

# National Archives and Records Administration



## 2012 Strategic Sustainability Performance Plan

# **National Archives and Records Administration**

## **2012 Strategic Sustainability Performance Plan**

### **Table of Contents:**

1. Policy Statement
2. Executive Summary
3. Goal-1: GHG reduction
4. Goal-2 : Buildings
5. Goal-3: Fleet Management
6. Goal-4: Water use Efficiency Management
7. Goal-5: Pollution Prevention and Waste Reduction
8. Goal-7: Electronic Stewardship
9. President's Performance Contracting Commitment
10. Appendix-1: Climate Change Adaptation Plan
11. Appendix-2: Fleet Management Plan
12. Appendix-3: Bio-based Purchasing Statement

# National Archives and Records Administration

## 2012 Strategic Sustainability Performance Plan

### Points of Contact:

- Mark Sprouse, Agency Senior Sustainability Officer,  
[mark.sprouse@nara.gov](mailto:mark.sprouse@nara.gov), (301) 837-3019
- Ngan Pham, Agency Energy Manager,  
[ngan.pham@nara.gov](mailto:ngan.pham@nara.gov), (301) 837-2004
- Kevin Anderson, Agency Environmental Manager,  
[kevin.anderson@nara.gov](mailto:kevin.anderson@nara.gov), (301) 837-0776

## POLICY STATEMENT

### Agency Policy Statement

The National Archives and Records Administration (NARA) is committed to compliance with all statutes, regulations and Executive Orders (EOs) related to environmental, energy and sustainability matters. With respect to energy in particular, and the associated reduction in greenhouse gases (GHG), NARA has gone beyond all requirements. The agency was one of four government agencies to win a FY2008 Presidential Award for Leadership in Federal Energy Management for its support, leadership, and effort in promoting and improving energy use in facilities and operations. Subsequently, NARA was one of eight federal agencies to win the FY2010 GreenGov Presidential Award for outstanding achievement in building energy efficiency and renewable energy development and deployment. NARA has also surpassed its goals for water conservation and established green building requirements for all new construction projects. The first new building to be constructed under these requirements (Clinton Library) achieved the highest rating—Platinum—under the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system. The George W. Bush Library is being constructed to LEED Platinum as well.

In FY2011, NARA achieved a 29.9% energy intensity (Btu/GSF) reduction as compared to the FY2003 baseline. Currently, NARA is one of the leaders in energy intensity reduction within the federal government. Building on these successes, this Strategic Sustainability Performance Plan (Sustainability Plan) outlines a new and expanded set of sustainability goals for NARA. Through the targets and actions outlined herein, NARA will renew its focus on GHG reduction, water conservation and green building. In addition, the agency will expand the scope of its sustainability goals to include regional and local planning, pollution prevention and waste elimination, sustainable acquisition, and electronic stewardship and data centers.

In order to implement this plan, NARA intends to undertake the following major projects during the 2013 financial year:

- Continue and expand efforts to conserve energy at all facilities.
- Expand energy generation via renewable and other on-site sources.
- Expand existing internal energy audit procedures to cover all sustainability goals.
- Implement the Climate Change Adaptation Plan and the Fleet Management Plan.
- Work directly with an ESCO to develop and implement a bundled ESPC project for multiple Presidential Libraries and Southeast Regional Archives.

These projects will require a new level of commitment from NARA, reflected in the actions and need for staff time described within the plan. These investments are necessary to meet the intent of Executive Order 13514. In addition, they will help improve the agency's operations and, if leveraged appropriately, could help attract additional visitors and further strengthen NARA's reputation as a leader in sustainability.

This plan is an opportunity for continuing dialogue about how NARA and other federal agencies can progress toward sustainable operations. We look forward to input and feedback on NARA's Sustainability Plan and the goals that it represents.



Mark Sprouse  
Agency Senior Sustainability Officer

## EXECUTIVE SUMMARY

Between fiscal years 2006 and 2011, the National Archives and Records Administration (NARA) invested several million dollars in energy efficiency projects. The two most innovative and successful projects are the \$5.7 million dollar ESPC project with an 8-year payback at Archives II and the \$5.8-million dollar ESPC project with a 7-year payback at Archives I. NARA worked directly with the ESCO to develop and implement the following Energy Conservation Measures at Archives I & II: Upgrade and optimize the energy management control system; Improve heating plant; Reduce steam distribution losses; Rebalance HVAC systems; Re-set condenser water temperature; Reduce water usage; Reduce bathroom exhaust fans run time; Retrofit lighting and controls; and Upgrade the building envelope. As a result, the agency realized significant reduction in energy and greenhouse gas emissions. Below is the summary of energy intensity and greenhouse gas reduction:

National Archives Total Agency Utilities Cost and Energy/GHG Savings								
		Executive Order 13423			Executive Order 13514			
FY	Total Utilities Costs (to include Water)	Btu/GSF	Btu/GSF Reduction vs FY2003	FY Goal Target Reduction	Site Delivery Billion Btu	Scopes 1, 2 & 3 GHG Emission (Ton)	GHG Reduction vs FY2008	GHG Saving vs FY2008 (Ton)
2003	\$7,798,163.48	<b>181,189</b>	Baseline					
2006	\$13,629,555.42	156,988	-13.4%	-3.0%	637.7	82,033		
2007	\$14,101,762.75	150,896	-16.7%	-6.0%	612.9	80,347		
2008	\$15,043,427.79	130,993	-27.7%	-9.0%	<b>575.4</b>	<b>76,295.4</b>	Baseline	Baseline
2009	\$14,496,452.58	127,765	-29.5%	-12.0%	561.6	75,468.6	-1.08%	826.8
2010	\$13,825,049.86	125,033	-31.0%	-15.0%	552.2	75,926.8	-0.48%	368.6
2011	\$12,837,795.15	126,981	-29.9%	-18.0%	560.2	70,736.3	-7.86%	5,559.1

This fiscal year, NARA's intense effort to reduce energy consumption has continued to yield exceptional savings. Energy usage in FY2011 (126,981Btu/GSF) is again down **29.9%** as compared to the FY2003 baseline (181,189 Btu/GSF). This year, NARA utility costs are down \$2.2 million or 14.7% compared to the FY2008 baseline. These savings represent 17.2% of NARA's entire FY2011 total utility costs.

Strong water conservation measures continue at NARA. This year, with aggressive water conservation measures, the water consumption of 21.5 gallons per GSF is down 19.2% as compared to FY2007 baseline. Below is the water savings summary:

<b>National Archives Total Agency Water Savings</b>			
FY	Gallons/GSF	Gal/GSF Reduction vs FY2007	FY Goal Target Reduction
2007	26.6	Baseline	
2008	25.4	-4.5%	-2.0%
2009	22.7	-14.7%	-4.0%
2010	21.6	-18.8%	-6.0%
2011	21.5	-19.2%	-8.0%

Going forward, with the strong success of the ESPC projects at Archives I & II, NARA is now ready to implement a similar ESPC project at NARA's other facilities. Between FY2012 and FY2013, NARA plans to work directly with an ESCO to develop and implement a bundled ESPC project for 14 sites. Below are the primary Energy Conservation Measures for the ESPC project:

1. HVAC systems improvement at some Presidential Libraries.
2. Building controls optimization at most Presidential Libraries.
3. High efficiency lighting retrofit and occupant sensor control at some Presidential Libraries.
4. Water conservation at most Presidential Libraries.
5. Solar Photovoltaic power generation at some Presidential Libraries and the SE Regional Archives.

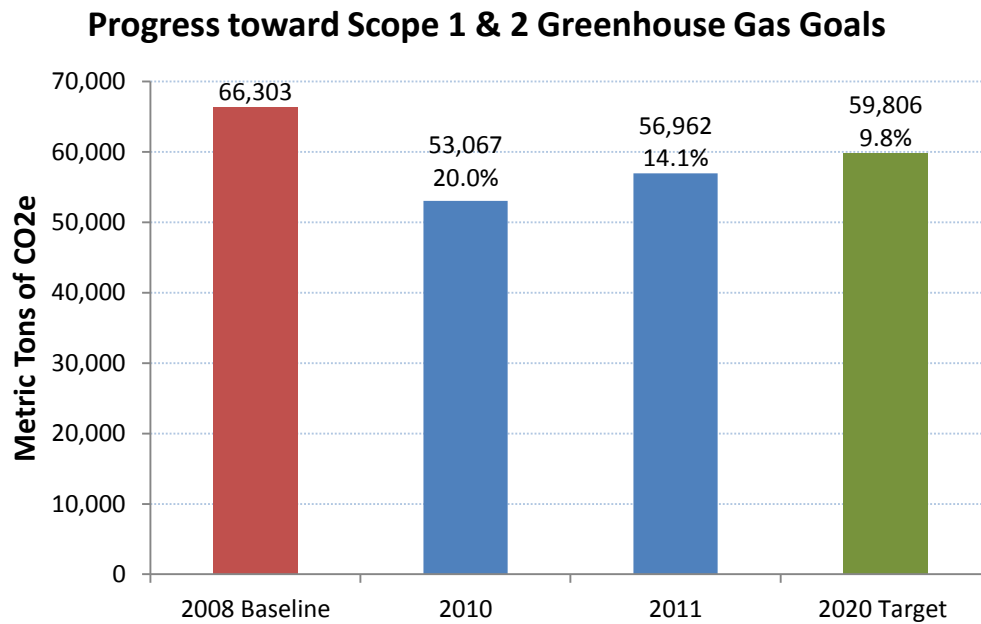
Finally, NARA staff will implement and expand the new Climate Change Adaptation Plan, the Fleet Management Plan and the Data Center Consolidation Plan. These measures will help NARA to continue as a leading agency in energy and GHG conservation.

**TABLE 1: SIZE AND SCOPE OF AGENCY OPERATIONS**

<b>Agency Size and Scope</b>	<b>FY 2011</b>
Total Number of Employees as Reported in the President's Budget	3,591
Total Acres of Land Managed	169
Total Number of Facilities Owned	16
Total Number of Facilities Leased (GSA and Non-GSA lease)	48
Total Facility Gross Square Feet (GSF)	4,262,955
Operates in Number of Locations Throughout U.S.	64
Operates in Number of Locations Outside of U.S.	0
Total Number of Fleet Vehicles Owned	0
Total Number of Fleet Vehicles Leased	76

## GOAL 1: GREENHOUSE GAS REDUCTION AND MAINTENANCE OF AGENCY COMPREHENSIVE GREENHOUSE GAS INVENTORY

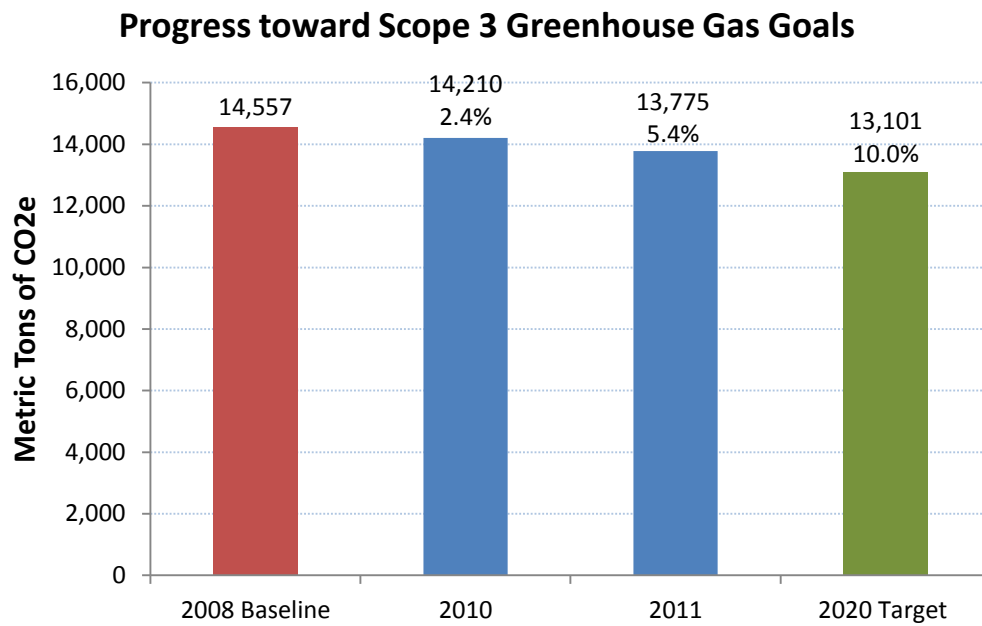
### Agency-Specific Performance Metrics for Scope 1 & 2 GHG Emissions Reduction:



Note: E.O. 13514 requires each agency to establish a scope 1 & 2 GHG reduction target for FY2020. The target for this agency is 9.8% compared to FY2008. The red bar represents the agency's FY2008 baseline. The green bar represents the FY2020 target reduction. The blue bars show actual status in relationship to the target. The percentage on each bar shows the reduction or increase from the FY2008 baseline.



## Agency-Specific Performance Metrics for Scope 3 GHG Emissions Reduction:

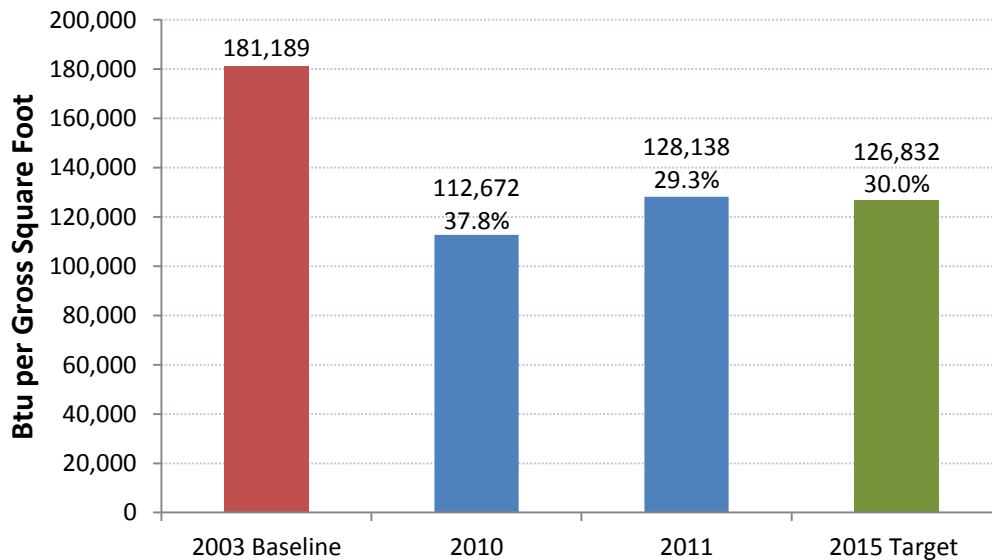


Note: E.O. 13514 requires each agency to establish a scope 3 GHG reduction target for FY2020. The FY2020 target for this agency is 10% compared to the FY2008 baseline. The red bar represents the agency's FY2008 baseline. The green bar represents the FY2020 target reduction. The blue bars show actual status in relationship to the target. The percentage on each bar shows the reduction or increase from the FY2008 baseline.

## GOAL 2: BUILDINGS

### Agency-Specific Performance Metrics for Facility Energy Intensity Reduction:

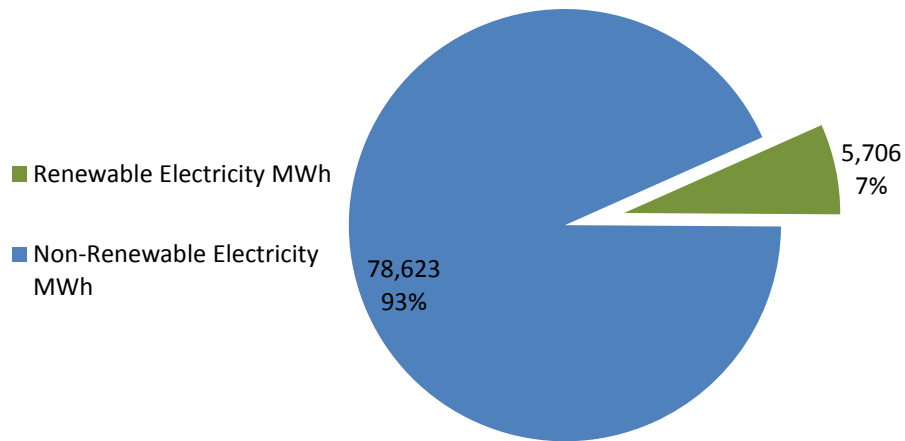
Progress toward Facility Energy Intensity Reduction Goals



Note: EISA requires agencies to reduce energy intensity by 18% for FY2011, compared to an FY2003 baseline; a 30% reduction is required by FY2015. The red bar represents the agency's FY2003 baseline. The green bar represents the FY2015 target reduction. The blue bars show actual status in relationship to the target. The percentage on each bar shows the reduction or increase from the FY2003 baseline.

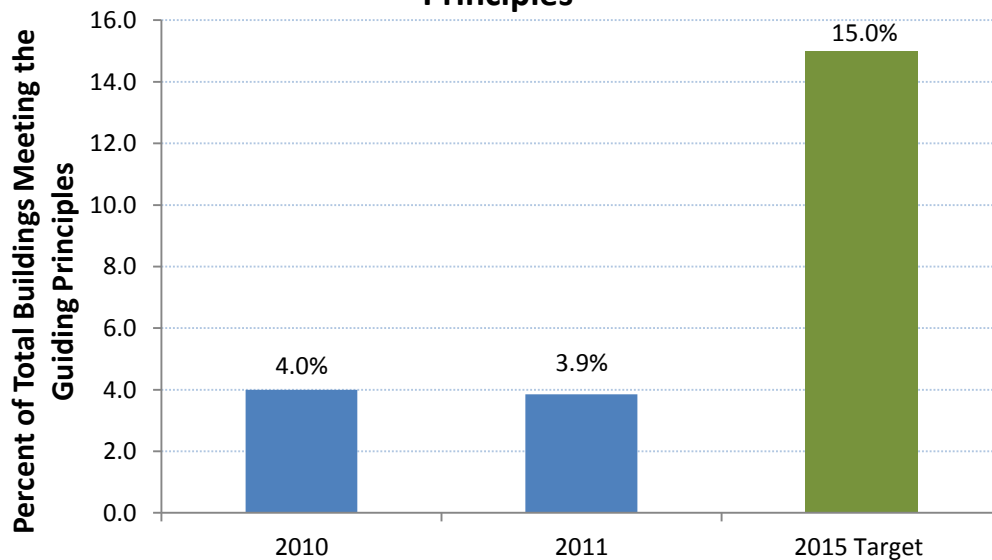
## Agency-Specific Performance Metrics for Renewable Energy:

### Use of Renewable Energy as a Percentage of Electricity Use



## Agency-Specific Performance Metrics for Total Buildings Meeting the Guiding Principles:

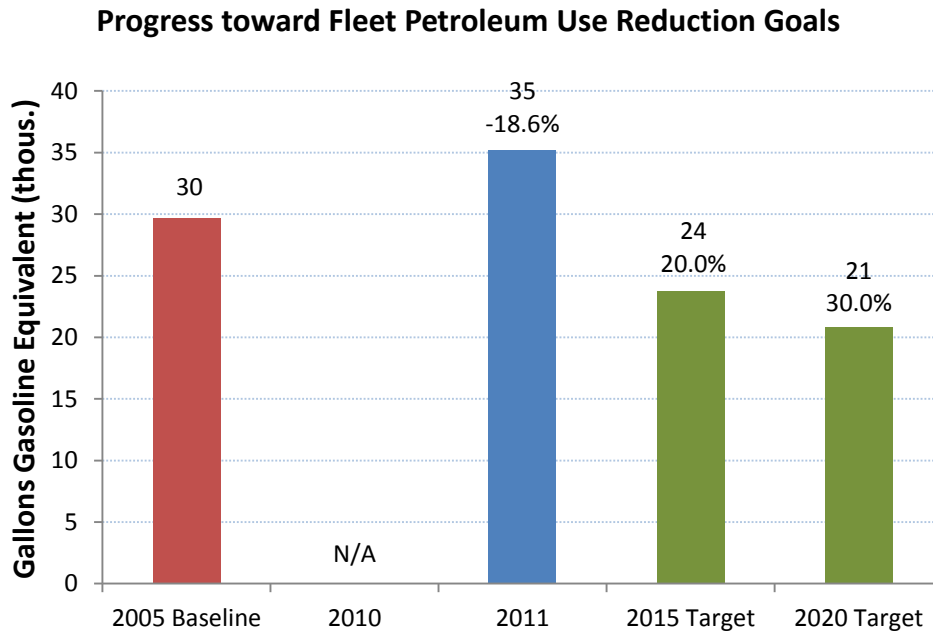
### Progress toward Total Buildings Meeting the Guiding Principles



Note: E.O. 13514 requires that by FY2011 agencies have 7% of new, existing, and leased buildings >5,000 square feet meet the Guiding Principles; the requirement increases to 15% by FY2015. The green bar represents the FY2015 target. The blue bars show actual progress toward the target.

## GOAL 3: FLEET MANAGEMENT

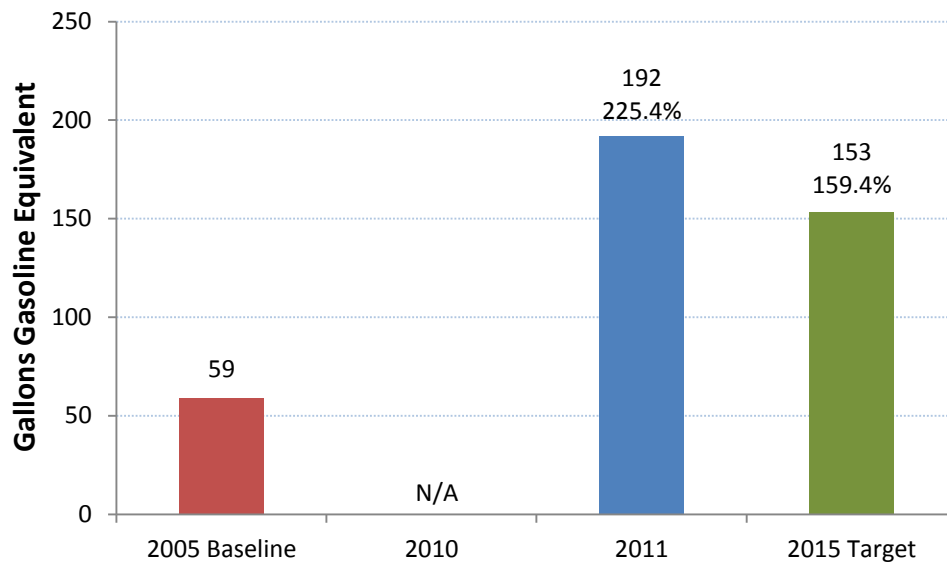
### Agency-Specific Performance Metrics for Fleet Petroleum Reduction:



Note: E.O. 13514 and EISA require that by FY2011 agencies reduce fleet petroleum use by 12%, compared to an FY2005 baseline. A 20% reduction is required by FY2015 and a 30% reduction is required by FY2020. The red bar represents the agency's FY2005 baseline. The green bars represent the FY2015 and FY2020 target reductions. The blue bars show actual status in relationship to the target. The percentage on each bar shows the reduction or increase from the FY2005 baseline. A negative percentage reflects an increase in fleet petroleum use.

## Agency-Specific Performance Metrics for Fleet Alternative Fuel Use:

### Progress toward Fleet Alternative Fuel Consumption Goals

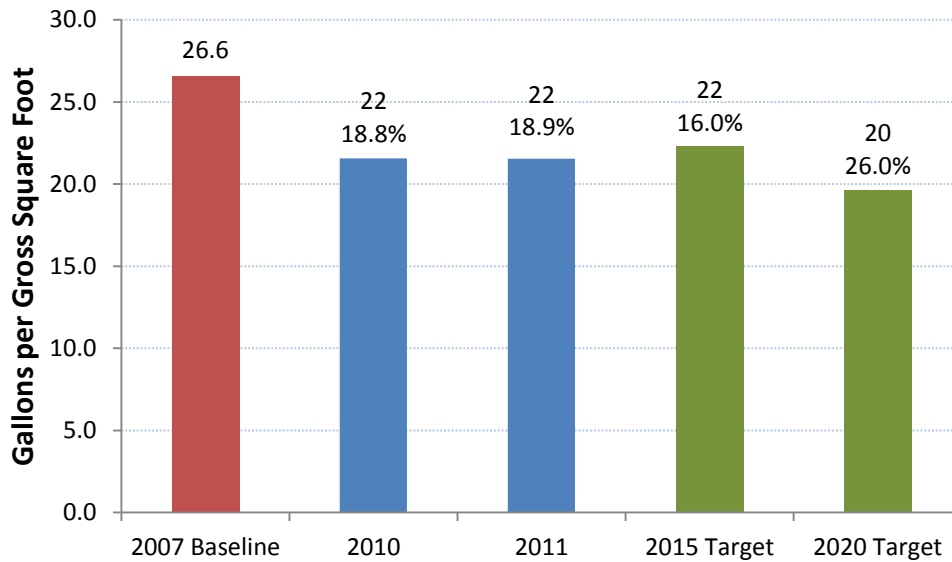


Note: E.O. 13423 requires that agencies increase total non-petroleum-based fuel consumption by 10% annually compared to an FY2005 baseline. Consequently, by FY2011 agencies must increase alternative fuel use by 77%, compared to an FY2005 baseline. By FY2015, agencies must increase alternative fuel use by 159.4%. The red bar represents the agency's FY2005 baseline. The green bar represents the FY2015 target. The blue bars show actual status in relationship to the target. The percentage on each bar shows the reduction or increase from the FY2005 baseline.

## GOAL 4: WATER USE EFFICIENCY AND MANAGEMENT

### Agency-Specific Performance Metrics for Potable Water Intensity Reduction:

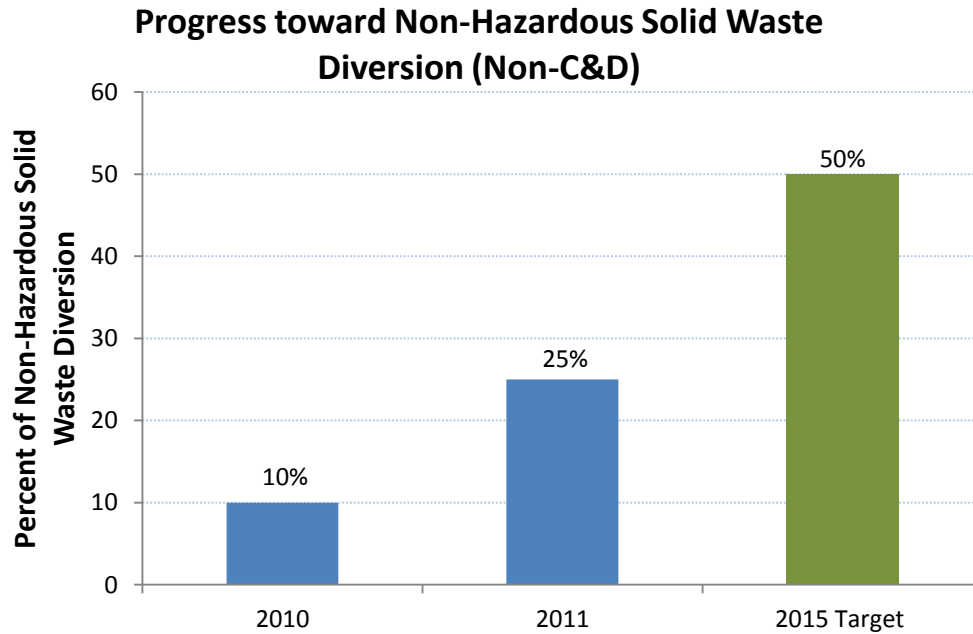
Progress toward Potable Water Intensity Reduction Goals



Note: E.O. 13514 requires agencies to reduce potable water intensity by 2% annually through FY2020, compared to an FY2007 baseline. Consequently, by FY2011 agencies are required to reduce potable water intensity by 8%, compared to an FY2007 baseline. A 16% reduction is required by FY 2015 and a 26% reduction is required by FY2020. The red bar represents the agency's FY2007 baseline. The green bars represent the FY2015 and FY2020 target reductions. The blue bars show actual status in relationship to the target. The percentage on each bar shows the reduction or increase from the FY2007 baseline.




## GOAL 5: POLLUTION PREVENTION AND WASTE REDUCTION

### Agency-Specific Performance Metrics for Non-Hazardous Solid Waste Diversion (Non-C&D):






Note: E.O. 13514 requires that by FY2015 agencies annually divert at least 50% of non-hazardous solid waste from disposal. The green bar represents the FY2015 target. The blue bars show actual progress toward the target.




## GOAL 7: ELECTRONIC STEWARDSHIP AND DATA CENTERS

EPEAT	POWER MANAGEMENT	END-OF-LIFE	COMMENTS
			




### EPEAT:

	95% or more Monitors and PCs/Laptops purchased in FY2011 was EPEAT Compliant Agency-wide
	85-94% or more Monitors and PCs/Laptops purchased in FY2011 was EPEAT Compliant Agency-wide
	84% or less Monitors and PCs/Laptops purchased in FY2011 was EPEAT Compliant Agency-wide

### Power Management:

	100% Power Management Enabled Computers, Laptops and Monitors Agency-wide
	90-99% Power Management Enabled Computers, Laptops and Monitors Agency-wide
	89% or less Power Management Enabled Computers, Laptops and Monitors Agency-wide

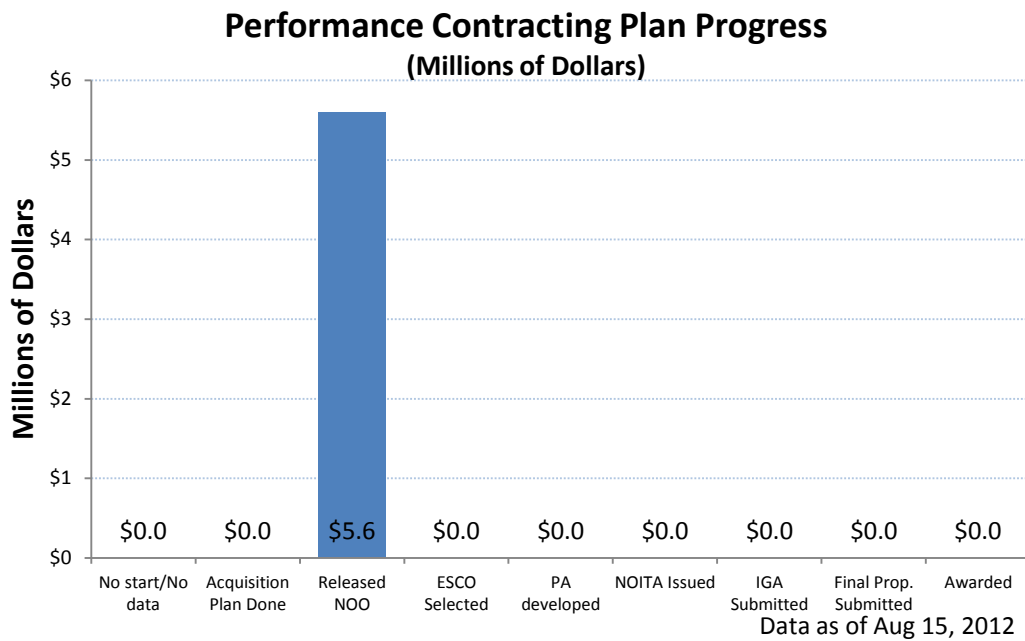
### End-of-Life:

	100% of Electronics at end-of-life disposed through GSA Xcess, CFL, Unicorn or Certified Recycler (R2, E-Stewards)
	100% of Electronics at end-of-life disposed through GSA Xcess, CFL, Unicorn or non-Certified Recycler
	Less than 100% of Electronics at end-of-life disposed through GSA Xcess, CFL, Unicorn or non-Certified Recycler

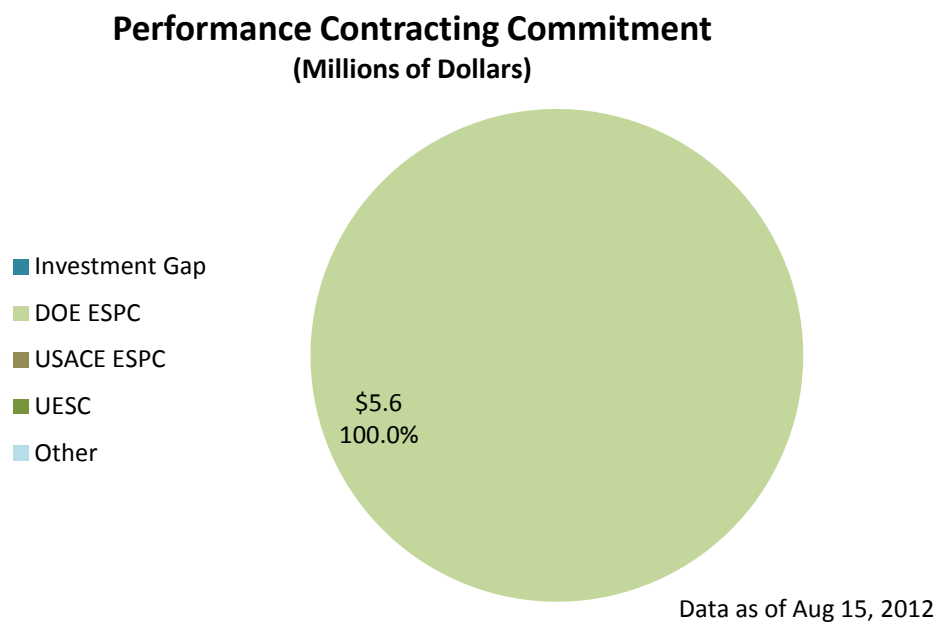


## President's Performance Contracting Commitment

### Agency-Specific President's Performance Contracting Commitment Metrics:



### Agency-Specific President's Performance Contracting Commitment Metrics:



**APPENDIX 1: CLIMATE CHANGE ADAPTATION PLAN**

**APPENDIX 2: FLEET MANAGEMENT PLAN**

**APPENDIX 3: BIOBASED PURCHASING STATEMENT**