

#### **UNFCCC COP24 Japan Pavilion**

Towards Enhanced Transparency Framework under the Paris Agreement: Lessons learnt from JICA's Support for National GHG Inventory of Mongolia

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# Brief overview of JICA GHG Inventory project of Mongolia

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#### Outline

- Background
- Goals and expected outputs
- Continuous cycle & improvement of GHGI
- The experts from Mongolian and Japan side
- Institutional/Procedural/Legal arrangements
- Achievements so far & next steps
- Introduction to JICA GHGI website

"The project for capacity development to establish a national GHG Inventory cycle of continuous improvement" implemented by MET & JICA

# Background of the project

- In 2014, Mongolia requested JICA for technical assistance to strengthen our capacity for preparing the GHGI
- JICA conducted surveys for detailed planning in Feb. 2016 and Mar. 2017
- The surveys identified the need for strengthening the capacity to <u>plan and implement the improvements for cross-</u> <u>sectoral and sectoral issues of GHGIs</u>
- The Record of Discussions (R/D) was signed in June 2017
- The project began in Oct. 2017 and will last until Nov. 2021

## Goals and expected outputs

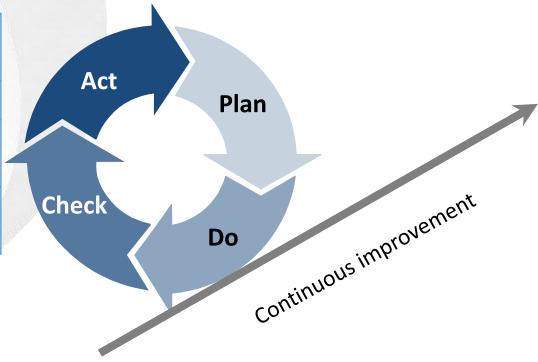
- Overall Goal: Regularly improved GHGI is used for the development of mitigation actions planning and monitoring.
- Project Purpose: The GHGI is regularly improved with the cooperation of relevant institutions.
- Project Duration: November 1, 2017 → October 31, 2021
- Expected Outputs of the project:
  - 1. Capacity to regularly and continuously improve the GHGI system is strengthened.
  - 2. Capacity to organize issues in the Energy sector and systematically improve the GHGI is strengthened.
  - 3. Capacity to organize issues in the Land use, land use change and forestry (LULUCF) sector and systematically improve the GHGI is strengthened.



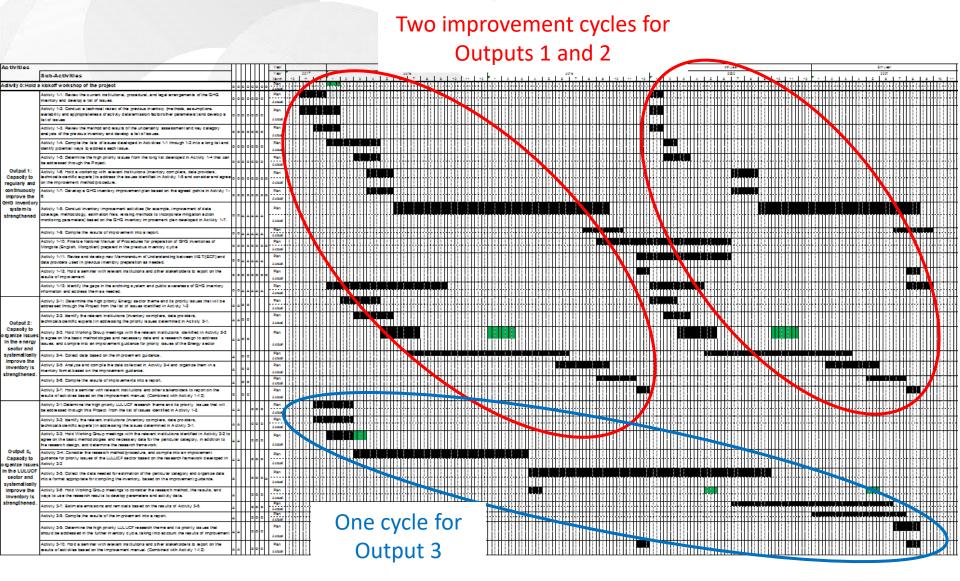
# Continuous cycle and Improvement of GHG Inventory

 Overarching goal is to enhance Mongolia's GHGI preparation cycle by introducing the concept of continuous improvement through implementation of the PDCA cycle.

Plan	Establish objectives Develop a plan				
Do	Implement the plan				
Check	Review the work Identify causes of any issues				
Act	Identify ways to prevent issues				

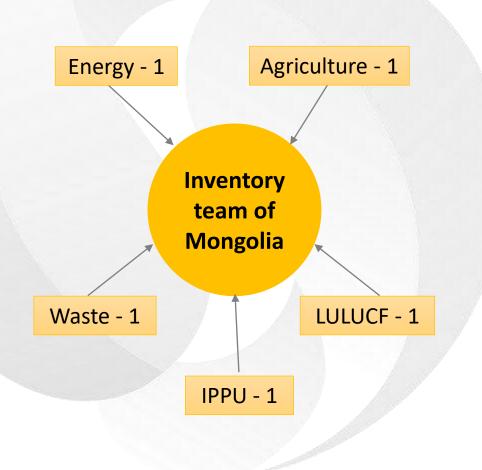


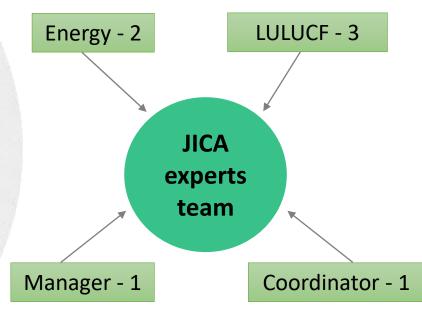
# Plan of operation





#### Mongolian and Japanese Experts

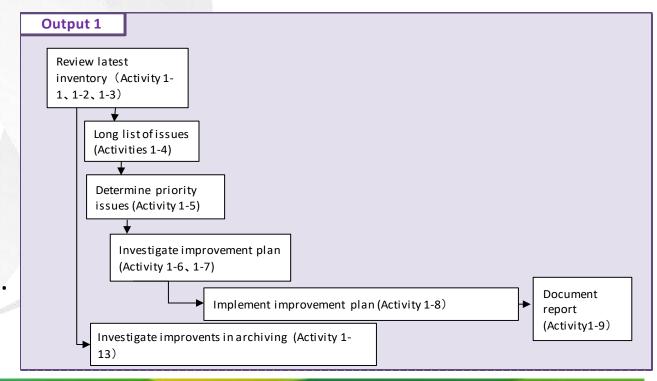




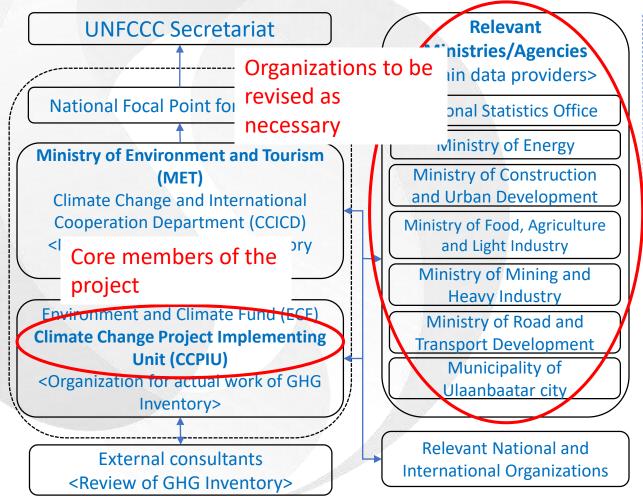
Missions to Mongolia: 3-6 times in a year Duration of the missions: 1-2 weeks Long-term expert: stationed at ECF office until the end of the project

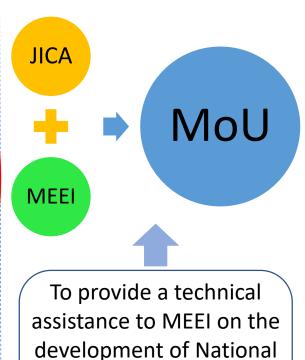
# Output 1: Inventory preparation

- Scope of Output 1
  - National system issues: institutional/procedural/legal arrangements;
  - Cross cutting issues: both general and technical issues; and
  - Review of BUR1 IPPU, waste and agriculture sectors
- Carry out 2 cycles
- Objective is to support the development an improvement cycle for GHG inventories.



# Institutional/Procedural/Legal arrangement





energy balance table

(EBT) in continuous

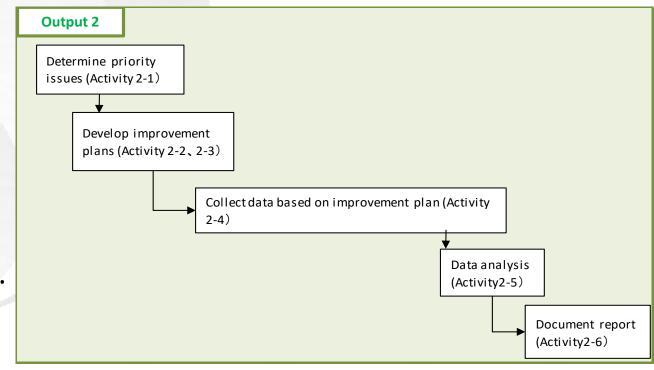
manner



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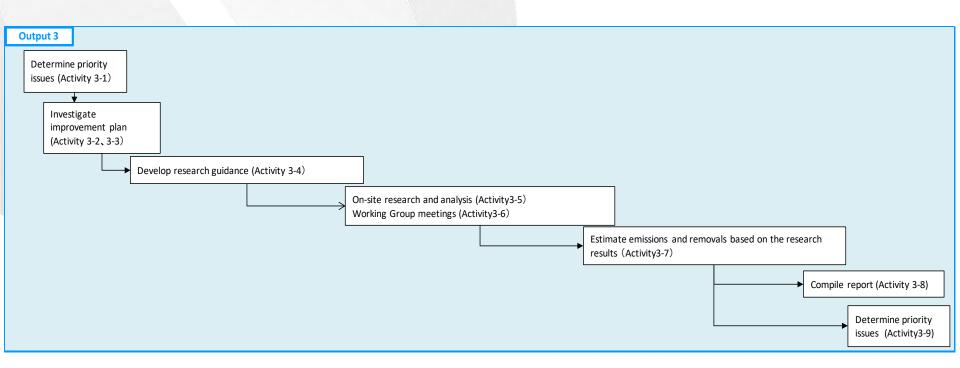
# Output 2: Energy sector data improvement

- Scope of Output 2
  - Activity data (energy balance table) for the energy sector,
  - In particular, breakdown fuel combustion by fuel types/industries, separation of international and domestic aviation fuel consumption.
- Carry out 2 cycles
- Objective is to support the development an improvement cycle in the energy sector.



## Output 3: LULUCF

- Scope of Output 3
  - Estimation of emissions and sinks from Grassland in the LULUCF sector,
  - As of now, Output 3 will involve a field study collecting soil samples to develop country specific parameters.



#### Achievements so far & next steps

#### Output 1 progress:

- Reviewed the current institutional, procedural and legal arrangements of GHGI and developed a list of issues.
- Conducted a technical review of the previous inventory of BUR1 (methods, assumptions, availability of activity data/emission factor/other parameters) and developed a list of issues.
- Reviewed the method and results of UA and KCA of BUR1 and developed a list of issues and compiled the lists of issues into a long list and identified potential ways to address each issue.
- Determined high priority issues from the long list that can be addressed through the project.
- Held the second workshop with relevant institutions (data providers, technical/scientific experts) to address the priority issues.
- Drafted a GHGI improvement plan (e.g. for agriculture, IPPU and waste sectors) based on above activities.
- Identified the gaps in the archiving system and public awareness of GHGI information and addressed them as needed.

#### Next steps:

• Finalization and implementation of the improvement plan

## Achievements so far & next steps

#### Output 2 progress:

- Determined the high priority issues in energy sector that will be addressed through the project the long list compiled in Output 1.
- Identified the relevant institutions in addressing the priority issues.
- MoU between JICA and MEEI to support the development of national EBT has been made.
- JICA experts proposed the possible support to MEEI's initiative to develop a national EBT.
- Held working group meetings with institutions identified above.
- Drafted an energy sector improvement plan based on above activities.

#### Next steps:

- Review the MEEI's plan for national EBT development process
- Agree on the further activity plan with MEEI

#### Achievements so far & next steps

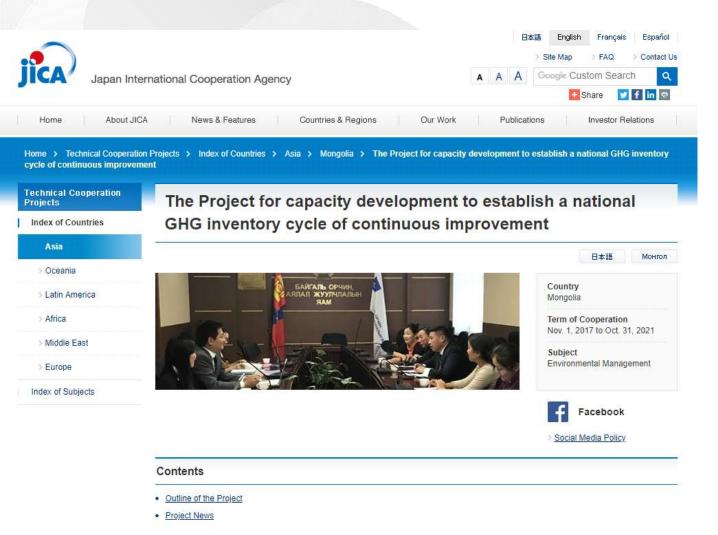
#### Output 3 progress:

- Determined the high priority issues in LULUCF sector that will be addressed through the project the long list compiled in Output 1.
- Identified the relevant institutions in addressing the priority issues.
- Held working group meetings with institutions identified above.
- The cooperation contract made with Institute of Geography and Geoecology (IGG), Mongolian University of Life Sciences (MULS) and researchers.
- Drafted a LULUCF sector improvement plan based on above activities.

#### • Next steps:

 Analyze literature review by national consultants to determine the field survey scope

#### Introduction to JICA GHGI website



PR team of JICA country office is operating the website according to information from ECF/CCPIU.

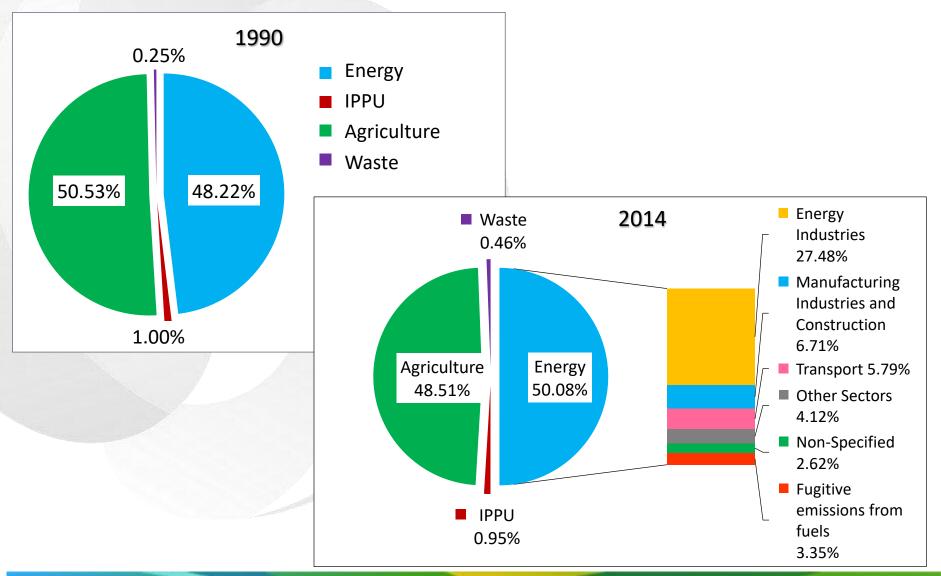
Published related events for information

Interlinked with related organizations & projects

Public awareness improved

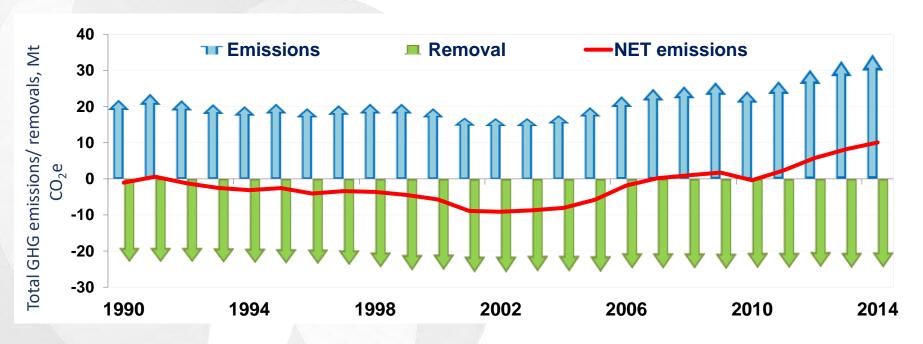
# Updates on GHG Inventory (BUR1) of Mongolia

# Mongolia's total GHG emissions/removals





#### **Emissions trend**



Total emissions, Gg CO2e	1990	1995	2000	2005	2010	2014
Energy	11,091.14	8,920.66	7,528.89	9,738.30	13,227.35	17,267.79
IPPU	218.66	82.81	63.95	140.46	251.63	328.06
Agriculture	10,585.30	11,719.79	11,790.52	9,881.33	10,635.70	16,726.98
Waste	55.62	55.71	66.04	83.33	108.26	159.91
LULUCF	-23,024.18	-23,364.15	-25,188.38	-25,658.09	-24,670.87	-24,451.93
TOTAL (incl. LULUCF)	-1,073.46	-2,585.18	-5 <i>,</i> 738.98	-5,814.68	-447.93	10,030.80
TOTAL (excl. LULUCF)	21,950.73	20,778.97	19,449.40	19,843.41	24,222.94	34,482.73

#### Conclusion

#### Main expected outputs:

- Systematically work according to plan
- QA/QC plan
- Archiving manual / it seems like not so important, but it is!
- Improved data collection system
- Data gap filling
- Improved reporting / NIR

#### Specific outputs:

- EBT development in continuous manner / capacity of MEEI is strengthened
- Emissions estimation from grassland → LULUCF sector results more accurate
- Capacity of stakeholders strengthened

# THANK YOU!



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