



Updates on the IPCC Inventory Software and Recent Activities

The 20th Workshop on Greenhouse Gas Inventories in Asia

Tomakomai, Hokkaido, Japan

27 June 2023

Baasansuren Jamsranjav

IPCC TFI TSU

ipcc

INTERGOVERNMENTAL PANEL ON climate change



IPCC Inventory Software (version 2.861)

IPCC Inventory Software

- Launched in 2012
- The latest upgraded version 2.861 released on 6 June 2023 is available at IPCC TFI website <https://www.ipcc-nggip.iges.or.jp/software/index.html>

The screenshot shows the IPCC website header with the text "Task Force on National Greenhouse Gas Inventories" and the IPCC logo. A navigation menu on the left lists various sections, with "Inventory Software" highlighted. The main content area features a green banner for "New Version 2.861 – IPCC Inventory Software" and text describing the software release. A dropdown menu for "IPCC web sites" is visible in the top right corner.

Task Force on
National Greenhouse Gas Inventories

ipcc
INTERGOVERNMENTAL PANEL ON climate change

WMO UNEP

IPCC web sites

Home IPCC
IPCC-TFI Home
Organization
Publications
Emission Factor Database (EFDB)
Inventory Software
Meetings
FAQs
Links
Electronic Discussion Group (EDG)

Inventory Software

New Version 2.861 – IPCC Inventory Software

This is the new version 2.861 of the IPCC Inventory Software released on June 6, 2023.

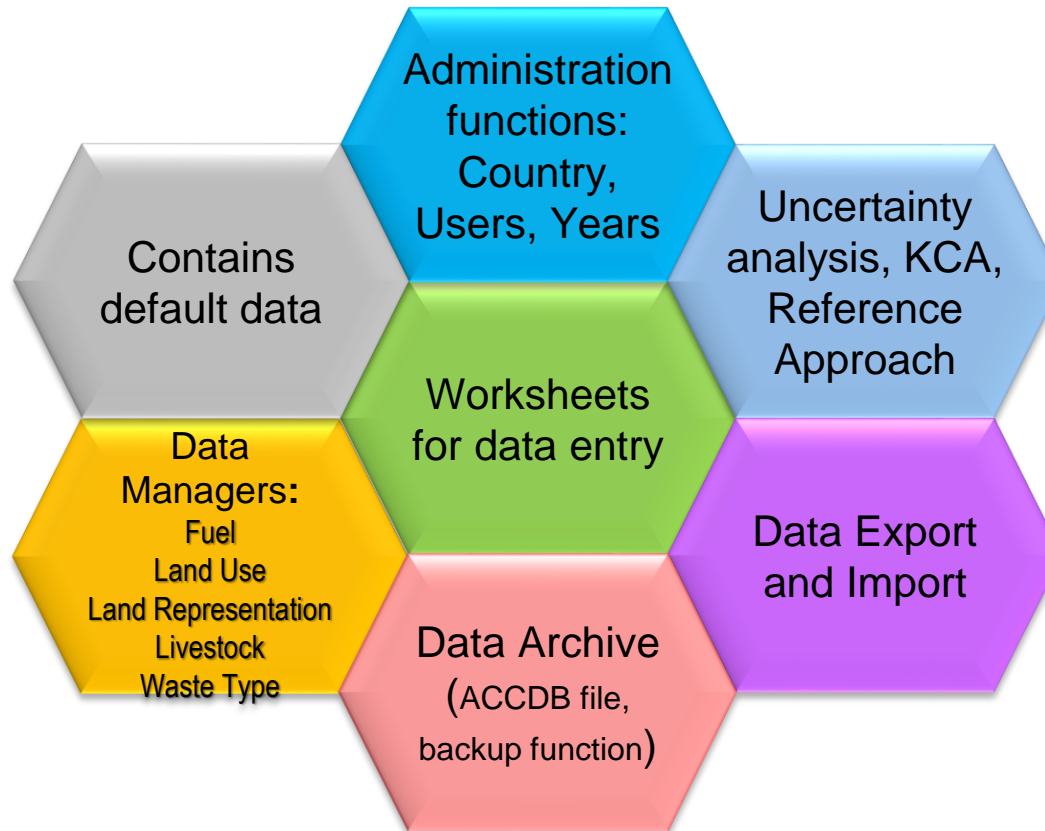
Please note that version 2.861 comes in 2 different files for installation. Thus, before downloading the file you shall check which one you actually need by using [this decision tree](#).

- Ver. 2.861 IPCC Inventory Software - **64bit**
- Ver. 2.861 IPCC Inventory Software - **32bit**

If you find any issues in the use of the IPCC Inventory Software, come back to us at ipcc-software@iges.or.jp.

Thank you very much for your support.

Software functions



Software key features

- All tiers and approaches of the *2006 IPCC Guidelines and its Wetlands Supplement (lilac color)*
- Data Managers:
- Subnational disaggregation
- Some elements of the *2019 Refinement (magenta color)* to facilitate interoperability with the UNFCCC reporting tool for electronic reporting of common reporting tables (CRT)
- Inclusion of AR5 GWP100 values
- Interoperability functionality with the UNFCCC reporting tool for CRT (Energy sector)

Data Managers

- Contains main data/information needed for estimation of greenhouse gas (GHG) emissions/removals. Allows to enter user-specific data/information.
- Data/information are transferred to relevant worksheets
- Help ensure consistency of data used in estimation of emissions/removals across all relevant worksheets/categories

The image displays three screenshots of a software application interface, likely for greenhouse gas emissions estimation. Each screenshot shows a different IPCC category selected in the '2006 IPCC Categories' tree on the left, with the 'Administrate' menu open, highlighting specific management options.

- Top Screenshot:** The 'Energy' category is selected. The 'Administrate' menu is open, and the 'Energy' option is highlighted, leading to the 'Fuel Manager' option.
- Middle Screenshot:** The 'Agriculture, Forestry, and Other Land Use' category is selected. The 'Administrate' menu is open, and the 'AFOLU' option is highlighted, leading to a sub-menu with 'Land Use Manager', 'Land Representation Manager', and 'Livestock Manager' options.
- Bottom Screenshot:** The 'Waste' category is selected. The 'Administrate' menu is open, and the 'Waste' option is highlighted, leading to the 'Waste Type Manager' option.

Each screenshot also shows a 'Time Series' plot for 'CARBON DIOXIDE (CO2) Emissions (Gg CO2 Equivalents)'.

Subnational disaggregation

- Subdivision allows estimation of emissions/removals at subnational level (e.g., regions by climate zone)

The screenshot displays the '2006 IPCC Categories' software interface. The left sidebar shows a tree view of categories, with '4 - Waste' expanded to '4.A - Solid Waste Disposal'. The main window shows parameters for 'Japan', 'Asia - Eastern', and 'Region_1'. A 'Subdivision' dropdown menu is highlighted with a pink box. A purple callout box with an arrow points to this dropdown, containing the text 'Click to define subdivision'. Below the main window, a '4.A - Subdivision' dialog box is open, showing a list of subdivisions. 'Region_1' is selected, and a purple callout box with an arrow points to it, containing the text 'Define subdivision'. Another purple callout box with an arrow points to the bottom of the list in the dialog, containing the text 'Add subdivisions'. At the bottom of the dialog, a red error message reads: 'Default 'Unspecified' subdivision cannot be deleted but can be edited'. The 'Save' and 'Undo' buttons are visible at the bottom of the dialog.

Interoperability with UNFCCC reporting tool for CRT

- UNFCCC Decision 5/CMA.3 requests the UNFCCC secretariat to facilitate interoperability between the reporting tools and the IPCC Inventory Software and invites the IPCC to engage in this work.
- IPCC Inventory Software version 2.861
 - Data/information in the software are rearranged/mapped to fit CRT (Annex I to Decision 5/CMA.3)
 - CRT interface is in Main menu of the software
 - Generates a file (JSON file) that could be received and read by the UNFCCC reporting tool for CRT (Energy sector)

The screenshot shows the IPCC Inventory Software interface. The 'Export/Import' menu is open, and 'UNFCCC CRT' is selected under the 'Export' sub-menu. The 'CRT Data Set Manager' dialog box is open, displaying a table of CRT Data Sets. The table has two columns: 'CRT Data Set name' and 'Date created'. The first row shows '1990-1991' and '07.06.2023 17:43:28'. The 'Generate JSON' button is highlighted in pink.

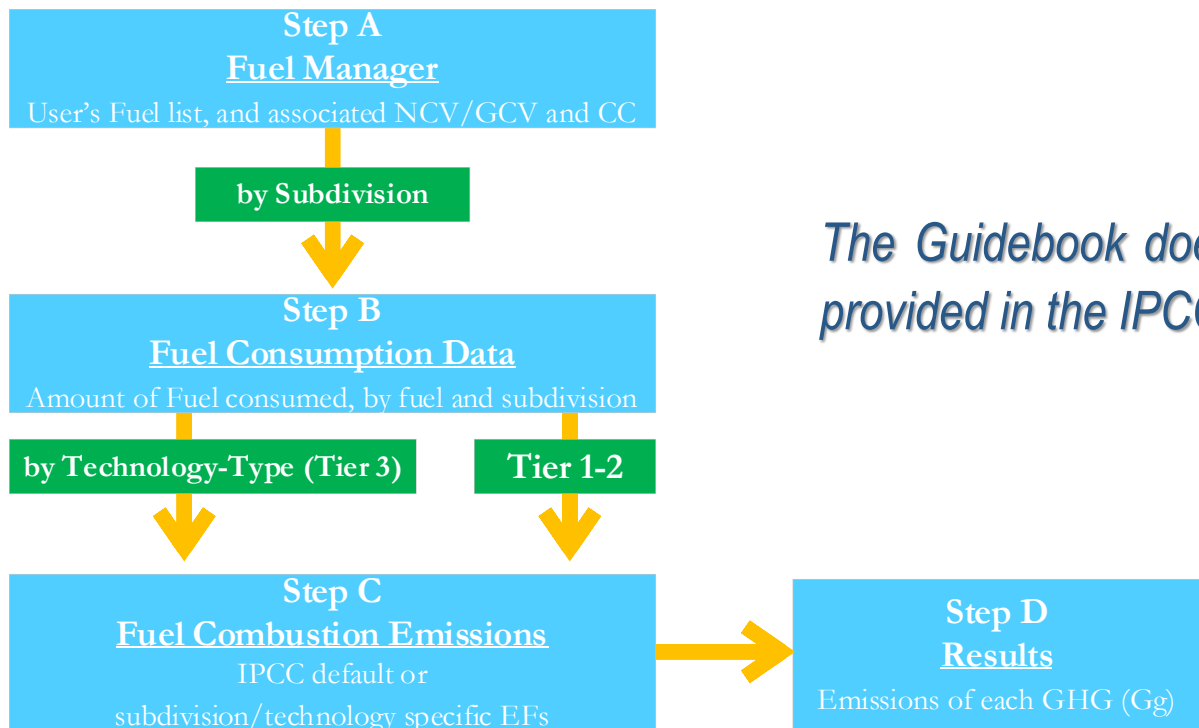
CRT Data Set name	Date created
1990-1991	07.06.2023 17:43:28

Annotations in pink:

- Generate/name the CRT dataset to be generated (pointing to the '1990-1991' entry)
- Visualize and review CRT (pointing to the 'Date created' column)
- Generate JSON (highlighted button)

IPCC Inventory Software Guidebook

- Step by step instructions on data entry and calculation of emissions and removals in each worksheet



The Guidebook does not replace guidance provided in the IPCC Methodology Reports

Support to users

- Organizing expert meetings annually
 - IPCC Expert Meeting to collect Software and EFDB users' feedback, 1-3 May 2023, Bangkok, Thailand
- Help Desk ipcc-software@iges.or.jp
- User Manual <https://www.ipcc-nggip.iges.or.jp/software/index.html>
- Frequently Asked Questions <https://www.ipcc-nggip.iges.or.jp/software/index.html>
- Guidebooks <https://www.ipcc-nggip.iges.or.jp/software/index.html>
 - Guide to Land Representation (draft)
 - CRT Export Quick Start Guide (draft)
- Collaboration with other organizations (e.g., UNFCCC regional workshops)

In the 7th IPCC assessment (AR7) cycle (from end of July 2023) the support may be subject to changes, depending on consideration by the IPCC and the new Bureau of the Task Force on National Greenhouse Gas Inventories.

Ongoing and planned work

- IPCC Inventory Software Guidebook
- Interoperability with UNFCCC reporting tool for CRT
- Indirect CO₂ emissions
- Indirect N₂O emissions
- Time series export/import

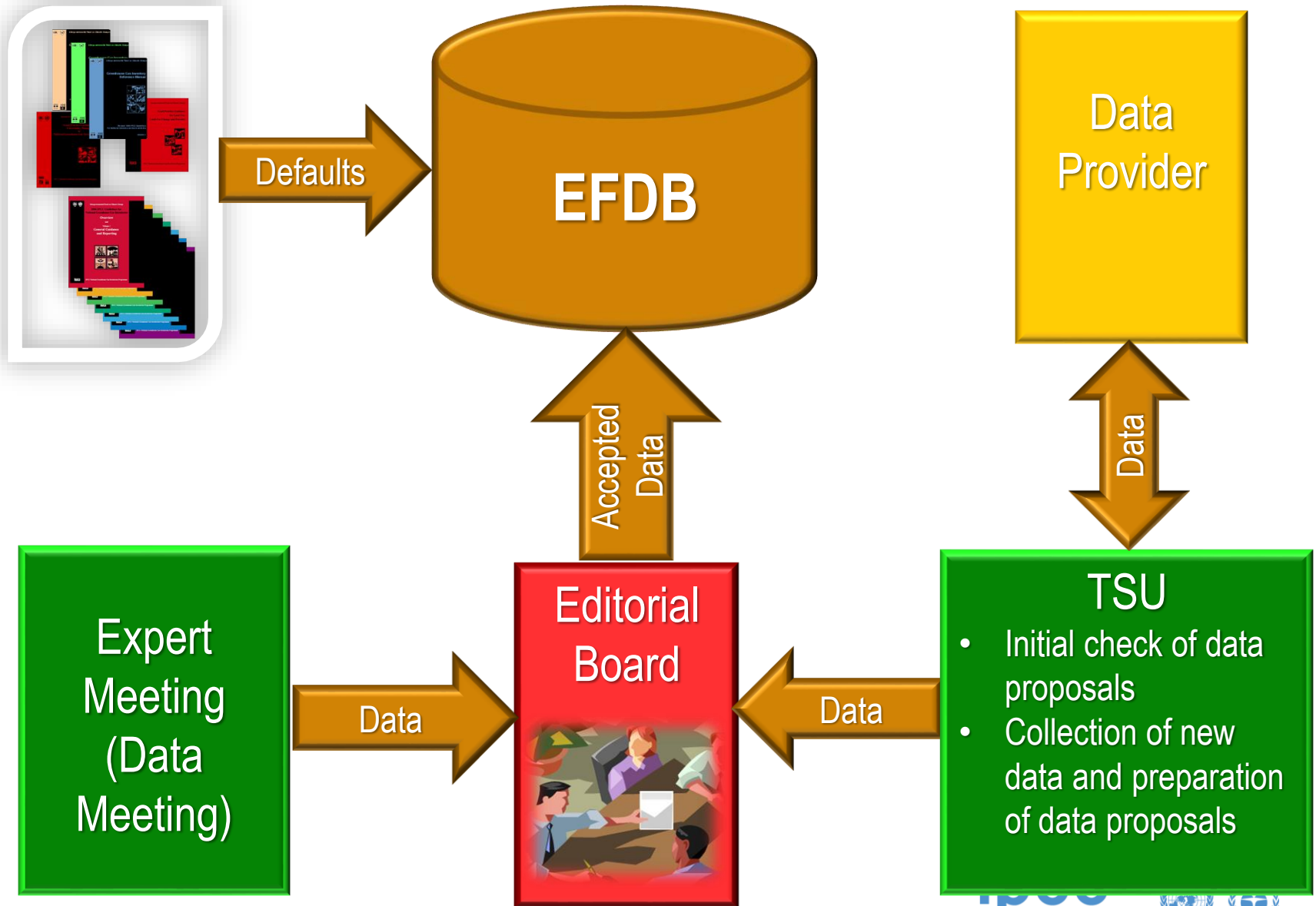
In the IPCC AR7 cycle the plan may be subject to changes, depending on consideration by the IPCC and the new Bureau of the Task Force on National Greenhouse Gas Inventories (TFI).

IPCC Emission Factor Database (EFDB)

IPCC EFDB

- Annual meetings of the Editorial Board to consider data proposals and discuss how to improve/enhance the EFDB
 - 21st Meeting of Editorial Board (EB21), 16-19 May 2023, Christchurch, New Zealand
- Expert Meetings on Data for the EFDB (Data Meetings) have been organized since 2008
 - 21st Data Meeting (DM21), 17-18 May 2023, Christchurch, New Zealand
- Total 2445 data were accepted by the Editorial Board at the EFDB meetings (EB21/DM21) held on 16-19 May 2023 for inclusion into the EFDB.
- A new upgraded version of the EFDB with enhanced functionality will be released in 2023.

Populating EFDB



IPCC TFI Work on Short-lived Climate Forcers (SLCFs)

Methodology Report on SLCFs

- IPCC49 (May 2019, Kyoto, Japan) decided that IPCC TFI should develop a new Methodology Report on SLCFs during AR7 cycle with a preparatory work during AR6 cycle (Decision IPCC-XLIX-7).
- Preparatory work for the Methodology Report in AR6 cycle included:
 - Preliminary technical analysis
 - Expert meetings (virtual): Joint 1st and 2nd Expert Meeting on SLCFs (11-22 October 2021) and 3rd Expert Meeting on SLCFs (11-15 April 2022)
 - Publication of the reports of the expert meetings <https://www.ipcc-nggip.iges.or.jp/public/index.html>

Methodology Report on SLCFs

- Scoping Meeting for the Methodology Report on SLCFs is planned to be held in AR7 cycle as early as possible (end of 2023 or beginning of 2024)
- Nominations of experts for the Scoping Meeting are being collected from the IPCC member governments and the observer organizations during AR6 cycle
 - The deadline for nomination of experts 30 June 2023 (3 May-30 June)

Thank you

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