



IPCC Inventory Software Introduction & Installation

Online – 21 October 2025

André Amaro
IPCC TFI TSU

ipcc
INTERGOVERNMENTAL PANEL ON climate change



Teach a compiler to “fish”...

“Give a man a fish and you feed him for a day.
Teach a man to fish and you feed him for a lifetime.”
— *Chinese Proverb*

“Give a *compiler* an *inventory* and you feed them for one *submission*.
Teach a compiler how to use the *IPCC Software* and they’ll keep
improving their inventory *forever*.”
— *TFI TSU Proverb*



Workshop objectives

- Understand the **purpose** and **structure** of the **IPCC Inventory Software**.
- Learn how to navigate and use the **main features** of the software.
- Recognize how **supporting materials** enhance the use of the software.
- See how the software operationalizes the **IPCC Guidelines** in practice.

Key message:

This session it's about **learning how to use the tool effectively** so that, with the Guidelines, you can “*learn how to fish*”:

- understand what the software does,
- how it helps you, and
- where to look when you need support.

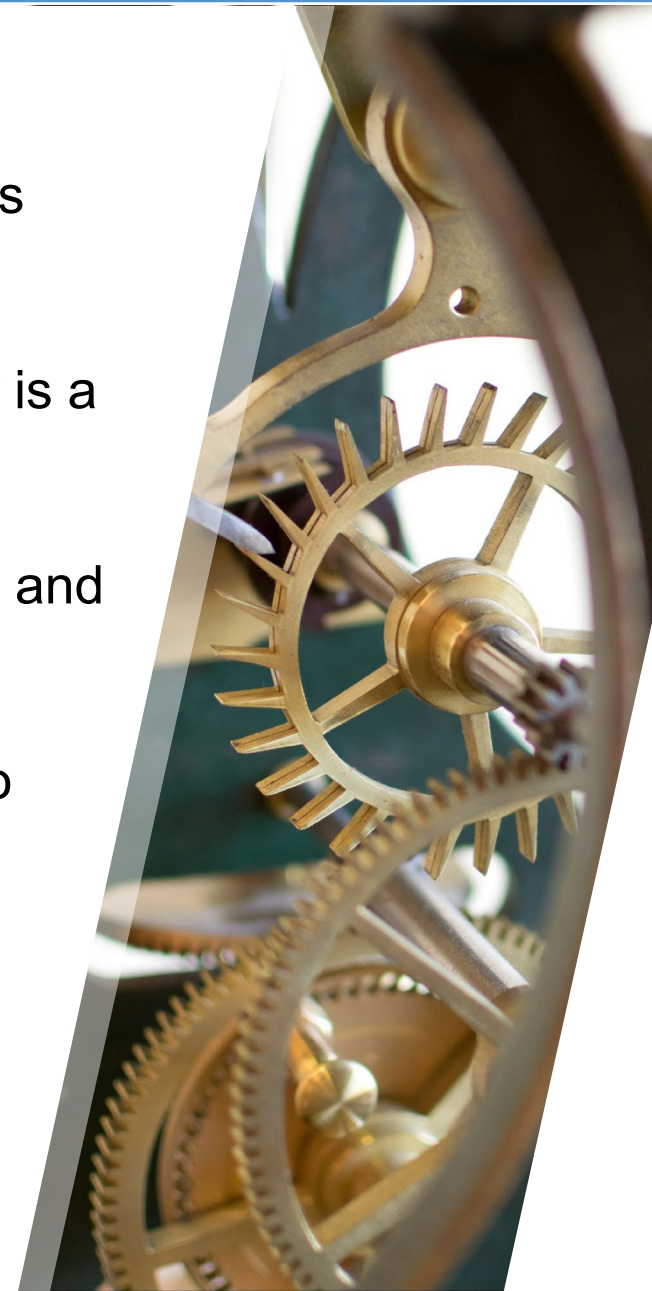


Why the Software exists

Making inventory compilation simpler, more consistent, and easier to manage — for everyone.

The need for an Inventory Tool

- Preparing a **GHG inventory** is more than emission & removals estimates it is running a **system**.
- Estimating emissions & removals from **all human activities** in a country is a **large-scale**, **diverse**, and **resource-intensive** task
- Countries must **organize data**, **apply methods**, **document processes**, and **coordinate** across institutions
- Building such a system **takes time** — even countries with more than two decades of experience still **face challenges** in core inventory tasks
- A structured tool is needed to ensure **consistency**, **transparency**, and **repeatability**



IPCC Inventory Software

- Developed by the IPCC **to help countries** manage the complexity of **GHG inventory preparation**
- **Supports the full cycle:** from organizing data to estimating emissions & removals, to preparing reports for submission
- Designed to help countries **structure their systems** — especially where institutional capacity is limited or evolving
- Built around the **IPCC Guidelines** to ensure **methodological consistency** and **transparency**



Full Coverage of Requirements



All sectors and categories

Energy, IPPU, Agriculture, LULUCF, and Waste — all sectors and all categories are included.



All IPCC Methods and Approaches (*tiers 1, 2, 3*)

You can use any tier you need — or even mix them where appropriate.



All IPCC Default data

All default parameters, emission factors, and activity data are preloaded and accessible.



AR5 GWP100 values automatically applied

The correct Global Warming Potential values are already integrated and applied.



Uncertainty & Key Category analysis, Reference Approach

The software includes all the cross-cutting tools you're expected to apply.



Country-specific parameters

Use **national values** for emission factors or activity data wherever available.



Flexible method selection

Apply **different tiers where needed** — even within the same category.



National and subnational data

Use regional or national data — the software **adapts** to the **level of detail available**.



Multiple compilers, multiple sectors

Inventory teams can **divide work by sector**, working in parallel within the **same system**.



Institutional continuity

The database serves as a **national archive**, helping you **preserve work** across inventory cycles.

Integration with the ETF Reporting

- The **ETF reporting tool** requires a **JSON file** for full data upload.
- **Manual Entry** or **Excel Uploads** are possible — but time-consuming and error-prone.
- The **IPCC Inventory Software** does the work for you: it prepares your data and **automatically generates the JSON** — no coding or formatting required.
- Your data is **aligned with ETF requirements**, and ready to upload with minimal effort.
- **Save time, avoid errors, and meet reporting obligations** with ease.



Trusted and Used around the World



Used by dozens of countries for their first BTR reports

Also commonly used to support BURs and National Communications before the ETF.

It's used.



Simplifies complexity and builds institutional memory

Helps structure data, reduce errors, and preserve work across inventory cycles.

It helps.



Flexible use depending on country needs

From full inventory preparation to final CRT and JSON generation.

It adapts.



Recognized in UNFCCC processes

Interoperability recognized and supported in Paris Agreement guidance and decisions.

It's endorsed.

"It's used. It helps. It adapts. It's endorsed."

Download and Installing IPCC Inventory Software

- *Where to find the official software*
- *How to get the latest version*
- *Choosing the installation file*

Where to find the Official Software

- The IPCC Inventory Software can be downloaded **exclusively** from the Task Force on National Greenhouse Gas Inventories website: <https://www.ipcc-nggip.iges.or.jp/software/index.html>
- The IPCC TFI TSU ensures that the **latest version** of the software is always available for download.

On the Software page, you will find:

- **Download links** to installation files (*64- and 32-bits versions*)
- **Change Log** with version updates and new features
- **Support materials:** User Manual and Sectoral Guidebook
- **Additional resources:** Blank database, complementary tools, and others

Inventory Software

New Version 2.98 – IPCC Inventory Software

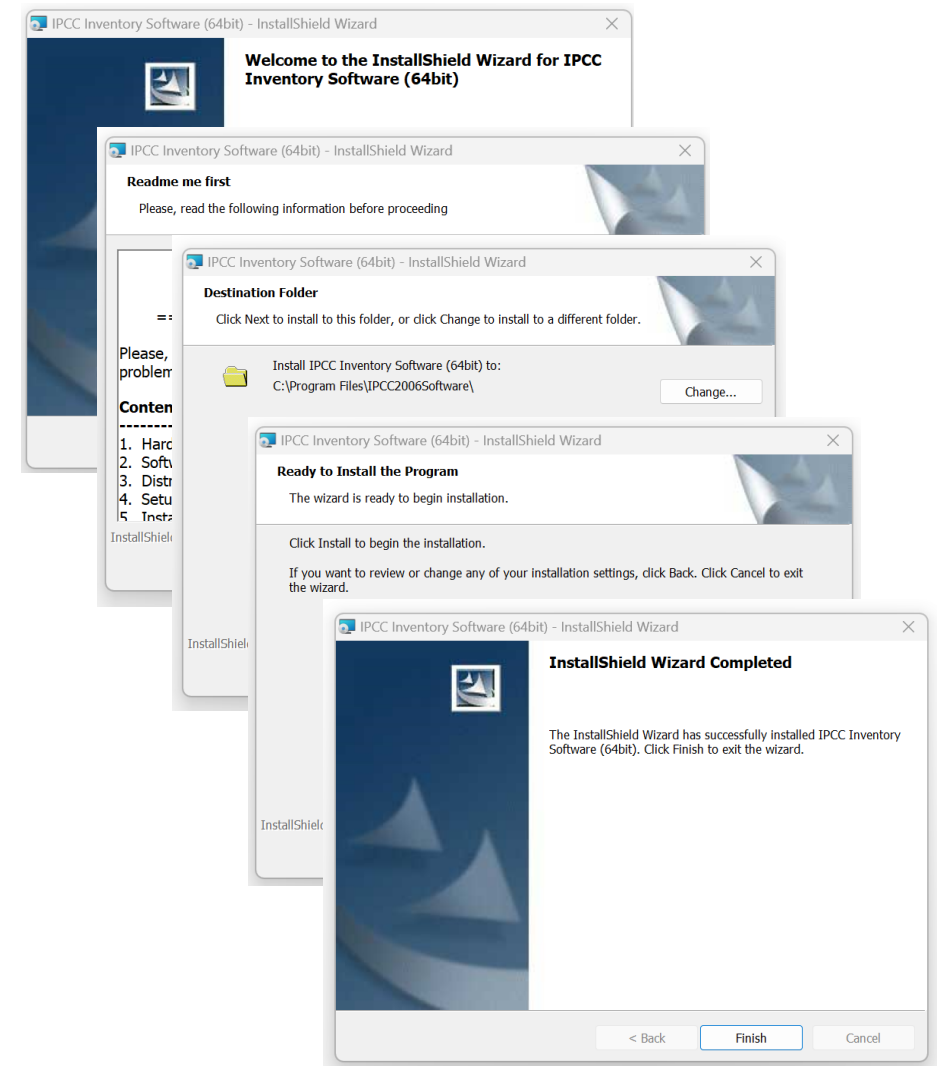
This is the new version 2.98 of the IPCC Inventory Software

■ [Ver. 2.98 IPCC Inventory Software - 64bit](#)

■ [Ver. 2.98 IPCC Inventory Software - 32bit](#)

Installing the IPCC Inventory Software

- The IPCC Inventory Software installation file is an executable that opens an **InstallShield Wizard**.
- Follow the usual installation steps by clicking 'Next' and 'Install.'
- Be sure to read the provided information before proceeding and choose the location where the *Software* will be installed.
- Please note that **administrative permissions are required to install the *Software***. If you do not have these permissions, contact your institution's IT department.
- It is also important to note that the *Software* only runs on the **Windows operating system**.



Frequent question

“Which installation file should I download?”

The *Software* has **two different installation files**, one for **32-bit systems** and another for **64-bit systems**.

These versions only differ in compatibility with your computer, the **software itself is identical**, and users can **share databases** across both without any problems.

How to Choose the Correct File

Before downloading, check which versions of Windows and MS Office you have installed:

Step 1 – Determine which **version of Windows OS** is installed on your computer.

Step 2 – Determine which **version of MS Office** is installed on your computer, if any.


Step 3 – Use the “**IPCC Inventory Software Setup Type Decision Chart**” to find out which installation file to download.



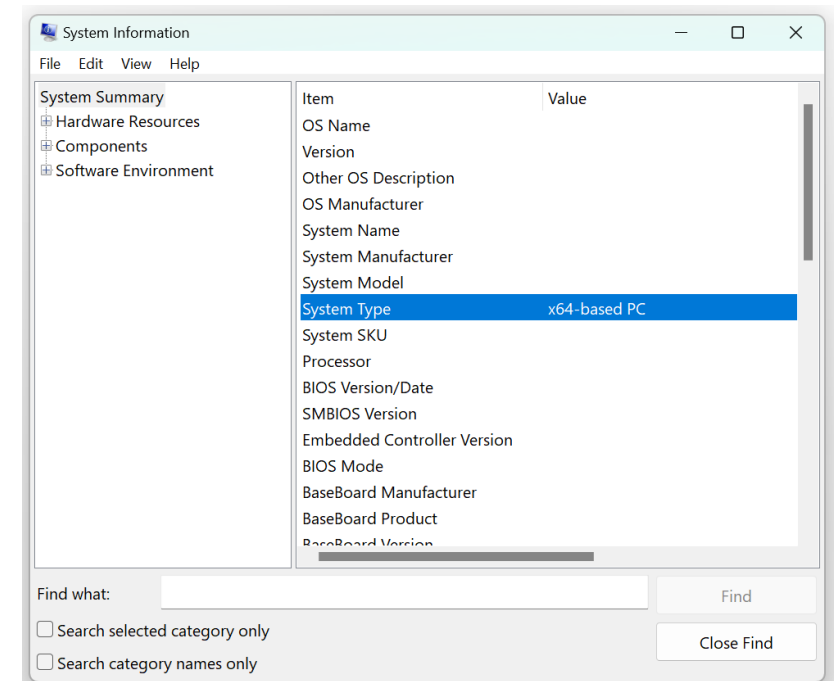
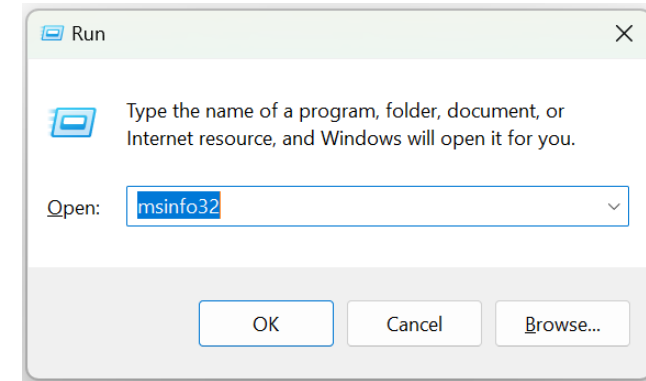
Windows version Installed

Step 1 – Determine version of Windows OS

To check whether you have a 32-bit or 64-bit version of Windows installed, follow these steps:

1. Press  Win + R to open the Run dialog window.
2. Type msinfo32 and press Enter.
3. Look for the "System Type" entry:
 - If it shows x64-based PC, your Windows is a 64-bit version.
 - If it shows x86-based PC, your Windows is a 32-bit version.

For windows 10 and 11 this information can also be found under Settings>System>About.



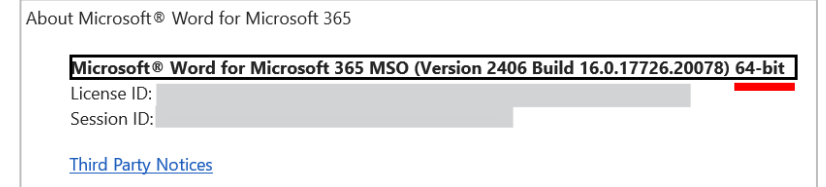
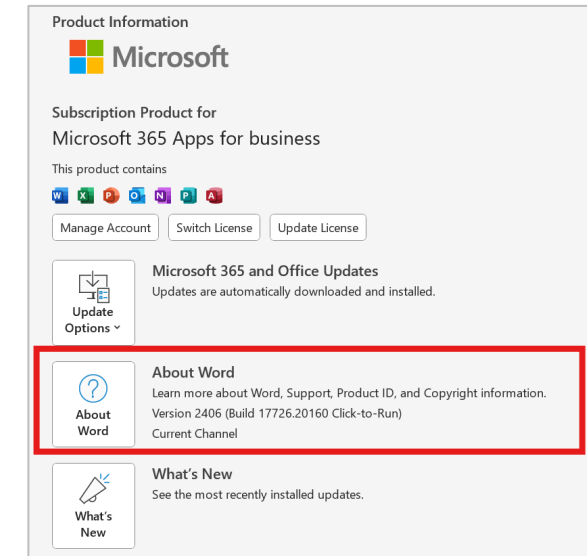
MS Office version Installed

Step 2 – Determine version of MS Office

To check whether you have a 32-bit or 64-bit version of MS Office installed, follow these steps:

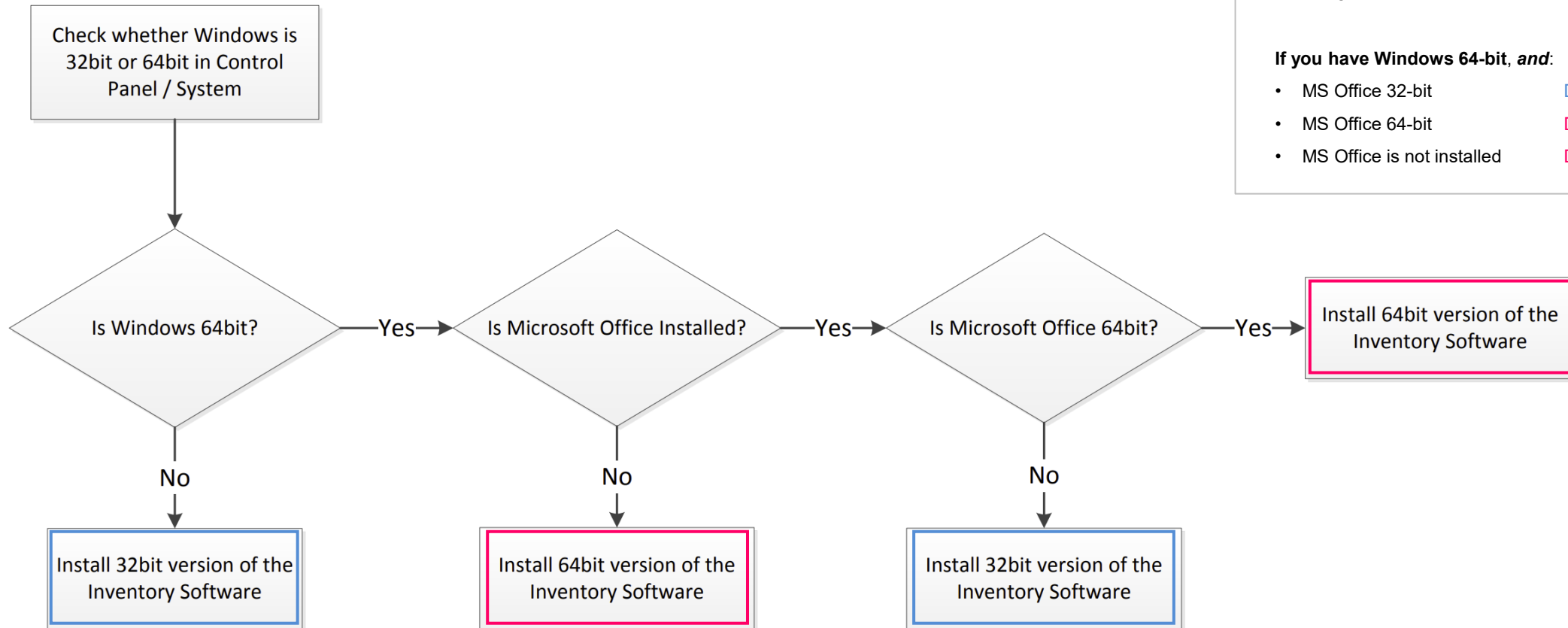
1. Open any Office application: such as Word, Excel, or PowerPoint.
2. Click on File in the top-left corner.
3. Click on Account. If you don't see Account, click Help.
4. Click on About [Application Name].
5. In the About window, you will see the version information, including whether it is 32-bit or 64-bit.

Steps suitable for Office 2013, Office 2016, Office 2019, Office 2021, and Microsoft 365.



Choose the correct installation file

Step 3 – Use the IPCC Inventory Software Setup Type Decision Chart



In summary

If you have Windows 32-bit, and:

- MS Office 32-bit [Download the 32-bit version](#)
- MS Office is not installed [Download the 32-bit version](#)

If you have Windows 64-bit, and:

- MS Office 32-bit [Download the 32-bit version](#)
- MS Office 64-bit [Download the 64-bit version](#)
- MS Office is not installed [Download the 64-bit version](#)

Frequent question

“If I upgrade the IPCC Inventory Software, will I lose my data??”

No. Upgrading improves the software — not your data.

What really happens

When you install a new version, it updates the **software**, not your **data content**.

When you open your existing database, the system **upgrades its structure** — not its *values*.

Small changes may occur

Some categories may be recalculated due to improved formulas —these are corrections, not data loss. All changes are explained in the **Change Log**.

Exception — very old versions

Only *very old versions* (before 2.8x) may require manual steps, or experience data loss.

Those versions are already **incompatible with ETF requirements**, so **upgrading is essential**.

💡 **Best Practice:** Always back up your database before upgrading



First Run

IPCC Inventory Software

- *Opening a new database*
- *Setting a Superuser*
- *Choose Country/Territory*
- *Create a new Inventory Year*

What is the First Run?

When the IPCC Inventory Software is *launched for the first time after installation*, several mandatory steps must be completed to initialize the software and its database.

Key actions during the First Run



1. Define a Superuser

- Assign a *user with full control* over the software and the database.



2. Choose Region and Country/Territory

- Select the *appropriate* region and country/territory.



3. Create an Initial Inventory Year

- Establish the *starting point* for your inventory data.

First Run – Define the Superuser

Why is a Superuser Needed?

The **Superuser** is the primary user with **full control** over the software and database.

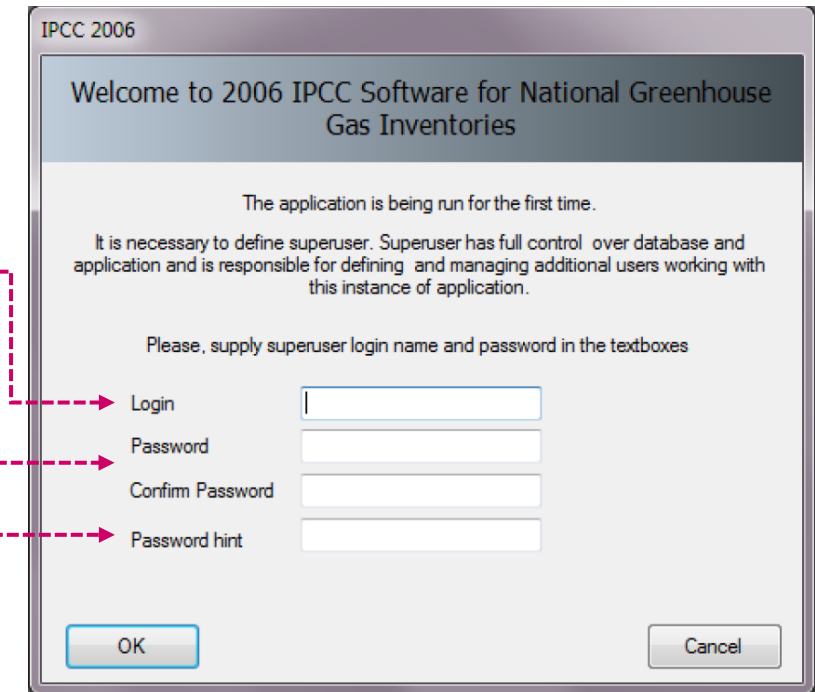
- *They are responsible for managing and defining additional users.*

Steps to Set Up the Superuser

1. Enter your **Login** (username) in the provided field.
2. Define a **Password** and confirm it.
3. Add a **Password Hint** to help recover your credentials if forgotten.

💡 *Tips for managing Superuser passwords*

- Always set a **password hint** for recovery purposes.
 - The software cannot recover lost passwords.
 - Losing your password could result in losing access to the database.
- *Passwords are specific to the database, not the software.*



The screenshot shows a window titled "IPCC 2006" with the subtitle "Welcome to 2006 IPCC Software for National Greenhouse Gas Inventories". The main text states: "The application is being run for the first time. It is necessary to define superuser. Superuser has full control over database and application and is responsible for defining and managing additional users working with this instance of application." Below this, it says "Please, supply superuser login name and password in the textboxes". There are four input fields: "Login", "Password", "Confirm Password", and "Password hint". Each field has a red dashed arrow pointing to it from the corresponding step in the list on the left. At the bottom, there are "OK" and "Cancel" buttons.



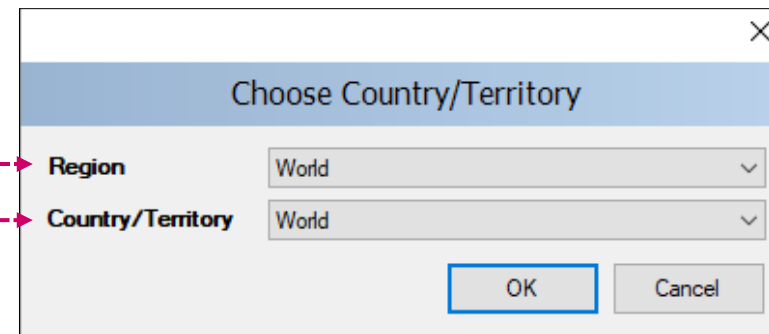
First Run – Choose Country/Region

Purpose of Selecting Country/Region

- Ensure *default emission factors* and *parameters* are applied where needed. (e.g., F-Gases, AFOLU, Waste)
 - Selection has no impact on Energy or IPPU.

Steps to select Region and Country/Territory

1. Choose the *Region* (e.g. World, Asia) from the dropdown menu.
2. Select the corresponding *Country/Territory* (e.g. World, Japan).



Tips

- The country list is based on the official *UN list of geographic regions*, available [here](#).
- *Country and region settings apply to the database only, not the software.*
- *Ensure country codes match when importing/exporting XML files for consistency.*



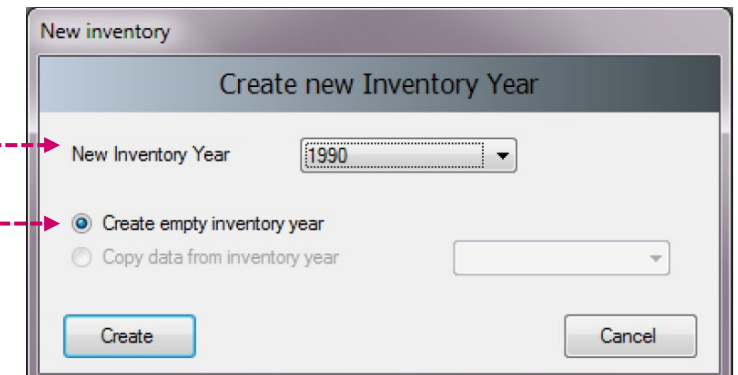
First Run – Create New Inventory Year

Purpose of Creating an Inventory Year

- Establish the *starting point* for your inventory data
- The **Inventory Year** organizes and structures your data for accurate reporting.

Steps to create a New Inventory Year

1. Select the *New Inventory Year* from the dropdown menu.
2. Choose Create *Empty* Inventory Year.



The screenshot shows a dialog box titled 'New inventory' with a sub-header 'Create new Inventory Year'. It contains a dropdown menu for 'New Inventory Year' with '1990' selected. Below this are two radio button options: 'Create empty inventory year' (which is selected) and 'Copy data from inventory year'. There is also a text input field next to the second option. At the bottom are 'Create' and 'Cancel' buttons. Red dashed arrows point from the first step of the instructions to the dropdown menu and from the second step to the 'Create empty inventory year' radio button.



Tips

- After the First Run, you can add new inventory years to your database.
- *Start with the first year of your time series (e.g., 1990) and build subsequent years in chronological order.*
- *The Inventory Year applies to the database, not the software.*



Next Session

UNFCCC's Webinars on the IPCC Inventory Software

- *What to expect*
- *How to prepare*

What We'll do Next time

- In the next webinar, we'll move **inside the IPCC Inventory Software** to explore how it actually works.
- We'll go through its *main structure* and *key features*, see how users navigate and *enter data*, and understand how *results* are generated.
- Short, demonstration-based **examples** will show typical **workflows** and illustrate how the software supports real inventory preparation.
- The goal is to *build familiarity* and *confidence* in using the tool effectively.



Before Next Session

Take some time to **explore the IPCC Inventory Software on your own.**

Even a short trial, opening the tool, browsing menus, or testing data entry, will help you feel more comfortable and make the next session easier to follow.

If you feel unsure or get stuck:

- Check the **support materials** available on the [TFI website](#) (User Manual, Sectoral Guidebook, etc.)
- Visit the **IPCC Software User Community** to **ask questions, exchange experiences**, or **find simple exercises** to try

Remember: the best way to learn the software is to use it.



Join the IPCC Software User Community

What it is

A **collaborative online space** to ask questions, share solutions

What you'll find there

- Peer Support – Ask **questions**
- Community Discussions –
- Guides & FAQs – Easily access
- News & Updates – Stay informed
- Feedback Channel – Help shape

How to join

- Access is via **Microsoft Teams**
- Complete the registration form: **[QR code]**



connect,



THANK YOU

FOR YOUR ATTENTION

STAY IN TOUCH



ipcc-nggip.iges.or.jp



nggip-tsu@iges.or.jp

STAY CONNECTED

 [ipcc_ch](#)

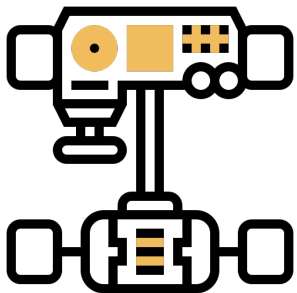
 [ipcc](#)

 [@ipcc](#)

 [ipcc](#)

Designed to Support at Every Step

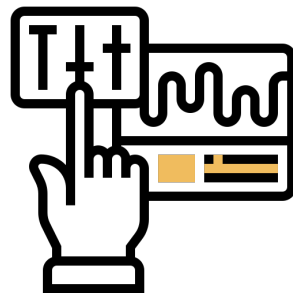
Think of it as your Inventory assembly line using the IPCC Software:



You start Strong

Worksheets, IPCC defaults, and structure already in place — you're never starting from zero.

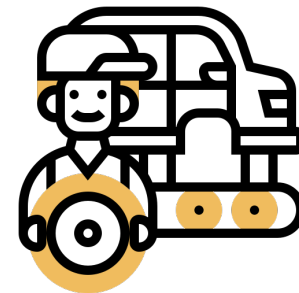
You're already rolling with a powerful engine.



Tailor to your Country

Data Managers help you integrate your national data, factors, and assumptions.

Fine-tune it to match your terrain



Error-Proof your Work

Built-in checks and logic avoid calculation errors and ensure methods are applied consistently.

Your alignment is spot on — no wobbles here.



Submit with Confidence

Outputs align with the 2006 IPCC Guidelines and UNFCCC MPGs — ready for ETF upload.

Tested, inspected, and cleared for the road.

The **IPCC Inventory Software** won't do all the work for you — but it will make producing a **high-quality, guideline-consistent GHG inventory** far **easier**.

Ongoing Development

Actively maintained with regular updates

Continuous software improvements based on user feedback, technical needs, and evolving practices, and bug fixes.

Aligned with UNFCCC decisions and guidance

Reflects outcomes from COP and SBSTA.

Joint development with UNFCCC

Collaboration ensures full compatibility with the ETF Reporting Tool, including up-to-date JSON generation.

Expanded supporting materials

Includes sector-specific guidebooks (e.g. Land, IPPU), step-by-step exercises, and add-on tools.

