U.S. Environmental Protection Agency

2013 Strategic Sustainability Performance Plan

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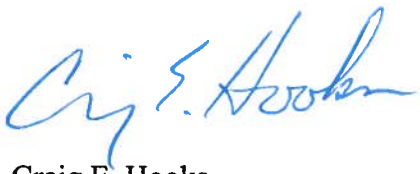
Agency Policy Statement

The U.S. Environmental Protection Agency continues to support its commitment to reduce its carbon footprint, conserve resources, protect the environment, and address climate change adaptation. EPA is committed to the priorities and sustainability goals established in its Strategic Sustainability Performance Plan for the following areas:

- Greenhouse gas and energy reductions
- Sustainable buildings
- Fleet management
- Water use efficiency and management
- Pollution prevention and waste reduction
- Sustainable acquisition
- Electronic stewardship and data centers
- Renewable energy
- Climate change resilience

The agency recognizes the need to continue to serve as a model for other federal agencies in reducing its impact on the environment. Taking budget considerations into account, the EPA plans to continue to invest the human and financial resources needed to support ongoing, cost-effective improvements in its energy and environmental performance.

As the EPA's Senior Sustainability Officer and Chief Acquisition Officer, I am committing the agency's leadership and every EPA employee to actively participating in the implementation of the agency's SSPP. In conjunction with the EPA's Chief Financial Officer, Chief Information Officer, Senior Real Property Officer, and General Counsel, all program offices and regions, the EPA commits to meeting its SSPP goals in a comprehensive and cost-effective manner.



Craig E. Hooks

EPA Senior Sustainability Officer

EPA's 2013 Strategic Sustainability Performance Plan: Executive Summary

In supporting the Agency's mission to protect human health and the environment, and to demonstrate leadership in environmental stewardship, the U.S. Environmental Protection Agency (EPA) is committed to managing its facilities and activities in a compliant and sustainable manner according to the goals of this Strategic Sustainability Performance Plan (SSPP). EPA's mission is carried out in more than 130 leased office facilities and more than 30 laboratories, 20 of which are owned by the Agency. Laboratories use significantly more energy and present greater environmental challenges than offices.

VISION

EPA's vision is to accomplish the Agency's mission while minimizing the impact of facility operations on the environment and surrounding communities by designing high-performance buildings and integrating sustainable practices into daily operations.

LEADERSHIP

EPA works to realize its vision of sustainability throughout its senior leadership team. The Agency's Assistant Administrators, General Counsel, Chief Information Officer, Chief Acquisition Officer, Chief Financial Officer, and Senior Real Property Officer are committed to integrating EPA's SSPP goals into all of the Agency's programs, facilities, and operations.

The Senior Sustainability Officer (SSO) for the Agency is the Assistant Administrator for the Office of Administration and Resources Management, who reports directly to the Administrator. The SSO chairs an Executive Steering Committee, composed of Assistant Administrators and senior regional management, which is charged with overseeing the implementation of the SSPP.

To ensure coordination and communication among the key individuals and offices responsible for implementing this SSPP, EPA has established a process for ongoing input and feedback and a Technical Advisory Group (TAG), which includes representatives from all of EPA's program offices, regions, and key administrative bodies. EPA ensures that annual review and updates to the SSPP include feedback from the appropriate program offices to integrate overall Agency goals and objectives.

EPA's annual budget planning process integrates SSPP goals during its facility needs review and the facility master planning process, which incorporates resource efficiency, low-impact development, and other sustainability strategies. EPA is also realigning its real estate portfolio management process, capital budgeting process, and other facility processes to support the Agency's seven strategic goals (which align with the goals of Executive Order [EO] 13514), including:

- Taking action on climate change
- Improving air quality
- Assuring the safety of chemicals

- Cleaning up our communities
- Protecting America's waters
- Expanding the conversation on environmentalism and working for environmental justice
- Building strong state and tribal partnerships

PERFORMANCE

In fiscal year (FY) 2012, EPA continued to meet or exceed nearly all federal sustainability goals established by EO 13514, EO 13423, the Energy Independence and Security Act of 2007 (EISA), and other key sustainability drivers.

EPA's SSPP integrates a number of individual Agency strategies for integrating greenhouse gas (GHG) emissions reduction, energy efficiency, sustainable buildings, water conservation, and other efforts. The Agency uses a variety of reporting systems to assess progress toward achieving—and exceeding—its SSPP goals:

- Facility-specific targets for energy and water consumption.
- Quarterly and annual collection and analysis of GHG, energy, and water data.
- Annual collection of solid waste generation and recycling data for owned and leased facilities.
- Continuous tracking of transportation data using the Automotive Statistical Tool database; evaluation of transportation initiatives and fuel use using the Agency's Alternative Fuel Compliance Emphasis Program.
- Balanced Scorecard (BSC) initiatives to improve data quality and planning for sustainable acquisitions.

Performance information for other targets and goals is acquired through annual data calls. Performance reports are provided periodically to the SSO and Executive Steering Committee, along with recommendations for action and adjustments to the SSPP as appropriate.

Goal 1: GHG Reduction

- *Scope 1 and 2 GHG Emissions:* In FY 2012, EPA's combined Scope 1 and 2 GHG emissions were 54.1 percent lower than its FY 2008 baseline, surpassing the Agency's Scope 1 and 2 GHG emissions reduction goal of 25 percent by FY 2020 from the FY 2008 baseline. Even when the Agency does not include its green power and renewable energy certificate (REC) purchases, EPA's FY 2012 Scope 1 and 2 GHG emissions still decreased 7.3 percent relative to the Agency's FY 2008 baseline.

- *Scope 3 GHG Emissions:* EPA reduced its Scope 3 GHG emissions 32.3 percent in FY 2012 compared to its FY 2008 GHG emissions baseline. The Agency's GHG emissions associated with business air travel decreased 46 percent in FY 2012 compared to FY 2008 through increased video conferencing and reduced business travel. EPA's telework program allows eligible staff to work from an alternate location on a regular or intermittent basis, which decreases the GHG emissions associated with employee commuting by reducing the number of days employees commute to work each week.

Goal 2: Sustainable Buildings

- *Energy Intensity:* EPA exceeded the 21 percent energy intensity reduction from its FY 2003 baseline required under EISA and EO 13423, reducing its FY 2012 energy intensity by 23.7 percent from FY 2003. In FY 2012, EPA completed energy assessments at its two largest laboratories and identified 15 energy conservation measures (ECMs) from these assessments. EPA successfully completed its first four-year reporting cycle required under EISA Section 432 by evaluating 100 percent of its covered facilities by June 2012.

- *Guiding Principles:* Using EPA's projected FY 2015 Federal Real Property Profile (FRPP) inventory, five buildings—or 9.8 percent—of the Agency's FRPP buildings measuring greater than 5,000 square feet met the *Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings (Guiding Principles)* in FY 2012. This progress exceeds the Office of Management and Budget (OMB) goal of 9.0 percent and is two-thirds of the way to meeting the FY 2015 requirement of 15 percent. In FY 2012, EPA completed *Guiding Principles* certification for one laboratory building and will certify another in FY 2013.

Goal 3: Fleet Management

- *Petroleum Use and Fleet Reduction:* In FY 2012, EPA reduced fleet petroleum use by 32.2 percent compared to the FY 2005 baseline, exceeding the goal of 14 percent. In addition, the Agency exceeded its FY 2015 vehicle allocation methodology (VAM) reduction goal of 4.2 percent of total fleet compared to an FY 2011 baseline by achieving a 4.9 percent reduction in fleet size. EPA identified and eliminated six exempt fleet vehicles (i.e., emergency response and law enforcement vehicles), which resulted in significant savings for the Agency in terms of lower annual leasing and administrative costs, as well as reduced vehicle maintenance needs.

- *Alternative Fuel Use:* EPA fell short of meeting the FY 2012 EISA requirement for increasing alternative fuel consumption by 10 percent annually compared to a FY 2005 baseline, but continues to work to meet this goal.

Goal 4: Water Use Efficiency and Management

- *Potable Water:* In FY 2012, EPA exceeded the EO 13514 requirement to reduce its water intensity by 10 percent compared to the FY 2007 baseline, with a decrease of 22.5 percent compared with FY 2007. Having completed water assessments at all EISA covered facilities in advance of the June 2012 deadline, in FY 2012 EPA completed water assessments at three additional facilities.

- *Industrial, Landscaping, and Agricultural (ILA) Water:* EPA also exceeded the proposed EO 13514 goal to decrease ILA water use by 2 percent annually compared to an FY 2010 baseline by reducing ILA water 94.8 percent compared to FY 2010.

- *Stormwater Management*: EPA continued to follow the EISA Section 438 Guidance on stormwater management in FY 2012.

Goal 5: Pollution Prevention and Waste Reduction

EPA surpassed its internal waste diversion goal of 55 percent in FY 2012 by achieving a 63 percent waste diversion rate, far exceeding the EO 13514 requirement of 50 percent waste diversion by FY 2013. For its second consecutive year, EPA reduced the reported weight of solid waste disposed per person through ongoing source reduction, recycling, reuse, donation, composting, and other waste reduction efforts. The number of EPA facilities that reported data for their composting programs also increased from FY 2011 to FY 2012.

Goal 6: Sustainable Acquisition

- *Balanced Scorecard Initiatives*: In FY 2012, EPA implemented two Balanced Scorecard Initiatives (BSC) which positively impacted the Agency's compliance with EO 13514. The first BSC is the implementation of the Contract Management Assessment Program (CMAP). The CMAP evaluation process includes a requirement to check that the Affirmative Procurement Program/Recovered Materials provisions and clauses are cited in applicable contract files pursuant to Federal Acquisition Regulation 23.404, Agency Affirmative Procurement Programs. The second BSC was the issuance of an Interim Policy Notice for Acquisition Planning, which includes a streamlined acquisition planning checklist that documents compliance with the Agency's Green Purchasing Plan (GPP).

- *Sustainable Acquisition Goals*: In FY 2012, EPA achieved the EO 13514 goal of 95 percent sustainable acquisition for applicable goods and service procurements. The Agency implemented BSC initiatives to improve data quality and strategic planning for all facets of sustainable acquisitions, including increasing the purchase and use of biobased products and services. EPA also created a newsletter devoted to sustainable acquisitions; provided Electronic Product Environmental Assessment Tool (EPEAT) and biobased product training with experts from EPA and the U.S. Department of Agriculture (USDA); and modified the data fields in EPA's contract writing system to allow for accurate recording of environmental attributes in contract actions.

Goal 7: Electronic Stewardship and Data Centers

- *Electronic Stewardship:* EPA continued to achieve a 100 percent power management enabling rate on all eligible Agency computers and monitors through enterprise-wide management software capable of establishing power management settings for computers and monitors over the Agency's network, as well as auditing computers and monitors on the network for compliance. EPA continued to increase the duplexing enabling rate on all eligible network printers and computers, reaching 99 percent. EPA also continued to ensure environmentally sound disposition of electronic products; the Agency uses electronics recyclers that are certified under all of the current requirements.

- *Data Centers:* Through EPA's Data Center Consolidation Initiative, approved by OMB, the Agency reduced total data centers, racks, servers, and energy usage by increasing virtualization of data center activity, increasing activity hosted in a cloud computing environment, consolidating space and servers, and embracing energy-efficient technologies. EPA also designated 25 of 75 "non-core" data centers for consolidation or closure by the end of FY 2015.

Goal 8: Renewable Energy

- *Onsite Renewable Energy:* In FY 2012, onsite renewable energy resources such as wind, solar, and geothermal power supplied EPA with 7.2 billion British thermal units (Btu), equivalent to 0.58 percent of the Agency's energy use.

- *Green Power and Renewable Energy Certificates (RECs):* EPA continued to be a leader among federal agencies by purchasing green power and RECs equivalent to 100 percent of the Agency's estimated FY 2012 electricity use.

Goal 9: Climate Change Resilience

EPA continues to prepare for and mitigate the effects of climate change through the development of an Agencywide *Climate Change Adaptation Plan*. The SSPP outlines numerous goals and achievements in reducing the Agency's GHG emissions, energy dependence, water use requirements, solid waste, pollution, and other environmental impacts. EPA also has in place an extensive continuity of operations plan (COOP) designed to address natural disasters and other events that could interrupt Agency operations. EPA has issued guidance encouraging all offices to include climate adaptation evaluation criteria into announcements of competitive funding opportunities. EPA is also developing tools to support climate adaptation planning.

Lessons Learned

Having an established "pipeline" of ready-to-implement, facility-specific energy and water conservation projects has helped EPA exceed its facility GHG reduction, energy efficiency, and water conservation goals. Reduced resource levels, however, have hindered EPA's ability to design and fund many of the major projects necessary to continue to meet or exceed increasingly aggressive building performance requirements. To address this funding issue, EPA has focused on implementing lower cost projects with the highest return on investment.

EPA has also realized that predicting accurately the future cost of energy commodities is critical to designing energy conservation projects that involve performance contracting. For example, EPA initiated a boiler replacement project as part of an energy savings performance contract (ESPC) at its Andrew W. Breidenbach Environmental Research Center (AWBERC) in Cincinnati, Ohio, in FY 2011. Since that time, the price of natural gas has fallen significantly, which has diminished the cost-effectiveness of the potential ESPC. EPA may still pursue this project on a performance contract basis, but is building what it learned about projecting fuel costs into future ESPC efforts.

Challenges

As the Agency charged with protecting human health and the environment, EPA must maintain its premier scientific research capabilities while continuing to reduce energy and water consumption. The Agency's laboratory mechanical system upgrades are complex and frequently take several years to design, complete, and commission. Lack of funding for ECMs, sustainable building improvement projects, and space consolidation projects often hinders progress. EPA has already implemented energy and water conservation measures with the lowest capital costs and shortest payback periods; to achieve additional savings and continue to meet its energy and water intensity reduction goals, however, EPA must find innovative ways to fund other major projects. Doing so in a time of reduced resources is quite a challenge.

EPA must also continue to improve the quality of data and metrics for sustainability goal areas. One particular challenge is obtaining better quality data for employee commuting, the Agency's largest component of currently required Scope 3 GHG emissions. In FY 2012, EPA conducted an employee commuter survey with a 54 percent response rate, which required the Agency to estimate commuting-related GHG emissions for the portion of employees who did not respond. In addition, the availability and quality of data for construction and demolition (C&D) waste have improved in recent years, but some facilities are still working to obtain and report better disposal and diversion data. EPA will continue to share data reporting best practices and implement a new reporting system for C&D debris.

In FY 2012, EPA did not meet the EO 13423 requirement for increasing alternative vehicle fuel consumption by 10 percent compounded annually. While most of the Agency's fleet consists of vehicles that are fueled with E85, fueling stations that offer E85 are not readily available in many areas of the country. To improve the Agency's performance in this area, EPA plans to hold an annual workshop and quarterly data calls with field operators. EPA will also continue to implement its Alternative Fuel Compliance Emphasis Program (AFCEP) to visit regional fleet locations, meet with stakeholders, discuss obstacles to compliance, share best practices, and develop site-specific strategies for meeting fuel targets.

PLANNED ACTIONS

EPA anticipates making further progress in reducing its Scope 1 and 2 GHG emissions in FY 2013 and beyond as a result of implementing additional energy conservation projects, consolidating or right-sizing laboratory infrastructure when opportunities arise, and continuing to purchase green power and RECs. The Agency also expects to see reductions in its Scope 3 GHG emissions for the optional rental space category because of its continuing office consolidation efforts and increasing use of telework.

EPA's Environmental Science Center (ESC) in Fort Meade, Maryland, is poised to meet the *Guiding Principles*, pending completion of a lighting controls study underway at the facility. Once these projects are completed at ESC in FY 2013, the number of EPA FRPP buildings meeting the *Guiding Principles* will rise to 11.8 percent. In addition, EPA plans to implement the *Guiding Principles* at the Atlantic Ecology Division Laboratory in Narragansett, Rhode Island, and National Exposure Research Laboratory in Athens, Georgia.

EPA will increase utilization of E85 in flex-fuel vehicles, locate dual-fuel vehicles where it has access to alternative fuel, and use biodiesel fuels in diesel vehicles. To ensure that it is operating a lean and effective fleet in FY 2013 and beyond, EPA will also increase its use of plug-in hybrid electric vehicles, continue to identify underutilized vehicles, and right-size its inventory as part of the annual VAM review.

EPA is updating its GPP in 2013 as a component of the Policy Reformation and Restoration Project, which requires all of the Agency's acquisition policy guidance to be updated, revised, and promulgated. It is EPA's position that the data cited in Figure 6.2, *EPA's FPDS Reported Applicable Contract Actions*, is an underrepresentation of the Agency's actual contract actions that include biopreferred contract requirements due to the data accuracy challenges EPA is addressing. The Agency plans to reassess its biobased purchasing baseline during FY 2013 and report the results of the reassessed baseline in future Scorecards.

PROGRESS ON ADMINISTRATION PRIORITIES

Climate Change Adaptation Plans: EPA released its draft *Climate Change Adaptation Plan* ("*Plan*") for public review and comment in February 2013. The *Plan* provides a roadmap (including 10 Agencywide priorities) for how EPA will anticipate and plan for future changes in climate and incorporate considerations of climate change into its programs, policies, rules, and operations to ensure they are effective under future climatic conditions. As stated in the June 2011 *EPA Policy Statement on Climate Change Adaptation*, climate change can pose significant challenges to EPA's ability to fulfill its mission. The Agency must therefore adapt to climate change if it is to continue fulfilling its statutory, regulatory, and programmatic requirements. Many of the actions called for in the *Plan* are already being implemented.

As part of the Agencywide *Plan*, every EPA National Environmental Program Office, all 10 Regional Offices, and National Support Offices have developed their own *Implementation Plans* that provide more detail on how they will carry out the work called for in the Agencywide *Plan* and meet the 10 EPA priorities on climate adaptation. Draft *Implementation Plans* were completed in June 2013 and are included with this SSPP.

The Agency benefitted from comments received on its draft *Climate Change Adaptation Plan* during the public review and comment period. Comments were received from state environmental and natural resource agencies, associations, and individuals. A collaborative submission was also received from 32 environmental organizations. Reviewers provided a generally favorable assessment of the *Plan*. A common request was for more detail on how EPA will meet the 10 Agencywide priorities on climate adaptation. EPA has responded by including this detail in the draft *Implementation Plans* prepared by the program and regional offices. Additional comments focused on: the importance of considering the co-benefits of adaptation strategies (e.g., adaptation strategies that also lead to reductions in GHG emissions); the need to consider a broader array of financial assistance mechanisms to support state climate change adaptation planning; a request for the development of communication and outreach tools for partners; and the importance of involvement of state and local partners in the development of the

Implementation Plans. EPA also received a recommendation to add a strategic measure to track how effectively it is helping to strengthen the adaptive capacity of its partners.

EPA is responding to all of these comments by making appropriate revisions to the *Plan*, incorporating appropriate actions into the draft *Implementation Plans*, and engaging states, tribes, and local communities in the development and review of the draft *Implementation Plans*. Specific actions are already being implemented to respond to suggestions made during the public comment period. For example, EPA is helping to strengthen the adaptive capacity of its partners by integrating considerations of climate change impacts and adaptive measures into a broad array of grant, loan, contract, and technical assistance programs, consistent with existing authorities. The Agency is also developing a new strategic measure to track the effectiveness of its partnerships on climate adaptation with states, tribes, and local communities.

Fleet Management Plans: EPA's baseline fleet inventory, established in FY 2011, consisted of 1,145 vehicles. In the FY 2012 VAM review, EPA established an optimal fleet size of 1,097 vehicles, including law enforcement and emergency response vehicles. EPA attained and exceeded this goal in FY 2012, reducing its fleet inventory to 1,089 vehicles. As part of EPA's FY 2013 VAM review, the Agency adjusted the threshold criterion for vehicle utilization for all vehicles. Regional and program fleet managers were required to justify the retention of all under-utilized vehicles via a VAM survey data call. Additionally, EPA reviewed the composition of the fleet to determine if the vehicles were sized correctly to meet its mission. Fleet managers confirmed that this was the case for the vast majority of the fleet.

ESPCs: In February 2012, EPA committed to pursue two large-scale ESPC or ESPC-like projects worth $9 million, and will continue to evaluate the use of ESPCs and utility energy service contracts (UESCs) for future projects. As with many federal agencies, EPA has limited capital funds to maintain existing laboratory infrastructure, replace aging infrastructure, and reconfigure existing research laboratory space to meet mission-critical needs. While EPA considers ESPCs as a potential funding source for energy-saving projects if they enable the Agency to reduce the burden of up-front capital cost, many of EPA's energy-saving projects are often not viable candidates for ESPCs due to the extreme age and complexity of mechanical systems, the laboratories' remote locations, and the small project sizes.

Biobased Purchasing Strategies: EPA continues to provide training, education, and outreach in accordance with Sections (1) and (7), respectively, of the Presidential Memorandum, *Driving Innovation and Creating Jobs in Rural America through Biobased and Sustainable Product Procurement*. EPA conducts quarterly reviews of relevant contract acquisitions for the inclusion of biobased product and services requirements and clauses in applicable contracts and provides specific training to acquisition staff to ensure contract language is used for applicable requirements. EPA will assess the results of the quarterly compliance reviews to identify applicable service contracts that did not contain biobased products and/or clauses, address any specific contracts that do not include biobased products and/or clauses, and develop corrective actions, including training, to improve performance and reporting in future sustainability plans.

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Agency Progress toward Pollution Prevention & Waste Reduction

Table 5: Goal 5 Strategies – Pollution Prevention & Waste Reduction

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Agency Progress towards Sustainable Acquisition Goal

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Federal Procurement Data Systems Standard Reports on Biopreferred Procurement Actions

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Agency Renewable Energy Percentage of Total Electricity Usage

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Goal 9: Climate Change Resilience

Agency Climate Change Resilience

Table 9: Goal 9 Strategies – Climate Change Resilience

Appendices

Size & Scope of Agency Operations

Table 1: Agency Size & Scope

Agency Size & Scope	FY 2011	FY 2012
Total Number of Employees as Reported in the President's Budget	17,761	17,202
Total Acres of Land Managed	664.92	628
Total Number of Buildings Owned	20	20
Total Number of Buildings Leased (GSA and Non-GSA Lease)	145	121
Total Buildings Gross Square Feet (GSF)	11,429,755	11,229,620
Operates in Number of Locations Throughout U.S.	165	141
Operates in Number of Locations Outside of U.S.	0	0
Total Number of Fleet Vehicles Owned	106	127
Total Number of Fleet Vehicles Leased	996	951
Total Number of Exempted-Fleet Vehicles (Tactical, Law Enforcement, Emergency, Etc.)	356	323
Total Amount Contracts Awarded as Reported in FPDS ($Millions)	$1,984.607	$1,500.886

Goal 1: Greenhouse Gas (GHG) Reduction

Agency Progress toward Scope 1 & 2 GHG Goals

E.O. 13514 requires each agency establish a Scope 1 & 2 GHG emission reduction target to be achieved by FY 2020. The red bar represents the agency's FY 2008 baseline. The green bar represents the FY 2020 target reduction. The blue bars represent annual agency progress towards achieving this target. The percentage at the top of each bar represents the reduction or increase from the FY 2008 baseline. A negative percentage value indicates that the emissions have decreased compared to the 2008 baseline.

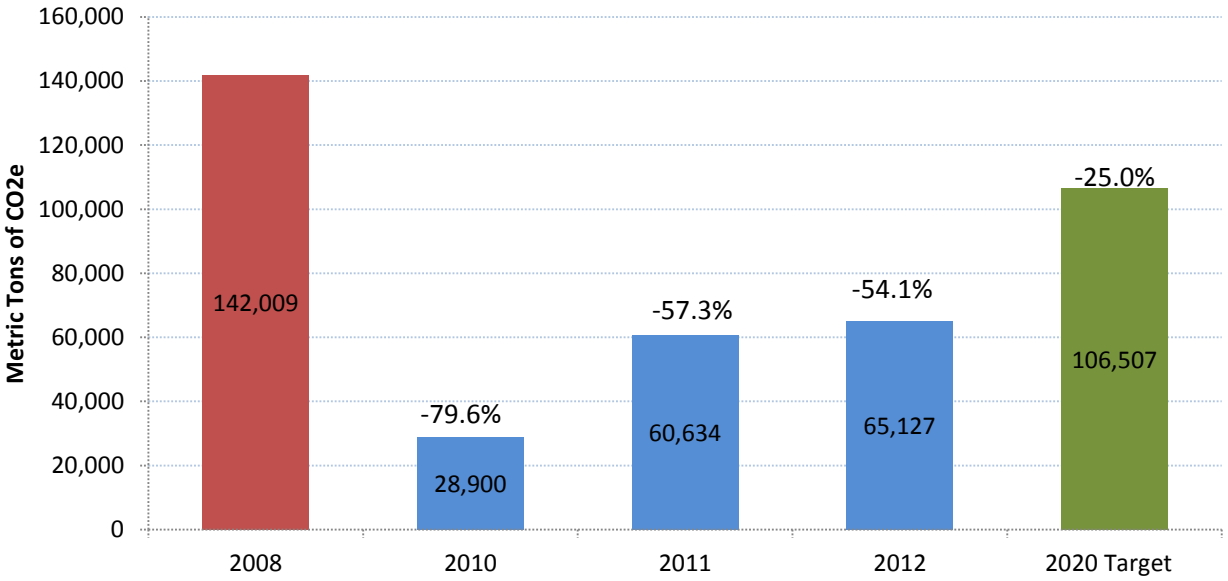

160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
Metric Tons of CO2e
142,009
-79.6%
28,900
-57.3%
60,634
-54.1%
65,127
-25.0%
106,507
2008
2010
2011
2012
2020 Target

Table 1-1: Goal 1 Strategies - Scope 1 & 2 GHG Reductions

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Use the FEMP GHG emission report to identify/target high emission categories and implement specific actions to resolve high emission areas identified.	No	EPA already relies on this strategy to prioritize opportunities, so the Agency currently focuses on implementing the enumerated top five strategies to reduce Scope 1 and Scope 2 GHG emissions at its facilities.	N/A
Ensure that all major renovations and new building designs are 30% more efficient than applicable code.	Yes	For new designs and major retrofits, EPA uses the GreenCheck system to monitor compliance with the 30 percent better than ASHRAE standard. GreenCheck is a compilation of all federal environmental and green building requirements that project managers must complete on each project. GreenCheck serves to educate and remind project managers of requirements as well as inform architecture and engineering (A&E) firms designing projects for the Agency. EPA also mandates that all leases involving new construction comply with these performance requirements.	(1) By December 2013, begin discussions with the U.S. General Services Administration (GSA) regarding EPA's Chapel Hill, North Carolina, laboratory lease to accommodate downsizing and new mechanical systems. (2) By December 2013, award the design for Phase 2 of an infrastructure replacement project (IRP) and rightsizing at EPA's Montgomery, Alabama, laboratory.
Implement in EISA 432 covered facilities all lifecycle cost effective ECMs identified.	No	EPA uses its Energy Strategy document to determine and implement cost-effective ECMs identified.	N/A
Reduce on-site fossil-fuel consumption by installing more efficient boilers, generators, furnaces, etc.	Yes	EPA has taken two approaches to address boiler plants. Aging boilers are replaced with new, more efficient, and more appropriately sized boilers. In facilities with oversized boilers, the boiler burners are replaced with small	Receive preliminary assessment for boiler replacement ESPC at EPA's Andrew W. Breidenbach Environmental Research Center (AW-

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
and/or use renewable fuels.		burners, increasing efficiency without the cost of a complete boiler replacement. EPA also considers ground source heat pump systems where appropriate.	BERC) in Cincinnati, Ohio, by July 2013.
Reduce grid-supplied electricity consumption by improving/upgrading motors, boilers, HVAC, chillers, compressors, lighting, etc.	Yes	EPA requires the use of high-efficiency lighting, motors, chillers, and compressors in its design and construction specifications. EPA's conversion of laboratories from constant volume (CV) to variable air volume (VAV), rightsizing laboratories where possible, and meeting high research heat loads through process water-free cooling systems reduce cooling and ventilation loads, and thus electricity use. EPA has piloted 24-watt fluorescent systems and LED office lighting systems, as well as vacancy sensors.	(1) Complete installation of new lighting control system at EPA's Ecosystems Research Division (ERD) laboratory in Athens, Georgia, by December 2013. (2) Complete lighting control system upgrades at EPA's Fort Meade, Maryland, Environmental Science Center by June 2014.
Employ operations and management best practices for energy consuming and emission generating equipment.	Yes	EPA implements best practices for energy-efficient operations through several strategies. Through EISA Section 432 energy assessments and recommissioning, EPA identifies and addresses operating and energy efficiency opportunities and educates its facility managers and operations and maintenance (O&M) staff. EPA requires commissioning for all significant construction and mechanical system projects, and employs its Guiding Principles certification process to simultaneously improve operations and document efficient standard operating procedures. At some laboratories, EPA has developed customized "system mode operating tests" to ensure all systems (including air distribution systems and individual laboratory ventilation controls) operate in a cohesive and efficient manner.	(1) Complete EISA Section 432 Round 5 facility assessments and commissioning requirements by July 2013. (2) Complete Guiding Principles certification at one additional laboratory by December 2013.

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Install building utility meters and benchmark performance to track energy and continuously optimize performance.	No	EPA advanced metering hardware captures 72 percent of the Agency's reportable energy consumption, and EPA annually benchmarks energy use in the Laboratories for the 21st Century (Labs21®) Energy Benchmarking Tool. As these practices are embedded standard operating procedures (SOPs) for EPA, the Agency currently focuses on implementing the enumerated top five strategies to reduce Scope 1 and 2 GHG emissions at its facilities.	N/A
Safely reduce laboratory ventilation rates to save energy	Yes	Re-circulated air is standard practice in office space. Laboratories are energy-intensive, one-pass air facilities, where 100 percent of outside air is conditioned, passed through a laboratory, and exhausted outside. EPA is carefully reducing laboratory ventilation by: using high-performance, low-flow fume hoods; "hibernating" fume hoods where safe and appropriate and updating specifications to require hibernation of fume hoods and controls systems; reducing air flow rates while maintaining containment using the new ASHRAE/ANSI Z9.5 standards; including occupancy sensors to allow lower air change rates in unoccupied laboratories; and improving the operational efficiency of its biosafety cabinets.	Complete unoccupied/lower flow control and operating pilot project for biosafety cabinets at the Agency's main campus in Research Triangle Park (RTP), North Carolina, by June 2014.

Agency Progress towards Scope 3 GHG Goal

E.O. 13514 requires each agency establish a Scope 3 GHG emission reduction target to be achieved by FY 2020. The red bar represents the agency's FY 2008 baseline. The green bar represents the FY 2020 reduction target. The blue bars represent annual agency progress on achieving this target. The percentage at the top of each bar represents the reduction or increase from the FY 2008 baseline. A negative percentage value indicates that the emissions have been decreased compared to the FY 2008 baseline.

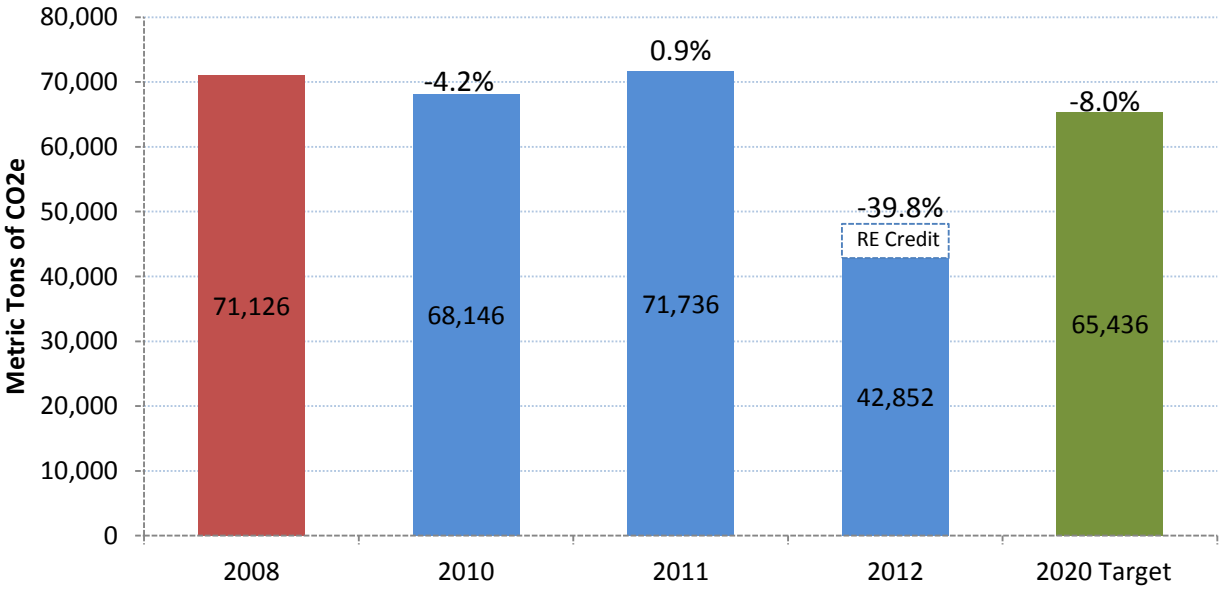

80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
Metric Tons of CO2e
71,126
-4.2%
68,146
0.9%
71,736
-39.8%
RE Credit
42,852
-8.0%
65,436
2008
2010
2011
2012
2020 Target

Table 1-2: Goal 1 Strategies - Scope 3 GHG Reductions

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Reduce employee business ground travel.	Yes	In October 2010, EPA completed installation of 50 video-conferencing units (VCUs) as an alternative to face-to-face meetings involving air and ground business travel. Additional VCUs have been installed since that time. Partly as a result of these activities, EPA reduced its GHG emissions from business ground travel by 68 percent in FY 2012 compared to the FY 2008 baseline. EPA expects to maintain at least a 50 percent reduction in business ground travel GHG emissions in future years.	Maintain EPA policies on reduced travel and increased videoconferencing use through June 2014.
Reduce employee business air travel.	Yes	In October 2010, EPA completed the installation of 50 VCUs to provide an alternative to face-to-face meetings involving air and ground business travel. Additional VCUs have been installed since that time. Partly as a result of these activities, EPA reduced its GHG emissions from business air travel by 46 percent in FY 2012 compared to the FY 2008 baseline. EPA expects to maintain at least a 35 percent reduction in this category of Scope 3 GHG emissions in future years.	Maintain EPA policies on reduced travel and increased videoconferencing use through June 2014.
Develop and deploy employee commuter reduction plan.	No	EPA is already leveraging its transit subsidy program. In conjunction with the aforementioned telework policy, EPA anticipates successfully achieving its employee commuting reduction goal.	N/A
Use employee commuting survey to identify opportunities and strategies for reducing commuter emissions.	No	The Agency already conducts an employee commuting survey using GSA's Carbon Footprint Tool, but has not yet identified its best opportunities to reduce commuting emissions by analyzing survey results.	N/A
Increase number of employees eligible for	Yes	EPA is working with its unions to establish an Agency telework policy that increases the number	Maintain or update EPA policies on tele-

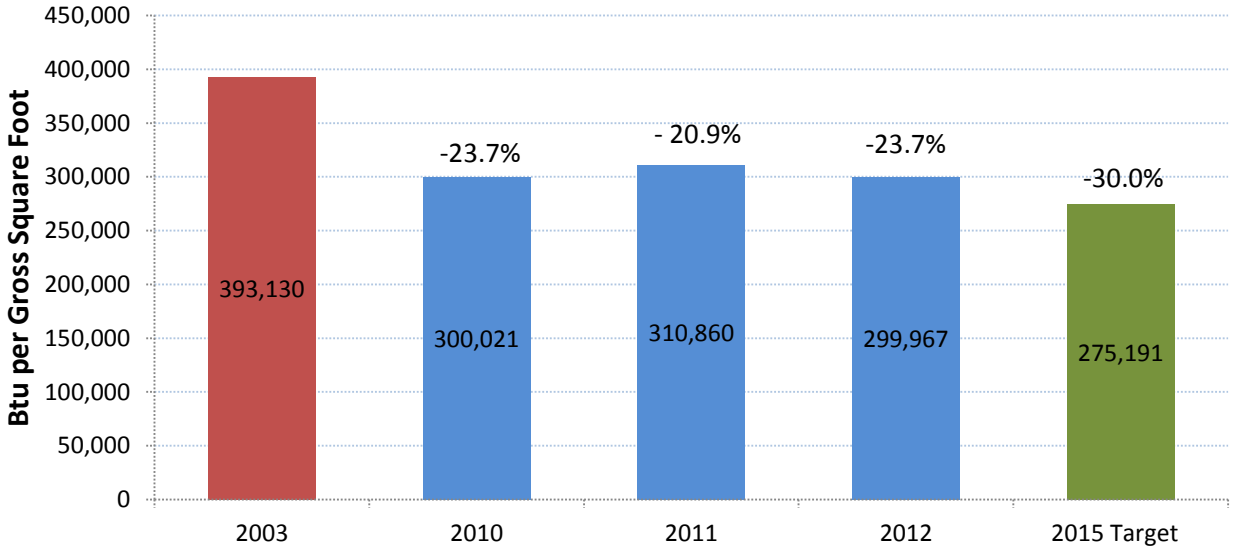
(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
telework and/or the total number of days teleworked.		of hours employees can telework per pay period. Once this is complete, the Agency will work with its unions and employees to leverage the number of telework hours available to employees.	work through June 2014.
Develop and implement bicycle commuter program.	No	EPA supports bicycle commuting in many of its locations with secure racks, shower facilities, etc., but at this time a formal, Agencywide bicycle commuter program is not one of the top five priorities for this goal area.	N/A
Provide bicycle commuting infrastructure.	Yes	In addition to a transit subsidy program with high levels of participation, EPA provides secure bike facilities at most major regional offices and Headquarters facilities.	Maintain existing infrastructure through June 2014.
Reconfigure and streamline office space to reduce Scope 3 GHG emissions from leased space.	Yes	As EPA employees telework to a greater degree, both via the increase in number of days of telework per week and via deployment of collaborative software services available from non-traditional workplaces, the needs and design of workspaces will change. EPA can serve its employees using smaller workstations or touchdown stations, resulting in a smaller space footprint, rent cost reductions, and a reduction in optionally reported Scope 3 GHG emissions from energy use in leased space.	Initiate master planning for Headquarters office space consolidation by December 2013.

Goal 2: Sustainable Buildings

Agency Progress toward Facility Energy Intensity Reduction Goal

E.O. 13514 Section 2 requires that agencies consider building energy intensity reductions. Further, the Energy Independence and Security Act of 2007 (EISA) requires each agency to reduce energy intensity 30 percent by FY 2015 as compared to the FY 2003 baseline. Agencies are expected to reduce energy intensity by 3 percent annually to meet the goal. The red bar represents the agency's FY 2003 baseline. The green bar represents the FY 2015 target reduction. The blue bars show annual agency progress on achieving this target. The percentage at the top

of each bar represents the reduction or increase from the FY 2003 baseline. A negative percentage value indicates that the energy intensity has been decreased compared to the FY 2003 baseline.


Btu per Gross Square Foot
450,000
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
0
393,130
-23.7%
300,021
- 20.9%
310,860
-23.7%
299,967
-30.0%
275,191
2003
2010
2011
2012
2015 Target

Agency Progress toward Total Buildings Meeting the Guiding Principles

E.O. 13514 requires that by FY 2015, 15 percent of agencies' new, existing, and leased buildings greater than 5,000 square feet meet the Guiding Principles. In order to meet the FY 2015 goal, agencies should have increased the percentage of conforming buildings by approximately 2 percent annually from their FY 2007 baseline. The green bar represents the FY 2015 target. The blue bars represent annual agency progress on achieving this target.

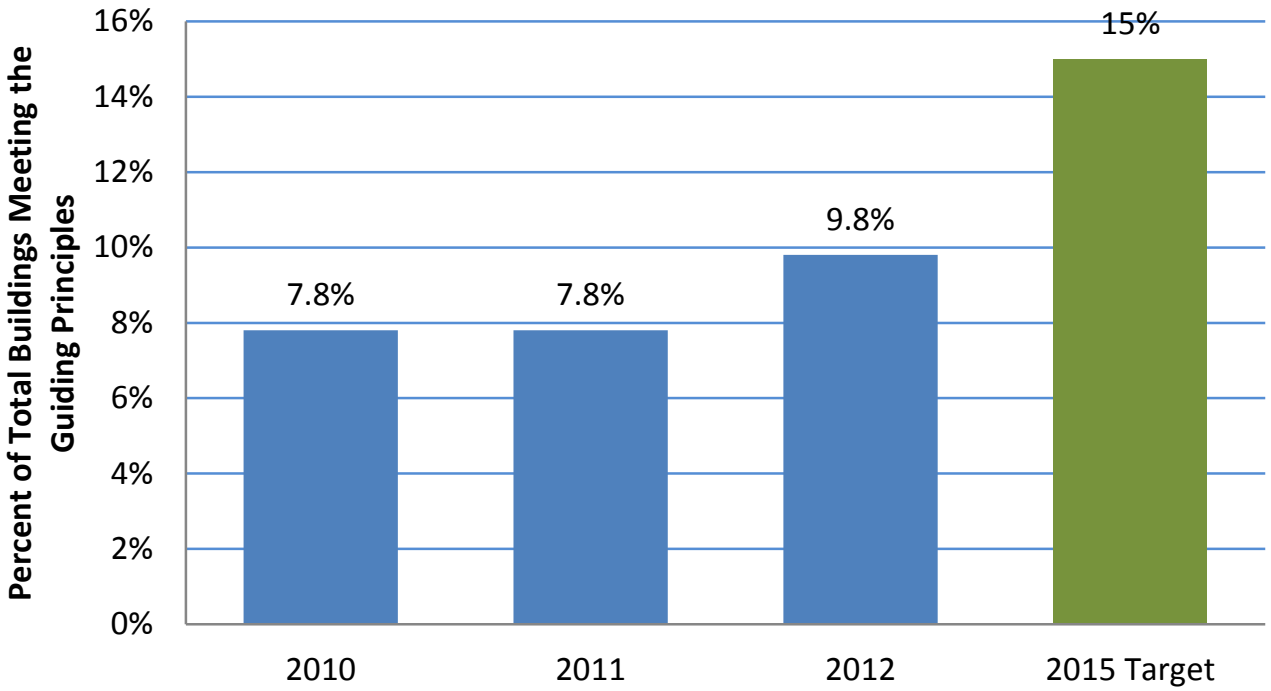

Percent of Total Buildings Meeting the Guiding Principles
16%
14%
12%
10%
8%
6%
4%
2%
0%
7.8%
7.8%
9.8%
15%
2010
2011
2012
2015 Target

Table 2: Goal 2 Strategies – Sustainable Buildings

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Incorporate green building specifications into all new construction and major renovation projects.	Yes	EPA uses its GreenCheck system to review every significant lease, repair, improvement, and construction project to ensure that it meets the multiple legal and EO requirements for green building. The Agency maintains A&E Guidelines that incorporate EPA and federal environmental performance requirements. EPA also maintains a Best Practices (Environmental) Lease Provisions inventory to ensure newly constructed and renovated leased space meets EPA and federal green building requirements.	Update A&E Guidelines to include any new environmental performance requirements by June 2014.
Redesign or lease interior space to reduce energy use by daylighting, space optimization, sensors/control system installation, etc.	Yes	EPA emphasizes daylighting in its construction and repair and improvement projects through GreenCheck and its A&E Guidelines, and in lease procurement documents through GreenCheck and Best Practice (Environmental) Lease Provisions. EPA specifically assesses daylighting in its high performance sustainable existing building certification process and installs or upgrades lighting controls for energy savings and to improve indoor environmental quality.	Evaluate at least one EPA facility for daylighting, occupancy sensors, and individual control capabilities by December 2013.
Deploy CEQ's Implementing Instructions - Sustainable Locations for Federal Facilities.	No	EPA is implementing the Council on Environmental Quality's (CEQ's) Instructions for Sustainable Locations for Federal Facilities as part of the GreenCheck system mentioned in the top five priorities above, but it is not among its top five priorities unless a new site is being considered.	N/A
Include in every construction contract all applicable sustainable ac-	Yes	The GreenCheck system ensures that the design and specification of all construction projects meet the requirements for recycled content, biobased,	Audit 5 percent of GreenCheck forms to ensure compliance with

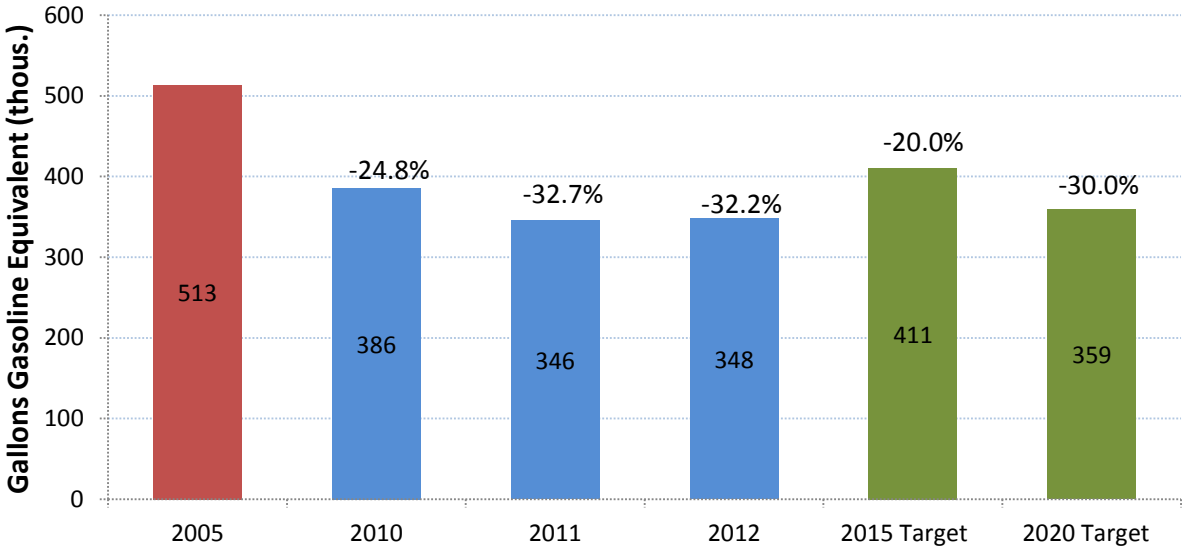
(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
quisition requirements for recycled, biobased, energy efficient, and environmentally preferable products.		energy efficiency, and environmentally preferable products. EPA construction contract language also addresses these requirements.	federal requirements by December 2013.
Develop and deploy energy and sustainability training for all facility and energy managers.	No	EPA provides training to facility managers where necessary and appropriate. Due to budget constraints and travel restrictions, this is not currently among the Agency's top five priorities.	NA
	NA		
Develop own system of assessing, addressing, documenting and certifying Existing Buildings as meeting the Guiding Principles.	Yes	While some green building rating systems set out rigorous performance requirements and provide high quality conformance assurance for the design, construction, and operation of high performance sustainable buildings, meeting the highly technical submittal requirements can often be unnecessarily complex and costly. EPA has chosen to assess, improve, document, and certify those facilities that meet high performance sustainable building standards using a transparent and verifiable system of performance and policy documentation. The system addresses all the Guiding Principles and sub-principles and allows EPA to apply limited green building funding more efficiently.	Increase the portion of EPA's existing buildings meeting the Guiding Principles to 13.1 percent by October 2014.
Rightsizing research infrastructure	Yes	When addressing laboratories that require mechanical system replacement, EPA challenges researchers to establish thoughtful research requirements, designs laboratory infrastructure to match current research practices, and aims to provide a safe working environment while minimizing extra capacity. Recent projects have resulted in fume	Continue to emphasize needsbased program of requirements development through June 2014, as additional IRPs are added to EPA's long-range facil-

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
		hood reductions of 25 and 30 percent, respectively, in two EPA laboratories in Montgomery, Alabama, and Narragansett, Rhode Island. In addition, the consolidation of EPA's Research Toxicology Facility (RTF) in Durham, North Carolina, into the main laboratory in RTP will achieve a net space reduction of 35,000 rentable square feet.	ity reconstruction schedule.

Goal 3: Fleet Management

Agency Progress toward Fleet Petroleum Use Reduction Goal

E.O. 13514 and the Energy Independence and Security Act of 2007 (EISA) require that by FY 2015 agencies reduce fleet petroleum use by 20 percent compared to a FY 2005 baseline. Agencies are expected to achieve at least a 2 percent annual reduction and a 30 percent reduction is required by FY 2020. The red bar represents the agency's FY 2005 baseline. The green bars represent the FY 2015 and FY 2020 target reductions. The blue bars represent annual agency progress on achieving these targets. The percentage at the top of each bar represents the reduction or increase from the FY 2005 baseline. A negative percentage indicates a decrease in fleet petroleum use.


Gallons Gasoline Equivalent (thous.)
600
500
400
300
200
100
0
513
386
346
348
411
359
-24.8%
-32.7%
-32.2%
-20.0%
-30.0%
2005
2010
2011
2012
2015 Target
2020 Target

Agency Progress toward Fleet Alternative Fuel Consumption Goal

E.O. 13423 requires that agencies increase total alternative fuel consumption by 10 percent annually from the prior year starting in FY 2005. By FY 2015, agencies must increase alternative fuel use by 159.4 percent, relative to FY 2005. The red bar represents the agency's FY 2005 baseline. The green bar represents the FY 2015 target. The blue bars represent annual agency progress on achieving this target. The percentage at the top of each bar represents the reduction or increase from the FY 2005 baseline. A negative percentage indicates a decrease in fleet alternative fuel use.

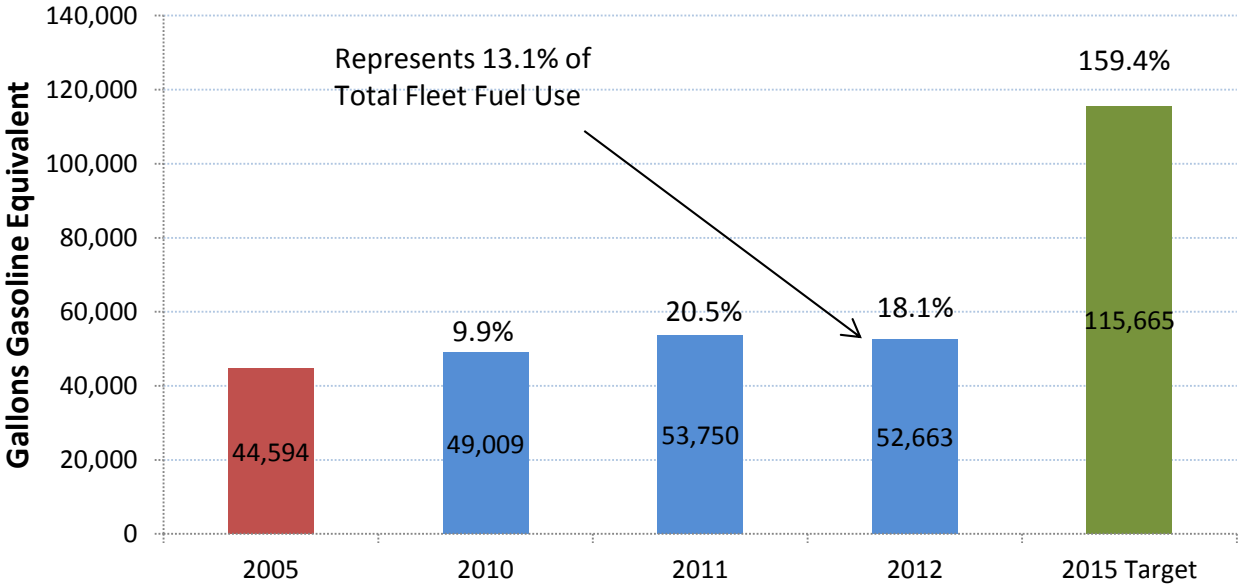

Gallons Gasoline Equivalent
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
Represents 13.1% of
Total Fleet Fuel Use
9.9%
20.5%
18.1%
159.4%
44,594
49,009
53,750
52,663
115,665
2005
2010
2011
2012
2015 Target

Table 3: Goal 3 Strategies – Fleet Management

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Optimize/Rightsize the composition of the fleet (e.g., reduce vehicle size, eliminate underutilized vehicles, acquire and locate vehicles to match local fuel infrastructure).	Yes	Continue to identify underutilized vehicles and right-size fleet inventory as part of the annual vehicle allocation methodology (VAM) process.	EPA's FY 2015 VAM reduction goal was 4.2 percent of total fleet. The Agency will achieve an 8.3 percent reduction in fleet size by September 30, 2013, and will continue to assess its fleet to see if further reductions are feasible.
Reduce miles traveled (e.g., share vehicles, improve routing with telematics, eliminate trips, improve scheduling, use shuttles, etc.).	Yes	EPA will continue to encourage trip consolidation policies, utilize teleconferencing to eliminate vehicle use, and encourage shuttle bus use.	Through June 2014: (1) Highlight the importance and impact of trip consolidation in fleet communications. (2) Increase Agencywide video-conferencing use. (3) Continue shuttle bus service in National Capitol Region and encourage other EPA facilities to do the same.
Acquire only highly fuel-efficient, low greenhouse gas-emitting vehicles and alternative fuel vehicles (AFVs).	Yes	EPA will continue to monitor and approve all new acquisitions at the Headquarters level to ensure compliance.	Achieve 75 percent EPAct requirement for FY 2013 acquisitions by September 30, 2013.
Increase utilization of alternative fuel in dual-fuel vehicles.	Yes	EPA plans to increase use of plug-in hybrid electric vehicles (PHEVs). The Agency will continue to communicate and set targets for alternative fuel use and share strategies with field operations.	(1) Increase fleet electricity consumption by 100 percent compared to FY2012. (2) Achieve 80 percent electricity utilization in PHEVs. (3) Hold annual workshop and quarterly data calls to communicate alternative fuel information.
Use a Fleet Management Information System to track fuel consumption throughout the year for agency-owned, GSA-leased, and commercially-leased vehicles.	Yes	EPA will maintain and enhance its fleet database, the Automotive Statistical Tool (AST), to include monitoring of fuel consumption, PHEVs, etc.	Develop new reporting mechanism for PHEVs for monitoring purposes, begin checking fuel consumption within AST each quarter, and report out to relevant stakeholders by June 2014.

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Increase GSA leased vehicles and decrease agency-owned fleet vehicles, when cost effective.	No	EPA reviewed its Agency-owned fleet and determined that nearly all of these vehicles were highly specialized and could not be replaced with GSA-leased vehicles without affecting mission requirements.	NA

Goal 4: Water Use Efficiency & Management

Agency Progress toward Potable Water Intensity Reduction Goal

E.O. 13514 requires agencies to reduce potable water intensity by 2 percent annually through FY 2020 compared to an FY 2007 baseline. A 16 percent reduction is required by FY 2015 and a 26 percent reduction is required by FY 2020. The red bar represents the agency's FY 2007 baseline. The green bars represent the FY 2015 and FY 2020 target reductions. The blue bars represent annual agency progress on achieving these targets. The percentage at the top of each bar represents the reduction or increase from the FY 2007 baseline. A negative percentage value indicates that portable water use intensity has decreased compared to the FY 2007 baseline.

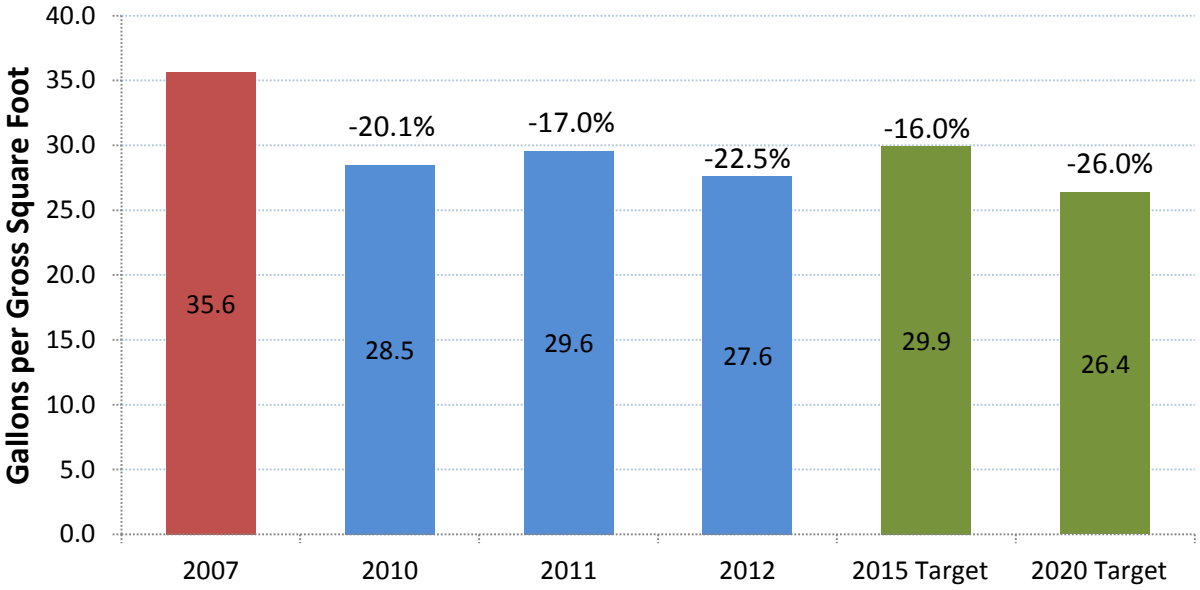

Gallons per Gross Square Foot
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
35.6
-20.1%
28.5
-17.0%
29.6
-22.5%
27.6
-16.0%
29.9
-26.0%
26.4
2007
2010
2011
2012
2015 Target
2020 Target

Table 4: Goal 4 Strategies – Water Use Efficiency & Management

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Purchase and install water efficient technologies (e.g., Waterwise, low-flow water fixtures and aeration devices).	Yes	EPA has introduced WaterSense label language in contracts for all urinal and showerhead replacements. (WaterSense labeled toilets and faucets have not been added to contract language because most facilities use flushometer valve toilets, which are not labeled by WaterSense, and have installed public use faucets with flow rates already below WaterSense specifications). Approximately 30 percent of EPA facilities' urinals, 40 percent of toilets, and 80 percent of faucets have been replaced/retrofitted with water-efficient devices. EPA intends to retrofit the remainder of appropriate toilets, urinals, faucets, and showerheads when time and budget resources permit.	Implement water-efficient fixture projects at three facilities by October 2014.
Develop and deploy operational controls for leak detection including a distribution system audit, leak detection, and repair programs.	Yes	EPA facility managers and O and M contractors conduct frequent walk-throughs of their facilities to check for leaks. Meter readings catch abnormal fluctuations in water usage. Water assessments conducted once every four years help ensure there are no major leaks.	(1) Identify/ correct leaks within one quarter after they are identified, to align with water data tracking. (2) Continue assessing facilities at least every four years to identify issues.
Design, install, and maintain landscape to reduce water use.	Yes	Only six of EPA's facilities use supplemental water for irrigation. At those facilities, audits have been conducted and upgrades have been made to minimize irrigation water use. EPA has evaluated xeriscaping designs for all applicable facilities but has not found potential projects to be cost-effective.	By June 2014: (1) Discontinue irrigation water use at one facility. (2) Complete one native landscaping pilot project.
Design and deploy water closed-loop, capture, recharge, and/or reclamation systems.	Yes	EPA is working to implement air handler condensate recovery (AHCR) projects at all facilities where climateappropriate. As of FY 2012, the Agency had implemented these pro-	Implement AHCR projects at two facilities by June 2014.

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
		jects at 70 percent of applicable facilities. EPA is planning to nearly eliminate single-pass cooling at all facilities (completed at seven facilities as of FY 2012). A rainwater recovery system is in place at one facility, and five facilities are capturing rainwater or reverse osmosis reject for reuse in other applications. EPA has already eliminated continuous flow tempering water in all steam sterilizers.	
Install meters to measure and monitor industrial, landscaping, and agricultural water use.	Yes	EPA plans to install meters on all remaining ILA uses. As of FY 2012, the Agency had installed meters for six of eight uses where metering is practical.	By October 2015: (1) Install metering for one remaining ILA water use. (2) Discontinue ILA water use at one unmetered end use.

Goal 5: Pollution Prevention & Waste Reduction

Agency Progress toward Pollution Prevention & Waste Reduction

E.O. 13514 requires that Federal agencies promote pollution prevention and eliminate waste. The E.O. requires agencies to minimize the use of toxic and hazardous chemicals and pursue acceptable alternatives. It also requires agencies minimize waste generation through source reduction, increase diversion of compostable materials, and by the end of FY 2015 divert at least 50% of non-hazardous and 50% of construction and demolition debris.

Table 5: Goal 5 Strategies – Pollution Prevention & Waste Reduction

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Eliminate, reduce, or recover refrigerants and other fugitive emissions.	Yes	EPA will continue to phase out applicable ozone-depleting substances (ODSs) in FY 2013 and require written ODS management plans for all Environmental	Develop ODS management plans for half of reporting locations that do not already have a plan by June 2014.

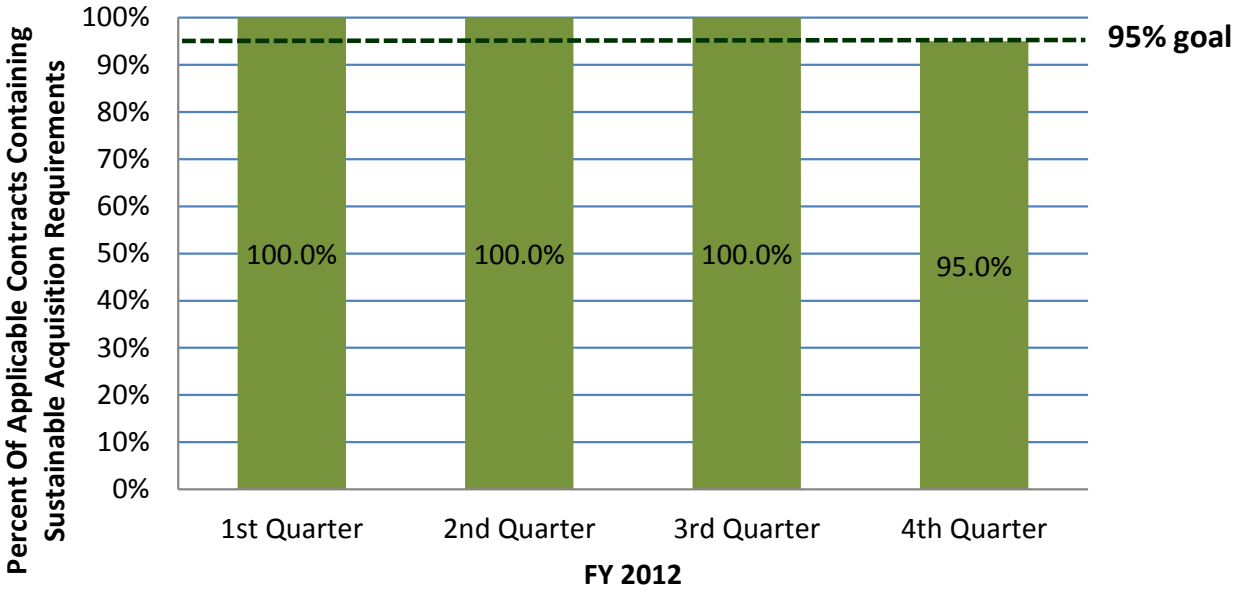
(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
		Management System (EMS) sites. Plans should include phase-out strategies and inventories for Class I and Class II ODS. Plans are currently in place for 86 percent of the reporting locations that still have equipment containing applicable ODSs.	
Reduce waste generation through elimination, source reduction, and recycling.	Yes	EPA will continue to require reporting locations to develop and report local waste diversion and/or recycling targets and encourage its facilities to pursue composting programs and provide related resources and best management practices.	Divert at least 60 percent of non-hazardous solid waste Agency-wide by the end of FY 2014 and continue to improve baselines for applicable reporting locations.
Implement integrated pest management and improved landscape management practices to reduce and eliminate the use of toxic and hazardous chemicals/materials.	Yes	EPA will implement integrated pest management (IPM), hardscape management, and/or landscape management best practices at applicable locations to reduce and eliminate the use of toxic and hazardous chemicals and materials.	(1) Implement IPM and improved landscape and hardscape management practices through the Agency's "Existing Buildings Meet the Guiding Principles" program. Complete Guiding Principles certification at one additional facility by October 2013. (2)Track sites employing best practices for IPM, landscape management, and/or hardscape management practices through the Agency's Environmental Stewardship Report.
Establish a tracking and reporting system for construction and demolition debris elimination.	Yes	EPA will continue to track C&D debris using a new tracking and reporting system to better measure C&D debris and waste, identify opportunities for improvement, and reduce the quantity of recyclable or reusable construction materials sent to landfills.	(1) Implement the new C&D debris tracking system by the end of 2013. (2) Divert at least 75 percent of C&D materials and debris by FY 2015 for all construction/renovation projects greater than 20,000 square feet.

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Develop/revise Agency Chemicals Inventory Plans and identify and deploy chemical elimination, substitution, and/or management opportunities.	Yes	EPA will continue to require facilities to have green cleaning policy/programs focused on green cleaning products and methods used in facilities and promote responsible chemical management and leverage the use of the Agencywide EMS objectives, targets, and metrics to set chemical management targets. EPA will also seek ways to minimize the quantity of toxic and hazardous chemicals used in laboratories by incorporating green chemistry principles and techniques into laboratory methods and SOPs.	Release updated Agencywide EMS objectives, targets, and metrics focused on chemical management by first quarter of FY 2014.

Goal 6: Sustainable Acquisition

Agency Progress toward Sustainable Acquisition Goal

E.O. 13514 requires agencies to advance sustainable acquisition and ensure that 95 percent of applicable new contract actions meet federal mandates for acquiring products that are energy efficient, water efficient, biobased, environmentally preferable, non-ozone depleting, recycled content, or are non-toxic or less toxic alternatives, where these products meet performance requirements. To monitor performance, agencies perform quarterly reviews of at least 5 percent of applicable new contract actions to determine if sustainable acquisition requirements are included.


Percent Of Applicable Contracts Containing Sustainable Acquisition Requirements
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
100.0%
100.0%
100.0%
95.0%
95% goal
1st Quarter
2nd Quarter
3rd Quarter
4th Quarter
FY 2012

Federal Procurement Data System Standard Reports on Biopreferred Procurement Actions

The Federal Procurement Data System (FPDS) is used by federal agencies to record and manage contract actions. On the pie chart below, the blue area represents the total number of contract actions reported by the agency in FPDS in FY 2012 that are "applicable" to the sustainable procurement requirements. Applicable contract actions are new domestic contracts, task and delivery orders, excluding weapons systems and those actions that are unlikely to use biobased products (e.g., research and social development contracts, education and training, social services, and the lease or rental of equipment). The green area represents the total number of applicable contract actions that the agency reported in FPDS as containing biobased product requirements.

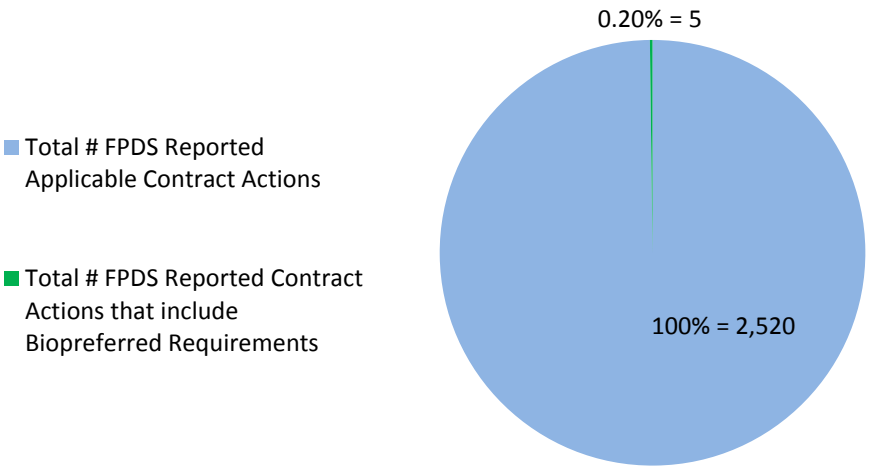

0.20% = 5
Total # FPDS Reported Applicable Contract Actions
Total # FPDS Reported Contract Actions that include Biopreferred Requirements
100% = 2,520

Table 6: Goal 6 Strategies – Sustainable Acquisition

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Update and deploy agency procurement policies and programs to ensure that federally-mandated designated sustainable products are included in all relevant procurements and services.	Yes	EPA plans to update its GPP and several related policies pursuant to the Policy Reformation and Restoration Project. EPA will also launch a survey regarding the Environmentally Preferable Purchasing Program for all federal agencies.	In FY 2014, address sustainable acquisition policy revisions and updates via a Balanced Scorecard (BSC) Initiative and identify milestones to be monitored, discussed, and adjusted on a quarterly basis.
Deploy corrective actions to address identified barriers to increasing sustainable procurements with special emphasis on biobased purchasing.	Yes	EPA will work to improve data accuracy (including data for biobased products and services) during the acquisition planning phase and training.	In FY 2014: (1) Reassess the biobased purchasing baseline. (2) Implement methodologies to ensure accuracy of data reported into FPDS-NG. (3) Continue training acquisition staff. (4) Work with program offices that write the requirements for construction, landscaping, janitorial and other applicable services. (5) Review the Annual Acquisition Forecast to identify requirements with the potential to use sustainable products and services.
Include biobased and other FAR sustainability clauses in all applicable construction and other relevant service contracts.	Yes	As part of EPA's FY 2013 BSC Strategic Enhancements for Ensuring Compliance with Sustainability Requirements, the Agency will emphasize outreach and discussion with the acquisition and facilities management staff responsible for developing requirements and solicitations for construction, landscaping, janitorial, and other applicable service contracts.	Use results of the FY 2013 BSC to create the FY 2014 BSC, including specific milestones to be monitored, discussed, and adjusted on a quarterly basis.
Review and update agency specifications to	NA	This strategy is not applicable because in January 2013, USDA advised EPA	N/A

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
include and encourage biobased and other designated green products to enable meeting sustainable acquisition goals.		that the definition of "specification" does not apply to statement of work/statement of objectives language. Also, OMB did not require EPA to discuss "performance review of 25 percent of the applicable formal specifications" in OMB's 2012 mid-year Sustainability/Energy Scorecard. Further, OMB did not require EPA to discuss "agency specification reviews" in its addendum to the Agency's 2012 SSPP.	
Use Federal Strategic Sourcing Initiatives, such as Blanket Purchase Agreements (BPAs) for office products and imaging equipment, which include sustainable acquisition requirements.	Yes	EPA will continue to promote Agencywide use of the Federal Strategic Sourcing Initiative for office supplies and domestic delivery service vehicles. During FY 2014, the strategic purchasing approach will be expanded to include solution(s) for satisfying Agencywide requirements for all EPEAT-registered products.	Track EPEAT-registered imaging equipment and televisions in the first quarter of FY 2014. If the results reflect less than the 100 percent ENERGY STAR-qualified and FEMP-designated and/or 95 percent EPEAT goal, EPA will work to achieve the compliance rate for the remainder of FY 2014. This effort will be monitored by conducting reviews in the second through fourth quarters of FY 2014.
Report on sustainability compliance in contractor performance reviews.	Yes	EPA will continue employee training and update its policy requiring sustainability compliance to be addressed on contractor performance evaluations. EPA plans to make a recommendation	In FY 2014, conduct an assessment of the quality of contractor performance evaluations. Assess 10 percent of applicable contracts with a goal of 25 percent compli-

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
		to the Federal Awardee Performance and Integrity Information System (FAPIIS) change control board that a performance category for sustainability compliance be added to the Contractor Performance Assessment Rating System.	ance the first year. Include strategy in the FY 2014 BSC.

Goal 7: Electronic Stewardship & Data Centers

Agency Progress toward EPEAT, Power Management & End of Life Goals

E.O. 13514 requires agencies to promote electronics stewardship by: ensuring procurement preference for EPEAT-registered products; implementing policies to enable power management, duplex printing, and other energy-efficient features; employing environmentally sound practices with respect to the disposition of electronic products; procuring Energy Star and FEMP designated electronics; and, implementing best management practices for data center operations.

EPEAT	POWER MANAGEMENT	END-OF-LIFE	COMMENTS
			

EPEAT:

	95% or more Monitors and PCs/Laptops purchased in FY2012 was EPEAT Compliant Agency-wide
	85-94% or more Monitors and PCs/Laptops purchased in FY2012 was EPEAT Compliant Agency-wide
	84% or less Monitors and PCs/Laptops purchased in FY2012 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, Unicor or Certified Recycler (R2, E-Stewards)
	100% of Electronics at end-of-life disposed through GSA Xcess, CFL, Unicor and/or non-Certified Recycler
	Less than 100% of Electronics at end-of-life disposed through GSA Xcess, CFL, Unicor or non-Certified Recycler

Table 7: Goal 7 Strategies – Electronic Stewardship & Data Centers

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Identify agency "Core" and "Non-Core" Data Centers.	Yes	EPA designated four of the Agency's data centers as "core" data centers using the Federal Data Center Consolidation Initiative (FDCCI) Core Data Center Evaluation tool. Core data centers are the designated destination for internally hosted enterprise applications.	By October 2013, establish a policy to define enterprise applications and require that all internally hosted enterprise applications are hosted in EPA core data centers.
Consolidate 40% of agency Non-Core Data Centers.	No	EPA designated 25 of 75 non-core data centers for consolidation and or closure by Q4 2015, which will achieve a 33 percent reduction. EPA will continue closures as scheduled and report to the FDCCI Task Force.	(1) Achieve 17 non-core data center closures by Q1 2014. (2) Identify four additional non-core data centers for closure by Q3 2014.
Optimize agency Core Data Centers across total cost of ownership metrics.	Yes	EPA plans to consolidate enterprise applications to designated core data centers to maximize utilization of shared infrastructure and resources.	(1) By Q1 2014, establish an Agencywide inventory of enterprise applications and schedule for consolidation and/or migration to core data centers or Enterprise Cloud. (2) By Q3 2014, achieve 10:1 virtual operating system-to-virtualmachine host ratio across all core data centers.
Ensure that power management, duplex printing, and other energy efficiency or environmentally preferable options and features are enabled on all eligible electronics and monitor compliance.	Yes	EPA will continue to use the Agency's PC Configuration and Management Standard to ensure use of power management and duplex printing.	(1) Complete survey of printers by Q3 2013. (2) Complete any corrective actions for duplex printing enabling identified during survey by Q4 2013.
Update and deploy policies to use environ-	Yes	EPA will continue to follow GSA personal property disposition proced-	Ensure that 70 percent of Property Utilization Officers are employing

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
mentally sound practices for disposition of all agency excess or surplus electronic products, including use of certified eSteward and/or R2 electronic recyclers, and monitor compliance.		ures of transfer, donation, sale, and recycling of electronic equipment, using only Responsible Recycling Practices certified recyclers and Computers for Learning program. The Agency will deploy an improved personal property tracking system and updated policy.	the GSA Excess system. [NEED MILESTONE DATE]
Ensure acquisition of 95% EPEAT registered and 100% of ENERGY STAR qualified and FEMP designated electronic office products.	Yes	EPA currently tracks and reports the purchase of ENERGY STARqualified, FEMP-designated, and EPEAT-registered personal computers, notebook computers, and monitors. As a result of the recent expansion of the EPEAT Program to include imaging equipment and televisions, EPA must expand the tracking and reporting to include the agency's progress toward the 95 percent EPEAT acquisition goal inclusive of imaging equipment and televisions.	By Q1 FY 2014, track and report EPEAT-registered imaging equipment and televisions. If the results of product and contract compliance reviews reflect less than the 100 percent ENERGY STARqualified and FEMP-designated and/or 95 percent EPEAT goal, EPA will work to reach or exceed the compliance rate for these two commodities by at least 10 percent for the remainder of FY 2014. This effort will be monitored using the Federal Electronics Challenge (FEC) reporting and conducting reviews in Q2–Q4 FY 2014.

Goal 8: Renewable Energy

Agency Renewable Energy Percentage of Total Electricity Usage

E.O. 13514 requires that agencies increase use of renewable energy. Further, EPACT 2005 requires agencies to increase renewable energy use such that 7.5 percent of the agency's total electricity consumption is generated by renewable energy sources for FY 2013 and beyond. For FY 2012, the required target was 5 percent of an agency's total electricity consumption.

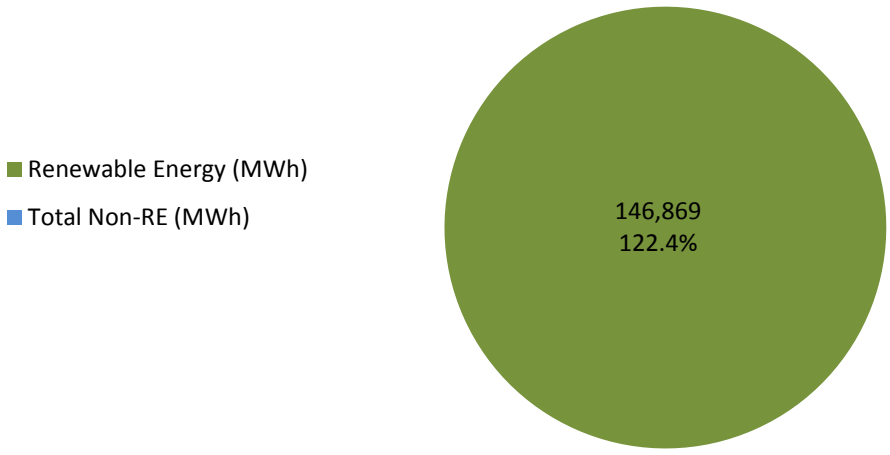

Renewable Energy (MWh)
Total Non-RE (MWh)
146,869
122.4%

Table 8: Goal 8 Strategies – Renewable Energy

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Purchase renewable energy directly or through Renewable Energy Credits (RECs).	Yes	In September 2006, EPA became the first federal agency to cover 100 percent of its estimated annual electricity use with green power. EPA will continue to procure RECs to lead by example, reduce its reported Scope 1 and 2 GHG emissions, and encourage green power market growth. EPA is currently procuring green power for FY 2014 via the Defense Logistics Agency (DLA).	Complete the Agency's FY 2014 green power purchase by December 2013.
Install onsite renewable energy on federal sites.	Yes	EPA continues to pursue onsite renewable energy projects where cost-effective, and implements demonstration projects where possible. Current projects include a solar hot water heating system in RTP, North Carolina. EPA is considering a renewable power ESPC contracting vehicle at the Edison, New Jersey, laboratory, which would support a 1- megawatt photovoltaic (PV) installation at that location.	By December 2013, answer interconnection agreement, title, and OMB issues, and either award contract or terminate procurement for the Edison PV installation.
Lease land for renewable energy infrastructure.	Yes	EPA currently licenses roof space on its child care facility in RTP, North Carolina, to Duke Energy for a 109-kilowatt PV installation. This installation was part of a state Public Utility Commissionapproved program in North Carolina. EPA will continue to participate where possible in similar programs.	Maintain existing leases for renewable energy installations through June 2014.
Develop biomass capacity for energy generation.	No	While EPA will always consider biomass where feasible, this is not one of the Agency's top five strategies in this area.	N/A
Utilize performance contracting methodologies for implementing ECMs and increasing renewable energy.	Yes	EPA has initiated work on a UESC to provide gas service to its Manchester, Washington, laboratory. The laboratory currently relies on fuel oil for its boilers; switching to natural gas	By June 2014, complete a preliminary feasibility study and initial discussions with UESC contract-

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
		should pay back the Agency's investment in less than six years and reduce GHG emissions from that facility by more than 35 percent. This project scope does not yet include a renewable energy component.	or for a project in Manchester, Washington.
Work with other agencies to create volume discount incentives for increased renewable energy purchases.	Yes	EPA has worked with DLA since 2006 to procure green power and RECs. DLA now procures large volumes of RECs under multi-agency REC procurements. EPA's requirements are now just a small portion of this procurement, which allows EPA to benefit from the large volume purchases.	Maintain existing procurement

Goal 9: Climate Change Resilience

Agency Climate Change Resilience

E.O. 13514 requires each agency to evaluate agency climate change risks and vulnerabilities to identify and manage the effects of climate change on the agency's operations and mission in both the short and long term.

Table 9: Goal 9 Strategies – Climate Change Resilience

(A) Will the agency implement the following strategies to achieve this goal?	(B) Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Ensure climate change adaptation is integrated into both agency-wide and regional planning efforts, in coordination with other Federal agencies as well as state and local partners,	Yes	EPA's Policy Statement on Climate-Change Adaptation directs the National Environmental Program and Support Offices and 10 Regional Offices to develop programmatic Implementation Plans detailing how to integrate climate adaptation into their planning and work, and help address the cross-EPA priorities identified in the Agencywide Plan. These offices	Complete and submit all draft National Environmental Program Office and Regional Office Implementation Plans to CEQ (as an amendment to this SSPP) by the end of June 2013.

(A) Will the agency implement the following strategies to achieve this goal?	(B) Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Tribal governments, and private stakeholders.		will have flexibility to develop their Implementation Plans in a manner consistent with their own circumstances and objectives.	
Update agency emergency response procedures and protocols to account for projected climate change, including extreme weather events.	Yes	EPA is building resistance to climate change by integrating considerations of climate change impacts and adaptive measures into major grant, loan, contract, and technical assistance programs to further EPA's mission, consistent with existing authorities. The Agency issued guidance in October 2011 to all EPA program and regional offices for incorporating climate change adaptation criteria into announcements of competitive funding opportunities for assistance agreements. The guidance helps ensure that projects for which outcomes are sensitive to changes in climate prove effective even as the climate changes.	By 2015, build resistance to climate change by integrating considerations of climate change impacts and adaptive measures into five major grant, loan, contract, and technical assistance programs to further EPA's mission, consistent with existing authorities (preference for one related to air quality, water quality, cleanup programs, and scientific research).
Ensure workforce protocols and policies reflect projected human health and safety impacts of climate change.	No	The new climate adaptation Implementation Plan for EPA's OARM, included with this SSPP, states, "Because a portion of EPA employees and contractors are engaged in field work, they may be vulnerable to extreme temperatures or other weather events. Emergency management mission support must include procuring the proper personal protective equipment to be prepared for such types of working conditions while conducting sampling, remediation, and other outdoor/field activities."	N/A
Update agency external programs and policies (including grants, loans, technical assistance, etc.) to incentiv-	No	The Implementation Plan for EPA's Office of Administration and Resources Management (OARM) acknowledges that "Following severe weather and other events, EPA response personnel may need to be redirected	N/A

(A) Will the agency implement the following strategies to achieve this goal?	(B) Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
ize planning for, and addressing the impacts of, climate change.		to assist emergency management personnel, assess environmental damage, and test sites for air quality, water quality, and other environmental health concerns." The plan is included in this SSPP submission.	
Ensure agency principals demonstrate commitment to adaptation efforts through internal communications and policies.	No	EPA issued a Policy Statement on Climate Change Adaptation in June 2011. It recognizes that climate change can pose significant challenges to EPA's ability to fulfill its mission. It calls for the Agency to anticipate and plan for future changes in climate and incorporate considerations of climate change into its activities. It also calls for EPA's Climate Change Adaptation Plan to integrate climate adaptation into the Agency's programs, policies, rules and operations. It directs every program and regional office to develop an Implementation Plan that articulates how it will meet the priorities called for in the Agencywide plan.	N/A
Identify vulnerable communities that are served by agency mission and are potentially impacted by climate change and identify measures to address those vulnerabilities where possible.	Yes	Certain parts of the population, such as children, the elderly, the poor, tribes, and indigenous people can be especially vulnerable to the impacts of climate change. EPA's efforts to anticipate and adapt to the effects of climate change on its core mission, therefore, will include helping the most vulnerable people and places reduce their exposure to climate change and improving their capacity to predict, prepare for and avoid adverse impacts. EPA's regional and program office Implementation Plans account for the regional variability in how climate change will impact communities already overburdened by environmental pollution or other stressors.	The EPA Policy Statement on Climate Change Adaptation directs the development of programmatic Implementation Plans (amendments to this SSPP) that describe how each program or regional office will identify communities vulnerable to climate change. Vulnerability assessments and priority actions for climate adaptation contained in the Plans consider how program and re-

(A) Will the agency implement the following strategies to achieve this goal?	(B) Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
			gional offices can help these communities reduce their exposure to climate change and improve their capacity to predict, prepare for, and avoid its adverse impacts.
Ensure that agency climate adaptation and resilience policies and programs reflect best available current climate change science, updated as necessary	Yes	EPA's Climate Change Adaptation Plan explicitly acknowledges that implementing effective strategies to adapt to the changing climate requires that decisions be grounded in the best available science on climate change risks, impacts, vulnerabilities, and adaptive management practices. EPA will advance a rigorous basic and applied science program that will inform, enable and deliver innovative and sustainable solutions to environmental problems in a changing climate. EPA's Office of Research and Development (ORD) has the primary responsibility of coordinating with the program and regional offices to identify the priority science needs of the Agency and its partners.	In order to identify the most pressing scientific needs for improved adaptation decision making, priority research needs related to climate change adaptation will be identified in FY 2013 and FY 2014 and periodically update for the entire Agency through a coordinated approach. This approach is designed to produce research results that benefit end-users in multiple areas of EPA.
Design and construct new or modify/manage existing agency facilities and/or infrastructure to account for the potential impacts of projected climate change.	Yes	EPA will make adaptation part of high-performance sustainable buildings. EPA will incorporate adaptation into GreenCheck, the Agency's process for evaluating new construction and renovation projects for various environmental initiatives and high-performance sustainable building characteristics. GreenCheck will consider measures to ensure building additions, construction, and other efforts take adaptation to severe weather and other climate change-related effects into ac-	Evaluate progress annually as part of the SSPP, OMB Scorecard, and federal agency environmental compliance process. Gather and review lessons learned over time as the Agency responds to severe weather events, addresses changing priorities, and mainstreams climate adaptation planning

(A) Will the agency implement the following strategies to achieve this goal?	(B) Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
		count when projects are undertaken. EPA will use lessons learned to continually improve climate change adaptation and mitigation planning.	into personnel, facilities, and operations processes.
Incorporate climate preparedness and resilience into planning and implementation guidelines for agency-implemented projects.	No	The FY 2011-2015 EPA Strategic Plan outlines the Agency's long-term goals, objectives, and strategic measures, which are the measurable human health and environmental results the Agency is working to achieve. The EPA Strategic Plan contains three strategic measures intended to promote the integration of climate adaptation planning into the Agency's activities. The three strategic measures are focused on core Agency activities that influence its ability to fulfill its mission: (1) rulemaking processes; (2) the distribution of financial resources and technical assistance; and (3) the development of science models and decision-support tools.	N/A