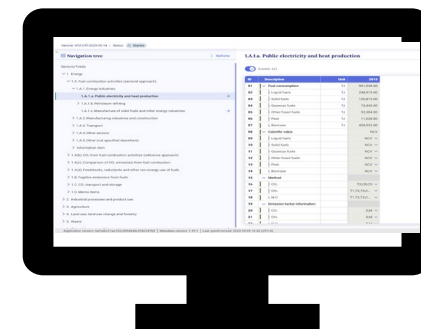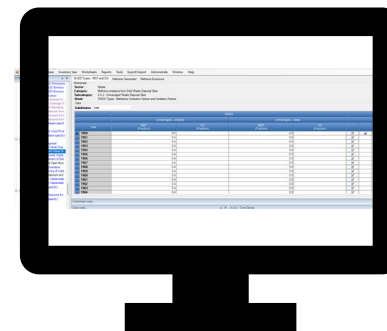# Interoperability between the IPCC Inventory Software and the UNFCCC ETF Reporting Tool

IPCC TFI TSU

UNFCCC COP28

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# **Outline**

- ✓ Background

- ✓ What is interoperability and why is it important?

- ✓ Using the IPCC Inventory Software to help meet UNFCCC ETF reporting

- ✓ The road ahead

- ✓ Demonstration

# Background

✓ By the end of next year (31 December 2024), countries will submit their National GHG Inventory (NGHGI) in the first **biennial transparency report (BTR)** consisting of a narrative document and reporting tables/ formats.

✓ **Decision 5/CMA.3** mandates the UNFCCC to develop reporting tools for the electronic reporting of the tables and formats, including **common reporting tables (CRT) for GHG inventory.**

✓ Decision 5/CMA.3 requests the UNFCCC secretariat **to facilitate interoperability** between the reporting tool and the IPCC Inventory Software and invites the IPCC to participate in this effort.

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# Interoperability: What it is and why it is important?

**Interoperability:** *"The ability of computer systems or software to exchange and make use of information"* -Oxford Dictionary

✓ In practice, the goal is to enable a country to use the IPCC Inventory Software to estimate its GHG emissions and removals in accordance with *good practice* in the *2006 IPCC Guidelines* and generate a file that could be received and read by the UNFCCC ETF reporting tool to facilitate reporting of NGHGI under the Paris Agreement.

✓ IPCC Inventory Software becomes a central component of a Party's institutional arrangements.
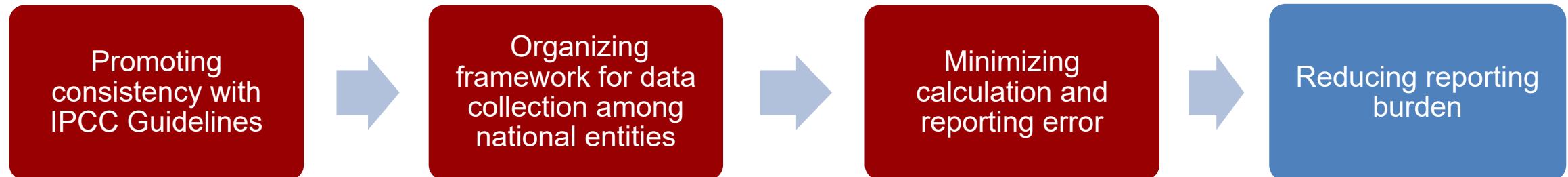
| Promoting consistency with IPCC Guidelines | → | Organizing framework for data collection among national entities | → | Minimizing calculation and reporting error | → | Reducing reporting burden |

# Steps of Interoperability

**1** **Prepare** GHG Inventory

**2** **Visualize & Quality Control** Common Reporting Tables

**3** **Generate** JSON file

**4** **Import** IPCC JSON file into ETF Reporting tool

**5** **Quality control** data entry

**6** **Submit** GHG inventory to UNFCCC
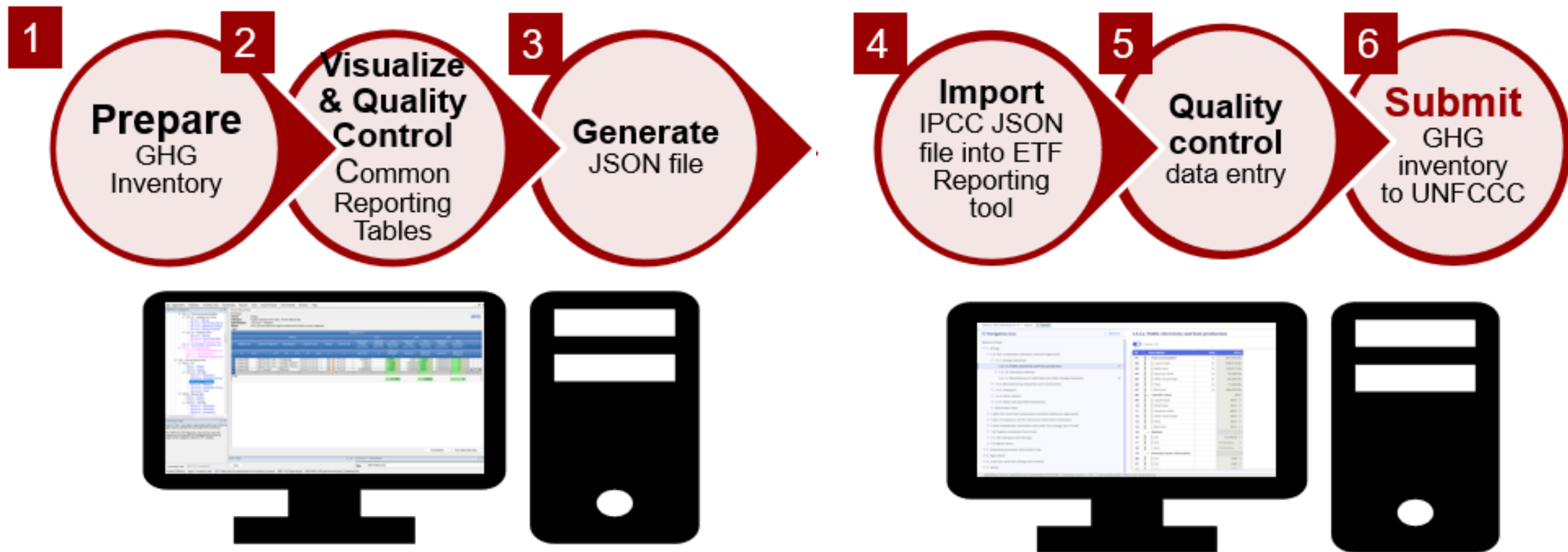
**IPCC Inventory Software**

**UNFCCC ETF Reporting Tool**

# Step 1: Prepare GHG Inventory



Enter activity data, emission factors and other parameters, using your selected IPCC tier(s) for each category. The Software contains tools to help facilitate data entry (e.g: Fuel Manager and "Time Series Data Entry") . Activity data, emissions (and some parameters) will be transferred to the UNFCCC ETF Reporting Tool.

**Repeat for all categories that occur in your country**

# Step 2: Visualize & Quality Control Common Reporting Tables



1. Access CRT interface in Main Menu under "Export/Import"
2. Select "New CRT Data Set"
3. Name the CRT data set to be generated
4. Select the year(s) for export to CRT
5. Feed worksheet data into CRT visualized in Software

# Step 2: Visualize & Quality Control Common Reporting Tables



**Checks done for all tables / all years**

**Review Values**

**Guidance available (CRT footnotes, and IPCC Inventory Software notes)**

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# Step 2: Visualize & Quality Control Common Reporting Tables



Add comments, explanatory information for NE / IE / FX and documentation box.

Some user tips

Right click any cell and select "Edit".

If value is in cell, you can add comments.

If "IE", "NE" or "FX" is in cell you shall provide a justification

# Step 2: Visualize & Quality Control Common Reporting Tables



Right click any cell with "FX" and select "Edit".

User can enter information to complete "Flex_Summary" CRT table

# Step 2: Visualize & Quality Control Common Reporting Tables

Right click on any blue cell.

User can enter information on method and EF applied to complete CRT Summary 3

# Step 3: Generate JSON file



1. Select "Generate JSON"
2. Select years you want to use for UNFCCC reporting *(Note, if a country applies flexibility, it may choose to include years in Software, but exclude from JSON file for ETF Reporting tool)*
3. Select "OK" to generate JSON
4. The JSON file can be uploaded to ETF Reporting Tool

# Step 4: Import IPCC JSON file into ETF Reporting tool



1. Select 'Upload a file"
2. Drag and drop or upload JSON file from previous step
3. You will be prompted to enter version settings:
   -Submission year
   -For developing countries, if you are applying flexibilities for time series/latest year
   -Sector-specific selections (e.g., fuels, NCV/GCV, Option A/B for cattle, HWP options)

# Step 5: Quality Control Data Entry



Use of the IPCC JSON file is a means of data input into the ETF Reporting Tool. Users can check all data input grids and reporting tables in the ETF Reporting Tool.

Users should quality control their imported IPCC data prior to submission.

Note: The implied emission factors will be calculated here; they were not shown in the IPCC Inventory Software

# Step 6: Submit GHG Inventory to UNFCCC ….and then start preparing for next submission



Remember: The ETF Reporting tool is the official tool for submission of data to the UNFCCC to meet reporting obligations under the Paris Agreement.

And…with the inventory you have created in the IPCC Inventory Software, you are well prepared to build on it for your next BTR GHG inventory submission.

Thus… helping build a sustainable GHG inventory system.

# Support Resources Available



IPCC Inventory Software

**UNFCCC Interoperability –**

**CRT Export Quick Start Guide**

## Contents

This Guide was prepared by the Technical Support Unit (TSU) of the IPCC Task Force on National Greenhouse Gas Inventories (TFI) to help users of the IPCC Inventory Software.

It has not been subject to formal IPCC review procedures.

o **Description of functionalities in IPCC Inventory Software to prepare data for generation of JSON file for use by UNFCCC electronic reporting tool.**

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

# The Road Ahead

✓ Multiple releases between now and June 2024, are expected

✓ Countries actively preparing for their first BTR submission are encouraged to use the IPCC Inventory Software

    ✓ The features shown today are ready for the Energy, Waste and Agriculture sectors

    ✓ We expect LULUCF to be available next, followed by IPPU

✓ Learn more about IPCC Inventory Software and download the latest version:

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

✓ Please continue to support us through testing and reporting your findings to ipcc-software@iges.or.jp

**November 2023** — Released version 2.89 of IPCC Inventory Software (continue testing functions of interoperability)

Multiple updated releases of IPCC Inventory Software

**June 2024** — Aim for final version of CRT: interoperable with IPCC Inventory Software

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# Thank you

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