IPCC Emission Factor Database (EFDB)

UN Climate Change Conference

Dubai, United Arab Emirates

9 December 2023
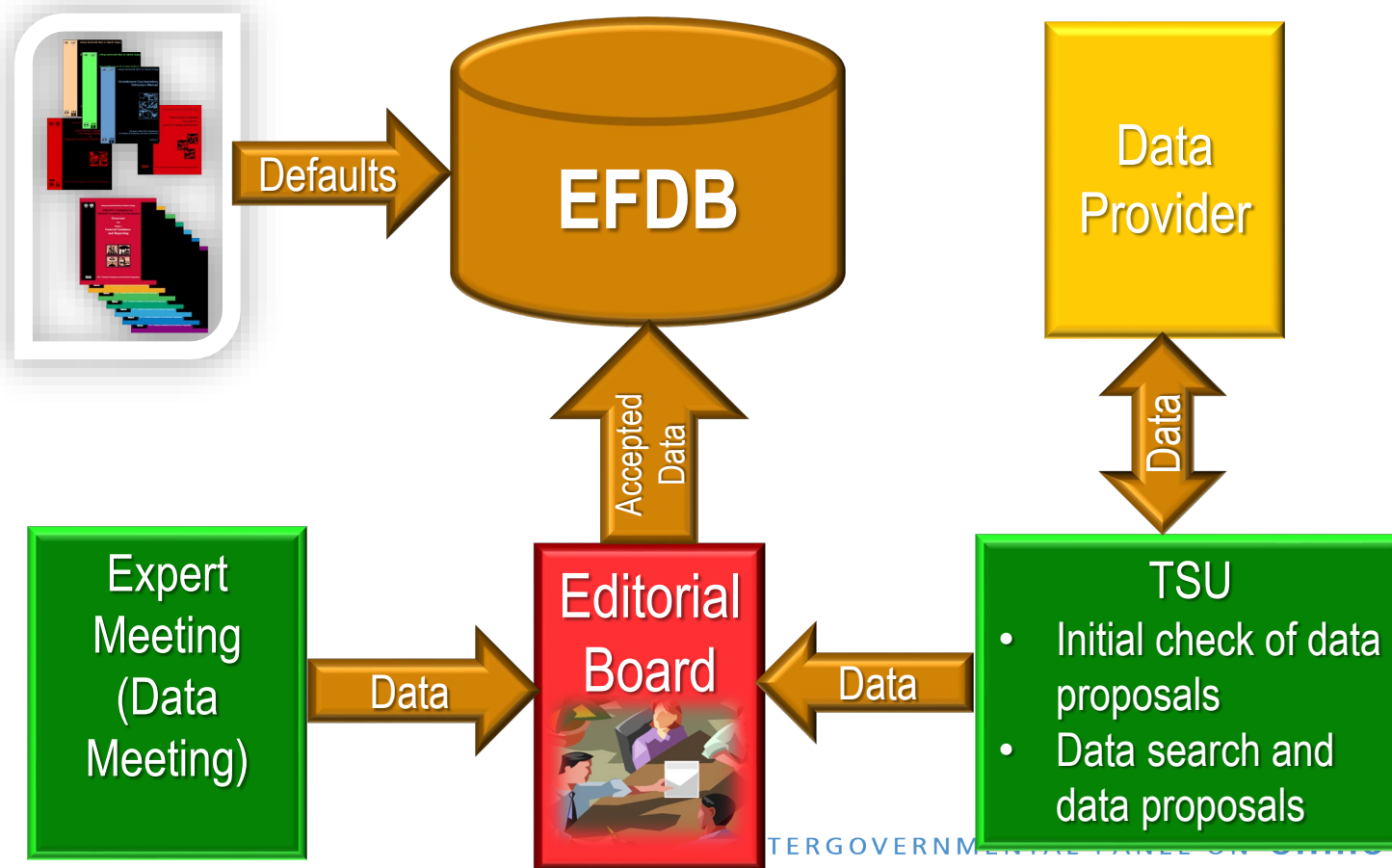
IPCC TFI TSU

Background

- Launched in 2002

- Open library of emission factors (EFs) and other parameters with background information https://www.ipcc-nggip.iges.or.jp/EFDB/main.php

  - Default data from IPCC guidelines

  - Data from peer-reviewed scientific papers

  - Data from other publications (e.g., national reports)

- Communication platform to share data and information that can be used for estimation of national greenhouse gas (GHG) emissions/removals

- Recognized as a useful resource for inventory compilers (e.g., Decision 24/CP.19 UNFCCC reporting guidelines on annual inventories for Parties included in Annex I to the Convention)
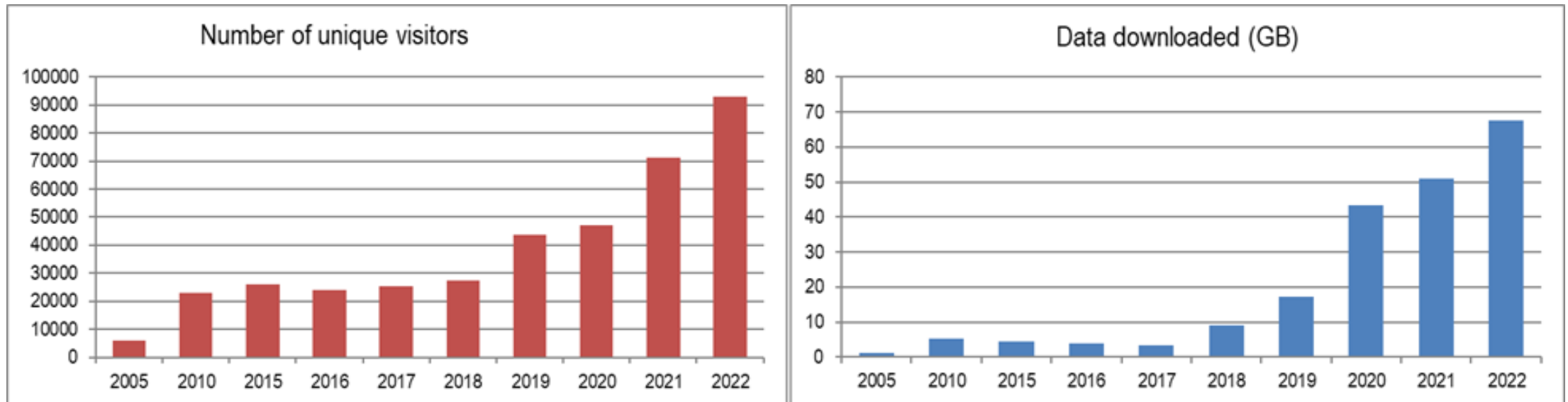
ipcc

INTERGOVERNMENTAL PANEL ON climate change

WMO   UNEP

EFDB

- Regularly updated with new data
- **Open to any data proposals** ipcc-efdb@iges.or.jp
  - Data proposals are considered by Editorial Board for inclusion into the EFDB
  - Criteria for inclusion of new data: **robustness, applicability and documentation**

EFDB usage

- The number of unique visitors and amount of data downloaded have been increasing
    - A "unique visitor" is a user who has made at least 1 hit on 1 page of the website during a month. If the user makes several visits during the month, it is counted only once.

EFDB search

EFDB data output

Enhancement and improvement of EFDB

- New upgraded version is released in September 2023
  - *2019 Refinement* categories
  - Enhanced search/filter functions (e.g., new search criteria)
  - Data statistics

Enhancement and improvement of EFDB

EFDB meetings

- Annual meeting 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
  - Summary of the meetings are published at IPCC TFI website https://www.ipcc-nggip.iges.or.jp/meeting/meeting.html
- Expert Meetings on Data for the EFDB (Data Meetings) have been organized annually since 2008
  - Attended by data providers (e.g., inventory experts, researchers) and Editorial Board members
  - 21st Data Meeting (DM21), 17-18 May 2023, Christchurch, New Zealand
- Total 2,445 data were accepted by the Editorial Board at the EB21 and DM21 for inclusion into the EFDB

Criteria for inclusion of new data

- **Robustness**
  - Within the accepted uncertainty, the value is unlikely to change if there was repetition of the original measurement programme or modelling activity.

    The term "accepted uncertainty" refers to the uncertainty of IPCC defaults for that category.

- **Applicability**
  - An emission factor can only be applicable if the source and its mix of technology, operating and environmental conditions and abatement and control technologies under which the emission factor was measured or modeled are clear and allow the user to determine how it can be applied.

- **Documentation**
  - Access information to the original technical reference must be provided to evaluate the robustness and applicability as described above.

ipcc

INTERGOVERNMENTAL PANEL ON climate change

WMO   UNEP

Thank you

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

https://www.ipcc-nggip.iges.or.jp/EFDB/main.php

ipcc

INTERGOVERNMENTAL PANEL ON climate change

WMO UNEP