

Greenhouse Gas Data Collection, Publication and Exchange

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U.S. EPA

Exchange Network National Meeting
Denver, Colorado
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Overview



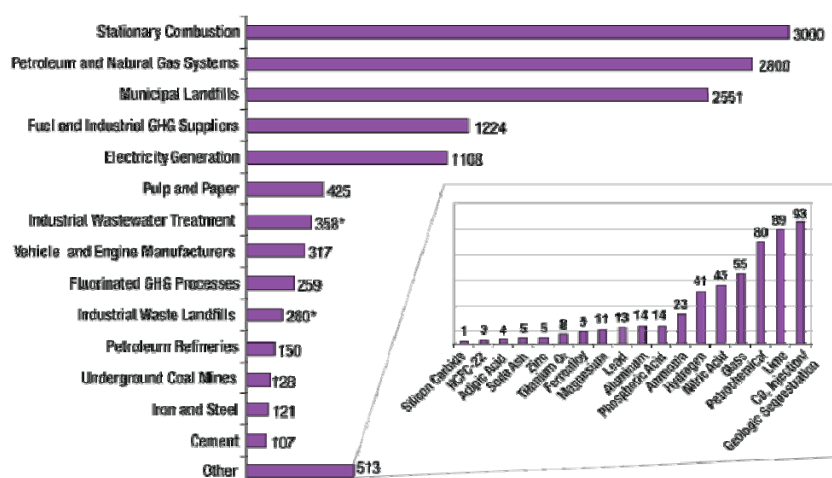
- Introduction to EPA's GHG Reporting Program (GHGRP)
- State-EPA GHG IPT
- Collecting GHGRP Data
- Publishing GHGRP Data
- Electronic Reporting Tool: e-GGRT Sneak Peak

Greenhouse Gas Reporting Program



- GHG Mandatory Reporting Rule finalized Fall, 2009
- Collect accurate and timely GHG data to inform future policy decisions.
- Monitoring began in **2010** for most emission sources with first reports due by late summer, 2011.
- An additional 12 source categories began collecting data in 2011 and report by March 31, 2012.
- Rule covers 41 source categories for reporting, accounting for 85-90% of total U.S. GHG emissions.
- Reporting only, no control or use requirements

Over 13,000 Facilities will Report



*The majority of these facilities already have to report under other subparts (e.g., pulp and paper, petroleum refining)

What will be reported?

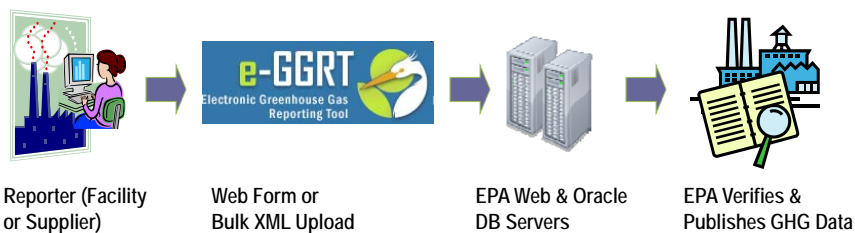


- CO₂
- CH₄ (methane)
- N₂O (nitrous oxide)
- Fluorinated GHGs
 - HFCs (hydrofluorocarbons)
 - PFCs (perfluorocarbons)
 - SF₆ (sulfur hexafluoride)
 - Other fluorinated gases (except CFC and HCFC and gases <1 mm Hg @250 C)
- Supporting Data which may include
 - Methodologies, standards, sampling frequencies, fuels, emission factors, activity data (production data), missing/substitute data flags
 - Facility ownership, NAICS code(s)

Data Flow



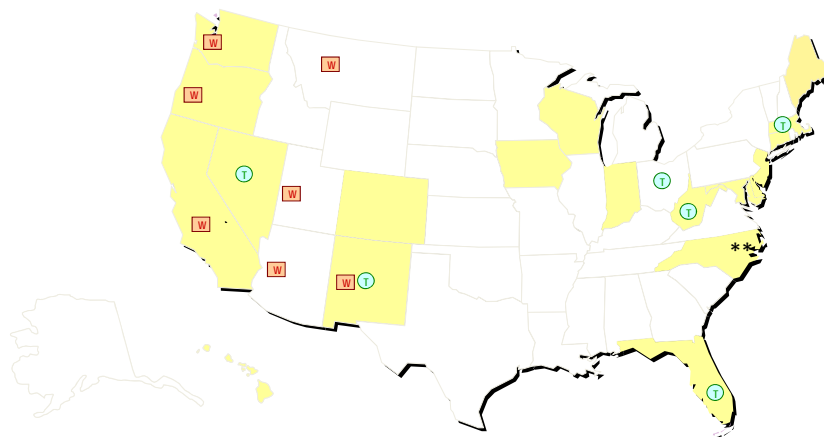
- Electronic Reporting Only



States Collect GHG Data Too



- As of 2009, when EPA Rule was finalized ...



State-EPA GHG Integrated Project Team



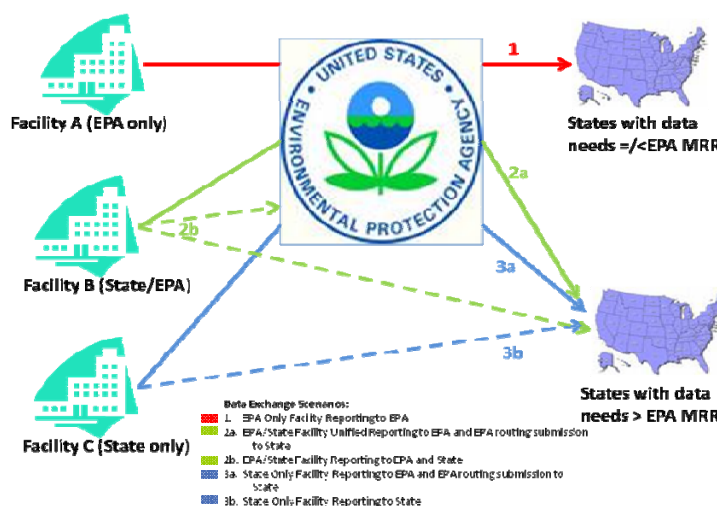
- GHG Data IPT Membership
 - Andy Putnam, CO, State Co-Chair
 - Kong Chiu, EPA Co-Chair
 - State Members : AZ , CA , CO, HI , IA , MA , MI, NC , NJ , NV , NM, OR , WA , WI
 - Technical Consultants: ECOS, Windsor, TCR, Ross
- GHG Data IPT Charge
 - Plan, design, develop, and document a GHG Data Exchange

GHG IPT Key Work Areas



- Phase 1: Identify & Document State Requirements
 - State consultations- differences from federal rule
 - Integrate State Requirements into EPA Electronic Reporting Schema
 - Enhanced federal reporting tool
 - Expanded federal data collection
- Phase 2: Plan, design, develop and document the GHG Data Exchange
 - Facility to EPA and EPA to State data flow(s)
 - Must consider:
 - States w/ no GHG data needs or rules
 - States w/ GHG data needs and/or rules \leq EPA rule
 - States w/ GHG data needs and/or rules $>$ EPA rule

GHG Data Flows



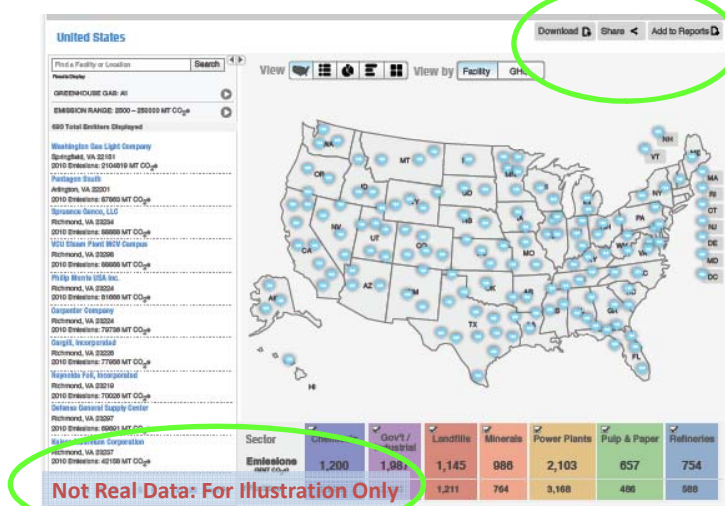
Rob Willis, Ross & Associates

Publishing GHG Data

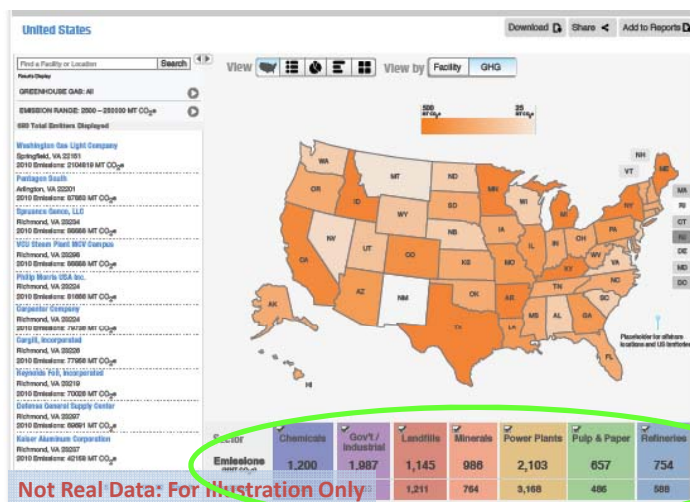


- Goals include:
 - Visually appealing
 - Dynamic
 - Accessible
 - Variety of data formats
- Audience Analysis

GHG Data Visualization Concept: Mapping



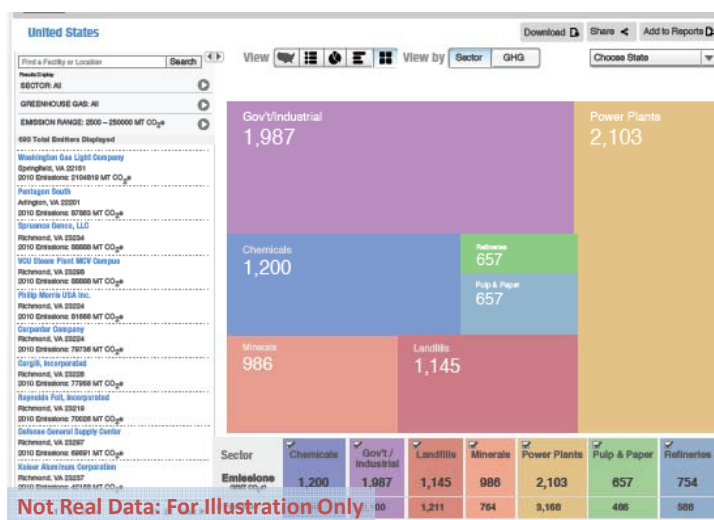
GHG Data Visualization Concept: Mapping



GHG Data Visualization Concept: Bar Charts



GHG Data Visualization Concept: Tree Map



Data Reporting Tool: e-GGRT Sneak Peak and Live Demo



HOME FACILITY REGISTRATION FACILITY MANAGEMENT DATA REPORTING

Electronic Greenhouse Gas Reporting Tool

Help, Kong Chiu | My Profile | Logout

e-GGRT Help

Using e-GGRT for Outbound Reporting

Chiu Industries (2010)

Subpart D: Electricity Generation

Subpart D Overview [Add a Fuel](#)

ADD A FUEL

Use this page to select a fuel combusted in this electricity-generating unit. Repeat this process for each fuel consumed by this electricity-generating unit over the course of the reporting year. If the fuel you wish to add is not on the list, click "ADD an Other Fuel or Blend" to add a new fuel type. For additional information about reporting fuel information, please use the e-GGRT Help link(s) provided.

COAL AND CORE [HIDE](#)

- ☐ Mixed (Industrial sector)
- ☐ Mixed (Industrial coking)
- ☐ Mixed (Commercial sector)
- ☐ Coke
- ☐ Mixed (Electric Power sector)
- ☐ Subbituminous
- ☐ Bituminous
- ☐ Anthracite
- ☐ Lignite

PETROLEUM PRODUCTS [SHOW](#)

OTHER FUELS - SOLID [SHOW](#)

OTHER FUELS - GASEOUS [HIDE](#)

- ☐ Propane Gas
- ☐ Blast Furnace Gas
- ☐ Fuel Gas
- ☐ Coke Oven Gas

BIOMASS FUELS - SOLID [SHOW](#)


BIOMASS FUELS - GASEOUS [SHOW](#)

[ADD an Other Fuel or Blend](#)

[CANCEL](#) [SAVE](#)

e-GGRT's screen by screen interface will guide reporters through the requirements of the GHG Rule

e-GGRT Sneak Peak



Using e-GGRT for Subpart G reporting

Subpart G: Ammonia Manufacturing
Subpart Overview » Ammonia Mfg Unit #1 » Emissions (Eq. G-1)

Eq. G-1 : GHG DATA AND ASSOCIATED INFORMATION
Use this page to enter the GHG data required by Subpart G for this unit and for each month. For additional information about the data collected on this page, please use the e-GGRT Help link(s) provided.

Eq. G-1) Annual CO₂ emissions arising from feedstock consumption (metric tons)

EQUATION G-1 SUMMARY AND RESULT

$$CO_{2,G,k} = \left(\sum_{n=1}^{12} \frac{44}{12} * Fdstk_{n,k} * CC_n * \frac{MW}{MVC} \right) * 0.001$$

Hover over an element in the equation above to reveal a definition of that element.
 k = Processing unit, n = Number of month.

Annual CO₂ emissions arising from feedstock consumption for this unit


(metric tons)
Use G-1 spreadsheet to calculate

JANUARY

Volume of feedstock, determination method	Select	Make all months same
Volume of feedstock, substitute value used	<input type="checkbox"/>	
Carbon content, basis	Select	Make all months same
Carbon content, substitute value used	<input type="checkbox"/>	
Molecular Weight, substitute value used	<input type="checkbox"/>	

e-GGRT's interface includes Rule equations (e-GGRT does not collect deferred data elements) and hover-over help

e-GGRT Testing



- Stakeholder Testing, June 2011
- Registration Open
 - <http://sandbox.ccdsupport.com/ghg>
- Training Webinars, beginning next week
 - <http://www.epa.gov/climatechange/emissions/training.html>

Thank You!



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www.epa.gov/climatechange/emissions/ghgrulemaking.html
<https://ghgreporting.epa.gov>
www.ccdsupport.com