



# Mutual Learning on Energy Sector

by  
Indonesia and Mongolia

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# Materials used

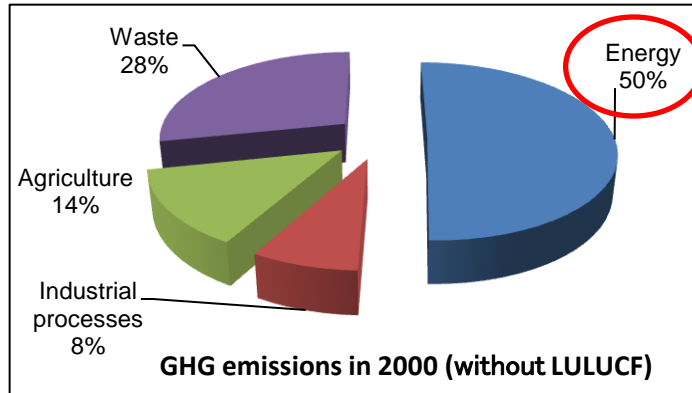
- Inventories subjected to study
  - Indonesia: Inventories for 2000-2006 (from SNC in 2010)
  - Mongolia: Inventories for 1990-2006 (from SNC in 2010)
- **Materials used** (Those underlined are publicly available.)

Country	Inventory Report	Spreadsheets
Indonesia	- SNC (June 2010)	- 1_Energy 2000 – SNC 2010 (excel) - 1_Energy 200X – SNC 2010 (excel) - Neraca Energi Indonesia 200X – 11 March 2009 (excel) - Summary of Energy 11 March 2009 (excel)
Mongolia	- <u>SNC (Dec. 1, 2010)</u>  - ENERGY SECTOR GREENHOUSE GAS INVENTORY OF MONGOLIA (2010)	- 1990-2006 (excel) - OVERVIEW (excel)



# Sector overview

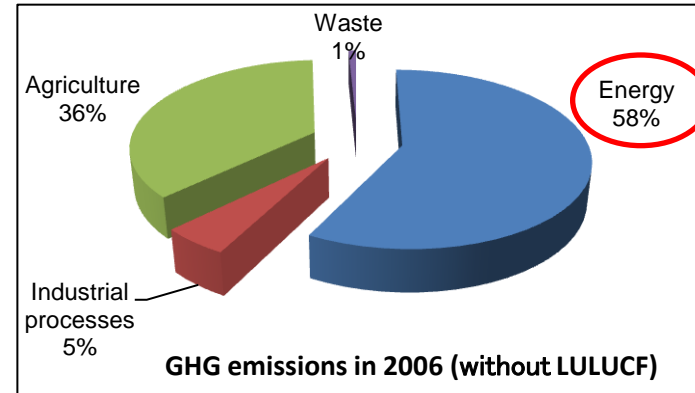
## Indonesia



### Energy sector (2000)

- 280,938 Gg-CO<sub>2</sub>
  - Energy production (30%)
  - Manufacturing Industries and Construction (23%)
  - Transportation (20%)
- Key categories
  - Energy production
  - Manufacturing Industries and construction
- Other features
  - 29% Increase from 2000 to 2006
  - 240 million population

## Mongolia



### Energy sector (2006)

- 10,212 Gg-CO<sub>2</sub>
  - Energy industries (63%)
  - Transport (18%)
  - Commercial, residential & agriculture (12%)
  - Industry is very limited
- Other features
  - 15% Increase from 2000 to 2006
  - 2.7 million population
  - Coal is produced and used for mainly heating during winter season.



# Overview of outcome

- Classification and number of questions asked prior to the workshop

Classification	Indonesia	Mongolia
Acquisition of activity data	9	6
Adoption of emission factor	12	1
Quality assurance & quality control	2	4
Responsible system structuring	1	4
Application of guideline	3	2
Mitigation plan	0	4



# Issues & solutions (Indonesia)

- Through the mutual learning, It was found out that there are some inventory data and understanding of the emission factor necessary to be corrected.
  - 1) The understanding of the emission factor on the answer of the Q&A was corrected.
  - 2) The template used for ML was not final version.
    - Will be checked after returning to the country.
- Stock change should be considered.
  - Will be studied after returning to the country.



# Issues & solutions (Mongolia)

- The activity data on sub-bituminous and lignite coal are collected from power plants. There is a possibility of other usage of coal other than collected data.
  - Will review after returning to the country.
- Necessity and importance of QA/QC is reminded through the mutual learning.
  - Will review after returning to the country.



# Outstanding issues

- The activity data of biomass is estimated but not collected. (Both countries)
- Structuring the permanent organization for inventory is necessary for the annual estimation in the future. (Mongolia)
- More CDM projects are expected and the capacity building for CDM project should be strengthen. (Mongolia)



## Indonesia

- Close discussion is performed between two teams of inventory working group and also with related sectoral ministries.
- Confidential data is properly treated.
- Energy balance data is same as IEA data.
- Bunker fuel is separated from domestic use.

## Mongolia

- Close discussion is performed between the inventory authority and related ministries and agencies.





# Possible follow-up activities

- Country-specific emission factor used can be provided to the IPCC Emission Factor Database. (Indonesia)
- On-line (E-mail) follow-up discussion is possible if necessary. (Both countries)



# Participants' comment

- Good examples of partner to follow to make own inventory are found.
- Motivation was shared by participants, which brings the interest in each other's inventory.
- In addition, by meeting face to face and having frank discussion, inventory compilers from both countries got more and more friendly with each other.



# Suggestion for future ML

- Hope to continue this mutual learning.
- Similar country in circumstance may be preferred as a partner for mutual learning
  - Emissions volume
  - Temperature (Climate condition)
  - Natural resources

