
6th Workshop on Greenhouse Gas
Inventories in Asia:
US programs and efforts on GHG
inventories, measurement and reporting

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Overview

- Inventories
 - Past and current work
 - Central America, SE Asia, Mexico, China
 - Synergies with REDD
- Mandatory GHG reporting program
- Questions

Addressing Challenges for Developing Countries

- Technical expertise for GHG inventories already exists in developing countries.
 - Small teams with multiple responsibilities and limited resources;
 - Incomplete or non-existent data;
 - Lack of country-specific emission factors;
 - Insufficient documentation of methods and data sources used in previous inventories; and
 - Difficulties retaining capacity and expertise developed during the preparation of the first National Communications
- Priorities should be determined by developing countries rather than donors

U.S. EPA Approach to building GHG Inventory Management Capacity

Two complementary sets of tools for National GHG inventories:

- **National System Templates** to document and institutionalize the inventory management process.
 - Establishing institutional arrangements, QA/QC, archiving, etc.
- **Targeted data collection strategies and software tools** to assist developing countries application of higher tier IPCC methods in key sectors

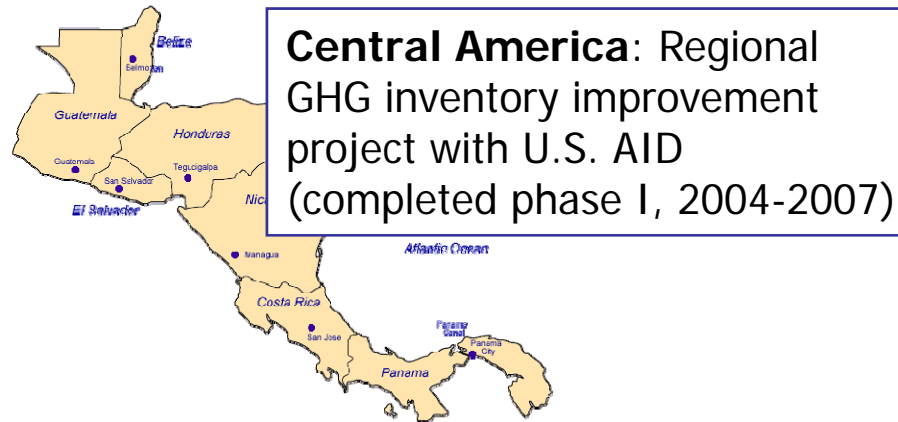
Next Steps: *“Intensify our efforts without delay within existing fora to improve effective greenhouse gas measurement”* - DECLARATION OF LEADERS MEETING OF MAJOR ECONOMIES ON ENERGY SECURITY AND CLIMATE CHANGE, July 9, 2008

Tools for GHG Inventory Development



- <http://www.epa.gov/climatechange/emissions/ghginventorycapacitybuilding/index.html>
- ALU: <http://www.nrel.colostate.edu/projects/ghgtool/>

Current and Past Projects



Central America: Regional GHG inventory improvement project with U.S. AID (completed phase I, 2004-2007)



South East Asia: Regional GHG inventory improvement project in collaboration with UNFCCC, IRRI, Japan and other regional experts

Central America Phase II

- Improve land-use/cover maps in Central America
 - Project runs through Sept. 2009
 - Collect groundtruthing data to improve GIS maps for Nicaragua, Honduras, Costa Rica, El Salvador and Guatemala.
 - Designate IPCC Landuse Categories: Forestland, Cropland, Grassland, Wetland, Settlements, and Other Land
- Process
 - Review existing land-use/cover maps
 - Develop a plan for collecting groundtruthing data
 - Collect groundtruthing data
 - Update maps using groundtruthing data
 - Ensure compatibility of revised maps with ALU Tool

Current and Past Projects



Mexico: Improving facility-level GHG inventories in key sectors (power) in collaboration with SEMARNAT and US-Mexico Science Foundation (FUMEC)



China: Initiating cooperative activities with NDRC, translation of existing tools

Reducing Emissions from Deforestation and Forest Degradation (REDD)

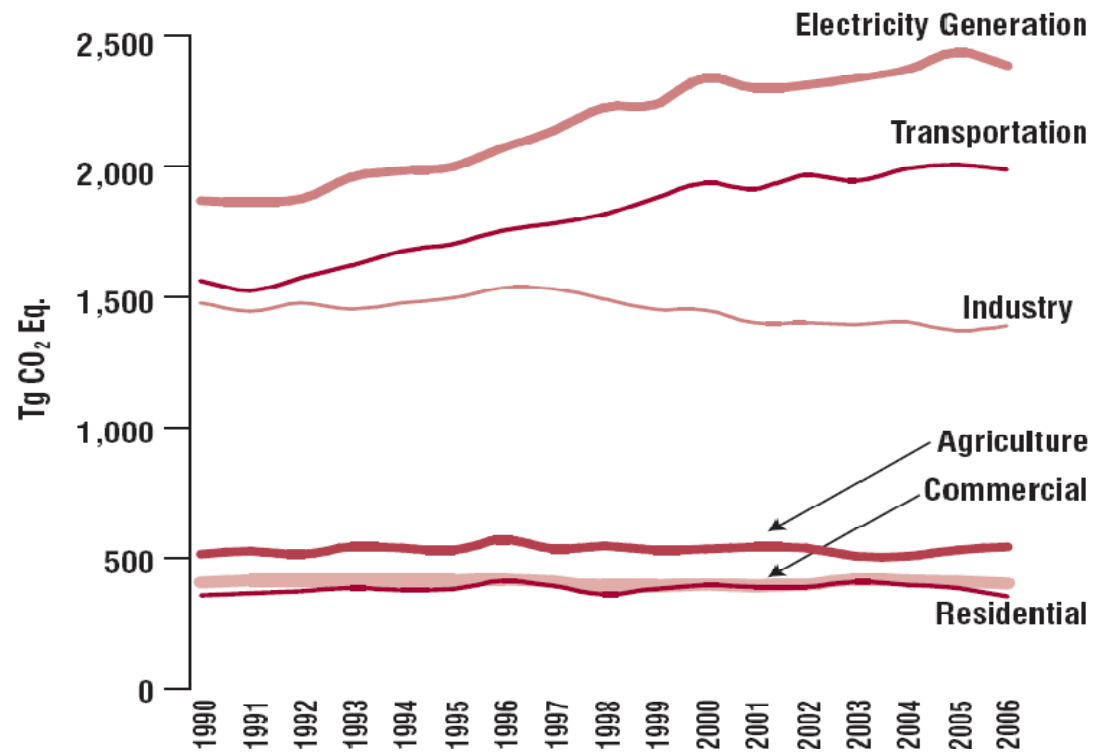
- Support capacity building and technical assistance to improve data collection, monitoring and reporting of emissions from deforestation and forest degradation (COP-13 decision, Bali)
- Technical program of work underway
 - workshop in Tokyo (June 2008)
- GHG Inventory data and expertise can be applied to development of REDD activities
- The ALU tool can be used for:
 - estimating national or regional baseline for evaluating REDD Projects
 - facilitating REDD calculations with region-specific C factors
- Data improvements and capacity-building achieved through REDD can also improve national GHG inventories

Mandatory GHG Reporting Program Development

- Mandate
 - Funding from 2008 Consolidated Appropriations Act
 - Legal authority: Clean Air Act Sections 114 and 208
- Directions
 - Economy-wide
 - Upstream AND downstream
 - Above 'appropriate thresholds'
- Very ambitious schedule
 - Proposed rule within 9 months (September, 2008)
 - Final rule within 18 months (June, 2009)
 - First reporting? For year 2010 emissions at the earliest.
- Status
 - US EPA Administrator committed to meeting schedule
 - Technical staff are very busy...

U.S. 2006 GHG Emissions

Emissions Allocated to Economic Sectors



Mandatory GHG Reporting Program

Development: EPA Approach

1. Start with anthropogenic sources (direct GHGs), identified in IPCC Guidelines and U.S. Inventory
2. Review existing methodologies and reporting programs
 - Federal reporting programs- e.g., Title IV, Climate Leaders, 1605(b)
 - State Programs- e.g., California, The Climate Registry, RGGI, other state programs
 - Corporate Programs- e.g., WRI/WBCSD
 - Industry Protocols- e.g., API Compendium, CSI Protocol (cement), International Aluminum Institute
 - International (IPCC Guidelines, EU ETS)
3. Apply screening criteria to identify sources to be included in the rule:
 - Could be covered under the Clean Air Act
 - Thresholds
 - Number of reporters vs. coverage of emissions
 - Administrative burden
 - Ability to measure
4. Develop reporting methodologies for selected sources

Thank you

- For more information:
 - www.epa.gov/climatechange
 - www.state.gov/g/oes/climate/

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