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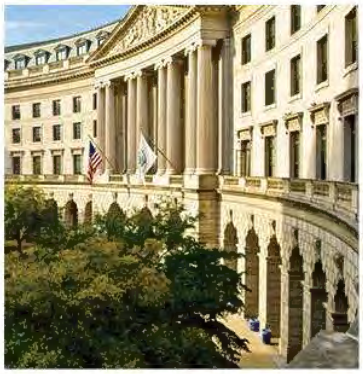

U.S. Environmental Protection Agency

2016 Strategic Sustainability Performance Plan

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Office of Administration and Resources Management
202-564-4600

EPA

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

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OFFICE OF
ADMINISTRATION
AND RESOURCES
MANAGEMENT

Agency Policy Statement

The U.S. Environmental Protection Agency (EPA) is committed to reducing its carbon footprint, conserving resources, protecting the environment, and addressing climate change adaptation. EPA is also committed to the priorities and sustainability goals established in its Strategic Sustainability Performance Plan (SSPP) for the following areas:

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

The EPA applies the overarching principles of leadership by example, accountability, mission enabling, community awareness, continuous improvement, lifecycle cost effectiveness, transparency, and conservation first to reduce greenhouse gas emissions. 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.

This commitment is supported by environmental management systems (EMS) at all appropriate organizational levels to address the sustainability goals presented in this SSPP through agencywide targets and performance metrics. By integrating our SSPP goals with agencywide and local EMS objectives, targets, and metrics, the EPA has established a coordination and communications mechanism for achieving performance goals in support of environmental compliance, stewardship, and sustainability.

As EPA's Chief Sustainability Officer and its 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 and compliance with all applicable environmental and energy statutes, regulations, and executive orders. In conjunction with the EPA's Chief Financial Officer, Chief Information Officer, Senior Real Property Officer, General Counsel, and all program offices and regions, the EPA commits to meeting its SSPP goals in a comprehensive and cost-effective manner.

Donna J. Vizian, Acting Assistant Administrator
EPA Chief Sustainability Officer
EPA Chief Acquisition Officer

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Size and Scope of Agency Operations

Agency Size and Scope	FY 2014	FY 2015
Total Number of Employees as Reported in the President's Budget	15,180	15,324
Total Acres of Land Managed	623	623
Total Number of Buildings Owned (Laboratories)	20	20
Total Number of Buildings Leased (GSA and Non-GSA Lease)	116	115*
Total Building Gross Square Feet (GSF)	11,148,785	9,844,298
Operates in Number of Locations Throughout U.S.	136	135
Operates in Number of Locations Outside of U.S.	0	0
Total Number of Fleet Vehicles Owned	125	127
Total Number of Fleet Vehicles Leased	882	859
Total Number of Exempted-Fleet Vehicles (Tactical, Law Enforcement, Emergency, Etc.)	314	257
Total Amount Contracts Awarded as Reported in FPDS ($Millions)	$1,282	$1,393

*This number reflects the release of space EPA leased at 1310 L Street NW, Washington, D.C.

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 135 office facilities and laboratories. EPA has a total of 30 laboratories. The Agency's laboratories use significantly more energy and water than offices, which presents greater environmental challenges.

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. EPA's *Climate Change Adaptation Plan* vision includes ensuring the Agency continues to fulfill its mission of protecting human health and the environment even as the climate changes.

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, Senior Real Property Officer, and Senior Adaptation Official are committed to integrating EPA's SSPP goals into all of the Agency's programs, facilities, and operations. The Chief Sustainability Officer (CSO) for the Agency is the Assistant Administrator for the Office of Administration and Resources Management, who reports directly to the Administrator.

EPA's annual budget planning process integrates SSPP goals during its facility needs review and master planning process, which incorporates resource efficiency, low-impact development, and other sustainability strategies. EPA is continuing to evaluate its real estate portfolio management process, capital budgeting process, and other facility processes to support the Agency's five strategic goals (which align with the goals of Executive Order [EO] 13693), including:

- Addressing climate change and improving air quality
- Protecting America's waters
- Cleaning up our communities and advancing sustainable development
- Assuring the safety of chemicals and preventing pollution
- Protecting human health and the environment by enforcing laws and assuring compliance

PERFORMANCE REVIEW

In fiscal year (FY) 2015, EPA continued to meet or exceed nearly all federal sustainability goals established by EO 13514, EO 13423, and the Energy Independence and Security Act of 2007 (EISA), and began working on efforts to achieve the goals associated with EO 13693.

EPA's SSPP integrates a number of individual Agency strategies for 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 and recycling data for owned and leased facilities.
- Facility-level environmental management systems (EMSs), which EPA leverages to help achieve continual improvement and facilitate data collection and collaboration.
- 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 acquired through annual data calls.

Goal 1: GHG Reduction

In FY 2015, EPA's combined absolute Scope 1 and 2 GHG emissions were 63 percent lower relative to the FY 2008 baseline with the inclusion of green power and renewable energy certificate (REC) purchases. Although RECs do not represent an actual reduction in GHG, they are an offset that EPA can account toward GHG targets. Without RECs, EPA's Scope 1 and 2 GHG absolute emissions decreased 20.8 percent relative to the Agency's FY 2008 baseline emissions. EPA has set a new goal to reduce those emissions 46 percent by FY 2025, compared to its FY 2008 baseline.

EPA reduced its Scope 3 GHG absolute emissions 56.9 percent in FY 2015 compared to its FY 2008 GHG emissions baseline. EPA's progress in Scope 3 emissions reductions has primarily been driven by decreased employee business travel and commuting, as well as a decrease in the number of personnel working at EPA. The Agency has committed to reduce the required Scope 3 GHG emissions 35 percent by FY 2025 compared to its FY 2008 baseline.

Goal 2: Sustainable Buildings

EPA reduced its FY 2015 energy intensity by 32.7 percent from FY 2003. In FY 2015, EPA completed energy assessments at six of its EISA covered facilities and identified at least 20 viable energy conservation measures (ECMs) from these assessments. With the completion of these assessments, EPA met the requirements for the fourth year of the current four-year assessment and reporting cycle established by EISA Section 432.

Working with the Federal Energy Management Program (FEMP), EPA has set its energy intensity reduction target for the next decade at 17.5 percent, reflecting the fact that the Agency exceeded the FY 2015 goal to reduce energy intensity 30 percent from an FY 2003 baseline. EPA has several projects underway that will continue the Agency's commitment to energy savings, including strategic infrastructure replacement projects in older buildings and laboratory consolidation efforts designed to remove excess, inefficient property from its building inventory.

Eight buildings—or 15.1 percent—of the Agency's FY 2015 Federal Real Property Profile (FRPP) building inventory measuring greater than 5,000 square feet met the *Guiding Principles*

for Federal Leadership in High Performance and Sustainable Buildings (*Guiding Principles*) in FY 2015. Due to a change in the way EPA is calculating its *Guiding Principles* goal in the future—based on square footage—and the fact that the Agency will be retiring at least one facility that has met the *Guiding Principles*, EPA's new goal is for 35 percent of its building inventory greater than 5,000 square feet to meet the *Guiding Principles* by FY 2025.

Goal 3: Renewable Energy

In FY 2015, onsite renewable energy resources such as wind, solar, and geothermal power supplied EPA with 0.55 percent of the Agency's annual energy use. EPA is looking at additional onsite renewable energy funding and installation opportunities in the future. 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 2015 electricity use and recently committed funds to purchase green power and RECs equivalent to 100 percent of its estimate FY 2017 electricity use.

Goal 4: Water Use Efficiency and Management

In FY 2015, EPA decreased potable water use 41.7 percent from its FY 2007 baseline. EPA also conducted water assessments for four EISA-covered facilities. The Agency reduced industrial, landscaping, and agricultural (ILA) water 97.9 percent in FY 2015 from the FY 2010 baseline. EPA also continued to follow the EISA Section 438 Guidance on stormwater management in FY 2015. Based on these achievements, the Agency has already surpassed the potable and ILA water reduction goals for FY 2025.

Goal 5: Fleet Management

In FY 2015, EPA reduced petroleum use 39.1 percent compared to the FY 2005 baseline. EPA exceeded the total petroleum reduction target of EO 13423 in FY 2009 (six years earlier than required) and surpassed the 30 percent reduction requirement goal of EO 13514. EPA remains diligent in implementing new strategies to reduce the agency's petroleum use.

EO 13423 also required federal fleets to increase the use of alternative fuels by 10 percent annually compared to the previous year's EO 13423-mandated amount. EPA did not meet this goal in FY 2015, falling short by approximately 82,001 gasoline gallon equivalents (GGEs). Although EPA has made positive strides in alternative fuel use in recent years, the lack of alternative fueling infrastructure remains an obstacle to compliance. However, EPA's alternative fuel use in FY 2015 did offset a sizeable portion of petroleum that would have otherwise been consumed—33,664 GGEs, or 9.7 percent of all covered GGEs the fleet consumed.

EPA has adapted rapidly to the new requirements of EO 13693. Despite not having a required reduction target for FY 2015, EPA reduced its per-mile GHG emissions by 4.9 percent. EPA will reposition the agency's fleet sustainability strategy to ensure compliance with EO 13693's shift in focus from absolute petroleum reduction and alternative fuel growth to per-mile GHG efficiency. Efficient and strategic acquisitions, petroleum use reduction, and increases in alternative fuel use will all continue to play vital roles in EPA's approach moving forward.

Goal 6: Sustainable Acquisition

During FY 2015, and FY 2016 to date, EPA has continued to achieve the sustainable acquisition goals established by EO 13514 and EO 13693 by implementing Balanced Scorecard initiatives to improve contract data quality and acquisition planning. As a result, EPA has continued along a successful path of ensuring that 95 percent of applicable contract actions provide for the delivery of sustainable products and services.

Goal 7: Pollution Prevention and Waste Reduction

EPA surpassed its internal recycling goal of 60 percent (and the EO 13693 requirement of 50 percent waste diversion) by achieving a 65.2 percent non-hazardous recycling rate in FY 2015. Once the Council on Environmental Quality (CEQ) issues final guidance on waste diversion reporting, EPA will revisit its reporting procedures and its more aggressive internal waste reduction goals.

EPA actively pursues integrated pest management (IPM), environmentally beneficial landscaping, and hardscape management, with 100 percent of sites implementing IPM best management practices that reduce chemical use and/or increase use of less toxic pesticides. EPA conducted pollinator site assessments in FY 2015 to promote pollinator communities and habitats at 17 EPA-owned facilities and will use the findings to educate facility managers and landscape maintenance staff on reducing pesticide use and promoting pollinator habitats.

Goal 8: Energy Performance Contracts

EPA recognizes the importance of energy performance contracts, such as energy savings performance contracts (ESPCs) and utility energy services contracts (UESCs), when implementing projects at its facilities. In recent years, EPA has built on the successes of completed ESPC projects at its laboratories at Ada, Oklahoma, and Ann Arbor, Michigan, when exploring new energy performance contracts at its facilities.

EPA completed a nationwide laboratory study to consolidate existing space and improve laboratory utilization. The Agency will use this information to reassess the potential for energy performance contracting at its future inventory of facilities. At this time, the Agency is hesitant to commit to long-term energy performance contracts while it is considering consolidating or co-locating some of its research facilities.

Goal 9: Electronic Stewardship and Data Centers

EPA continued to focus on improving electronics stewardship in FY 2015, achieving a 94.3 percent EPEAT (Electronic Product Environmental Assessment Tool) purchasing for monitors, laptops, and computers, just shy of the 95 percent requirement. The Agency achieved a 100 percent power management enabling rate for all eligible computers and monitors through enterprise-wide management software capable of establishing power management settings for computers and monitors over the Agency's network for compliance. The Agency ensured environmentally sound disposition of electronic assets, with 100 percent of electronics recycled through approved programs. EPA will continue to improve on its electronics stewardship efforts, as well as consolidate data centers by initiating closure of non-core centers in the coming year.

Goal 10: Climate Change Resilience

EPA is implementing its *Climate Change Adaptation Plan* to mainstream adaptation planning into the Agency's programs, policies, rules, and operations. EPA is also implementing the 17 *Climate Change Adaptation Implementation Plans* prepared by its National Environmental Program Offices, 10 Regional Offices, and several National Support Offices.

A central element of these plans is EPA's commitment to build and strengthen the ability of its own staff, as well as its partners in states, tribes, and local communities, to anticipate, prepare for, and adapt to a changing climate. The Agency's goal is to empower 40,000 communities and 567 tribes across the United States to protect human health and the environment even as the climate changes. EPA is doing this through three main mechanisms:

(1) *Training*: EPA continues to develop free, online training modules to help decision-makers better understand the impacts climate change can have on their ability to provide services (e.g., safe drinking water) to their communities, as well as opportunities to implement effective adaptation strategies. For example, EPA has released a Climate Adaptation Training Module for Local Government Officials.
(2) *Financial Assistance*: EPA continues to support climate-resilient investments in communities and tribes across the nation. For example, in FY 2015, EPA issued 17 grants to help environmental justice communities prepare for climate change. Also, EPA now supports the development of adaptation plans by tribes through its Tribal General Assistance Program (GAP).
(3) *Tools and Technical Assistance*: EPA is developing and delivering tools to help communities integrate adaptation planning into their day-to-day operations. For example, EPA's Climate Resilience Evaluation and Awareness Tool (CREAT) enables utilities anywhere in the country to assess their vulnerabilities to climate impacts and evaluate alternative adaptation strategies. EPA has also provided technical assistance by funding more than 20 pilot projects with communities and tribes to implement the CREAT tool.

This SSPP outlines numerous goals and achievements for 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.

To make the Agency's facilities more climate-resilient, EPA has reviewed resiliency-related municipal regulations, zoning ordinances, building codes, subdivision specifications, and other federal, state, local, and academic literature. EPA conducted climate resiliency assessments at three of its facilities in FY 2015 to evaluate facility-specific risks posed by severe weather events (e.g., flooding, storm surge) and to identify opportunities to enhance the resilience of its facilities. Climate resiliency assessments are underway in FY 2016 covering additional climate zones.

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. EPA has focused on implementing lower-cost projects with the highest

return on investment and is looking for alternative approaches and financing mechanisms for more resource-intensive projects, master planning, and infrastructure replacement. Reduced resource levels, however, continue to hinder EPA's ability to design and fund many of the major projects necessary to continue to meet or exceed increasingly tougher federal building performance requirements.

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 many of the 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 continue to find innovative processes to fund other major projects. Doing so in a time of reduced resources is a challenge.

In FY 2015, EPA made progress but did not meet the EO 13423 requirement for increasing alternative vehicle fuel consumption by 10 percent compounded annually. While most of the Agency's alternative fuel vehicle fleet currently consists of vehicles that are fueled with E85, fueling stations that offer E85 are not readily available and accessible in many areas of the country. EPA is therefore concurrently initiating a strategy to increase procurement of electric vehicles beginning in FY 2017. EPA will also continue to meet with stakeholders, discuss obstacles to compliance, share best practices, and develop site-specific strategies for encouraging alternative fuel use.

Regarding sustainable acquisition reporting, the federal reporting systems, System for Award Management and Federal Procurement Data System–Next Generation, continue to be a challenge in obtaining accurate and complete data.

STRATEGIES AND PLANNED ACTIONS

GHG Emissions: EPA has already made great progress in reducing its Scope 1 and 2 GHG emissions through FY 2015 as a result of implementing energy conservation projects, consolidating or right-sizing laboratory infrastructure, and continuing to purchase green power and RECs. EPA anticipates that its future progress in this area could be constrained by limited resources to purchase RECs and pursue more complex energy reduction projects.

Fleet Management: Looking to the future, the Agency will continue to implement cost-effective, sustainable strategies to meet the requirements of EO 13693. New requirements include a phased reduction of GHG emissions per mile traveled, implementation of vehicle telematics, acquisition of next-generation vehicle technologies, and integration of vehicle-level data management. EPA is already taking steps to ensure compliance with EO 13693, such as acquiring zero-emission vehicles (ZEVs) and plug-in hybrid electric vehicles (PHEVs). The Agency has already met the data management requirements to fully integrate fleet data into an Agency fleet management information system (FMIS), the Federal Automotive Statistical Tool (FAST), FleetDASH, and

the Federal Motor Vehicle Registration System (FMVRS). EPA will continue to develop strategies to meet and exceed the fleet goals of EO 13693.

Sustainable Purchasing: EPA is actively involved in the regulatory process pertaining to sustainable acquisitions in the federal government. One example of EPA's active participation in promulgating changes to the Federal Acquisition Regulation (FAR) is EPA's partnership with the FAR Council in developing FAR Case 2013-016, *EPEAT*, which identified imaging equipment and televisions as new items to be included under the requirement to procure EPEAT-registered products in FAR Parts 23 and 52. FAR Case 2013-016 was published in the *Federal Register* in September 2015, and the changes in the FAR contained in the final rule became effective beginning October 5, 2015.

A second action occurred in September 2015, when EPA issued *Interim Recommendations for Standards and Ecolabels for Use in Federal Procurement*, as required by EO 13693. EO 13693 removed the specific requirement for federal purchasers to procure EPEAT-registered products, and instead requires federal purchasers to procure "environmentally sustainable electronics products." Also, EO 13693 requires EPA to provide recommendations for standards and/or ecolabels for federal purchasers to use to determine if the product is environmentally sustainable. As a result, FAR Case 2015-033, *Sustainable Acquisition* was developed to align the FAR with the new sustainable acquisition requirements of EO 13693. On March 30, 2016, the Defense Acquisition Regulations Council agreed to submit the draft proposed FAR rule for processing.

A third FAR Case 2014-026, *High Global Warming Potential Hydrofluorocarbons*, proposes to amend the FAR pertaining to facilities implementation of the President's Climate Action Plan and EO 13693 with regard to high global warming potential hydrofluorocarbons as requested by the Council on Environmental Quality. On April 11, 2016, the final rule was sent to the FAR Secretariat for preparation of the Federal Acquisition Circular.

A fourth FAR Case 2015-024, *Public Disclosure of Greenhouse Gas Emissions And Reduction Goals – Representation*, proposes to amend the FAR to create an annual representation within the System for Award Management (SAM) for offerors to indicate if and where they publicly disclose greenhouse gas emissions and greenhouse gas reduction goals or targets. This information will help the government assess supplier greenhouse gas management practices and assist agencies in developing strategies to engage with contractors to reduce supply chain emissions, as directed in EO 13693. On April 11, 2016, the Civilian Agency Acquisition Chair sent this draft proposed rule to the Office of Information and Regulatory Affairs for review. Further, EPA volunteered to participate in the pilot program focused on greenhouse gas disclosure and reduction target specified in EO 13693, and has identified contracts to be awarded in FY 2017 that will result in furthering the objectives of EO 13693. The White House Council on Environmental Quality advised that EPA may submit less than five contracts in the Procurement Plan to Reduce Greenhouse Gas Emissions.

PROGRESS ON ADMINISTRATION PRIORITIES

***President's Performance Contracting Challenge*:** EPA's commitment under the President's Performance Contracting Challenge is $5 million in contracts awarded by the end of calendar year 2016. To meet its 2016 spending goal, EPA is planning to award a $5 million contract this

year for a 1.5 megawatt photovoltaic (PV) array at its Edison, New Jersey, laboratory that combines an energy savings performance contract with a power purchase agreement. For FY 2017 and FY 2018, EPA's target for performance contracts spending is $0.6 million annually. These targets were derived using data from recent federal ESPC awards and EPA's projected energy intensity reduction goals for those fiscal years, as the Agency continues to identify new performance contracting opportunities in the future.

Electric and Zero Emission Vehicles: EPA will ensure compliance with the PHEV/ZEV acquisition requirement by reviewing all vehicle orders at the Agency level prior to submission, and seeking opportunities to acquire ZEVs. EPA will ensure that PHEVs or ZEVs account for at least 20 percent of subject acquisitions in Calendar Year (CY) 2021 and 50 percent of subject acquisitions in CY 2026 and thereafter. EPA will work with component fleets to ensure that charging infrastructure is feasible and installed prior to vehicle delivery. EPA will conduct a fleet/facility survey to determine parking facility capabilities and obstacles. Based on the results of the survey, EPA will develop a plan for installing charging infrastructure on a location by location basis.

Climate Preparedness and Resilience: In response to EO 13653, *Preparing the United States for the Impacts of Climate Change*, EPA has identified facility planning and design best practices for climate resiliency, contacted other federal agencies engaged with facility-level climate resiliency planning, and reviewed relevant literature, including state and municipal building regulations, codes, and ordinances. Based on the results of this research, EPA developed facility-level climate resiliency assessment checklists for three laboratories and conducted climate resiliency assessments at these facilities in FY 2015. Based on the results of its pilot assessments and the requirements of EO 13693, EPA is updating its Agencywide *Architecture and Engineering Guidelines* to incorporate climate resiliency considerations and began to develop a framework for prioritizing future climate resiliency assessments. In FY 2016, EPA plans to complete additional facility assessments to expand its understanding of the Agency's vulnerabilities to severe weather events and to identify opportunities to improve resilience.

EPA released its final *Climate Change Adaptation Plan* ("*Plan*") in October 2014. The *Plan* can be found at http://www.epa.gov/greeningepa/documents/adaptationplans2014_508.pdf. The *Plan* identifies 10 Agencywide priorities on climate adaptation. It describes 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 2014 revised EPA *Policy Statement on Climate Change Adaptation*, we continue to see a wide range of impacts associated with human-induced climate change that pose significant challenges to EPA's ability to fulfill its mission. The Agency must therefore adapt if it is to continue fulfilling its statutory, regulatory, and programmatic requirements.

As called for in the Agencywide *Plan*, EPA National Environmental Program Offices, all 10 Regional Offices, and several National Support Offices developed their own *Implementation Plans* that provide details on how they will carry out the work called for in the Agencywide *Plan* and meet the 10 EPA priorities on climate adaptation. EPA released the 17 final *Implementation Plans* in October 2014. The 17 *Implementation Plans* can also be found at http://www.epa.gov/greeningepa/documents/adaptationplans2014_508.pdf.

A central element of EPA's work on climate adaptation is to build and strengthen the adaptive capacity of its partners across the country in ways that are critical to attaining the Agency's mission. States, tribes, and local communities share responsibility for protecting human health and the environment. These partnerships will be critical for efficient, effective, and equitable implementation of climate adaptation strategies. EPA is therefore supporting the efforts of its partners to integrate climate adaptation into the work they do by providing: (1) training to increase awareness of ways climate change may affect their ability to implement effective programs; (2) financial incentives that support climate-resilient investments in communities across the country; and (3) necessary data, information, tools, and technical assistance.

EPA has already made significant progress integrating climate adaptation planning into its programs, policies, rules, and operations; fulfilling commitments in the President's *Climate Action Plan*; and following directives in EO 13653 ("Preparing the United States for the Impacts of Climate Change") and EO 13693. It has promoted climate-resilient investments by integrating climate adaptation criteria into financial mechanisms and assistance agreements. EPA has successfully fulfilled its commitments in the President's *Climate Action Plan* to integrate considerations of climate change impacts and adaptive measures into major programs, including its Clean Water and Drinking Water State Revolving Loan funds and grants for brownfields cleanup. It has supported climate-resilient investments through discretionary, competitive financial mechanisms such as the Great Lakes Restoration Initiative. EPA has also supported climate-resilient investments as part of the Hurricane Sandy recovery effort. The Agency is working closely with New York and New Jersey to plan resilient water infrastructure projects that incorporate green infrastructure and adapt to a changing climate. Furthermore, to better understand and enhance the resiliency of its own facilities, EPA completed pilot climate resiliency assessments at two laboratories in FY 2015 and is using the findings of these assessments to update its space acquisition and *A&E Guidelines*.

EPA has also produced tools to support adaptive management decisions. For example, as called for in the President's *Climate Action Plan*, the Agency released a National Stormwater Calculator and Climate Assessment Tool Package in January 2014 that can be used to estimate runoff during storm events under current and future climate. In November 2014, EPA announced that it will provide up to $600,000 in training and technical assistance to help drinking water, wastewater, and stormwater utilities in more than 20 communities bolster their climate change resilience and readiness using EPA's Climate Resilience Evaluation and Awareness Tool. In May 2015, EPA released a new Web-based climate adaptation training module to help local government officials prepare for the impacts climate change may have on the services they provide to their communities.

EPA is incorporating climate change impacts into water quality actions. For example, EPA is developing guidance for watershed managers on how to develop total maximum daily load provisions that protect beneficial uses (e.g., cold water fish habitat) as the climate changes. EPA is also conducting work to evaluate approaches and limitations of incorporating climate change into its existing ozone modeling framework.

Looking ahead, EPA will continue to implement key actions to address the Agencywide priorities in its *Climate Change Adaptation Plan*. Key next steps include: (1) fulfilling the Strategic Measures in the *Fiscal Year 2014-2018 EPA Strategic Plan*; (2) continuing to modernize EPA programs to encourage climate-resilient investments; (3) providing information,

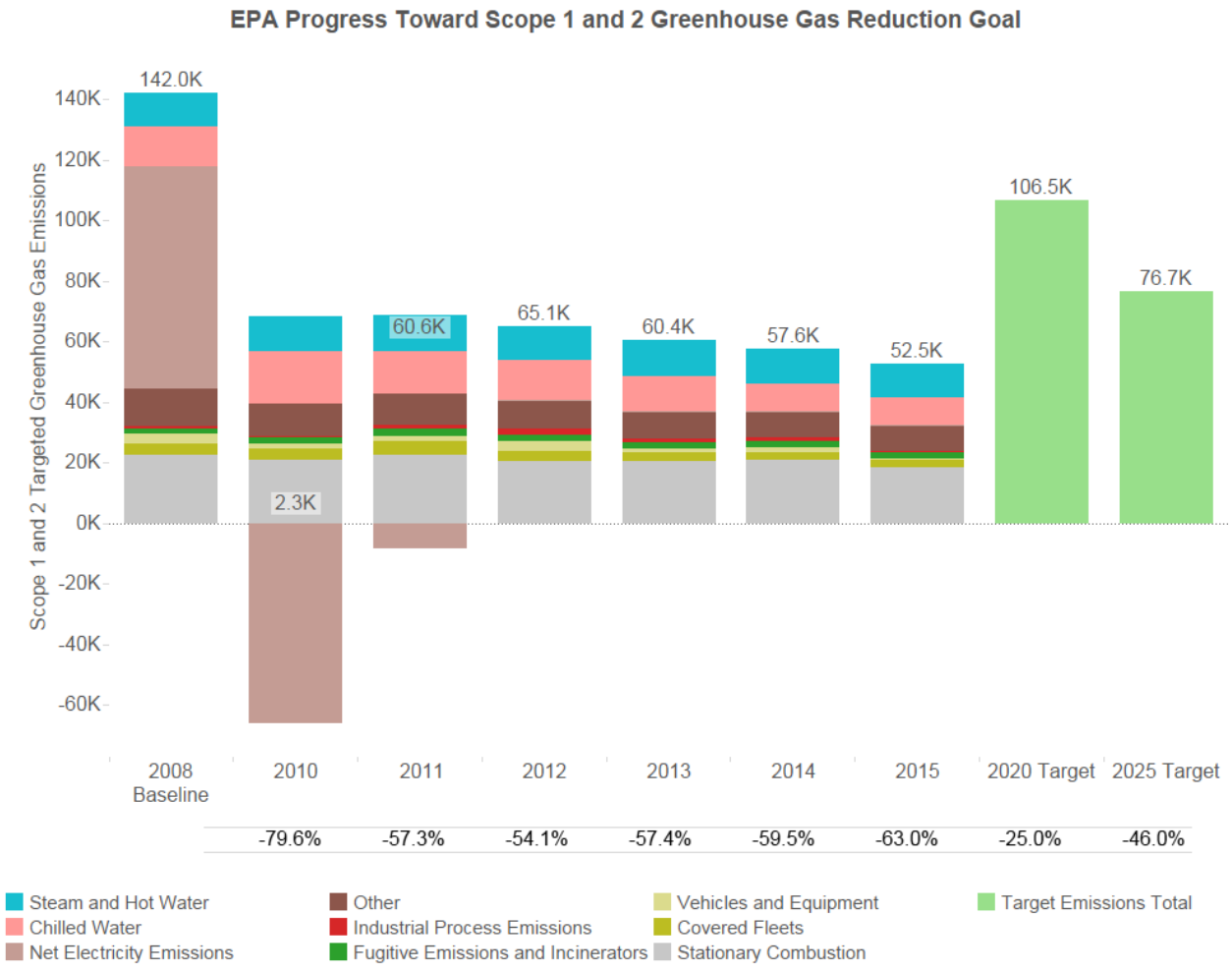
tools, training, and technical support on climate change preparedness and resilience to states, tribes, and local communities; (4) implementing the priority actions identified in the 17 *Implementation Plans* produced by EPA's Program and Regional Offices; (5) focusing on the most vulnerable people and places; (6) partnering with tribes to increase adaptive capacity; (7) measuring and evaluating performance on an ongoing basis; and (8) continuing to build and maintain strong partnerships with other federal agencies.

Goal 1: Greenhouse Gas (GHG) Reduction

Scope 1 and 2 GHG Reduction Goal

EO 13693 requires each agency to establish Scope 1 and 2 GHG emissions reduction targets to be achieved by FY 2025 compared to an FY 2008 baseline. EPA's FY 2025 Scope 1 and 2 GHG reduction target is 46 percent.

Chart: Progress Toward Scope 1 and 2 GHG Reduction Goal



Scope 1 and 2 GHG Reduction Strategies

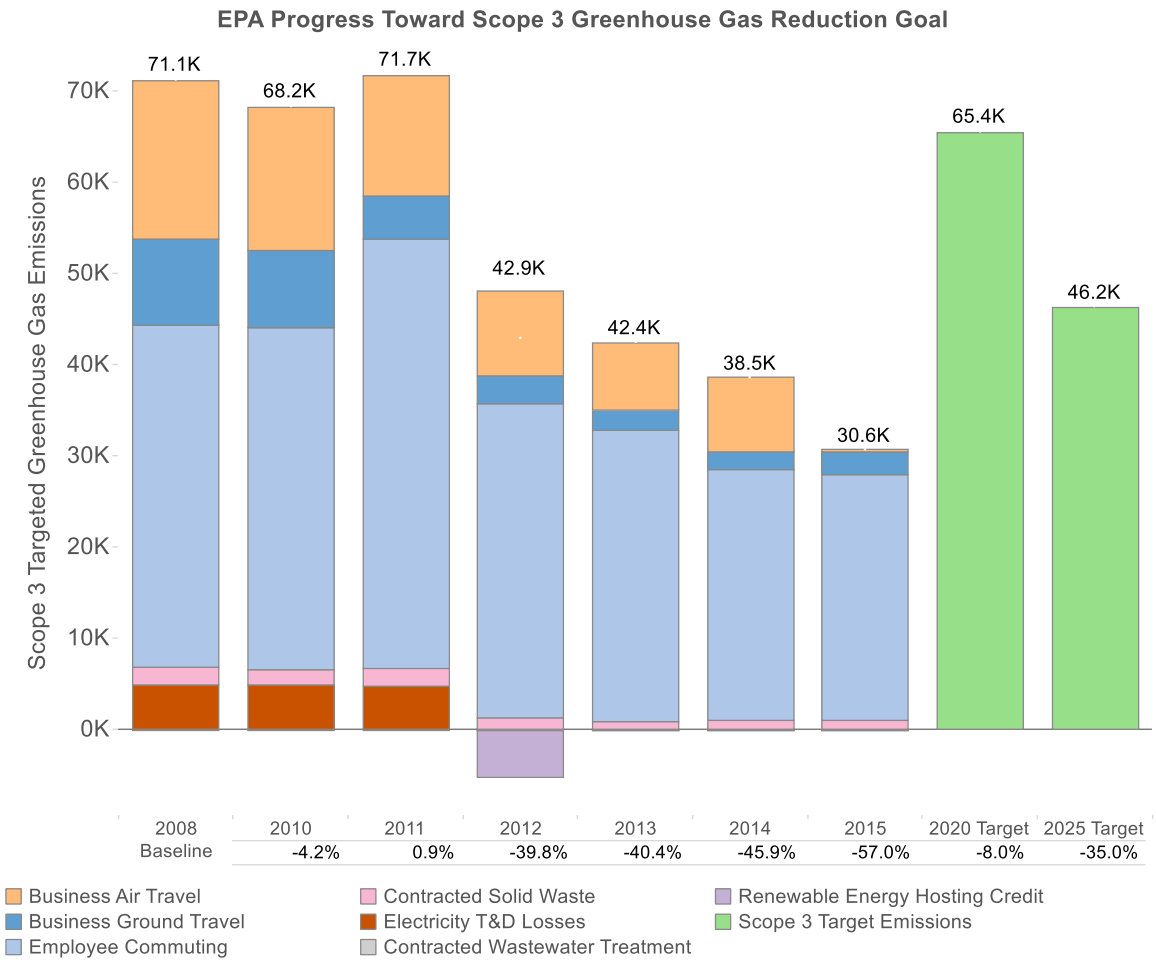
Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Use the Federal Energy Management Program (FEMP) GHG emission report to identify/target high emission categories and implement specific actions to address high emission areas identified.	No	EPA maintains a GHG emissions inventory modeled after the FEMP report; GHG emissions from facility energy consumption represent the vast majority of the Agency's Scope 1 and 2 GHG emissions. As described below in its Goal 2 strategies, EPA is already taking steps to reduce facility energy consumption, so this is not one of the Agency's top strategies in this area.	
Identify and support management practices or training programs that encourage employee engagement in addressing GHG reduction.	Yes	EPA prepares annual, facility-specific energy reduction ("ConservE") targets for each reporting facility through its Energy Forecasting Program, taking into account prior years' performance, planned energy projects, and any projected variations in energy use. On a quarterly basis, EPA prepares a series of internal facility energy and water performance reports so facility managers can investigate deviations from normal usage patterns. EPA also prepares an annual analysis detailing Scope 1 and 2 GHG emissions for each reporting facility.	EPA will communicate FY 2015 ConservE targets to facility managers by July 31, 2016. EPA will issue an FY 2016 GHG emissions report by February 1, 2017.
Determine unsuccessful programs or measures to be discontinued to better allocate agency resources.	No	EPA has a thorough vetting process to test and implement energy conservation and GHG emissions reduction strategies prior to full-scale implementation. The Agency does not plan to discontinue any existing programs, so this is not one of the Agency's top strategies in this area.	
Given agency performance to date, determine whether current agency GHG target should be revised to a more aggressive/ambitious target.	No	EPA far surpassed its GHG emissions reduction goal for FY 2015 and set its new emissions reduction goal of 46 percent compared to FY 2008 in response to EO 13693. The Agency anticipates depending less on green power and renewable energy certificates while continuing to focus on reducing facility energy intensity.	

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Employ operations and management (O&M) best practices for emission generating and energy consuming equipment.	Yes	EPA implements best practices for energy-efficient operations through several strategies. Through EISA Section 432 energy assessments and recommissioning, EPA is continuing to identify and address O&M improvements and energy efficiency opportunities and uses this information to educate its facility managers and O&M staff. Currently, EPA is focusing on air distribution systems and individual laboratory ventilation controls to ensure these systems operate in a cohesive and efficient manner.	EPA will initiate an O&M assessment at one laboratory by June 30, 2017.
Identify additional sources of data or analysis with the potential to support GHG reduction goals.	Yes	EPA continues to add advanced metering capacity to its building inventory by coupling metering hardware installation with major infrastructure replacement projects. EPA is working to calibrate its meters and better capture electricity consumption with advanced metering at its reporting facilities in order to better realize Scope 1 and 2 GHG emissions from facility energy consumption.	EPA will complete meter calibrations to provide accurate, real-time data at three facilities by June 30, 2017.
Safely reduce ventilation rates to save energy.	Yes	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 safely reducing laboratory ventilation by: using high-performance, low-flow fume hoods; "hibernating" fume hoods where safe and appropriate and updating specifications to consider hibernation of fume hoods; reducing air flow rates while maintaining containment using the latest ASHRAE/ANSI standards; including occupancy sensors to allow lower air change rates in unoccupied laboratories; and improving the operational efficiency of its biosafety cabinets.	EPA will initiate air flow reduction projects at two laboratories by June 30, 2017.

Scope 3 GHG Reduction Goal

EO 13693 requires each agency to establish a Scope 3 GHG emission reduction target to be achieved by FY 2025 compared to an FY 2008 baseline. EPA's FY 2025 Scope 3 GHG reduction target is 35 percent.

Chart: Progress Toward Scope 3 GHG Reduction Goal



Scope 3 GHG Reduction Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Reduce employee business ground travel.	Yes	EPA continues to refresh employee computers and other information technology (IT) hardware and expand access to tools such as video teleconferencing (VTC) as an alternative to face-to-face meetings. VTC bridge calls have increased significantly since FY 2010. Partly as a result of this initiative, as well as a decrease in personnel at EPA over the past five years, EPA reduced its GHG emissions from business ground travel by nearly 75 percent in FY 2015 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.	EPA will continue to focus on reduced travel and encourage VTC use on an ongoing basis through June 30, 2017.
Reduce employee business air travel.	Yes	Thanks in part to increased implementation of VTC use, as well as decreased personnel at EPA over the past five years, EPA reduced its GHG emissions from business air travel by nearly 99 percent. EPA expects to maintain at least a 50 percent reduction in business air travel GHG emissions in future years.	EPA will continue to focus on reduced travel and encourage VTC use on an ongoing basis through June 30, 2017.
Develop and deploy an employee commuter emissions reduction plan.	No	EPA is already leveraging its transit subsidy program to reduce the number of employees driving to work, but this is not one of the Agency's top strategies in this area. In conjunction with the Agency's telework practices, EPA anticipates maintaining the reductions it has achieved in GHG emissions associated with employee commuting.	
Use an employee commuting survey to identify opportunities and strategies for reducing commuter emissions.	Yes	EPA conducts a biennial employee commuting survey using GSA's Carbon Footprint Tool. Using this tool, the Agency analyzes survey results to identify its best opportunities for reducing commuting emissions.	EPA will complete an Agencywide employee commuting survey by June 30, 2017.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Increase & track number of employees eligible for telework and/or the total number of days teleworked.	Yes	In accordance with the Telework Enhancement Act of 2010, EPA is implementing Agencywide telework practice to: establish employee eligibility requirements for participating in telework; define tracking and reporting roles and responsibilities for management and employees; and increase the number of hours employees can telework during each pay period.	EPA will continue progress towards implementing its Agencywide telework policy on an ongoing basis through June 30, 2017.
Develop and implement a program to support alternative/zero emissions commuting methods and provide necessary infrastructure.	No	EPA supports alternate/zero emissions commuting methods such as bicycle commuting at many of its locations with provisions such as secure racks and shower facilities, but at this time a formal, Agencywide zero emissions commuting program is not one of EPA's top strategies in this area.	
Establish policies and programs to facilitate workplace charging for employee electric vehicles.	Yes	EPA is working on efforts to increase electric vehicle charging capacity at its owned and leased facilities.	EPA will install electrical vehicle charging stations at three locations by June 30, 2017.
Include requirements for building lessor disclosure of carbon emission or energy consumption data and report Scope 3 GHG emissions for leases over 10,000 rentable square feet.	No	Since FY 2010, EPA has estimated and voluntarily reported to FEMP its Scope 3 GHG emissions associated with energy consumption at leased facilities where EPA is not responsible for paying the utility bills. Because EPA does not control the direct leasing of these facilities, this is not one of the Agency's top strategies in this area. However, EPA will strive to continue to improve the quality of these data by requesting actual energy consumption data from these facilities.	

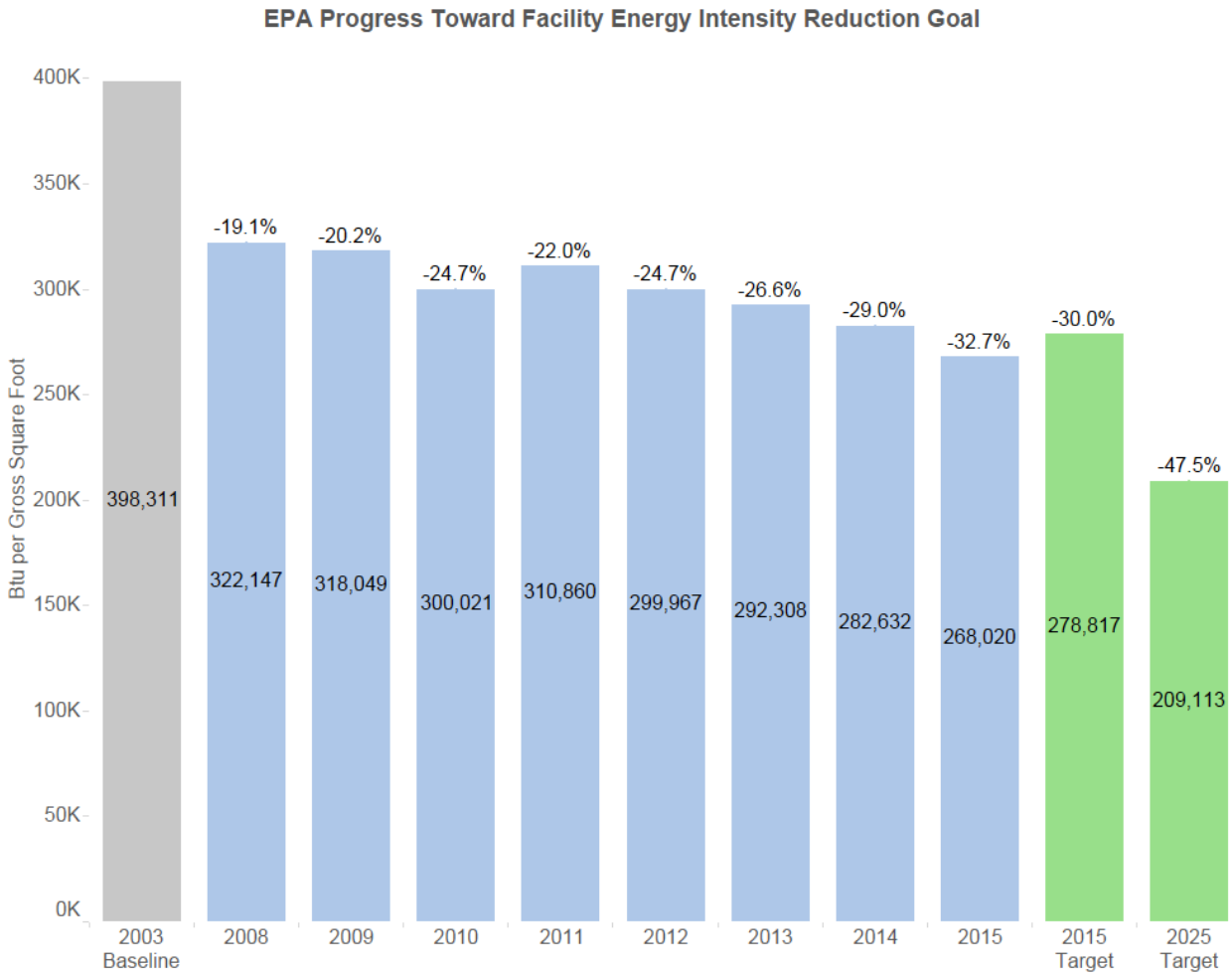
Goal 2: Sustainable Buildings

Building Energy Conservation Goal

The Energy Independence and Security Act of 2007 (EISA) requires each agency to reduce energy intensity 30 percent by FY 2015 compared to an FY 2003 baseline. Section 3(a) of EO 13693 requires agencies to promote building energy conservation, efficiency, and management and reduce building energy intensity by 2.5 percent annually through the end of FY 2025, relative to an FY 2015 baseline and taking into account agency progress to date, except where revised pursuant to Section 9(f) of EO 13693.

Since EPA exceeded the FY 2015 target, the Agency has elected to pursue the alternative target of a 47.5 percent total reduction in energy intensity from FY 2003 to FY 2025, as provided by CEQ in the *Implementing Instructions for Executive Order 13693*.

Chart: Progress Toward Facility Energy Intensity Reduction Goal



Building Energy Conservation Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Make energy efficiency investments in agency buildings.	Yes	EPA continues to complete major energy efficiency capital improvement projects where it is cost-effective to do so.	By June 30, 2017, EPA plans to begin installation of variable air volume fume hoods at one laboratory.
Use remote building energy performance assessment auditing technology.	Yes	Calibration efforts are underway for EPA's advanced metering system, which will capture near real-time energy and water consumption data at several key facilities and provide data analytics. EPA will use this advanced metering system to remotely assess building energy performance on an ongoing basis.	By June 30, 2017, EPA will pilot remote assessments at two laboratories.
Participate in demand management programs.	No	EPA currently participates in energy demand management programs at its facilities in Cincinnati, Ohio; Fort Meade, Maryland; and Research Triangle Park, North Carolina, but this is not one of the Agency's top strategies in this area.	
Incorporate Green Button data access system into reporting, data analytics, and automation processes.	No	Calibration efforts are underway for EPA's advanced metering system, which will capture near real-time energy and water consumption data at several key facilities, provide data analytics, and assist with annual energy and water reporting requirements. Because EPA is building a comprehensive data platform for its national advanced metering system, incorporating Green Button data is not one of the Agency's top strategies in this area.	
Redesign interior space to reduce energy use through daylighting, space optimization, and sensors and control systems.	Yes	EPA optimizes space use, daylighting, and lighting controls in new and renovated office and laboratory spaces, where feasible.	By June 30, 2017, EPA plans to begin installation of lighting occupancy sensors in two laboratories.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Identify opportunities to transition test-bed technologies to achieve energy reduction goals.	No	EPA has piloted occupancy sensors to control air change-per-hour rates in laboratory modules based on occupancy. After installing sensors in laboratory modules in Cincinnati, Ohio, EPA is considering installing similar sensors in its laboratories in Chelmsford, Massachusetts, and Manchester, Washington; however, this is not one of the Agency's top strategies in this area.	
Follow city energy performance benchmarking and reporting requirements.	No	While this is not one of EPA's top strategies in this area, the Agency will continue to monitor local benchmarking and reporting requirements in areas where its existing facilities are sited and comply as appropriate.	
Install and monitor energy meters and sub-meters.	Yes	EPA has energy meters at 100 percent of its reporting facilities, and advanced metering hardware captures 76 percent of the Agency's reportable energy consumption. The Agency installs sub-meters where practicable. EPA is continuing to refine its facility-level advanced metering systems, which will capture near real-time energy and water consumption data at its facilities.	By June 30, 2017, EPA will continue integrating installed advanced meters into its Enterprise Level Energy Management System.
Collect and utilize building and facility energy use data to improve building energy management and performance.	No	Calibration efforts are underway for EPA's advanced metering system, which will capture near real-time energy consumption data at several key facilities and provide data analytics. EPA will use this advanced metering system to improve building energy management and performance; however, this is not one of the Agency's top strategies in this area.	
Ensure that monthly performance data is entered into the EPA ENERGY STAR Portfolio Manager.	Yes	EPA annually enters monthly building energy use data for its EISA-covered facilities in ENERGY STAR Portfolio Manager to meet the EISA Section 432 requirement. EPA will continue to use Portfolio Manager to monitor trends in facility energy performance.	By March 31, 2017, EPA will enter its EISA-covered facility energy use in ENERGY STAR Portfolio Manager.

Building Efficiency, Performance, and Management Goal

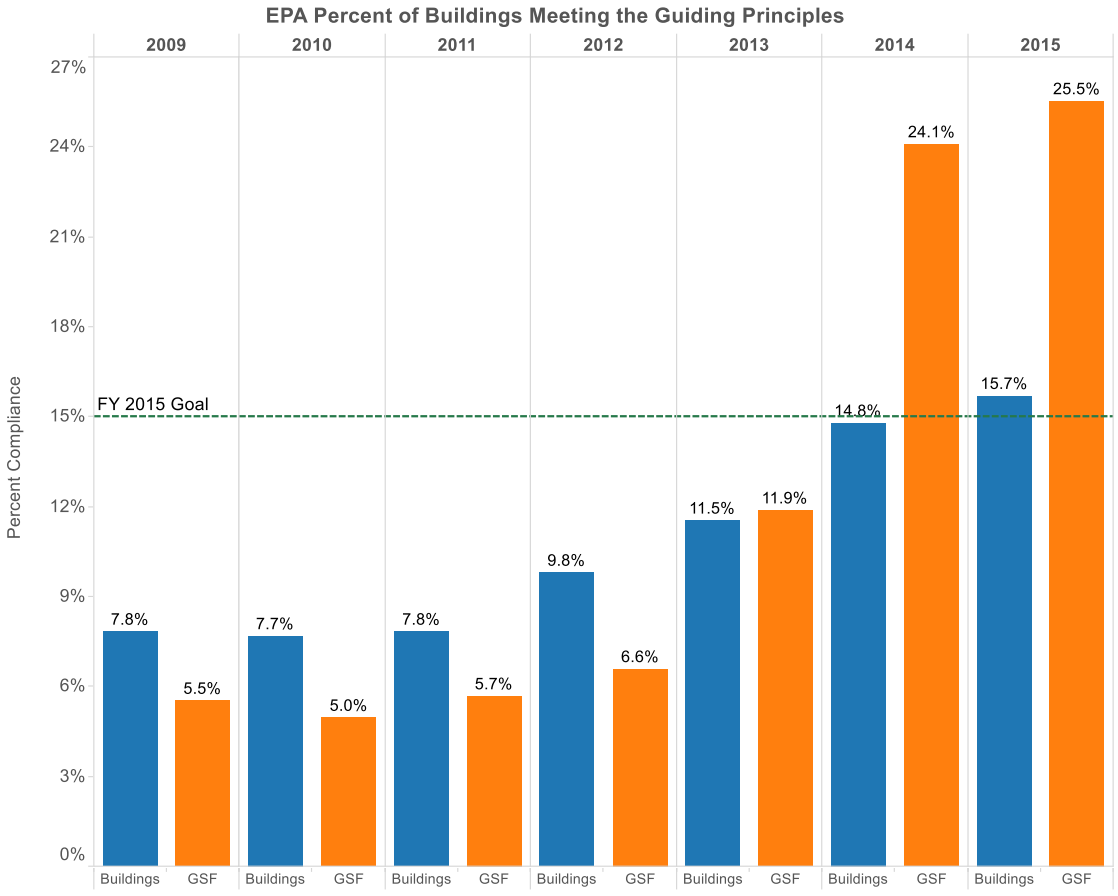
Section 3(h) of EO 13693 states that agencies will improve building efficiency, performance, and management and requires that agencies identify a percentage of the agency's existing buildings above 5,000 gross square feet intended to be energy, waste, or water net-zero buildings by FY 2025 and implementing actions that will allow those buildings to meet that target. EPA's FY 2025 target is 5 percent.

Guiding Principles for Sustainable Federal Buildings

Section 3(h) of EO 13693 also states that agencies will identify a percentage, by number or total GSF, of existing buildings above 5,000 GSF that will comply with the *Guiding Principles for Sustainable Federal Buildings (Guiding Principles)* by FY 2025.

EPA's FY 2025 target is 35 percent of total GSF.

Chart: Percent of Buildings Meeting the Guiding Principles



Sustainable Buildings Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Include climate resilient design and management into the operation, repair, and renovation of existing agency buildings and the design of new buildings.	Yes	In response to EO 13653, *Preparing the United States for the Impacts of Climate Change*, EPA has identified facility planning, design, and management best practices for climate resiliency; developed a facility-level climate resiliency assessment protocol; and continues conducting two to three facility assessments per year to understand the Agency's vulnerabilities to severe weather events and identify opportunities to improve resilience. EPA has completed climate resiliency assessments of EPA laboratories in five out of six climate regions in the continental United States.	By June 30, 2017, EPA plans to complete an assessment in the remaining climate region and document region-specific best practices and recommendations for improving building operations, repairs, renovations, and designs.
In planning new facilities or leases, include cost-effective strategies to optimize sustainable space utilization and consideration of existing community transportation planning and infrastructure, including access to public transit.	Yes	EPA is incorporating the Council on Environmental Quality's *Implementing Instructions—Sustainable Locations for Federal Facilities* where relevant into its GreenCheck process, which is used to review every lease, construction, renovation, and repair project to ensure the project meets federal sustainability requirements.	As new leases for two regional offices are planned through June 30, 2017, EPA will work to right-size office square footage requirements and locate facilities in areas with existing infrastructure and public transit.
Ensure all new construction of Federal buildings greater than 5,000 GSF that enters the planning process be designed to achieve energy net-zero and, where feasible, water or waste net-zero by FY 2030.	N/A	EPA does not currently have plans to construct any new buildings greater than 5,000 GSF.	
Include criteria for energy efficiency as a performance specification or source selection evaluation factor in all new agency lease solicitations over 10,000 rentable square feet.	Yes	EPA has been using its *Best Practice Lease Provisions* for major lease procurements since 2008, which include source selection evaluation factors for sustainability and energy efficiency.	EPA will incorporate sustainability and energy efficiency source selection evaluation factors in any new lease solicitations greater than 10,000 rentable square feet through June 30, 2017.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Incorporate green building specifications into all new construction, modernization, and major renovation projects.	Yes	EPA uses its GreenCheck process to review every lease, construction, renovation, and repair project to ensure the project meets federal green building and EPA's own sustainability requirements. The Agency maintains *Architecture and Engineering Guidelines* that include green building design criteria for EPA's new construction and renovation projects.	By June 30, 2017, EPA will review and update its GreenCheck process; complete the GreenCheck process for all new construction, renovation, and repair projects undertaken in the next 12 months; and continue updating its *Architecture and Engineering Guidelines*.
Implement space utilization and optimization practices and policies.	Yes	EPA has historically implemented many efforts to consolidate space within its owned and leased facilities. EPA's *Synthesis Report of the U.S. EPA Laboratory Enterprise Evaluation* identifies additional opportunities for space consolidation, several of which are currently underway. EPA is also conducting a strategic site portfolio review for leased facilities.	By June 30, 2017, EPA will continue to make progress in consolidating its Golden, Colorado, operations into its existing space in the Denver Federal Center.
Implement programs on occupant health and well-being in accordance with the *Guiding Principles.*	No	This is not one of EPA's top strategies in this area since the Agency already has existing programs addressing occupant health and well-being in its facilities.	

Goal 3: Clean and Renewable Energy

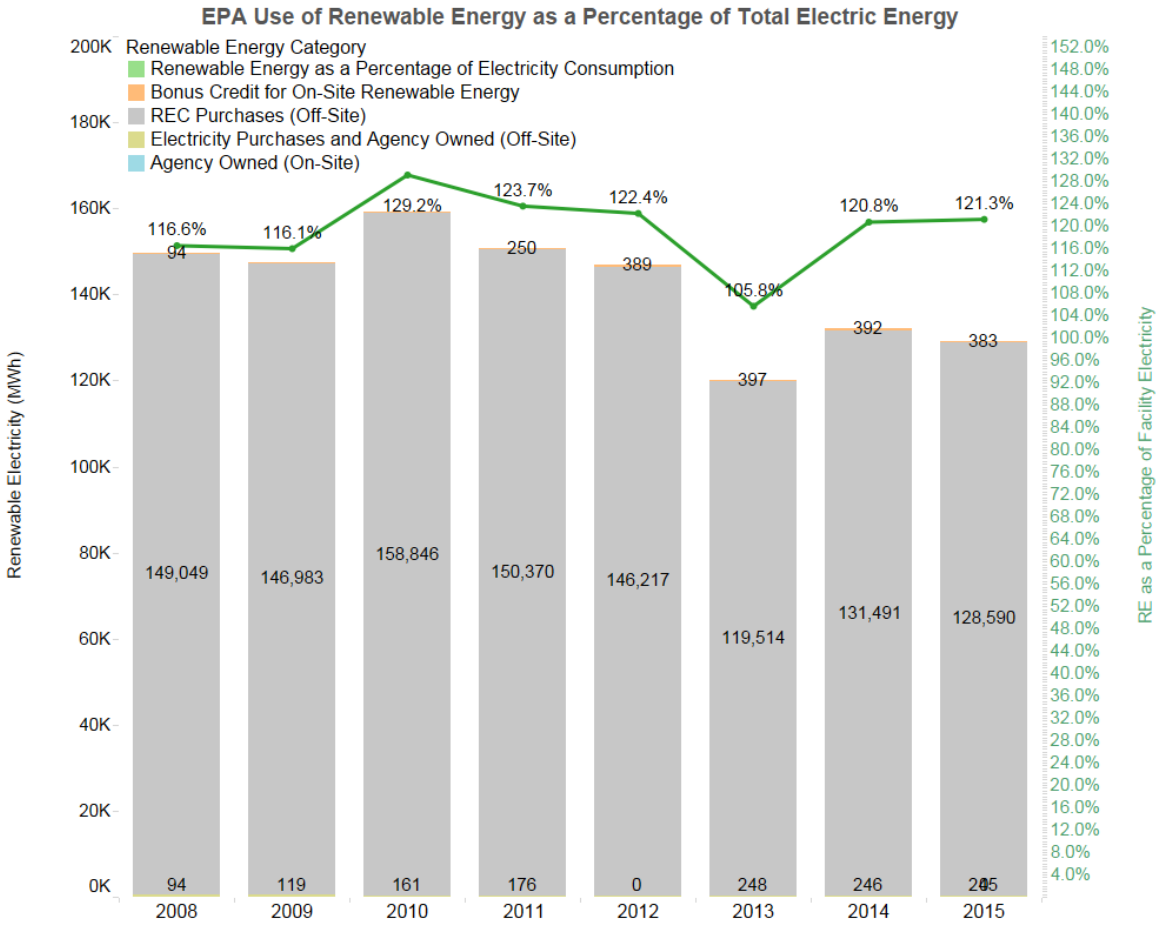
Clean Energy Goal

EO 13693 Section 3(b) requires that, at a minimum, the percentage of an agency's total electric and thermal energy accounted for by renewable and alternative energy shall be not less than: 10 percent in FY 2016-17; 13 percent in FY 2018-19; 16 percent in FY 2020-21; 20 percent in FY 2022-23; and 25 percent by FY 2025.

Renewable Electric Energy Goal

EO 13693 Section 3(c) requires that renewable energy account for not less than 10 percent of total electric energy consumed by an agency in FY 2016-17; 15 percent in FY 2018-19; 20 percent in FY 2020-21; 25 percent in FY 2022-23; and 30 percent by 2025.

Chart: Use of Renewable Energy as a Percentage of Total Electric Energy



Clean and Renewable Energy Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Metrics
Install agency-funded renewable on-site and retain corresponding renewable energy certificates (RECs).	Yes	EPA has successful onsite renewable energy demonstration projects installed on its facilities across the country, including solar arrays, outdoor lights, ground source heat pumps, and wind turbines. EPA is reevaluating the recommendations from a 2011 feasibility study of onsite renewable energy options to identify additional opportunities to further evaluate generating energy at its laboratory facilities.	By June 30, 2017, EPA will identify two EPA laboratory locations with suitable conditions for onsite renewable energy projects for onsite feasibility studies.
Contract for the purchase of energy that includes installation of renewable energy on or off-site and retain RECs or obtain replacement RECs.	Yes	EPA continues to pursue onsite renewable energy installations and demonstration projects where cost-effective to do so, when funding is available. Despite delays last year, EPA is progressing on a renewable energy savings performance contract (ESPC) combined with a power purchase agreement to support a 1.5-megawatt photovoltaic (PV) installation at the Agency's Edison, New Jersey, laboratory. EPA has committed to purchasing replacement RECs for the energy generated by this PV system through its extensive green power/REC purchase program.	By June 30 2017, EPA will complete the installation of the solar PV array at the Edison, New Jersey, laboratory.
Purchase electricity and corresponding RECs or obtain equal value replacement RECs.	Yes	EPA currently participates in utility-offered programs at its facilities in Corvallis, Oregon, and Duluth, Minnesota, where EPA purchases both electricity and corresponding RECs (i.e., delivered green power). Participating in these delivered green power programs has been an EPA strategy since 2002, and the Agency will continue to pursue similar opportunities where feasible.	By June 30, 2017, EPA will identify an additional utility company offering for obtaining delivered green power at one EPA facility.
Purchase RECs to supplement installations and purchases of renewable energy, when needed to achieve renewable goals.	Yes	Since 2006, EPA has purchased green power equivalent to 100 percent of its estimated annual electricity use each year. EPA will continue to procure RECs and other forms of green power in FY 2017 to reduce its reported Scope 1 and 2 GHG emissions.	EPA plans to complete the Agency's FY 2017 REC purchase with DLA Energy by June 30, 2017.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Install on-site thermal renewable energy and retain corresponding renewable attributes or obtain equal value replacement RECs.	Yes	EPA has a number of onsite thermal renewable energy systems at its facilities, including: a ground source heat pump system installed at its laboratory in Ada, Oklahoma, and three solar hot water heating systems in Edison, New Jersey; Athens, Georgia; and Narragansett, Rhode Island.	EPA expects to complete construction of a ground source heat pump at one laboratory by June 30, 2017.
Install on-site combined heat and power processes.	No	While EPA will always consider combined heat and power technology where feasible, this is not of the Agency's top strategies in this area.	
Identify opportunities to install on-site fuel cell energy systems.	No	EPA considers fuel cell energy systems where feasible, but this is not of the Agency's top strategies in this area.	
Identify opportunities to utilize energy that includes the active capture and storage of carbon dioxide emissions associated with energy generation.	N/A	Carbon capture and storage energy projects are not applicable at sites within EPA's current inventory of facilities.	
Identify and analyze opportunities to install or contract for energy installed on current or formerly contaminated lands, landfills, and mine sites.	N/A	EPA does not own any current or formerly contaminated lands, landfills, or mine sites that can be used for energy technology installations.	
Identify opportunities to utilize energy from small modular nuclear reactor technologies.	N/A	Modular nuclear reactor technologies are not applicable in EPA's current inventory of facilities.	

Goal 4: Water Use Efficiency and Management

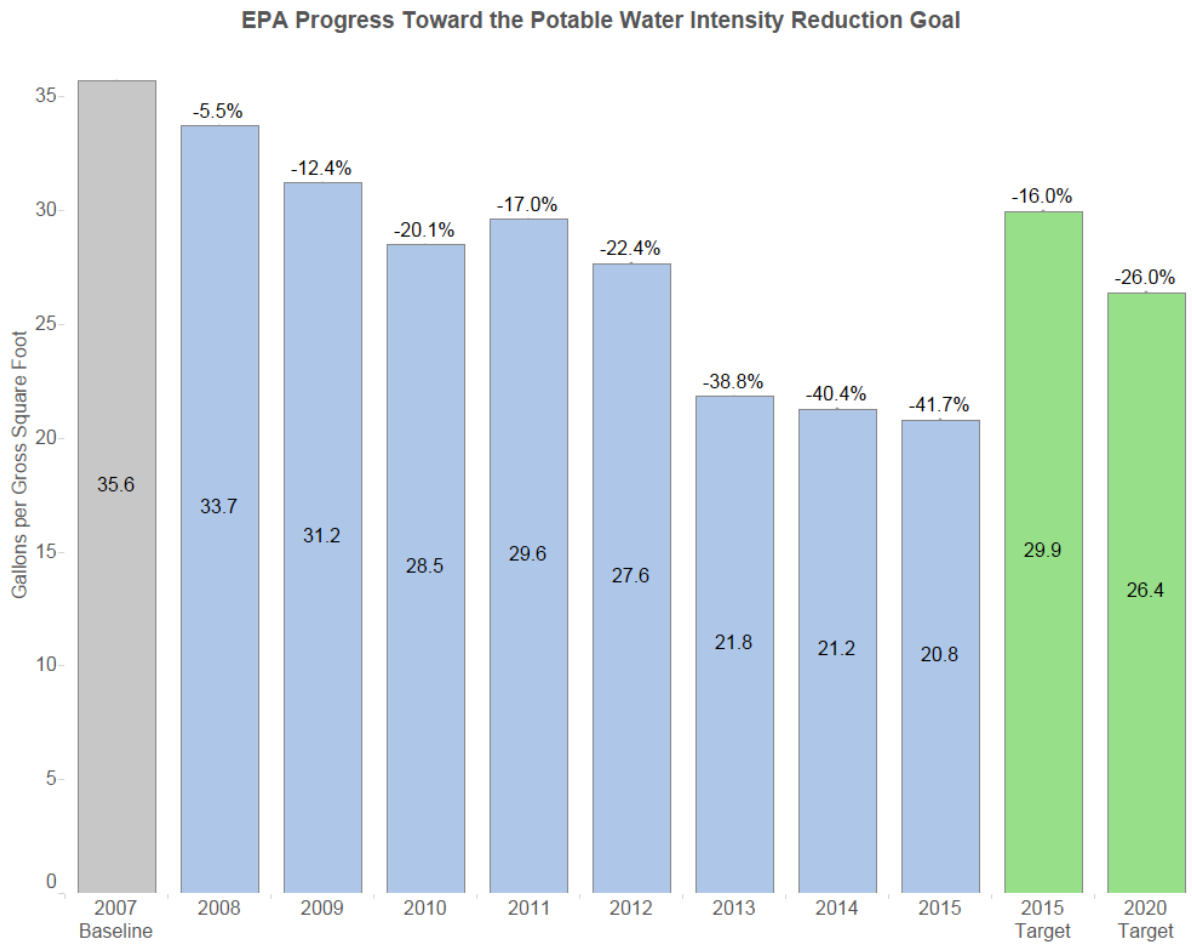
Potable Water Consumption Intensity Goal

EO 13693 Section 3(f) states that agencies must improve water use efficiency and management, including stormwater management, and requires agencies to reduce potable water consumption intensity, measured in gallons per square foot, by 2 percent annually through FY 2025 relative to an FY 2007 baseline. A 36 percent reduction is required by FY 2025.

Industrial, Landscaping and Agricultural (ILA) Water Goal

EO 13693 section 3(f) also requires that agencies reduce ILA water consumption, measured in gallons, by 2 percent annually through FY 2025 relative to an FY 2010 baseline.

Chart: Progress Toward the Potable Water Intensity Reduction Goal



Water Use Efficiency and Management Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Install green infrastructure features to assist with storm and wastewater management.	Yes	EPA uses its GreenCheck process to review every lease, construction, and renovation project that adds or redevelops more than 5,000 square feet of impervious area to ensure green infrastructure features are included to meet Section 438 of EISA 2007. EPA also identifies green infrastructure opportunities when certifying existing buildings to meet the *Guiding Principles*.	EPA will initiate the contracting process to construct several green infrastructure features in one laboratory's new parking lot renovation by June 30, 2017.
Install and monitor water meters and utilize data to advance water conservation and management.	Yes	EPA has installed and regularly monitors water meters at the building level on all of its reporting facilities and will use this information to maintain potable and ILA water use below EO 13693 required targets. Individual facilities monitor system-level submeters to identify and fix leaks or other abnormalities.	EPA will collect, analyze, and distribute quarterly water use data for all reporting facilities to facility managers on an ongoing basis through June 30, 2017.
Install high efficiency technologies, e.g. WaterSense fixtures.	Yes	EPA will continue to retrofit bathroom fixtures with high-efficiency technologies and is specifying water-efficient technology in all new construction and lease renewals. EPA is implementing lavatory faucet replacement with 0.5 gallon-per-minute models; showerhead replacement with WaterSense labeled models; and toilet and urinal replacements with WaterSense labeled models where life-cycle cost effective and feasible within the plumbing infrastructure.	EPA will install faucet aerators and WaterSense labeled showerheads at two laboratories by December 31, 2016. In order to achieve net-zero water status at two of its facilities, EPA will install WaterSense labeled urinals and toilets by June 30, 2017.
Prepare and implement a water asset management plan to maintain desired level of service at lowest life cycle cost.	N/A	EPA does not operate its own water supply systems.	
Minimize outdoor water use and use alternative water sources as much as possible.	Yes	EPA assesses alternative water sources during new construction projects and water assessments and implements projects where feasible. Only seven facilities use supplemental water for irrigation.	EPA will install rainwater cisterns at one laboratory's new parking structure by June 30, 2017.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Design and deploy water closed-loop, capture, recharge, and/or reclamation systems.	No	EPA has already made significant progress implementing air conditioning condensate capture and reuse projects in prior years; therefore, this is not one of the Agency's top priorities in this area.	
Install advanced meters to measure and monitor potable and ILA water use.	No	EPA has installed advanced meters to monitor water use at all reporting facilities; therefore, this is not one of the Agency's top priorities in this area.	
Develop and implement programs to educate employees about methods to minimize water use.	No	Education has been a top priority within the Agency's Environmental Management Systems (EMSs) for many years, and no new initiatives are planned beyond the EMS approach.	
Assess the interconnections and dependencies of energy and water on agency operations, particularly climate change's effects on water which may impact energy use.	No	EPA is primarily addressing the interconnections and dependencies of energy and water use by effectively implementing strategies to reduce use of both resources concurrently. The impact of water use reduction projects on energy use is assessed prior to implementing these projects. This is not one of the Agency's priorities top in this area.	
Consistent with State law, maximize use of greywater and water reuse systems that reduce potable and ILA water consumption.	Yes	EPA has implemented an initiative across its portfolio of laboratory facilities to capture and reuse air handler condensate for cooling tower make-up water where climate-appropriate, thereby reducing potable water consumption.	EPA will complete control system improvements to maximize collection and reuse of condensate and other greywater at one laboratory by June 30, 2017, and initiate an effort to route collected air handler condensate to another facility's cooling tower, if project funding is available.
Consistent with State law, identify opportunities for aquifer storage and recovery to ensure consistent water supply availability.	N/A	This strategy is not applicable to the building level activity that EPA operates.	

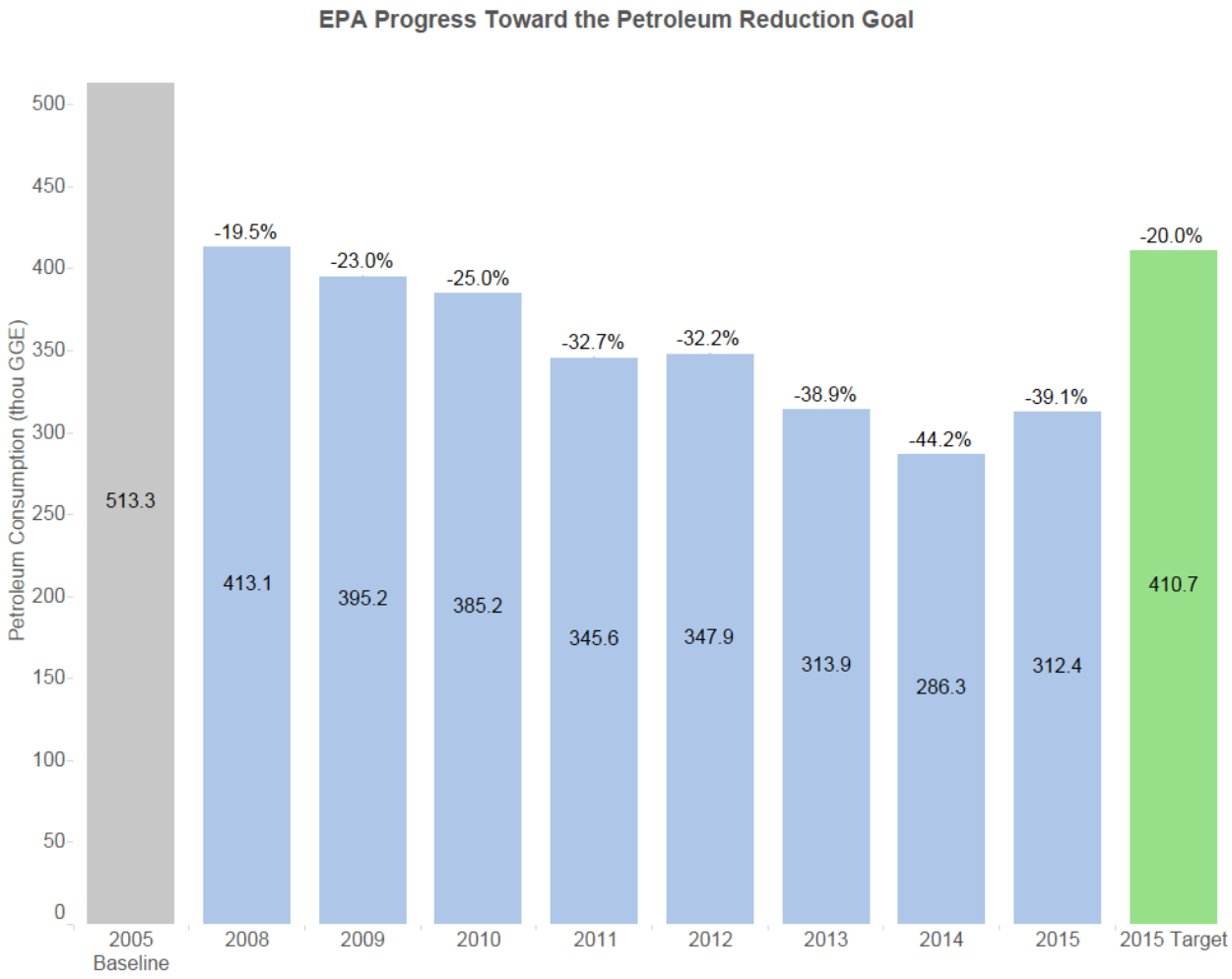
Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Ensure that planned energy efficiency improvements consider associated opportunities for water conservation.	No	Laboratory facilities have significant space heating and cooling needs and associated water use for boiler and cooling tower operations. Planned heating and cooling energy efficiency projects have commensurate water use reductions. These projects are ongoing, but this is not one of EPA's top priorities in this area.	
Where appropriate, identify and implement regional and local drought management and preparedness strategies that reduce agency water consumption.	Yes	EPA has a consistent process in place to update facility-specific water management plans approximately every four years. A drought management and preparedness chapter is being added during each plan update. Each update includes a discussion of drought risk, opportunities for short-term response to local drought potential, and considerations for making new construction projects more resilient to drought. In addition, drought preparedness is being assessed as part of the Agency's ongoing climate resiliency assessments.	EPA will include drought planning chapters in at least four water management plan updates by December 31, 2016.

Goal 5: Fleet Management

Fleet Petroleum Use Reduction Goal

EO 13514 and EISA required that by FY 2015 agencies reduce fleet petroleum use by 20 percent compared to an FY 2005 baseline.

Chart: Progress Toward the Petroleum Reduction Goal



Fleet Alternative Fuel Consumption Goal

Agencies should have exceeded an alternative fuel use that is at least 5 percent of total fuel use. In addition, EO 13423, *Strengthening Federal Environmental, Energy, and Transportation Management*, required that agencies increase total alternative fuel consumption by 10 percent annually from the prior year starting in FY 2005. By FY 2015, agencies must have increased alternative fuel use by 159.4 percent, relative to FY 2005. In FY 2015, EPA's use of alternative fuel equaled 9.7 percent of total fuel use.

Fleet Per-Mile Greenhouse Gas (GHG) Emissions Goal

EO 13693 Section 3(g) states that agencies with a fleet of at least 20 motor vehicles will improve fleet and vehicle efficiency and management. EO 13693 section 3(g)(ii) requires agencies to reduce fleet-wide per-mile GHG emissions from agency fleet vehicles relative to a FY 2014 baseline and sets new goals for percentage reductions: not less than 4 percent by FY 2017; not less than 15 percent by FY 2020; and not less than 30 percent by FY 2025.

EPA plans to meet the 30 percent per-mile GHG reduction requirement. The plan includes a focus on fuel-efficient acquisitions and replacements (including AFVs, HEVs, PHEVs, ZEVs, and LGVs) and continued use of alternative fuels, primarily E85 and electricity. EPA will ensure that electric charging infrastructure is feasible and installed prior to electric vehicle acquisition.

EO 13693 Section 3(g)(i) requires that agencies determine the optimum fleet inventory, emphasizing eliminating unnecessary or non-essential vehicles. EPA's right-sizing goal is to ensure that sedans comprise the highest percentage of the total fleet possible to maximize vehicle efficiency. The Agency continues to seek opportunities to electrify EPA's fleet through the replacement of conventionally fueled sedans with PHEVs and EVs.

Chart: Fleet-Wide Per-Mile GHG Emissions

Fleet Management Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Collect and utilize agency fleet operational data through deployment of vehicle telematics.	Yes	EPA will review all FY 2017 vehicle orders and ensure that telematics are installed on all applicable acquisitions.	EPA will initiate efforts to incorporate telematics into all covered light-duty and medium-duty vehicle acquisitions by June 30, 2017.
Ensure that agency annual asset-level fleet data is properly and accurately accounted for in a formal Fleet Management Information System as well as submitted to the Federal Automotive Statistical Tool reporting database, the Federal Motor Vehicle Registration System, and the Fleet Sustainability Dashboard (FLEETDASH) system.	No	EPA already has a formal FMIS, and submits data into FAST, FMVRS, and FleetDASH. EPA will work to further integrate data into FleetDASH and allow for Regional/Program Office fleet managers to access the system.	
Increase acquisitions of zero emission and plug-in hybrid vehicles.	Yes	Although not required to begin acquisition of these vehicles until 2021, EPA will seek to acquire as many of these vehicles as possible given mission and budgetary constraints.	EPA will engage with the DOE Tiger Team by March 30, 2017, to partner in identifying potential locations for EV infrastructure installation.
Issue agency policy and a plan to install appropriate charging or refueling infrastructure for zero emission or plug-in hybrid vehicles and opportunities for ancillary services to support vehicle-to-grid technology.	Yes	EPA will conduct a fleet/facility survey to determine parking facility capabilities and obstacles. Based on the results of the survey, EPA will develop a plan for installing charging infrastructure on a location by location basis.	EPA will conduct a parking facility survey by June 30, 2017, and use the results to develop a charging infrastructure plan.
Optimize and right-size fleet composition, by reducing vehicle size, eliminating underutilized vehicles, and acquiring and locating vehicles to match local fuel infrastructure.	Yes	EPA will review its fleet inventory and right-size the Agency's fleet accordingly.	EPA will develop and submit the VAM Fleet Management Plan by May 31, 2017.

Strategy	Priority for FY 2017	Strategy Narrative	Metrics
Increase utilization of alternative fuel in dual-fuel vehicles.	Yes	EPA will continue to target 100 percent alternative fuel use in all non-waivered flex-fuel vehicles.	EPA will continue to encourage alternative fuel use via trainings, nationwide fleet conference calls, and fleet site visits on an ongoing basis through June 30, 2017.
Use an FMIS to track real-time fuel consumption throughout the year for agency-owned, GSA-leased, and commercially-leased vehicles.	No	EPA will track all relevant fleet data elements in the Agency's FMIS. However, real-time fuel consumption will not be possible until a telematics system is fully integrated into the Agency's FMIS.	
Implement vehicle idle mitigation technologies.	No	EPA will review the feasibility of this strategy and potential cost benefits.	
Minimize use of law enforcement exemptions by implementing GSA Bulletin FMR B-33, *Motor Vehicle Management, Alternative Fuel Vehicle Guidance for Law Enforcement and Emergency Vehicle Fleets.*	Yes	EPA will stratify law enforcement vehicles into the three categories provided in GSA FMR Bulletin B-33.	EPA will incorporate law enforcement tiers into the Agency's FMIS by April 30, 2017.
Where state vehicle or fleet technology or fueling infrastructure policies are in place, meet minimum requirements.	No	It is not entirely clear to which state policies this recommendation is referring. If it refers to emissions inspections, EPA is actively working to comply with state vehicle emissions requirements.	
Establish policy/plan to reduce miles traveled, e.g. through vehicle sharing, improving routing with telematics, eliminating trips, improving scheduling, and using shuttles, etc.	No	EPA has significantly reduced miles traveled over the past nine years and continues to encourage trip consolidation and elimination while reviewing how telematics can support advanced routing technology to further reduce fuel consumption.	

Goal 6: Sustainable Acquisition

Sustainable Acquisition Goal

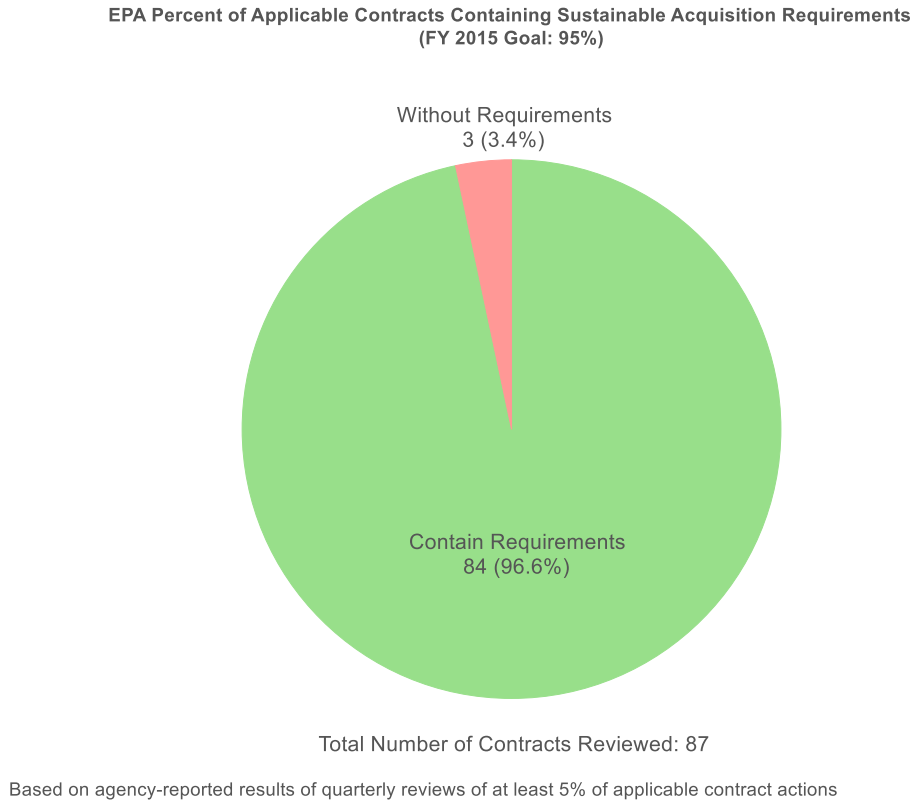
EO 13693 section 3(i) requires agencies to promote sustainable acquisition by ensuring that environmental performance and sustainability factors are considered to the maximum extent practicable for all applicable procurements in the planning, award, and execution phases of acquisition.

Biobased Purchasing Targets

The Agricultural Act of 2014 requires that agencies establish a targeted biobased-only procurement requirement. E.O. 13693 section 3(iv) requires agencies to establish an annual target for increasing the number of contracts to be awarded with BioPreferred and biobased criteria and the dollar value of BioPreferred and biobased products to be delivered and reported under those contracts in the following fiscal year.

For FY 2017, EPA has established a target of 149 contracts and $5,272,255.95 in products to be delivered.

Chart: Percent of Applicable Contracts Containing Sustainable Acquisition Requirements



Sustainable Acquisition Strategies

As indicated by the Sustainable Acquisition Chart, in 2015 EPA successfully achieved the sustainable acquisition goals mandated by EO 13514. The four FY 2017 priority strategies discussed below will allow EPA to continue achieving the important sustainable acquisition goals of current EO 13693. Sustainable acquisition is an integral part of EPA's mission of protecting human health and the environment. To this end, EPA will dedicate staff and resources to ensure that each of the four FY 2017 priority strategies is successfully achieved.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Establish and implement policies to meet statutory mandates requiring purchasing preference for recycled content products, ENERGY STAR qualified and FEMP-designated products, and Biopreferred and biobased products designated by USDA.	Yes	The EPA Acquisition Guide (EPAAG) establishes the Agency's Green Purchasing Plan (GPP) and has created a complementary Green Purchase Toolkit, which provides a variety of information and reference materials that makes it easier to purchase green supplies and services.	EPA will review sample contract actions for FY 2016 Q1/Q2 by July 31, 2016, and Q3/Q4 sample contract actions by January 31, 2017. EPA will analyze results of its Quality Assessment Program by June 30, 2017; and its Office of Acquisition Management will continue to oversee the effectiveness of self-monitoring on an ongoing basis.
Establish and implement policies to purchase sustainable products and services identified by EPA programs, including SNAP, WaterSense, Safer Choice, and Smart Way.	No	This is not a priority strategy at this time, because in October 2015 EPA promulgated Agency policy pursuant to EPA's Green Purchasing Plan in EPAAG Chapter 23, Environment, Energy and Water Efficiency, Renewable Energy Technologies, Occupational Safety, and Drug-Free Workplace. EPA plans to update EPAAG Chapter 23 as needed.	
Establish and implement policies to purchase environmentally preferable products and services that meet or exceed specifications, standards, or labels recommended by EPA.	No	This is not a priority strategy at this time, because in October 2015 EPA promulgated Agency policy pursuant to EPA's Green Purchasing Plan in EPAAG Chapter 23, Environment, Energy and Water Efficiency, Renewable Energy Technologies, Occupational Safety, and Drug-Free Workplace. EPA plans to update EPAAG Chapter 23 as needed.	

Strategy	Priority for FY 2017	Strategy Narrative	Metrics
Use Category Management Initiatives and government-wide acquisition vehicles that already include sustainable acquisition criteria.	Yes	EPA's portfolio of Strategic Sourcing/Category Management Initiatives (SSI/CM) includes: laboratory supplies, cellular services, print management services, office supplies, Microsoft licenses, domestic delivery services, and Enterprise Voice Services. Building on this successful portfolio, CM focus areas are information technology and mobile devices and services. EPA's established workgroup ensures that relevant mobile devices offered as part of CM meet applicable sustainability requirements.	By September 30, 2016, EPA will add an Enterprise Network Services and Equipment Maintenance SSI. By September 30, 2017, EPA plans to include SSIs on records management and IT applications and services and expand the Agency CM portfolio as the CM Leadership Council endorses other areas of focus.
Ensure contractors submit timely annual reports of their BioPreferred and biobased purchases.	Yes	EPA is developing a mechanism for the acquisition staff for how to best communicate this requirement to applicable contractors. EPA plans on consulting with the U.S. Department of Agriculture and, based upon the results, will develop and implement any needed corrective action(s). EPA will continue outreach efforts to the acquisition staff to ensure contractors submit timely annual reports.	By September 30, 2016, EPA will ascertain its past and current level of compliance. By December 31, 2016, EPA will establish any corrective actions needed. By March 31, 2017, EPA will develop a compliance baseline to measure future improvement of contractor compliance. By June 30, 2017, EPA will conduct acquisition staff training. By September 30, 2017 EPA will work with the acquisition staff on contractor notification regarding reporting requirements, and by December 31, 2017, EPA will assess the FY 2017 improvement of contractor reporting.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Reduce copier and printing paper use and acquire uncoated printing and writing paper containing at least 30 percent postconsumer recycled content or higher.	No	This is not priority strategy at this time, because in January 1990, EPA issued an order directing contracts offices to ensure that all new contracts specify that contractors use recycled paper for all reports required for delivery to the Agency and the Grants Administration Division to include in all new grants and cooperative agreements a special condition requiring grantees and recipients of cooperative agreement funds to use recycled paper for reports submitted to the Agency.	
Identify and implement corrective actions to address barriers to increasing sustainable acquisitions.	No	This is not a priority strategy at this time, because as reported in the 2015 SSPP, EPA completed this strategy during FY 2014.	
Improve quality of data and tracking of sustainable acquisition through the Federal Procurement Data System (FPDS).	No	This is not a priority strategy at this time, because EPA has served on one SAMM sub-workgroup in FY 2015 and a second SAMM sub-workgroup FY 2016 to assess and make recommendations on improving the FPDS data. The reports from both sub-workgroups have been submitted to the White House Council on Environmental Quality. EPA also conducts an annual Independent Verification and Validation (IV&V) review of the data reported in FPDS fields compared to contract file documentation and provides training to the acquisition staff on the results of the IV&V report, including guidance reference for coding the sustainable acquisition FPDS codes.	

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Incorporate compliance with contract sustainability requirements into procedures for monitoring contractor past performance and report on contractor compliance in performance reviews.	No	This was a four-phased strategy inclusive of promotion, training, implementation feedback, and implementation analysis. Three phases were completed from FY 2014 through FY 2015. EPA determined that it was not feasible to implement the fourth phase, sustainability criteria in the Contractor Performance Assessment Reporting System (CPARS). CPARS is a government-wide system, owned by NAVSEA; EPA has no control over the past performance measures included in CPARS.	
Review and update agency specifications to include and encourage products that meet sustainable acquisition criteria.	No	This is not a priority strategy. The strategy is not applicable to most statements of work/statements of objectives language contained in EPA contracts. EPA is working with the GSA Green Products Compilation Team to facilitate the inclusion of sustainability clauses into contracts. At this time, EPA also plans to include sustainable acquisition requirements in the evaluation criteria and/or factors in pertinent contracts, which would allow for effective monitoring and enforcement.	
Identify opportunities to reduce supply chain emissions and incorporate criteria or contractor requirements into procurements.	Yes	Although not required by Section 15 of EO 13693, Supply Chain GHG Management, which requires the seven largest federal procuring agencies to develop annual plans to implement five new procurements that include contractor GHG management requirements or include evaluation criteria that consider GHG management practices, EPA has volunteered to participate in this initiative. As such, EPA's 2016 Procurement Plan to Reduce Supply Chain GHG Emissions is attached as Appendix 3 to the SSPP.	Through June 30, 2017, EPA will monitor and measure this strategy at six and 12-month milestones based on actual contract requirements for contractors to disclose GHG emissions, establish targets for reductions, and provide GHG reporting as a contract deliverable.

Goal 7: Pollution Prevention and Waste Reduction

Pollution Prevention and Waste Reduction Goal

EO 13693 section 3(j) requires that Federal agencies advance waste prevention and pollution prevention and to annually divert at least 50 percent of non-hazardous construction and demolition debris. Section 3(j)(ii) further requires agencies to divert at least 50 percent of non-hazardous solid waste, including food and compostable material, and to pursue opportunities for net-zero waste or additional diversion.

Reporting on progress toward the waste diversion goal will begin with annual data for FY 2016.

Pollution Prevention & Waste Reduction Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Report in accordance with the requirements of sections 301 through 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (42 U.S.C 11001-11023).	No	EPA continues to report in accordance with sections 301-313 EPCRA, leveraging internal reporting mechanisms to confirm which facilities are reporting via the Toxic Release Inventory. However, this is not one of EPA's priority strategies for this area.	
Reduce or minimize the quantity of toxic and hazardous chemicals acquired, used, or disposed of, particularly where such reduction will assist the agency in pursuing agency greenhouse gas reduction targets.	No	All of EPA's laboratories have chemical management committees that meet periodically to discuss opportunities for reducing chemicals purchased, reducing chemical waste generation, strengthening chemical management systems, and adopting analytical techniques that use fewer chemicals. However, this is not one of EPA's priority strategies for this area.	
Eliminate, reduce, or recover refrigerants and other fugitive emissions.	No	EPA requires ozone-depleting substance (ODS) management plans and inventories for all sites that use ODS-containing equipment. Plans must include phase-out strategies and inventories for Class I and Class II ODSs. However, this is not one of EPA's priority strategies for this area.	

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Reduce waste generation through elimination, source reduction, and recycling.	Yes	EPA requires reporting locations to provide facility waste generation and diversion data, and encourages waste reduction, recycling, and composting to support internal agencywide waste diversion goals. EPA also collects construction and demolition (C&D) waste and recycling data to identify opportunities for improvement. EPA has begun planning for waste-to-energy (WTE) data collection and analysis, and continues to encourage all reporting locations to implement waste reduction and diversion strategies.	EPA will continue to pursue its internal goal of 60 percent diversion of nonhazardous solid waste through June 30, 2017. EPA will begin to evaluate internal strategies to meet new federal waste management guidance, anticipated for release in 2016, and will begin collecting WTE data, where applicable by June 30, 2017. EPA will continue to pursue a C&D waste diversion rate of 75 percent for all new construction and renovation projects through June 30, 2017.
Implement integrated pest management (IPM) and improved landscape management practices to reduce and eliminate the use of toxic and hazardous chemicals and materials.	Yes	EPA implements IPM, hardscape management, and/or landscape management best practices where applicable to reduce or eliminate the use of toxic and hazardous chemicals. Facilities participating in the Agency's internal *Guiding Principles* certification conduct a thorough review of their IPM plans to ensure all applicable IPM best practices are incorporated. EPA is implementing recommendations from 17 pollinator site assessments conducted in 2015, implementing IPM best practices with pollinator protection strategies, where feasible, at EPA-owned locations.	EPA will continue to develop updates to landscape management plans, where appropriate, to address pollinator protection through June 30, 2017. EPA will develop updated internal guidance on IPM for facilities in EPA's internal *Guiding Principles* certification process by June 30, 2017.
Develop or revise agency chemical inventory plans and identify and deploy chemical elimination, substitution, and/or management opportunities.	No	EPA promotes responsible chemical management and requires chemical management plans at all laboratories; however, this is not one of EPA's priority strategies in this area.	

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Inventory current HFC use and purchases.	Yes	EPA requires its EMS reporting locations to inventory Class I and Class II ODSs, and the Agency has initiated planning to capture and provide data on other refrigerants, such as HFC chemicals.	EPA will begin requesting all reporting locations to incorporate HFCs in annual inventory reporting for FY 2016 by June 30, 2017.
Require high-level waiver or contract approval for any agency use of HFCs.	Yes	EPA requires EMS reporting locations to have written ODS management plans, to develop ODS inventories, and to phase out applicable Class I and Class II ODSs. EPA is leveraging this reporting process to include HFCs, to identify where the agency is using HFCs, and to evaluate options for a waiver process.	EPA will develop a process to establish high-level waivers for HFC use by June 30, 2017.
Ensure HFC management training and recycling equipment are available.	Yes	EPA plans to provide training on HFC management and recycling to facility safety and health managers.	EPA will initiate planning and development of training on HFC management by June 30, 2017.

Goal 8: Energy Performance Contracts

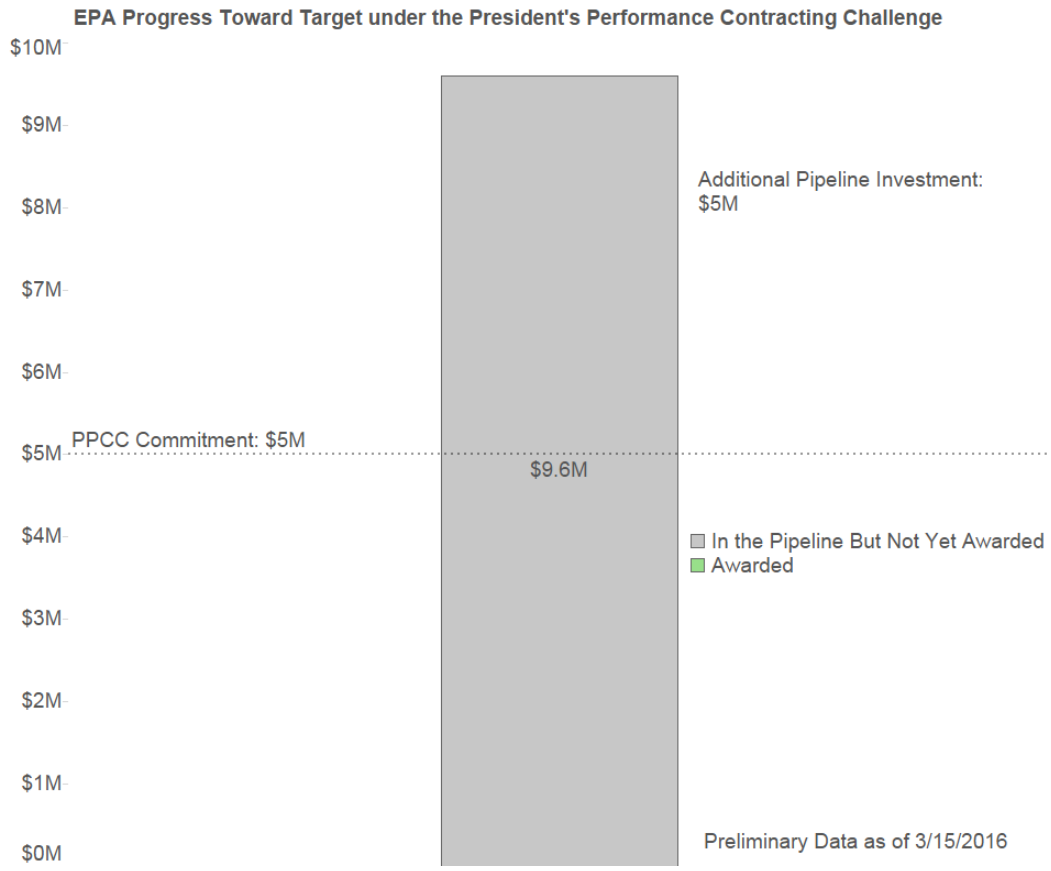
Performance Contracting Goal

EO 13693 section 3(k) requires that agencies implement performance contracts for Federal buildings. EO 13693 section 3(k)(iii) also requires that agencies provide annual agency targets for performance contracting. EPA's commitment under the President's Performance Contracting Challenge is $5 million in contracts awarded by the end of calendar year 2016. EPA's targets for the next two fiscal years are:

FY 2017: $0.6 million
FY 2018: $0.6 million

Taking into account the energy intensity reduction goal of 17.5 percent by FY 2025 from the FY 2015 baseline, and using data from recent ESPC awards to determine a $1 investment per 4,500 Btus saved factor, EPA calculated its total required investment over eight years to be $40.1 million. However, the Agency was able to subtract its FY 2015 energy investment and an investment in a performance contract-based solar PV installations currently underway at one of its laboratories, bringing the total eight-year investment to $12.2 million (an annual investment of $1.5 million). EPA calculated 38 percent of that amount (due to the use of non-performance contracting or direct investment) to reach an annual performance target of $0.6 million.

Chart: Progress Toward Target under the President's Performance Contracting Challenge



Performance Contracting Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Utilize performance contracting to meet identified energy efficiency and management goals while deploying life-cycle cost effective energy and clean energy technology and water conservation measures.	Yes	EPA is examining new performance contracting opportunities, taking into account the recommendations for laboratory consolidation from the *Synthesis Report of the U.S. EPA Laboratory Enterprise Evaluation*.	EPA will make significant progress on identifying one new performance contracting opportunity by June 30, 2017.
Fulfill existing agency target/ commitments towards the PPCC by the end of CY16.	Yes	EPA is making significant progress toward completing a 1.5 megawatt photovoltaic (PV) array at its Edison, New Jersey, laboratory that combines an energy savings performance contract with a power purchase agreement.	EPA will continue to make significant progress towards the completion of the solar PV array installation at the Edison, New Jersey, laboratory by December 31, 2016, with a target of completing the installation no later than June 30, 2017.
Evaluate 25% of agency's most energy intensive buildings for opportunities to use ESPCs/UESCs to achieve goals.	Yes	EPA is examining new performance contracting opportunities, taking into account the *Synthesis Report of the U.S. EPA Laboratory Enterprise Evaluation*, and is focusing on its most energy-intensive facilities that are not slated for consolidation.	EPA will make significant progress on identifying one new performance contracting opportunity at an energy-intensive laboratory by June 30, 2017.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Prioritize top ten portfolio wide projects which will provide greatest energy savings potential.	Yes	EPA continually updates its Energy Strategy framework to prioritize top energy-saving projects at its reporting facilities and continues to identify other energy savings opportunities through ongoing facility energy assessments, taking into account the recommendations of the *Synthesis Report of the U.S. EPA Laboratory Enterprise Evaluation*.	EPA will continue to maintain and update its Energy Strategy program to identify and prioritize the top 10 most cost-effective energy savings projects at its facilities by June 30, 2017.
Identify and commit to include onsite renewable energy projects in a percentage of energy performance contracts.	No	Pursuing additional onsite renewable energy projects using performance contracting is not one of the Agency's top strategies in this area until the Agency has a chance to assess the performance of the PV array being installed at its Edison, New Jersey, laboratory.	
Submit proposals for technical or financial assistance to FEMP and/or use FEMP resources to improve performance contracting program.	No	Submitting a proposal for technical or financial assistance from FEMP is not one of the Agency's top five strategies at this time.	
Work with FEMP/USACE to cut cycle time of performance contracting process, targeting a minimum 25% reduction.	No	Reducing the cycle time of EPA's performance contracting process is not one of the Agency's top five strategies in this area.	
Ensure agency legal and procurement staff are trained by the FEMP ESPC/UESC course curriculum.	No	Participating in FEMP trainings is not one of the Agency's top five strategies in this area.	

Goal 9: Electronics Stewardship and Data Centers

Electronics Stewardship Goals

EO 13693 Section 3(l) requires that agencies promote electronics stewardship, including: procurement preference for environmentally sustainable electronic products; establishing and implementing policies to enable power management, duplex printing, and other energy efficient or environmentally sustainable features on all eligible agency electronic products; and employing environmentally sound practices with respect to the agency's disposition of all agency excess or surplus electronic products.

Agency Progress in Meeting Electronics Stewardship Goals

Procurement Goal: At least 95 percent of monitors, PCs, and laptops acquired meets environmentally sustainable electronics criteria (EPEAT registered).

FY 2015 Progress: 94.3 percent

Power Management Goal: 100 percent of computers, laptops, and monitors has power management features enabled.

FY 2015 Progress: 100 percent of equipment has power management enabled.
49 percent of equipment has been exempted.

End-of-Life Goal: 100 percent of electronics disposed using environmentally sound methods, including GSA Xcess, Computers for Learning, Unicor, U.S. Postal Service Blue Earth Recycling Program, or Certified Recycler (R2 or E-Stewards).

FY 2015 Progress: 100 percent

Data Center Efficiency Goal

EO 13693 Section 3(a) states that agencies must improve data center efficiency at agency facilities, and requires that agencies establish a power usage effectiveness target in the range of 1.2 to 1.4 for new data centers and less than 1.5 for existing data centers.

Electronics Stewardship Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Use government-wide strategic sourcing vehicles to ensure procurement of equipment that meets sustainable electronics criteria.	Yes	In February 2016, the agency issued an acquisition policy within the EPA Acquisition Guide (and supplementing the FAR). The policy, *Requirement for Use of Strategic Sourcing Contract Vehicles*, specifies that in accordance with OMB memorandum M-16-02, Category Management Policy 15-1, dated October 16, 2015, computers shall only be purchased from one of three government-wide acquisition contracts: NASA Solutions for Enterprise-Wide Procurement (SEWP), GSA's IT Schedule 70, or NIH's Chief Information Officer-Commodities and Solutions (CIO-CS). The policy mandates that strategic sourcing contract vehicles are required first sources (with limited exceptions) and is applicable to all purchases regardless of dollar value.	As part of its OMB Scorecard efforts, EPA will review sample contract actions from the first and second quarters of FY 2016 by July 31, 2016, and sample contract actions from the third and fourth quarters of FY 2016 by January 31, 2017.
Enable and maintain power management on all eligible electronics; measure and report compliance.	Yes	A new Data Center Energy Practitioner position (discussed below) will enable the National Computer Center (NCC) to manage power utilization and report compliance on all equipment in the Agency's core data centers and provide advice and support to data center managers of all agency non-core data centers.	EPA will define the position description for the Data Center Energy Practitioner and submit the package by September 30, 2016 to the Office of Human Resources, for hiring during the first quarter of FY 2017.
Implement automatic duplexing and other print management features on all eligible agency computers and imaging equipment; measure and report compliance.	No	EPA will continue to implement its existing policies for duplexing and deploy duplex-enabling on new eligible computers and network printers, but this is not one of the Agency's top priorities at this time.	

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Ensure environmentally sound disposition of all agency excess and surplus electronics, consistent with Federal policies on disposal of electronic assets, and measure and report compliance.	Yes	To ensure continued stewardship of the agency's electronic assets, EPA will continue to implement environmentally sound disposition of electronic assets through approved programs and submit data annually to GSA. EPA will also continue to monitor compliance and use only Responsible Recycling certified recyclers. EPA will also pursue environmentally sound disposition of mobile devices, implementing agreements with eCycle, Verizon, and AT&T for sustainable asset recovery and recycling of mobile devices.	EPA will strive to achieve a rate of 75 percent or higher for IT product donations through GSA's CFL program on an ongoing basis through June 30, 2017.
Improve tracking and reporting systems for electronics stewardship requirements through the lifecycle: acquisition and procurement, operations and maintenance, and end-of-life management.	Yes	EPA will continue to use existing mechanisms for tracking and reporting electronics stewardship data and evaluate areas for improvement across the lifecycle of electronics acquisition, O&M, and end-of-life management. EPA will continue to leverage its agency Electronics Stewardship working group to ensure coordination of improvement initiatives. EPA will research if applicable contracts contain clauses and specifications pertaining to life-cycle management. If the research identifies applicable contracts that do not contain adequate clauses and/or specifications, EPA will work with contracting staff to incorporate this language in future contracts.	EPA will continue to implement industry best practices from the asset management standard (ISO 55000:2014), through June 30, 2017. By December 31, 2017, EPA will initiate and complete research to determine if applicable contracts contain clauses and specifications pertaining to life-cycle management.

Data Center Efficiency Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Develop, issue, and implement policies, procedures, and guidance for data center energy optimization, efficiency, and performance.	Yes	EPA plans to consolidate data centers under the Federal Data Center Consolidation Initiative (FDCCI), closing 40 percent of the Agency's non-core data centers.	EPA will initiate closure of 50 percent of non-core data centers by October 30, 2016.
Install and monitor advanced energy meters in all data centers (by FY 2018) and actively manage energy and power usage effectiveness.	Yes	EPA will initiate planning to prioritize installation of advanced energy meters across agency data centers.	EPA will make progress on installing advanced energy meters at EPA data centers on an ongoing basis through June 30, 2017.
Minimize total cost of ownership in data center and cloud computing operations.	Yes	EPA plans to implement intra-agency cross-geographical continuity of operations (COOP) through replication and backup between the agency's data centers, instead of hiring external COOP sites.	EPA will initiate plans to achieve $250,000 per year savings from discontinuing use of one disaster recovery and COOP site through June 30, 2017.
Identify, consolidate, and migrate obsolete, underutilized, and inefficient data centers to more efficient data centers or cloud providers; close unneeded data centers.	Yes	EPA will replace obsolete equipment through routine equipment refresh cycles and leverage virtualization technologies to ensure the maximum practical utilization of IT resources. Virtualization utilization must vary according to the specific workload associated with each virtualization cluster. EPA will identify measures appropriate for each environment and the excess capacity required to provide for scalability.	EPA will surplus 100 percent of obsolete equipment on an ongoing basis through June 30, 2017.
Improve data center temperature and air-flow management to capture energy savings.	Yes	EPA will raise temperatures in its NCC-operated data centers to reduce air conditioning energy and cost requirements. The Agency plans to procure and install new airflow tiles strategically located to maximize efficient cooling and prototype cold aisle containment barriers to ensure that cool air is directed to computer systems.	On a quarterly basis through June 30, 2017, EPA will continue to track energy consumption measures in an effort to achieve 25 percent less energy consumption in NCC-operated data centers by 2020.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Assign certified Data Center Energy Practitioner(s) to manage core data center(s).	Yes	EPA will create a full time position for a certified Data Center Energy Practitioner to advise and act as the agent of the NCC director in managing energy at the Agency's core data centers and provide advice and support to managers of the Agency's non-core data centers.	EPA will initiate efforts to fill this position by September 30, 2016, for hiring during the first quarter of FY 2017.

Goal 10: Climate Change Resilience

EO 13653, *Preparing the United States for the Impacts of Climate Change*, outlines federal agency responsibilities for supporting climate resilient investment; managing lands and waters for climate preparedness and resilience; providing information, data, and tools for climate change preparedness and resilience; and planning.

EO 13693 Section 3(h)(viii) states that as part of building efficiency, performance, and management, agencies should incorporate climate-resilient design and management elements into the operation, repair, and renovation of existing agency buildings and the design of new agency buildings. In addition, Section 13(a) requires agencies to identify and address projected impacts of climate change on **mission-critical** water, energy, communication, and transportation demands and consider those climate impacts in operational preparedness planning for major agency facilities and operations. Section 13(b) requires agencies to calculate the potential cost and risk to mission associated with agency operations that do not take into account such information and consider that cost in agency decision-making.

Climate Change Resilience Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Strengthen agency *external* mission, programs, policies and operations (including grants, loans, technical assistance, etc.) to incentivize planning for, and addressing the impacts of, climate change.	Yes	One of the Strategic Measures on climate adaptation in the *FY 2014-2018 EPA Strategic Plan* is to have 240 state, tribal, and community partners incorporate climate change adaptation into the implementation of their environmental programs supported by major EPA financial mechanisms (grants, loans, contracts, and technical assistance agreements). This goal fulfills directives in the President's Climate Action Plan, EO 13653, and EO 13693 to modernize federal programs to support climate-resilient investments in states, tribes, and local communities.	EPA will continue to support climate resiliency investments through its categorical and discretionary grant programs and other financial mechanisms. For example, EPA is working to support tribal drought resilience through EPA's General Assistance Program (GAP) and specific set-aside funds for tribes through the State Revolving Funds on an ongoing basis through June 30, 2017.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Update and strengthen agency *internal* mission, programs, policies, and operations to align with the *Guiding Principles*, including facility acquisition, planning, design, training, and asset management processes, to incentivize planning for and addressing the impacts of climate change.	No	EPA Administrator Gina McCarthy signed EPA's revised "Policy Statement on Climate Change Adaptation" in June 2014; therefore, this is not one of the Agency's top five strategies in this area. This policy statement reaffirmed the commitments of EPA's principles to adaptation efforts.	
Update emergency response, health, and safety procedures and protocols to account for projected climate change, including extreme weather events.	No	EPA updated its emergency response plans in FY 2013 to account for extreme weather events. EPA's Office of Land and Emergency Management (OLEM) also produced a Climate Change Adaptation Implementation Plan that identifies the vulnerabilities of Emergency Response programs to climate change and actions to address them. The Implementation Plan identifies actions to ensure that Emergency Operations Center staff receive the most accurate and comprehensive information that takes into consideration changes in climate. No new updates are anticipated in FY 2016, so this is not one of the Agency's top five strategies in this area.	
Ensure climate change adaptation is integrated into both agencywide and regional planning efforts, in coordination with other Federal agencies as well as state and local partners, Tribal governments, and private stakeholders.	Yes	EPA's *Climate Change Adaptation Plan* identifies 10 Agencywide priorities for addressing the vulnerabilities of its mission to climate change and for integrating climate adaptation into its programs, policies, rules and operations. The 17 Climate Change Adaptation Implementation Plans produced by EPA's Program and Regional Offices provide more detail on how each office will carry out the work called for in the Agencywide Plan and provide a roadmap for how EPA will continue to implement the Agency's programs, serving communities all across the country that are facing climate-related challenges, to protect human health and the environment even as the climate changes.	The 17 Climate Change Adaptation Implementation Plans contain over 550 priority commitments by the Agency with specific targets/metrics to measure success; EPA will continue to implement them on an ongoing basis through June 30, 2017.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Ensure that vulnerable populations potentially impacted by climate change are engaged in agency processes to identify measures addressing relevant climate change impacts.	Yes	One of the 10 Agencywide priorities identified in EPA's *Climate Change Adaptation Plan* calls for the Agency to place special emphasis on, and work in partnership with, overburdened populations. Certain parts of the population, such as children, elderly, low income communities, tribes and indigenous people, environmental justice communities, and small rural communities can be especially vulnerable to the impacts of climate change. The Agency will continue to engage the most vulnerable communities to improve their capacity to prepare for and avoid damages from climate change impacts.	Each of the 17 Program and Regional Office Implementation Plans describe how they will continue to identify populations and places that are vulnerable to climate change and work with them to strengthen adaptive capacity; EPA will continue this work on an ongoing basis through June 30, 2017.
Identify interagency climate tools and platforms used in updating agency programs and policies to encourage or require planning for, and addressing the impacts of, climate change.	Yes	Per Section 10 of EO 13693, EPA and GSA have created an EO 13693 Regional Interagency Workgroup, which has been convening regularly to coordinate interagency efforts at the regional level on four key issues: sustainable operations of federal fleet vehicles; water resource management and drought response; climate change preparedness and resilience planning; and opportunities for collective procurement of clean energy for multiple agency buildings.	EPA and GSA will continue to convene the Regional Interagency Workgroup at least bimonthly and identify and implement showcase projects on an ongoing basis through June 30, 2017.

Appendices

EPA Fleet Management Plan and Vehicle Acquisition Methodology Report
Multi-Modal Access Plan
2016 Procurement Plan to Reduce Supply Chain Greenhouse Gas Emissions
EPA Climate Adaptation Survey Response

May 2016



FY 2016 Fleet Management Plan and Budget Narrative

U.S. Environmental Protection Agency
Office of Administration and Resources Management

EPA

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Contents

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(A) Introduction

(1) Briefly describe your agency's primary/core mission and how your fleet is configured to support it.

The Environmental Protection Agency's (EPA) primary mission is to protect human health and the environment. The Agency's motor vehicle fleet is used to support this mission; motor vehicles (hereafter referred to simply as "vehicles") are used to support monitoring and testing of environmental conditions, environmental disaster and clean-up response, enforcement of federal environmental regulations, and employee transportation for other official duties.

(2) Please describe the organizational structure and geographic dispersion of your fleet.

The Agency's ten regions cover the United States and its territories, including Guam, American Samoa, Puerto Rico, and the U.S Virgin Islands. EPA manages a decentralized vehicle fleet with both Regional and Program Office fleet components that support the Agency's primary and ancillary missions.

(3) Describe your agency's ancillary missions, such as administrative functions, and how your fleet supports them.

Vehicles are used to support such ancillary missions as: administrative functions, official travel, environmental testing, emergency response (ER), and law enforcement (LE).

(4) Describe how vehicles are primarily used, and how do mission requirements translate into the need for particular vehicle quantities and types.

Most vehicles operate within motor pools, meaning vehicles can be shared across different EPA organizations located a single geographic location. Some vehicles, such as specialized ER, LE, and special purpose vehicles are excluded from motor pool use. In other cases, vehicles may be assigned to individuals such as specific senior management officials, LE officers, or On-Scene Coordinators (OSCs). Each Regional or Program Office fleet determines how many and what types of vehicles are needed based primarily on mission requirements, vehicle availability, and budgetary considerations.

(B) Vehicle Acquisition and Replacement Strategies

(1) Describe your agency's vehicle sourcing strategy and decision(s) for purchasing/owning vehicles compared with leasing vehicles through GSA Fleet or commercially.

EPA complies with vehicle acquisition regulations through managerial controls as well as the education of Regional and Program Office Fleet Managers. All vehicle acquisitions must be approved by EPA's Safety and Sustainability Division (SSD) prior to finalization. SSD reviews proposed acquisitions for compliance with federal and Agency requirements. SSD will not approve vehicle orders if they are not alternative fuel vehicles (AFVs) (which includes hybrid electric vehicles [HEVs], plug-in hybrid electric vehicles [PHEVs], and low greenhouse gas-emitting vehicles [LGVs]), unless otherwise exempt. Additionally, SSD educates fleet managers on acquisition requirements via trainings and newsletters to ensure Agency compliance.

Per 31 U.S.C. 1343(b), EPA is not authorized to purchase passenger vehicles absent explicit statutory authority. Therefore, EPA currently leases a majority of its fleet from the General Services Administration (GSA). EPA is required to lease vehicles from GSA unless GSA is unable to provide vehicles that meet

EPA's mission requirements. In these cases GSA issues a waiver granting EPA authorization to pursue acquisition from alternate sources. GSA is routinely the most inexpensive source for leasing vehicles, and as a result, EPA will continue to source its vehicle acquisitions from GSA for the foreseeable future, with rare exceptions. EPA purchases vehicles only for such approved uses as mobile laboratories or emissions testing activities. In most cases, vehicles are purchased because they require significant additional investment in upgrades or specialized equipment, or are otherwise not practicable to lease via GSA.

(2) Describe your agency's plans and schedules for locating AFVs in proximity to AFV fueling stations.

As part of the acquisition approval process, SSD confirms that ethanol (E85) fueling infrastructure is locally available prior to placing flex-fuel vehicles (FFVs). SSD checks any fleet location requesting an FFV acquisition using the Department of Energy Alternative Fuel Station Locator to ensure that E85 infrastructure is located within five miles of the fleet location, in order to maximize the amount of E85 used. This helps the Agency to maximize alternative fuel consumption and lower GHG emissions.

(3) Describe your agency's approach to areas where alternative fuels are not available and whether qualifying LGVs or zero emission vehicles (ZEVs) are being placed in such areas.

For fleet locations without access to E85 infrastructure, EPA approves ZEV, PHEV, HEV, and LGV acquisitions unless fleet managers provide a reasonable justification for another vehicle type (via a functional needs exemption request), in accordance with Agency internal controls.

(4) EO 13693 requires agencies to reduce greenhouse gas (GHG) emissions as compared to a 2014 baseline. Describe your agency's plans to meet this goal. If funding is required to comply with this mandate, do you have documentation that it has been requested?

EPA's plan to meet the 30 percent per-mile GHG reduction requirement is twofold. The strategy includes a focus on (1) fuel efficient acquisitions and replacements (including AFVs, HEVs, PHEVs, ZEVs, and LGVs) and (2) continued use of alternative fuels, primarily E85 and electricity, which are favorable under Department of Energy (DOE) GHG calculations. EPA has already reduced per-mile GHG emissions by 4.9 percent from 416.9 carbon dioxide equivalent (CO_2e) grams per mile (GPM) in Fiscal Year (FY) 2014 to 396.3 CO_2e GPM in FY 2015.

(5) EO 13693 requires agencies to acquire ZEVs as an increasing percentage of passenger vehicle acquisitions. Describe your agency's plans to meet this goal. If funding is required to comply with this mandate, do you have documentation that it has been requested?

EPA will ensure compliance with the PHEV/ZEV acquisition requirement by reviewing all vehicle orders at the Agency level prior to submission, and seeking opportunities to acquire ZEVs. SSD will ensure that PHEVs or ZEVs account for at least 20 percent of subject acquisitions in Calendar Year (CY) 2021 and 50 percent of subject acquisitions in CY 2026 and thereafter. SSD will work with component fleets to ensure that charging infrastructure is feasible and installed prior to vehicle delivery. PHEV and ZEV acquisitions and associated infrastructure costs will require significant additional funding, assuming current cost levels remain constant or even slightly reduced. EPA is aware of potential funding obstacles and will begin taking steps to prepare for these additional costs.

(C) Telematics Acquisition Strategies

(1) EO 13693 requires agencies to incorporate telematics into the fleet. Describe your agency's plans to meet this goal.

Beginning in Fiscal Year (FY) 2017, EPA will require its fleet to procure telematics equipment for new passenger and light-duty vehicle acquisitions (and for medium duty vehicles, where appropriate) via GSA's schedule offerings. All vehicle acquisitions will be reviewed by SSD to ensure that 100 percent of subject vehicles include telematics units.

(2) If funding is required to comply with this mandate, do you have documentation that it has been requested?

EPA is aware of potential funding obstacles to meet this requirement and is taking action to prepare for these additional costs.

(3) Has the agency acquired the telematics system through GSA or directly from a vendor/company?

EPA has not acquired telematics systems as of FY 2016, but anticipates acquiring this system and equipment through GSA in FY 2017 and thereafter.

(4) Describe the type of telematics technology installed (satellite, cellular or radio frequency identification.

As of FY 2016, EPA does not own or operate telematics in its vehicle fleet.

(5) What type of telematics features are installed in your vehicles?

As of FY 2016, EPA does not own or operate telematics in its vehicle fleet. However, EPA plans to acquire a telematics system that includes the all vehicle diagnostics features mandated by Executive Order (EO) 13693, including fuel consumption, emissions, maintenance, utilization, idling, speed, and location data.

(6) Describe the obstacles encountered, lessons learned, and any experiences or other information that may benefit other agencies.

As of FY 2016, EPA does not own or operate telematics in its vehicle fleet.

(D) Efforts to Control Fleet Size and Cost

(1) Provide an explanation for any measurable change in your agency's fleet size, composition, and/or cost or if you are not meeting optimal fleet goals (based on agency VAM study results).

Following the guidance of GSA Bulletin FMR B-30, issued August 22, 2011, EPA conducted its first vehicle allocation methodology (VAM) study following finalization and submission of FY 2011 data. EPA conducted annual VAM studies from FY 2011 through FY 2015. EPA Is incorporating the new VAM requirements of E0 13693 into its FY 2016 VAM study.

EPA's first VAM, following the FY 2011 Federal Automotive Statistical Tool (FAST) data submission, resulted in a projected reduction of 48 vehicles (4.2 percent of total fleet inventory) to reach EPA's optimal fleet. Since FY 2011, EPA has eliminated 159 vehicles, or 13.8 percent of its total fleet, far

exceeding Agency goals for vehicle reductions. FAST reportable annual fleet costs (indirect costs, maintenance costs, depreciation, lease costs, and fuel costs) have decreased from $7,429,091 in FY 2012 to $5,387,517 in FY 2015, a 27 percent reduction. Figure 1 provides a summary of EPA's VAM eliminations from FY 2012 to 2014.

Figure 1. Actual Vehicle Fleet Inventory Reductions

	End of Year Inventory	Vehicle Eliminations	% Decrease from Baseline
FY 2011 (Baseline)	1,145 vehicles[1]	N/A	N/A
FY 2012	1,085 vehicles	60 vehicles[2]	5.2%
FY 2013	1,039 vehicles	46 vehicles	4.0%
FY 2014	1,007 vehicles	32 vehicles	2.8%
FY 2015	986 vehicles	21 vehicles	1.8%
Total	**N/A**	**159 vehicles**	**13.8%**

EPA has exceeded its FY 2015 goal of reducing its fleet by 4.2 percent of total fleet inventory. The Agency continues to seek unnecessary and under-utilized vehicles through the ongoing FY 2016 VAM study.

(2) Describe the factors that hinder attainment of your optimal fleet (e.g., budgetary, other resource issues, mission changes, etc.).

EPA has met and exceeded its FY 2015 fleet reduction goal.

(3) Discuss any trends toward larger, less fuel-efficient vehicles and the justifications for such moves.

As a result of VAM efforts, EPA is trending towards a fleet of smaller, more fuel-efficient vehicles. SSD emphasized vehicle right-sizing in the FY 2014 through FY 2016 VAM surveys and found that many vehicles are able to be replaced with smaller vehicles as they become eligible for replacement. EPA will continue to use these findings to ensure that future replacements are like-sized or smaller for both fuel and cost savings.

(4) Are you aware of and do you consider alternatives (short term rental, pooling, public transportation, etc.) to adding a vehicle to the agency's fleet?

See response to section (E)(3).

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[1] *After submission of the FY 2012 VAM, EPA received updated guidance from GSA and DOE regarding the definition of "special purpose vehicles," prompting the Agency to conduct an internal review of all special purpose designations and correct improper designations. As a result, EPA's FY 2011 VAM baseline of 1,145 differs from the FY 2011 Federal Automotive Statistical Tool (FAST) inventory of 1,102 because 43 vehicles were incorrectly designated as special purpose and, therefore, not reported into FAST.*

[2] *The FY 2012 vehicle elimination figure includes four vehicles that were incorrectly included in the VAM inventory. These vehicles were special purpose vehicles and not FAST reportable, and therefore were removed from EPA's VAM inventory.*

(5) Discuss the basis used for your future cost projections (published inflation estimates, historical trends, flat across-the-board percentage increases, mission changes, etc.)

EPA based future fleet cost projections on several factors, including historical trends, estimated changes in fleet size, and future mission needs. For example, EPA uses historical trends to project future vehicle ownership (i.e., fewer commercially-leased vehicles due to a shift towards GSA leases and vehicle reductions, respectively). EPA projects fuel costs based on historical trends. EPA also reviews current fleet size and projected fleet size when developing cost estimates. As a result, cost estimates are not projected to deviate significantly from current levels.

(E) Vehicle Assignments and Vehicle Sharing

(1) Describe how vehicles are assigned at your agency (individuals, offices, motor pools).

EPA assigns vehicles to authorized vehicle operators based on factors such as mission need, mission criticality, passenger and cargo requirements, and availability of reasonable alternatives (e.g., public transit, teleconferencing, or shuttle bus service). In some cases, vehicles are assigned to specific senior management officials, LE officers, or OSCs, but most vehicles operate within motor pools.

(2) Describe your agency's efforts to reduce vehicles assigned to a single person wherever possible.

The vast majority of EPA vehicles are not assigned to specific individuals. However, there are scenarios where single-user vehicles are essential for mission operations, including those listed in Section (E)(1). EPA has sought to keep single-user vehicle assignments to a minimum for budgetary purposes and continues to monitor this via the VAM process and other internal controls. Single-user assignments are a small subset of the EPA vehicle fleet.

(3) Describe pooling, car sharing, and shuttle bus consolidation initiatives as well as efforts to share vehicles internally or with other Federal activities.

SSD stresses the importance of trip consolidation and use of mass transit, video-conferencing, and teleconferencing to Regional and Program Office fleet components. All component fleets utilize some or all of these strategies to reduce reliance on the vehicle fleet and help conserve fuel and fleet costs. SSD has educated vehicle operators and fleet managers on ride-sharing practices in order to lower overall vehicle miles traveled (VMT) and optimize fleet efficiency. Reduced reliance on the vehicle fleet results in lower vehicle demand, which can lead to fleet consolidation. Additionally, EPA operates a shuttle bus service between its Washington, DC offices in conjunction with other federal agencies, as well. Due to the unique nature of EPA's mission, it is sometimes necessary for vehicles to be assigned to specific employees such as OSCs who perform site visits to remote locations for environmental testing and mitigation efforts. EPA anticipates that implementation of telematics into fleet vehicles will facilitate further progress for car sharing.

(4) Describe how home-to-work (HTW) vehicles are justified, assigned, and reported, as well as what steps are taken by your agency to limit HTW use.

Every two years, the EPA Administrator signs home-to-work (HTW) memoranda authorizing employees with specific mission needs to utilize vehicles for HTW transportation. Employees engaged in field work (as defined by 41 CFR 102-5.30) or law enforcement activities may be authorized for HTW transportation if it

is determined that such transportation will substantially increase the efficiency and economy of the government. Employees must have HTW requests approved by an authorizing official for each instance of HTW transportation, provide justification for such use, complete an official HTW authorization form, and have it signed and approved by their management. EPA's vehicles are never assigned for HTW transportation for the comfort or convenience of an employee. These Agency controls help limit HTW transportation to only those instances where allowing such travel is in the best interests of the government.

(5) Does your agency document/monitor the additional cost of HTW use of Federal vehicles? If so, please describe how.

EPA does not currently aggregate or require aggregation of HTW cost data. EPA HTW policy requires that HTW can only be granted when it improves the efficiency and economy of the government. The Agency's strict controls of HTW transportation provide sufficient cost management and ensure responsible stewardship of government funding.

(F) Vehicle Allocation Methodology (VAM) Planning

(1) What is the date of your agency's most recent VAM study? Please describe the results (Add/Reduce/Change vehicle types, sizes, etc.). Have all bureaus been studied?

EPA conducted annual VAM studies between FY 2012 and FY 2015. EO 13693 Implementing Instructions and GSA's draft revision of Federal Management Regulation (FMR) Bulletin B-30 contain revised requirements for VAM studies. Although new guidance only requires that agencies conduct VAM studies every five years, EPA is proactively conducting an FY 2016 VAM study to incorporate new requirements and guidance. The FY 2016 VAM study is expected to be completed by July 2016.

The FY 2015 VAM study was completed in June 2015 and documented in EPA's FY 2015 FMP. Following completion of the FY 2015 VAM, EPA reduced the Agency fleet by an additional 21 vehicles, for a total fleet reduction of 13.8 percent since FY 2011 (see Figure 1). EPA has exceeded its original FY 2012 optimal fleet goal of 4.2 percent by an additional 9.6 percent through the end of FY 2015. FAST reportable annual fleet costs (indirect costs, maintenance costs, depreciation, lease costs, and fuel costs) have decreased from $7,429,091 in FY 2012 to $5,387,517 in FY 2015, a 27 percent reduction.

FY 2014 and FY 2015 VAM processes placed emphasis on right-sizing fleet composition and ensuring that appropriate vehicles are used to meet mission requirements. Since FY 2011, the large majority of vehicle eliminations have come from light-duty (LD) trucks, with EPA eliminating 32 LD 4x2 trucks and 76 LD 4x4 trucks. Total VMT per year for vehicle types show a matching trend of decreased mileage in LD trucks, medium-duty (MD) vehicles, and heavy-duty (HD) vehicles while sedan VMT has stayed relatively consistent. EPA is therefore reducing VMT from the more inefficient vehicles in the fleet while maximizing use of the most efficient vehicles.

EPA's fleet has not seen a net increase in its inventory for several years and additional vehicles are only approved when warranted by specific and urgent mission requirements. EPA considers several alternatives prior to adding vehicles including:

1) Absorbing additional use into existing, similar vehicles in the fleet;

2) Determining if public transportation, teleconferencing, or shuttle bus service would suffice; and

3) Offsetting the additional vehicle acquisition via a vehicle disposal from within the Agency fleet.

(2) From your most recent VAM study, please describe/provide the specific utilization criteria (miles, hours, vehicle age, or other measures) used to determine whether to retain or dispose of a vehicle? If different criteria were used in different bureaus or program areas, provide the criteria for each.

As noted in Section (D)(1), EPA heavily scrutinized its vehicle fleet for in the FY 2016 VAM. EPA targeted the most under-utilized vehicles for elimination while concurrently placing an emphasis on right-sizing the existing fleet to match the Agency's needs. For the purposes of this report, the term right-sizing refers to determining the correct size and capabilities of each vehicle in the fleet. SSD used the following specific criteria for recommending vehicle eliminations in the FY 2016 VAM:

1) **VMT —** Vehicles with fewer than 10,000 VMT in FY 2015 were scrutinized for consolidation or elimination opportunities if operating time is also low.

2) **Operating Time —** Vehicles used fewer than 10 hours per week, or less than weekly (as estimated by component fleet managers) were examined for consolidation or elimination opportunities.

3) **Vehicle Size and Operating Terrain –** Vehicles used for basic passenger transport were reviewed for right-sizing opportunities. Additionally, vehicles with 4x4 drivetrains were examined in conjunction with their primary operating terrain and recommended for right-sizing to 4x2 vehicles if primarily driven on city or highway roads.

4) **Mission Criticality —** Vehicles are excused from additional scrutiny based on operating time or VMT if deemed ancillary to the mission they support. Vehicles with exemption status (law enforcement, emergency response, and special purpose vehicles) are excluded. Other reasons a vehicle could be deemed mission critical could include geographic location, special equipment or usage, or fleet composition.

EPA's right-sizing goal is to ensure that sedans comprise the highest percentage of the total fleet as possible (given mission requirements) to maximize vehicle efficiency. Additionally, SSD continues to seek opportunities to electrify EPA's fleet through the acquisition of PHEVs and EVs. Based on VAM survey responses and AST data for FY 2015 and FY 2016, SSD is making the following primary recommendations for each vehicle: retain vehicle and replace with similar vehicle type, right-size vehicle upon replacement lease, or consolidate to improve vehicle utilization (i.e., eliminate). SSD is also making recommendations pertaining to replacement fuel type; opportunities to improve efficiency; HEV, PHEV, and ZEV acquisition; and inclusion in motor pools.

(3) From your most recent VAM study, what were the questions used to conduct the VAM survey (see FMR Bulletin B-30(6)(C)) (if lengthy, provide as an attachment)?

Appendix A contains FY 2016 VAM survey questions.

(G) Agency-wide Vehicle Management Information System

(1) Does your agency have a vehicle management information system (MIS) at the Department or Agency level that identifies and collects accurate inventory, cost, and use data that cover the complete lifecycle

of each motor vehicle (acquisition, operation, maintenance, and disposal), as well as provides the information necessary to satisfy both internal and external reporting requirements?

EPA's vehicle management information system, the Automotive Statistical Tool (AST), accurately collects and reports on all necessary fleet data elements including:

- Inventory categorized by component fleets and sub-component fleets;
- Maintenance, fuel, leasing, acquisition, and disposal costs;
- Utilization data such as vehicle miles traveled and fuel consumption;
- Identifying data on an individual vehicle basis such as license number, exemption type, fuel type, vehicle type, make, model, vehicle description, and many other data points.

AST provides the requisite capabilities to accurately report to both internal and external entities regarding all FAST-reportable data. This includes the ability to calculate cost per mile and fuel costs for each vehicle.

(2) Your agency was provided a draft list of 70 asset-level data (ALD) elements. How many of the 70 data elements is your current system able to report on a "per vehicle" basis right now?

The ALD data call spreadsheet included 71 data elements. EPA's response to the ALD data call spreadsheet noted that the AST database was able to report 52 ALD elements at the time of submission. 17 data points have not been included and EPA required more information to accurately answer the remaining two data elements.

(3) Describe your agency's plan for reporting all required ALD elements. What is the timeline?

EPA is currently enhancing the AST database to ensure that all required ALD elements are included for reporting purposes. The Agency is aware of the updates made to the FAST reporting schema and will be prepared, after extensive testing in FAST Sandbox, to report FY 2016 data in full.

(4) If your agency does not currently have a system capable of reporting ALD, describe the steps that are being taken or have been taken to comply with Executive Orders, regulations, and laws that require such a system.

See response to section (G)(3).

(5) If your agency currently uses telematics systems, does your MIS capture and report all of the data from those devices?

EPA does not currently operate a telematics system. However, it is anticipated that the AST database will capture data from telematics once implemented into the fleet.

(H) Justification for Restricted Vehicles

(1) If your agency uses vehicles larger than class III (midsize), is the justification for each one documented?

EPA does not operate any sedans that are larger than class III. Furthermore, EPA's policy guidance states that the Agency will not acquire any class IV or higher sedans unless it is essential to mission

requirements, in accordance with the Code of Federal Regulations (CFR).

(2) Does your agency use the law enforcement (LE) vehicle classification system described in GSA Bulletin FMR B-33? If not, why not?

EPA is currently conducting a review of its LE vehicles to appropriately categorize them according to the three tiers outlined in GSA FMR Bulletin B-33. When the review is completed, the appropriate categorizations will be reflected in EPA's fleet database (AST). AST tracks whether a vehicle is LE, but does not currently differentiate between LE 1, LE 2, or LE 3 tiers. However, AST is slated to be updated with this fix in the near future, concurrently with the Agency-wide LE review.

(3) If your agency reports limousines in its inventory, do they comply with the definition in GSA Bulletin FMR B-29?

Not applicable. EPA does not own or operate any limousines in its fleet.

(4) For armored vehicles, do you use the ballistic resistance classification system of National Institute of Justice (NIJ) Standard 0108.01, and restrict armor to the defined types?

Not applicable. EPA does not own or operate any armored vehicles in its fleet.

(5) Are armored vehicles authorized by appropriation?

Not applicable. EPA does not own or operate any armored vehicles in its fleet.

(I) Impediments to Optimal Fleet Management

(1) Please describe the obstacles your agency faces in optimizing its fleet.

EPA has been fortunate in that the Agency's fleet managers are very cooperative, responsive, and willing to routinely and openly discuss fleet issues and provide important feedback. This is critical when operating a decentralized fleet, as EPA does. Fleet managers have been receptive to right-sizing their fleets and EPA has seen success in this area in large part due to their efforts.

(2) Please describe the ways in which your agency finds it hard to make the fleet what it should be, operating at maximum efficiency.

The lack of nationwide alternative fuel infrastructure has made it incredibly difficult for EPA to meet alternative fuel consumption requirements. EPA has issued policies, conducted trainings, and provided numerous resources to its fleet community regarding the importance of using alternative fuel in AFVs. However, employees that travel outside of a five mile radius from their fleet location (which represents the overwhelming majority of EPA's vehicle trips) cannot access the requisite alternative fuel. Energy Policy Act (EPAct) of 1992 and 2005 require the acquisition of AFVs and the use of alternative fuel in AFVs. As a result of these requirements, EPA has at times been obligated to acquire E85 vehicles knowing that they would subsequently be waived from using E85 fuel. In some of these cases, a petroleum vehicle acquisition would result in higher efficiency than an E85 vehicle operating with petroleum fuel. Thus, the existing regulatory framework is an impediment to EPA achieving EO 13693 per-mile GHG emissions goals.

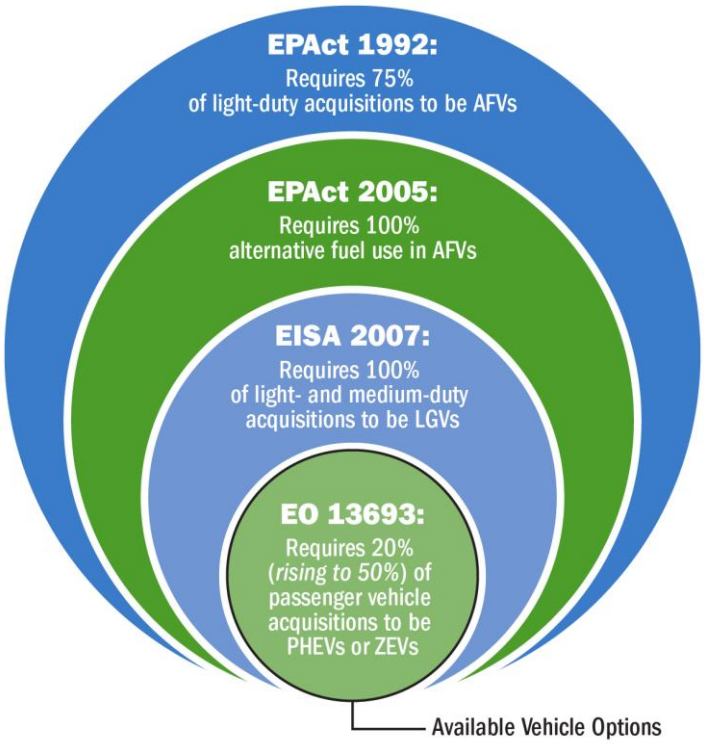
(3) If additional resources are needed, (such as to fund management information system implementation or upgrades, or to acquire ZEVs, or LGHG vehicles, or install alternative fuel infrastructure) have they been documented and requested? Do you have a copy of this documentation?

SSD has briefed EPA senior management regarding the funding obstacles to meet the PHEV/ZEV acquisition requirement and EPA is taking action to prepare for these additional costs.

(4) Describe what specific laws, Executive Orders, GSA's government-wide regulations or internal agency regulations, budget issues, or organizational obstacles you feel constrain your ability to manage your fleet. Be specific and include examples. If you have a solution, describe it and indicate whether we can share the solution with other agencies as a potential best practice.

The largest impediment to efficiently managing EPA's fleet hasn't been a specific law or executive order; it is the sheer number and scope of all the fleet-related laws and executive orders combined. Current fleet fuel consumption and vehicle acquisition requirements consist of a patchwork of various laws and executive orders making it extremely onerous to ensure compliance. The myriad acquisition requirements, for example, are problematic due to segmentation and are compounded by the need for concurrent alternative fuel infrastructure proximity assessments. As illustrated in Figure 3, the current intersection of EPAct 1992, EPAct 2005, the Energy Independence and Security Act of 2007 (EISA 2007), and EO 13693 vehicle acquisition requirements is so small that compliance tracking becomes prohibitively burdensome. EPA feels it would be beneficial to request that legislative statute eliminate these overly-restrictive requirements and create a unified vehicle acquisition requirement.

Figure 3. Constraints on Federal Vehicle Acquisitions



In addition, the EPAct 2005 requirement for AFVs to utilize alternative fuel 100 percent of the time is not feasible for any vehicle that needs to take long range trips. Although created with good intentions of increasing alternative fuel consumption, this has become burdensome and, in some ways, counter-productive. EPA requests a legislative solution to this issue, as well.

(J) Anomalies and Possible Errors

(1) Explain any real or apparent problems with agency data reported in FAST.

EPA's FY 2011 baseline inventory (1,145 vehicles) differs from the FAST FY 2011 inventory (1,102

vehicles) due to 43 vehicles that were incorrectly categorized as special purpose in AST and, therefore, not reported in FAST. GSA and DOE provided EPA with updated guidance on the definition of special purpose vehicles after the FY 2012 VAM submission. EPA made corrections in AST, but is not able to make corrections in FAST. To remain consistent and accurate, EPA uses a VAM baseline of 1,145 vehicles. If possible, EPA requests that GSA and DOE allow EPA to correct this data in FAST, as well.

(2) Discuss any data fields highlighted by FAST as possible errors that you chose to override rather than correct. Examples would be extremely high annual operating costs or an abnormal change in inventory that FAST considers outside the normal range, or erroneous data in prior years causing an apparent discrepancy in the current year.

See response to Section (J)(1) and (J)(3), below.

(3) Explain any unresolved flagged, highlighted, or unusual-appearing data within FAST.

Data anomalies identified in FAST are listed and explained below:

- **The monthly operating cost per vehicle in at least one row falls outside the pre-defined reasonable cost limits (between $100 AND $1,000).** This refers to the high operating cost of several commercially-leased vehicles. These vehicles are, in many cases, large vehicles (such as shuttle buses) that have a higher monthly lease rate.
- **The acquisition cost per vehicle in at least one row falls outside the pre-defined reasonable cost limits (between $10,000 AND $100,000).** This is referring to low planned acquisition costs for Agency-owned vehicles. There appears to be an anomaly in EPA's fleet database that allows for unreasonably low projected costs. EPA will work to correct this anomaly in order to avoid future FAST errors. Nevertheless, this error does not affect actual data reported, only planned costs which will eventually be correctly reported as actual within the pre-defined reasonable cost limits.

(K) Summary and Contact Information

(1) Who should be contacted with questions about this agency fleet plan?

For questions about this report, please contact:

Howard Wilson, Deputy Director, Safety and Sustainability Division
(202) 564-1646
wilson.howard@epa.gov

Bryford Metoyer, Program Analyst, Sustainable and Transportation Solutions Branch
(202) 564-0310
metoyer.bryford@epa.gov

Rickie Sampson, Transportation Specialist, Sustainable and Transportation Solutions Branch
(202) 564-2311
sampson.rickie@epa.gov

(2) Indicate whether the budget officer participated in the VAM and A-11 processes.

EPA's Office of Administration's senior budget analyst reviewed the VAM Fleet Management Plan and

Office of Management and Budget (OMB) A-11 report. The senior budget analyst's contact information is below:

Norman Boyle, Senior Program Analyst, Budget, Resource Management Services
(202) 564-2037
boyle.norman@epa.gov

(3) Indicate whether the Chief Sustainability Officer participated in the VAM, vehicle planning, and vehicle approval processes.

EPA's Chief Sustainability Officer delegates fleet management planning and operations to the Safety and Sustainability Division. The Chief Sustainability Officer's contact information is below:

Donna Vizian, EPA Chief Sustainability Officer
(202) 564-2533
vizian.donna@epa.gov

Appendix A. FY 2016 VAM Survey Questions

1) What is the projected VMT for this vehicle in FY 2016?
2) What is the projected replacement year for this vehicle?
3) How many hours per week is this vehicle in use?
4) What is the average frequency of use for this vehicle?
5) What is this vehicles assignment type?
6) Could this vehicle's tasks be done by a motor pool vehicle (if not already part of a motor pool)?
7) Is this vehicle used for home-to-work transportation?
8) Does this vehicle have any special add-on equipment?
9) What is this vehicle's primary task?
    a. What percentage of use time is dedicated to primary task?
10) What is this vehicle's secondary task?
    a. What percentage of use time is dedicated to secondary task?
11) What is this vehicle's other task (if applicable)?
    a. What percentage of use time is dedicated to other task?
12) If a law enforcement vehicle, what is the primary law enforcement tier?
13) What is this vehicle's primary operating terrain?
14) Could a different model vehicle complete the primary task more efficiently (i.e. using alternative fuels and/or reducing vehicle size, petroleum consumption, or GHG emissions)?
15) Please provide any additional comments about this vehicle.

June 2016

FY 2016
Multimodal Access Plan

U.S. Environmental Protection Agency
Office of Administration and Resources Management

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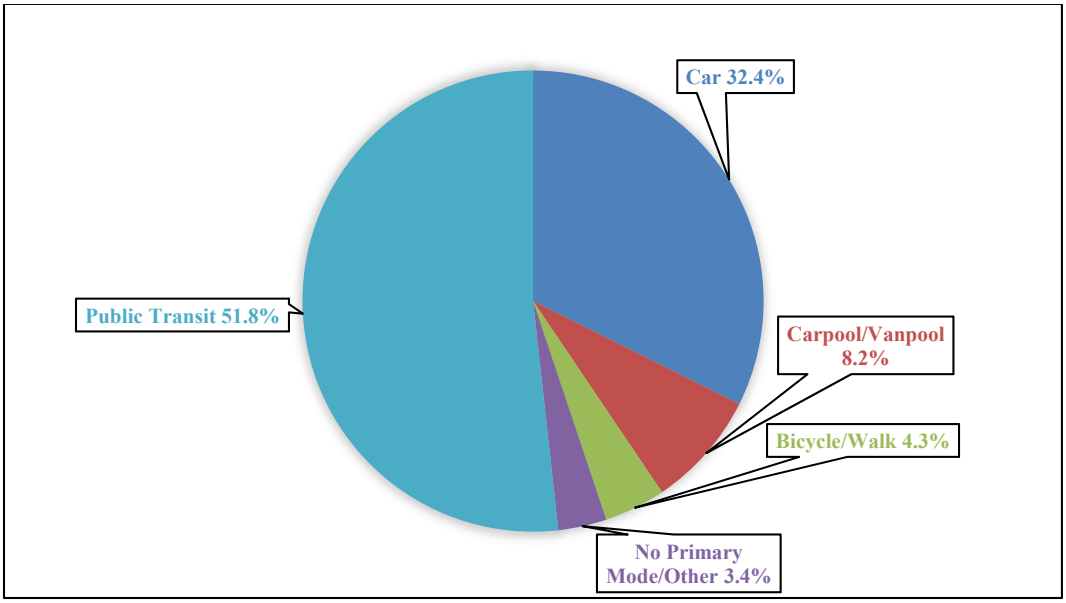
I. INTRODUCTION

In accordance with Executive Order 13693, EPA is committed to promoting sustainable commuting and workplace travel practices to reduce its Scope 3 greenhouse gas (GHG) emissions. Employees throughout the Agency are engaged in a variety of sustainable commuting and workplace travel practices. EPA conducted an agencywide employee commuter survey in 2011, 2012 and 2014 using GSA's Carbon Footprint Tool to collect data on how employees commute to and from work, including the use of bicycles, carpooling, public transit, and teleworking. While many employees use multiple forms of transportation for their commute, Figure 1 captures a summary of the self-reported primary commuting modes for 2014 survey participants. Notably, 52 percent of respondents identified public transit[1] as their primary mode of commuting[2]. The survey also captures data on employee use of EPA commuting and work schedule options, highlighting some of EPA's more popular initiatives, such as the transit subsidy benefit program, compressed work weeks, and flexible work hours. EPA plans to issue its next commuter survey in FY 2017.

Figure 1. Primary Commuting Mode



The results of the commuter surveys are corroborated with data on alternative commuting options and workplace travel practices implemented by EPA locations in its annual Environmental Stewardship Report as well as other more targeted surveys, such as the Federal Employee Viewpoint Survey and the Health and Wellness Questionnaire.

Collectively, these surveys help EPA to understand employees' use of sustainable commuting and workplace travel practices, and highlight best practices as well as areas for improvement.

[1] Including transit rail (e.g., subway), commuter rail, transit bus, intercity rail (e.g., Amtrak), and ferry boat.
[2] Primary commuting mode is defined as the mode by which the respondent commuted the longest distance relative to all other modes in the week-long survey period.

EPA uses the survey results for benchmarking and to inform decision making, including development of this Multimodal Access Plan (MAP).

This MAP was developed, and will be implemented, under the supervision and approval of EPA's Chief Sustainability Officer. The following sections outline EPA's current sustainable commuting and workplace travel practices and strategies for expanding these practices through FY 2017.

II. Workplace Charging

Current Practices

Several EPA locations provide workplace charging for their employees' personal electric vehicles. According to the FY 2015 Environmental Stewardship Report, the Region 6 laboratory and Corvallis laboratory allow employees to use facility outlets to charge personal vehicles, while the Region 6 office indicated that electric vehicle charging is available in its underground garage for an additional cost to employees. Potomac Yard also recently began allowing employees to use facility charging stations to charge personal vehicles. Region 7 has installed, in conjunction with the local power company and its property management company, 12 charging stations for employee use.

New Strategies

EPA will pursue the following workplace charging initiatives through FY 2017:

1. Include additional questions regarding electric vehicle use in future commuter surveys in order to better gauge interest in workplace charging and potential pilot program areas by December 31, 2016.

2. Identify ramifications of the Fixing America's Surface Transportation (FAST) Act on workplace charging policies and benefits by February 28, 2017, dependent on issuance of further implementation guidance.

3. Investigate potential for installing charging stations for personal electric vehicles in EPA-owned facilities by April 30, 2017.

4. Determine feasibility of public-private partnerships with local businesses and power utility companies to create a localized electric vehicle charging network through ongoing work in Region 7 by April 30, 2017.

III. Bicycling and other forms of Active Commuting

Current Practices

Approximately three percent of EPA employees identified biking or walking as their primary mode of commuting in the 2014 commuter survey. EPA currently employs a number of

strategies in support of bicycling and other forms of active commuting among its employees. For example, as reported in the FY 2015 Environmental Stewardship Report, EPA has secure bike racks or bike storage areas at approximately 97 percent of its locations. Region 5 worked with GSA to install a bike maintenance station in the garage of the Metcalfe Building, equipped with basic repair tools and an air pump for cycling employees.

Many EPA employees bike to work regularly. This is a composite shot of the DC contingent who rode in on Bike to Work Day, May 20, 2016.

Bike-sharing efforts and bike-to-work campaigns are also part of EPA's current active commuting strategy. In FY 2015, 41 percent of EPA locations participated in bike-to-work campaigns; two offices offered prizes to spur friendly competition as part of this campaign. In Region 8, program offices competed for the gold helmet trophy, which was awarded to the office with the most riders who participated in the bike challenge. Likewise, the Cincinnati location held a drawing in conjunction with its bike-to-work event and gave prizes to five event participants. Region 5 was the first to join a local bike-share program. Since then, nine percent of EPA offices have obtained discounts for employees to participate in local bike-sharing programs. Region 5 has also been a winner in the Chicago Bike to Work Commuter Challenge for the past two years.

Additionally, some offices have implemented bike subsidy programs. Region 5 set-up a Bicycle Transit Subsidy Program under the Federal government's transportation fringe benefit program. This benefit provides $20/month for employees who commute by bike from home to work at least 10 work days per month.

New Strategies

Building off of the progress to-date to encourage bicycling and other forms of active commuting, EPA will pursue the following strategies through FY 2017:

- Explore streamlining the employee registration process to participate in the bike program at Headquarters by June 30, 2017.

- Continue exploring options to expand shower facilities and add 30 bike racks at the William Jefferson Clinton complex by June 30, 2017.
- Explore the development of a National Bike Coordinator Work Group comprised of regional bike coordinators by June 30, 2017.
- Consider promoting an agencywide Bike-To-Work Day to encourage employees to commute to work via bike by June 30, 2017.

IV. Telecommuting and Teleconferencing Expansion

Current Practices

EPA's telework program allows eligible staff to work from alternate locations on a regular or intermittent basis. Annual telework training must be completed by all staff who qualify for telework and by supervisors with staff who telework. Currently, EPA uses training modules provided by the Office of Personnel Management. Each year, qualifying staff and managers must re-certify their completion of the training to designate their eligibility to work and/or manage staff remotely. The Agency has been actively involved in increasing employee participation and uses timecards to capture teleworking data. According to EPA's 2015 Federal Employee Viewpoint Survey, 43 percent of agency personnel telework one or two days per week (compared to 23 percent in 2011).

In an effort to reduce costs and GHG emissions related to business travel, EPA established the Green Conferencing Initiative five years ago to expand video teleconferencing (VTC) capability and usage throughout the Agency. Under this initiative, the number of multipoint VTC calls (with more than two video connections) has increased significantly, from approximately 12,000 to 43,000 calls per year, a figure that continues to rise 10 to 12 percent annually. By the end of FY 2016, EPA will have upgraded 226 conference rooms across all regions with new VTC equipment and will continue to expand capacity each year.

New VTC technology enables staff to participate in meetings from various locations.

Many of the Agency's existing telecommuting and teleconferencing strategies are implemented and measured at both the agency and regional/local levels. For example, as reported in the FY 2015 Environmental Stewardship Report, Region 4 noted that its telework program helped to reduce its Scope 3 emissions by 11 percent in FY 2015, averting 259 metric tons of carbon dioxide equivalent (CO_2e). Also, two locations started taking action in FY 2015 to quantify the impact that VTC capability has on business travel miles. The Office of Research and Development (ORD) Atlantic Ecology Division estimated that VTC usage at their laboratory prevented 2,114 business travel miles over the course of the fiscal year, while Region 1 posted an online survey to gather information about VTC's impact on travel miles. As EPA has increased its teleconferencing capabilities, agencywide VTC usage statistics are now actively tracked and reported quarterly.

New Strategies

Building on the progress of EPA's telecommuting and teleconferencing efforts, the following strategies are being considered through FY 2017:

1. Utilize the Agency Intranet Messaging and Mass Mail Messaging System by June 30, 2017 to remind employees to complete the annual telework training and certification process.

2. Promote messaging and outreach by June 30, 2017 to guide employees through teleworking best practices and processes, such as setting up work computers for home use, phone forwarding, and simultaneous phone ring functions.

3. Through the Green Conferencing Initiative, continue to: encourage use of VTC technology, actively track VTC usage, and explore options for integrating existing technologies in order to increase capacity to host video calls, on an ongoing basis through June 30, 2017.

4. Continue to encourage locations to use the GHG savings calculator tool created at Headquarters to estimate GHG savings resulting from VTC meetings through June 30, 2017.

V. Carpooling and the use of Public Transportation

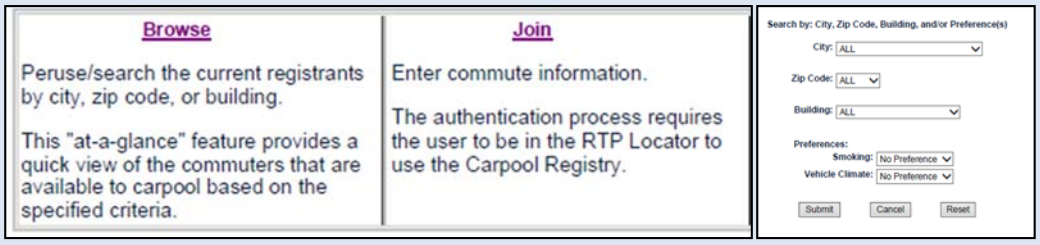
Current Practices

According to the 2014 commuter survey, eight percent of EPA employees reported carpooling as their primary commuting mode. As part of a continued effort to lower the Agency's Scope 3 GHG emissions, EPA Headquarters and regional offices promote a variety of employee carpooling and public transit use options. Parking subsidies are offered to vehicle owners at Headquarters that are part of a carpool. Ride-sharing for work meetings is also encouraged; as part of EPA's online car rental system, a carpooling function allows employees to enter their

meeting locations and times to match with other employees needing to travel to the same location. In FY 2015, Region 9 implemented a blanket purchase agreement (BPA) with Zipcar to promote ride-sharing among employees.

Research Triangle Park (RTP) Comprehensive Transportation Plan

The EPA RTP campus has developed a Comprehensive Transportation Plan designed to encourage the use of alternative modes of transportation and reduce Scope 3 GHG emissions. The plan includes information on agencywide commuter programs and campus-specific initiatives. For example, the RTP site includes a carpool registry portal, where participants can find coworkers to carpool with based on similar commutes and working hours. The site also contains guidance on joining a vanpool, as well as information about the campus's shuttle service.



The images above are screenshots from the RTP Carpool Registry intranet page. Users can view and join available carpools that match their preferences.

According to the 2014 commuter survey, 52 percent of EPA employees report public transit as their primary commuting mode. To promote the use of public transit and reduce the number of employees driving to work, EPA participates in a Federal transit subsidy program. The program is widely used across the Agency, with 65 percent of the 2014 commuter survey respondents noting their participation. EPA Headquarters has also directed that each EPA location develop and implement a transit fare subsidy program where appropriate mass transit systems exist. Region 3 improved upon this transit subsidy program by simplifying the reimbursement process (switching from paper-based transit checks to the U.S. Department of Transportation's TRANServe debit card program). EPA will initiate an agency Transit Subsidy Policy to improve the oversight of the Agency's transit subsidy program. EPA standard lease agreements also stipulate that buildings be located within 3 miles of a bus or metro location, where possible, to better enable the use of public transit for work commuting.

New Strategies

EPA is committed to building upon its successes in carpooling and use of public transportation for its employees agencywide. Strategies through FY 2017 include the following:

1. Explore a national an intranet tool, registry or other application by June 30, 2017 to connect employees who want to carpool.

2. Evaluate opportunities to modernize the public transit certification system, which tracks employee public transit use to provide their monthly transit subsidies, by converting it from a paper system to an automated system by June 30, 2017.

3. Implement an agency Transit Subsidy Policy to improve the oversight of the Agency's transit subsidy program by June 30, 2017.

4. EPA's National Enforcement Investigations Center (NEIC) will continue to work with GSA to initiate a RideShare program for the Denver Federal Center that would also incorporate electric vehicles by June 30, 2017.

VI. SUMMARY

EPA is heavily invested in reducing its Scope 3 GHG emissions by promoting sustainable commuting and workplace travel practices. Approximately 64 percent of EPA employees report using an alternative commuting method, including carpooling, public transit, and biking, as their primary mode of commuting to and from work and over 40 percent of staff telework one or two days per week. Regions are also promoting teleconferencing options to decrease workplace travel as well as ridesharing programs when travel to meetings is necessary.

Through the implementation of this MAP, EPA will continue to provide tools and resources to make sustainable commuting practices and workplace travel practices even more accessible for its employees. EPA is committed to demonstrating leadership in environmental stewardship while advancing its mission to protect human health and the environment.

US Environmental Protection Agency

2016 PROCUREMENT PLAN TO REDUCE SUPPLY CHAIN GREENHOUSE GAS EMISSIONS

(Do not include procurement-sensitive information. Listing of procurements in this plan is not a guarantee that funds will be obligated or contracts will be awarded.)

I. Plan and Agency Information

Plan Submission Date:	June 30, 2016
Plan Fiscal Year (for implementation):	FY 2017
Chief Acquisition Officer Name and Contact Information:	Donna Vizian 1200 Pennsylvania Avenue NW Ariel Rios North Bldg. Mailcode: 3101A Washington, DC 20460 vizian.donna@epa.gov Office Phone: 202-564-4600 Fax: 202-564-0233
Chief Sustainability Officer Name and Contact Information:	Donna Vizian 1200 Pennsylvania Avenue NW Ariel Rios North Bldg. Mailcode: 3101A Washington, DC 20460 vizian.donna@epa.gov Office Phone: 202-564-4600 Fax: 202-564-0233

II. Methodology for Selecting Procurements

*What is your agency's **methodology for selecting procurements?** Please select the appropriate selection criteria below (multiple selections are acceptable) and then describe approaches and considerations:*

- ☒ Industry sector, considering GHG "hotpots" or sources of high emissions
- ☒ Industry sector, considering state of industry GHG practices
- ☒ Alignment with agency mission and/or mission-critical products and services
- ☐ Procurement/acquisition size
- ☐ Procurement/acquisition schedule or timeline
- ☐ Features of procurement or acquisition plan (such as type of requirement, contract action, evaluation scheme, or specific competitive landscape)
- ☐ Other criteria

Narrative description of methodology:	The Acquisition Forecast Database was used to identify planned procurement actions for FY 2017. Based on the GHG practices within specific industry sectors, planned procurement actions that align with the agency's mission were identified for inclusion in the 2016 Procurement Plan to Reduce Supply Chain Greenhouse Gas.

III. Strategies and Metrics to Evaluate Impacts

*What are your agency's **strategies and metrics for evaluating the GHG impacts** of these procurements? Examples include tracking agency-wide measures or goals, such as percentage of contractors or percentage of spend to suppliers that publicly disclose GHG emissions or have an emissions reduction target; quantification of the agency's Scope 3 emissions from purchased goods and services; or other factors. Include the office(s) responsible for tracking strategies and metrics.*	
Agency-wide strategies and metrics and lead office (if any):	EPA's Office of the Administrator will evaluate and measure the percentage of contractors that publicly disclose GHG emissions, completed GHG inventories and/or have established GHG emissions reduction targets.
Sub-agency strategies, metrics, and supplier management/ feedback processes, including offices involved (if any; duplicate row as needed):	EPA's Office of Acquisition Management will monitor the procurement actions identified in the GHG Procurement Plan and evaluate to determine if the requirements for contractor GHG management practices have resulted in any challenges with ensuring adequate competition.
Other:	

	Program Name	Summary of Requirement	Anticipated Award Date	Estimated Dollar Value
Ex.	*Domestic Delivery Services 3 (DDS3) BPAs*	*Government-wide BPAs for domestic package delivery services*	*May 2017*	*$1 billion*
1	**Procurement Number FY13-733** Endocrine Disruptor Screening Program Technical Support Services	Provide laboratory support services including in vitro and in vivo testing of chemicals; and general support including literature curation, scientific analyses, and document development.	FY 2016 Q4 -FY 2017 Q1	>$5M-$10M
2	**Procurement Number FY13-573** Radioactive Waste Storage	Provide fifteen(15) lead lined containers for radioactive waste storage	FY 2017 Q4	>$500K - $1M
3	**Procurement Number FY13-576** RCRA Enforcement and Permitting Assistance (REPA)	RCRA Enforcement and Permitting Assistance (REPA) for Corrective Actions and Site Investigations	FY 2017 Q4	$5M-$10M
4				
5				
6*				

* The sixth procurement and beyond are optional; add rows as appropriate.

IV. Details of Procurements

Procurement Number FY13-733	
Contracting team POC	EPA Headquarters Procurement Operations Division (HPOD)
Program or requirement team POC	EPA Office of Chemical Safety and Pollution Preventions (OCSPP) Office of Science and Policy
Summary of requirement	**Endocrine Disruptor Screening Program Technical Support Services** Provide laboratory support services including in vitro and in vivo testing of chemicals; and general support including literature curation, scientific analyses, and document development.
Anticipated award date	FY 2016 Q4 – FY 2017 Q1
Estimated maximum dollar value (base and all options)	>$5M-$10M
Anticipated performance period	FY-2017 –FY-2022
NAICS codes	54160
PSC codes	
Describe the type of contract action (for example, competitive single award, multiple award, BPA, IDIQ, or GWAC).	TBD – Sources sought will determine procurement method
Is the contract action a task order? If so, state the master contract used.	NA
Source selection type (sole-source, LPTA, best value, etc.)	TBD
Why was this procurement selected? How does it fit into the methodology described above?	This procurement was selected based on alignment with agency mission and the industry sector being comprised of vendors capable of managing and reporting GHG practices. Current contractors are Battelle Memorial Institute (EPW11063), RTI (EPW11065) and BioQual (EPW11064), expires 09/30/2016 Battelle Memorial (EPW11063) and RTI (EPW11065) currently disclose GHG emissions. Battelle included on the Federal Supplier Greenhouse Gas Management Scorecard and RTI's public disclosure via Carbon Disclosure Project. Unable to confirm status of GHG disclosure with BioQual

Describe GHG-related contract requirements or source selection evaluation criteria to be implemented.	EPA has not yet finalized source selection evaluation criteria. The following GHG-related contract requirements will be considered for inclusion of contract requirements. The contractor shall meet the following milestones with regard to contents of the annual Sustainable Practices and Impact Disclosures: 1. Within 6 months after the Notice to Proceed - initially filed Disclosures and all future Disclosures must be publicly available online via Contractor or third party Web site 2. Within 12 months after initially filed Disclosures - Disclosures must include a complete Greenhouse Gas (GHG) inventory 3. Within 24 months after initially filed Disclosures - Disclosures must include a GHG reduction target(s) (either for reduction of absolute annual quantity of greenhouse gas emissions, and/or for reduction of "carbon intensity" i.e., reduction of carbon footprint per activity measure such as sales, number of employees, square feet of facilities, etc) 4. Within 36 months after initially filed Disclosures - Disclosures must report on progress towards meeting the GHG reduction target(s)
Current status of procurement	Office of Science Coordination and Policy
For FY17 plan and beyond: state any lessons learned that will be incorporated into this procurement.	

Procurement Number FY13-573	
Program name	Radioactive Waste Storage
Contracting team POC	EPA Region 6 Debora Bradford E-Mail: bradford.debora@epa.gov
Program or requirement team POC	Debora Bradford E-Mail: bradford.debora@epa.gov Superfund Division
Summary of requirement	The purpose of this contract is to provide fifteen(15) lead lined containers of radioactive waste
Anticipated award date	FY 2017 – Q4
Estimated maximum dollar value (base and all options)	>$500K - $1M
Anticipated performance period	10/01/2017 – 09/30/2022
NAICS codes	562211
PSC codes	F107, F108, F114, 4235
Describe the type of contract action (for example, competitive single award, multiple award, BPA, IDIQ, or GWAC).	Single Award Firm Fixed Price
Is the contract action a task order? If so, state the master contract used.	NA
Source selection type (sole-source, LPTA, best value, etc.)	Sole Source Current # EPR51203
Why was this procurement selected? How does it fit into the methodology described above?	This procurement was selected based on alignment with agency mission and/or mission-critical products and services

Describe GHG-related contract requirements or source selection evaluation criteria to be implemented.	EPA has not yet finalized source selection evaluation criteria. The following GHG-related contract requirements will be considered for inclusion of contract requirements. The contractor shall meet the following milestones with regard to contents of the annual Sustainable Practices and Impact Disclosures: 1. Within 6 months after the Notice to Proceed - initially filed Disclosures and all future Disclosures must be publicly available online via Contractor or third party Web site 2. Within 12 months after initially filed Disclosures - Disclosures must include a complete Greenhouse Gas (GHG) inventory 3. Within 24 months after initially filed Disclosures - Disclosures must include a GHG reduction target(s) (either for reduction of absolute annual quantity of greenhouse gas emissions, and/or for reduction of "carbon intensity" i.e., reduction of carbon footprint per activity measure such as sales, number of employees, square feet of facilities, etc) 4. Within 36 months after initially filed Disclosures - Disclosures must report on progress towards meeting the GHG reduction target(s)
Current status of procurement	Acquisition Planning
For FY17 plan and beyond: state any lessons learned that will be incorporated into this procurement.	

Procurement Number FY13-576	
Program name	RCRA Enforcement and Permitting Assistance (REPA)
Contracting team POC	Superfund/RCRA Regional Procurement Operations Division (SRRPOD)
Program or requirement team POC	Multimedia Planning and Permitting Division Region 6: AR, LA, NM, OK, TX
Summary of requirement	RCRA Enforcement and Permitting Assistance (REPA) for Corrective Actions and Site Investigations
Anticipated award date	FY 17 Q4
Estimated maximum dollar value (base and all options)	$5M-$10M
Anticipated performance period	09/2017 09/2022
NAICS codes	541620
PSC codes	R425
Describe the type of contract action (for example, competitive single award, multiple award, BPA, IDIQ, or GWAC).	Indefinite Delivery Indefinite Quantity
Is the contract action a task order? If so, state the master contract used.	NA
Source selection type (sole-source, LPTA, best value, etc.)	FULL AND OPEN COMPETITION
Why was this procurement selected? How does it fit into the methodology described above?	This procurement was selected based on alignment with agency mission and the industry sector being comprised of vendors capable of managing and reporting GHG practices.

Describe GHG-related contract requirements or source selection evaluation criteria to be implemented.	EPA has not yet finalized source selection evaluation criteria. The following GHG-related contract requirements will be considered for inclusion of contract requirements. criteria The contractor shall meet the following milestones with regard to contents of the annual Sustainable Practices and Impact Disclosures: 1. Within 6 months after the Notice to Proceed - initially filed Disclosures and all future Disclosures must be publicly available online via Contractor or third party Web site 2. Within 12 months after initially filed Disclosures - Disclosures must include a complete Greenhouse Gas (GHG) inventory 3. Within 24 months after initially filed Disclosures - Disclosures must include a GHG reduction target(s) (either for reduction of absolute annual quantity of greenhouse gas emissions, and/or for reduction of “carbon intensity” i.e., reduction of carbon footprint per activity measure such as sales, number of employees, square feet of facilities, etc) 4. Within 36 months after initially filed Disclosures - Disclosures must report on progress towards meeting the GHG reduction target(s)
Current status of procurement	Acquisition Planning
For FY17 plan and beyond: state any lessons learned that will be incorporated into this procurement.	

Survey on EPA's Climate Adaptation Plan

AGENCY: U.S. Environmental Protection Agency (EPA)

POINT OF CONTACT: Dr. Joel Scheraga
Phone: 202-564-3385
Email: Scheraga.Joel@epa.gov

Element	#	Questions: Has your agency...	Yes/No/ Partial	Plan Page Reference
Risks and Vulnerabilities	Q1	Comprehensively assessed and reexamined, as appropriate, the climate change-related impacts on and risks to the agency's ability to accomplish its missions, operations, and programs?	Y	18-39; Also contained in all 17 Program & Regional Office Implementation Plans
Mission and External Programs	Q1	Identified opportunities to support or encourage smarter, more climate-resilient investment through grants, loans or other financial incentives?	Y	16, 42, 44
	Q2	Identified opportunities to support or encourage smarter, more climate-resilient investment through program planning requirements?	Y	16-17, 42-44
	Q3	Identified barriers, prioritized and established timelines for implementing those opportunities?	Y	45-46, 51-54, 57-59; Also contained in 17 Program & Regional Office Implementation Plans
Agency Internal Policies	Q1	Identified the internal agency policies that require updating to manage climate risks and build resilience in the short and long term?	Y	15-17, 42-44
	Q2	Identified the component/office responsible for updating those policies, the level of maturity of the effort (e.g., "initiated" or "ongoing"), and key milestones or timelines for implementation?	Y	Described in each of the 17 Program & Regional Office Implementation Plans
	Q3	Successfully revised policies?	Y	43
Agency Facilities and Infrastructure	Q1	Identified which facilities and infrastructure may be impacted by climate change?	Partial (In progress)	33; Page 94 in OARM Climate Adaptation Implementation Plan (June 2014)
	Q2	Identified the components/offices responsible for addressing those risks, developed a strategy for addressing facilities and infrastructure that are at-risk, and identified barriers and timelines for implementation?	Partial	88 in OARM Climate Adaptation Implementation Plan (June 2014)
Data, Information and Tools	Q1	[For Agencies that Develop Climate-Related Data] Established clear goals and timelines to develop and share the latest data, information and tools across Federal agencies at the national, regional, and local levels?	N/A	N/A
	Q2	Establish clear goals and timelines to integrate the latest data, information and tools into Federal programs, policies, and operations?	N/A	N/A
Climate Literacy, Training and Technical Assistance	Q1	Conducted an assessment of climate literacy, training and technical assistance needs of agency staff and key mission-critical external partners?	Y	46, 47, 49
	Q2	Established clear goals and timelines for implementing climate literacy, training and technical assistance programs for key partners (internal and external)?	Y	51-54, 57-59; Also contained in 17 Program & Regional Office Implementation Plans
Supply Chain	Q1	Identified climate change-related risks to critical supply chains?	N	N/A
	Q2	Identified and implemented actions to manage supply chain risks?	N	N/A

EPA Narrative Responses

Element: Agency Facilities and Infrastructure

Q1 – Identified which facilities and infrastructure may be impacted by climate change?

Narrative Response: The EPA *Climate Change Adaptation Plan* (page 33) provides a general reference to the SSPP. Page 94 of the OARM *Climate Adaptation Implementation Plan* (June 2014) states, "Conduct Pilot Facility Climate Resiliency Assessment – EPA will select a representative, mission-critical facility that is currently experiencing impacts from climate change and conduct a pilot assessment analyzing the climate stressors, vulnerabilities, adaptive responses, and lessons learned for that facility…" The FY'16 SSPP (page 24) reports that EPA performed a total 5 assessments beyond 2 initial pilot assessments. OARM identified the regional climate stressors to perform the Climate Resiliency Assessments at those five sites.

Major Milestones and Timeline: OARM will conduct a sixth climate resiliency assessment in July 2016.

Responsible Component/Office/Individual: OARM/OA/SSD/STSB

Challenges or Barriers to Implementation: None

Q2 – Identified the components/offices responsible for addressing those risks, developed a strategy for addressing facilities and infrastructure that are at-risk, and identified barriers and timeliness for implementation? ***Partial page 88, No identification of barriers and timelines for implementation***

Narrative Response: Page 88 of the OARM *Climate Adaptation Implementation Plan* (June 2014) states, "As the office within EPA responsible for facilities, transportation, security, health and safety, human resources, grants, and procurement, OARM is responsible for ensuring the sage and continues operation of the Agency's buildings, contracts, grants and personnel…EPA will develop and implement new action items to protect its workforce, facilities, and operations against climate change effects and become more resilient to these effects."

The FY'16 SSPP (page 24) outlines the initial phases of the physical assessments focused on our laboratories in five out of six climate regions identified. OARM is responsible for addressing the measures.

Major Milestones and Timeline: OARM will conduct a sixth climate resiliency assessment in July 2016.

Responsible Component/Office/Individual: OARM/OA/SSD/STSB

Challenges or Barriers to Implementation: None

Element: Supply Chain

Q1 – Identified climate change-related risks to critical supply chains?

Q2 – Identified and implemented actions to manage supply chain risks?

Narrative Response: EPA has identified critical infrastructure (*i.e.*, facilities) that may be vulnerable to the impacts of climate change. Protecting the integrity of this infrastructure is necessary to ensure the Agency continues to fulfill its mission even as the climate changes. However, the Agency is not aware of any critical supply chains necessary for the Agency to continue fulfilling its mission that are vulnerable to the impacts of climate change.

Major Milestones and Timeline: N/A

Responsible Component/Office/Individual: N/A

Challenges or Barriers to Implementation: N/A