

Task Force on National Greenhouse Gas Inventories

Emission Factor Database (EFDB) and other activities

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30 November 2011, Durban South Africa

COP17/CMP7 Side Event

ipcc

INTERGOVERNMENTAL PANEL ON climate change



Emission Factor Database (EFDB)

Need for Emission Factor Database (EFDB)

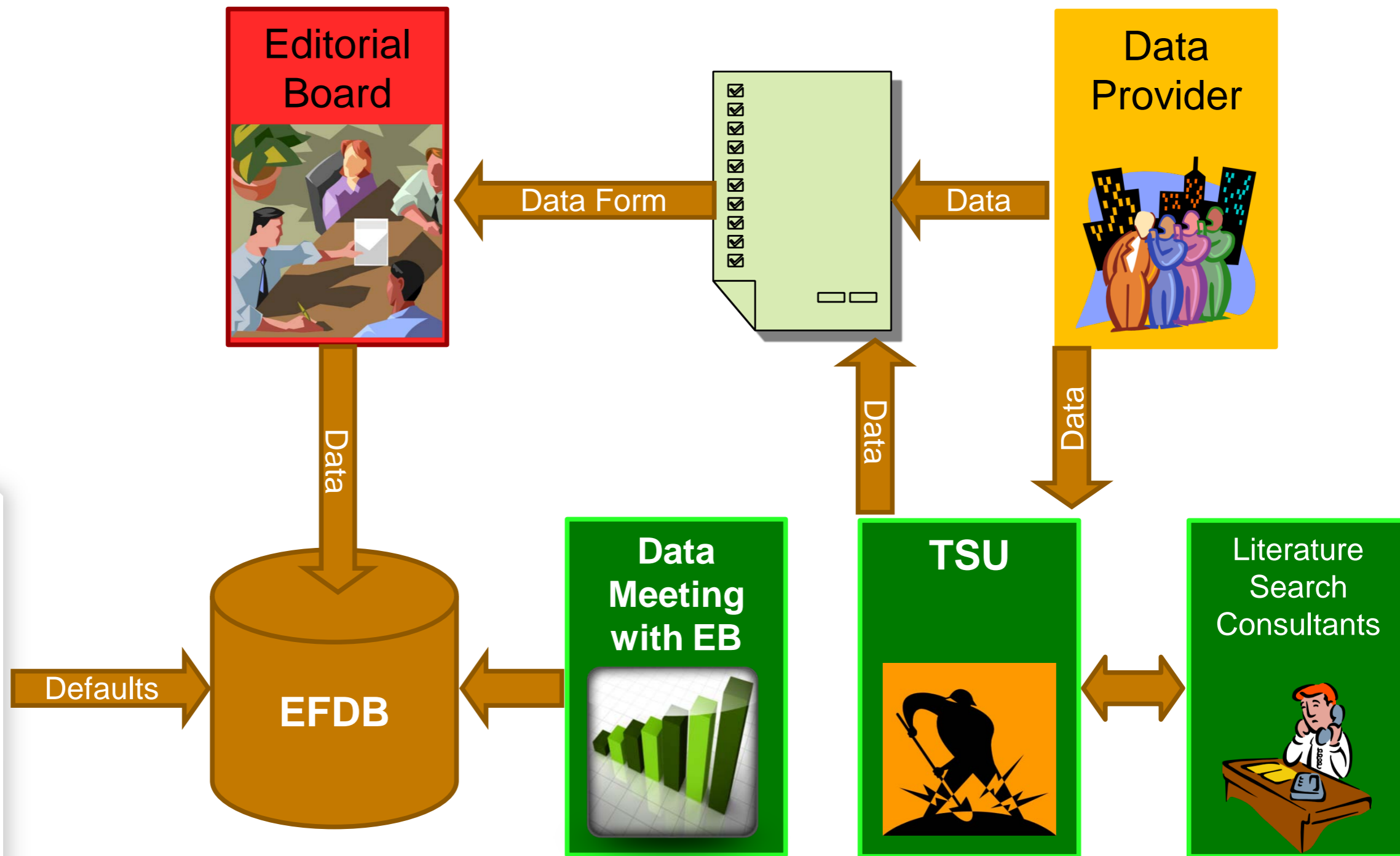
- IPCC Guidelines contain global or regional default values (mostly for Tier 1) based on the best science when guidelines were compiled.
- Higher tier estimates need country-specific factors based on:
 - Situation in country, methods, management etc
 - Latest science and best practice elsewhere
 - Latest mitigation being applied
- However
 - it is expensive to measure all these. It would be more efficient to use appropriate literature or experience in similar situations.
 - Emission factors and other parameters may not be easily accessible.

EFDB – Dynamically evolving library

- A library:

- Documented Emission Factors (interpreted broadly – all parameters)
 - Peer reviewed
 - Non-peer reviewed (government reports, industry studies etc.)
 - In any language (need English abstract)
 - Available through internet as well as in the form of CDROM
 - <http://www.ipcc-nggip.iges.or.jp/EFDB/>
 - Information about when and where this data may be applicable
 - Evolves dynamically - new data from inventory compilers, researchers, industry...
 - Communication platform for distribution of new research and measurement data
 - Data evaluated by Editorial Board (EB)
- However the user **MUST** decide if this is suitable in their specific situation

Populating EFDB



Growing importance of EFDB

- In the context of revision of the UNFCCC reporting guidelines for Annex I Parties, the SBSTA32 welcomed the work of the IPCC to facilitate the use of the 2006 IPCC Guidelines, including its efforts to develop inventory software and the **Emission Factor Database**. It invited the IPCC and other relevant organizations to strengthen their efforts in this area.
(FCCC/SBSTA/2010/6, paragraph 76)
- In the context of REDD discussion, the SBSTA32 requested the UNFCCC secretariat to work with the IPCC on promoting the use of the IPCC **Emission Factor Database**. (FCCC/SBSTA/2010/6, paragraph 40)
- In the context of national communications from non-Annex I Parties (NAI-NC), the Consultative Group of Experts (CGE):
 - Agreed on the usefulness of **Emission Factor Database**; and
 - Recommended improvement of data quality by enhancement of the sharing of country-specific emission factors through the **Emission Factor Database** among NAI Parties, as an element to be considered in a future revision of the NAI-NC Guidelines.

(FCCC/SBI/2011/5/Rev.1)

Enhancement and improvement of EFDB

- Continuing efforts for data collection
 - Data can be proposed by anyone – welcomed!!
 - Meetings to collect data on specific topics are held every year:
 - Biomass Expansion Factor and forestry data
 - Livestock & Soil C in Grasslands and Cropland
 - Soil N₂O
 - Fugitive emissions and biofuels
 - Up-to-date data/information relevant to “*2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands*” will be included.
- Improvement in EFDB user-interface etc.
 - Navigability of data search process will be improved.
 - User-friendliness of data input process will be improved.

Other activities

- Frequently Asked Questions (FAQs)
- Expert Meetings
- IPCC participation in capacity building activities
- Promotion activities
- Inventory Internship Programme

FAQs – being updated

- Answers to frequently asked questions (FAQs)
<http://www.ipcc-nggip.iges.or.jp/faq/faq.html>
- Recently updated as a result of:
 - Expert Meeting on Uncertainty and Validation of Emission Inventories
(March 2010, Utrecht, the Netherlands)
 - Expert Meeting on HWP, Wetlands and Soil N₂O
(October 2010, Geneva, Switzerland)



The screenshot shows the website for the Task Force on National Greenhouse Gas Inventories. The header includes the IPCC logo and the text "INTERGOVERNMENTAL PANEL ON climate change" along with WMO and UNEP logos. A navigation menu on the left lists various sections, with "FAQs" highlighted. The main content area is titled "Frequently Asked Questions" and includes a "printable version" link. The questions listed are:

- 1. IPCC Task Force on National Greenhouse Gas Inventories (TFI), general guidance and other inventory issues
 - 1.1. Questions about IPCC National Greenhouse Gas Inventories Programme
 - Q1-1-1. What is the role of the IPCC in Greenhouse Gas Inventories and reporting to the UNFCCC?
 - Q1-1-2. How does the IPCC produce its Inventory Guidelines?
 - Q1-1-3. What are the required steps to be taken to have an inventory methodology accepted by the IPCC?
 - Q1-1-4. How can new data and information be taken up by the IPCC NGGIP?
 - 1.2. Questions about Good Practice Guidance
 - Q1-2-1. How do greenhouse gases affect the atmosphere?
 - Q1-2-2. What are the major greenhouse gases?
 - Q1-2-3. Why is water vapour not covered by the IPCC Guidelines?

Expert Meetings

- **“Software and Use of 2006 IPCC Guidelines for National Greenhouse Gas Inventories”**, Aug 2011, Hayama, Japan
- **“Use of Facility and Project Information in National GHG Inventories”**, Jul 2011, Wellington, New Zealand
- **“HWP, Wetlands and Soil N₂O”**, Oct 2010 Geneva, Switzerland
- **“Use of Models and Measurements in GHG Inventories”**, Aug 2010 Sydney, Australia
- **“Uncertainty and Validation of Emission Inventories”**, Mar 2010 Utrecht, The Netherlands
- **“National Forest GHG Inventories - A Stock Taking”**, Feb 2010 Yokohama, Japan
- **“IPCC-FAO Expert Meeting Agriculture, Forestry and Other Land Use Data”**, Oct 2009 Rome, Italy
- **“Revisiting the Use of Managed Land as a Proxy for Estimating National Anthropogenic Emissions and Removals”**, May 2009 Sao Paulo, Brazil

Participation in GHG inventories-related capacity-building activities

- Although it itself does not conduct training, IPCC TFI has actively taken part in many GHG inventories-related capacity building activities, e.g.:
 - Japan International Cooperation Agency (JICA) Seminar
 - Workshop on GHG Inventories in Asia (WGIA)
 - Training Workshop on the National System for the GHG Inventory, FAO, Rome, Jan 2011
 - CGE GHG Inventory Hands-on Training Workshops for the Latin America and the Caribbean Region, Santiago Chile, Sep 2011

Promotion activities

- IPCC TFI has made efforts to promote the use of the IPCC Guidelines through a number of tools and activities, e.g.:
- IPCC Open Meeting "Estimation of Greenhouse Gas Emissions - A Basis of Climate Actions" Aug 2011, Yokohama, Japan
- Primer
- Brochures
- Banners

The screenshot displays the 2006 IPCC Guidelines for National Greenhouse Gas Inventories website. It includes a navigation menu on the left with categories like Fuel Combustion, Manufacturing and construction, and Land use change and forestry. The main content area is titled '2006 IPCC Guidelines for National Greenhouse Gas Inventories' and contains sections for 'Submission of Data', 'Evaluation of Data Proposed', 'Data Acceptance Procedure', and 'Data Quality'. A table titled 'Emission Factor Detail (ID: 213624)' is visible, listing various emission factors with their codes, units, and values. The 'Data Quality' section lists criteria such as 'Robust?', 'Applicable?', and 'Documented?'. The page footer features the WMO and UNEP logos and the text 'INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE'.

Inventory Internship Programme

- Established and funded as part of Japan's contribution to TFI.
- Aims to provide young scientists with opportunities to familiarise with the IPCC work on methodologies for national GHG inventories as well as to contribute to the work of TSU through applied studies in relevant inventory-related science.
- For details, visit the TFI website
<http://www.ipcc-nggip.iges.or.jp/tsu/tsu-intern.html>

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Thank you!

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