



Experience in using the 2006 IPCC software

Case Study for the Philippines

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NATIONAL INSTITUTIONAL ARRANGEMENTS



Climate Change Commission



Department of Environment
&
Natural Resources

waste, IPPU, FOLU



Department of Energy

energy



Department of Transportation

transport



Department of Agriculture &
Philippine Statistics Authority

agriculture

CCC as Overall lead

- Provide direction and guidance
- Develop archiving reporting monitoring and evaluating GHGI
- Provide continuous capacity building

Lead Agencies:

- Conduct and monitor sector specific GHG inventory
- Report GHGI to CCC based on agreed reporting scheme

Philippine Statistics
Authority

- assist in data collection and analysis

local government units

academe

private sector

public institutions

- participate, complement, and assist in the implementation of the PGHGIMRS

Support Institutions

Experiences in Using the IPCC Guidelines and Inventory Software (v.2.691)



- The 2006 IPCC Guidelines were used for the three National GHG Inventories conducted (2010, 2015, & 2020).
- The IPCC Inventory Software was used in the quantification process for the three inventory years except for the 2010 Forestry (ALU Software) and 2015 and 2020 estimates for the RAC under the IPPU sector.
- Most of our quantification follow the Tier 1 Methodology.
- The IPCC Guidelines is a very useful reference and the Inventory Software makes the calculation easier.
- Currently working on the 2022 GHG Inventory

Name of plant or type of clinker	Clinker production (tonnes)	Emission Factor (tonne CO ₂ /tonne Clinker)	Correction Factor for Cement Kiln Dust (CF, kg/kg)	CO ₂ Emissions (Gg CO ₂)
national clinker production	11855319	0.848	1	100533105
Total	11855319			100533105

Experiences in Using the IPCC Guidelines

- The default values/parameters provided in the IPCC Guidelines are very helpful especially if no reliable or complete national data is available.
- The decision trees are also very helpful in determining the appropriate methodological tier to use.
- However, it was also observed that most of the references or sources are quite old and some may not be reflective of the current circumstances (i.e. practices, processes, and technologies)
- Some terminologies in the IPCC Guidelines do not readily match with the national terminologies which needs further harmonization such as in the case of solid waste disposal facilities.
- IPCC guidelines have a consistent pattern that makes other volumes, chapters, or parts predictable and easy to locate.

Experiences in Using the IPCC Software

- The IPCC Software is easy to use and very helpful not only in the quantification of emissions but also in doing key category analysis and uncertainty analysis.
- The software is well organized and provide functions for consolidation, import/export as well as sectoral reporting.
- It was observed that there is a relatively high uncertainty in the RAC sector estimate as the software does not allow further disaggregation for sub-application types.
- The IPCC software does not allow simultaneous multiple users of one account (i.e. input/use from sub-national/regional users in 1 sector) and also one account does not work in different computers. Proposed Revision: Experienced challenges in creating superusers and users within the Software which may require development of proper/appropriate modules for available features/functions.
- The IPCC software does not work for MAC operating system and there is no function for the recovery of password.

Experiences in Using the IPCC Software

- Experiencing errors when we input data on wetlands
- Importing XML files to a different laptop results in different values compared to the original laptop (experienced in the FOLU/LULUCF sector)
- XML files generated using v.2.691 cannot be read by newer versions (experience in all sectors)
- IPCC Inventory software is limited only to Approach 1 of Key Category Analysis
- Tabs in the inventory worksheets keep rearranging when another tab is selected, making it difficult to keep track of tabs without data yet (esp. on worksheets with multiple tabs)
- Exporting worksheets to Excel is beneficial as it facilitates easy data validation and sharing.

Recommendations

- Proposing for a recalculation function to be available in the succeeding updates of the Inventory Software
- Need a better understanding of the use of Uncertainty Analysis in the Inventory Software
- Recommendation to have a community of users where they can ask questions and the IPCC can respond. Proposal for the IPCC to have a “helpdesk” to respond to queries and provide technical assistance to countries using the software
- Recommendation to have a “troubleshooting” manual or how we can address some issues encountered