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The 7th Greenhouse Gas Inventory System Training Workshop

Outline of Enhanced Transparency Framework (ETF) and its modalities, procedure, and guidelines

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Background on the ETF

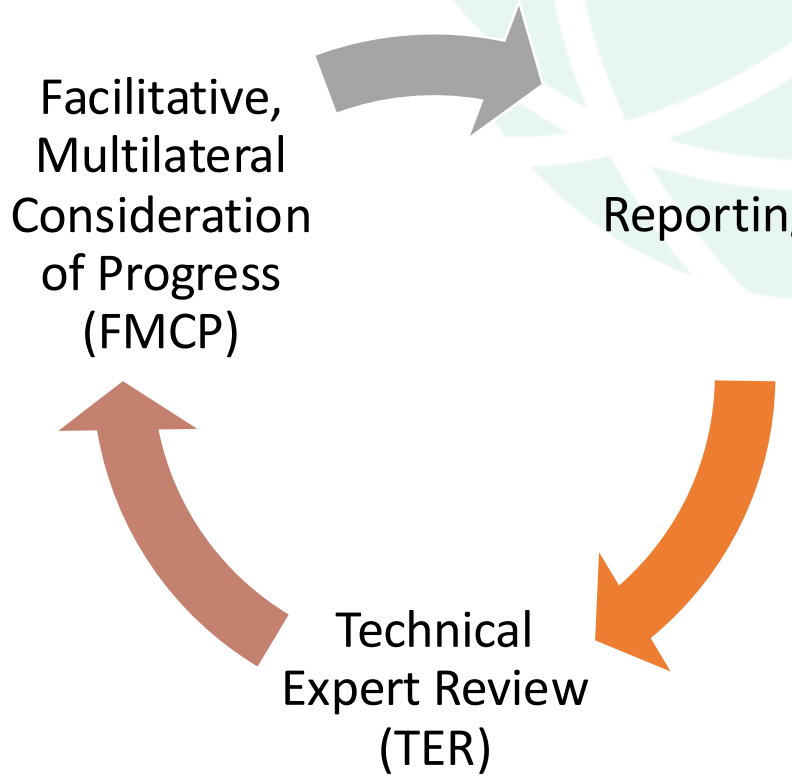
Article 13 decision 18/CMA.1, Paris Agreement adopts the enhanced transparency framework (ETF) for action and support:

The ETF:

- A **common framework applicable to all Parties**, with flexibility for developing countries.

Main purposes:

- **Provide a clear understanding of climate action and track progress towards NDCs.**
- **Inform the global stocktake** process of the Paris Agreement.
- Provide clarity on support provided and received for climate action.



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Background on the ETF

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MPGs (Modalities, Procedures, and Guidelines):

- Elaborated in December 2018 for implementing the ETF.
- **Decision 18/CMA.1**
  - Rules for the enhanced transparency framework under the Paris Agreement.
- **Decision 5/CMA.3:**
  - Further guidance and clarification on the reporting requirements, including related to flexibility, the CRTs and the reporting outlines for the BTR and the NID.

BTRs (Biennial Transparency Reports):

- Submit every two years, first by 31 December 2024.
- LDCs and SIDS may submit at their discretion.

BTR Content

- National GHG inventory
- Information to track progress on NDCs
- Information on climate change impacts and adaptation
- Financial, technology transfer, and capacity-building support provided and needed
- *Submission of BTR initiates the Technical expert review process under the ETF.*

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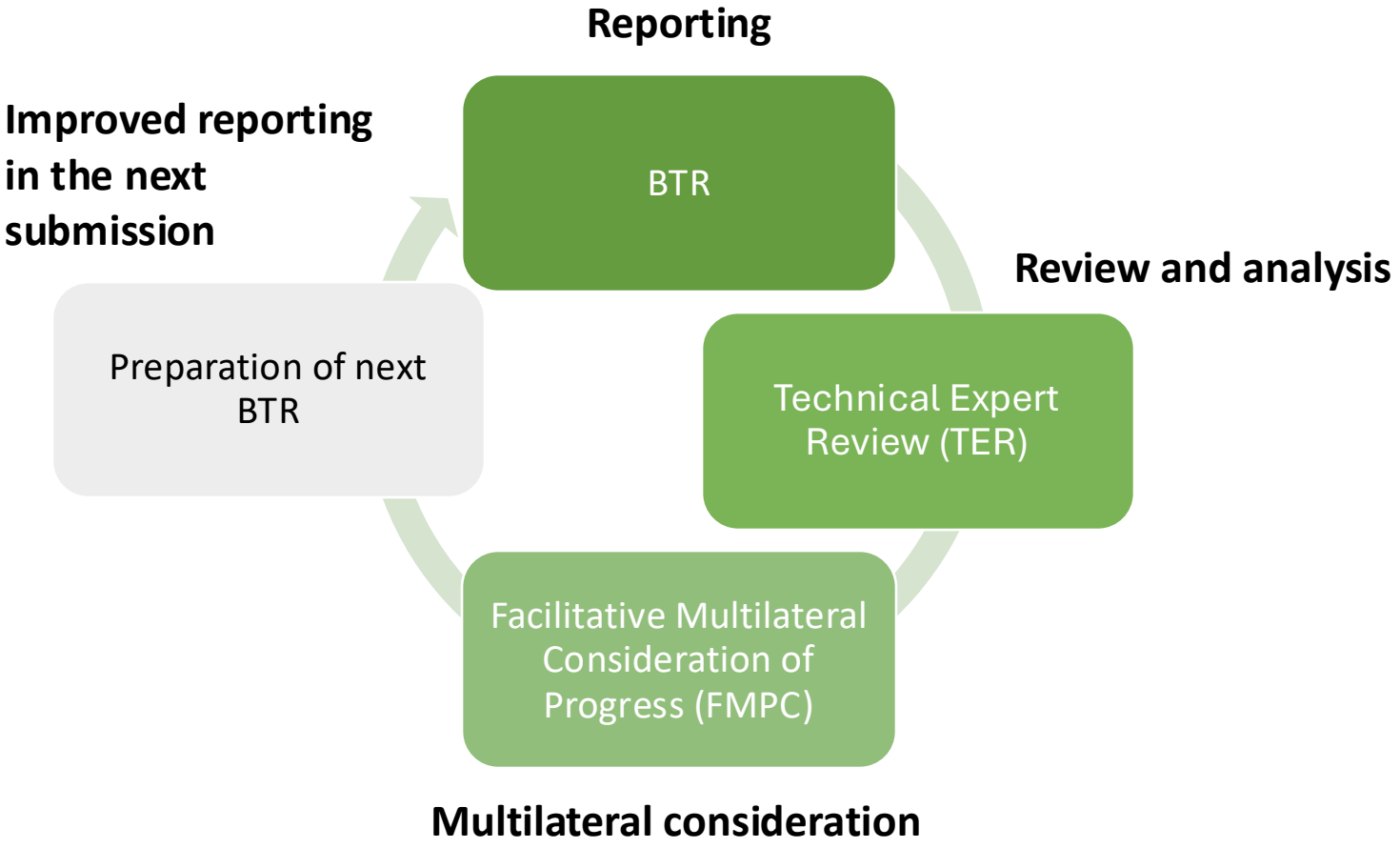
Facilitating improvement over time



Under the ETF, Parties must maintain and improve the quality of reporting under the Convention.

The TER team will identify areas of improvement for all Parties and assist developing countries in identifying capacity-building needs.

Parties should report on how they are addressing or intend to address identified areas of improvement in subsequent BTRs.

Information on improvement plans is not subject to review but can inform discussions during the TER.

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Core elements of the ETF

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All Parties (shall)

	Climate Action	Support
Reporting	**National GHG inventory report** **Article 13.7(a)**	Information on support provided by developed countries Article 13. 9 *(developed countries, shall)*
	Information necessary to track progress of NDC under Article 4 **Article 13.7(b)**	
	Information on climate change impacts and adaptation Article 13.8 *(all Parties, should)*	Information on support needed and received by developing countries Article 13. 10 *(developing countries, should)*
Review	**Technical expert review (TER) of information submitted** **Article 13.11**	
Multilateral consideration	**Facilitative, multilateral consideration of progress (FMCP)** **Article 13.11**	

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GHG Inventory under the ETF and BTR

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National Inventory Report of Anthropogenic Emissions by Sources and Removals by Sinks of Greenhouse Gases:

- Each Party **shall** provide a national inventory report (NIR) of anthropogenic emissions by sources and removals by sinks of GHGs
- NIR **may be** submitted as a stand-alone report or as a component of a BTR
- The submission includes the **National Inventory Document (NID)** and the **common reporting tables (CRTs)** for the electronic reporting of the national inventory report
- The CRT are submitted electronically and considered part of the submission, so tables do not need to be reproduced in the BTR itself
- Parties are encouraged to follow the **NID outline** (Decision 5/CMA.3, annex IV), but it is not mandatory

Provisions of MPGs

I. National inventory report of anthropogenic emissions by sources and removals by sinks of greenhouse gases

- A. Definitions (17)
- B. National circumstances and institutional arrangements (18-19)
- C. Methods
  1. Methodologies, parameters and data (20-24)
  2. Key category analysis (25)
  3. Time-series consistency and recalculations (26-28)
  4. Uncertainty assessment (29)
  5. Assessment of completeness (30-33)
  6. Quality assurance/quality control (34-36)
- D. Metrics (37)
- E. Reporting guidance (38)
  1. Information on methods and cross-cutting elements (39-46)
  2. Sectors and gases (47-56)
  3. Time series (Para 57-58)

Provisions of MPGs

I. National inventory report of anthropogenic emissions by sources and removals by sinks of greenhouse gases

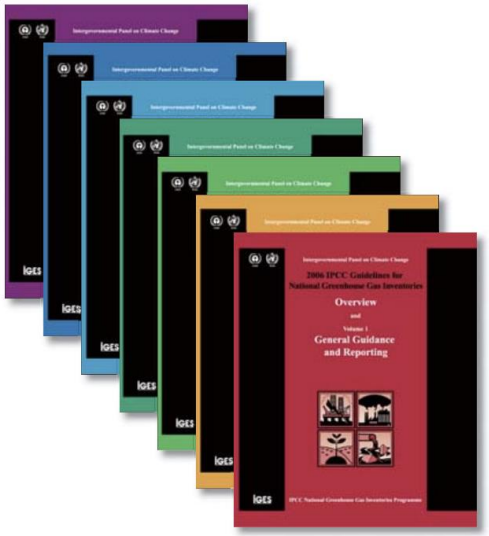
C. Methods

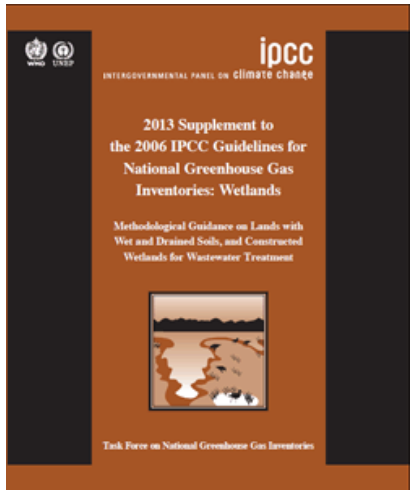
1. Methodologies, parameters and data (20-24)
2. Key category analysis (25)
3. Time-series consistency and recalculations (26-28)
4. Uncertainty assessment (29)
5. Assessment of completeness (30-33)
6. Quality assurance/quality control (34-36)

Methodologies, parameters and data

20. Each Party **shall** use *the **2006 IPCC Guidelines*** and any subsequent versions or refinements of the guidelines approved by the COP/HR.

Each Party is **encouraged** to use the *2013 Supplement to the 2006 IPCC Wetlands Guidelines*.





Methodologies, parameters and data

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21. Each Party **shall** use **methods from** the IPCC guidelines […].

Each Party **should** make every effort to use a **recommended method (tiers)** for the main categories according to the IPCC guidelines.

The equation for the Tier 1 method for estimating CH_4 and N_2O from road vehicles may be expressed as:

EQUATION 3.2.3
TIER 1 EMISSIONS OF CH_4 AND N_2O

$$Emission = \sum_{a} [Fuel_a \bullet EF_a]$$

Where:

Emissions = emission in kg

EF_a = emission factor (kg/TJ)

$Fuel_a$ = fuel consumed, (TJ) (as represented by fu

a = fuel type a (e.g., diesel, gasoline, natural g

The emission equation for Tier 2 is:

EQUATION 3.2.4
TIER 2 EMISSIONS OF CH_4 AND N_2O

$$Emission = \sum_{a,b,c} [Fuel_{a,b,c} \bullet EF_{a,b,c}]$$

Where:

Emission = emission in kg.

$EF_{a,b,c}$ = emission factor (kg/TJ)

$Fuel_{a,b,c}$ = fuel consumed (TJ) (as represented by fuel sold) for a given mobile s

a = fuel type (e.g., diesel, gasoline, natural gas, LPG)

b = vehicle type

c = emission control technology (such as uncontrolled, catalytic converte

The emission equation for Tier 3 is:

EQUATION 3.2.5
TIER 3 EMISSIONS OF CH_4 AND N_2O

$$Emission = \sum_{a,b,c,d} [Distance_{a,b,c,d} \bullet EF_{a,b,c,d}] + \sum_{a,b,c,d} C_{a,b,c,d}$$

Where:

Emission = emission or CH_4 or N_2O (kg)

$EF_{a,b,c,d}$ = emission factor (kg/km)

$Distance_{a,b,c,d}$ = distance travelled (VKT) during thermally stabilized engine operation phase for a given mobile source activity (km)

$C_{a,b,c,d}$ = emissions during warm-up phase (cold start) (kg)

a = fuel type (e.g., diesel, gasoline, natural gas, LPG)

b = vehicle type

c = emission control technology (such as uncontrolled, catalytic converter, etc.)

d = operating conditions (e.g., urban or rural road type, climate, or other environmental factors)

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Methodologies, parameters and data

22. Each Party **may** use nationally appropriate methodologies if these better reflect national circumstances and conform to IPCC guidelines.

- In such cases, each Party **shall** transparently explain the selected national parameters, data or methods.

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Methodologies, parameters and data

23. If, due to a lack of resources, a Party is unable to adopt a higher-level approach for a particular principal category, the Party concerned **may** **use a tier 1 approach**.

In that case, the reason why the methodological choice did not respect the relevant decision tree of the IPCC guidelines **shall be** clearly documented.

For future improvements, the Party **should** prioritise those main categories where the good practice approach developed in the IPCC guidelines cannot be used.

Analysis of key categories

25. Each Party **shall** identify key categories for the first and last year for which it reports, as provided for in Chapter II.E.3, including and excluding LULUCF categories, using approach 1, for both the level and trend assessment, by conducting an **analysis of key categories in accordance with the IPCC guidelines.**

Flexibility: Parties […] will be able to identify their key categories using a threshold of not less than 85% instead of the 95% threshold in the IPCC guidelines, allowing them to focus on improving fewer categories and prioritising their resources.

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Time series consistency and recalculations

28. Each Party **shall** perform its **recalculations** in accordance with IPCC guidelines, ensuring that changes in emission trends are not intriduced as a result of changes in methods or assumptions across the time series.

Assessment of uncertainty

- **29.** Each Party **shall** quantitatively estimate and qualitatively discuss the uncertainty of estimates of emissions and removals for all categories, including inventory totals, at least for the first and last year of the time series referred to in paragraphs 57 and 58.
- Each Party **shall** also estimate the trend uncertainty of emission and removals estimates for all categories, including totals, between the start year and the last year of the time series, using at least method 1 as stipulated in the IPCC guidelines.
- Flexibility: Parties may submit, at a minimum, a qualitative uncertainty analysis of the main categories, using the IPCC guidelines, where quantitative input data are not available to quantitatively estimate the uncertainties; they are encouraged to submit a quantitative uncertainty estimate for all inventory categories.

Assessment of completeness – Notation keys

31. When completing CRTs, each Party **shall** use **notation keys** when numerical data are not available, indicating the reasons why information on emissions and removals and related data for specific sectors, categories, subcategories or gases is not reported.

Assessment of completeness - Notation keys

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31. These notation keys include:

Notation Key	Definition	Explanation
NE	Not estimated	Emissions and/or removals occur but have not been estimated or reported, but for which a corresponding activity may occur within a Party.
IE	Included elsewhere	Emissions and/or removals for this activity or category are estimated and included in the inventory but not presented separately for this category. The category where these emissions and removals are included should be indicated (for example in the documentation box in the correspondent table).
C	Confidential information	Emissions and/or removals are aggregated and included elsewhere in the inventory because reporting at a disaggregated level could lead to the disclosure of confidential information
NA	Not applicable	The activity or category exists but relevant emissions and removals are considered never to occur. Such cells are normally shaded in the reporting tables.
NO	Not occurring	An activity or process does not exist within a country.

Assessment of completeness - "Insignificant" sources

32. Each Party may use "NE" when the level of the estimates is insignificant.

- Emissions from one category should be **considered insignificant** only when the likely level is **less than 0,05 % of the national total excluding LULUCF** or 500 kt CO2 eq, if this amount is lower.

- The aggregate national total of estimated emissions for all gases of the categories considered negligible **shall** remain **below 0,1% of the national total excluding LULUCF.**
  - Parties should use approximate IPCC activity data and emission factors by default in order to obtain a likely level of emissions for the category concerned.

Flexibility: Parties may consider negligible emissions which are likely to be less than 0.1% of the national total excluding LULUCF or 1,000 kt CO2 eq, whichever is the lower. In this case, the aggregate national total of estimated emissions for all gases of the categories considered negligible shall be less than 0.2% of the national total excluding LULUCF.

Assessment of completeness – reporting of categories

33. Once emissions or removals have been estimated for a category and if they continue to occur, each Party **shall** report them in subsequent submissions.

Flexibility Provisions

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The ETF and BTR require all Annex and Non-Annex countries to report on transparency through the MPGs.

Flexibility provisions are in place for developing countries in light of their capacity to report.

The flexibility provisions for developing countries:

- Self-determined
- Need for flexibility shall be specifically explained
- Plans and time frames for how to meet the full requirements shall be drawn up
- Aiming for a continuous enhancement of the quality over time

Flexibility Provisions

Developing countries **shall** clearly indicate:

- the provision to which flexibility is applied
- capacity constraints, noting that some constraints may be relevant to several provisions,
- estimated time frames for improvements in relation to those capacity constraints

When a developing country Party applies flexibility available for a provision of the MPGs, **the TER team must not review why the Party decided to apply such flexibility** or whether it has the capacity to implement that provision without flexibility.

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Flexibility Provisions (GHG inventory)

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Key category analysis (para. 25)	Uncertainty assessment (para.29)	Completeness (para.32)	QA/QC (para.34 and 35)	Gases (para.48)	Time-series (para.57, para 58)
• Option to identify fewer key categories; • less complex methodologies can be used to estimate GHG emissions/removals for categories that are not key	• Option to report only qualitative uncertainty information if quantitative input data are not available	• Option to use a higher threshold for insignificant categories	• Encouragement to develop a QA/QC plan and provide information on general QC procedures implemented	• Option to report fewer GHGs	• Option to report a shorter time series and an earlier "latest reporting year"

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Source: UNFCCC GHG Inventory Review Training Course – General and cross-cutting issues bg2-01_L3_flex.pdf

Thank you for your attention!

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