

IPCC Inventory Software

Information event on experiences and perspectives on the compilation of NGHGI and on the use of reporting tables and reporting tools by developing and developed country Parties virtual, 20 November 2020

IPCC TFI TSU





Background

IPCC Inventory Software:

- ✓ produced, since 2012, by the IPCC Task Force on National Greenhouse Gas Inventories (IPCC TFI) to assist inventory compilers in using the 2006 IPCC Guidelines
- ✓ <u>free</u> to <u>use</u> and <u>download</u> at <u>https://www.ipcc-nggip.iges.or.jp/software/index.html</u>
- ✓ based on MS-Access for WindowsOS. Emulator needed for MacOS
- ✓ database password protected, a hint to recover the password is to be provided (once password is lost users can no longer access the database)
- ✓ Software and Manual are in English only. Manual is also available in:
 - French (translated by Government of Belgium)
 - Arabic (translated by Sidati Ould Dah Ould EIDA, CCPNCC, Mauritania)

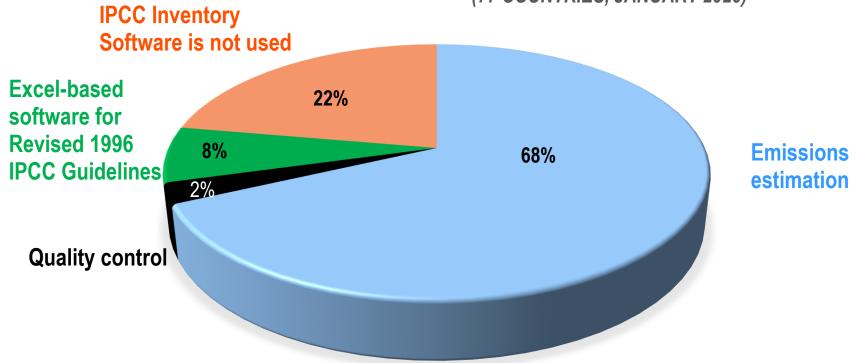




Use of the Software by Developing Countries



(77 COUNTRIES, JANUARY 2020)







Status

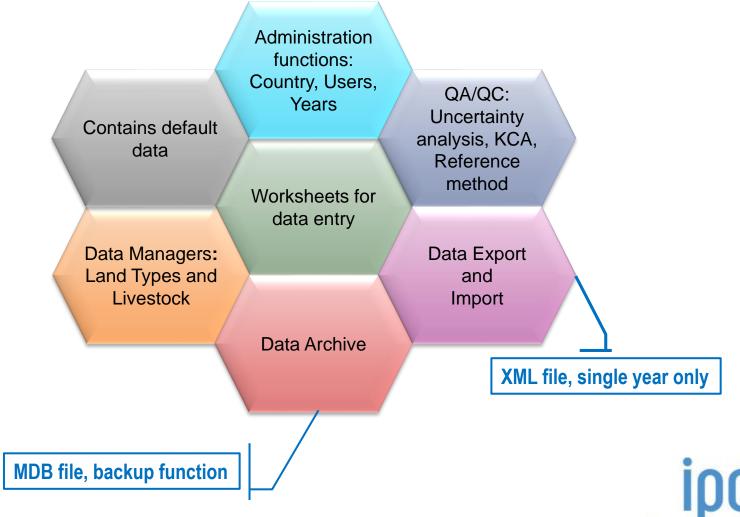
IPCC Inventory Software:

- ✓ originally designed to implement <u>Tier 1 Worksheets only</u> **provides** default data from the 2006 IPCC Guidelines
- ✓ current version 2.691 allows input of user-specific values for EFs and parameters (Tier 2) for Energy, IPPU, Agriculture, Waste categories
- ✓ can be used for the whole inventory or just individual categories.
- ✓ allows different sectors to be developed simultaneously
- ✓ can report outputs in non-Annex I National Communications format (reporting tables, consistent with Tables 1 and 2 in Annex to Decision 17/CP.8)





Software Functions





Reports in the Software

Main Menu

→ Report

Report	Level	Contents
Summary (IPCC)	1.A.1	Emissions/Removals
Short summary (IPCC)	1.A	Emissions/Removals
Sectoral (IPCC)	1.A.1.a.ii (most disaggregated level)	Emissions/Removals
Background (IPCC)	1.A.1.a.ii (most disaggregated level)	AD, Emissions/Removals

Main Menu

→ **Export**

Report	Level	Contents
NAI 1 & 2 (UNFCCC 17/CP.8)	1.A.1	Emissions/Removals

Note: All reports can be exported as MS Excel file





Plans

- Implementation of all IPCC Tier 2 & 3 methods provided in the 2006 IPCC Guidelines and the Wetlands Supplement Work going on AFOLU Sector, including WS
- > Tier 2 for Uncertainty Analysis
- Approach 2 for Key categories analysis
- Regional disaggregation of categories (e.g. federal states inventories)
- Multi-users at category level
- ➤ Time series export/import -XML file- that may be usable in various reporting formats including CRT
- Translation into the 5 non-English UN languages





Supporting Tools

Excel-based tool:

- ➤ HWP excel-based tool for data retrieval from FAOSTAT website and upload to the IPCC Inventory Software (under testing)
- Excel-based complete set of the IPCC Inventory Software worksheets, for QC as well as for data compilation (UNDP GSP)
- Data compilation of land representation and upload to the IPCC Inventory Software (not designed yet)

Guidebook for inventory compilers (not designed yet)

- ✓ Expected to be produced sector by sector
- ✓ All UN languages, beginning with English,
- ✓ Simulating the use of the software for each inventory category, providing most relevant references to good practice set in the 2006 IPCC Guidelines and its Supplements



Supporting Tools

Add-ons for Land Representation:

- based on wall-to-wall data collection and analysis (maps), implemented through FAO-SEPAL and QGIS
- based on sampling data collection and analysis (inventories), implemented through FAO-COLLECT EARTH

Connection with the IPCC Emissions Factors DataBase





Support

TSU is supporting the IPCC Inventory Software

- ✓ User Manual
- ✓ Help Desk E-mail ipcc-software@iges.or.jp
- ✓ Pool of voluntary testers, to support software development and use
- ✓ Annual meeting on feedbacks from software users including issues where support is needed or a revision of the software is envisaged







Thank you

https://www.ipcc-nggip.iges.or.jp/index.html





Tools

- **➤** Uncertainty analysis (estimate-level, tier 1 only)
- Key category analysis (approach 1 only)

When all values are entered in the worksheet for each sector, these analysis can be performed by:

Main Menu

→ **Export**

→ Uncertainty Analysis

or

Key Category Analysis





Multiple Users

Project manager Sectoral Expert(s) Distribute updated DB (MDB file) **Compile Sector 1** (Energy) PM: Update **Database Compile Sector 2** (IPPU) **Combine Databases** 000 (XML File) **Compile Sector 5 Database** (Other) Checks, Using XML file aimed to **Uncertainty, KCA** avoid losing or overwriting the database unintentionally **Prepare Outputs**

INTERGOVERNMENTAL PANEL ON Climate change

