

Cross Agency Priority Goal

Quarterly Progress Update

Climate Change (Federal Actions)

Federal Government Energy Consumption and Energy Efficiency

Goal Leaders:

Christina Goldfuss, Managing Director, Council on Environmental Quality;
Denise Turner Roth, Administrator, General Services Administration



FY2016 Quarter 2

Goal Statement (revised in response to EO 13693)

Increase federal government consumption of electricity from renewable sources to 30% by 2025 and improve energy efficiency at federal facilities including \$4 billion in performance contracts by the end of 2016 as part of the wider strategy to reduce the federal government's direct greenhouse gas emissions by at least 40 percent from a 2008 baseline.

Urgency (revised in response to EO 13693)

On March 19, 2015, President Obama issued [Executive Order 13693](#) (EO), "*Planning for Federal Sustainability in the Next Decade*," which expanded this cross-agency priority goal to include the following:

- **Greenhouse Gas Emissions:** Reduce direct greenhouse gas emissions by at least 40 percent by 2025 from a 2008 baseline.
- **Renewable Electricity:**
 - 10 percent in fiscal years 2016 and 2017
 - 15 percent in fiscal years 2018 and 2019
 - 20 percent in fiscal years 2020 and 2021
 - 25 percent in fiscal years 2022 and 2023
 - 30 percent by fiscal year 2025 and each year thereafter
- **Performance Contracting:** \$4 billion in federal performance-based contracts by the end of calendar year 2016. Beginning in 2017 and each year thereafter, agency Strategic Sustainability Performance Plans will include agency performance contracting goals for the following two fiscal years.

Vision

- The U.S. government must lead by example. Experience shows that reductions in GHG emissions and increased consumption of renewable energy are both possible while continuing to deliver the mission and may increase mission readiness while saving money.

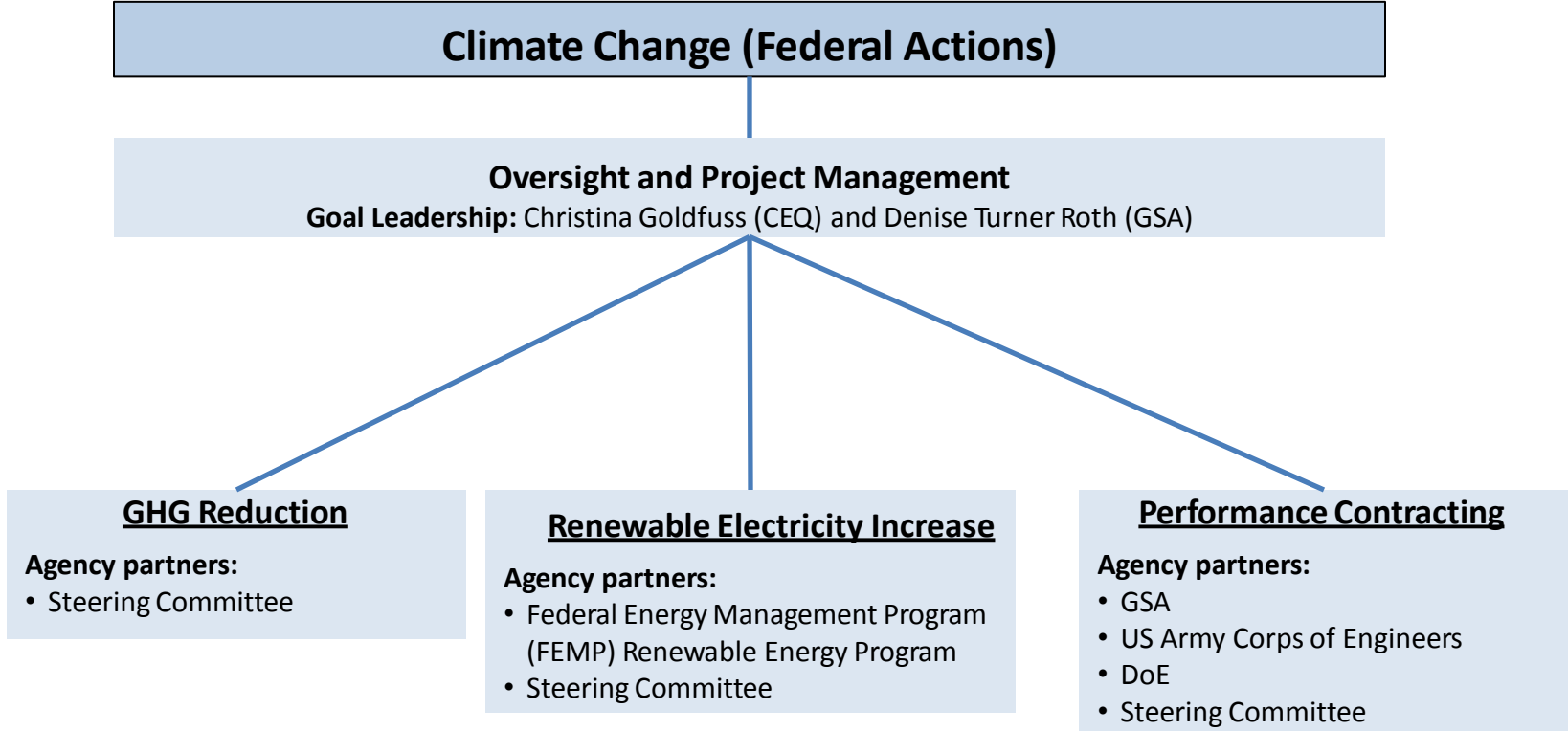
Progress update

Status

- By the end of FY 2015, direct GHG emissions declined 17.6% and estimated Indirect GHG emissions decreased 17.5%, both from an FY2008 baseline. The reduction goal for Direct GHG emissions is 40% by 2025, and the reduction goal for Indirect GHG emissions is 13% by 2020, which has already been exceeded.
- At the close of FY 2015, the Renewable Electricity goal of 7.5% in FY2014 was exceeded as the Federal community reached a level of 8.3% of total electricity use. The new goal under E.O. 13693 is 30% by 2025.
- The President's Performance Contracting Challenge (PPCC) goal is for federal agencies to commit \$4 billion to performance contracts by December 2016. As of March 2016, agencies have awarded contracts for projects valued at \$2.720 billion with agency identified projects totaling \$6.20 billion (awarded + pipeline).

Progress Q2, FY2016

- A hybrid renewable energy project (15 MW onsite solar and 50 MW offsite wind) contract award and groundbreaking ceremony was held on January 28, 2016 at Fort Hood, Texas. The private project developer provided all of the capital required and the Army expects to save \$168 million over the contract term.
- On February 26, 2016, the Council on Environmental Quality (CEQ) issued the 2016 version of the Guiding Principles for Sustainable Federal Buildings, which reflect the evolution of sustainable building design, construction, and operating practices and incorporate building-related E.O. 13693 requirements.
- The Energy Department announced on January 27 that four projects will receive \$2.85 million in cost-shared support to deploy renewable energy technologies at facilities throughout the federal government:
 - The State Department will bundle together solar photovoltaic projects at 10 overseas U.S. diplomatic posts (totaling 11.9 MW) into its first multi-site energy savings performance contract (ESPC).
 - The U.S. Forest Service will have a 0.76-megawatt project to deploy solar panels at 11 sites across Oregon and Washington, meeting 100% of the electricity needs for four sites and more than 50% at the other locations.
 - The Drug Enforcement Administration (DEA) in El Paso, Texas, will have a 0.79-megawatt PV installation at the El Paso Intelligence Center (EPIC), providing 30% of EPIC's energy use.
 - The U.S. Marine Corps Installation Command in Albany, Georgia, will install a ten-megawatt biomass steam turbine generator that will reduce grid power consumption by 4,600 megawatt-hours annually.



Governance: The overarching governance is the same for all three sub-goals, and the participation at the team lead and agency partner level represents the varying specific tasks in the work plan. The co-leads will utilize the Interagency Steering Committee on Federal Sustainability to support and provide additional feedback for this goal.

Action Plan Summary

Sub-goal	Major Actions to Achieve Impact (Lead Agency)	Key Indicators
GHG Emissions: Reduce GHG emissions by the federal government for Scope 1 and 2 by 40% by 2025	<ul style="list-style-type: none"> • Reduce GHG direct and indirect emissions (all reporting agencies)(ongoing) • Track GHG emissions (Department of Energy (DoE) & all reporting agencies) • Provide training for agencies in reduction techniques (DoE and GSA)(completed) • Provide training for facility managers (DoE, GSA & Department of Defense (DoD)) 	GHG emissions inventory and agency annual reports
Renewable Electricity: Increase renewable electricity consumed by the federal government to 30% by 2025	<ul style="list-style-type: none"> • Implement renewable energy efforts at Federal facilities (all agencies) • Provide procurement support for acquisition of renewable energy (GSA, Defense Logistics Agency (DLA)) • Provide technical support regarding potential renewable energy projects (DoE) 	New renewable electricity (kWh) as a percent of total electrical consumption
Performance Contracting: Improve energy/water efficiency in federal buildings through the use of Energy Savings Performance Contracts (ESPCs) or Utility Energy Service Contracts (UESCs)	<ul style="list-style-type: none"> • Provide models/templates for deep retrofits using ESPCs and UESCs (GSA, DoE) • Provide procurement support to agencies (GSA, DoE, DLA, USACE) • Convene quarterly check in meetings with agency Chief Sustainability Officers (CEQ) • Improve data quality and availability (DoE) 	Public indicator: Number and value of federal investment and guaranteed energy savings of implemented projects

Work plan

Purpose

- Mitigate the effects of federal government operations on climate change

Barriers/Challenges

- As GHG reductions are achieved, identifying and pursuing additional reductions will require continued interagency coordination and effort.
- Performance contracting efforts will require interagency focus to identify and resolve common process barriers and increase energy savings.
- Onsite production of renewable energy may be limited by the location of the Federal property.

Milestone Summary

Key Milestones (FY16 and beyond)	Owner	Milestone Due Date	Milestone Status	Comments
Provide advice and guidance about potential renewable energy projects (upon demand)	DoE/FEMP	Ongoing	On track	Ongoing discussions with agencies
Provide agency support for renewable energy projects that utilize GSA procurement authority and contract personnel (upon demand)	GSA	Ongoing	On track	Ongoing discussions with agencies
Provide updated training on energy reduction (upon demand)	DoE/FEMP	Ongoing	On Track	See http://apps1.eere.energy.gov/femp/training/
Provide assistance to agencies based on their performance in monthly reports on President's Performance Contracting Challenge (PPCC) (upon demand)	DoE	Ongoing	On track	Ongoing discussions with agencies

Work plan (cont.)

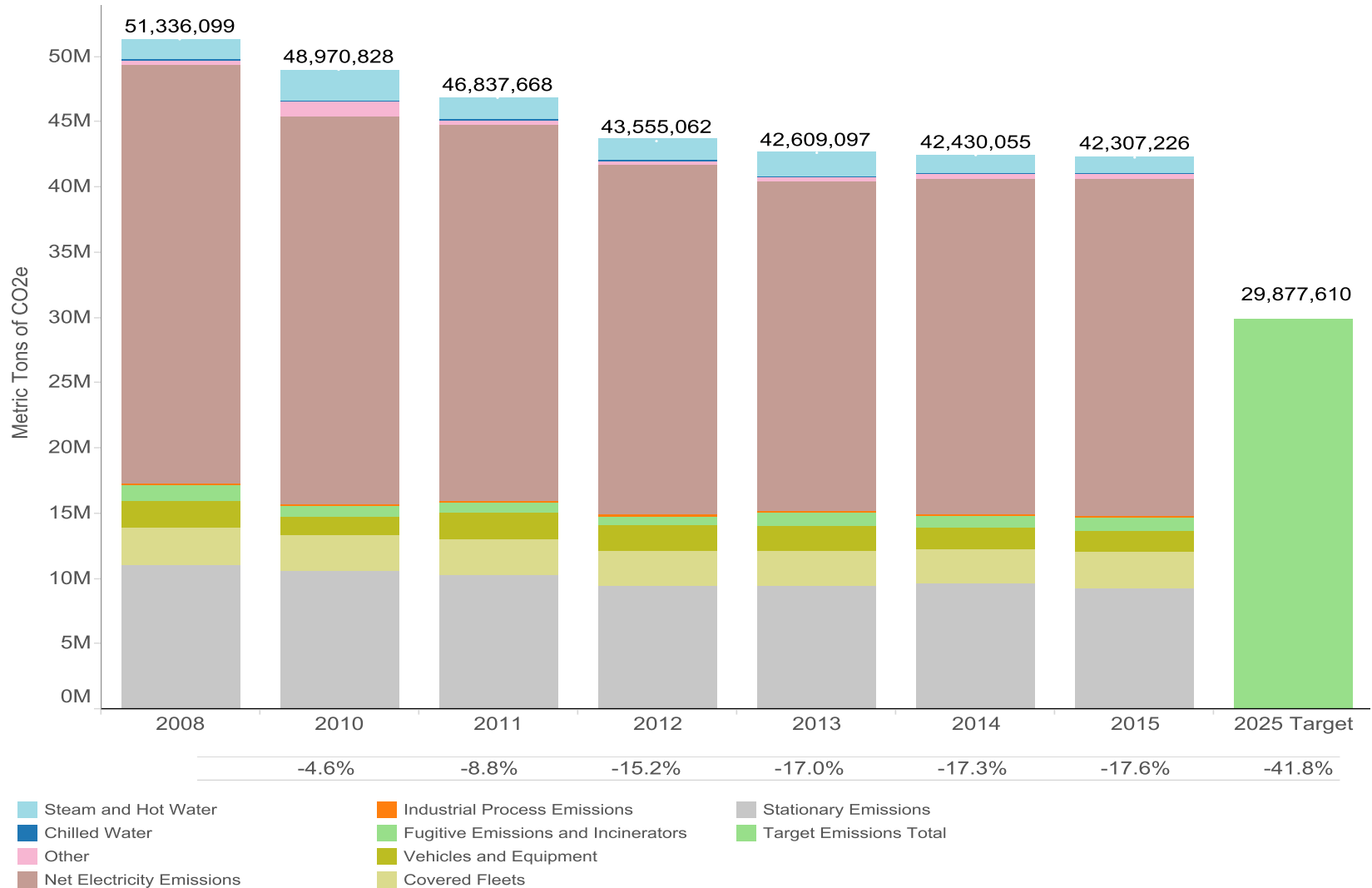
Milestone Summary				
Key Milestones (FY16 and FY17)	Owner	Milestone Due Date	Milestone Status	Comments
Provide best practices FAQ sheet for GHG reduction in health care facilities	VA	September, 2015	Missed	Second draft received; new due date to be set
Federal agencies publicly release FY2016 Strategic Sustainability Performance Plans in support of Executive Order 13693 goals	OMB and CEQ	Q1 FY2016	Completed	Links posted on Performance.gov here
Issue Guidance for Measuring Waste Diversion in Federal Facilities to reduce GHG emissions associated with waste handling activities	CEQ	Q2 FY2016	Anticipated to come out in Q3	Plans are for Q3 FY2016
Issue Guiding Principles for Green Buildings for Federal agencies to facilitate reducing the energy intensity of buildings	CEQ	Q2 FY2016	Completed	
Federal agencies publicly release FY2015 Agency Sustainability and Energy Scorecards	OMB and CEQ	Q3 FY2016	On track	Links posted on Performance.gov here
Issue updated Renewable Energy Credit (REC) Guidance to reinforce priority activities under E.O. 13693	CEQ	Q3 FY2016	On track	
Federal agencies publicly release FY2017 Strategic Sustainability Performance Plans in support of Executive Order 13693 goals	OMB and CEQ	Q1 FY2017	On track	
Issue revised Federal Greenhouse Gas Accounting and Reporting Guidance, last issued in June 2012	CEQ	Q1 FY2017	On track	
Federal agencies publicly release FY2016 Agency Sustainability and Energy Scorecards	OMB and CEQ	Q3 2017	On track	Links posted on Performance.gov here

Key indicators

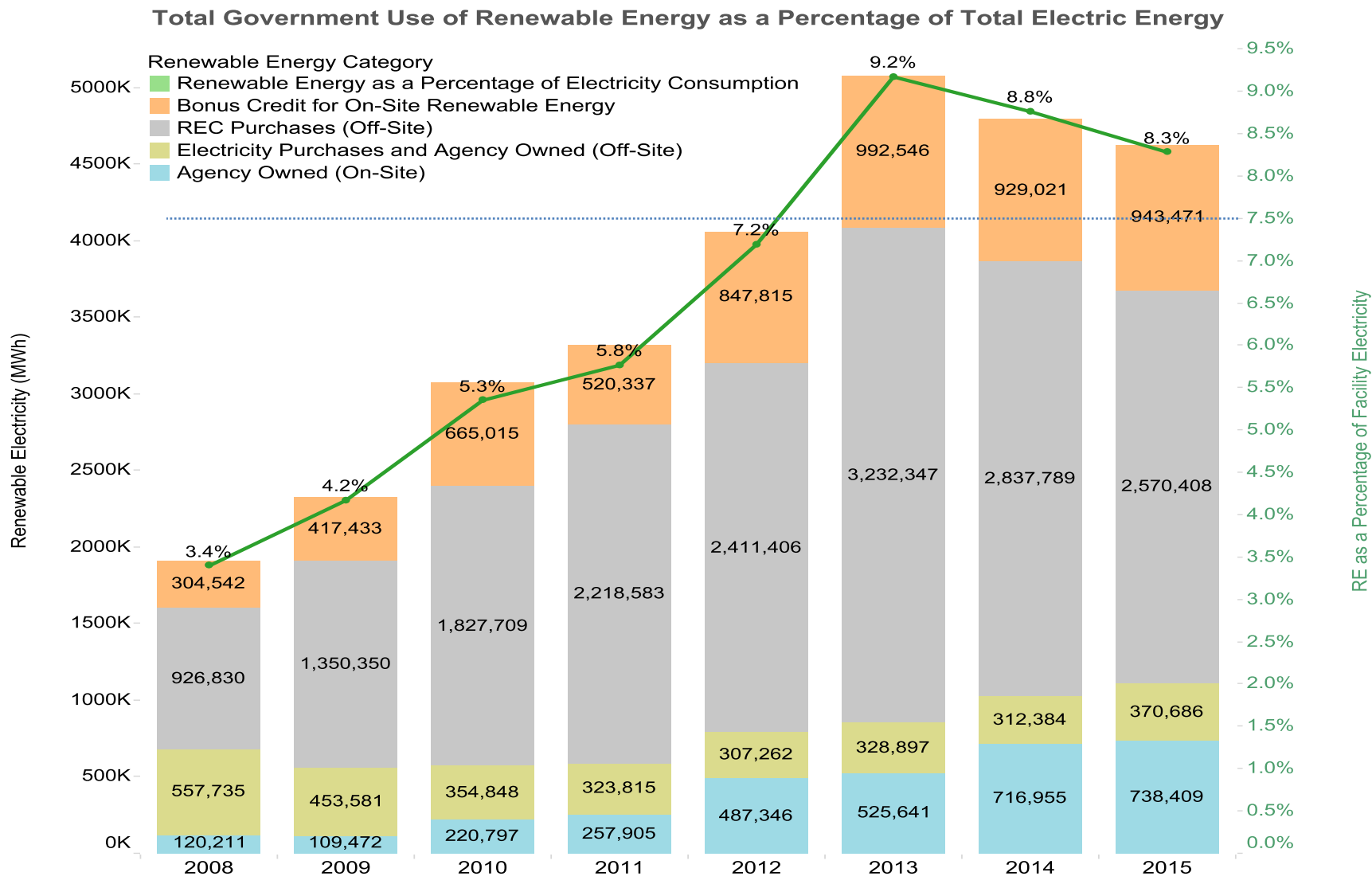
Key Implementation Data						
Indicator	Source	Baseline	Target	Frequency	Latest data	Trend
GHG emissions	DoE/FEMP	51.4 million metric tons of carbon equivalent (FY2008 baseline)	Down 40% by 2025	Annual	17.6% FY2015	Down
Renewable electricity consumed as % of total electricity consumed	DoE/FEMP	3.39% (FY2008 level of use)	Up to 30% by 2025	Annual	8.3% FY2015	Down (<1% but FY2015 goal exceeded)
Contract award amounts for Presidents Performance Contracting Challenge (PPCC)	OMB	\$2 billion (May 2014 baseline)	<u>additional</u> \$2 billion by Dec. 2016	Monthly	\$6.20 billion (awarded + pipeline)	Up

Targeted Scope 1&2 GHG Emissions Reductions, FY 2008 - FY 2015 (million metric tons CO₂e; M = 1,000,000)

Federal Government Progress toward Scope 1 and 2 Greenhouse Gas Reduction Goal



Renewable Energy Use, FY 2008 to FY 2015

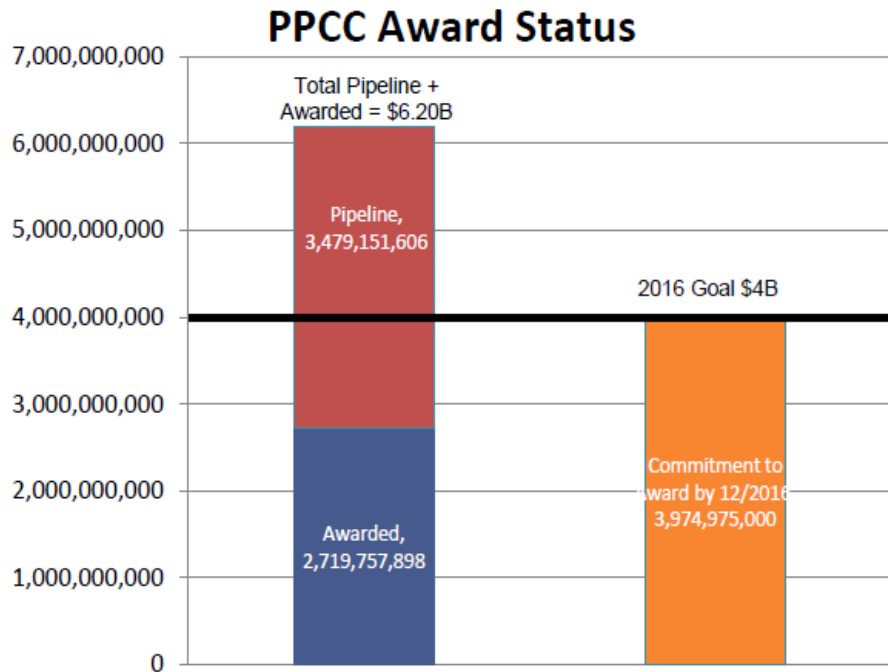


Federal Commitments to the President's Performance Contracting Challenge

Agency	Total Commitment (\$Millions)
Department of Agriculture	37.5
Department of Commerce	12.0
Department of Defense	2,183.0
Department of Energy	275.0
Department of Homeland Security	73.2
Department of the Interior	20.0
Department of Justice	367.0
Department of Labor	3.0
Department of State	10.9
Department of Transportation	40.6
Environmental Protection Agency	5.0
General Services Administration	344.5
Department Health and Human Services	92.6
National Archives and Records Administration	15.6
National Aeronautics and Space Administration	73.9
Office of Personnel Management	2.0
Smithsonian Institution	14.6
Social Security Administration	20.0
Department of Treasury	27.6
Tennessee Valley Authority	22.5
Army Corps of Engineers	12.5
Department of Veterans Affairs	320.0

President's Performance Contracting Challenge (PPCC) Status

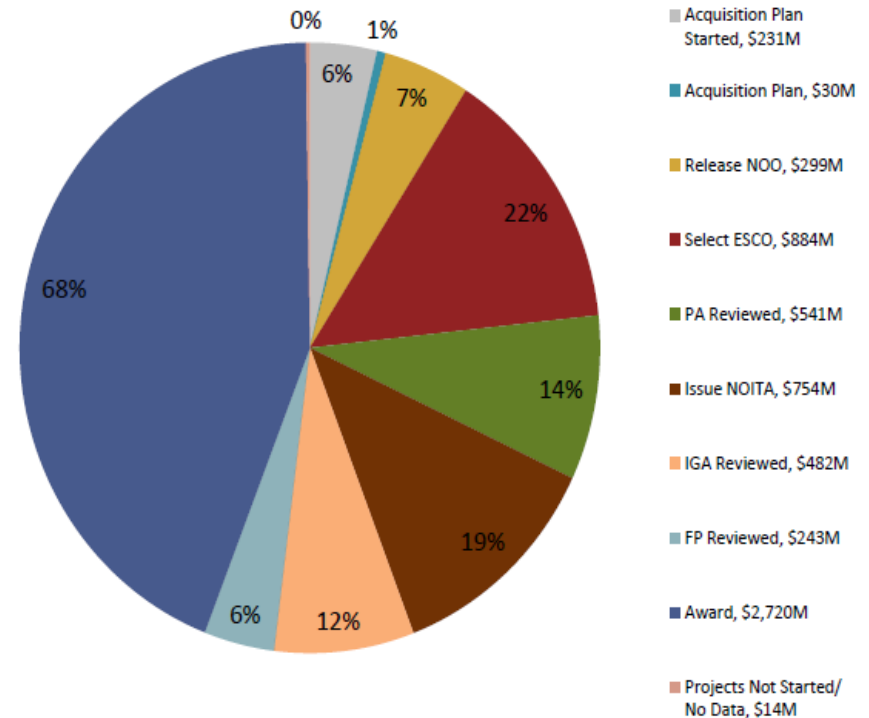
(March 15, 2016 – Monthly Updates Are Available Through [DOE's Website](#))



Pipeline: Amount of project costs in procurement process and expected to award.

Awarded: Amount of project costs awarded.

Agency Commitments: Amount in project costs committed to. Total of pipeline and awarded values may exceed commitment value due to additional projects beyond original agency baselines.



Note: Sum of percentages equals 155% due to agency pipeline development exceeding \$4B PPCC goal.

Acquisition Plan Started: Projects in the process of acquisition

Acquisition Plan Completed: Completion of agency's acquisition

Release NOO: Release of the Notice of Opportunity to perform a performance contract.

Select ESCO: Selection of the Energy Service Company that will perform the work.

PA Reviewed: Review of the Preliminary Assessment outlining the work to be completed.

Issue NOITA: Issuance of the Notice of Intent to Award the contract

IGA Reviewed: Review of the Investment Grade Audit and cost/savings proposal.

Submit FP: Submission of the Final Proposal

Award: Awarding of the contract to the energy service company

Contributing Programs

- A significant number of federal agencies contribute to the Climate Change Cross Agency Priority Goal.
- Progress towards the goals* is listed for 25 major federal agencies in the [Supporting Information](#) section for this CAP Goal under the OMB Energy/Sustainability Scorecard area.
- Planning documents that outline federal agency strategies to achieve the goals are also provided in the [Supporting Information](#) section under the Strategic Sustainability Performance Plan and Climate Adaptation Plan areas.
- Progress towards the federal government consumption of electricity from renewable sources to 30% by 2025, implementing \$4 billion in energy savings performance contracts at federal facilities by the end of 2016 can also be found in the [Supporting Information](#) section.

* Including reducing the federal government's direct greenhouse gas emissions by 40 percent by 2025 and reducing indirect GHG emissions by 13% by 2020 (2008 baseline), doubling the federal government consumption of electricity from renewable sources to 30% by 2025, and implementing \$4 billion in performance contracts at federal facilities by 2016

Acronyms

- **CAP – Cross Agency Priority**
- **CEQ – Council on Environmental Quality**
- **CO₂e – Carbon Dioxide Equivalent**
- **DLA – Defense Logistics Agency**
- **DoD – Department of Defense**
- **DoE – Department of Energy**
- **EO – Executive Order**
- **ESCO – Energy Service Company**
- **ESPC – Energy Saving Performance Contract**
- **FAQ – Frequently Asked Questions**
- **FAR – Federal Acquisition Regulation**
- **FEMP – Federal Energy Management Program**
- **FMI – Facility Management Institute**
- **FP – Final Proposal**
- **FY – Fiscal Year (Oct. 1 thru Sept. 30)**
- **GHG – Greenhouse Gas**
- **GSA – General Services Administration**
- **HFC - Hydrofluorocarbon**
- **IGA – Investment Grade Audit**
- **kWh – Kilowatt Hour**
- **MW -- Megawatt**
- **NOITA –Notice of Intent to Award**
- **NOO – Notice of Release of Opportunity**
- **OMB – Office of Management and Budget**
- **OFPP – Office of Federal Procedure**
- **PA – Preliminary Assessment**
- **Performance Contract – using ESPCs or UESCs to improve energy/water efficiency in federal buildings**
- **PPCC – President’s Performance Contracting Challenge**
- **PV -- photovoltaic**
- **Q (Q1) – Quarter (1-4)**
- **UESC – Utility Energy Service Contracts**
- **USACE – United States Army Corps of Engineers**
- **USDA – United States Department of Agriculture**
- **VA – Department of Veterans Affairs**