

# Ghana's experiences on the application of the MPGs provisions for Chapter I (National GHG Inventory) of the BTR under the Paris Agreement

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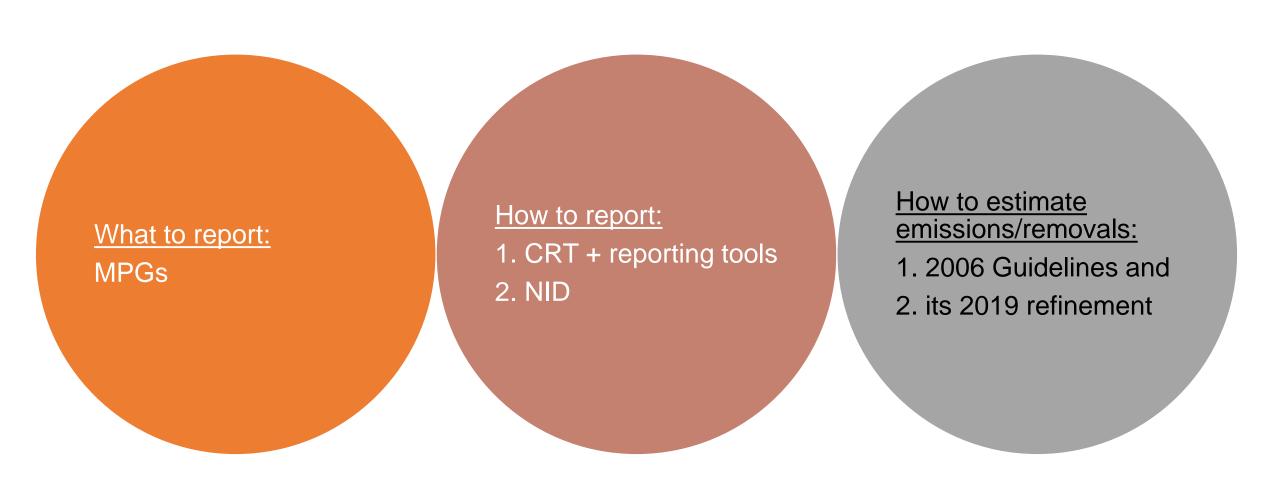
## Milestones for climate reporting in Ghana

NCs **Reforms Capacity development**  Decentralised climate reporting Need to scale up effort Trained more 50 national experts Developed GHG manual Expand to more sectors About 15 UNFCCC Roster of Experts Continuous training • Facility data collection and datahub 5 Lead reviewers Focus more on data • Training package for new entrants New IPCC Guidelines systems 2013 2013-2015 2015-2024 2010-2022 **Post-CBIT Project** 2019-2022 **CBIT Project** Reporting **Established GCARP** • 2 NDCs, NDC3 ongoing Strengthening capacities 4 BURs · NDC tracking and reporting Domestic MRV Upgrading data systems • 5 NIRs • 2 FREL · Pilot MRV at facility level **BRT1** ongoing

## Reporting under the Paris Agreement

- Paris Agreement Reporting: Article 13 established the ETF for climate action and support.
- Mandate: Biennial Transparency Report (BTR)
- What to report under in BTR: Modalities Procedures Guidelines (MPG)
- BTR format: BTR outline (narrative and reporting tables), standalone report or with NCs and NIR but clearly labelled.
- Reporting period: Every 2 years, starting December 2024 (all parties, except LDCs with discretion).
- Reporting elements in BTR:
  - National GHG inventory report (All parties shall > Article 13.7a)
  - NDC Progress and Achievement (All parties shall > Article 13.7b)
  - Climate impacts and adaptation (All parties should, as appropriate > Article 13.8)
  - FTC needed and received (Developing countries should > Article 13.10)
- Report consideration: Technical Expert Review (TER) & Facilitative, Multilateral Consideration of Progress (FMCP)
- TER: BTR1 in-country review, consistency of information with MPGs considering flexibility.
- **Key Principles**: Avoid undue burden, respect for sovereignty; build on MRV; FX to developing countries; TACCC, avoid double counting and ensuring environmental integrity; improvement over time

# **NGHGI** under the Paris Agreement



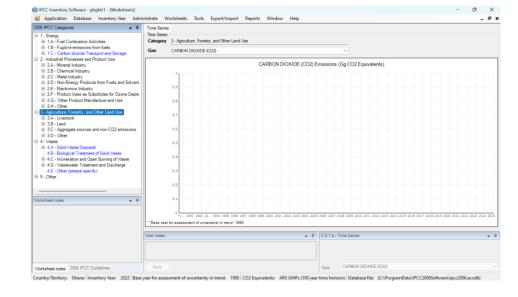
## What to report under NGHGI – MPGs (section II)

- A. Definitions
- B. National circumstances and institutional arrangements
- C. Methods
  - Methodologies, parameters and data
  - Key category analysis (FX)
  - Time series consistency and recalculations
  - Uncertainty assessment (FX)
  - Assessment of completeness (FX)
  - QA/QC (FX)
- D. Metrics
- E. Reporting Guidance
  - Information on methods and cross-cutting elements
  - Sectors and gases (FX)
  - Time series (FX)

# What to report NGHGI – IPCC (or spreadsheet), CRT, reporting software

- IPCC software or Spreadsheet calculation sheets (the case of Ghana)
- Use of <u>2006 IPCC Guidelines</u> and/or complement with <u>2019 refinement</u> and 2013 wetland supplement.
- Common reporting tables for GHG inventories
- UNFCCC reporting tool (online software)





Year Submission Country

TABLE 1.A(a) SECTORAL BACKGROUND DATA FOR ENERGY Fuel combustion activities - sectoral approach (Sheet 1 of 4)

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GREENHOUSE GAS SOURCE AND SINK CATEGORIES	AGGREGATE ACTIVITY DATA		IMPLIED EMISSION FACTORS		EMISSIONS			AMOUNT CAPTURED (4)	
	Consumption		CO <sub>2</sub> <sup>(1)</sup>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> (2,3)	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub>
	(TJ)	NCV/GCV <sup>(5)</sup>	(t/TJ)	(kg/	TJ)			(kt)	
1.A. Fuel combustion									
Liquid fuels									
Solid fuels									
Gaseous fuels (6)									
Other fossil fuels (7)									
Peat <sup>(8)</sup>									
Riomass (3)									

## What to report NGHGI – NID outline

#### **Main report**

- Executive Summary
- Chapter 1: National circumstances, institutional arrangement and crosscutting information
- Chapter 2: Trends in GHG emissions and removals
- Chapter 3: Energy (CRT 1)
- Chapter 4: IPPU (CRT 2)
- Chapter 5: Agriculture (CRT 3)
- Chapter 6: LULUCF (CRT 4)
- Chapter 7: Waste (CRT 5)
- Chapter 8: Other (CRT 6, if applicable)
- Chapter 9: Indirect CO2 and N2O emissions
- Chapter 10: Recalculations and improvement

#### **Annexes**

- Annex I: Key categories
- Annex II: Uncertainty assessment
- Annex III: Reference Approach
- Annex IV: QA/QC plan
- Annex V: Additional info
- Annex VI: CRT
- References

## **Estimating emissions/removals**

- According to 2006 IPCC guidelines/2019 refinement and 2013 wetland supplement.
- Use the GL's decision tree to:
- To select appropriate methods according to different national circumstances (T1, T2, T3 ~ level of complexity)
- KCA to identify KCs. It is good practice to use higher-tier methods unless the resource constraints.
- In Ghana, we focus on the following:
  - Improving the national system for the GHG inventory
  - Developed and used spreadsheet for calculation based on IPCC GL
  - Some KCs have higher-tier (progressive improvements of methods for KCs)
  - Inventory covers all occurring sinks and removals.
  - Prioritise mandatory reporting elements
  - Apply FX (Uncertainty assessment)
  - Reflect national circumstances

## Flexibility provisions in MPGs

- Flexibility (FX) provisions should not be mixed up with the "other choices" countries may have based on national circumstances.

  Examples
  - LDCs and SIDSs may choose to submit the BRT at their own discretion
  - Parties may also make choices regarding the extent to which they can report non-mandatory information (i.e. should or may provision)
  - Reporting should NOT burden Parties and report as national circumstances permit (best available data, national capacity, etc)
- FX is available to those developing countries that need it in the light of their capacities for specific provisions.
- FX are <u>self-determined</u> by those parties who elect to apply it.
- When using FX provisions, countries shall
  - clearly indicate the provision in which FX has been used
  - · concisely explain capacity constraint
  - provide self-determined estimated time frames for improvements in relation to those capacity constraints

# Flexibility provisions in MPGs for GHG inventory report

Reporting elements	Shall provision in MPGs	FX applicable
Key category analysis	95% threshold	85% to 95% threshold
Uncertainty assessment	Quantitative and qualitative for all categories	At least qualitative for key categories
Insignificant threshold	"NE" if < 0.05% of national total and 500kt of $CO_2e$	NE if < 0.1% of national total and 1000kt of CO2e
QA/QC	Implement general QC procedures	Encouraged to implement
GHG	CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O, HFC, PFCs, SF <sub>6</sub> and NF <sub>3</sub>	CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O. Other, if in NDC or reported before
Time series	T-2 of reporting year	T-3 of reporting year
Time series	Annul between 1990 and T-2	Reference year for NDC and annual from 2020 to T-3

#### **GHG** inventory under BTR1: Ghana

#### Method:

IPCC 2006, 2019 refinement, 2013 wetland supplement

#### Time series:

1990 – 2022

1990-2020: recalculation

2020-2022- new estimates

#### Gases

 $CO_2$ ,  $CH_4$ ,  $N_2O$ , HFC, PFCs,  $SF_6$  $NF_3 = NO$ 

#### Sectors:

Energy, IPPU, Agriculture, LULUCF, Waste

#### GWP:

IPCC AR4

#### Tools:

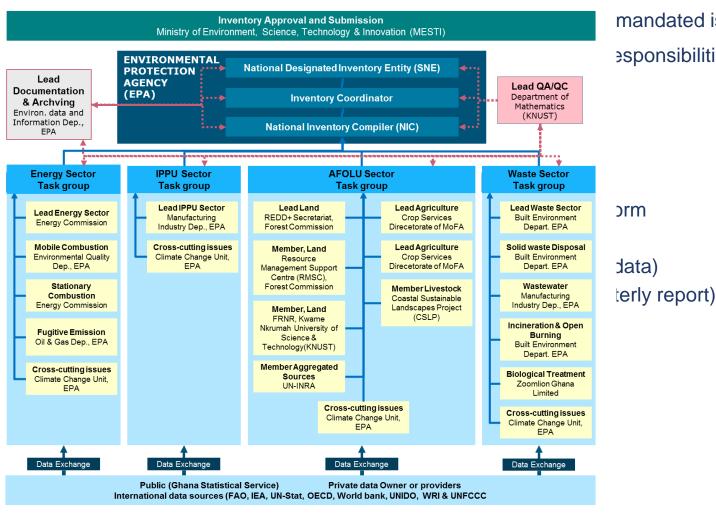
Spreadsheet package (datasheet, calculation sheets, analysis sheets)

Common reporting tables (offline report as Annex to NID or)

UNFCCC reporting tool (online reporting)

Climate change data hub (online archiving platform)

## NGHGI – strengthening national system



mandated is backed by EPA Act, 490, being amended) esponsibilities, regular training

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data)

1. Collect activity data from national and international sources. Stationary combustion Mobile combustion Ghana Customs Zoomlion Ghana Limited. Ghana Petroleum Railway Company Energy Commission Tema oil Refinery Ghana Gas Company Tema oil Refinery MICS Reports. Ministry of Sanitation & Water Resources. Volta Lake Transport Ministry of Fisheries 3.1 Energy datasheet (1990-2021) 4. Use IPCC Software and 5. Compile time-series inventory results 1990-2021 (Waste sector emissions) (Energy sector dataset on online data

#### NGHGI – Overall progress

- On course to submit BTR1 by December 2024
- Draft NID = 65% complete
- CRT (offline version) = 75% complete
- UNFCCC reporting software = 0% complete (offline CRT will be exported to reporting software after approval)
- Data sheet, calculation sheet and analysis:
  - Energy sector = 100% complete
  - IPPU = 70% complete
  - Agriculture = 80% complete
  - LULUCF = 90% complete
  - Waste = 60% complete
  - Overall trends and analysis = 60% complete
  - KCA = 70% complete
  - Recalculation of 1990-2020 time-series = 70% complete
  - QA/QC plan and QA/QC procedures = 75% complete
  - Uncertainty assessment = FX applied. Qualitative for KC = 55% complete
  - Planned improvement = 65% complete

## **Conclusions – BRT1 preparation experience.**

- Prioritise mandatory reporting elements
- Focus on completeness and improvement over time.
- Make the effort to submit (BTR and reporting tables) before the 31<sup>st</sup> December.
- There is NO perfect BTR. We are all in the same boat.
- If your NID + CRT is ready now or earlier, submit it online.
- Appoint more than 1 EFT focal point to access online software.
- Ensure that consistency between BTR (intra, among chapters) and CRT and CTF where possible
- TER is a normal process (Don't be apprehensive) capacity needs identification/improvement
- Plan for the TER (If you are using consultants, understand the process, results and documentation)
- After BTR1 start planning for BRT2 earlier.

## Lessons from existing domestic transparency system

- Full Implementing "domestic transparency" can be a slow and "tough" endeavour.
- Limited funds (donor-dependent and no/low national budgetary allocation)
- Low visibility of transparency reporting results for policy decision-making.
- Inadequate access to good quality data (missing data, non-existing data)
- Capacity gap (involvement local government and private sector)
- Slow operationalisation of planned institutional arrangement (it takes time to get what is on paper to become a reality).

Thank you for listening