



# Transparency Accelerator for Greenhouse Gas Inventories

**I&NDC Network 2021 Introductions and Research Collaboration Meeting**

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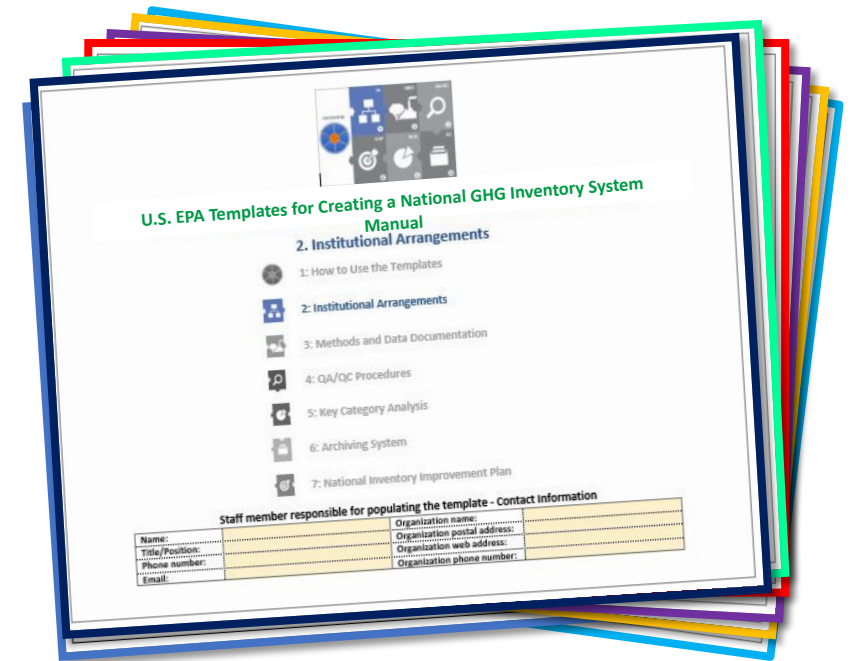
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# Transparency Accelerator for GHG Inventories

- *Transparency Accelerator for Greenhouse Gas (GHG) Inventories* Project
  - International capacity-building initiative of the U.S. Government led by the U.S. Environmental Protection Agency (EPA)
  - Timing: 2019-2023
- Designed to help improve the technical capacity of developing countries to transition to the **2006 IPCC Guidelines** to estimate, track, and report GHG emissions and removals
  - Support future reporting under the Enhanced Transparency Framework
- Focused on:
  - Development of tools and templates for general use
  - Bilateral capacity-building technical support
- Project covers all GHG Inventory categories, including cross-cutting and national inventory system support – with a special emphasis on the AFOLU sector

# EPA's Capacity Building Approach

- Build strong institutional arrangements as necessary for ensuring a sustainable inventory system
- “Learning by Doing Approach”
- Avoid duplication of work and find collaboration opportunities with other donors
- Utilize EPA and partner GHG Inventory development and IPCC Guidelines expertise
- Utilize EPA's *National GHG Inventory System Toolkit*:
  - EPA has taken key elements of the UNFCCC and IPCC guidance and condensed them into easy-to-use National Inventory System Templates



<https://www.epa.gov/ghgemissions/toolkit-building-national-ghg-inventory-systems>

# Updates to ALU Tool

- Agriculture and Land Use Greenhouse Gas Inventory (ALU) Software
- Guides an inventory compiler through the process of estimating greenhouse gas emissions and removals related to agricultural and forestry activities

The screenshot displays the ALU Tool software interface, titled "ALU Tool -- IPCC 2006 Guidelines: (Version 6.1.0)". The interface includes a menu bar with "File", "Help", and "Data Management". The main content area is divided into several sections:

- Current Database, User, Country and Inventory Year:** Shows "Database: LiveDemo", "User: S. Ogle", "Country: Country X", and "Year: 2010". Each has a corresponding "Set" button.
- Module I: Specify Activity Data:** Includes "Primary Activity Data" (Enter Primary Data) and "Secondary/Supporting Activity Data" (Enter Secondary Data).
- Module II: Enter Emission/Stock Factors:** Includes "Enter Factors".
- Module III: Calculate Emissions/Stocks:** Includes "View Calculations".
- Quality Assurance/Quality Control:** Includes "Conduct QA/QC".
- Module IV: Mitigation Analysis:** Includes "Conduct Analysis".
- Emissions Reports:** Includes a button with the ALU logo.
- Data Completion Status:** Shows a table of completion status by region for the year 2010.

The "Data Completion Status" section includes the following dropdown menus and table:

- Source Category: 3.B - Land Use
- Source Subcategory: 3.B.1 - Forest Land
- Equation Group: Biomass Carbon Stock Change: Gain-Loss Forests
- Category: Forest Land Remaining Forest Land

Completion Status by Region:		Year: 2010
Region	Go To:	
East Province	Module III	
West Province	No Primary Data	

Buttons at the bottom include "Quit Application", "Reset", and "Go To Next Step". Logos for Colorado State University, Natural Resources Ecology Laboratory, and USAID are also visible.

<https://www.nrel.colostate.edu/projects/alusoftware/home/>

# Updates to ALU Tool

- In collaboration with the U.S. Forest Service and Colorado State University
- Planned updates:
  - Round out 2006 IPCC Guidelines
  - Add an Incorporate the 2013 IPCC Wetlands Supplement
  - economic mitigation component
  - Develop Import/Export data functions to align with IPCC Software and future BTR/CRT table reporting needs
  - Develop online version, develop Application Programming Interface (API)
  - Improve user-interface and overall user-friendliness of tool
  - Develop tutorials, translation, trainings

# Land Representation Workflow Schema

- Lesson learned from previous capacity-building projects:
  - How do you address inconsistencies between datasets?
  - There is a need for guidance on the use of different datasets and how to combine information to develop a country's land representation
- Land representation schema
  - Utilize U.S. experiences in developing a land representation for the GHG Inventory, working with the U.S. Forest Service and other key partners
  - Develop a standardized workflow that can assist countries in harmonizing datasets developed by different entities, often for different purposes
  - Produce consistent estimates and data products for the representation of lands consistent with IPCC methods and UNFCCC reporting requirements