

# BTR Finalization and NDC Alignment Workshop

Saint George's, Grenada | 1st April – 4th April 2025

Day 1

---

# Opening and formal welcome

---

# Housekeeping

- Bathrooms
- Coffee breaks and lunch
- Registration and travel logistics
- Cellphones and laptops
- Questions and "parking lot"
- Confidentiality
- Open and non-discriminatory environment
- Announcements?

---

# **Objectives of the workshop**

## **Agenda of today**

---

# Objectives of the workshop

- Explore the interlinkages between the BTR and the NDC cycles
- Gain hands-on experience on the use of the UNFCCC ETF reporting tools
- Provide in-depth technical advice on the application of the MPGs
- Facilitate feedback from peers of their on-going work on different chapters of BTRs
- Promote sharing of lessons learned and experiences on certain technical issues and challenges
- Encourage improvement plans and prepare for TERs

---

# Agenda Day 1

- Participants introduction

## **Group photo and coffee break**

- Interactive Quiz
- Highlights of Linkages between BTRs and NDCs
- Panel discussion BTR preparation and NDC Update

## **Lunch**

- Introduction to ETF reporting tools
- Hands-on exercises
- Reflection and feedback of the day

---

# Participants Journal

- Reflect at the beginning and the end of each day about different aspects and note them down
- exchange with others on your thoughts/questions/learnings
- Take journal and notes home with you

---

# Participant Introductions

- Name
- Country
- Primary climate measurement, reporting, and verification role
  - Not your title. What is your **primary role** within **climate MRV** for your country?



---

## Participant Introductions (now in pairs)

1. What experience do you have to bring to the workshop?
2. What are you hoping to take away from the workshop?
3. What does success look like at the end of the workshop?

# Group Photo & Coffee Break

Supported by:



Federal Foreign Office



German Federal Government  
Climate Change



German Climate Centre



---

# Quiz on BTR & NDC

Join at menti.com | use code 3725 6623

<https://www.menti.com/albbu4cepsdr>



# NDC and BTR

Highlighting the linkages

Sponsored by:



Federal Foreign Office



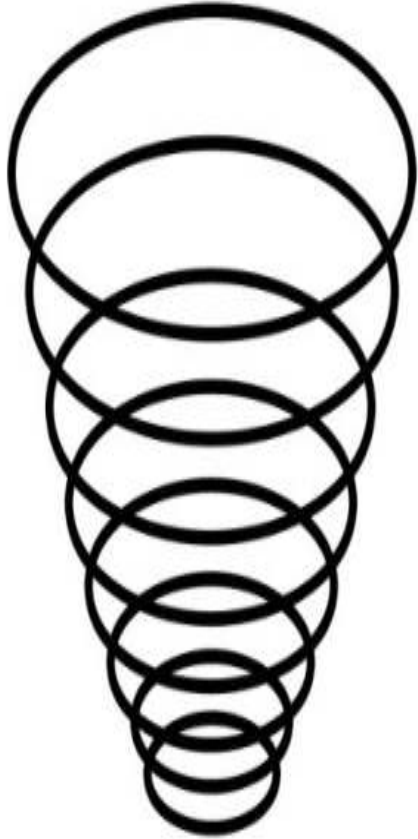
International Climate  
Initiative (IKI)



angewandte  
climate centre



# NDC and feedback mechanisms



- The Paris Agreement recognizes that its objectives will be achieved through time
- It builds on aggregate and individual progression/ambition
- It establishes a mandatory cycle of NDCs:
  - First submission by 2020 with 2030 targets
  - Enhanced ambition submitted every 5 years
  - Next NDCs are due in 2025
- Feedback Mechanisms
  - Global Stocktake
  - Enhanced Transparency Framework



# Arrangements of the Paris

## Agreement

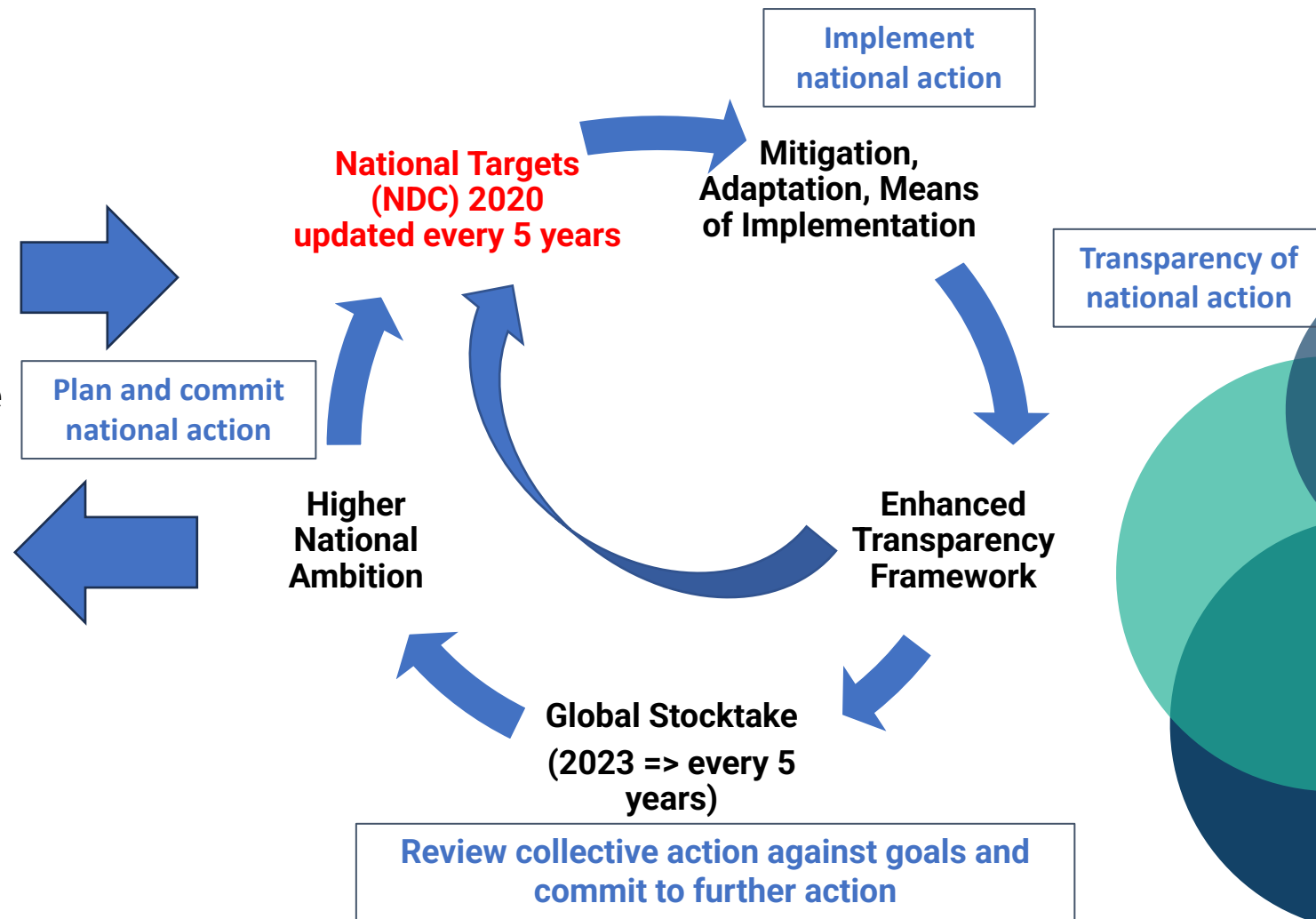
### Mitigation

Keep temperature increase to well below 2°C

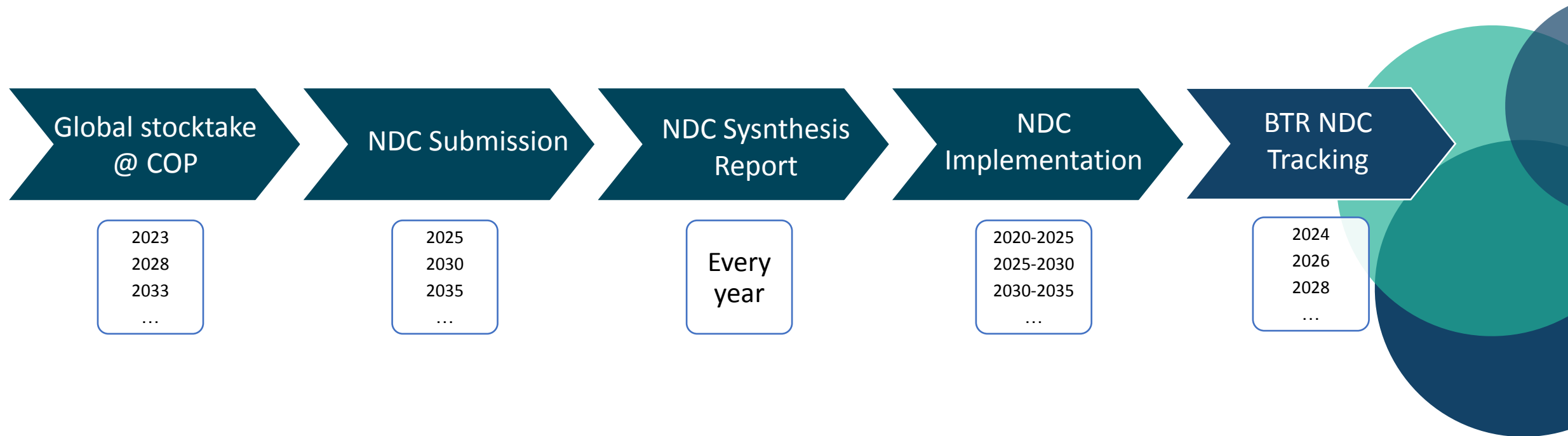
### Adaptation

Increase the ability to adapt and foster resilience

**Finance** flows consistent with path to low GHG emissions and resilient development



# NDC submission process



---

# What about targets and indicators?

A close cooperation between NDC team and BTR team is key for:

- Setting targets and indicators that can be realistically monitored
- Avoid addition of unnecessary and inconsistent indicators
- Selecting indicators for which there is sufficient:
  - Capacity within the NDC tracking team
  - Historical data available
  - Institutional arrangements in place





# Information necessary to track progress

## A. National circumstances and institutional arrangements

Should be used to show a comprehensive image of the country's particular context that might impact their progress towards NDCs, including institutional, legal, procedural arrangements for implementation .

## B. Description of a Party's NDC under Article 4 of the Paris Agreement, including updates

Detailed description of the NDC, including all its parameters and any updates since the last report. The purpose is to ensure a clear understanding of the country's climate commitments and any changes therein.

## C. Information necessary to track progress made in implementing and achieving NDCs

The goal of this section is to outline how a country tracks its progress towards meeting its NDCs. It involves detailing the specific indicators used and sharing the most recent data related to these indicators.

## D. Mitigation Policies, Actions, and Plans

Section that presents policies, actions and plans in place to mitigate climate change. The goal is to highlight the measures being taken to reduce GHG emissions and the effectiveness of these measures.

## E. Summary of GHG Emissions and Removals

Provide a succinct summary of a country's GHG emissions and removals. This information is especially important for countries submitting a stand-alone national inventory report

## F. Projections of GHG Emissions and Removals

Projection of future GHG emissions and removals, based on current mitigation policies and measures. This helps to identify the potential future trajectory of a country's GHG emissions. (Flexibility)

## G. Other Information

Any additional information that helps understand the progress in implementing and achieving their NDCs. This could include any unique initiatives, challenges, plans, etc.



# Common Tabular Format (CTF)

In total, the Common tabular formats comprise 12 Tables and one Appendix, covering the 7 parts of Section III of the MPG:

Section III: Information necessary to track progress made in implementing and achieving NDC

## Annex II\*

Common tabular formats for the electronic reporting of the information necessary to track progress made in implementing and achieving nationally determined contributions under Article 4 of the Paris Agreement

### I. Structured summary: Description of selected indicators

| Indicators selected to track progress <sup>a</sup> | Description                                                                                                                                                                                                                                                             |
|----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Indicator]                                        | Information for the reference point(s), level(s), baseline(s), base year(s) or starting point(s), as appropriate <sup>b</sup><br><br>Updates in accordance with any recalculation of the GHG inventory, as appropriate <sup>b</sup><br><br>Relation to NDC <sup>c</sup> |

Notes: (1) Pursuant to para. 76 of the MPG, each Party shall report the information referred to in paras. 65–76 of the MPG in a narrative and common tabular format, as applicable. (2) A Party may amend the reporting format (e.g. Excel file) to ensure specific rows in this table if the information to be provided in those rows is not applicable to the Party's NDC under Article 4 of the Paris Agreement, as accordance with the MPG. (3) The Party could add rows for each additional selected indicator and related information.

<sup>a</sup> Each Party shall identify the indicator(s) that it has selected to track progress of its NDC (para. 65 of the MPG).  
<sup>b</sup> Each Party shall provide the information for each selected indicator for the reference point(s), level(s), baseline(s), base year(s) or starting point(s), and shall update the information in accordance with any recalculation of the GHG inventory, as appropriate (para. 67 of the MPG).  
<sup>c</sup> Each Party shall describe for each indicator identified how it is related to its NDC (para. 76(c) of the MPG).

Custom footnotes:

Discriminator line:

## NDC definition and methods

- **Appendix:** Description of a Party's NDC
- **Table 1:** Description of selected indicators
- **Table 2:** Definitions needed to understand the NDC
- **Table 3:** Methodologies and accounting approaches

## Current mitigation status and tracking progress

- **Table 4:** Tracking progress
- **Table 5:** Mitigation policies, measures, actions and plans (Achieved)
- **Table 6:** Inventory summary

## Projections and expected emissions reduction

- **Table 5:** Mitigation policies, measures, actions and plans (expected)
- **Table 7:** Projections “with measures” scenario
- **Table 8:** Projections “with additional measures” scenario
- **Table 9:** Projections “without measure” scenario
- **Table 10:** Projections of key indicators
- **Table 11:** Key underlying assumptions and parameters of projections

## Response measures

- **Table 12.** Information necessary to track progress on the social and economic consequences of response measures

---

**Thank you!**



---

# Panel "Experiences on BTR preparation and NDC update"

**Grenada:** preparing BTR | *Mr. Titus Antoine*

**St. Lucia:** NDC update submitted and preparing BTR | *Ms. Jermaine Missole*

**Trinidad & Tobago:** submitted BTR | *Mr. Kishan Kumarsingh*

# Lunch Break

## Bon Appétit!

Sponsored by:



Federal Foreign Office



angewandte  
climate centre



---

# Energiser - 60" connections

- Participants pair up and have 60 seconds to find something they have in common – not work related.
- After 60" pairs swap.
- Three rounds.

The background of the slide is a solid blue color. In the bottom-left corner, there is a decorative graphic consisting of several overlapping triangles in shades of light blue, green, yellow, and orange, creating a modern, abstract design.

# Overview of the ETF reporting tools

**Tibor Lindovsky**

Transparency Division

UNFCCC Secretariat

## Building blocks supporting ETF implementation

Enhances the skills and knowledge of technical experts to report and review information in a manner that is both efficient and effective

Facilitates the submission of information by Parties in a user-friendly and efficient manner

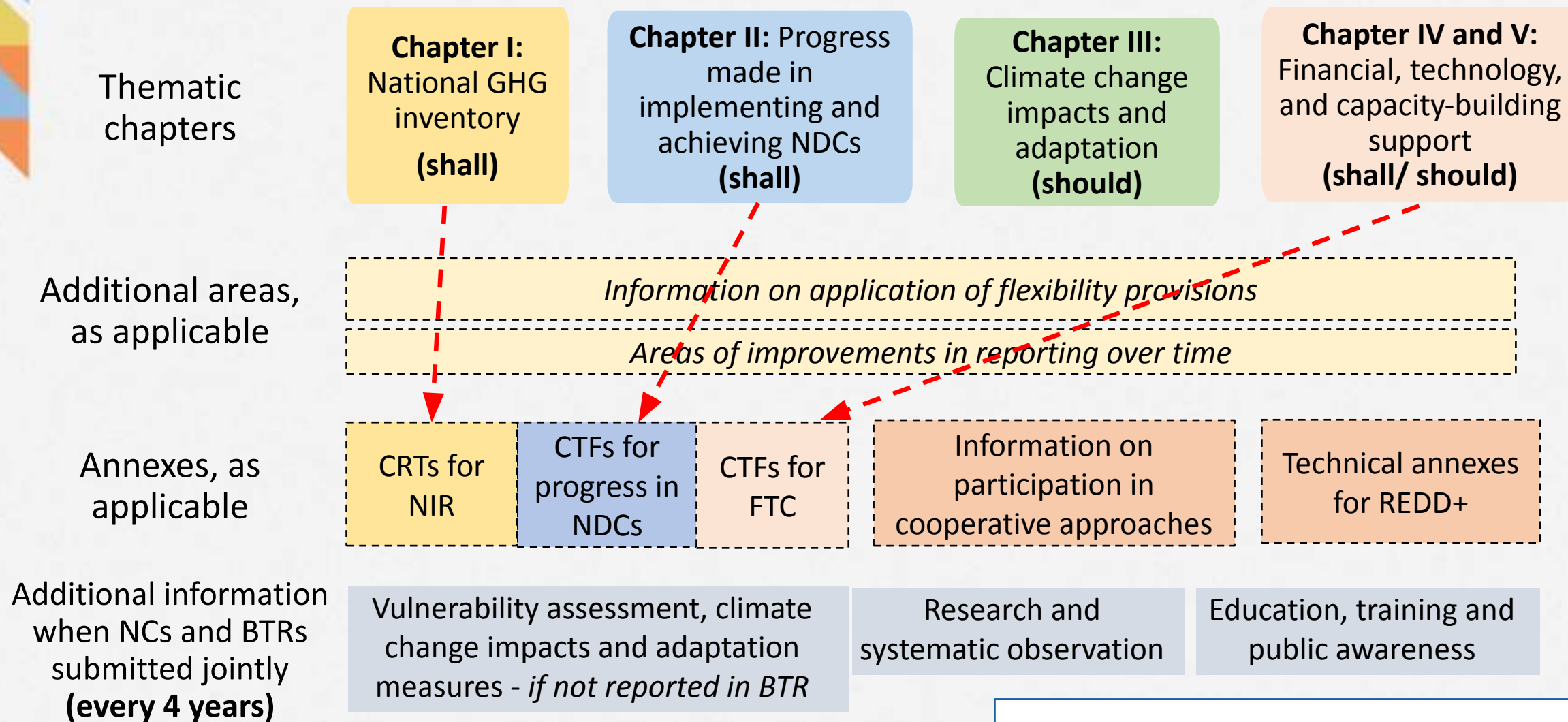


Enhances sustainability, boosts effectiveness, and increases efficiency in both national reporting and the international review process

Facilitates the effective and efficient review of submitted information



# Overview of BTR



For the BTR outline, see [decision 5/CMA.3, Annex IV](#).

# ETF reporting tools: Mandate

Article 13 of the Paris Agreement:  
**Enhanced transparency framework (ETF)**

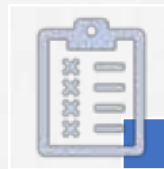
**Modalities, Procedures and Guidelines (MPGs)** for enhanced transparency framework (Decision 18/CMA.1)



## Decision 18/CMA.1

Requested SBSTA to develop:

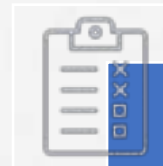
- common reporting tables (CRTs) for GHG inventories
- common tabular formats (CTFs) for tracking NDC progress and achievements
- common tabular formats (CTFs) for support provided, needed and received



## Decision 5/CMA.3

Adopted:

- CRTs for GHG inventories
- CTFs for NDC progress and achievements
- CTFs for support provided, needed and received

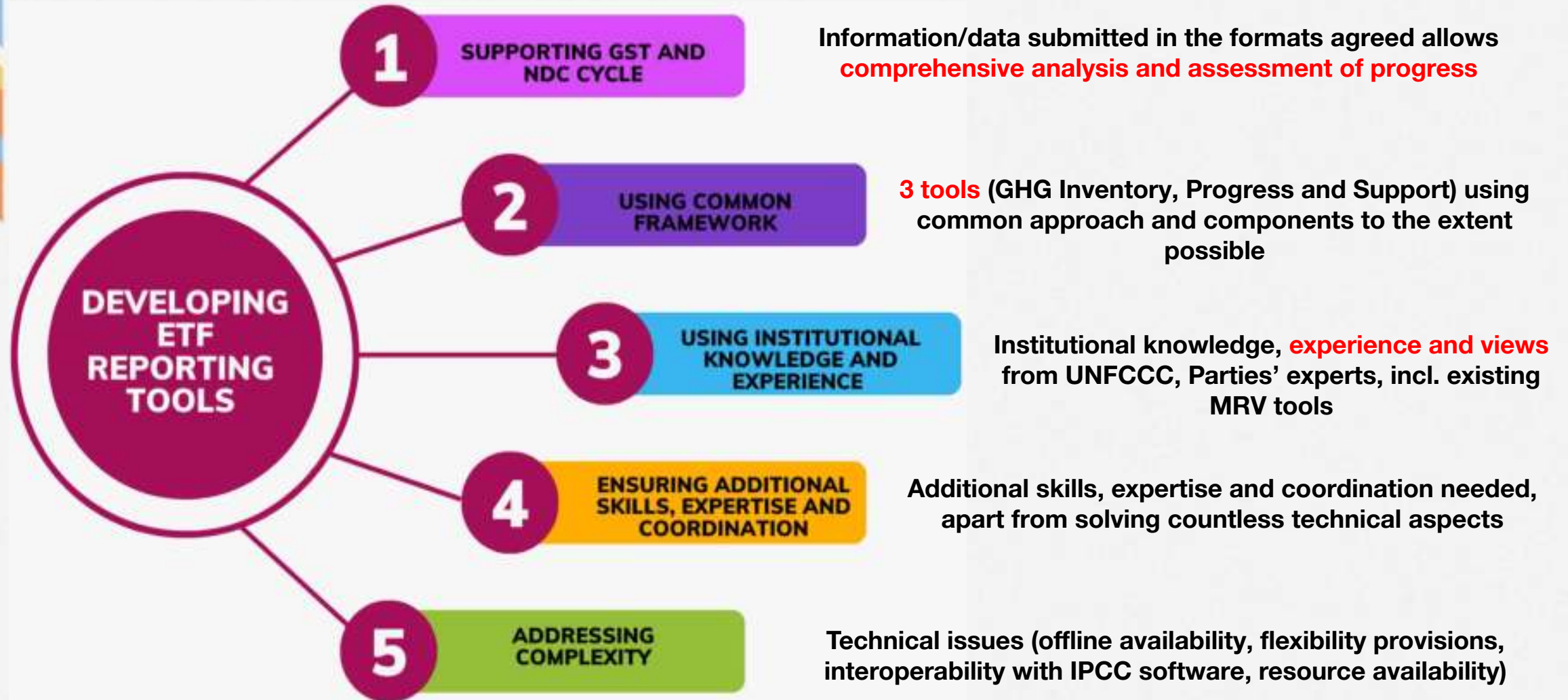


## Decision 5/CMA.3

Requested the secretariat to:

- Develop the reporting tools
- Test version by June 2023; Final version by June 2024
- Update Parties on progress at SBSTA sessions
- Organize technical training workshops
- Facilitate interoperability with IPCC software
- Establish an interactive web-portal for support info by Dec 2025

# Approach



# Overall scope

3 tools: GHG inventory, Progress, Support

## GHG inventory



- All sectors, data entry grids
- All flexibility provisions and version settings
- Key category analysis
- Interoperability with IPCC software

## Progress



- All data entry grids
- All flexibility provisions and version settings
- Interconnection with CRT

## Support



- All data entry grids
- All version settings
- Detailed explanation of each decision step

- Manual data entry or Importing and exporting data (Excel and JSON)
- Generating reporting tables
- Providing comments/custom footnotes/doc boxes
- QA/QC checks
- Working in offline mode
- Interoperability with IPCC software (*GHG inventory tool*)

## MAIN FUNCTIONALITIES

ETF Reporting Tools released in June 2024 to allow Parties to compile data and generate reporting tables for submission

# ETF Reporting Tools

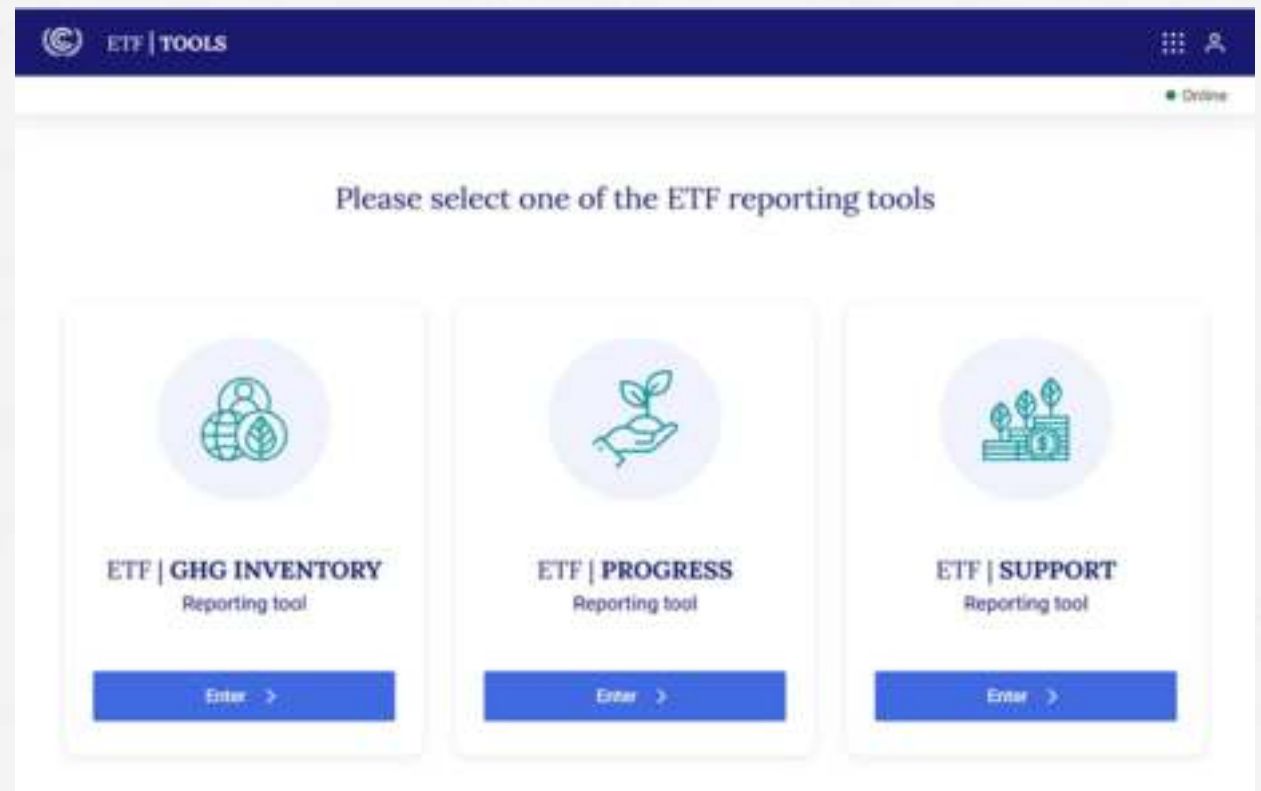
*Demonstration of the ETF reporting tools (Live Demo):*

<https://www.canva.com/design/DAGHX8MJM1w/q5Ous-y7Tajbia3DYMWaFq/watch>

**Only Parties' nominated users have access.**

The live demo features how to:

- ❖ Access the ETF reporting tools
- ❖ Create a new CTF/CRT version for a specific submission year
- ❖ Specify and modify version settings
- ❖ View and access all CTF/CRT versions
- ❖ View and move through the navigation tree
- ❖ Add and modify data in the data entry grids
- ❖ Work in offline mode
- ❖ Export/import of data entry grids to excel
- ❖ Generate/download reporting tables



# Framework

...implemented

..under implementation

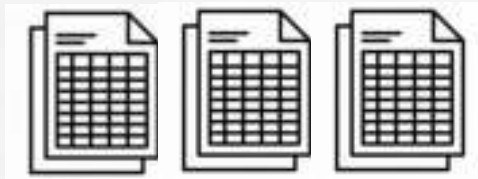
## User management



### User management tools

- **My Team**: allows focal points to add/remove/modify user roles
- **My Apps**: allows assigned users to access tools as per granted roles

## Electronic reporting of information (CRTs/CTFs)



### ETF reporting tools

- **ETF GHG inventory reporting tool**: CRTs for national GHG inventories
- **ETF Progress reporting tool**: CTFs for tracking NDC progress and achievements
- **ETF Support reporting tool**: CTFs for support provided, mobilized, received & needed

## Submission of CRTs/CTFs and narrative documents



### National reports submission portal

Allows Parties to submit CRTs, CTFs and other narrative documents (BTR, NID and Annexes)

## Data storage and management



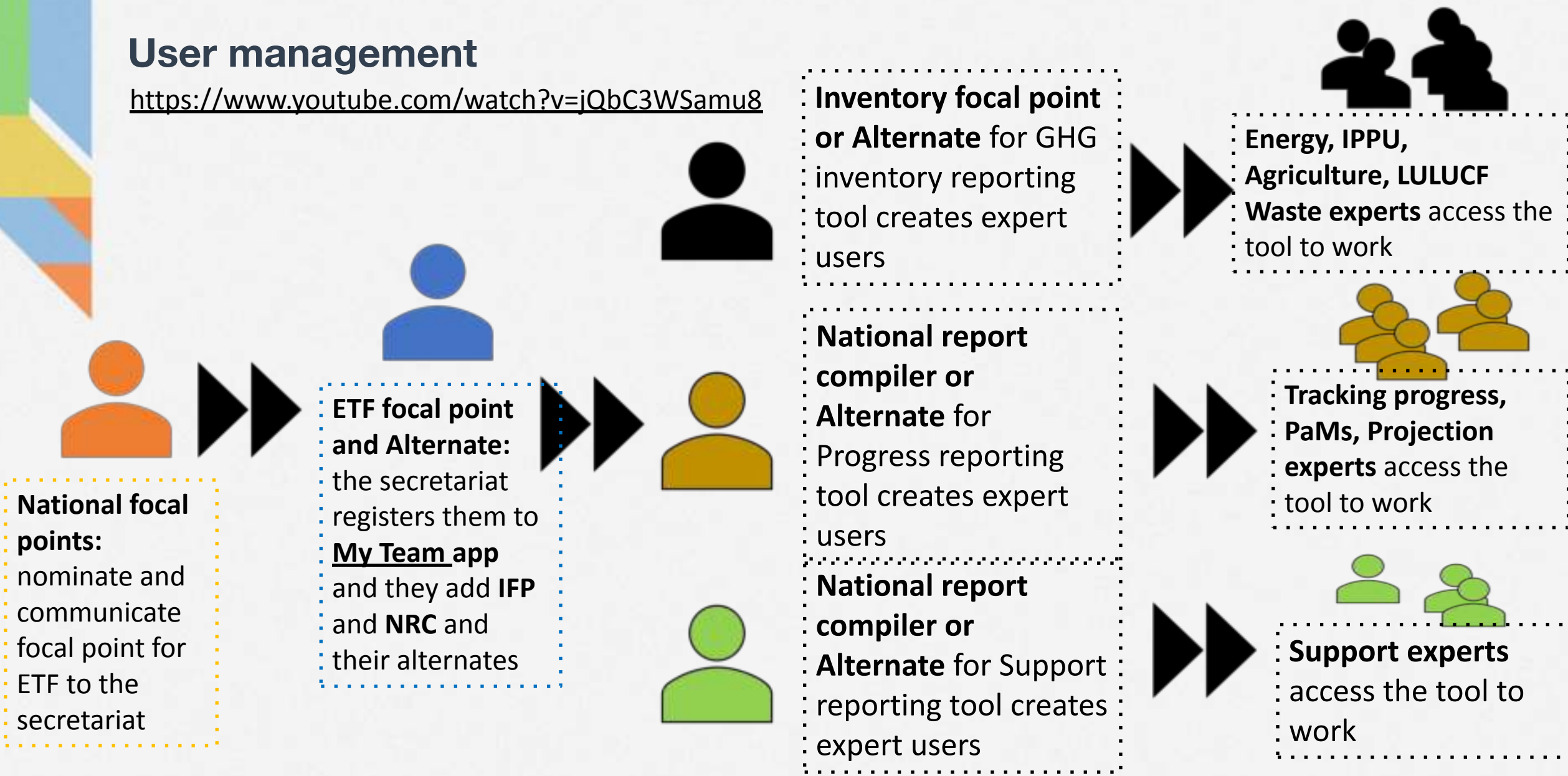
### UNFCCC climate data hub

Store and prepare data for further processing, analysis and management



# User management

<https://www.youtube.com/watch?v=jQbC3WSamu8>



**!! Secretariat is NOT responsible for providing/removing access.**

# User management – GHG Inventory Tool

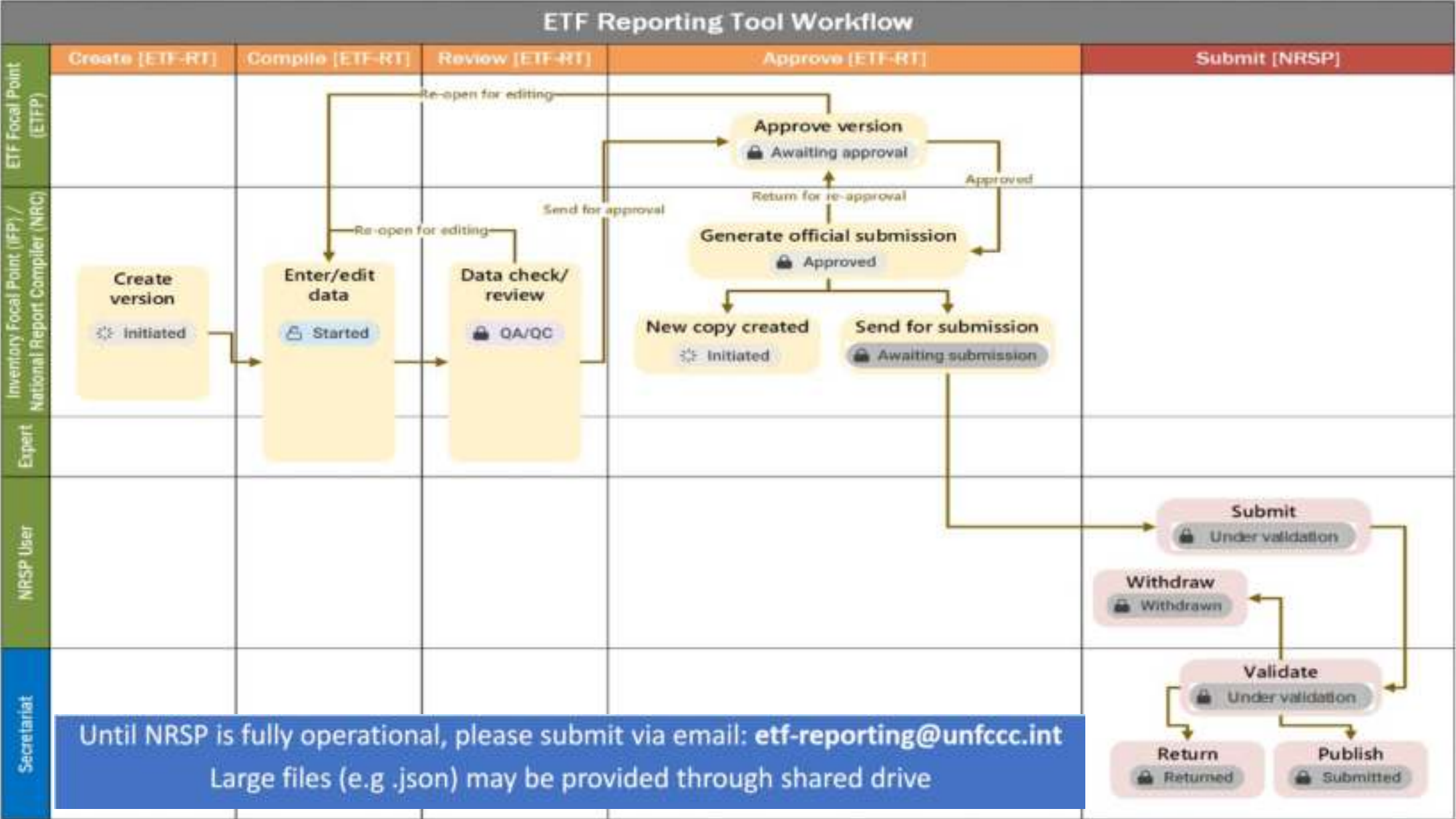
| ETF Reporting Tool Role | User Roles                  | Actions they may take on the GHG inventory                                          | Maximum number of users |
|-------------------------|-----------------------------|-------------------------------------------------------------------------------------|-------------------------|
| Overarching             | ETF Focal Point (FP)        | Add/remove all users, view inventories                                              | 1                       |
|                         | ETF FP Alternate            |                                                                                     | 1                       |
| GHG Inventory           | Inventory Focal Point (IFP) | Add/remove inventory experts, create inventories and complete/edit version settings | 1                       |
|                         | IFP Alternate               |                                                                                     | 1                       |
|                         | Expert Energy               | Enter/edit data in the Energy sector                                                | Multiple                |
|                         | Expert IPPU                 | Enter/edit data in the IPPU sector                                                  | Multiple                |
|                         | Expert Agriculture          | Enter/edit data in the Agriculture sector                                           | Multiple                |
|                         | Expert LULUCF               | Enter/edit data in the LULUCF sector                                                | Multiple                |
|                         | Expert Waste                | Enter/edit data in the Waste sector                                                 | Multiple                |

**!! Secretariat is NOT responsible for providing/removing access.**

<https://www.youtube.com/watch?v=jQbC3WSamu8>



# Submission workflow





## Submission workflow – Statuses of GHG inventory submission

- i. **Initiated:** The inventory has been created but the version settings have not been completed by the IFP yet to allow for data entry. Only the role of IFP can edit the version settings in the initiated state.
- ii. **Started:** The inventory is ready for data entry.
- iii. **QA/QC:** The inventory is locked and is ready for the QA/QC within the Party. The inventory is in read-only state. All users may QA/QC the inventory.
- iv. **Awaiting approval:** the inventory is waiting for ETF FP approval.
- v. **Approved:** Inventory has been approved by the ETF FP.
- vi. **Awaiting submission:** Inventory is made visible in the NRSP for submission to UNFCCC secretariat.
- vii. **Submitted:** The final inventory published on the secretariat website.
- viii. **Returned:** A read-only archived version, returned from the NRSP.
- ix. **Withdrawn:** A read-only archived version, withdrawn by the Party NRSP user.

# Thank you for attention

**Webpage ETF Reporting Tools:**

<https://unfccc.int/process-and-meetings/transparency-and-reporting/reporting-and-review/transparency-data-and-tools/etf-reporting-tools>

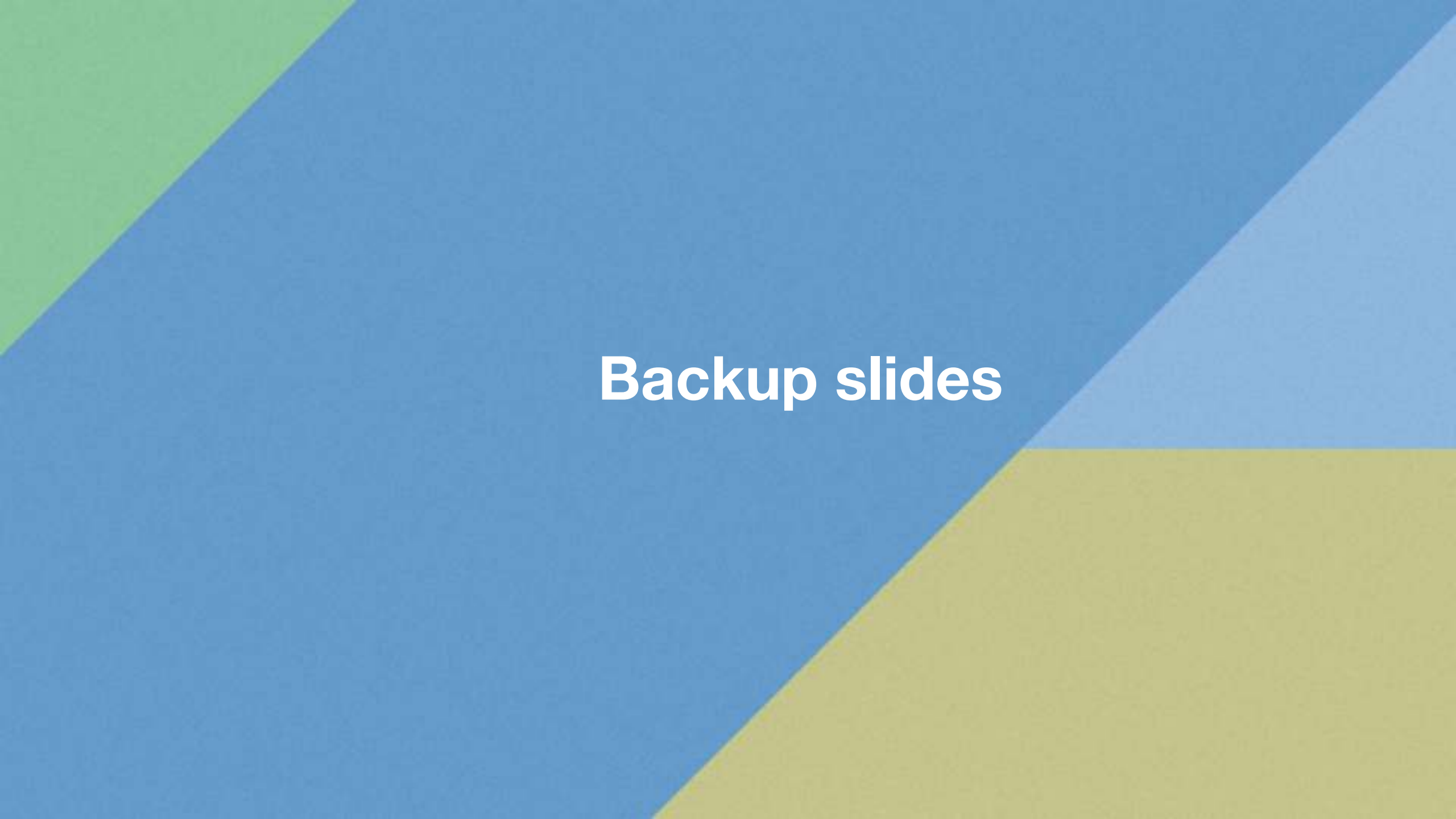
**ETF Reporting Tools Help Page:**

<https://unfccc.int/etf-reporting-tools-help>

**Contact us at:**

[CGESupport@unfccc.int](mailto:CGESupport@unfccc.int)





**Backup slides**



# Submission workflow

Start Submission: ▾

Biennial Transparency Report (BTR)

National Inventory Report (NIR)

Party landing page in the NRSP

1. Click on **Start Submission** button  
2. Select submission type

| Submission type | Submission cycle | Submission status | Submission date  | User          | Action               |
|-----------------|------------------|-------------------|------------------|---------------|----------------------|
| NIR             | BTR2             | Completed         | 2024-11-11 11:28 | Kristina Kaar | <a href="#">VIEW</a> |

## Make your submission

Submission type: BTR

Submission cycle: Please select BTR cycle ▾

Please select NC cycle, if appropriate ▾

Submission year: 2024 ▾

Files:

|                                                                                                                               | File name                                                               | File size                                                                                                                        |
|-------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>Generic upload section:</b><br>For uploading biennial transparency report (BTR), additional information, cover letter etc. | Select CRT, CTF version(s) and upload files from the ETF reporting tool | Upload of files from the ETF reporting tool(s):<br>1. Select version from the ETF reporting tool(s)<br>2. Upload relevant files. |
|                                                                                                                               | Drag and drop or <a href="#">Select a file</a>                          |                                                                                                                                  |

Party comment:

# Submission workflow

For each ETF tool, version(s) in status **Awaiting submission** appear in the NRSP for selection.

Submission year

Files:

Party comment:

BTR

Please select BTR cycle

Version(s) available in the ETF reporting tool

| GHG Inventory:                                         | Progress:                                      | Support:                                       |
|--------------------------------------------------------|------------------------------------------------|------------------------------------------------|
| <input type="checkbox"/> XYZ-CRT-2025-V9.0             | <input type="checkbox"/> XYZ-CTF-NDC-2026-V4.0 | <input type="checkbox"/> XYZ-CTF-FTC-2027-V1.0 |
| <input type="checkbox"/> XYZ-CRT-2024-V5.0             | <input type="checkbox"/> XYZ-CTF-NDC-2027-V2.0 | <input type="checkbox"/> XYZ-CTF-FTC-2025-V1.0 |
| <input checked="" type="checkbox"/> XYZ-CRT-2027-V12.0 | <input type="checkbox"/> XYZ-CTF-NDC-2025-V3.0 | <input type="checkbox"/> XYZ-CTF-FTC-2026-V2.0 |

Drag and drop or [Select](#) files to upload

No match;

Status is communicated back in the ETF reporting tool only to the version(s) uploaded through this section!

Files: XYZ-CRT-2027-V12.0.zip  
XYZ-CRT-2027-V12.0.json

Cancel

Upload to submission

Guidance on upload of the files for each version selected.

size

0/500

# Submission workflow

Submission Portal

Party landing page in the NRSP

Start Submission ▾

Submission overview: Submission Type ▾ Submission Cycle ▾ Submission Status ▾

| Submission type | Submission cycle | Submission year | Submission status              | Submission date  | User          | Action                   |
|-----------------|------------------|-----------------|--------------------------------|------------------|---------------|--------------------------|
| NIR             | BTR2             | 2024            | Published                      | 2024-11-11 11:28 | Kristina Kaar | <a href="#">VIEW</a>     |
| NC              | NC7              | 2024            | Published                      | 2024-11-11 10:02 | Kristina Kaar | <a href="#">VIEW</a>     |
| BTR             | BTR1             | 2024            | Rejected                       | 2024-11-11 09:57 | Kristina Kaar | <a href="#">VIEW</a>     |
| BTR             | BTR4, NC10       | 2024            | Published                      | 2024-11-11 02:36 | Kristina Kaar | <a href="#">VIEW</a>     |
| NIR             | BTR3             | 2024            | Published                      | 2024-11-11 02:30 | Kristina Kaar | <a href="#">VIEW</a>     |
| NIR             | BTR3             | 2024            | Validated, Pending publication | 2024-11-04 12:39 | Kristina Kaar | <a href="#">VIEW</a>     |
| NIR             | BTR2             | 2024            | Submitted, Pending validation  | 2024-10-29 08:42 | Kristina Kaar | <a href="#">WITHDRAW</a> |
| NIR             | BTR4             | 2024            | Submitted, Pending validation  | 2024-10-29 03:27 | Kristina Kaar | <a href="#">WITHDRAW</a> |
| BTR             | BTR1             | 2024            | Published                      | 2024-10-28 06:04 | Kristina Kaar | <a href="#">VIEW</a>     |
| BTR             | BTR1             | 2024            | Submitted, Pending validation  | 2024-10-25 09:19 | Kristina Kaar | <a href="#">WITHDRAW</a> |
| NIR             | BTR1             | 2024            | Submitted, Pending validation  | 2024-10-24 09:40 | Kristina Kaar | <a href="#">WITHDRAW</a> |

Until NRSP is fully operational, please submit via email: [etf-reporting@unfccc.int](mailto:etf-reporting@unfccc.int)  
Large files (e.g .json) may be provided through shared drive



United Nations  
Climate Change

# **Hands-on Training** **ETF GHG Inventory** **Reporting Tool**

**Tibor Lindovsky**

Transparency Division

UNFCCC Secretariat

Grenada, 1-3 April 2025





*Scan the QR code  
for exercise guide*

# Agenda

## ☐ Introduction

- ✓ Reporting requirements under the Paris Agreement
- ✓ Common Reporting Tables (CRT)

## ☐ Participants' interaction and question/answers

## ☐ Hands-on Training on ETF GHG Inventory Reporting Tool

- ✓ Interoperability with IPCC Software



# Session background and objectives

## Training session

- **ETF GHG Inventory Reporting Tool** for common reporting tables (CRT) for the electronic reporting of the information in the national inventory reports of anthropogenic emissions by sources and removals by sinks of greenhouse gases
- Hands-on training session to provide a practical experience of the use of the tool and its features

## Background

At the end of the training session, the participants will be able to:

- ✓ Access to the ETF Reporting Tools
- ✓ Get familiar with the user interface
- ✓ Create a new inventory version
- ✓ Specify/Edit version settings
- ✓ View and access all inventory versions
- ✓ Export/import of data entry grids in Excel
- ✓ Generate/download common reporting tables
- ✓ Work with JSON and interoperability with IPCC Software

## Objective



# Introduction



**United Nations**  
Climate Change

# Reporting requirement for GHG Inventories under Paris Agreement

## Article 13 of the Paris Agreement

### National inventory report (NIR) of GHG emissions

- i. Each Party shall regularly provide information on national inventory report of anthropogenic emissions by sources and removals by sinks of greenhouse gases

## Decision 18/CMA.1, Annex, Chapter II

### National inventory document (NID) and Common reporting tables (CRT)

- i. The national inventory report (NIR) consists of a national inventory document (NID) and the common reporting tables (CRTs).
- ii. Each Party shall report the information referred to in paragraphs 39–46, recognizing the associated flexibilities provided for those developing country Parties that need them in the light of their capacities.

## Decision 5/CMA.3

### Adopted:

- i. The common reporting tables (CRTs) referred to in chapter II of the annex to decision 18/CMA.1 for the electronic reporting of the information in the NIRs of anthropogenic emissions by sources and removals by sinks of greenhouse gases, as contained in annex I;



# Common Reporting Tables (CRT)

- CRTs for the electronic reporting of information in the NIR
- Set of MS Excel workbook (**containing 60 worksheets**) for each reported year
- There are three types of tables for each year
  - Sectoral Background Tables (white/orange cells) – Need to fill data at this layer
  - Sectoral Report Tables (green cells) – Automatically generated
  - Summary Tables/Cross-sectoral Tables (blue cells) – Automatically generated

A stack of four Excel worksheets representing Sectoral Background Tables. The top sheet shows a grid with orange and white cells, indicating data entry points. The sheets are titled 'Table 1: ...', 'Table 2: ...', 'Table 3: ...', and 'Table 4: ...'.

Sectoral Background Tables

A stack of four Excel worksheets representing Sectoral Report Tables. The top sheet shows a grid with green cells, indicating automatically generated data. The sheets are titled 'Table 1: ...', 'Table 2: ...', 'Table 3: ...', and 'Table 4: ...'.

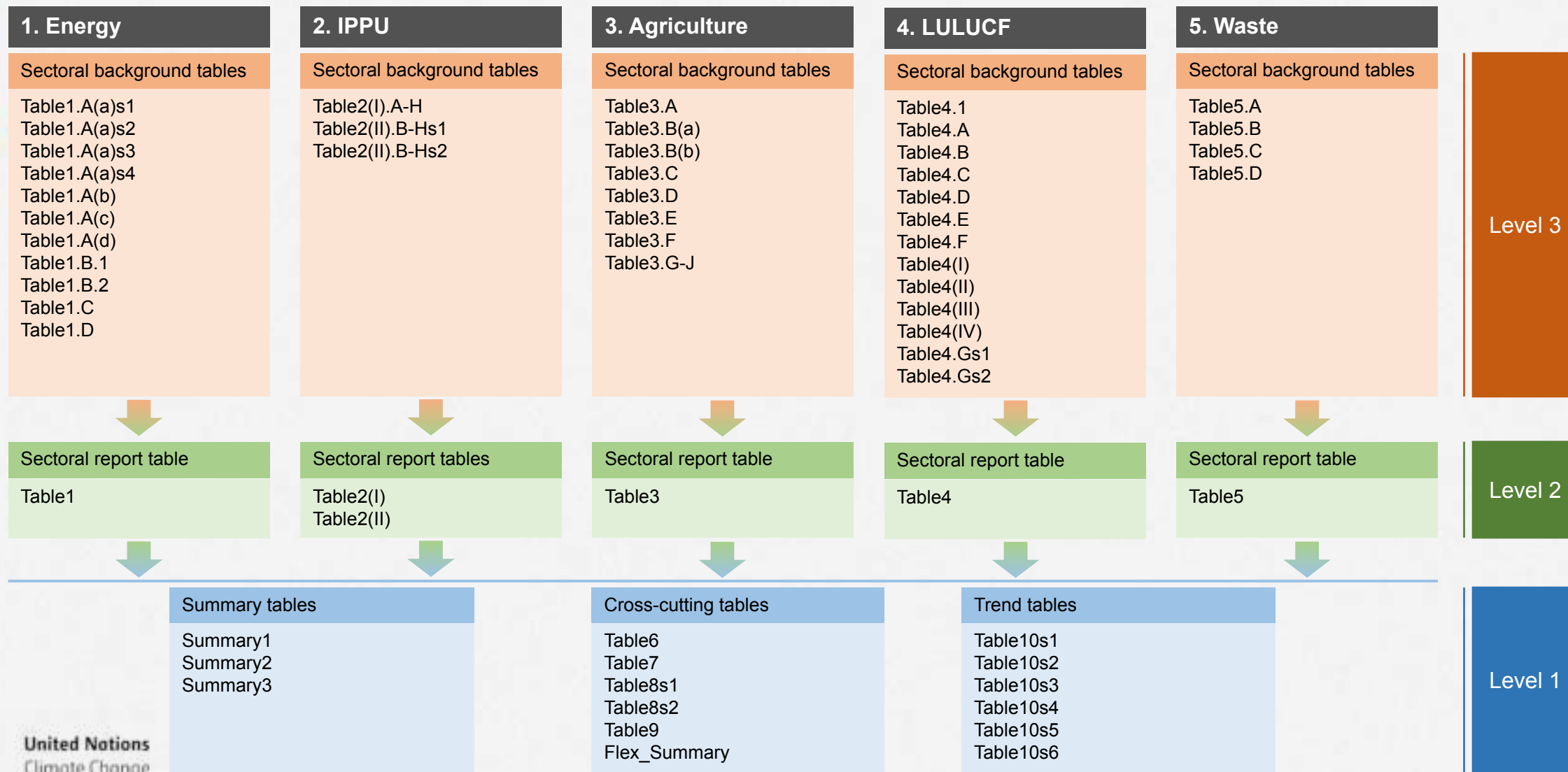
Sectoral Report Tables

A stack of four Excel worksheets representing Summary / Cross-sectoral / Trends Tables. The top sheet shows a grid with blue cells, indicating automatically generated data. The sheets are titled 'Table 1: ...', 'Table 2: ...', 'Table 3: ...', and 'Table 4: ...'.

Summary / Cross-sectoral / Trends Tables

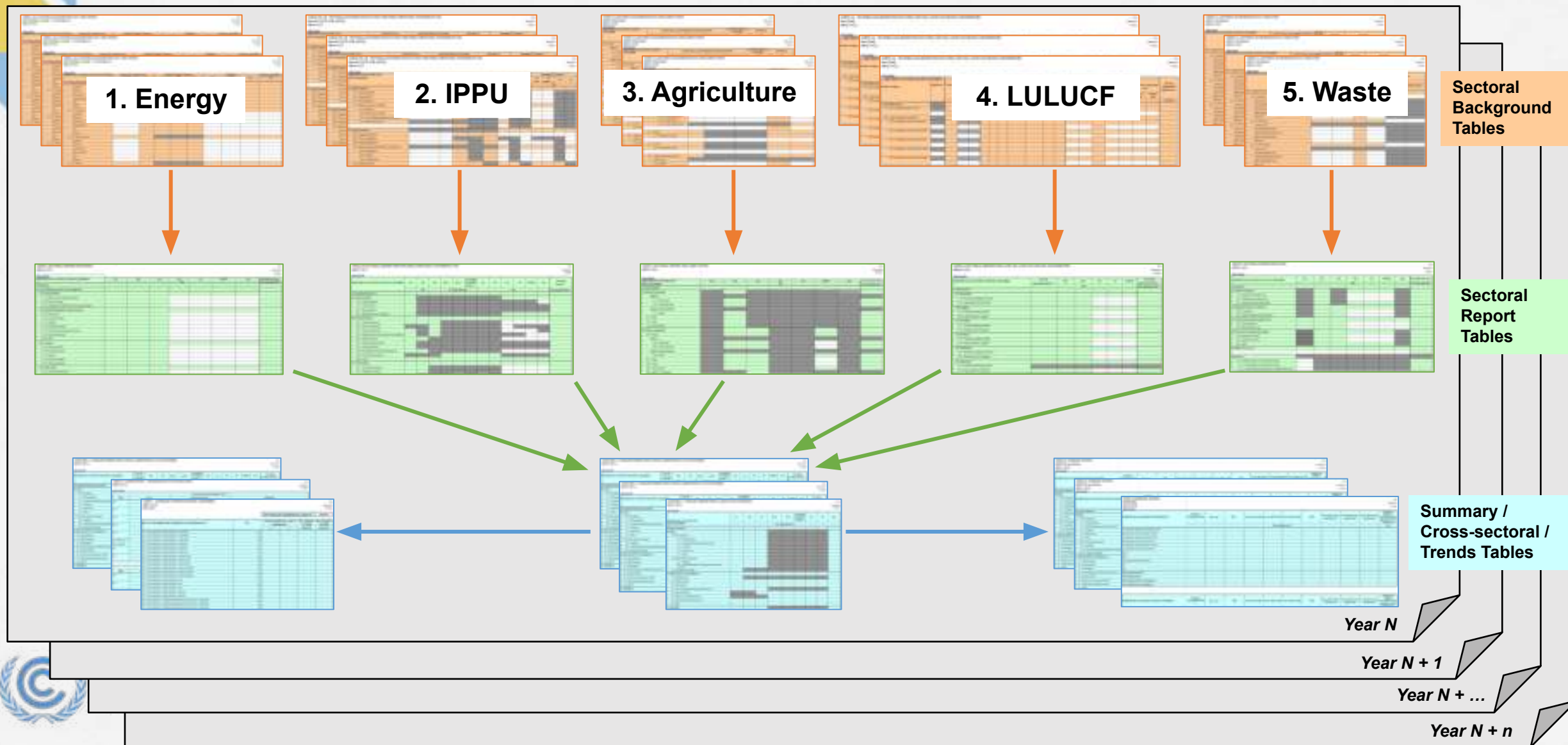


# CRT structure

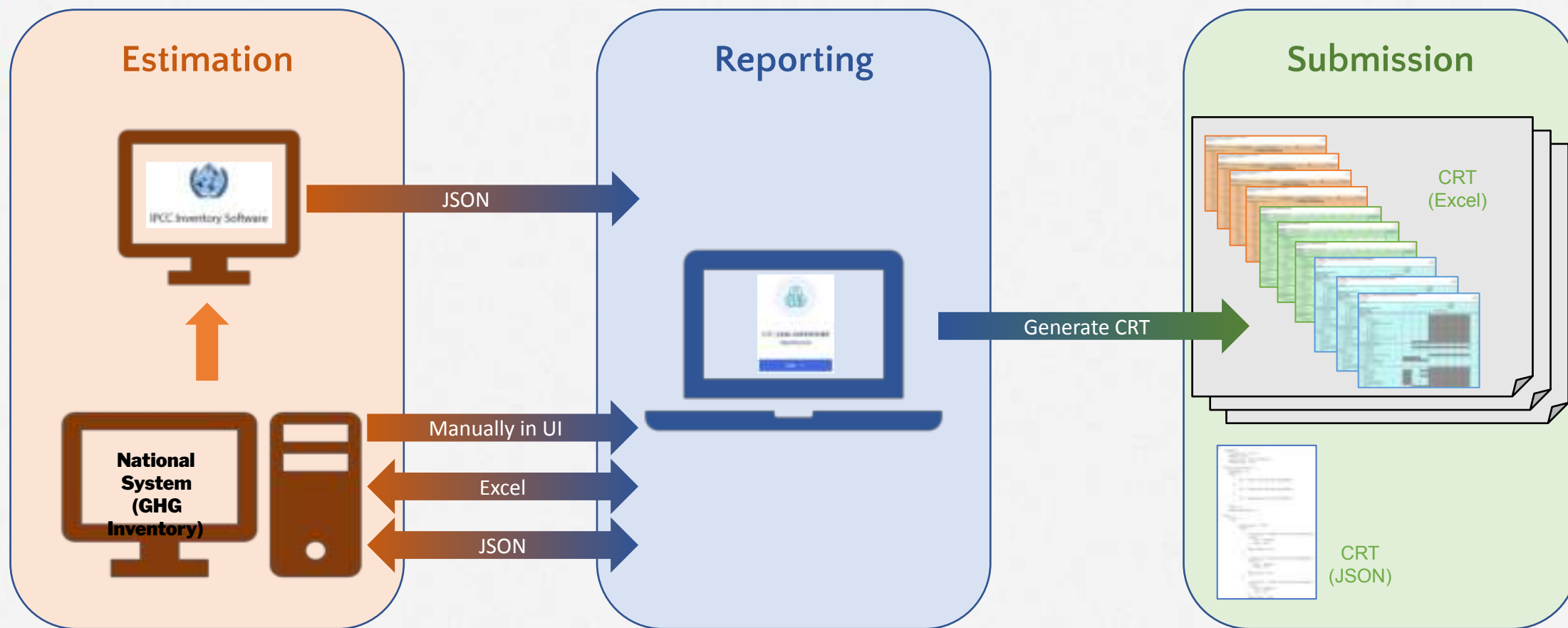




# CRT worksheets



# GHG inventory workflow

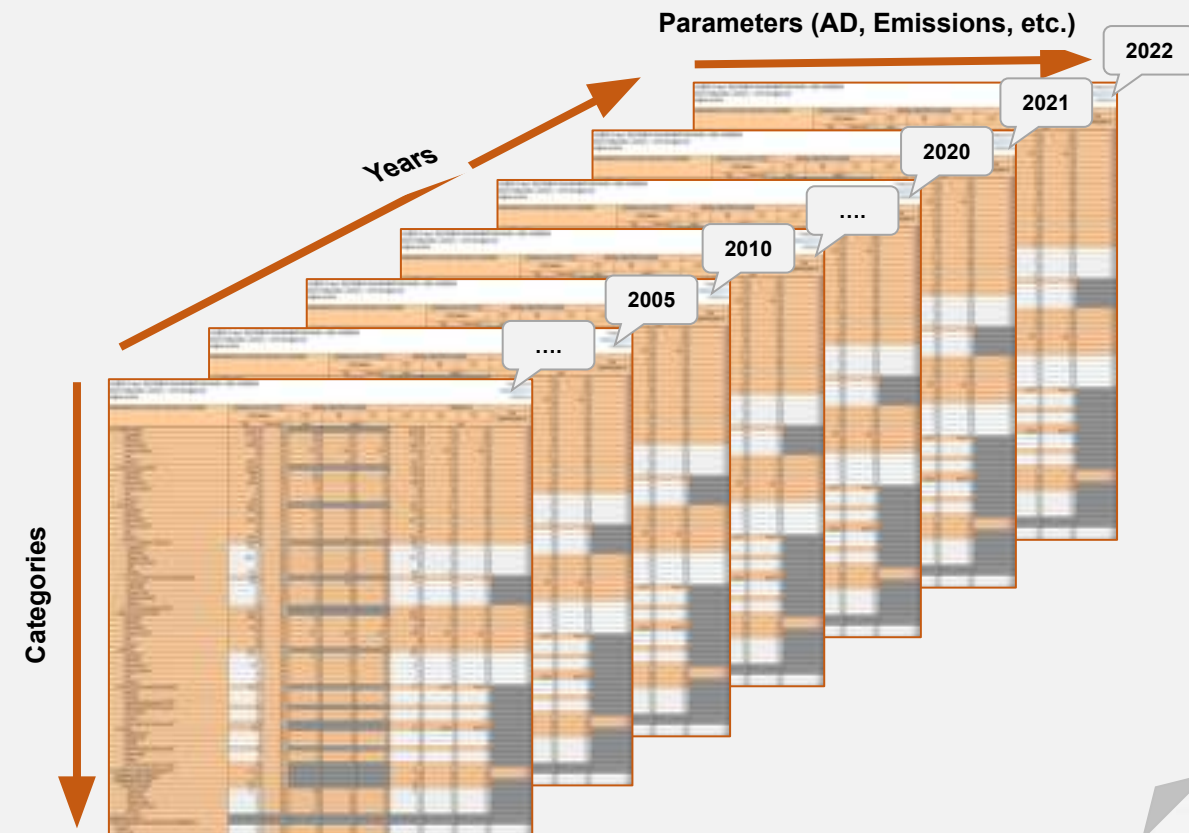




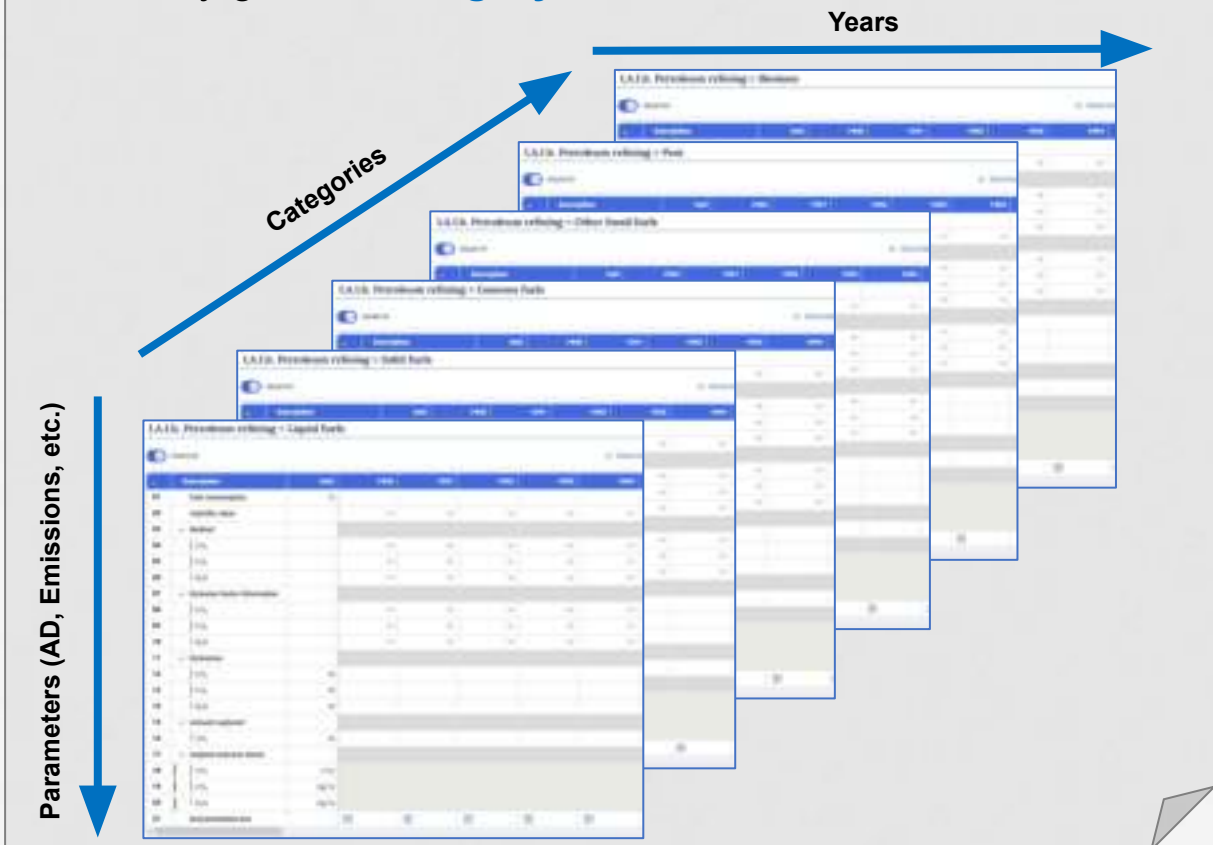
# Common Reporting Tables and Data entry grids

**i** Data entry grids have categories for all sectors arranged in navigation tree and allows to enter data for the whole time series for a selected category. The data from the data entry grids are mapped to the CRTs on an annual basis when you generate/download the reporting tables.

## Common Reporting Tables – **Annual basis**



## Data entry grids – **Category basis**



# Participants' interaction and question/answers



**United Nations**  
Climate Change

# Country Experiences Using the ETF Tools



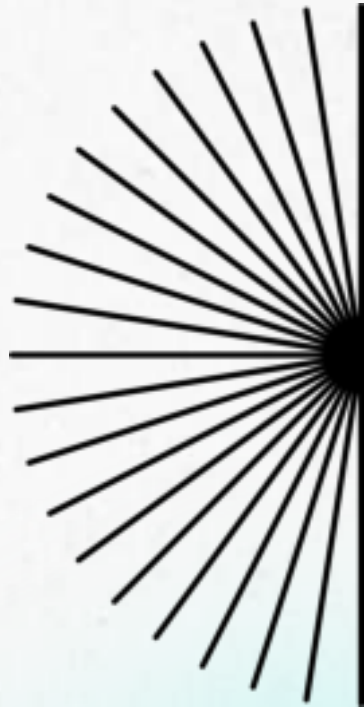
**United Nations**  
Climate Change

---

01 April 2025

# **BTR Finalization & NDC Alignment Workshop & 2025 MRV Hub Annual Meeting**

*Belize's Experience with the ETF  
Reporting Tool*



# Agenda

Overview

Version Settings

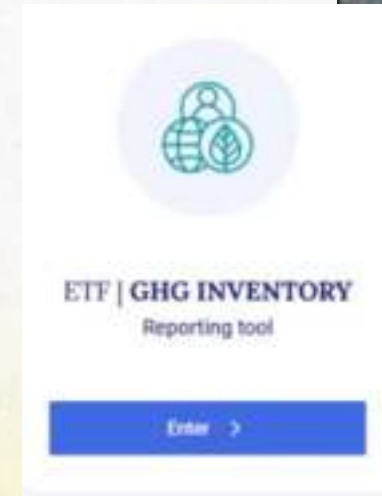
Data Entry

Concluding Remarks

---

# Overview

- Belize submitted its first BTR in January 2025
- CRTs and CTFs were generated using the ETF Reporting Tool
- ETF data input included both IPCC interoperability function for importing json file (all sectors) and manual filing in tables (LULUCF sector)
- 14 excel spreadsheets generated for each year in the time series





# Version Settings: Flexibility Provisions

**Tip:** Know which FX Provisions are required prior to starting process

- Understand:
  - FX Provisions required
  - Time series and reference year/period
  - Description of flexibility, clarification of capacity constraint, improvement timeframe and progress in addressing improvement

**1 Flexibility provisions**

\* Response required to continue

**Please specify if any flexibility provisions in light of national capacities will be used.\***

Notation key "FX" can only be used in data entry when flexibility provisions are used.

☒ Yes ☐ No

**Select the specific flexibility provisions to be used**

**Para 58 (Last year in time series)** 

Enabling this option will set the last reporting year as the submission year minus 3 in the annual time series and allow the reporting of information for the reporting table "Flex\_Summary".

The last reporting years in the time series is: **Y** 2022

**Para 57 (Annual time series)** 

**Specify NDC reference year/period\***

☐ NDC reference year ☐ NDC reference period ☒ Do not specify NDC reference year/period

**Select the reporting years in the time-series\***

Years

1954, 1997, 2000, ...

1954 X 1997 X 2000 X 2003 X 2006 X 2009 X 2012 X 2015 X 2017 X

2018 X 2019 X



# Version Settings: Flexibility Provisions

- FX Provisions selected will impact data eg. F-gases

### Para 48 (Reporting F-gases)



Enabling this option will allow the selection of F-gas(es) for reporting and also allow the reporting of information for the reporting table "Flex\_Summary".

**Select at least one F-gas to apply flexibility\***

The reporting table Table2(II) will be filled with notation key "FX" for the selected gas(es) and its species, if any, for all reporting years in the time series.

Select F-Gases

PFCs, SF<sub>6</sub>, NF<sub>3</sub> 

PFCs 

SF<sub>6</sub> 

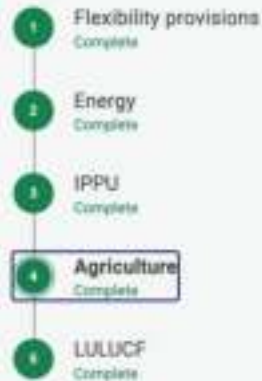
NF<sub>3</sub> 

**Summary on the use of flexibility provision**

The information provided below will be reflected in the reporting table "Flex\_Summary".

# Version Settings: Agriculture & LULUCF

**Tip:** Know the sector specific approach for Ag and LULUCF used



**TABLE 3 SECTORAL REPORT FOR AGRICULTURE**  
(Sheet 1 of 1)

| GREENHOUSE GAS SOURCE AND SINK CATEGORIES | CO <sub>2</sub> | CH <sub>4</sub> | N <sub>2</sub> O | FLUORIDED GASES |
|-------------------------------------------|-----------------|-----------------|------------------|-----------------|
| B. Total agriculture                      | 0.95            | 13.88           | 0.01             | NA/NEND         |
| B.1. Enteric fermentation                 |                 | 10.28           |                  |                 |
| B.1.1. Cattle <sup>1)</sup>               |                 | 10.04           |                  |                 |
| Option B (country-specific)               |                 |                 |                  |                 |
| B.1.1.a. Other                            |                 | 10.04           |                  |                 |
| B.1.1.a.i. Mature dairy cattle            |                 | 0.38            |                  |                 |
| B.1.1.a.ii. Other mature cattle           |                 | 9.66            |                  |                 |
| B.1.1.a.iii. Growing cattle               |                 | NA              |                  |                 |
| B.1.1.a.iv. Other (please specify)        |                 | NA              |                  |                 |
| B.1.2. Sheep                              |                 | 0.09            |                  |                 |
| B.1.3. Swine                              |                 | 0.03            |                  |                 |
| B.1.4. Other livestock                    |                 | 0.02            |                  |                 |

## 4 Agriculture

\* Answer needed to continue

### Specify the option for cattle categorization\*

Option A: Select this option for cattle categorization as "Dairy cattle" and "Non-dairy cattle."

Option B: Select this option for country-specific cattle categorization as "Mature dairy cattle," "Other mature cattle," "Growing cattle," and "Other (please specify)."

☐ Option A ☒ Option B (country-specific)

## 5 LULUCF

\* Response required to continue

### Specify the approach for harvest wood products (HWP)\*

Please select one or more approach.

Approach A: Stock change approach.

Approach B: Production approach.

Approach B1: Aggregate for consumed domestically and exported.

Approach B2: Separate for consumed domestically and exported.

Approach C: Atmospheric flow approach.

Select the approach

Approach A: Stock change approach. Approach B: Production approach.

Approach A: Stock change approach ☒ Approach B: Production approach ☒

### Specify the approach B \*

☒ Approach B1: Aggregate for consumed domestically and exported.

☐ Approach B2: Separate for consumed domestically and exported.

### Select the approach is account for emissions and removals for the national total \*

☒ Approach A: Stock change approach

# Data Entry

Imported .json file to ETF Reporting Tool > Some manual data entry > Exported as .xlsx file

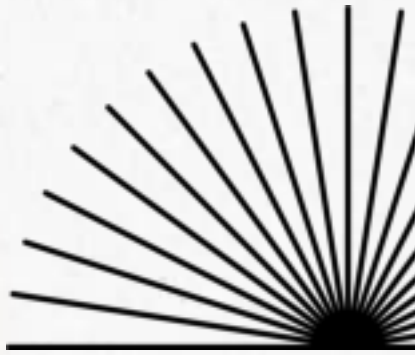
| Navigation tree                                                |  | Options |  | 4.A.1. Forest land remaining forest land <sup>1)</sup> |  |  |  |  |
|----------------------------------------------------------------|--|---------|--|--------------------------------------------------------|--|--|--|--|
| Sectors/Totals                                                 |  |         |  |                                                        |  |  |  |  |
| > 1. Energy                                                    |  |         |  |                                                        |  |  |  |  |
| > 2. Industrial processes and product use                      |  |         |  |                                                        |  |  |  |  |
| > 3. Agriculture                                               |  |         |  |                                                        |  |  |  |  |
| v 4. Land use, land-use change and forestry                    |  |         |  |                                                        |  |  |  |  |
| 4.1. Land transition matrix                                    |  |         |  |                                                        |  |  |  |  |
| v 4.A. Forest land                                             |  |         |  |                                                        |  |  |  |  |
| v 4.A. Carbon stock change                                     |  |         |  |                                                        |  |  |  |  |
| 4.A.1. Forest land remaining forest land                       |  |         |  |                                                        |  |  |  |  |
| > 4.A.2. Land converted to forest land                         |  |         |  |                                                        |  |  |  |  |
| > 4.B.1. Forestry Emission and other management of soils (FOM) |  |         |  |                                                        |  |  |  |  |

| 4.A.1. Forest land remaining forest land <sup>1)</sup> |                                    | Expand all |      | Autofill with "NA" |           | Show/hide years |  | Export |  |
|--------------------------------------------------------|------------------------------------|------------|------|--------------------|-----------|-----------------|--|--------|--|
|                                                        | Description                        | Unit       | 1997 | 2000               | 2002      | 2006            |  |        |  |
| 01                                                     | Activity Data                      |            |      |                    |           |                 |  |        |  |
| 02                                                     | Total area <sup>2)</sup>           | tha        |      | 1,564.00           | 1,548.00  | 1,533.00        |  |        |  |
| 03                                                     | Area of mineral soil               | tha        |      | 1,564.00           | 1,548.00  | 1,533.00        |  |        |  |
| 04                                                     | Area of organic soil               | tha        |      | NE                 | NE        | NE              |  |        |  |
| 05                                                     | Changes in carbon stock            |            |      |                    |           |                 |  |        |  |
| 06                                                     | Carbon stock changes in living ... |            |      |                    |           |                 |  |        |  |
| 07                                                     | Gains <sup>1, 3, 4</sup>           | kt C       |      | 3,497.00           | 3,522.00  | 3,532.00        |  |        |  |
| 08                                                     | Losses <sup>1, 3, 4, 5</sup>       | kt C       |      | -509.00            | -1,210.00 | -582.00         |  |        |  |
| 09                                                     | Net change <sup>1, 3, 4</sup>      | kt C       |      | 2,988.00           | 2,312.00  | 2,950.00        |  |        |  |

---

# Final Remarks

- ETF Tool compatible with import/export of json and .xlsx file types
- ETF Tool configures data from IPCC Software to match CRT format
- Understand FX Provisions and sector approach for version settings
- Accommodates both automated and manual data entry
- Support available from UNFCCC tools team for troubleshooting issues



# Hands-on Training



**United Nations**  
Climate Change

# Housekeeping rules for the training

- ✓ For this training session, participants should use their own credentials to **access the GHG Inventory Reporting tool**. If you don't have access to the tool yet, please join somebody else who does.
- ✓ The facilitator **will firstly introduce the exercise and guide the participants step by step** and then test and experience different features of the GHGI Reporting tool.
- ✓ **Please start working on the exercise only when you are asked to do so by the facilitator**. Sufficient time will be allocated to perform the exercises.
- ✓ **Please feel free to ask questions** while performing the exercises.







## List of exercise for the training

- **Exercise 1:** Creating an inventory version and specifying version settings
- **Exercise 2:** Customizing navigation tree (categories for reporting)
- **Exercise 3:** Data entry (manual data entry)
- **Exercise 4:** Data entry (Excel export/import)
- **Exercise 5:** Generation/download of reporting tables
- **Exercise 6:** Working with JSON and interoperability with IPCC Software

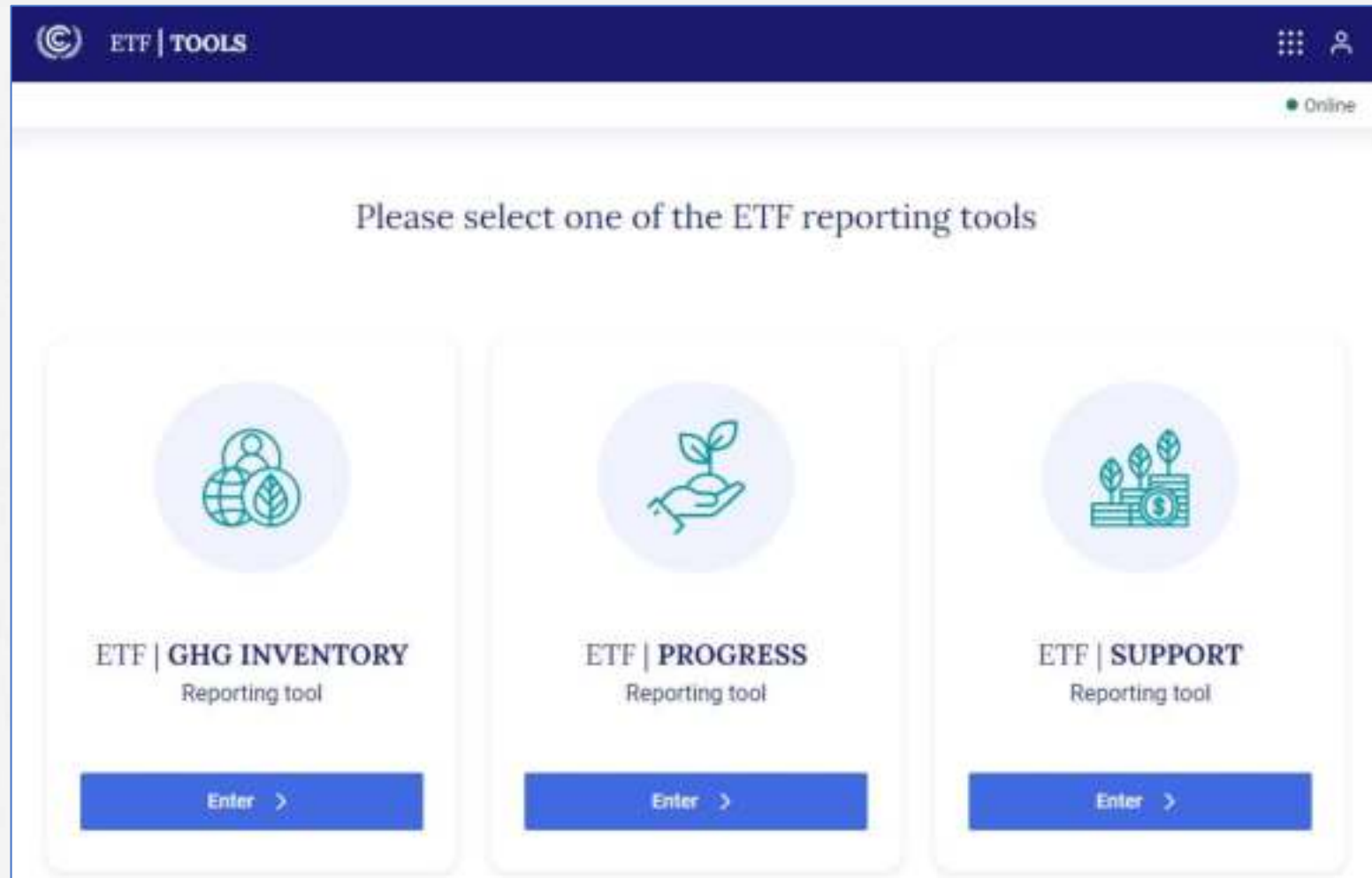






# ETF Reporting Tools login

- ❑ Please login to your account to access the ETF Reporting Tools **UNFCCC My Apps** <https://myapps.unfccc.int>





# Intro: Creating an inventory and version settings (1/2)

1. Click **“Enter”** on the **“ETF | GHG INVENTORY Reporting tool”** tile.
2. Click on **“Start”** in the **“Create blank inventory”** tile.

Please select an option to start working on an inventory

**Create blank inventory**  
Please select this option to create a new blank inventory and start working on it.

**Select an existing inventory**  
Please select this option if you want to work on an existing inventory.

**Upload a file**  
Please select this option if you want to work on an existing inventory by uploading a CSV file.

*If you are in the **“Data entry”** tab*

1. Click on the **“Inventories”** tab
2. Click on **“+ Create version”** and follow the steps above.

ETF | GHG INVENTORY

**Inventories** | Data entry | Reporting tables | QA/QC

Version: 1.0.0 | Status: Draft | ID: DEFAULT

**Inventories**  
The list below contains all inventory versions and their status.

**+ Create Version**

3. Select **“Year”** for which you want to submit the inventory.
4. Toggle on **“Default version”** to make this the default working version for all users within your Party.
5. Click **“Create Inventory >”**

Please select year and version type to start working on a version

**Select the submission year**  
The submission year will be reflected in the inventory name. You may edit the submission year later.

**Set as default version**  
Please select this option to make this the default working version for all users within your Party. You may change the default version later.

**Default version**

**Create inventory >**



# Intro: Creating an inventory and version settings (2/2)

E1

1. Select **“No”** if your Party does not want to apply flexibility provisions.
2. Select **“Yes”** if your Party wants to apply flexibility provisions, and you can select the specific flexibility provisions.
3. Click on **“Next”** until you complete all version settings
4. At the end of version settings, you can enter the **“Data entry”** page

Version Settings

Flexibility provisions  
Completed

Energy

IPPU

Agriculture

LULUCF

## 1 Flexibility provisions

Please specify if any flexibility provisions in light of national capacities will be used.

☒ Yes ☐ No

Note: Flexibility provisions "10" can only be selected in data entry when flexibility provisions are used.

### 2 Select the specific flexibility provisions to be used

Para 38 (Enables to set the last reporting year as submission year versus 1 in the time series) ☒

The last reporting year in the time series is: 2020

Para 37 (Allows to select the reporting years in the time series including the NDC reference year/period, if applicable) ☒

Specify NDC reference year/period:

☒ Last reference year ☐ NDC reference period ☐ Do not specify NDC reference year/period

NDC reference year: 2020

Select the reporting years in the time series:

From: 2020 To: 2022

Para 40 (Preparing HFCs, PFCs, SF6, and NF3) ☒

Enabling this option will allow to apply flexibility for the selected 2 gases.

Next



United Nations  
Climate Change

# Flexibility provisions



| Flexibility provisions<br>(Annex to decision 18/CMA.1) | Flexibility provisions for those developing country Parties that need it in the light of their capacities.                                                                                                                                                                                                                                                                                                       |
|--------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Para. 25</b><br>(Key category analysis)             | Identify key categories using a threshold no lower than 85 per cent (instead of 95 per cent)                                                                                                                                                                                                                                                                                                                     |
| <b>Para. 29</b><br>(Uncertainty assessment)            | Provide qualitative discussion of uncertainty for key categories both latest inventory year/ trend, instead of quantitatively estimating and qualitatively discussing uncertainty for all categories for at least the starting year and the latest reporting year and the trend.                                                                                                                                 |
| <b>Para. 32</b><br>(Insignificance threshold)          | Consider emissions insignificant if the likely level of emissions is below 0.1 per cent of total GHG emissions, excluding LULUCF, or 1,000 kt CO <sub>2</sub> eq, whichever lower (as opposed to 0.05 per cent or 500 kt CO <sub>2</sub> eq). Total emissions for all gases from categories considered insignificant shall remain below 0.2 % total GHG emissions, excluding LULUCF, as opposed to 0.1 per cent. |
| <b>Para. 34</b><br>(QA/QC plan)                        | Encouraged to elaborate an inventory QA/QC plan including information on the inventory agency responsible for implementing QA/QC (as opposed to a requirement to develop a QA/QC plan).                                                                                                                                                                                                                          |
| <b>Para. 35</b><br>(QC procedures)                     | Encouraged to implement and provide information on general inventory QC procedures in accordance with their QA/QC plan (as opposed to required to implement and provide information).                                                                                                                                                                                                                            |
| <b>Para. 48</b><br>(Reporting F-gases)                 | <b>Report at least 3 gases</b> (CO <sub>2</sub> , CH <sub>4</sub> , and N <sub>2</sub> O). Also, any of the 4 gases (HFCs, PFCs, SF <sub>6</sub> , and NF <sub>3</sub> ) included in NDC under Art. 4 or that are covered by activity under Article 6 or have been previously reported (as opposed to reporting all 7 gases)                                                                                     |
| <b>Para. 57</b><br>(Annual time series years)          | Report data covering the reference year/period for the NDC and, in addition, a consistent annual time series from at least 2020 onward (as opposed to reporting a continuous time series from 1990 onwards).                                                                                                                                                                                                     |
| <b>Para. 58</b><br>(Last year in time series)          | The latest reporting year shall be no more than 3 years prior to submission of the inventory (as opposed to no more than 2 years for all other Parties)                                                                                                                                                                                                                                                          |



# Exercise: Creating version and specifying version settings

E1

## Exercise 1a:

- Login to the application
- Create a new inventory version for the submission year 2025
- Select “**Yes**” to apply flexibility provisions
- Select para 58 flexibility provisions
- Select para 57 flexibility provisions and select “**Do not specify NDC reference year**” and select 1990, 2000, and 2010

## Exercise 1b:

- Go through the version settings for Energy and IPPU, and **do not select any settings** (Toggle off)
- Go to the version setting for the Agriculture sector
- Select “**Option B (country-specific)**” for the cattle categorization
- Select “**Approach C**” in the LULUCF sector
- Click on “**Go to data entry**”



*Scan the QR code for  
exercise guide*



# User Interface of GHG Inventory Reporting Tool



- ❑ **Inventories** – To start a new inventory and to configure the properties relating to the inventory, such as submission year, sectors, options and years to be included in the inventory
- ❑ **Data entry** – For entering and/or editing data in the data entry grids
- ❑ **Reporting tables** – For viewing reporting tables in Excel, in the format of the agreed CRT, for a particular year
- ❑ **QA/QC** – Placeholder for various types of QA/QC (not implemented yet)

- 
- ❑ **Version** – Unique name of the version you are working on (ISO code, Tool, Submission year, version number)
  - ❑ **Status** – State of the inventory (e.g., Initiated, Started, QA/QC, Approved, Submitted)
  - ❑ **Default** – Flag to indicate the common version that all users within a Party are working
  - ❑ **Data synchronized** – Shows the status of data synchronization
  - ❑ **Online** – Indication if the user is Online or Offline

- 
- ❖ **Navigation tree** – CRT category tree as agreed in Annex I to decision 5/CMA.3
  - ❖ **Data entry grids** – Grids for entering data

The screenshot shows the 'GHG INVENTORY' tool interface. The top navigation bar includes 'Inventories', 'Data entry', 'Reporting tables', and 'QA/QC'. The 'Data entry' tab is active. On the left, the 'Navigation tree' shows a hierarchy of sectors and activities, with '1.A.1.b. Petroleum refining > Liquid fuels' selected. The right pane displays the 'Data entry grid' for this category, showing a table with columns for 'Description', 'Unit', and years '1990', '1991', and '1992'. The table contains rows for fuel consumption, calorific value, and various greenhouse gases (CO2, CH4, N2O). The interface also includes a status bar at the bottom showing the application version, metadata version, and last synchronization date.





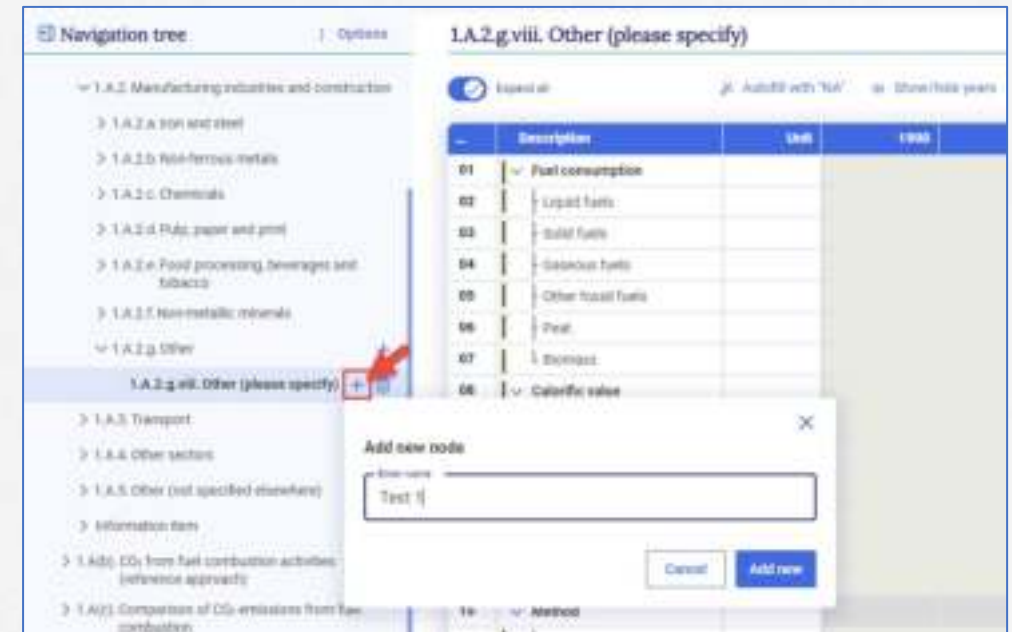


## Intro: Customizing navigation tree – Adding country-specific category

1. Click on the “**Data entry**” tab.
2. Click on “>” to expand the tree node (category) and “v” to collapse the tree node.
3. Click on “+” sign next to the category name to **add a sub-category**
4. Select an item from a dropdown list where the predefined sub-category is available
5. OR Enter a country-specific category where the node name says “please specify”



Adding pre-defined sub-category



Adding country specific category





# Intro: Customizing navigation tree

## Editing/deleting country-specific category (child node)

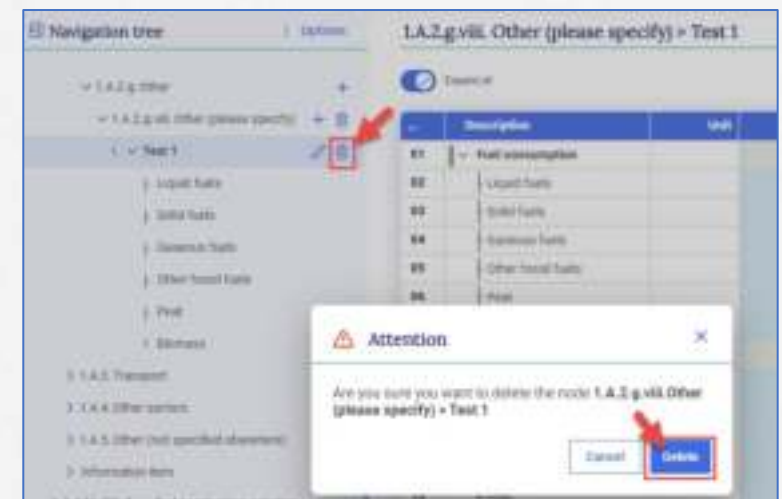
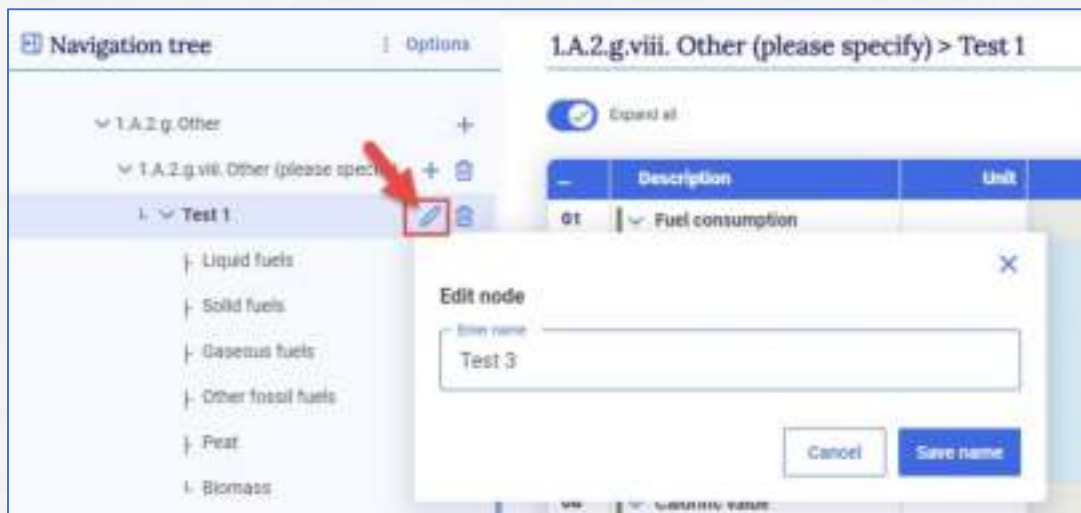
### Adding category and its name

1. Click on the added category and click on the pen icon to **edit the child node name**
2. Rename the child node and Click '**Save name**' to confirm rename.

### Deleting country-specific category

1. Click on the added category and click on the bin icon to delete the child node.
2. Click "Delete" to confirm the deletion.

*Note: Only the node/category that you have added can be deleted. Deletion of the node also deletes all data added for that category.*





## Exercise: Customizing navigation tree (categories for reporting)

### Exercise 2a:

- Find child node **“1.A.4.c.iii. Fishing > Gasoline”** in the navigation tree

### Exercise 2b:

- Add user-specified node **“5.A.2. Unmanaged waste disposal sites > Less decomposable wastes”**

### Exercise 2c:

- Add user-specified node **“3.A.1.A.iv. Other (please specify) > Famous cow”** and **“3.A.1.A.iv. Other (please specify) > Sad cow”**
- Rename **“Sad cow”** to **“Happy cow”**

### Exercise 2d:

- Delete user-specified node **“3.A.1.A.iv. Other (please specify) > Famous cow”**



*Scan the QR code for  
exercise guide*



# Data entry in GHG Inventory Reporting Tool



## ☐ Three ways of data entry

- ✓ Manual input into the data entry grids
- ✓ Partial or full import of data using MS Excel
- ✓ Bulk import of data using JSON
  - For connecting with the national system
  - For importing data from IPCC Software

## ☐ Data are saved automatically in the database in real-time

## ☐ Copy and paste including drag and drop of data in data entry grids

## ☐ Automatic data entry validation

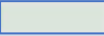
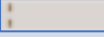
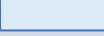
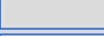
- ✓ Either a number or a notation key (NO, NA, IE, NE, C, FX)
- ✓ Number to be separated by a dot (".") to signify a decimal point
- ✓ Number should be between 0 and 1 where fractions are required
- ✓ Number should be between 0 and 100 where the information required is in %
- ✓ Text can be entered as needed to report e.g., AD description (in 1.B.2)



# Intro: Manual data input



Manual data entry done in data entry grids of each category in the navigation tree. Color codes used in the grids:

-  White – The user can enter data
-  Green – Data are automatically calculated by the application
-  Brown – Formula in these cells are overwritten with user-entered data
-  Blue – Value cross-referenced
-  Grey – No input necessary
-  Dropdown – Data can be selected from the dropdown list

1. Click on the **“Data Entry”** tab.
2. Navigate to a node (category) in the tree by using the **“>”** sign.
3. Click on the node (category) to display the data entry grid.
4. In the data entry grid, provide the required information in the corresponding cells (for one year), such as AD and emissions.

*Values in green cells with formulas, e.g., implied emission factor, are automatically calculated.*

Navigation tree

1. Emissions

2. Emissions

3. Emissions

4. Emissions

5. Emissions

6. Emissions

7. Emissions

8. Emissions

9. Emissions

10. Emissions

11. Emissions

12. Emissions

13. Emissions

14. Emissions

15. Emissions

16. Emissions

17. Emissions

18. Emissions

19. Emissions

20. Emissions

21. Emissions

22. Emissions

23. Emissions

24. Emissions

25. Emissions

26. Emissions

27. Emissions

28. Emissions

29. Emissions

30. Emissions

31. Emissions

32. Emissions

33. Emissions

34. Emissions

35. Emissions

36. Emissions

37. Emissions

38. Emissions

39. Emissions

40. Emissions

41. Emissions

42. Emissions

43. Emissions

44. Emissions

45. Emissions

46. Emissions

47. Emissions

48. Emissions

49. Emissions

50. Emissions

51. Emissions

52. Emissions

53. Emissions

54. Emissions

55. Emissions

56. Emissions

57. Emissions

58. Emissions

59. Emissions

60. Emissions

61. Emissions

62. Emissions

63. Emissions

64. Emissions

65. Emissions

66. Emissions

67. Emissions

68. Emissions

69. Emissions

70. Emissions

71. Emissions

72. Emissions

73. Emissions

74. Emissions

75. Emissions

76. Emissions

77. Emissions

78. Emissions

79. Emissions

80. Emissions

81. Emissions

82. Emissions

83. Emissions

84. Emissions

85. Emissions

86. Emissions

87. Emissions

88. Emissions

89. Emissions

90. Emissions

91. Emissions

92. Emissions

93. Emissions

94. Emissions

95. Emissions

96. Emissions

97. Emissions

98. Emissions

99. Emissions

100. Emissions

1. Emissions

2. Emissions

3. Emissions

4. Emissions

5. Emissions

6. Emissions

7. Emissions

8. Emissions

9. Emissions

10. Emissions

11. Emissions

12. Emissions

13. Emissions

14. Emissions

15. Emissions

16. Emissions

17. Emissions

18. Emissions

19. Emissions

20. Emissions

21. Emissions

22. Emissions

23. Emissions

24. Emissions

25. Emissions

26. Emissions

27. Emissions

28. Emissions

29. Emissions

30. Emissions

31. Emissions

32. Emissions

33. Emissions

34. Emissions

35. Emissions

36. Emissions

37. Emissions

38. Emissions

39. Emissions

40. Emissions

41. Emissions

42. Emissions

43. Emissions

44. Emissions

45. Emissions

46. Emissions

47. Emissions

48. Emissions

49. Emissions

50. Emissions

51. Emissions

52. Emissions

53. Emissions

54. Emissions

55. Emissions

56. Emissions

57. Emissions

58. Emissions

59. Emissions

60. Emissions

61. Emissions

62. Emissions

63. Emissions

64. Emissions

65. Emissions

66. Emissions

67. Emissions

68. Emissions

69. Emissions

70. Emissions

71. Emissions

72. Emissions

73. Emissions

74. Emissions

75. Emissions

76. Emissions

77. Emissions

78. Emissions

79. Emissions

80. Emissions

81. Emissions

82. Emissions

83. Emissions

84. Emissions

85. Emissions

86. Emissions

87. Emissions

88. Emissions

89. Emissions

90. Emissions

91. Emissions

92. Emissions

93. Emissions

94. Emissions

95. Emissions

96. Emissions

97. Emissions

98. Emissions

99. Emissions

100. Emissions

1. Emissions

2. Emissions

3. Emissions

4. Emissions

5. Emissions

6. Emissions

7. Emissions

8. Emissions

9. Emissions

10. Emissions

11. Emissions

12. Emissions

13. Emissions

14. Emissions

15. Emissions

16. Emissions

17. Emissions

18. Emissions

19. Emissions

20. Emissions

21. Emissions

22. Emissions

23. Emissions

24. Emissions

25. Emissions

26. Emissions

27. Emissions

28. Emissions

29. Emissions

30. Emissions

31. Emissions

32. Emissions

33. Emissions

34. Emissions

35. Emissions

36. Emissions

37. Emissions

38. Emissions

39. Emissions

40. Emissions

41. Emissions

42. Emissions

43. Emissions

44. Emissions

45. Emissions

46. Emissions

47. Emissions

48. Emissions

49. Emissions

50. Emissions

51. Emissions

52. Emissions

53. Emissions

54. Emissions

55. Emissions

56. Emissions

57. Emissions

58. Emissions

59. Emissions

60. Emissions

61. Emissions

62. Emissions

63. Emissions

64. Emissions

65. Emissions

66. Emissions

67. Emissions

68. Emissions

69. Emissions

70. Emissions

71. Emissions

72. Emissions

73. Emissions

74. Emissions

75. Emissions

76. Emissions

77. Emissions

78. Emissions

79. Emissions

80. Emissions

81. Emissions

82. Emissions

83. Emissions

84. Emissions

85. Emissions

86. Emissions

87. Emissions

88. Emissions

89. Emissions

90. Emissions

91. Emissions

92. Emissions

93. Emissions

94. Emissions

95. Emissions

96. Emissions

97. Emissions

98. Emissions

99. Emissions

100. Emissions

## Exercise: Manual data entry (directly in the tool)

### Exercise 3a:

- Go to “1.A.1.b. Petroleum refining > Liquid fuels”
- Fill fuel consumption for several years
- Fill calorific value (choose from the list) and apply subsequent years
- Fill “NO” for CH<sub>4</sub> emissions in the first reporting year.
- Fill numeric values for CO<sub>2</sub> and N<sub>2</sub>O

### Exercise 3b:

- Go to “1.A.1.b. Petroleum refining > Solid fuels”
- Do similar things for this node as in exercise 3a.
- Go to “1.A.1.b. Petroleum refining” and check the aggregation



*Scan the QR code for  
exercise guide*



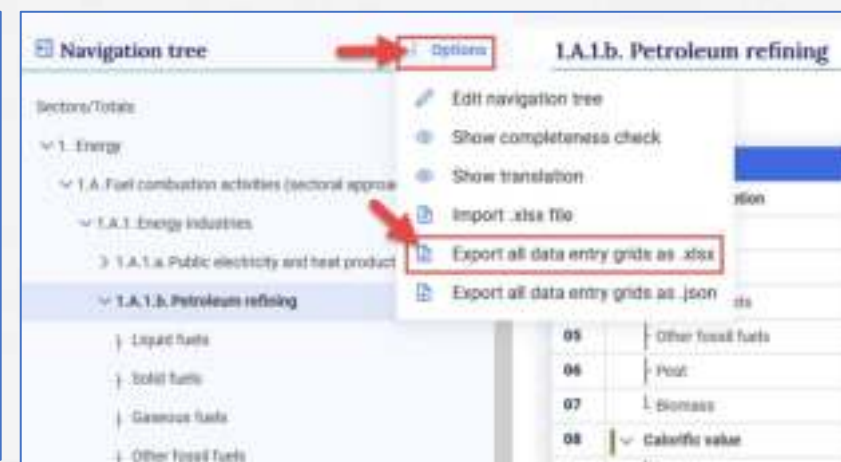
# Intro: Excel data input – Exporting excel tables for data entry



- i** This method allows downloading data entry grids in Excel format and work offline. It assists users to either check data entered in the software, or to enter/edit data and re-import it into the application.
- Export of data entry grids can be done for a sub-category, sector, or for the entire inventory.

## Exporting excel data entry grids

1. Click on category that you want to export.
2. Click on “**Export**” and then on “**Current grid as .xlsx**” to export the single selected grid or “**Current sector/subsector as .xlsx**” to export the selected category and all sub-categories below the selected category.
3. The file will be exported to your local computer.
4. You can also export all data entry grids in excel. Click “**Options**” then “**Export all data entry grids as .xlsx**”.





# Intro: Excel data input – Entering data in Excel table(s)



The color scheme of the excel data entry grid follows the same color scheme as in the web interface. The excel file should not be modified to add/delete rows or columns or to enter data in the cells other than the specified cells.

## Entering data in Excel data entry grids

1. Open the Excel data entry grid file exported from the GHG Inventory reporting tool.
2. Enter the data in the white cells for activity data and emissions.
3. The implied emission factor (green cells) is not calculated in the Excel file, but it will be calculated upon importing it into the GHG Inventory reporting tool.
4. Save the Excel file after entering the data for importing to the GHG Inventory reporting tool.

|    | A                                                                                                                                                        | B                                                                | C                     | D                    | E                      | F                           | G             | H    | I    | J    | K    |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|-----------------------|----------------------|------------------------|-----------------------------|---------------|------|------|------|------|
| 1  | TEST                                                                                                                                                     | XYZ-CRT-2024-V0.04      Exported on: 2024-04-17 13:58:29 [UTC+2] |                       |                      |                        |                             |               |      |      |      |      |
| 2  | Sectors/Totals > 1. Energy > 1.A. Fuel combustion activities (sectoral approach) > 1.A.1. Energy industries > 1.A.1.b. Petroleum refining > Liquid fuels |                                                                  |                       |                      |                        |                             |               |      |      |      |      |
| 3  |                                                                                                                                                          |                                                                  |                       |                      |                        |                             |               |      |      |      |      |
| 4  | ID                                                                                                                                                       | Description                                                      | Unit                  | 1990                 | 1991                   | 1992                        | 1993          | 1994 | 1995 | 1996 | 1997 |
| 5  | 01                                                                                                                                                       | Fuel consumption                                                 | TJ                    | 123,456.00           | 123789.00              |                             |               |      |      |      |      |
| 6  | 02                                                                                                                                                       | Calorific value                                                  |                       | NCV                  | NCV                    |                             |               |      |      |      |      |
| 7  | 03                                                                                                                                                       | Method                                                           |                       |                      |                        |                             |               |      |      |      |      |
| 8  | 04                                                                                                                                                       | CO <sub>2</sub>                                                  |                       | D                    |                        |                             |               |      |      |      |      |
| 9  | 05                                                                                                                                                       | CH <sub>4</sub>                                                  |                       | T1,T2                |                        |                             |               |      |      |      |      |
| 10 | 06                                                                                                                                                       | N <sub>2</sub> O                                                 |                       | T2                   |                        |                             |               |      |      |      |      |
| 11 | 07                                                                                                                                                       | Emission factor information                                      |                       |                      |                        |                             |               |      |      |      |      |
| 12 | 08                                                                                                                                                       | CO <sub>2</sub>                                                  |                       | D                    |                        |                             |               |      |      |      |      |
| 13 | 09                                                                                                                                                       | CH <sub>4</sub>                                                  |                       | C5                   |                        |                             |               |      |      |      |      |
| 14 | 10                                                                                                                                                       | N <sub>2</sub> O                                                 |                       | OTH                  |                        |                             |               |      |      |      |      |
| 15 | 11                                                                                                                                                       | Emissions                                                        |                       |                      |                        |                             |               |      |      |      |      |
| 16 | 12                                                                                                                                                       | CO <sub>2</sub>                                                  | kt                    | 4,321.00             | 5432.00                |                             |               |      |      |      |      |
| 17 | 13                                                                                                                                                       | CH <sub>4</sub>                                                  | kt                    | 65.40                | 68.00                  |                             |               |      |      |      |      |
| 18 | 14                                                                                                                                                       | N <sub>2</sub> O                                                 | kt                    | 8.70                 | 23.00                  |                             |               |      |      |      |      |
| 19 | 15                                                                                                                                                       | Amount captured                                                  |                       |                      |                        |                             |               |      |      |      |      |
| 20 | 16                                                                                                                                                       | CO <sub>2</sub>                                                  | kt                    | NO                   | -2.50                  | NO                          | NO            | NO   | NO   | NO   | NO   |
| 21 | 17                                                                                                                                                       | Implied emission factor                                          |                       |                      |                        |                             |               |      |      |      |      |
| 22 | 18                                                                                                                                                       | CO <sub>2</sub>                                                  | t/TJ                  | 35.00                | NO                     | NO                          | NO            | NO   | NO   | NO   | NO   |
| 23 | 19                                                                                                                                                       | CH <sub>4</sub>                                                  | kg/TJ                 | 529.74               |                        |                             |               |      |      |      |      |
| 24 | 20                                                                                                                                                       | N <sub>2</sub> O                                                 | kg/TJ                 | 70.47                |                        |                             |               |      |      |      |      |
| 25 | 21                                                                                                                                                       | Documentation box                                                |                       | Hello again!         |                        |                             |               |      |      |      |      |
| 26 |                                                                                                                                                          |                                                                  |                       |                      |                        |                             |               |      |      |      |      |
|    | +                                                                                                                                                        | 1.A.1.b. Petroleum refining                                      | 1.A.1.b. Liquid fuels | 1.A.1.b. Solid fuels | 1.A.1.b. Gaseous fuels | 1.A.1.b. Other fossil fuels | 1.A.1.b. Peat |      |      |      |      |



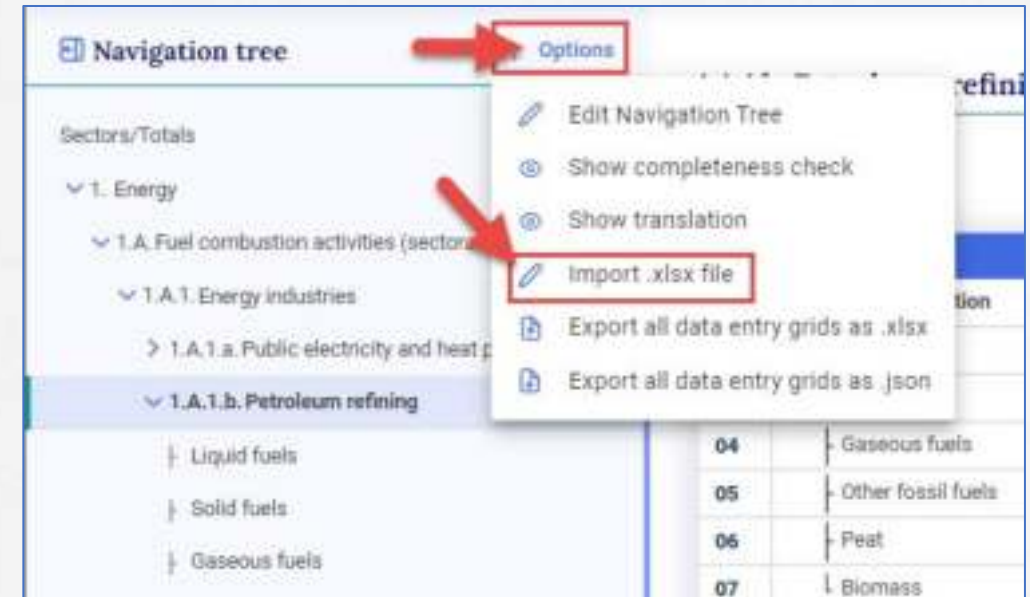
# Intro: Excel data input – Importing Excel tables into the tool



The Excel data import function will only work with Excel files for data entry grids exported from the GHGI Reporting Tool. The user should first export the file from the software in order to import an Excel file with the data. It is imperative that the format and structure of the Excel file exported are not changed.

## Importing excel data entry grids

1. Click “**Options**” and then click “**Import .xlsx file**”.
2. Click on the “**Select**” and select the appropriate Excel file to be imported. You can also drag and drop the file in import window.
3. Click on “**Import**” button. This will initiate the data import process, which includes automatic input of data, and recalculation of values in cells with formulas.
4. You can check the generated log file for the detail of the import.



## Exercise: Data entry with Excel export / import

### Exercise 4:

1. For the category “1.A.1.b. Petroleum refining”, export “Current sector/subsector as .xlsx”.
2. Open the exported Excel file (from your download folder)
3. Add some numerical values in the exported Excel file for the fuels in the fuel-specific worksheet.
4. Add invalid notation key ‘PK’ for CH<sub>4</sub> in the exported Excel file.
5. Save the exported Excel file
6. Import the Excel file to the GHGI reporting tool
7. Check that the data that you have entered in the Excel are imported into the tool.



1. Click on the **“Reporting tables”** tab.
2. Select **“Years”**, **“Sectors”** and **“Tables”** to view/download the reporting tables.
3. Click **“Apply filters”**. The reporting tables based on the selection above will be available for download.



United Nations  
Climate Change

| CATEGORIES AND SUB-CATEGORIES                                              | AGGREGATE ACTIVITY DATA |                       | FUELS/EMITTER FACTORS |                 |                  | EMISSIONS       |                 |                  | ADJUSTED TOTAL  |
|----------------------------------------------------------------------------|-------------------------|-----------------------|-----------------------|-----------------|------------------|-----------------|-----------------|------------------|-----------------|
|                                                                            | Consumption             |                       | CO <sub>2</sub>       | CH <sub>4</sub> | N <sub>2</sub> O | CO <sub>2</sub> | CH <sub>4</sub> | N <sub>2</sub> O | CO <sub>2</sub> |
|                                                                            | TJ                      | SEC/TAJ <sup>10</sup> | g/GJ                  | g/GJ            | g/GJ             | kg              | kg              | kg               | kg              |
| <b>1.1 Total combustion</b>                                                | 41600                   | 0.07                  |                       |                 |                  | 4091.540        | 0.794           | 2.39             | 4094            |
| 1.1.1 Liquid fuels                                                         | 18910                   | 0.07                  | 0.122330              | 0.000000        | 0.000000         | 18121.880       | 0.00000         | 1.00             | 18122           |
| 1.1.2 Solid fuels                                                          | 44400                   | 0.07                  | 0.1775000             | 0.000000        | 0.000000         | 39710.00        | 0.00000         | 0.00             | 39710           |
| Electricity fuels <sup>11</sup>                                            | 55,176,200              | 0.07                  | 0.1, 0.16, 0.20       | 0.0, 0.0, 0.0   | 0.0, 0.0, 0.0    | 0.0, 0.0, 0.0   | 0.0, 0.0, 0.0   | 0.0, 0.0, 0.0    | 0.0, 0.0, 0.0   |
| Other fossil fuels <sup>12</sup>                                           | 55,176,200              | 0.07                  | 0.1, 0.16, 0.20       | 0.0, 0.0, 0.0   | 0.0, 0.0, 0.0    | 0.0, 0.0, 0.0   | 0.0, 0.0, 0.0   | 0.0, 0.0, 0.0    | 0.0, 0.0, 0.0   |
| Gas <sup>13</sup>                                                          | 55,176,200              | 0.07                  | 0.1, 0.16, 0.20       | 0.0, 0.0, 0.0   | 0.0, 0.0, 0.0    | 0.0, 0.0, 0.0   | 0.0, 0.0, 0.0   | 0.0, 0.0, 0.0    | 0.0, 0.0, 0.0   |
| Biomass <sup>14</sup>                                                      | 55,176,200              | 0.07                  | 0.1, 0.16, 0.20       | 0.0, 0.0, 0.0   | 0.0, 0.0, 0.0    | 0.0, 0.0, 0.0   | 0.0, 0.0, 0.0   | 0.0, 0.0, 0.0    | 0.0, 0.0, 0.0   |
| <b>1.1.1 Energy sub-total</b>                                              | 111470                  | 0.07                  |                       |                 |                  | 3771.640        | 0.0000          | 2.39             | 3772            |
| 1.1.1.1 Liquid fuels                                                       | 40900                   | 0.07                  | 40.0000               | 0               | 0.0              | 3771.560        | 0.00            | 0.00             | 3772            |
| 1.1.1.2 Solid fuels                                                        | 111470                  | 0.07                  | 86.58000              | 0.000000        | 0.000000         | 3974.00         | 0.0000          | 0.0000           | 3974            |
| Electricity fuels <sup>15</sup>                                            | 55                      | 0.07                  | 50                    | 50              | 50               | 50              | 50              | 50               | 50              |
| Other fossil fuels <sup>16</sup>                                           | 55                      | 0.07                  | 50                    | 50              | 50               | 50              | 50              | 50               | 50              |
| Gas <sup>17</sup>                                                          | 55                      | 0.07                  | 50                    | 50              | 50               | 50              | 50              | 50               | 50              |
| Biomass <sup>18</sup>                                                      | 55                      | 0.07                  | 50                    | 50              | 50               | 50              | 50              | 50               | 50              |
| <b>1.1.1.4 Public electricity and heat production<sup>19</sup></b>         | 11170                   | 0.07                  |                       |                 |                  | 3974.00         | 0.0000          | 0.0000           | 3974            |
| 1.1.1.4.1 Liquid fuels                                                     | 500                     | 0.07                  | —                     | 0               | 0.0              | 0.0             | 0.0000          | 0.0000           | 0.00            |
| 1.1.1.4.2 Solid fuels                                                      | 11170                   | 0.07                  | 40.00000              | 0.000000        | 0.000000         | 3974.00         | 0.0000          | 0.0000           | 3974            |
| Electricity fuels <sup>20</sup>                                            | 55                      | 0.07                  | 50                    | 50              | 50               | 50              | 50              | 50               | 50              |
| Other fossil fuels <sup>21</sup>                                           | 55                      | 0.07                  | 50                    | 50              | 50               | 50              | 50              | 50               | 50              |
| Gas <sup>22</sup>                                                          | 55                      | 0.07                  | 50                    | 50              | 50               | 50              | 50              | 50               | 50              |
| Biomass <sup>23</sup>                                                      | 55                      | 0.07                  | 50                    | 50              | 50               | 50              | 50              | 50               | 50              |
| <b>1.1.1.5 Non-fossil offsetting</b>                                       | 39700                   | 0.07                  |                       |                 |                  | 2771.640        | 0.0000          | 0.0000           | 2772            |
| 1.1.1.5.1 Liquid fuels                                                     | 39700                   | 0.07                  | 40.00000              | 0               | 0.0              | 2771.640        | 0.0000          | 0.0000           | 2772            |
| 1.1.1.5.2 Solid fuels                                                      | 55                      | 0.07                  | 50                    | 50              | 50               | 50              | 50              | 50               | 50              |
| Electricity fuels <sup>24</sup>                                            | 55                      | 0.07                  | 50                    | 50              | 50               | 50              | 50              | 50               | 50              |
| Other fossil fuels <sup>25</sup>                                           | 55                      | 0.07                  | 50                    | 50              | 50               | 50              | 50              | 50               | 50              |
| Gas <sup>26</sup>                                                          | 55                      | 0.07                  | 50                    | 50              | 50               | 50              | 50              | 50               | 50              |
| Biomass <sup>27</sup>                                                      | 55                      | 0.07                  | 50                    | 50              | 50               | 50              | 50              | 50               | 50              |
| <b>1.1.1.6 Absorption of net-fossil-like energy sub-total<sup>28</sup></b> | 55                      | 0.07                  |                       |                 |                  | 50              | 50              | 50               | 50              |

## Exercise: Downloading common reporting tables (CRT)



E5

### Exercise 5:

1. Select a few years from the years dropdown (e.g., 1990 and 1995)
2. Select the “**Energy**” sector or Select “**Tables**”
3. Click “**Apply filters**”
4. You will see the list of reporting tables for each year
5. Download individual Excel files from the list or download them as zip file
6. Open the Excel file
7. Check if the data you entered in the reporting tool is reflected in the reporting tables



# Interoperability with IPCC Software



**United Nations**  
Climate Change



# Intro: JSON data input – Export/ Import JSON file



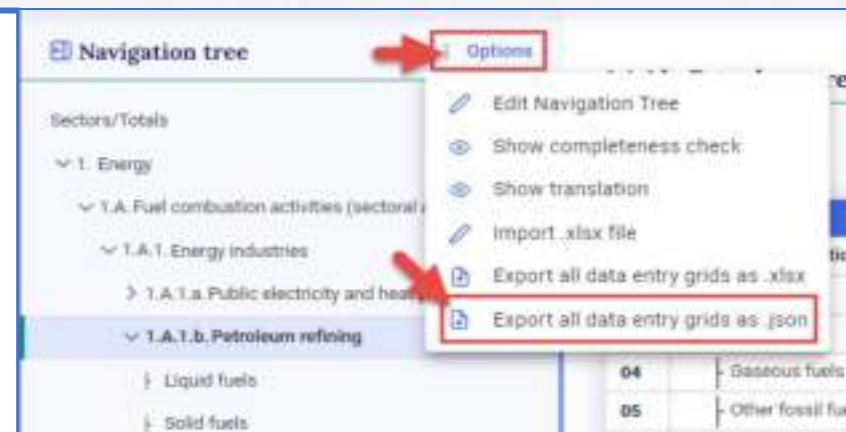
E6



The **JSON is the interoperability format** used in the GHG Inventory Reporting Tool. It is used for integration with other UNFCCC systems as well as with national systems that follow the JSON schema provided to Parties.

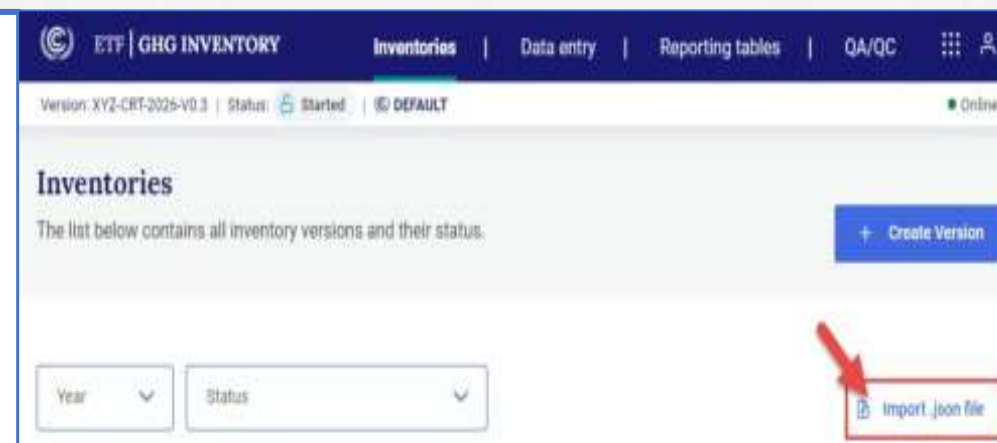
## Exporting JSON file

1. In the “**Data Entry**” tab, click “**Options**” and then click “**Export all data entry grids .json**”.
2. The file will be exported to your local computer.
3. You can then modify data in the JSON file, or you can transfer the data into JSON file from your national system.



## Importing JSON file

1. In the “**Inventories**” tab, click “**Import .json file**”
2. Click on the “**Select**” and select the appropriate JSON file to be imported. You can also drag and drop the file in import window.
3. Click on “**Import**” button. This will initiate the data import process.
4. You can check the generated log file for the detail of the import.





# Intro: Interoperability with IPCC Software (1/2)



E6



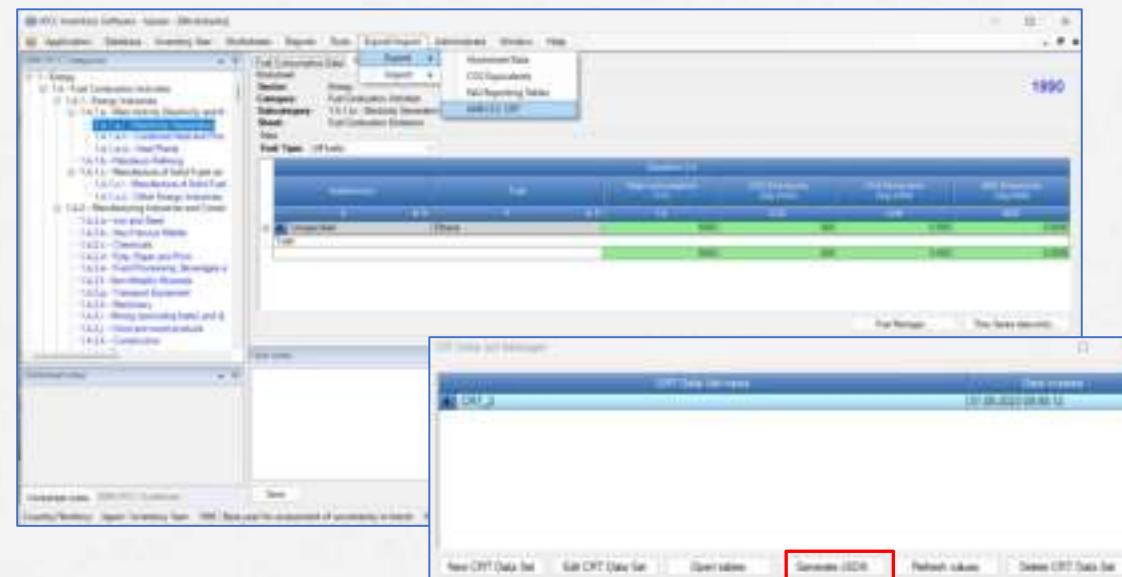
The interoperability with the IPCC Software allows the transfer of the data from the IPCC software to the GHG Inventory Reporting Tool. After estimating the national GHG inventory Parties can **export the JSON data exchange file from IPCC software and import it to GHG inventory reporting tool.**

Please note the following for the interoperability:

- **Generation and Export of JSON file is available in the IPCC software version 2.871 or later.**

## In the IPCC Software (GHG estimation software)

1. After compiling your GHG inventory estimation:  
Click **“Export/Import” > “Export” > “UNFCCC CRT”**
2. Click **“Generate JSON”** and a JSON file is generated.
3. **Save the JSON** file to your computer and it can now be imported to the GHG Inventory reporting tool.



United Nations  
Climate Change

# Intro: Interoperability with IPCC Software (2/2)



E6

## In the GHG Inventory reporting tool (reporting software)

1. In the “**Inventories**” tab, click “**+ Create version**”
2. Click “**Select**” in the “**Upload a file**” tile
3. Click “**Select**” and select the JSON file exported from the IPCC software.
4. Specify “**Submission year**”, “**Default version**” and click “**Create inventory**”. The inventory will be created.
5. Specify applicable version settings and click “**Go to data entry**” to start working on your inventory.
6. The data imported from the IPCC software will be populated in the **data entry grids**.
7. You can modify the data, if needed.



Please upload json file and select submission year to create an inventory version

1. Selected the json file to upload  
First select the file you want to upload so that we can analyze if it meets the necessary requirements.

Drag and drop or [Select a json file](#)

2. Select the submission year  
The submission year will be reflected in the inventory name. You may edit the submission year later.

3. Set as default version  
Please select this option to make this the default working version for all users within your Party. You may change the default version later.

☒ Default version ☐



United Nations  
Climate Change



## Exercise: Interoperability with IPCC Software

### Exercise 6:

1. Log in to your account in the IPCC Software – for GHG inventory estimation
2. Click “**Export/Import**” > “**Export**” > “UNFCCC CRT” in the IPCC Software
3. Click “**Generate JSON**,” and a JSON file is generated and save the JSON file to your computer
4. Enter the GHG Inventory Reporting Tool
5. In the “**Inventories**” tab, click “+ **Create version**”
6. Click “**Select**” in the “**Upload a file**” tile and select the JSON file downloaded to your computer.
7. Specify “**Submission year**” and “**Default version**” and click “**Create inventory**”.
8. Specify applicable version settings and click “**Go to data entry**” to start working on inventory.
9. Data imported from the IPCC software will already be populated in the data entry grids and you can edit/modify the data if needed.





United Nations  
Climate Change

# Thank you!

Let's keep this conversation going.

Join the **Transparency LinkedIn Group**  
to stay informed with our latest updates,  
upcoming events and more at:  
<https://www.linkedin.com/groups/13910606/>

Find out more at:  
<https://unfccc.int/Transparency>

Contact us at:  
[CGESupport@unfccc.int](mailto:CGESupport@unfccc.int)

For technical issues, contact:  
[Tools.Support@unfccc.int](mailto:Tools.Support@unfccc.int)





United Nations  
Climate Change

# Backup

# Version settings for inventory



| Settings               |                                        | Explanation                                                                                                                                                                                                |
|------------------------|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Flexibility provisions | Application of flexibility provision   | Option to apply flexibility for those developing country Parties that need it in the light of their capacities. The notation key 'FX' can be used in data entry only when flexibility provisions are used. |
|                        | Para 58 (Last year in time series)     | Set the last reporting year as the submission year minus 3 in the annual time series.                                                                                                                      |
|                        | Para 57 (Annual time series)           | Select the reporting years in the annual time series, including the NDC reference year/period, if applicable.                                                                                              |
|                        | Para 48 (Reporting F-gases)            | Select F-gas (HFCs, PFCs, SF6 and NF3) for reporting.                                                                                                                                                      |
| Energy                 | Specify calorific value                | Auto-fill the selected calorific values for all fuels in sub-categories of 1.A.                                                                                                                            |
|                        | Fuel(s) Not Occurring                  | Auto-fill the notation key 'NO' in the data entry grids for the selected fuel(s) in all sub-categories of 1.A.                                                                                             |
| IPPU                   | F-Gas(es) Not Occurring                | Auto-fill the notation key 'NO' in the data entry grids for the selected species of F-Gas(es).                                                                                                             |
|                        | Bulk addition of F-Gases species       | Bulk add the selected F-gas(es) as child nodes in all sub-categories of 2.B, 2.C, 2.E, 2.F, 2.G and 2.H.                                                                                                   |
| Agriculture            | Cattle categorization                  | Select the options (Option A or Option B) for cattle categorization                                                                                                                                        |
| LULUCF                 | Approach for HWP                       | Specify the approach (Approach A, Approach B and Approach C) for the harvested wood products reporting                                                                                                     |
|                        | Additional years for HWP activity data | Select additional year(s) for reporting HWP activity data                                                                                                                                                  |
|                        | Reporting information in Table4(II)    | Select the option to report the information in the aggregated or disaggregated way                                                                                                                         |



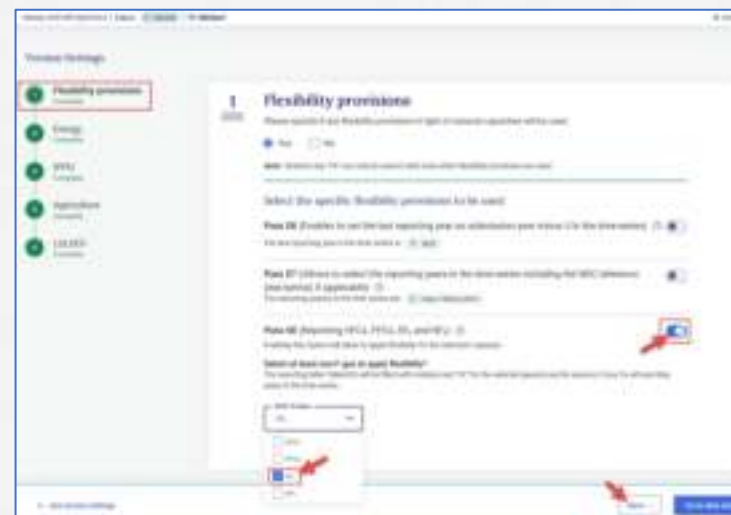
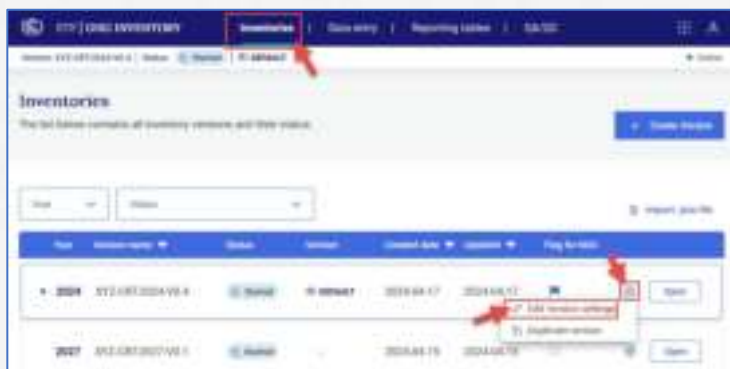


# Intro: Editing version setting



You can go back to the edit version setting in your inventory to change the parameters you want to report or add/edit flexibility provisions. This will only affect the version that you are editing.

1. Go to the **Inventories** tab,
2. Identify the inventory for which you want to edit the version setting and click on the gear icon.
3. Navigate to the section for which you want to edit the version setting
4. Edit the settings you want to change.
5. Click on “**Next**” for additional settings or click “**Go to data entry**”



---

# Participants' Journal

Reflection and feedback on the day:

- What did I learn today?
- What can I take home with me?
- Where should I focus my energy on Day 2?
- Who would I like to have conversations with during the next days?

# End of Day 1

See you tomorrow morning at 9am

Sponsored by:



Federal Foreign Office



German Federal Government  
Climate Change



German Climate Centre

