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· Dallas Convention Center ·

Greenhouse Gas Accounting: The Public Sector Protocol

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Agenda

GHG Accounting Protocols and the U.S. Public Sector Standard

EO 13514 Section 9

Questions

Reporting GHG Emissions in the U.S.

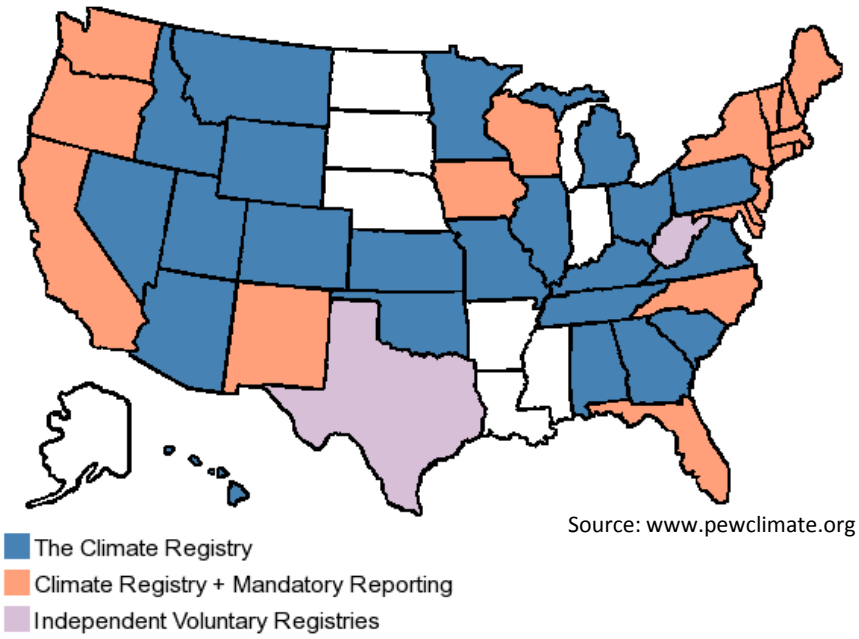
Laws, EOs, etc.

- U.S. report to the UN
- RGGI (10 states)
- EPA Mandatory Reporting Rule
- 18 States
- EO 13514

Voluntary Programs

- US Mayors Climate Protection Agreement (1044 Cities signed)
- Western Climate Initiative (7 states)
- Midwest GHG Reduction Accord
- The Climate Registry
- Chicago Climate Exchange
- EPA Climate Leaders
- DOE 1605(b)
- ICLEI

GHG Reporting and Registries



Source: www.pewclimate.org

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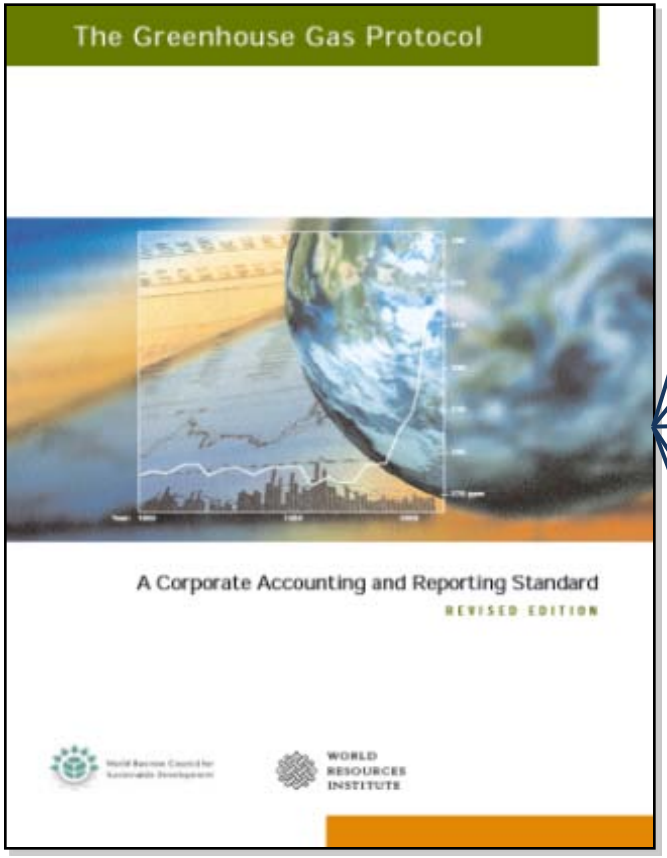
The Corporate Standard

Used by ISO, major reporting programs and 1000s of companies worldwide (including 63% of Fortune 500)



EPA Climate Leaders Guidance

ISO 14054 Standards

U.S. Public Sector Protocol*

CCAR Reporting Protocol

Climate Registry Protocol

*http://www.ghgprotocol.org/the-public-sector-works-with-ghg-protocol-to-develop-a-new-protocol

GHG Accounting Hierarchy

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EO 13514 GHG Accounting Principles

- **Completeness**
- **Consistency**
- **Transparency**
- **Accuracy**
- **Relevance**

With this Guidance, CEQ aims to establish aggressive standards with the goal of continually improving agency inventories.

EO 13514 Section 9 Guidance
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Organizational and Operational Boundaries

Content	Summary
Organizational Boundaries	Agencies must report emissions from 1) activities related to the operation of facilities for which they directly pay utility bills; 2) operation of mobile sources for which the agency purchases fuel; and 3) All other scope 1 and 2 activities over which the agency has operational control.
Operational Boundaries: Scopes	Defines scope 1, scope 2, scope 3, and other emissions required for reporting in FY10 and FY11. Here, biogenic emissions are defined to be ***within*** the scopes.
de minimis	There is no *de minimis* reporting threshold for Federal agency GHG inventories. Guidance lays out a hierarchy for reporting small quantities.

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Organizational Boundaries

Energy Bills

The activities related to the operation of facilities for which they directly pay utility bills. The energy-related activity data required to calculate these emissions are currently reported in the Annual FEMP energy report.

Purchased Fuel

The operation of mobile sources for which the agency purchases fuel. The activity data needed to calculate these emissions are reported in the **FAST** (Federal Automotive Statistical Tool) database and the Annual FEMP energy report.

Other Activities

All other scope 1 and 2 activities over which the agency has operational control. These include **fugitive, process, and specified scope 3 emissions** in an agency's organizational boundary, where the agency does not have full operational control.

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Operational Boundaries: Scope 3 Emissions

Required reporting for FY08 baseline and FY10 inventory	
Potential future categories	
Example Optional reporting for agency-specific activities	

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Land use and Sequestration

Content	Summary
Biofuel combustion	**Required reporting**. Biogenic CO_2 emissions from biofuel combustion are categorized as scope 1 but are not part of the reduction goal. CH_4 and N_2O emissions **must be** reported as scope 1 emissions.
Biomass combustion	**Required reporting**. Same requirements as biofuel combustion.
Emissions and sequestration from land management practices	**Optional reporting**. Agencies may optionally include sequestration or emissions associated with any land-use, land-use changes, or land management techniques in the qualitative section of their reports. A working group of Federal land managers and scientists will convene FY10-11 to determine how existing methodologies and data might be used to account for GHG sequestration and emissions from Federal land management practices.
Enteric fermentation	**Optional reporting**. Enteric fermentation from animals owned by Federal agencies are reported as scope 1 emissions. Enteric fermentations from animals not owned by Federal agencies but on Federal land are reported as scope 3 emissions.
Composting	**Not required**. Calculation methodology still being developed.
Manure Management	**Optional reporting**. Manure management systems owned by Federal agencies are reported as scope 1 emissions; if they are not owned but occur on Federal lands, they are reported as scope 3 emissions.

Renewable Energy & Carbon Offsets

Content	Summary
Carbon Offsets	Carbon Offsets are **not** eligible at this time to reduce an agency's emissions.
Renewable energy purchases, including Renewable Energy Credits (RECs)	Emission reductions resulting from renewable energy purchases can be used to reduce the agency's scope 2 electricity emissions, according to where the RECs originate (e.g. the eGrid region). This section includes requirements for purchase of electricity or RECs from biomass combustion, conversion of landfill gas, and municipal solid waste combustion. RECs purchased in FY08 should not be included in base year inventory.
On-site renewable energy	Scope 2 emission reductions automatically reflected in inventory. If RECs are not retained in an on-site system, agencies are generators of renewable energy, <u>but not consumers</u>, and any claims must reflect that.

Reporting GHG Emissions

Content	Summary
Reporting process	Overviews annual date for reporting; electronic reporting portal; reporting approach; other GHG calculation tools; and FEMP Energy and GHG Emissions Report.
Emission and conversion factors	Emission factors and methodologies were selected from the EPA Mandatory Reporting Rule, EPA Climate Leaders, and DOE 1605(b) when possible; otherwise, non-gov't voluntary programs were the source.
Base Year and Subsequent Year Recalculations	• FY08 base year for the comprehensive inventory, followed annually starting FY10. • FY09 not required, but valuable for benchmarking. • Three year average **only** allowable for fugitive emissions • If quality FY08 data is not available, particularly for scope 1 fugitive and some scope 3, use the earliest year for which data is available to include in the FY08 base year inventory.

Verification and Validation

Content	Summary
Agency responsibilities	Internal agency Quality Assurance is the minimum required; this is done through an Inventory Management Plan. Agencies may use second-party or third-party verification. The agency Senior Sustainability Officer must certify that reported inventories are reliable, and must document any known errors identified through the verification process.
FEMP responsibilities	FEMP is developing a secure portal on the reporting web site where the agency Senior Sustainability Officer can certify that inventories are reliable. FEMP will review the data submitted by the agency and follow up with agencies as appropriate to clarify questions on data quality.

Technical Support Document

Calculating Emissions

In general for each GHG source:

Step 1: Calculate emissions for each GHG

= x

Step 2: Calculate CO_2e for each GHG and sum overall emissions

= x

(From Step 1)

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Example: Purchased Electricity

eGrid subregion SRVC with annual purchases of 30,000 MWh:

Step 1: Calculate Emissions for each GHG

= x

Step 2: Calculate CO_2e for each GHG and sum overall emissions

= x

15,549.01 MT CO_2e

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www.eere.energy.gov/femp/program/greenhousegases.html

www.fedcenter.gov/programs/greenhouse/

http://www.ghgprotocol.org/the-public-sector-works-with-ghg-protocol-to-develop-a-new-protocol