

# Transition to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories in Thailand

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Office of Natural Resources and Environmental Policy and Planning (ONEP)**

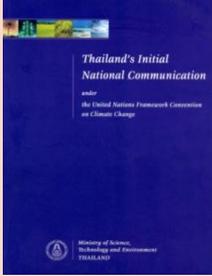
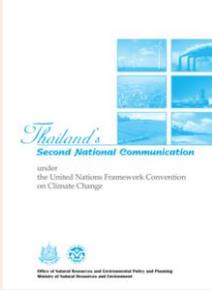
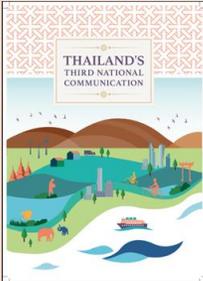


# Outlines

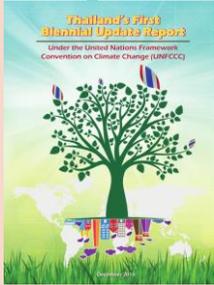
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- ❖ **GHG Inventory of reporting to UNFCCC**
- ❖ **Institutional Arrangement of GHG Inventory**
- ❖ **Thailand Greenhouse Gas Emission Inventory System (TGEIS)**
- ❖ **National Greenhouse Gas Inventory of Thailand**
- ❖ **Challenges in reporting**

# National Communication

REPORT		DATA YEAR	SUBMISSION YEAR	Methodology
<b>Initial National Communication (INC)</b>		<b>1994</b>	<b>2000</b>	<b>1996 IPCC Guidelines</b>
<b>Second National Communication (SNC)</b>		<b>2000-2004</b>	<b>2011</b>	<b>-1996 IPCC Revised Guidelines -2003 GPG for Land use, Land use Change, and Forestry</b>
<b>Third National Communication (TNC)</b>		<b>2000-2013</b>	<b>2018</b>	<b>-1996 IPCC Revised Guidelines -2000 GPG -2003 GPG for LULUCF</b>

# Biennial Update Reports

REPORT		DATA YEAR	SUBMISSION YEAR	Methodology
<b>First Biennial Update Reports (BUR 1)</b>		<b>2000-2011</b>	<b>2015</b>	<b>-1996 IPCC Revised Guidelines</b> <b>-2000 GPG</b> <b>-2003 GPG for LULUCF</b>
<b>Second Biennial Update Reports (BUR 2)</b>		<b>2000-2013</b>	<b>2017</b>	<b>-1996 IPCC Revised Guidelines</b> <b>-2000 GPG</b> <b>-2003 GPG for LULUCF</b>
<b>Third Biennial Update Reports (BUR 3)</b>		<b>2000-2016</b>	<b>2020</b>	<b>-2006 IPCC Guidelines</b> <b>-2000 GPG</b> <b>-2003 GPG for LULUCF</b>

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# Institutional Arrangement of GHG inventory

# Thailand Institutional Arrangement

## National Committee on Climate Change Policy (NCCC)

Prime Minister

Chairman

Minister of National Resources and Environment

Vice-Chairman

Minister of Foreign Affairs

### NCCC members:

1. Prime Minister's Office
2. Ministry of Finance
3. Ministry of Agriculture and Cooperatives
4. Ministry of Transport
5. Ministry of Information and Communication Technology
6. Ministry of Energy
7. Ministry of Commerce
8. Ministry of Interior
9. Minister of Science and Technology
10. Ministry of Education
11. Ministry of Public Health
12. Ministry of Industry
13. Bangkok Metropolitan Administration
14. Office of the National Economics and Social Development Board (NESDB)
15. Bureau of Budget
16. 5-9 Experts

Secretariat  
Permanent Secretary, Ministry of  
Natural Resources and Environment

ONEP

TGO

**Subcommittee on Climate Change  
Policy and Planning Integration**

**Subcommittee on Climate Change  
Knowledge and Database**

**Subcommittee on Climate Change  
Negotiation and International Cooperation**

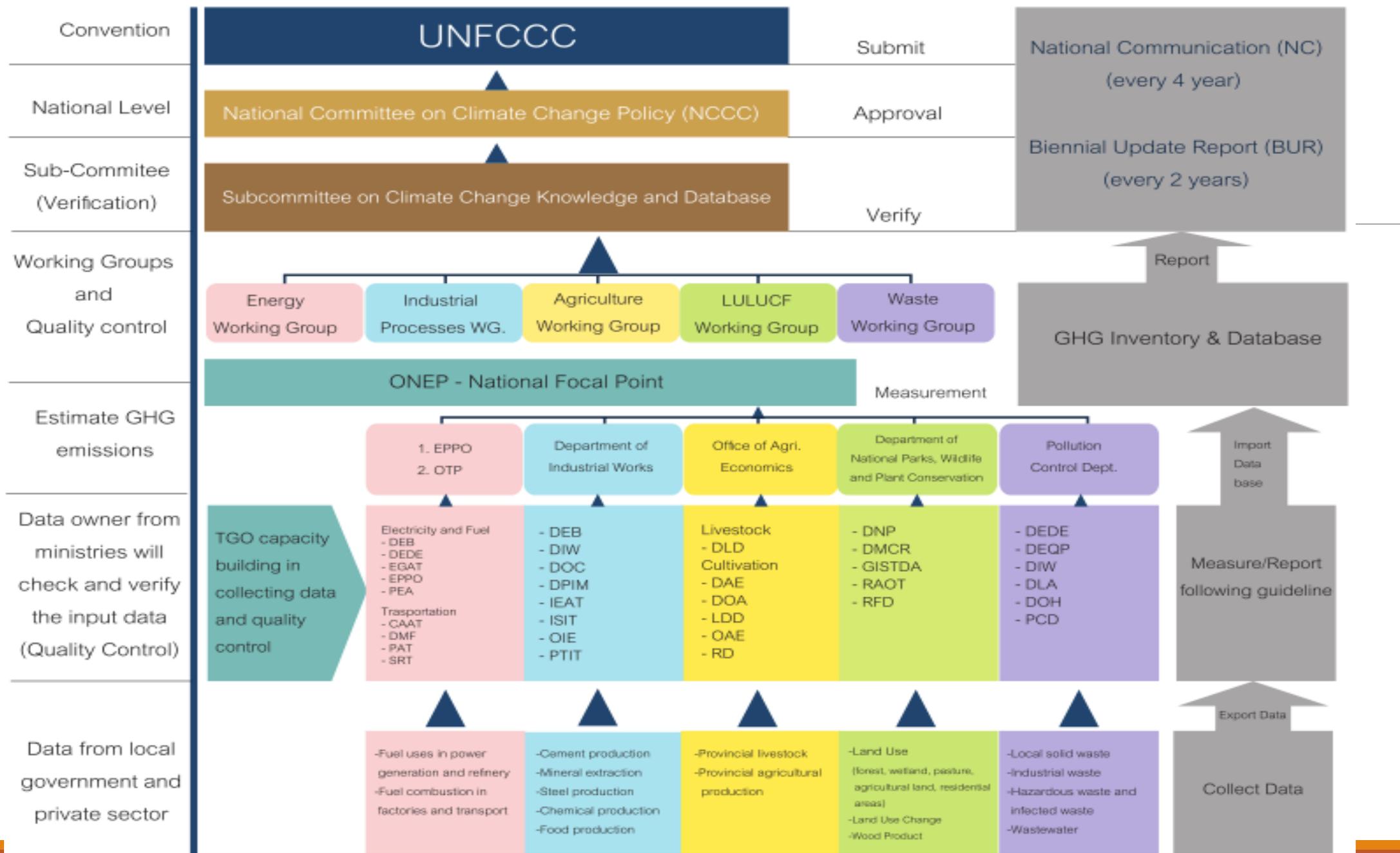
**Subcommittee on Action for Climate  
Empowerment and Public Relation**

**Chair:** Permanent Secretary, MNRE  
**Vice-Chair1:** Secretary General, ONEP  
**Vice-Chair2:** Secretary General, NESDB  
**Members:** 24 persons  
**Secretariat:** ONEP

**Chair:** Permanent Secretary, MNRE  
**Vice-Chair:** Secretary General,  
ONEP  
**Members:** 29 persons  
**Secretariat:** ONEP

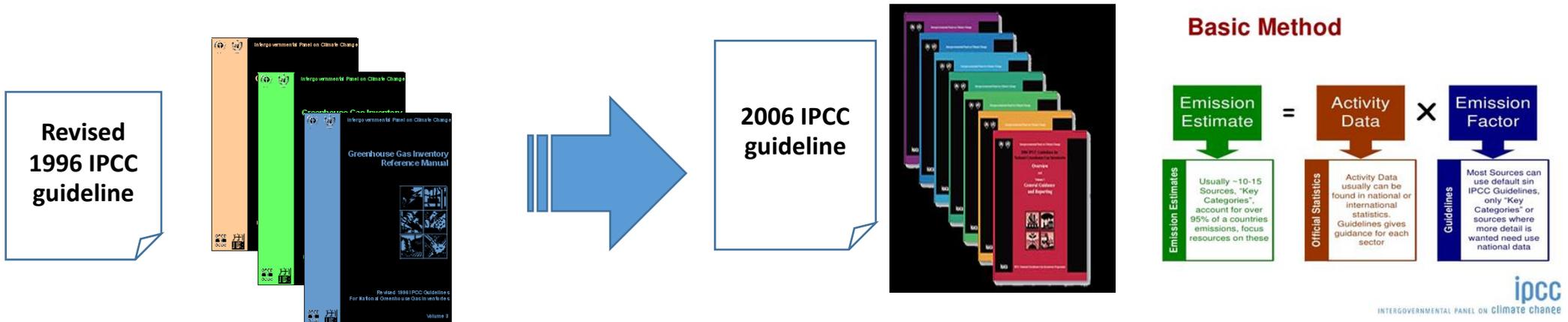
**Chair:** Permanent Secretary, MNRE  
**Vice-Chair1:** Secretary General, ONEP  
**Vice-Chair2:** Director-General of the Department  
of International Organizations (DIO)  
**Members:** 18 persons  
**Secretariat:** ONEP & DIO

**Chair:** Permanent Secretary, MNRE  
**Vice-Chair:** Director-General,  
Department of Environment  
Quality Promotion (DEQP)  
**Members:** 22 persons  
**Secretariat:** DEQP

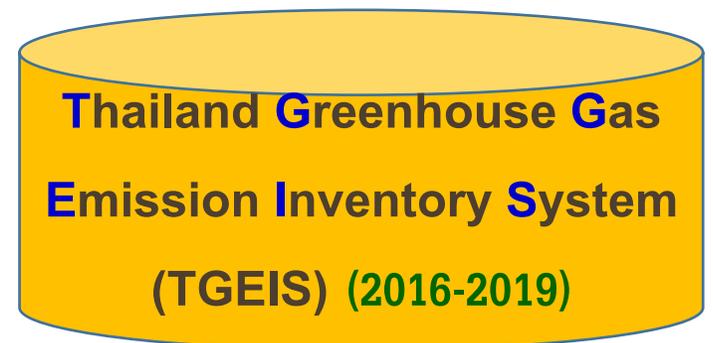
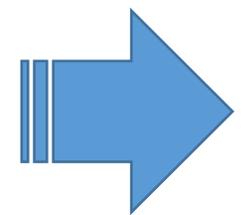
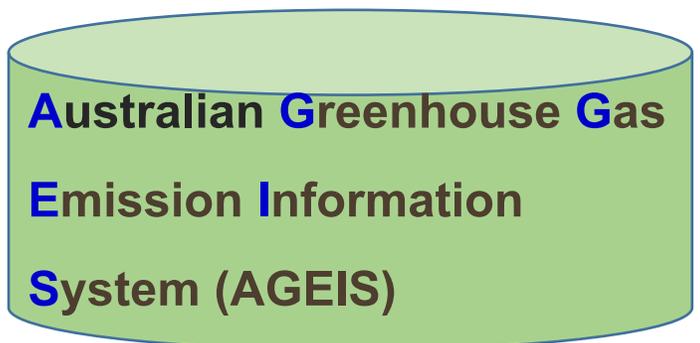


Source: Office of Natural Resources and Environmental Policy and Planning (ONEP)

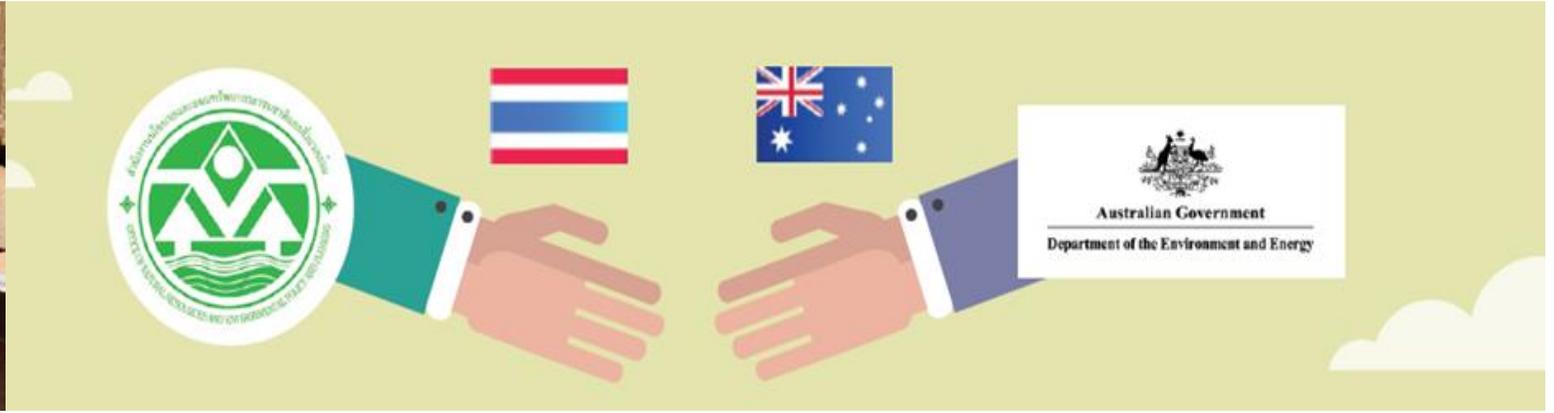
# Enhancing for Greenhouse Gas Inventory transition on 1996 to 2006 IPCC Guidelines



## Development of collection and reporting GHG inventories in Thailand (2015-2018)



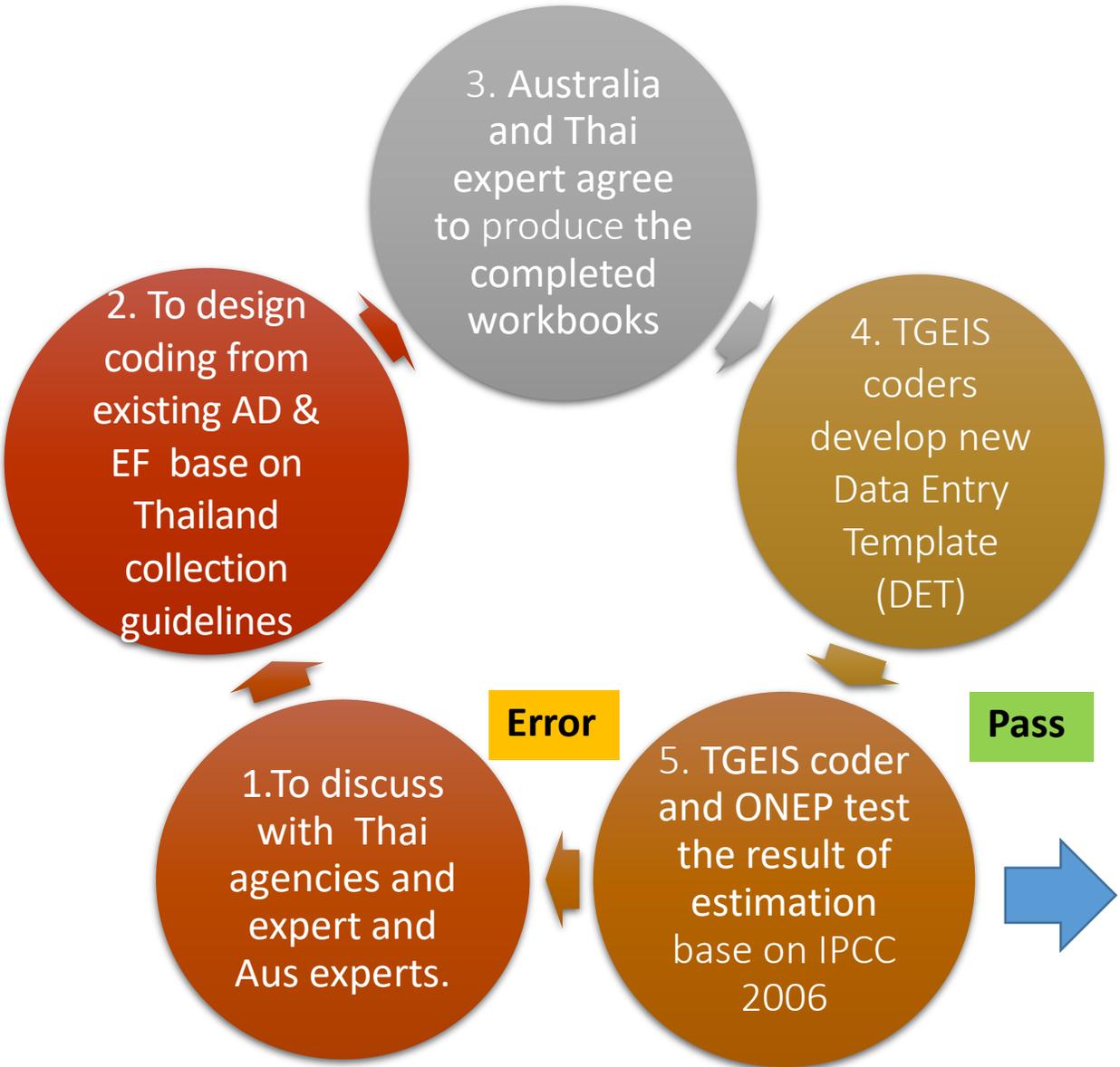
# 1. What is Thailand Greenhouse Gas Emission Inventory System or TGEIS ?



- Emission calculation based on IPCC 2006 guideline and inventory compilation system
- An emissions database that can be queried, graphs produced and data downloaded as reports
- Inbuilt quality control
- Integrated documentation and archive system
- A UNFCCC reporting tool



# 2. Data Entry Template (DET)



DET of Energy (4)

DET of Transport (1)

DET of IPPU (8)

DET of Agriculture (5)

DET of LULUCF (1)

DET of Waste (3)

DET of other (2)

# 3.Key functions for inventory management

## New inventory

- Create new Inventories
- Flexible frequency

## Recalculations

- New methods
- New data

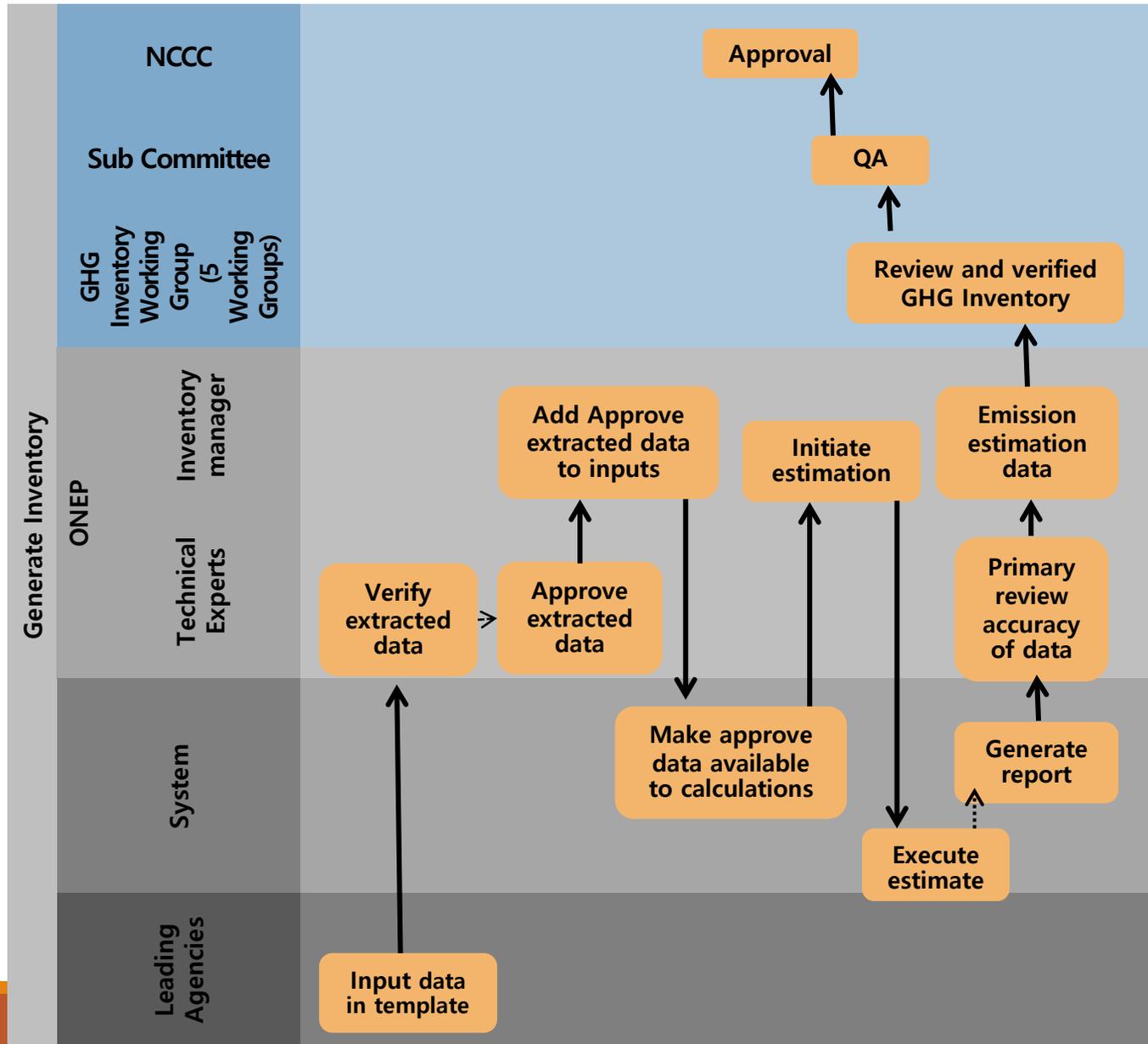
## Archive inventory

- Store completed inventories & inputs
- Retrieve and query

## Efficiency

- Rollover previous data into new inventory
- Not need to re-enter data

# 4. Thailand Greenhouse Gas Emission Inventory System (TGEIS)

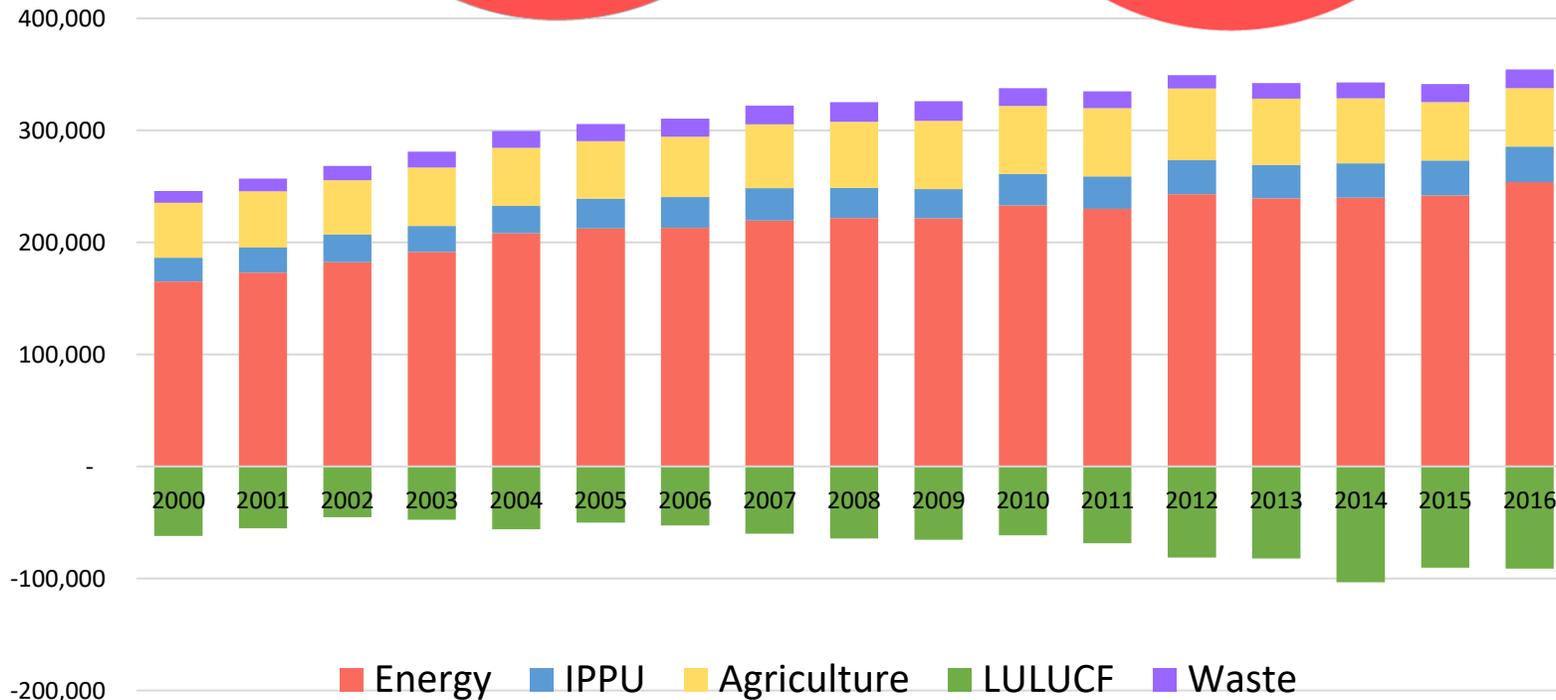
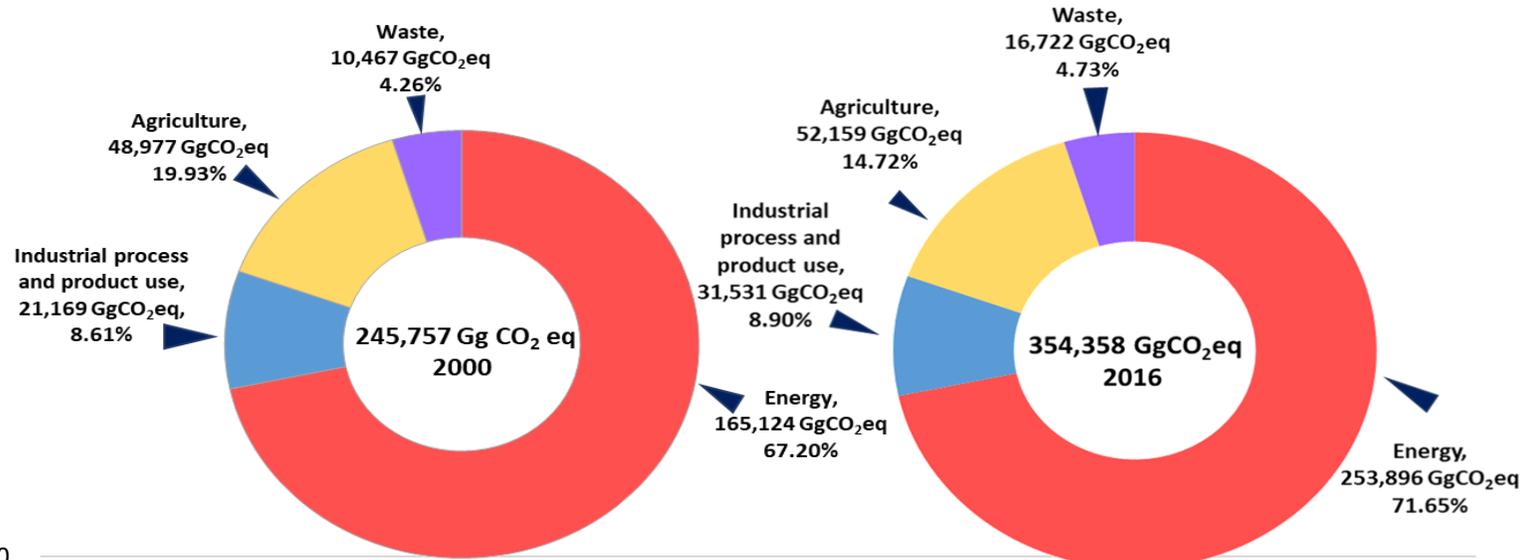


## The Abilities of TGEIS; TACCC

- Carbon Check; Energy sector
- Report Generation
- Time Series
- Uncertainty Calculation

Supported by Australian Government

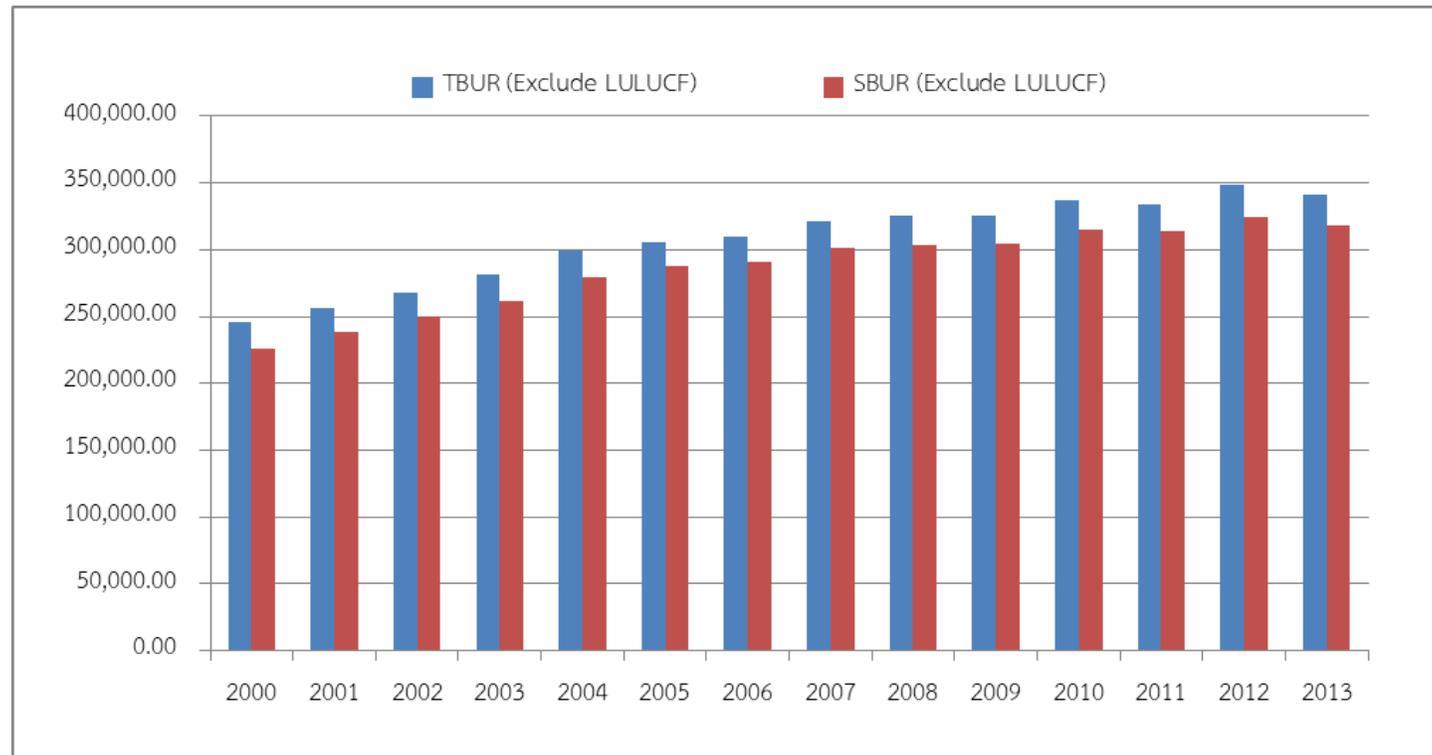
# National Greenhouse Gas Inventory of Thailand



During 2000 to 2016 total emissions, excluding those from LULUCF sector, increased from 245,757 GgCO<sub>2</sub>eq in 2000 to 354,358 GgCO<sub>2</sub>eq in 2016.

# Recalculations

## comparison of Thailand's GHG emissions between BUR2 and BUR3



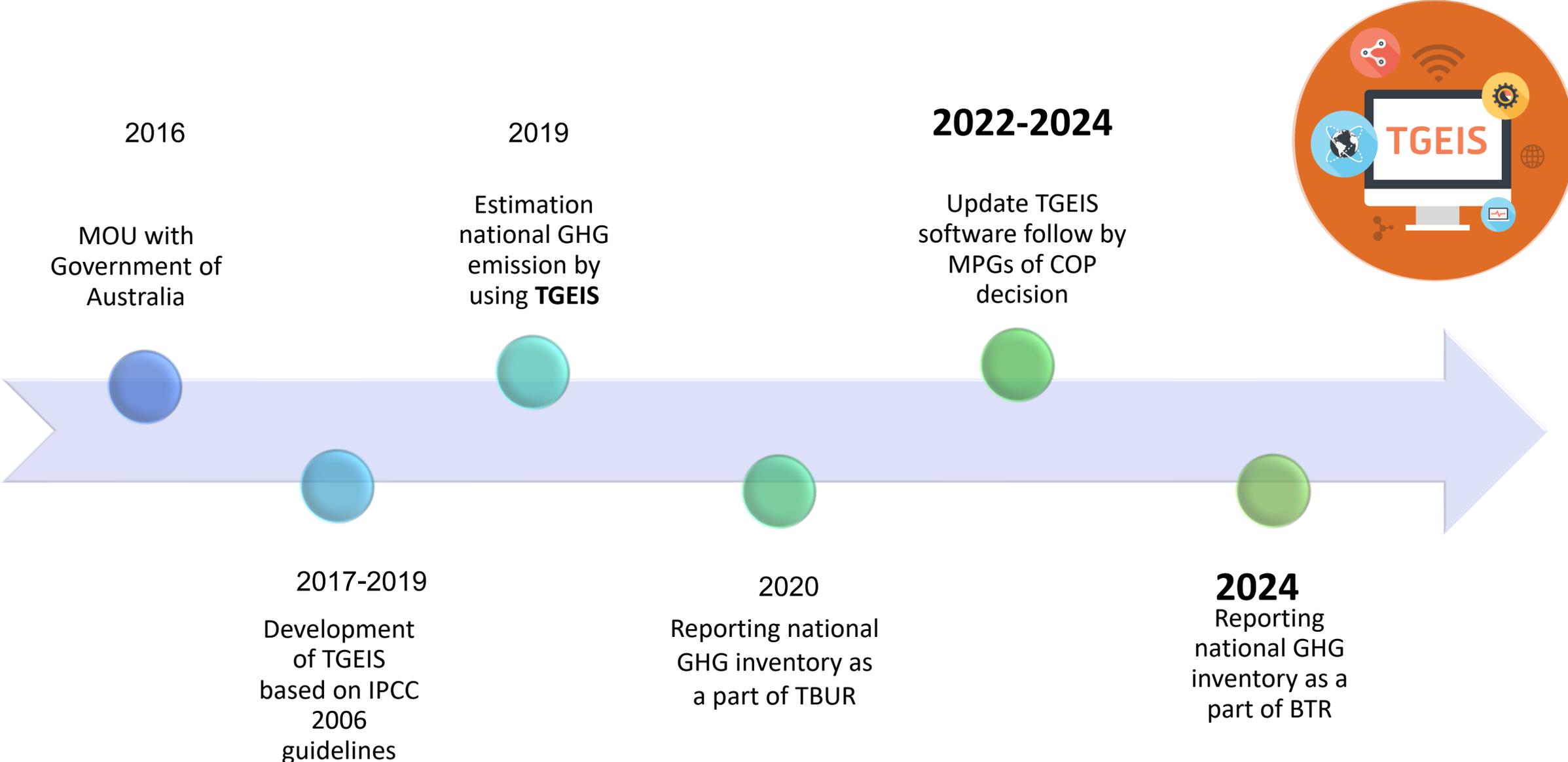
The emissions for the period 2000-2013 were higher than those in the previous inventories submitted in the BUR2 in the range of 5.8% to 8.0%.

## 5. Challenge in reporting

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- ❖ Transition to the 2006 IPCC Guidelines for National GHG Inventories in all sectors and enhancing the capacities of national staff involved in the inventory process.
- ❖ Move to higher tier particularly for key categories sub-sector.
- ❖ Collecting data from private sector, currently there are no regulations.
- ❖ Improving data collection and methodology for F-GAS and LULUCF sector.

# Next Step





# Thank you

**Climate Change Management and Coordination Division  
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Ministry of Natural Resources and Environment**

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