



**CLIMATE CHANGE OFFICE
IMPLEMENTATION OVERSIGHT DIVISION**

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CONCEPT NOTE

**TECHNICAL BACKSTOPPING ON GHG INVENTORIES AND QA/QC FOR THE
INDUSTRIAL PROCESSES AND PRODUCT USE (IPPU) AND WASTE SECTORS**

Rationale

Executive Order No. 174 series of 2014 institutionalized the Philippine Greenhouse Gas Inventory Management and Reporting System (PGHGIMRS), to support better planning, archiving, reporting, monitoring and evaluating of greenhouse gas (GHG) emissions and sources of the government and to enable the country to transition towards a climate-resilient pathway for sustainable development.

The policy sets institutional arrangements for GHG inventory preparation and reporting. Headed by the Climate Change Commission (CCC), institutional arrangements, reporting templates, and worksheets are being prepared for each of the focus sectors: Agriculture, Waste, Industry, Transportation, Forestry and Energy (AWIT-FE). The CCC leads the preparation of national greenhouse gas (GHG) emission inventory within the country for a specific year. Sectoral GHG Inventory Teams, specifically in the Agriculture, Forestry, and Other Land Use, Waste, Industrial Processes and Product Use, Transport, and Energy sectors, are constituted through policy issuances of ministries leading these sectors, are the sectoral institutional arrangements supporting the implementation of the PGHGIMRS.

To date, the Philippines has prepared three GHG inventory reports: GHG inventories for 1994 and 2000 were incorporated in the first and second National Communications to the United Nations Framework Convention on Climate Change (UNFCCC), and the GHG inventory for 2010 served as input to the Philippine Intended Nationally Determined Contribution. The National Integrated Climate Change Database and Information Exchange System (NICCDIES) was also operationalized to serve as the transparency system for climate action and support, which serves as the platform to support GHG inventory reporting and publication.

Background

The Philippine government is preparing its communication requirements to the UNFCCC, particularly the technical articulation of policies and measures under its Nationally Determined Contribution (NDC) and the first Biennial Update Report (BUR), and with a view of transitioning to the requirements under the Enhanced Transparency Framework of the Paris Agreement.

The GHG inventories to be prepared for this cycle will cover inventory years 2015 and 2020 as inputs to the NDC and BUR, and in consideration of the UNFCCC reporting timeframes.

An inception meeting with the EO 174 agencies was conducted last 26 March 2021, the commencement of the next cycle of accounting for the National GHG Inventory by the PGHGIMRS for years 2015 and 2020 was discussed.

Five (5) follow-up house-to-house sectoral consultations with lead sectoral agencies were conducted in the 2nd half of April 2021 in order to discuss the following:

1. Updates on the institutional arrangements of the respective greenhouse inventory teams of the sectoral lead agencies;
2. Capacity building needs such as use of IPCC GHGI software among others;
3. National Inventory Improvement Plan (NIIP) for critical fixes identified from the 2019 QA/QC workshop of the 2010 national greenhouse gas inventory;
4. Comments and inputs on the proposed quarterly reporting templates; and
5. Development of the QA/QC Action Plan

On 29 June 2021, during the NDC-MRV meeting, discussions on the matters arising regarding inventory needs, inventory cycle, and workstream prioritization were discussed.

On 21 September 2021, the commencement of the National GHG Inventory Cycle for Years 2015 and 2020 was officially announced to the EO 174 agencies. The following documents were also provided with the announcement: (1) Sectoral GHG Inventory Cycle/Timeline for Years 2015 and 2020, (2) Revised sectoral inventory report template outline, (3) Quarterly Progress Report Guidelines and Template; and (4) Draft Reference Manual.

The CCC has consolidated the support and capacity building needs of the EO 174 agencies and have touched base with the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) last 10 November 2021 in order to explore the support that can be provided by the said development partner.

Objectives

In general, the proposed Technical Backstopping aims to enhance institutional capacities of government agencies on reporting of GHG inventories under the UNFCCC and thus improving the quality of the inventories they will produce per sector in line with the IPCC guidelines and UNFCCC reporting requirements, particularly for the Industrial Processes and Product Use (IPPU) and Waste Sectors.

Specifically, this activity aims for the participating government agencies to:

- Identify the data requirements for GHG inventory preparation
- Understand and apply the methodologies and processes for the preparation of GHG inventories using the 2006 IPCC Guidelines for National Greenhouse Gas Inventories
- Compile GHG inventories for the IPPU and Waste Sectors for Inventory Years 2015 and 2020
- Improve the quality of GHG inventories through Quality Control/Quality Assurance (QA/QC) methodologies and principles, considering the critical fixes identified by the UNFCCC in its QA session for the Philippine 2010 GHG inventory in 2019
- Develop an initial GHG improvement plan and QA/QC plan
- Understand and prepare to transition to the requirements under the Enhanced Transparency Framework of the Paris Agreement

Target Participants

The target participants for the proposed GHGI capacity building activity are the following:

- GHG inventory teams of DENR for waste and IPPU sectors
- CCC GHG inventory team and EO-174 secretariat

- Assisting GHGI experts of DENR and data providers for waste and IPPU sectors (if needed and appropriate)

Scope of Work and Methodology

The delivery of the technical backstopping will be through the provision of technical expert by the development partner (GIZ) to support the conduct of structured learning activities (e.g., trainings, workshops) and mentoring (e.g., expert consultations), particularly:

- (1) Basic GHG Inventory Training for IPPU and Waste sectors
 - Design and conduct of GHG inventory trainings for IPPU and Waste Sectors
- (2) In-depth capacity building on use of the IPCC Software and Data Mapping
 - Development of data checklists/matrices
 - Design and conduct of hands-on exercises using the IPCC software
- (3) Backstopping services for the conduct of GHG Inventory
 - Provision of expert consultation sessions/services
 - Initial scanning/assessment of GHG inventory results and processes
- (4) Data Input on the IPCC Software using Actual Data Collection for 2015 and 2020 GHG inventory

To ensure effective delivery of the technical backstopping and facilitate sustainability of its results, the services of sectoral experts on IPPU and Waste may be engaged. The experts to be engaged are expected to have the following qualifications:

- Expert on the IPPU Sector
 - Expertise in the industries covered in the IPPU sector
 - Expertise in the methodologies and data collection for the Waste sector
 - Knowledgeable on the 2006 IPCC Guidelines
 - Basic knowledge on operating the IPCC Software particularly in the IPPU Sector worksheets
- Expert on the Waste Sector
 - Expertise in the methodologies and data collection for the Waste sector
 - Knowledgeable on the 2006 IPCC Guidelines
 - Basic knowledge on operating the IPCC Software particularly in the Waste Sector worksheets

Meanwhile, the CCC through the Implementation Oversight Division serving as the PGHGIMRS Secretariat can provide the logistical requirements for the conduct of activities (e.g., virtual conference platforms, invitations, documentation). Below is the draft training design.

Proposed Timeline of Activities

Activity	Schedule (tentative)	Support Needs
IPPU Sector GHG Inventory Training*	January 17-21. 2022	IPPU Sector Expert as Resource Speaker
Waste Sector GHG Inventory Training*	January 25-28, 2022	Waste Sector Expert as Resource Speaker
GHG Data Collection for IPPU and Waste Sector	January - April 2022	Waste Sector Expert as Technical Backstop Support Waste Sector Expert as Technical Backstop Support

Data Input on the IPCC Software using 2015 and 2020 Actual Data Collection**	April 2022	Waste Sector Expert as Technical Backstop Support Waste Sector Expert as Technical Backstop Support
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*Please refer to the draft training design below

** Training design yet to be drafted

Proposed Program Flow for Waste Sector GHG Inventory Training (January 25-28, 2022)

Time (GMT +8)	Topic	Presenter
DAY 1		
8:30 – 8:45	Preliminaries	CCC GIZ DENR-CCS
8:45 – 9:15	Introduction to Climate Change and UNFCCC	Resource Person
9:15 – 9:45	Introduction to Mitigation Concepts and GHG Inventory	Resource Person CCC
9:45 – 10:00	Quiz 1	GIZ
10:00 – 10:10	Break	
10:10 - 10:40	Waste Generation, Composition and Management Data	Resource Person
10:40 – 11:10	Methodologies for Estimating GHG Emissions from Waste sector: Emissions from Solid Waste Disposal	Resource Person
11:10 – 11:25	Quiz 2	GIZ
11:25 – 11:30	Adjournment	CCC
DAY 2		
8:30 – 8:45	Re-cap	CCC
8:45 – 9:15	Methodologies for Estimating GHG Emissions from Waste sector: Emissions from Biological Treatment of Solid Waste	Resource Person
9:15 – 9:45	Methodologies for Estimating GHG Emissions from Waste sector: Emissions from Incineration and Open Burning of Waste	Resource Person
9:45 – 10:00	Quiz 3	GIZ
10:00 – 10:10	Break	
10:10 – 11:10	Methodologies for Estimating GHG Emissions from Waste sector: Emissions from Wastewater Treatment and Discharge	Resource Person
11:10 – 11:25	Quiz 4	GIZ
11:25 – 11:30	Adjournment	CCC
DAY 3		
8:30 – 8:45	Re-cap	CCC
8:45 – 9:15	Introduction to the 2006 IPCC Software	Resource Person
9:30 – 9:45	Break	
9:45 – 11:25	Exercise on using the 2006 IPCC Software	Resource Person
11:25 – 11:30	Adjournment	CCC
DAY 4		
8:30 – 8:45	Re-cap	CCC
8:45 – 9:15	2010 Waste Sector GHG Inventory	DENR
9:15 – 10:15	Workshop on Rapid Data Assessment and Institutional Arrangements	Resource Person CCC
10:15 – 10:25	Break	

10:25 – 11:00	Continuation of the Workshop on Rapid Data Assessment and Institutional Arrangements	Resource Person CCC
11:00 – 11:10	Synthesis	GIZ
11:10 – 11:30	Closing	CCC DENR

Proposed Program Flow for IPPU Sector GHG Inventory Training (January 17-21, 2022)

Time (GMT +8)	Topic	Presenter
DAY 1		
8:30 – 8:45	Preliminaries	CCC GIZ DENR-CCS
8:45 – 9:15	Introduction to Climate Change and UNFCCC	Resource Person
9:15 – 9:45	Introduction to Mitigation Concepts and GHG Inventory	Resource Person CCC
9:45 – 10:00	Quiz 1	GIZ
10:00 – 10:10	Break	
10:10 – 10:40	Methodologies for Estimating GHG Emissions from the IPPU sector: Emissions from Mineral Industry	Resource Persons
10:40 – 11:10	Methodologies for Estimating GHG Emissions from the IPPU sector: Emissions from Chemical Industry	Resource Persons
11:10 – 11:25	Quiz 2	GIZ
11:25 – 11:30	Adjournment	CCC
DAY 2		
8:30 – 8:45	Re-cap	CCC
8:45 – 9:15	Methodologies for Estimating GHG Emissions from the IPPU sector: Emissions from Metal Industry	Resource Person
9:15 – 9:45	Methodologies for Estimating GHG Emissions from the IPPU sector: Non-Energy Products from Fuels and Solvent Use	Resource Person
9:45 – 10:00	Quiz 3	GIZ
10:00 – 10:10	Break	
10:10 – 10:40	Methodologies for Estimating GHG Emissions from the IPPU sector: Emissions from Electronics Industry	Resource Persons
10:40 – 11:10	Methodologies for Estimating GHG Emissions from the IPPU sector: Emissions of Fluorinated Substitute for Ozone Depleting Substances	Resource Persons
11:10 – 11:25	Quiz 4	GIZ
11:25 – 11:30	Adjournment	CCC
DAY 3		
8:30 – 8:45	Re-cap	CCC
8:45 – 9:15	Methodologies for Estimating GHG Emissions from the IPPU sector: Other Product Manufacture and Use	Resource Person
9:15 – 9:45	Introduction to the 2006 IPCC Software	Resource Person
9:45 – 09:55	Break	
9:55 – 11:25	Exercise on using the 2006 IPCC Software	Resource Person
11:25 – 11:30	Adjournment	CCC

	DAY 4	
8:30 – 8:45	Re-cap	CCC
8:45 – 9:15	2010 IPPU Sector GHG Inventory (Results, Experiences, and Challenges)	DENR
9:15 – 9:45	Workshop on Rapid Data Assessment and Institutional Arrangements	Resource Person CCC
9:45 – 10:00	Break	
10:00 – 11:00	Continuation of the Workshop on Rapid Data Assessment and Institutional Arrangements	Resource Person CCC
11:00 – 11:10	Synthesis	GIZ
11:10 – 11:30	Closing	CCC DENR
	DAY 5	
8:30 – 8:45	Re-cap	CCC
8:45 – 9:45	Continuation of the Workshop on Rapid Data Assessment and Institutional Arrangements	Resource Person CCC
9:45 – 10:00	Break	
10:00 – 11:00	Continuation of the Workshop on Rapid Data Assessment and Institutional Arrangements	Resource Person CCC
11:00 – 11:10	Synthesis	GIZ
11:10 – 11:30	Closing	CCC DENR