



# Introduction to WGIA22

**Hiroshi ITO**

Greenhouse Gas Inventory Office of Japan (GIO)  
Center for Global Environmental Research (CGER)  
Earth System Division (ESD)  
National Institute for Environmental Studies (NIES)

The 22<sup>nd</sup> Workshop on Greenhouse Gas Inventories in Asia

16<sup>th</sup> July, 2025

# Workshop on Greenhouse Gas Inventories in Asia (WGIA)



Workshop title:	Workshop on Greenhouse Gas Inventories in Asia (WGIA)
Objective:	To support countries in Asia to improve the quality of inventories via regional information exchange
Organizers:	Ministry of the Environment of Japan National Institute for Environmental Studies
Member countries:	Bhutan, Brunei, Cambodia, China, India, Indonesia, Japan, Republic of Korea, Laos, Malaysia, Mongolia, Myanmar, Philippines, Singapore, Thailand, Viet Nam (16 countries)
Participants:	Government officials, researchers and compilers
Style:	Annual workshop since 2003
Funds:	Ministry of the Environment of Japan

# Necessity of GHG Inventory



- National GHG inventory for the Transparency Framework under the Paris Agreement
- Inventories form the basis of rational policy development because they can be used:
  - to identify the major sectors where abatement will have a real impact.
  - to predict and compare impacts of mitigation measures.
  - to choose efficient/ effective mitigation options.
- Inventories are essential to the monitoring of impacts of mitigation policies and measures.
  - Policy makers need to know if policies are working.
  - Inventory estimation methods should be chosen to reflect impacts of mitigation actions.

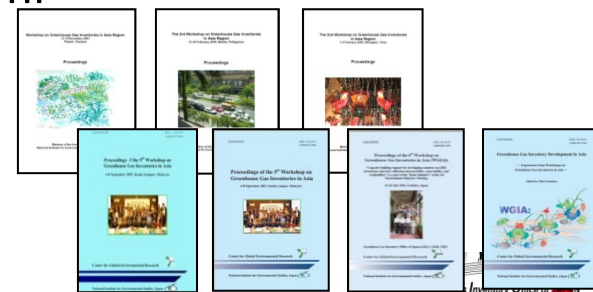


## What do we do to improve our inventories in WGIA?

- Updating inventory related information of each member country
- Sharing experiences concerning inventory development, and preparation
- Identifying common issues and discussing possible solutions
- Discussion on cross-cutting and sector-specific issues concerning inventories
- Mutual Learning since 2011: In-depth methodological discussion between 2 countries by inventory-compilers

## Outcomes

- Development of a network for inventory experts
- Presentations made by the participants in the workshop are available on the below URL: <https://www.nies.go.jp/gio/en/wgia/index.html>
- Workshop proceedings are published



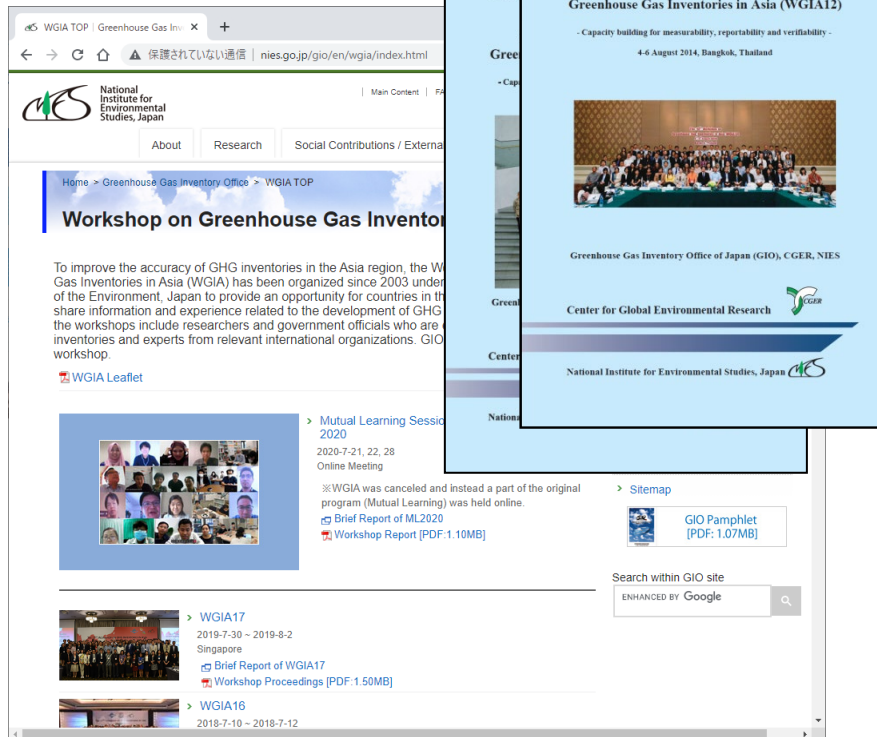
# WGIA History

WGIA1:	Phuket, Thailand, 13-14 Nov. 2003	Starting with 11 countries, Identified problems and needs of support
WGIA2:	Shanghai, China, 7-8 Feb. 2005	Shared information and experiences gained through inventory development
WGIA3:	Manila, Philippines, 23-24 Feb. 2006	<b>Malaysia</b> becomes a member country Discussed technical matters on each sector inventory
WGIA4:	Jakarta, Indonesia, 14-15 Feb. 2007	<b>Singapore</b> and <b>Myanmar</b> become member countries Organized working groups and discussed sector specific issues
WGIA5:	Kuala Lumpur, Malaysia, 6-8 Sep. 2007	Identified needs for further inventory improvement
WGIA6:	Tsukuba, Japan, 16-18 July 2008	Reaffirmed the importance of inventory development
WGIA7:	Seoul, Republic of Korea, 7-10 July 2009	Shared information and experiences/ Discussed sector specific and cross cutting issues
WGIA8:	Vientiane, Lao P.D.R., 13-16 July 2010	
WGIA9:	Phnom Penh, Cambodia, 13-15 July 2011	Newly started "Mutual Learning"
WGIA10:	Hanoi, Viet Nam, 10-12 July 2012	Shared information and experiences/ Conduct <b>Mutual Learning</b>
WGIA11:	Tsukuba, Japan, 5-7 July 2013	
WGIA12:	Bangkok, Thailand, 4-6 August 2014	
WGIA13:	Bali, Indonesia, 4-6 August 2015	<b>Brunei</b> become a member country
WGIA14:	Ulaanbaatar, Mongolia, 26-28 July 2016	<b>Poster session (Sharing information on specific issues)</b>
WGIA15:	Nay Pyi Taw, Myanmar, 11-13 July 2017	
WGIA16:	New Delhi, India, 10-13 July 2018	
WGIA17:	Singapore, 30 July - 2 August 2019	<b>Bhutan</b> become a member country
2020	On-line, 21, 22, 28 July 2020	Only Mutual Learning
WGIA18:	On-line, 8 – 14 July 2021	Mutual Learning and Plenary Session
WGIA19:	On-line, 7 – 13 July 2022	Mutual Learning and Plenary Session
WGIA20:	Tomakomai, Japan, 26 – 29 June 2023	Group discussion on <b>BTR readiness</b>
WGIA21:	Putrajaya, Malaysia, 9-12 July 2024	Hands-on Training on the ETF GHG Inventory Reporting Tool
WGIA22:	Phnom Penh, Cambodia, 15-18 July 2025	Group discussion on the ETF GHG Inventory Reporting Tool

# Achievements of WGIA

## Dissemination

- Website
- Proceedings



## Strengthened a network of regional experts



WGIA1 in Thailand (2003)



WGIA21 in Malaysia (2024)

WGIA19  
on-line (2022)





# Welcome to WGIA22!

Participants from ...



15 Member  
Countries in  
Asia:

Government officials, researchers, compilers from:  
Bhutan, Brunei, Cambodia, China, India, Indonesia, Japan, Republic of Korea, Laos, Malaysia, Mongolia, Philippines, Singapore, Thailand, and Viet Nam.

Japan's  
Organizations:

- Ministry of the Environment (MOE),
  - National Institute for Environmental Studies (NIES),
  - Institute for Global Environmental Strategies (IGES),
  - Ministry of Agriculture, Forestry and Fisheries (MAFF),
  - National Agriculture and Food Research Organization (NARO),
- and so on...

International  
Organizations  
& observers:

- United Nations Framework Convention on Climate Change
  - Intergovernmental Panel on Climate Change, Task Force on National GHG Inventories,
  - Food and Agriculture Organization of the United Nations,
  - Uzbekistan
- and so on...

# Workshop flow



## Day 1: 15<sup>th</sup> July, Tuesday

- Mutual Learning (Closed Session), Energy, and Waste
- Hands-on Training on IPCC Inventory Software

## Day 2: 16<sup>th</sup> July, Wednesday

- Opening Session
- Session I: Updates on the GHG Inventory of Biennial Transparency Reports (BTRs)
- Session II: Estimation Methodology and Data for Agriculture
- Session III: Discussion on the ETF GHG Inventory Reporting Tool

## Day 3: 17<sup>th</sup> July, Thursday

- Session IV: Technical Expert Review and Support Available
- Poster session
- Wrap-up Session
- Joint Meeting of the WGIA Organizing Committee (OC) and Advisory Board (AB) (Closed Session)

## Study tour: 18<sup>th</sup> July, Friday

- 8 • Visit to Royal University of Agriculture (RUA)



# NC, BUR & BTR submission status in Asian countries

Based on information from UNFCCC web site

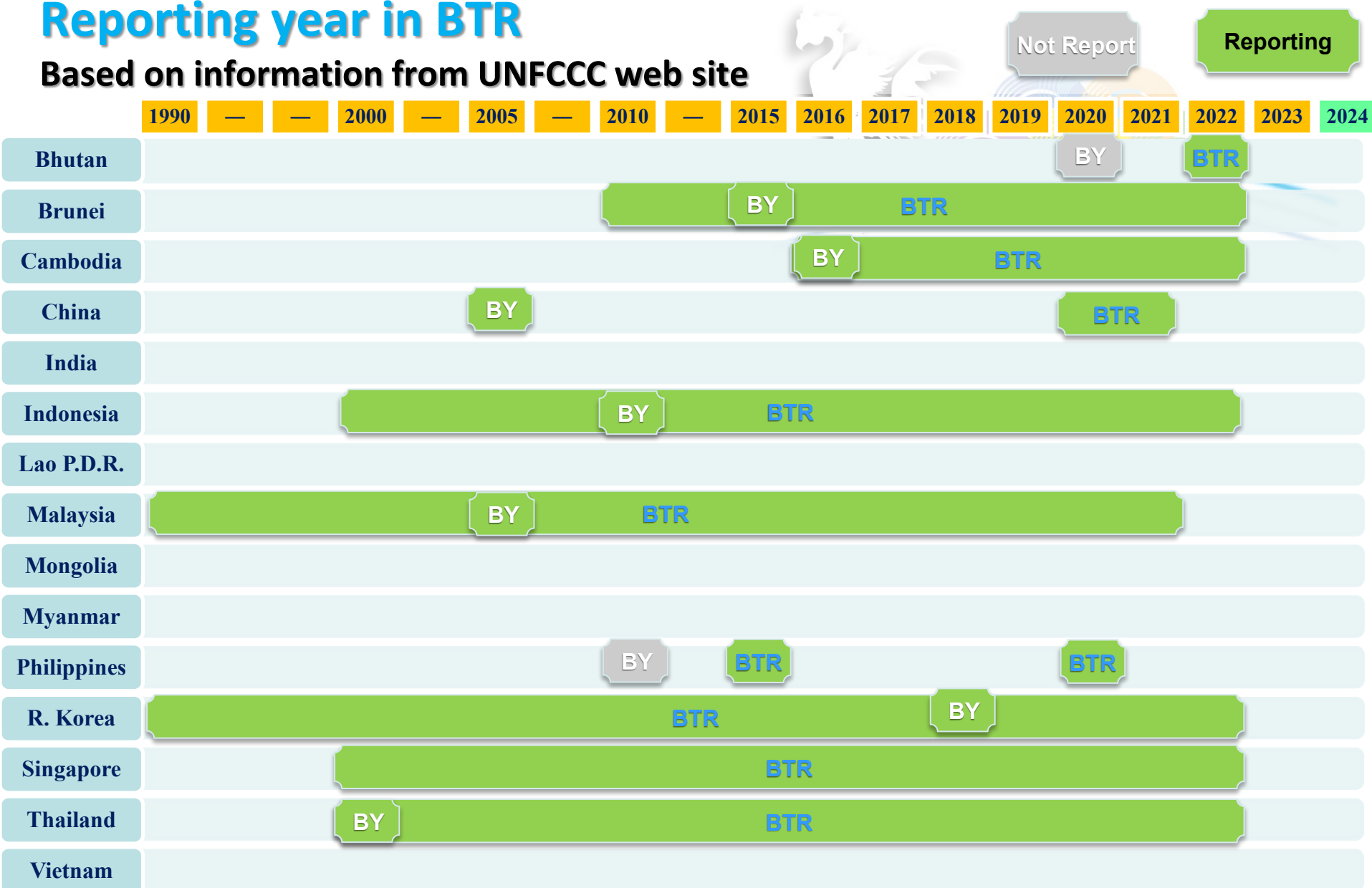
Submitted

	1998	—	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Bhutan		NC1		NC2										NC3	BUR1		BTR	
Brunei									NC1	NC2							BTR	
Cambodia		NC1							NC2				BUR1		NC3		BTR	
China		NC1			NC2					BUR1		NC3 BUR2				NC4 BUR3	BUR4 BTR	
India		NC1			NC2				BUR1		BUR2			BUR3		NC3	BUR4	
Indonesia		NC1		NC2					BUR1		NC3 BUR2			BUR3			BTR	
Lao P.D.R.		NC1				NC2							BUR1				NC3	
Malaysia		NC1		NC2					BUR1		NC3 BUR2		BUR3		BUR4		NC4 BTR	
Mongolia		NC1	NC2							BUR1	NC3					BUR3	NC4	
Myanmar					NC1													
Philippines		NC1					NC2											BTR
R. Korea	NC1	NC2			NC3		BUR1			BUR2		NC4 BUR3		BUR4				BTR
Singapore		NC1	NC2				NC3 BUR1		BUR2		NC4 BUR3		BUR4		NC5 BUR		BTR	
Thailand		NC1		NC2				BUR1		BUR2	NC3		BUR3		NC4 BUR4		BTR	
Vietnam		NC1	NC2				BUR1			BUR2		NC3		BUR3				

NC: National Communication BUR: Biennial Update Report BTR: Biennial Transparency Report

# Reporting year in BTR

Based on information from UNFCCC web site



BY: Base Year BTR: Reporting in Biennial Transparency Report

# Expected outcomes of WGIA22



- Enhancement of the quality of GHG inventories for BTRs
- Enhancement of understanding of the methodology of Agriculture sector
- How to use the ETF GHG Inventory Reporting Tool
- Strengthening of the participants' understanding of the technical expert review (TER)

→ Accurate GHG inventories in BTRs will contribute to future planning and assessment of the progress towards emission reduction targets under the Paris Agreement.



# Thank you

Presentation Material: <https://>

GIO website: <https://www.nies.go.jp/gio/en/index.html>

WGIA website: <https://www.nies.go.jp/gio/en/wgia/index.html>

# Virtual Participation Guidelines



- Sessions are **recorded** for the purpose of creating WGIA's proceedings.
- Please keep your **microphone muted** and your **camera switched off** during the meeting.
- Change your username as follows.

**<Country/Organization> <First Name> <Last Name>**

Click "Participants" > "More" > "Rename".

- When requesting to speak,
  - Please **use the chat function** in order to be acknowledged.
- When you are given the floor,
  - Please unmute your microphone (and if able, turn your camera on)
  - Identify yourself