



#### Mutual Learning on the Industrial Processes Sector by Indonesia and Japan

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#### **Materials used**



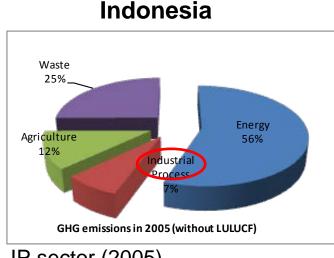
- Inventories subjected to study
  - Indonesia: Inventories for 2000-2005 (from SNC in 2010)
  - Japan: Inventories for 1990-2010 published in 2012
- Materials used (Those underlined are publicly available.)

Country	Inventory Report	Spreadsheets	Others
Indonesia	<u>SNC Chapter II</u> <u>National GHG</u> Inventory	2006 IPCC GLs worksheets + Summary GHG Inventory worksheets	
Japan	<u>NIR</u>	CRF tables	

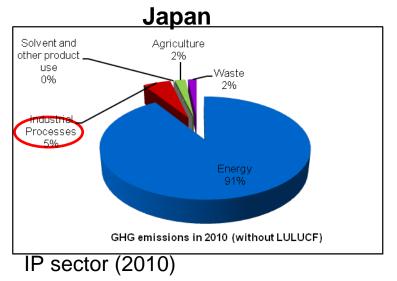


#### **Sector overview**





- IP sector (2005)
- 48,733 Gg-CO2 eq
  - Mineral Products (66%)
  - Chemical (23%)
  - Metal (11%)
- Key categories
  - Cement Production
  - Ammonia Production
- Other features...
  - Total of CO2, CH4, N2O: +13% from 2000
  - PFCs unchanged from 2000



- 65,898 Gg-CO2 eq
  - Mineral Products (58%)
  - Consumption of F-gases (34%)
  - Chemical (6%)
- Key categories
  - Cement Production
  - Refrigeration & AC and more
- Other features...
  - Total of CO2, CH4, N2O: -38% from 1990
  - Total of F-gases: -54% from 1995

- Issue ...Currently no emissions reported for HFCs, SF6, and coverage of PFCs may not be sufficient
  - Solution...Correct identification of HFC, PFC, and SF6 sources will be needed first, and following that, a Tier 1 method from the 2006 GLs may be used for F-gases use
- Issue ...CO2 recovered for urea production is deducted from emissions from ammonia, but down-stream use of urea might not be accounted for Inventories in Asia

- Solution...Coordination across inventory sectors is necessary
- Issue ... Presidential Regulation No. 71 decided that local/provincial governments are to prepare emissions estimations, and this is to be incorporated into the national inventory. Large and middle-size companies will also provide emission data to provincial/national governments. How to ensure consistency and avoid omissions double-counting? Workshop on Greenhouse Gas Inventories in Asia

- Solution...Careful coordination necessary, especially for AD. But also can be used as an opportunity for cross-checking between provincial government and company submitted emission data
- Issue ... Insufficient commitment from relevant ministries to inventory preparation
  - Solution...Engage stakeholders such as the Ministry of Industry and industrial associations in some part of the process of estimations

- Issue ...Hesitance of relevant ministries/ organizations/companies to provide confidential data
  - Solution...1) providing explanation that reporting in the inventory will be done by aggregation, therefore confidential data will not be disclosed, 2) involving related ministries and companies in the process of estimation so that they know that data will be treated correctly, but must bear in mind that careful coordination will be necessary when data is compiled across ministerial boundaries

# Outstanding issues (Indonesia)

- Issue ... How to involve appropriate stakeholders in AD acquisition and EF development
- Issue ...With the complex data provision scheme starting-up, how to conduct QC for AD
- Issue ...Lack of coordination among ministries/other entities, and clarity on who decides on the roles of each

## **Outstanding issues (Japan)**



 Issue ...Japan uses an Energy Balance Table to balance all fuel use in the country, therefore it is difficult to take out portions to report as IP sector emissions sometimes



## **Outstanding issues (Japan)**



 Issue ... There are no special written arrangements for data provision (from ministries, industrial organizations, private companies) and treatment, which might pose a problem when personnel changes



# **Suggestion for future ML**



- ...How should QC be implemented? Not just for AD, EFs, but for the whole process of inventory development
- What is MRV in the context of inventory preparation? How to prepare for domestic MRV?
- ...What would be the cost and benefit of moving methodologies up to 2006 GLs? – Indonesia's experience could be offered
- ...BUR GLs specify 1996 GLs and GPG for methodological guidance, but in cases where 2006 GLs are already applied, how would it work?

# **Suggestion for future ML**



- ...How to prepare for BURs, in general
- ... Relationship between inventories and mitigation action, drawing the baseline etc
- … How to develop an institutional arrangement that will be effective in data collection, and also involve necessary ministries, aside from the primary ministry in charge of inventory compilation – an issue that needs to be continuously discussed Workshop on Greenhouse Gas Inventories in Asia