncertainty Management in National GHG Inventories



Good Practice Guidance for Land Use, Land-Use Change and Forestry

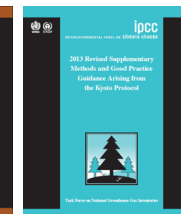


**2006 IPCC Guidelines for National GHG Inventories**



2013 Revised Supplementary Methods and GPG Arising from the Kyoto Protocol

2013 Supplement to the 2006 IPCC Guidelines for National GHG Inventories: Wetlands



2019 Refinement to the 2006 IPCC Guidelines for National GHG Inventories

**1995/1996**

**2000**

**2003**

**2006**

**2013**

**2019**

*Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories (1996 IPCC Guidelines)*  
First set of full guidance applied by UNFCCC Parties to prepare national GHG inventories. The *1996 GL*, the *GPG* and *GPG-LULUCF* were used together for reporting under the UNFCCC and the Kyoto Protocol

*2006 IPCC Guidelines for National Greenhouse Gas Inventories (2006 IPCC Guidelines)*  
Second set of full guidance. Parties to the Paris Agreement are to use the 2006 GL and subsequent refinement as agreed by CMA

## The IPCC Guidelines in the UNFCCC

- The IPCC develops methodological guidance for national GHG inventories.
- The UNFCCC **determines which IPCC methodological guidance are used** for reporting under the UNFCCC.
- Under the Paris Agreement:
  - ✓ Each Party shall use the *2006 IPCC Guidelines for National Greenhouse Gas Inventories*, and shall use any subsequent version or refinement of the IPCC guidelines agreed upon by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA).
  - ✓ Each Party is encouraged to use the *2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands* (Decision 18/CMA.1).
  - ✓ Parties may use on a voluntary basis the *2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories* (Decision 5/CMA.3)

## Methodology Reports in AR7 cycle

- For the IPCC's Seventh Assessment cycle the TFI has been tasked with the production of two Methodology Reports:

1. 2027 IPCC Methodology Report on Inventories for Short-lived Climate Forcers (SLCFs)

- Outline of Report approved at IPCC 61 (Jul. 2024)
- Report to be completed in second half of 2027
- It is a standalone report but will follow the structure, principles, approach of the 2006 IPCC Guidelines.

2. Methodology Report on Carbon dioxide removal technologies and carbon capture utilization and storage activities

- Outline of the Report considered at IPCC 62 (Mar. 2025) but not agreed. It will be discussed again at IPCC 63, to be held late 2025.
- Call for nominations immediately after approval of the outline.



# Seventh Assessment Cycle Timeline





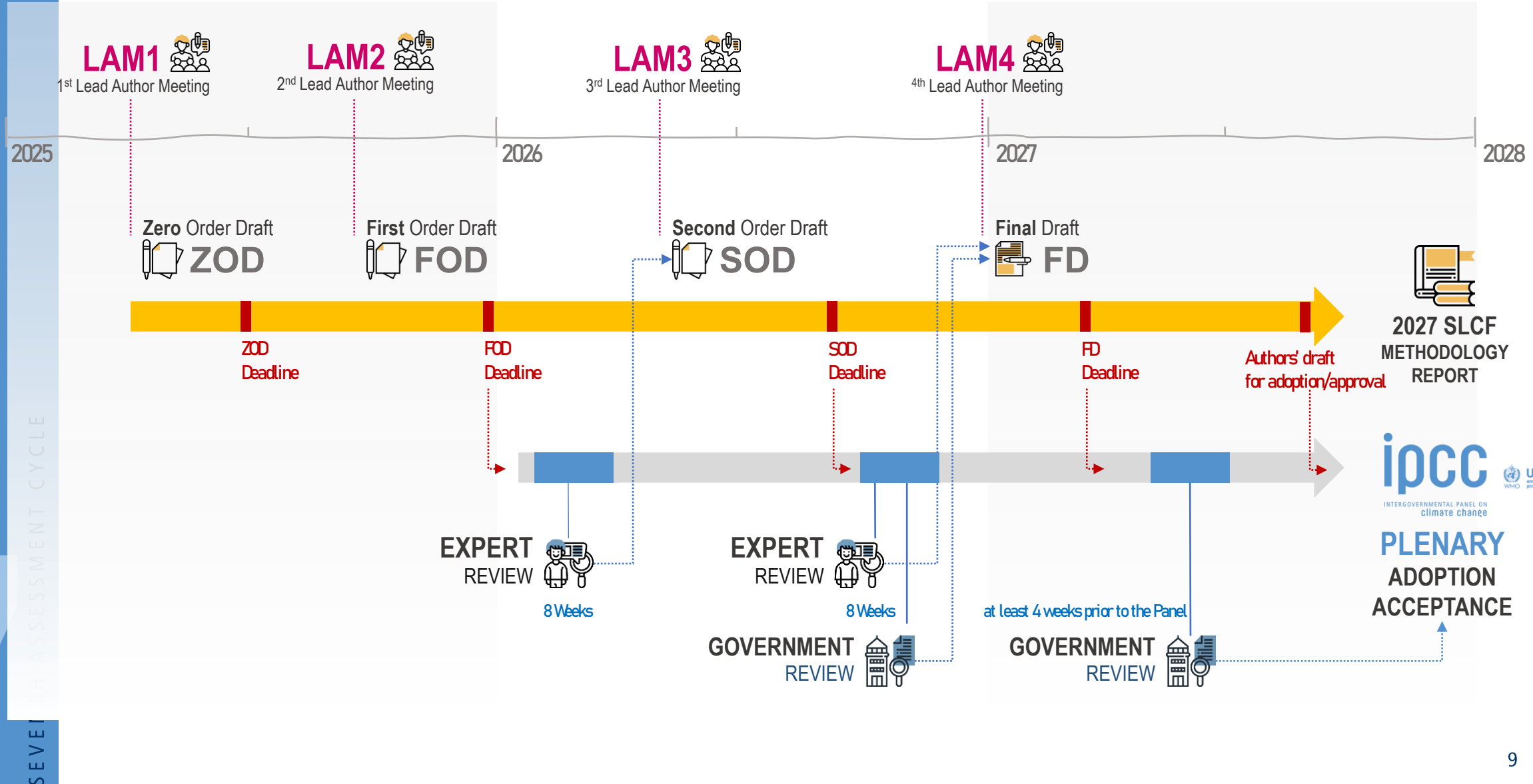
## Overview of the SLCF Methodology Report

- Title: *2027 IPCC Methodology Report on Inventories for Short-lived Climate Forcers*  
Format: Consistent with categories and build on the methodological guidance of: *2006 IPCC Guidelines, Wetlands Supplement, 2019 Refinement*.  
The Report will cover all IPCC inventory sectors and all relevant categories.
- Species in the scope:
  - ✓ NO<sub>x</sub>, CO, NMVOCs, SO<sub>2</sub>, NH<sub>3</sub>, BC and OC, as well as primary particulate matter relevant for radiative forcing, as appropriate.
  - ✓ H<sub>2</sub> emissions relevant for radiative forcing are to be considered by the authors as an Appendix subtitled "Basis for future methodological development"
  - ✓ CH<sub>4</sub> and halogenated species are not in the scope, since these are in the scope of the *2006 IPCC Guidelines for National Greenhouse Gas Inventories*.

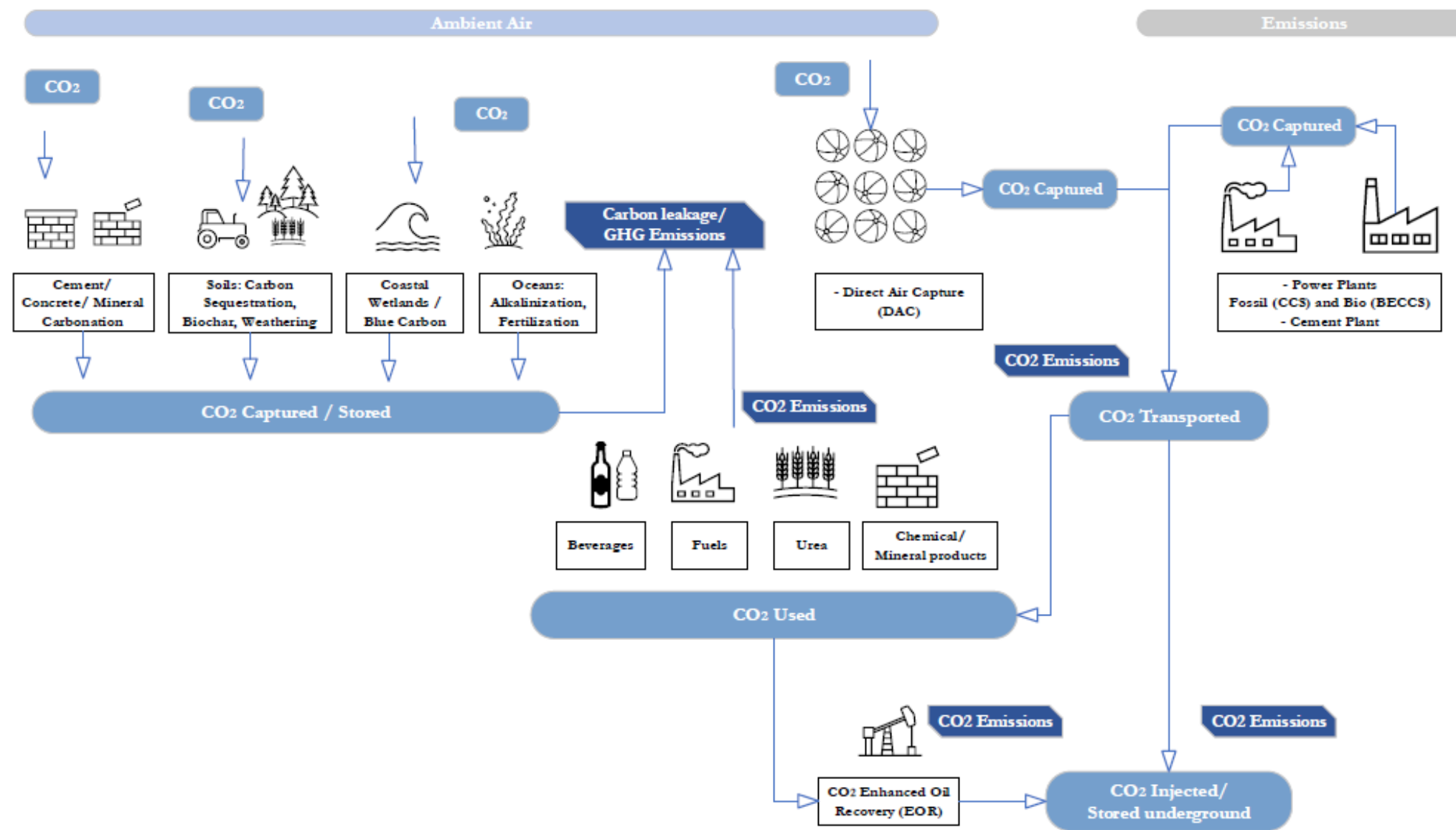
For outline document, see [https://www.ipcc.ch/site/assets/uploads/2024/08/Decision\\_SLCF.pdf](https://www.ipcc.ch/site/assets/uploads/2024/08/Decision_SLCF.pdf)



# Drafting to Adoption



# CDR/CCUS Methodology Report



*Source: Background paper to CDR/CCUS Scoping Meeting*

# IPCC Inventory Software

- Developed by the TFI to help countries **create national GHG inventories**.
- Facilitates systematic **collection**, **calculation**, and **reporting of emissions/removals** data, ensuring consistency with good practice in the IPCC guidelines, as well as with reporting requirements under the UNFCCC

## Key Features:

- Adaptable to national circumstances
- A framework for efficient data collection
- Collaboration among multiple experts simultaneously
- An in-country archive system
- Consistent with IPCC guidelines
- Interoperability with UNFCCC reporting tool

A unique system, complete, that does all the GHG inventory

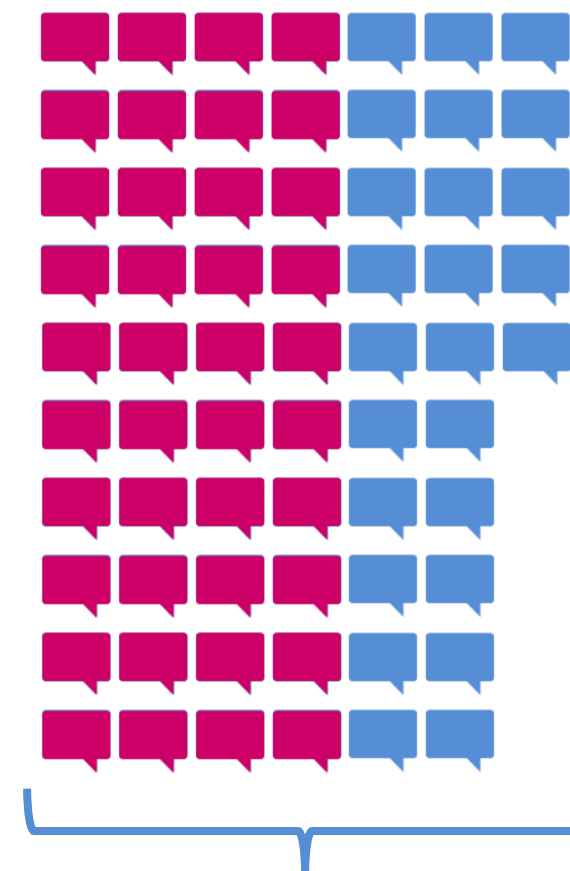
Link: <https://www.ipcc-nggip.iges.or.jp/software/index.html>



# IPCC Inventory Software Usage

- Facilitates the use of IPCC Guidelines worldwide and promote transparency under the Paris Agreement
- Widely adopted by developing countries
  - ✓ 67 developing countries submitted their first emissions inventory
  - ✓ 46 countries (two-thirds) used the IPCC software
- Helps overcome capacity challenges for first-time reporting
- Many plans to expand IPCC software use (user community service, guidebook publications, and interactive sessions to demonstrate the use of the Software)

## Parties to the UNFCCC reporting Inventories for the first time



65 submissions from  
Non-Annex-I parties

# Emission Factor Database

- Library of emission factors/parameters and other relevant data that can be used for estimation of national GHGs emissions/removals:
  - ✓ Default values from IPCC Guidelines
  - ✓ Data from peer-reviewed scientific papers
  - ✓ Data from other publications
- Open to new data proposals
- Regularly evolves with the addition of new data
- Investing in IT in 2027

Link: <https://www.ipcc-nggip.iges.or.jp/EFDB/main.php>



## Other products and activities

### Consolidation of IPCC Guidance

- Over time, multiple versions of the IPCC guidelines have been produced. Consolidating these documents into a unified, user-friendly framework will streamline their use and improve global understanding and implementation.
  - 2006 IPCC Guidelines
  - 2013 Wetlands Supplement
  - 2019 Refinement
- The product is not an IPCC Methodology Report but a TFI product for the GHG inventory compilers.

### Expert Meetings

- The TFI holds Expert Meetings to consider specific GHG inventory topics.
- Two Expert Meetings were held in 2024:
  - CDR/CCUS: *Present new information on CDR technologies and CCUS and consider gaps in IPCC guidance.*
  - Land: *Understand different approaches used by GHG inventory and modelers in estimating CO<sub>2</sub> emissions from land.*

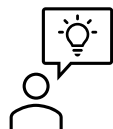
## Ways to contribute



Direct contribution as a Coordinating, Lead Author, or Review Editor.



Publish literature containing emission/removal methodologies, emission factors and parameters, and other relevant information.



Submit Review comments as an Expert/Government.



Use and submit feedback comments on Inventory Software, submit data to EFDB database.



Get in touch with TFI Co-Chairs, TFI TSU.



Thank you