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Complying with Federal Directives Track, Session 8, GHG Compliance
Renewable Energy and GHG Compliance
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How Renewable Energy Helps You Meet Your GHG Goals

- Requirements
- How Renewable Energy helps meet GHG goals
- How GHG makes your Renewable Project more valuable
- The Renewable Context
- Reporting
- What you can do

Requirements

- EO 13514 – Section 2(a): “In establishing the target, the agency head shall consider reductions associated with:
...(ii) increasing agency use of renewable energy and implementing renewable energy generation projects on agency property; and...
- Federal Renewable Definition for GHG – Sec. 19 (j) “renewable energy” means **energy** produced by solar, wind, biomass, landfill gas, ocean (including tidal, wave, current, and thermal), geothermal, municipal solid waste, or new hydroelectric generation capacity achieved from increased efficiency or additions of new capacity at an existing hydroelectric project *
- Reporting, EO 13514 for GHG goals and EPA Act Section 203 for RE goals:
 - GHG goal can use **all** RE including thermal, otherwise, definitions vary only slightly, mainly in hydropower
 - Renewable energy can meet both requirements simultaneously

* EO13514 Guidance also allows new capacity at existing dams without hydropower generating equipment

Technologies and Emissions

- Electric **and** Thermal Use counts
- Zero Emission Technologies
 - Solar, wind, incremental hydro, ocean, geothermal,
- Biomass, Landfill Gas
 - CO2 emissions considered neutral and reported separately
 - Direct emissions for methane and nitrous oxide
- Municipal Solid Waste
 - Biogenic portion – follows biomass rules
 - Fossil portion - has regular emissions



Renewable Purchases and GHG Emissions

- Thermal renewable energy reduces Scope 1 or 2 GHG emissions by reducing or avoiding use of fossil fuels.
- Electric renewable energy in the form of renewable power purchases or Renewable Energy Credits (RECs) offset Scope 2 greenhouse gas (GHG) emissions.
 - Use eGRID non-baseload GHG emission rates to determine GHG benefit (see <http://cfpub.epa.gov/eGRIDweb/ghg.cfm>).
 - Both location and renewable resource type are important.
 - Separate line in the annual sustainability data reporting spreadsheet for each renewable resource type and location (ZIP Code).
 - Emissions (EGRID) factors are listed in the *Federal GHG Accounting and Reporting Guidance Technical Support Document (TSD)* (Table D-8).
 - http://www.whitehouse.gov/sites/default/files/microsites/ceq/Technical%20Support%20Document_1.pdf

How GHG Can Make Your Renewable Energy Projects and Purchases More Valuable

- A renewable energy project can serve multiple goals and targets
 - EPCAct, DoD, GHG reduction, energy surety
- GHG rules give you ways to ask for more specific REC requirements to serve multiple goals:
 - eGRID region
 - On Federal or Indian land
 - By technology or emission level



Wind Turbines on the Campo Indian Reservation, CA

How GHG Can Make Your Renewable Energy Projects and Purchases More Valuable

eGRID2007 Non-Baseload Values, 2005 Generation



Renewable Context

- Renewable and REC world –
 - Regional Tracking
 - State RPS
 - Federal Trade Commission “Green Guide” on Claims
- GHG world
 - International standards and reporting community –
 - EPA Climate Leaders include GM, GE, Caterpillar, Johnson Controls, many others,
<http://www.epa.gov/climateleaders/partners/index.html>
 - WRI Green Power in GHG accounting
 - Work groups in progress – target Spring 2012 guidance

Federal Reporting Tool

- Tool is set up to ease Renewable reporting
 - Technology
 - Location
 - How much energy produced or purchased
 - Is it grid connected – on-site
 - Does the agency own the RECs – on-site
- Reporting Tool:
 - <http://www.fedcenter.gov/Documents/index.cfm?id=16387>
- Report the project once, it reports for all goals

Renewable Energy Site/Ownership Information							
Electric Generating Capacity (MW) (optional)	Facility Name (optional)	Facility Zip (5 digit)	Goal Subject or Excluded Building	Siting Status: On -Site, Federal or Indian Land	Placed in Service Before or After January 1, 1999	REC Status: Ownership and Purchase Status	Does Agency Own T&D System that Delivers Purchased Electricity?

Reporting

- GHG Renewable Reporting has different rules
 - from Renewable Reporting for EPA Act 203 Federal Renewable goal
 - or the DoD renewable energy goal.
- For GHG
 - more counts – thermal **and** electric
 - BUT - no bonus
- For Scope 1 and 2 must have REC to count toward goals

What You Can Do

- Look for opportunities for renewable projects
- Learn how to finance renewable projects so they can reduce your greenhouse gas emissions.
 - FEMP Private Funding – ESPC, Renewable Energy Purchase Agreements, UESC, EULs
- If you can't do on-site projects, look for ways to purchase renewable greenpower and RECs
 - WAPA, GSA, DLA buy for all agencies
- Report

Contacts and Resources

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http://www1.eere.energy.gov/femp/technologies/renewable_energy.html
- CEQ Guidance:
http://www.whitehouse.gov/sites/default/files/microsites/ceq/ghg_guidance_document_0.pdf
- WRI: <http://www.ghgprotocol.org/feature/launch-greenhouse-gas-protocol-us-public-sector-0>
- EPA: <http://www.epa.gov/climateleaders/>