U.S. Department of
ENERGY

2014 Strategic Sustainability Performance Plan

United States Department of Energy
Washington, DC 20585

U.S. Department of Energy

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Department of Energy

2014 Strategic Sustainability Performance Plan Agency Policy Statement

There is great urgency associated with the Department of Energy's (DOE or Department) continuous and vital mission. An increasingly complex, global environment has brought into sharp focus the relationships between energy security, climate change, and national security objectives. In this fifth annual Strategic Sustainability Performance Plan (SSPP), DOE pledges to continue to be a leader in the Federal government, working aggressively to achieve sustainability goals and requirements through teamwork and continuous improvement. Along with mission objectives, energy efficiency and sustainability principles will drive decisions on capital infrastructure, real property, and information technology.

The Department commits to "**LEAD**" the Federal government through implementation of the following sustainability approaches:

- ***L****everage the Science*
  DOE will continue to leverage the science conducted by our National Laboratories. Cross-functional laboratory teams will continue to identify cost-effective energy solutions at DOE facilities, especially energy intensive processes. These efforts will build on past successes, such as Brookhaven National Laboratory's reduction of 1.2 megawatts of electricity demand through innovative design of a new cooling system at its National Synchrotron Light Source II facility.

- ***E****mpower our Employees*
  Coordinated through the Department's Sustainability Performance Office (SPO), DOE will continue to collaborate across programs and offices, embrace whole-enterprise thinking, and challenge established habits and procedures to instill culture change. DOE encourages behavior change through a variety of efforts, including an annual sustainability awards program that recognizes sustainability achievements throughout the complex.

- *Analyze our Progress, Bridge the Gaps*
  DOE will launch an enterprise-wide sustainability reporting system for the upcoming reporting cycle. This system will provide a uniform and consolidated reporting process; eliminating multiple reporting systems and streamlining sustainability reporting efforts across the Department. We will utilize this dashboard to help identify highly replicable projects that yield immediate results.

- ***D****rive Innovation*
  DOE will continue to be a Federal leader in the uptake of innovative clean technologies, including larger utility scale renewable energy projects on DOE land. In early FY 2014, DOE began construction of an 11.5 megawatt wind farm at the Pantex Plant, which when completed will be the largest Federally-owned wind farm in the United States. This project is financed through an Energy Savings Performance Contract and will supply nearly 60 percent of the electricity used by the site.

As a leader in developing clean energy and energy efficiency technologies, DOE will continue to aggressively leverage its mission to ensure that it meets and exceeds sustainability goals and requirements, while leading the Federal government and the Nation to a more sustainable future.

Daniel B. Poneman
Senior Sustainability Officer
Deputy Secretary of Energy

JUN 30 2014
Date

Department of Energy
2014 Strategic Sustainability Performance Plan
Executive Summary

The mission of the Department of Energy (DOE or Department) is to ensure America's security and prosperity by addressing energy, environmental, and nuclear challenges through transformative science and technology solutions. DOE's mission is performed at 47 geographically dispersed locations across the United States and relies on high-energy mission specific facilities in pursuit of new and advanced forms of energy, basic science and research, and creating a clean and affordable energy economy.

DOE's Strategic Sustainability Performance Plan (SSPP) embodies the Department's sustainability commitment laid out in its 2014 Strategic Plan, including efforts "to operate more efficiently, perform cleanup, and address post-closure responsibility [resulting in] sites and laboratories with smaller footprints and more efficient and effective infrastructure." Consistent with the objectives of Executive Order (E.O.) 13514, the Department will continue to integrate the principles of sustainability into its decision-making processes.

As the Federal leader in clean energy research and development (R&D), DOE has a unique opportunity to lead by example and integrate sustainability into all aspects of its operations. In FY 2013, multiple on-site renewable generating projects began construction or became fully operational. DOE will continue to pursue projects that advance renewable energy and energy efficiency at its facilities. As DOE plans the replacement for its Forrestal building, DOE will ensure it serves as a showcase for energy efficiency and sustainability.

DOE leverages its foundation in scientific research to engage local communities, including businesses, local governments, and schools to test and deploy technologies developed by DOE National Laboratories, and to implement comprehensive, effective approaches to reduce energy consumption and environmental impacts. In addition, DOE sites will be utilized as test beds for R&D pilots to advance energy technology and improve performance.

Sustainability is prioritized at DOE through the assignment of the Deputy Secretary as the Senior Sustainability Officer (SSO). In this capacity, the SSO chairs the Senior Sustainability Steering Committee and oversees Departmental attainment of sustainability goals and requirements. The Sustainability Performance Office (SPO) serves as the principal lead for the Department on matters relating to sustainability and supports the SSO in the execution of duties including monitoring performance, developing guidance, reporting, data collection and analysis, and implementing and updating the SSPP. DOE Under Secretaries support the SSO in meeting sustainability goals and are responsible for planning, resourcing, implementing, monitoring, reporting, and managing the achievement of DOE's sustainability goals.

The annual budget process is informed by the goals of the SSPP, starting at the Under Secretary level and progressing through the Program Secretarial Offices (PSO) to DOE's National Laboratories and sites. The Department continues to align its site-level environmental, energy, and real property planning systems to elevate sustainability in site management. *DOE Order 436.1, Departmental Sustainability*, ensures that senior leaders, managers, staff, and DOE contractors are accountable for meeting sustainability

requirements.

Over the next year, DOE will continue to engage its stakeholders and employees to enhance continuous improvement in the implementation of sustainability objectives. Efforts will include gathering data and operational experiences from DOE programs and sites, and disseminating internal scorecards that provide feedback on progress towards goals. To encourage participation and feedback, DOE created a virtual comment box that is accessible to all DOE staff through email (sustainability@hq.doe.gov) that collects ideas and suggestions on DOE sustainability efforts. The monthly DOE SPOtlight newsletter highlights upcoming events, raises awareness, and shares best practices and lessons learned with DOE programs, sites, and the entire DOE sustainability community. The Department also facilitates a monthly teleconference series to bring together DOE site and facility managers on a variety of sustainability topics closely aligned with the SSPP goals augmenting a robust set of workgroups and communities of practice.

Information is also accessible through DOE's sustainability public website where the SSPP and associated milestones/performance information are posted. DOE also provides periodic updates on the status of programs, initiatives and accomplishments associated with the SSPP. This information can be found at www.sustainability.energy.gov. The Department also utilizes PowerPedia, DOE's internal Wikipedia site, to share sustainability information, resources, and performance data.

The following table summarizes DOE's performance toward many of the key sustainability-related goals addressed by the SSPP:

Goal	Baseline	FY 2013 Results	FY 2013 Target	FY 2013 Performance (vs. Baseline)
Scope 1&2 GHG Reduction ($MtCO_2e$)[4]	4,747,874	3,129,097	-17%	-34.1%
Scope 3 GHG Reduction ($MtCO_2e$)[4]	796,680	618,523	-4%	-22.4%
Energy Intensity Reduction (Btu/GSF)[1]	222,476	163,756	-24%	-26.4%
Sustainable Buildings	2,634	101	11%	3.8%
Petroleum Reduction (GGE)[3]	7,401,460	6,213,853	-16%	-16.0%
Alternative Fuel Increase (GGE)	624,704	1,609,614	114%	157.7%
Potable Water Intensity Reduction (Gal/GSF)[2]	70.9	54.1	-12%	-23.8%
Renewable Electric Energy (MWh)[5]	4,947,229	875,408	7.5%	17.7%

1. BTU – British Thermal Units
2. Gal/GSF – Gallons per Gross Square Foot
3. GGE – Gasoline Gallons Equivalent
4. $MtCO_2e$ – Metric tons Carbon Dioxide Equivalent
5. MWh – Megawatt hours; baseline refers to FY 2013 electricity usage.

Since its first SSPP, DOE has quickly advanced on numerous sustainability goals and is meeting or

exceeding targets for GHG emissions, renewable energy, energy and water intensity, and fleet petroleum and alternative fuel use. While there is more work ahead, DOE looks forward to partnering with its sites, National Laboratories, and other Federal agencies to secure a sustainable future for the Department.

Goal 1 – Greenhouse Gas (GHG) Reduction

The Department of Energy is currently exceeding interim reduction targets for greenhouse gas (GHG) emissions. Consistent with section 2(b) of E.O. 13514, DOE committed to reducing scope 1 & 2 GHG emissions (direct emissions) by 28 percent and scope 3 GHG emissions (indirect emissions) by 13 percent by FY 2020. Through FY 2013, the Department achieved reductions of 34.1 percent for scope 1 & 2 GHG emissions and 22.4 percent for scope 3 GHG emissions, each relative to a FY 2008 baseline.

SRS's Biomass Steam Plant

DOE's success in reducing scope 1 & 2 emissions is directly related to the improved performance and overall efficiency of its facilities. Over the past few years, DOE completed installation and began operations of several large scale renewable energy projects at DOE sites. Collectively, these projects reduce the Department's dependence on grid electricity and overall GHG emissions. Savannah River Site (SRS) completed the first full year of operation of the new biomass cogeneration facility in FY 2013.

Sulfur hexafluoride (SF_6) emissions constitute 15 percent of DOE's 2013 scope 1 & 2 emissions. SF_6 has many beneficial properties that are not found in other materials, and its use is required in specialized equipment and processes at the Department, including particle accelerators and pulsed power experiments. Since 2010 DOE sites have utilized SF_6 capture programs, resulting in a 32.6 percent reduction of this potent GHG since 2008.

While recent progress is encouraging, continued GHG reduction success is not a certainty. At many DOE sites, mission-related activities are expected to increase, expanding demand for energy and electricity and potentially increasing the use of certain high global warming potential (GWP) gases. As a result, DOE will be challenged to sustain reductions. To help counter these increases, DOE intends to continue to perform site-level energy and gas management assessments and implement cost-effective conservation measures to maximize efficiency.

Employee commuting is the largest contributor of DOE's scope 3 GHG emissions, accounting for 58.5 percent of the Department's total. To reduce scope 3 emissions, DOE encourages the use of mass transit, alternative transportation, and promotes teleworking and alternative work environments, such as hoteling. The Department will leverage successes at our sites to replicate results across the DOE complex.

DOE's scope 3 GHG emissions are also attributable to transmission and distribution (T&D) losses. As the Department expands on-site renewable energy generation at DOE sites, T&D loss emissions should decrease.

Goal 2 – Sustainable Buildings

ANL's Advanced Photon Source (APS) Office Module 435

DOE performs its mission at 47 geographically dispersed sites across the U.S. to advance basic science and research, expand the use of clean, affordable, and safe energy, and safeguard the nation's nuclear stockpile. DOE facilities consist of unique scientific laboratories, accelerators, light sources, supercomputers and data centers, industrial facilities, and traditional office space environments. As a result of these unique factors, the Department is challenged with integrating sustainability into aging infrastructure and energy intensive processes.

DOE will continue efforts to bring 15 percent of its building stock into compliance with the Federal guiding principles of high performance sustainable buildings (HPSB) by FY 2015. As of FY 2013, 3.8 percent of the Department's building stock met the guiding principles. Despite not meeting the interim HPSB target, DOE is exceeding interim targets for energy intensity reduction. As of FY 2013, DOE reduced energy intensity by 26.4 percent relative to the FY 2003 baseline, and is on track to meet the FY 2015 goal of a 30 percent reduction.

DOE made significant progress over the past year to improve sustainable building performance. In FY 2013, DOE added 33 buildings to its green building portfolio, for a total of 101 DOE HPSB facilities. This represents a 49 percent increase over FY 2012 performance. DOE expects to leverage findings from these successes, as well as from site-level energy audits and assessments to evaluate potential energy conservation measures at additional facilities. For all potential projects, DOE will calculate return on investment and life cycle costs when establishing funding priorities. DOE also plans to continue to expand metering and benchmarking efforts across DOE facilities, with the goal of metering all energy intensive buildings.

A recent example of DOE's ability to integrate sustainability at high energy mission-specific facilities is Argonne National Laboratory's (ANL) Advanced Photon Source (APS) Laboratory Office Module Building 435, which achieved the HPSB Guiding Principles in FY 2013. Building 435 is a 23,831 square foot facility that employs several sustainable features, including a heat recovery system for the APS process, eliminating the need for additional energy for heat. Other efficiency improvements include lighting efficiency improvements, occupancy sensors throughout the facility, and restroom plumbing fixtures upgrades.

Goal 3 – Fleet Management

The Department promotes fleet management principles that increase the acquisition of alternative fuel vehicles and encourage reductions in petroleum consumption. Collectively, these measures improve the Department's ability to optimize the size and composition of its vehicle fleet required to fulfill mission objectives.

INL's newly converted coach dual-fuel bus

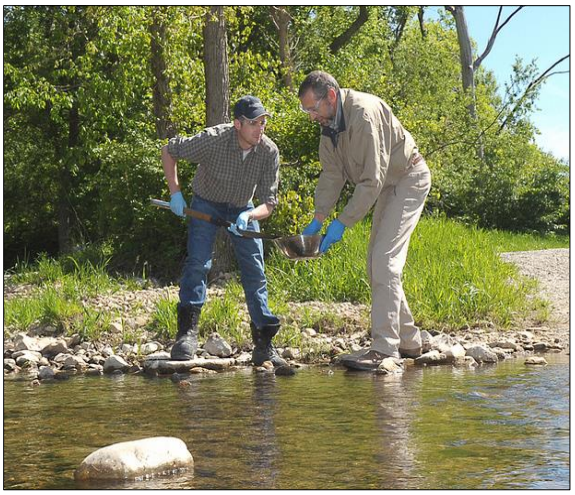
The Department is currently meeting or exceeding interim goal targets for petroleum use, alternative fuel use, and alternative fuel vehicle acquisition under E.O. 13514 and E.O. 13423. Through FY 2013, the Department reduced fleet petroleum use by 16 percent relative to the FY 2005 baseline, a 7.6 percent goal improvement from FY 2012. In addition, the Department increased alternative fuel consumption by 157.7 percent relative to an FY 2005 baseline. DOE's progress well exceeds the alternative fuel use interim target of 95 percent and places the Department on track to meet the E.O. 13423 FY 2015 goal of a 159 percent increase.

In the past year, the Idaho National Laboratory (INL) modified three diesel coach buses to run on dual fuel, a combination of bio-diesel and natural gas. INL's 80 bus fleet shuttles employees across the 890-square mile site. The modifications reduce the bus fleet's diesel use by 50 percent, and if the entire bus fleet were converted, it would save the equivalent of taking 42 passenger vehicles off the road.

The Department will be challenged in the coming years to achieve further progress against the fleet goal targets. DOE's varied mission includes requiring the use of heavy-duty, petroleum intensive fleet vehicles, some of which are not readily available in an alternative fuel platform. In addition, many DOE sites are located in remote locations inaccessible to alternative fueling stations. In the next year, the Department will expand efforts to increase alternative fuel use. DOE will promote the use of available alternative fueling locator tools when fueling and acquiring new fleet vehicles and look for opportunities to replace petroleum-dedicated vehicles where possible.

Goal 4 – Water Use Efficiency & Management

Water is essential to the DOE mission as industrial processes account for the majority of DOE's potable and non-potable water use. Many DOE sites use water for evaporative cooling towers, process heat removal, cooling accelerators, supercomputers, and data centers. The reliance on water-intensive mission-critical activities may create a challenge for DOE in meeting future water reduction goals.



Researchers collecting a sediment sample from Sawmill Creek, south of the Argonne site.

The Department is currently on-track to meet the FY 2020 goal of a 26 percent reduction in potable water use intensity. As of FY 2013, DOE reduced potable water intensity by 23.8 percent relative to the FY 2007 baseline, exceeding the interim target of 12 percent. DOE's performance can be attributed to the efforts of several large water consuming sites that upgraded large processes in FY 2013. The Y-12 Site decreased water consumption by 139 million gallons (a 14.5 percent decrease from FY 2012) by replacing once-through air handling units and repairing steam traps. The Princeton Plasma Physics Laboratory installed two coolant recirculating chillers to replace once through equipment cooling, resulting in a 172,800 gallon reduction in FY 2013. The improvements are expected to save 600,000 gallons of potable water annually.

DOE will be challenged to maintain success over the next few years as water-intensive mission-related activities increase. Cooling demand for supercomputers and scientific processes makes future progress difficult to predict. To overcome these obstacles, the Department will continue to employ proactive water management strategies. In FY 2013, DOE sites performed upgrades to improve water efficiency based on findings from site-level water assessments. The Oak Ridge National Laboratory's (ORNL) cooling systems upgrades are projected to save 179 million gallons of potable water annually. In addition, the Portsmouth Gaseous Diffusion Plant replaced single pass cooling systems, which is projected to save 125 thousand gallons annually. DOE will continue to conduct site-level water audits and assessments and implement cost effective measures to improve water efficiency.

Furthermore, DOE will continue to pursue water recycling and reuse options to reduce potable water use. To support this approach, the Department is converting once-through cooling systems to closed-loop and reusing process water or gray water and/or storm water runoff to displace potable water use, when cost effective and allowable by local regulation.

Goal 5 – Pollution Prevention and Waste Reduction

The Department seeks to prevent or reduce pollution at the source whenever feasible. Pollutants and waste that cannot be prevented through source reduction will be diverted from entering the waste stream through environmentally safe and cost-effective reuse or recycling to the greatest extent practicable.

Cardboard designated for recycling at SNL.

As prescribed by E.O. 13514, the Department seeks to divert at least 50 percent of non-hazardous solid waste and construction and demolition (C&D) debris by FY 2015. In FY 2013, DOE reported a 56.4 percent diversion rate for non-hazardous waste and a 57.9 percent diversion rate for C&D waste.

Many DOE sites have taken proactive steps to manage waste and increase recycling and diversion. For example, the Y-12 National Security Complex launched the Property Exchange intranet site, which allows employees to post usable excess property items for on-site reuse. Through this program, the site diverted over 400,000 pounds of material and equipment from landfills, including vehicles, maintenance supplies, and security equipment. The Sandia National Laboratory (SNL) seeks to divert as many waste streams as possible. A robust composting program reuses green waste for a mulching applications and composts food waste from the onsite dining facilities.

Sustainable Remediation (SR) is the practice of using sustainable methods to reduce environmental and social impacts of remedial cleanup and closure activities in a cost-effective way. DOE is implementing effective uses of SR practices to improve performance across sustainability goal areas when performing mission-related cleanup activities. At the Hanford Site, non-contaminated concrete and demolition debris is reused for backfill material at other site projects. In FY 2012, Hanford diverted approximately 77,500 metric tons of C&D waste from landfills.

The Department also seeks to reduce fugitive emissions from SF_6 and other potent GHGs. DOE sites that emit SF_6 are required to implement comprehensive capture programs. The Princeton Plasma Physics Laboratory's (PPPL) program minimizes SF_6 emissions from high-voltage power systems, resulting in a 96.9 percent reduction in annual SF_6 emissions since 2008. Similar programs at other sites have resulted in significant fugitive emissions savings. In addition to SF_6, DOE sites track emissions of a wide variety of other potent GHGs, including hydro fluorocarbons (HFC). Since FY 2008, DOE has reduced SF_6 emissions by 32.6 percent and HFC emissions by 8.8 percent.

Goal 6 – Sustainable Acquisition

The Department of Energy has a foundation of policies, procedures, guidance and programs that support sustainable acquisition requirements and goals. The Federal Acquisition Regulation (FAR) establishes uniform acquisition policies at the Federal level, while the Department of Energy Acquisition Regulation (DEAR) establishes uniform acquisition policies that implement and supplement the FAR. The Department of Energy Acquisition Guide provides guidance and procedural material for procurement and acquisition personnel.

Through the end of FY 2013, the Department exceeded goal targets for sustainable acquisition. DOE maintained a level of 95 percent or greater for applicable new contract actions that included sustainable clauses and provisions, as determined by quarterly sustainable acquisition contract reviews. In addition, the Department will look to expand compliance with biobased eligible and construction contracts. In FY 2013 the Department established a baseline of 35 percent of applicable new contract actions based on FY 2012 contract review data. DOE will set a goal to increase biobased contract performance by 15 percent, for a total compliance level of 50 percent, by the end of FY 2014. During the FY 2013 contract reviews, DOE noted that 58 percent of all new applicable contract actions contained biobased clauses. Based on this progress, DOE will revise its goal and strive to achieve 75 percent compliance by the end of FY 2014 and work towards 100 percent compliance by FY 2020. DOE will also look to strengthen sustainable acquisition criteria in new construction contracts. Based on contract review data from the past year, DOE determined that 65 percent of all new construction contracts reviewed contained sustainable acquisition clauses. DOE will strive to improve construction contract performance and achieve 75 percent compliance by the end of FY 2014 and work towards 100 percent compliance by FY 2020.

In FY 2014, the Department issued an update to the Sustainable Acquisition chapter of its internal Acquisition Guide. The guide is utilized by headquarters and field office procurement officials for reviewing purchasing priorities and resources and helps ensure the Department increases procurement of sustainable goods and services. DOE will continue to promote internal resources, such as the Acquisition Guide, and external resources, such as GSA's Green Procurement Compilation tool, to inform DOE purchasing specialists of sustainable options when completing procurements.

Goal 7 – Electronics Stewardship & Data Centers

ANL's Mira Supercomputer

The Department of Energy's research mission is carried out by several of the fastest supercomputers in the world. Computing power is only part of DOE's innovation in this arena however. The Department also operates some of the world's most efficient super computers. Argonne National Laboratory installed the Mira Supercomputer in July 2013. In addition to being 20 times faster (at installation it was the fifth fastest computer in the world) than its predecessor, the Intrepid, Mira is five times more efficient. According to the Green500 list, DOE facilities operate seven of the top 50 most efficient supercomputers in the world, more than any other organization.

In addition to maintaining powerful and efficient data centers, DOE is also working to implement numerous electronics stewardship strategies to reduce energy use and associated costs. In the past year, the Department made significant strides to improve the efficiency of its data centers and ensure continued electronics stewardship of its IT assets. In FY 2013, DOE sites continued their exemplary performance and met sustainable purchasing and disposal goals. DOE also developed a DOE IT Sustainability Working Group for data centers and IT sustainability. Composed of representatives from DOE field, program and corporate offices, the IPT aims to define and lead the strategic direction of data center energy efficiency, electronics stewardship, and related IT sustainability activities across the agency.

Over the next year, DOE intends to examine Department-wide data on duplex printing, with the goal of better understanding implementation and challenges to reducing paper use. To assist this effort, DOE will finalize a Print Management Guide to identify print management best practices and provide recommendations for reducing paper use. Through these and other waste reduction efforts, DOE hopes to reduce paper consumption by 75 percent by FY 2020.

Led by the Department's Chief Information Officer (CIO), DOE will continue to conduct energy assessments on high energy use, traditional data centers to identify energy savings opportunities and promote the purchase and use of energy efficient components. DOE will strive to reduce data center energy 20 percent by FY 2025.

Goal 8 – Renewable Energy

The Department is currently exceeding the target for renewable electric energy and is on track to meet the FY 2020 20 percent goal. Through FY 2013, 17.7 percent of DOE's overall electricity consumption was derived from renewable sources. DOE's renewable energy success can be largely attributed to major on-site renewable energy projects, with many financed through performance-based contracts, including ESPCs. DOE was also recognized as the highest purchaser of green power in the Federal government by EPA's Green Power Partnership.

National Renewable Energy Laboratory's Roof Array

- FY 2013 was the first full year of operations for the new Savannah River Site Biomass Cogeneration Facility. The plant produced 69 Gigawatt hours (GWh) of electricity and 567 billion British Thermal Units (BTUs) of steam.
- In FY 2013, the National Renewable Energy Laboratory's parking garage PV array also became fully operational – adding an additional 1.2 MW of renewable capacity.
- DOE's Office of Legacy Management (LM) installed a new 285 kW PV array at its Tuba City site in FY 2013. This is the largest of approximately 168 renewable energy systems operated by LM at a multitude of small distributed sites across the country. Combined, the on-site systems produce 7.9 percent of LM's total electricity usage.
- In FY 2013, the Pantex plant awarded an ESPC to install a five-turbine, 11.5 megawatt wind farm. Once constructed, it will be the largest federally owned wind farm.

The economic feasibility of large renewable energy systems continues to challenge DOE sites, as many receive low cost electricity, which makes payback periods too long to pursue. However, DOE will continue to encourage the inclusion of on-site renewable generation into all new construction projects. In addition, DOE issued a policy on preference for purchasing renewable energy from Indian Tribes pursuant to the Department's authorities under EPAct 2005. Through these collective strategies, DOE anticipates meeting the 20 percent target by FY 2020.

Goal 9 – Climate Change Resilience

DOE is making progress in its adaptation and resilience activities by accounting for the national context of the DOE mission, the local context of DOE facilities and nearby stakeholders, and planning for potential climate-related events. DOE successfully updated its Adaptation Plan and worked to align its objectives with the strategies outlined in Goal 9 and Presidential Climate Action Plan.

DOE utilizes an internal Climate Adaptation Working Group to provide guidance and best practices of climate adaptation activities across the Department. The group includes DOE program managers, site operators, and technical experts. DOE and its employees actively participate in numerous partnerships and working groups, from the local and regional to the interagency level. DOE's scientific experts and advanced computing capabilities offer significant benefits to the international climate science research effort, as well as information necessary for proper climate-related planning. DOE will continue to coordinate climate change resiliency efforts across programs and missions.

In the past year two DOE sites, began the process of piloting site level assessments to quantify and assess climate change risks and vulnerabilities. This process will serve as a replicable model for future site level analyses at additional DOE sites. DOE is also working to integrate climate adaptation concerns into all applicable DOE orders, policies, and planning documents, and continue work on detailed site-level analysis at a pilot site in FY 2014. Climate change vulnerability knowledge and data will continue to be provided to the DOE Emergency Management Issues Special Interest Group (EMI SIG) to inform emergency response programs and policies.

Goal 10 – Energy Performance Contracts

Performance-based contracts are an important component of DOE's overarching approach to sustainability. Implementing projects that save energy and water and reduce deferred maintenance are critical to ensure efficient, effective and sustainable operations.

Additionally, the use of performance based contracts is an integral strategy for the implementation of onsite renewable energy projects, as directed by the June 2013 Climate Action Plan, which calls on federal agencies to consume no less than 20 percent of their electricity from renewable sources by 2020. Since DOE began participating in the ESPC program in the late 1990s, total project investment has reached over $530 million.

Pantex Plant Wind Turbines

In early 2012, DOE committed $100 million in new project awards to contribute to the government-wide goal under the President's Performance Contracting Challenge. As of March 2014, DOE awarded three ESPCs and one Utility Energy Services Contract (UESC), exceeding its commitment by $16 million. On December 4, 2013, CEQ asked agencies to develop a new commitment target that significantly exceeds the current $2 billion goal. In January 2014, DOE submitted a new commitment value of $175 million, for a total commitment value of $275 million by December 31, 2016.

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EVALUATION OF PREVIOUS YEAR'S STRATEGIES

Goal 1 Strategies – Scope 1 & 2 GHG Reductions

(A) Will the agency implement the following strategies to achieve this goal?	(B) Did you implement this strategy Yes/No	(C) Was the strategy successful for you? Yes/No	(D) Will you use this strategy again next year (1-2 sentences)
Implement in EISA 432 covered facilities all lifecycle cost effective ECMs identified.	No	No	Yes. DOE will continue to implement cost effective ECMs in EISA 432 covered facilities. DOE will also continue incorporation of ECM prioritization into the Department's new enterprise sustainability reporting tool.
Reduce on-site fossil-fuel consumption by installing more efficient boilers, generators, furnaces, etc. and/or use renewable fuels.	Yes	Yes	Yes. In FY 2013 DOE awarded an ESPC for an 11.5 MW wind farm at the Pantex plant. DOE will continue to implement cost effective ECMs and utilize renewable energy whenever possible.
Reduce grid-supplied electricity consumption by improving/upgrading motors, boilers, HVAC, chillers, compressors, lighting, etc.	Yes	Yes	Yes. DOE will continue to conduct regular EISA energy and water audits and use them as a basis for ECM implementation.
Employ operations and management best practices for energy consuming and emission generating equipment.	Yes	Yes	Yes. Initial roll out of the peer-to-peer network has been highly successful. DOE plans to expand to 5 sites over the coming year.
Install building utility meters and benchmark performance to track energy and continuously optimize performance.	Yes	Yes	Yes. DOE will continue to benchmark performance and install utility meters whenever possible. DOE is awaiting new metering guidance based on the President's December 5, 2013 memo on Federal Leadership on Energy Management.

Goal 1 Strategies – Scope 3 GHG Reductions

(A) Will the agency implement the following strategies to achieve this goal?	(B) Did you implement this strategy Yes/No	(C) Was the strategy successful for you? Yes/No	(D) Will you use this strategy again next year (1-2 sentences)
Reduce employee business ground travel.	Yes	Yes	Yes. DOE will continue to promote teleconferencing as a substitute for ground travel.
Reduce employee business air travel.	Yes	Yes	Yes. DOE reduced air travel emissions by 28 percent since FY 2008, and will continue to pursue methods to minimize air travel.
Develop and deploy employee commuter reduction plan.	Yes	Yes	Yes. DOE will continue to disseminate best practices on employee commuting.
Use employee commuting survey to identify opportunities and strategies for reducing commuter emissions.	Yes	Yes	Yes. DOE will promote the use of surveys to identify opportunities for reducing commuting related emissions.
Increase number of employees eligible for telework and/or the total number of days teleworked.	Yes	Yes	Yes. DOE developed a telework best practices document based on lessons learned from DOE sites. The Department will issue this document and provide follow up training as appropriate.

Goal 2 Strategies – Sustainable Buildings

(A) Will the agency implement the following strategies to achieve this goal?	(B) Did you implement this strategy Yes/No	(C) Was the strategy successful for you? Yes/No	(D) Will you use this strategy again next year (1-2 sentences)
Incorporate green building specifications into all new construction and major renovation	Yes	Yes	DOE will continue to monitor the incorporation of green building principles into projects, in

(A) Will the agency implement the following strategies to achieve this goal?	(B) Did you implement this strategy Yes/No	(C) Was the strategy successful for you? Yes/No	(D) Will you use this strategy again next year (1-2 sentences)
projects.			accordance with DOE Order 413.3.
Redesign or lease interior space to reduce energy use by daylighting, space optimization, sensors/control system installation, etc.	Yes	Yes	DOE will assess existing Green Lease Policies and Procedures for Lease Acquisition for additional opportunities to reduce energy use.
Deploy CEQ's Implementing Instructions –Sustainable Locations for Federal Facilities.	No	No	DOE will select and perform an appropriate case study of a recent relocation by FY 2015.
Include in every construction contract all applicable sustainable acquisition requirements for recycled, biobased, energy efficient, and environmentally preferable products.	Yes	Yes	Yes. In FY 2013 DOE developed a baseline for construction contracts which contained sustainable clauses and provisions. DOE will strive to improve construction contract performance by including sustainable clauses in 75 percent of all new construction contracts reviewed by the end of FY 2014.
Conduct detailed data analysis to identify areas of improvement in meeting the guiding principles.	Yes	Yes	DOE will continue to perform data deep dives to identify facilities that have made progress towards meeting the guiding principles and look for opportunities to leverage lessons learned and best practices.

Goal 3 Strategies – Fleet Management

(A) Will the agency implement the following strategies to achieve this goal?	(B) Did you implement this strategy Yes/No	(C) Was the strategy successful for you? Yes/No	(D) Will you use this strategy again next year (1-2 sentences)
Optimize/Right-size the composition of the fleet (e.g., reduce vehicle size, eliminate underutilized vehicles, acquire and locate vehicles to match local fuel infrastructure).	Yes	Yes	Yes. The Department will continue to develop annual site-level fleet management plans and perform localized vehicle allocation methodologies.
Acquire only highly fuel-efficient, low greenhouse gas-emitting vehicles and alternative fuel vehicles (AFVs).	Yes	Yes	Yes. The Department will continue the practice of vehicle fleet optimization and right-sizing, placing emphasis on the acquisition of low GHG-emitting vehicles and alternative fuel vehicles.
Increase utilization of alternative fuel in dual-fuel vehicles.	Yes	Yes	Yes. The Department will continue efforts to maximize the use of alternative fuel in dual-fuel vehicles, striving to increase the alternative fuel utilization rate by 20 percent by FY 2016.
Use a Fleet Management Information System to track fuel consumption throughout the year for agency-owned, GSA-leased, and commercially-leased vehicles.	Yes	Yes	Yes. In FY 2014, DOE achieved initial operating capabilities of a fleet management system to track agency-owned fleet assets. DOE will continue development and expand use of the enterprise-wide FedFMS.
Utilize GSA short-term leasing program to fulfill seasonal-based mission requirements.	No	No	Yes. DOE will continue to encourage the use of GSA's short term leasing program as a means to lower fleet costs. DOE will finalize and distribute an informational guide on GSA's short-term leasing program.
Perform fleet data analysis to improve petroleum performance.	Yes	Yes	Yes. DOE will continue to review fleet performance data to examine goal gaps and evaluate potential areas for improvement.

Goal 4 Strategies – Water Use Efficiency & Management

(A) **Will the agency implement the following strategies to achieve this goal?**	**(B) Did you implement this strategy Yes/No**	**(C) Was the strategy successful for you? Yes/No**	**(D) Will you use this strategy again next year (1-2 sentences)**
Purchase and install water efficient technologies (e.g., Waterwise, low-flow water fixtures and aeration devices).	Yes	Yes	Yes. DOE will continue to encourage the installation of water efficient technologies, as opportunities to replace current water fixtures and devices are identified through evaluations and audits.
Develop and deploy operational controls for leak detection including a distribution system audit, leak detection, and repair programs.	Yes	Yes	Yes. DOE will continue to evaluate and audit water systems at least every four years to detect leaks and perform water main repairs.
Design, install, and maintain landscape to reduce water use.	Yes	Yes	Yes. DOE will continue to promote xeriscaping and other alternative landscaping methods as a means to reduce water use. Moreover, DOE will continue to ensure stormwater management compliance with EISA Section 438 for new buildings and renovations.
Design and deploy water closed-loop, capture, recharge, and/or reclamation systems.	Yes	Yes	Yes. DOE will continue to promote and encourage the deployment and replacement of cooling systems with closed-loop, and/or condensate capture systems.
Install meters to measure and monitor potable and non-potable freshwater use in buildings, industrial processes, landscaping and, agricultural water use.	Yes	Yes	Yes. DOE will continue to promote the installation of dedicated water meters at the building and process level and evaluate data to improve performance.

Goal 5 Strategies – Pollution Prevention & Waste Reduction

(A) Will the agency implement the following strategies to achieve this goal?	(B) Did you implement this strategy Yes/No	(C) Was the strategy successful for you? Yes/No	(D) Will you use this strategy again next year (1-2 sentences)
Establish a tracking and reporting system for construction and demolition debris elimination.	Yes	Yes	Yes. DOE will continue to track construction and demolition waste streams and streamline sustainability data reporting where possible.
Eliminate, reduce, or recover refrigerants and other fugitive emissions.	Yes	Yes	DOE will assess the performance and benefits of the three newly installed SF_6 reclaimers and evaluate the potential for additional installations.
Reduce waste generation through elimination, source reduction, and recycling.	Yes	Yes	Yes. DOE will continue to promote best practices for managing waste and increasing recycling.
Implement integrated pest management and improved landscape management practices to reduce and eliminate the use of toxic and hazardous chemicals/materials.	Yes	Yes	Yes. In FY 2013. DOE recorded new integrated pest management plans at two sites. DOE will continue to promote safer, non-toxic pest management alternatives for landscaping.
Improve availability and usage of on-site and off-site composting at DOE facilities.	Yes	Yes	Yes. DOE will continue to share composting best practices and assist sites with implementing composting programs.

Goal 6 Strategies – Sustainable Acquisition

(A) Will the agency implement the following strategies to achieve this goal?	(B) Did you implement this strategy Yes/No	(C) Was the strategy successful for you? Yes/No	(D) Will you use this strategy again next year (1-2 sentences)
Update and deploy agency procurement policies and programs to	Yes	Yes	Yes. The Department will promote its recently revised Acquisition

(A) Will the agency implement the following strategies to achieve this goal?	(B) Did you implement this strategy Yes/No	(C) Was the strategy successful for you? Yes/No	(D) Will you use this strategy again next year (1-2 sentences)
ensure that federally- mandated designated sustainable products are included in all relevant procurements and services.			Guide to ensure procurement personnel are aware of sustainable acquisition requirements and resources.
Deploy corrective actions to address identified barriers to increasing sustainable procurements with special emphasis on biobased purchasing.	Yes	Yes	Yes. DOE will continue to evaluate findings from the sustainable acquisition contract reviews to target areas for improvement.
Include biobased and other FAR sustainability clauses in all applicable construction and other relevant service contracts.	Yes	Yes	Yes. The Department will promote the inclusion of biobased clauses in all new relevant contracts, including construction and service contracts. DOE will track progress during future sustainable acquisition contract reviews.
Use Federal Strategic Sourcing Initiatives, such as Blanket Purchase Agreements (BPAs) for office products and imaging equipment, which include sustainable acquisition requirements.	No	No	DOE will evaluate the potential to leverage strategic sourcing initiatives, such as Blanket Purchase Agreements (BPAs), to increase and streamline the purchase of sustainable good and services.
Report on sustainability compliance in contractor performance reviews.	No	No	As applicable, DOE will look to incorporate compliance with sustainability requirements into support service contract performance reviews.

Goal 7 Strategies – Electronic Stewardship & Data Centers

(A) Will the agency implement the following strategies to achieve this goal?	(B) Did you implement this strategy Yes/No	(C) Was the strategy successful for you? Yes/No	(D) Will you use this strategy again next year (1-2 sentences)
Identify agency "Core" and "Non-Core" Data Centers.	Yes	Yes	Yes, DOE has initially identified 6 data centers as Core Data Centers. Evaluations continue to identify and document additional Core candidates.
Consolidate 40% of agency Non-Core Data Centers.	Yes	Yes	Yes, based on a current FDCCI inventory, DOE is on track to meet the goal. (40% of applicable Non-Core Data Centers).
Optimize agency Core Data Centers	Yes	Yes	Yes, DOE's use of the DOEGRIT / DC Pro data center assessment tool has helped document the energy profile of many Core Data Centers. The tool also produces a list of improvements that can improve the data center PUE.
Ensure that power management, duplex printing, and other energy efficiency or environmentally preferable options and features are enabled on all eligible electronics and monitor compliance.	Yes	Yes	Yes. DOE drafted a print management policy and is currently working to finalize distribution. The Department will monitor this issue and continue to provide technical assistance to programs struggling to meet the Electronics Stewardship goals.
Update and deploy policies to use environmentally sound practices for disposition of all agency excess or surplus electronic products, including use of certified eSteward and/or R2 electronic recyclers, and monitor compliance.	Yes	Yes	Yes. DOE successfully established a partnership with USPS to recycle outdated electronics. Use of this program will continue next year.

(A) Will the agency implement the following strategies to achieve this goal?	(B) Did you implement this strategy Yes/No	(C) Was the strategy successful for you? Yes/No	(D) Will you use this strategy again next year (1-2 sentences)
Ensure acquisition of 95% EPEAT registered and 100% of ENERGY STAR qualified and FEMP designated electronic office products.	Yes	Yes	Yes. DOE will continue to ensure acquisition of EPEAT registered, ENERGY STAR qualified, and FEMP designated electronics.

Goal 8 Strategies – Renewable Energy

(A) Will the agency implement the following strategies to achieve this goal?	(B) Did you implement this strategy? Yes/No	(C) Was the strategy successful for you? Yes/No	(D) Will you use this strategy again next year? (1-2 sentences)
Purchase renewable energy directly or through Renewable Energy Credits (RECs)	Yes	Yes	DOE will continue to purchase renewable energy and renewable energy credits to supplement on-site renewable energy generation for meeting the renewable energy and greenhouse gas goals.
Install onsite renewable energy on federal sites	Yes	Yes	DOE will continue to encourage the development of on-site renewable energy systems to the greatest extend practical.
Lease land for renewable energy infrastructure	Yes	Yes	DOE will continue to encourage the use of excess land for beneficial public uses when practical.
Utilize performance contracting methodologies for implementing ECMs and increasing renewable energy	Yes	Yes	Performance contracting is an integral part of DOE's funding methodology for meeting sustainability goals. As such DOE will continue to encourage the use of performance contracts to

(A) Will the agency implement the following strategies to achieve this goal?	(B) Did you implement this strategy? Yes/No	(C) Was the strategy successful for you? Yes/No	(D) Will you use this strategy again next year? (1-2 sentences)
			implement on-site renewable energy systems.
Work with other agencies to create volume discount incentives for increased renewable energy purchases	Yes	Yes	DOE will continue to encourage sites to purchase RECs through third party groups, such as Western Area Power Administration and Defense Logistics Agency Energy, to pool Federal resources.

Goal 9 Strategies – Climate Change Resilience

(A) Will the agency implement the following strategies to achieve this goal?	(B) Did you implement this strategy Yes/No	(C) Was the strategy successful for you? Yes/No	(D) Will you use this strategy again next year (1-2 sentences)
Ensure climate change adaptation is integrated into both agency-wide and regional planning efforts, in coordination with other Federal agencies as well as state and local partners, Tribal governments, and private stakeholders.	Yes	Yes	Yes. DOE will expand current efforts to integrate climate change into agency-wide and regional planning efforts.
Update agency emergency response procedures and protocols to account for projected climate change, including extreme weather events.	Yes	Yes	DOE successfully reviewed emergency response orders and included climate change language in their update. The Department will continue this review, as appropriate.

(A) Will the agency implement the following strategies to achieve this goal?	(B) Did you implement this strategy Yes/No	(C) Was the strategy successful for you? Yes/No	(D) Will you use this strategy again next year (1-2 sentences)
Ensure agency principals demonstrate commitment to adaptation efforts through internal communications and policies.	Yes	Yes	Yes. The Department will continue to utilize DOE's internal climate change working group as a means to increase climate change literacy. Additionally, DOE leadership remains committed to climate change adaptation and resilience through the release of a policy statement with the 2014 Climate Change Adaptation Plan.
Identify vulnerable communities that are served by agency mission and are potentially impacted by climate change and identify measures to address those vulnerabilities where possible.	Yes	Yes	Yes. DOE is currently concluding the first round of pilot climate change site assessments. Best practices and lessons learned will be used to replicate this process at future sites.
Ensure that agency climate adaptation and resilience policies and programs reflect best available current climate change science, updated as necessary.	Yes	Yes	DOE utilized best available science in its planning and policy development and will continue to do so in the future. DOE will continue to rely upon the technical and scientific capabilities of its National laboratories to ensure compliance with this strategy.

SIZE & SCOPE OF AGENCY OPERATIONS

Table 1: Agency Size & Scope

Agency Size and Scope	FY 2012	FY 2013
Total Number of Employees as Reported in the President's Budget	108,090	115,546
Total Acres of Land Managed	2,297,997	2,228,684
Total Number of Buildings Owned[1]	10,559	10,641
Total Number of Buildings Leased (GSA and Non-GSA Lease)	104	67
Total Building Gross Square Feet (GSF)	120,768,271	119,590,298
Operates in Number of Locations Throughout U.S.	47	47
Operates in Number of Locations Outside of U.S.	0	0
Total Number of Fleet Vehicles Owned	3,805	3,657
Total Number of Fleet Vehicles Leased	10,652	10,537
Total Number of Exempted-Fleet Vehicles (Tactical, Law Enforcement, Emergency, Etc.)	1,274	1,346
Total Amount Contracts Awarded as Reported in FPDS ($Millions)	25,002	23,872

GOAL 1: GREENHOUSE GAS (GHG) REDUCTION

Agency Progress toward Scope 1 & 2 GHG Goal

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

Figure 1-1

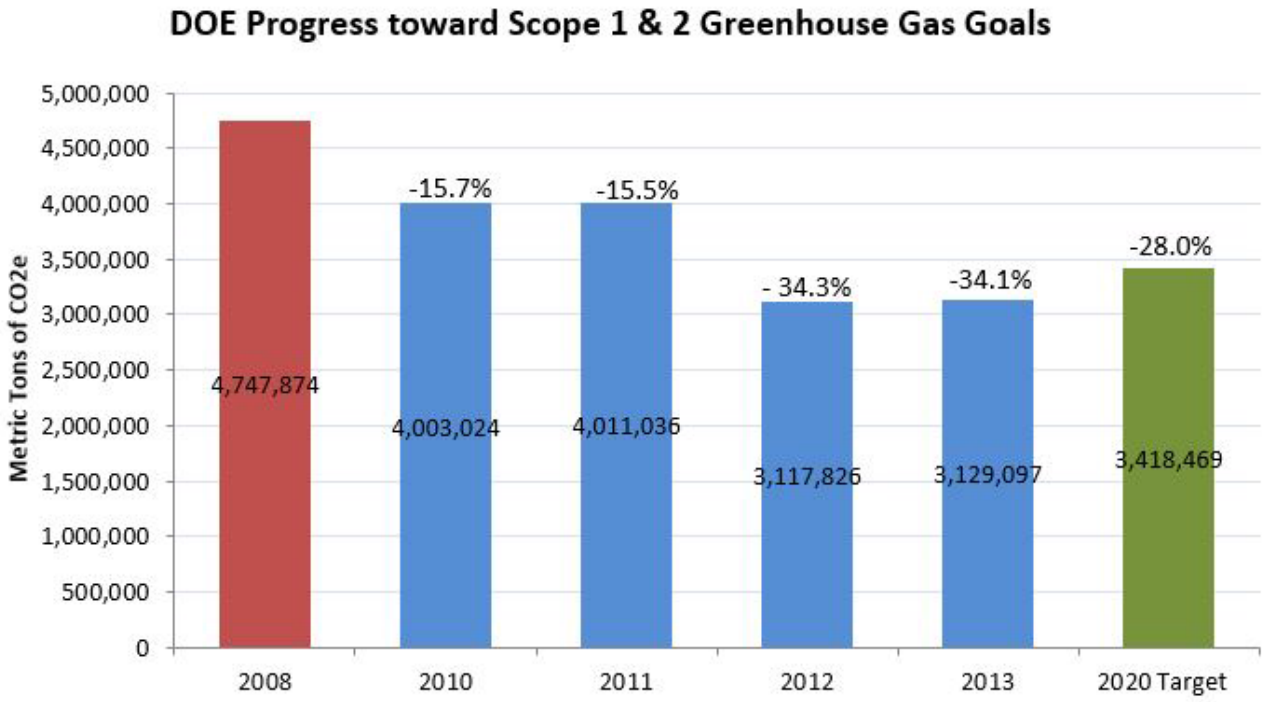


Table 1-1: Goal 1 Strategies – Scope 1 & 2 GHG Reductions

(A) **Will the agency implement the following strategies to achieve this goal?**	(B) **Top Five? Yes/No/NA**	(C) **Strategy Narrative** (100 word limit)	(D) **Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months**
Use the FEMP GHG emission report to identify/target high emission categories and implement specific actions to resolve high emission areas identified.	No	DOE utilizes the FEMP tool and multiple internal analyses to identify areas for prioritization. In addition, DOE is developing an enterprise sustainability reporting tool to consolidate analyses, and provide for overarching strategy prioritization by programs and sites.	
Ensure that all major renovations and new building designs are 30% more efficient than applicable code.	No	DOE ensures facilities are designed, built and renovated to operate as efficiently as possible while achieving mission and research goals (e.g., 30% below ASHRAE 90.1 2007).	
Implement in EISA 432 covered facilities all lifecycle cost effective ECMs identified.	Yes	DOE will continue to utilize EISA audits at covered facilities to prioritize ECMs based on economic, social, and environmental considerations, deferred maintenance needs, and building condition index, mission and other factors.	(1) Integrate ECM prioritization within new enterprise sustainability reporting tool.
Reduce on-site fossil-fuel consumption by installing more efficient boilers, generators, furnaces, etc. and/or use	Yes	Building upon recent successes, including the installation of biomass boilers at two DOE sites, DOE will continue to focus	(1) Update and implement cost-effective ECMs across DOE sites including steam system

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top Five? Yes/No/NA	(C) Strategy Narrative (100 word limit)	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
renewable fuels.		on reducing on-site fossil-fuel consumption by implementing lifecycle cost-effective ECMs and accelerating deployment of on-site renewable generation including photovoltaic, biomass, landfill gas, combined heat and power and wind.	decentralization, lighting upgrades, building management system improvements, and mechanical equipment upgrades. (2) Complete feasibility evaluation for on-site landfill gas generation at one DOE site.
Reduce grid-supplied electricity consumption by improving/upgrading motors, boilers, HVAC, chillers, compressors, lighting, etc.	Yes	DOE will improve the efficiency of existing buildings through EISA energy and water audits.	(1) Continue implementation of lifecycle cost-effective ECMs, when appropriate and cost effective. (2) Issue a case study on best practices of building management.
Employ operations and management best practices for energy consuming and emission generating equipment.	Yes	DOE will continue educational campaigns to change employee behavior when operating DOE facilities, including promoting the use of specialized equipment for inventory control, detecting emission leaks, and performing preventative maintenance.	(1) Deploy Peer-to-Peer network to partner high performing sites with low performing sites to share operational and management best practices. (2) Issue case study on best practices of operations and management of high energy consuming equipment.
Install building utility meters and benchmark performance to track	Yes	DOE's internal metering guidance requires that 90	(1) Re-evaluate, update, and issue

(A) **Will the agency implement the following strategies to achieve this goal?**	(B) **Top Five? Yes/No/NA**	(C) **Strategy Narrative** (100 word limit)	(D) **Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months**
energy and continuously optimize performance.		percent of electricity, natural gas, steam, and chilled water consumption be metered. DOE will continue to benchmark all metered buildings and enter the data into CTS. DOE will also leverage successes and lessons learned by the Department's continued participation in the Better Buildings Federal Competition to improve benchmarking and building performance.	internal metering guidance. (2) Install 100 meters across DOE sites. (3) Conduct data deep dives and identify opportunities for improvement.

Agency Progress toward Scope 3 GHG Goal

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

Figure 1-2

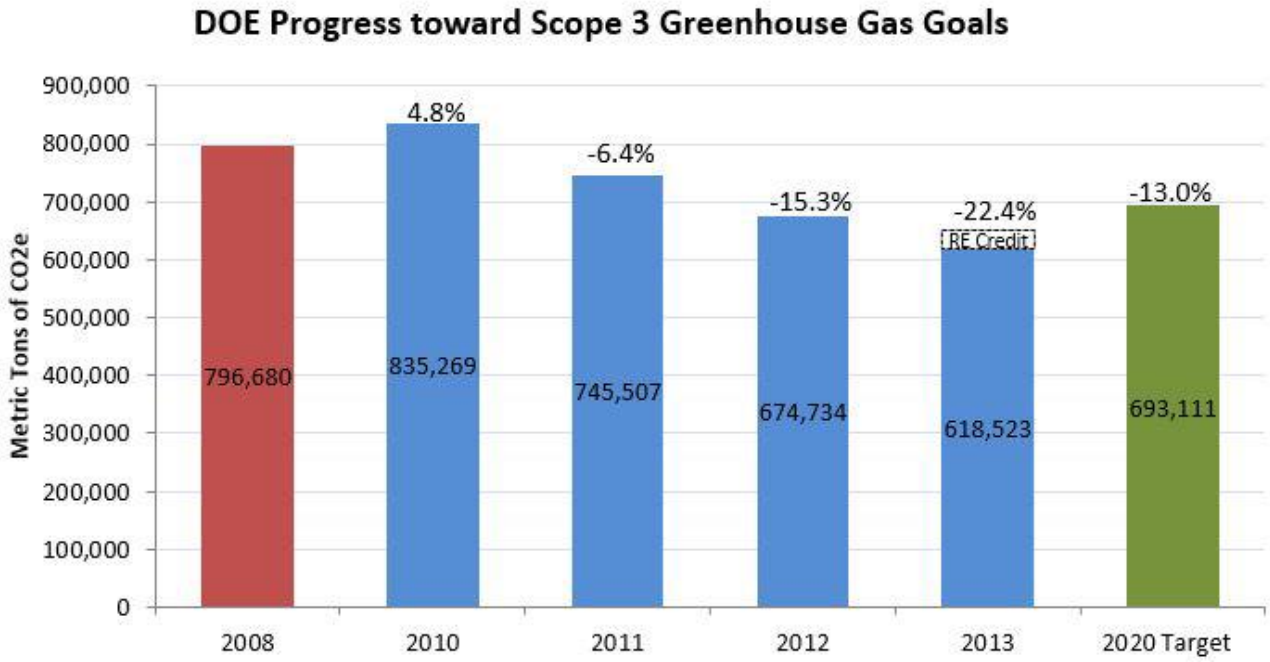


Table 1-2: Goal 1 Strategies – Scope 3 GHG Reductions

(A) **Will the agency implement the following strategies to achieve this goal?**	(B) **Top Five? Yes/No/NA**	(C) **Strategy Narrative** (100 word limit)	(D) **Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months**
Reduce employee business ground travel.	Yes	DOE reduced employee business ground travel emissions by 44.5 percent since FY 2008. DOE will continue to reduce emissions by: (1) Increasing the use of web-based meetings and teleconferencing facilities; and, (2) Reducing car rentals by promoting carpooling at meetings.	(1) Evaluate technological barriers for utilizing web-based and teleconferencing as a substitute for ground travel. (2) Issue best practices document for utilizing carpooling at meetings and events.
Reduce employee business air travel.	Yes	In concert with E.O. 13589, Promoting Efficient Spending, DOE will increase use of web-based meetings to reduce air travel. DOE will also promote the bundling of mission related trips to reduce travel costs and avoid emissions.	(1) Evaluate technological barriers for utilizing web-based and teleconferencing as a substitute for business air travel.
Develop and deploy employee commuter reduction plan.	Yes	DOE will continue to develop site commuter reduction plans and replicate successes from DOE sites.	(1) Issue best practices guide for the development of site-level employee commuting reduction plans.

(A) **Will the agency implement the following strategies to achieve this goal?**	(B) **Top Five? Yes/No/NA**	(C) **Strategy Narrative** (100 word limit)	(D) **Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months**
Use employee commuting survey to identify opportunities and strategies for reducing commuter emissions.	Yes	DOE will continue to identify employee commuting reduction opportunities by evaluating commuting surveys from DOE sites.	(1) Issue employee commuting surveys through internal DOE sustainability data management system, based on guidance from CEQ. (2) Utilize Peer-to-Peer network to share best practices with underperforming sites.
Increase number of employees eligible for telework and/or the total number of days teleworked.	Yes	Per DOE Order 314.1, DOE-FLEX: DOE's Telework Program, DOE will develop a telework best practices document and provide training to promote remote work options.	(1) Issue telework best practice document based on lessons learned from DOE sites.
Develop and implement bicycle commuter program.	No	DOE will continue to coordinate with local planning and transportation demand management agencies to replicate successful bicycle commuter programs at DOE sites.	
Provide bicycle commuting infrastructure.	No	DOE will continue to replicate successful programs by identifying where intra-campus bicycle options are feasible and encouraging the development of	

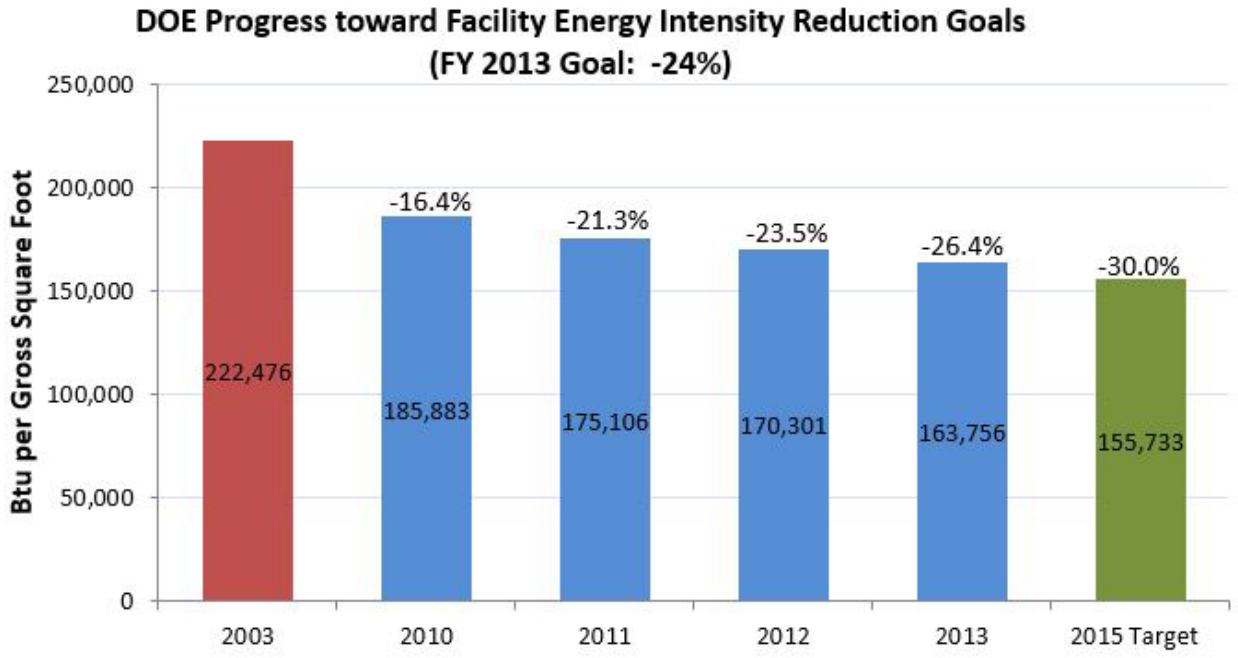
(A) **Will the agency implement the following strategies to achieve this goal?**	(B) **Top Five? Yes/No/NA**	(C) **Strategy Narrative** (100 word limit)	(D) **Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months**
		bicycle-friendly infrastructure at additional DOE sites.	

GOAL 2: SUSTAINABLE BUILDINGS

Agency Progress toward Facility Energy Intensity Reduction Goal

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

Figure 2-1



Agency Progress toward Total Buildings Meeting the Guiding Principles

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

Figure 2-2

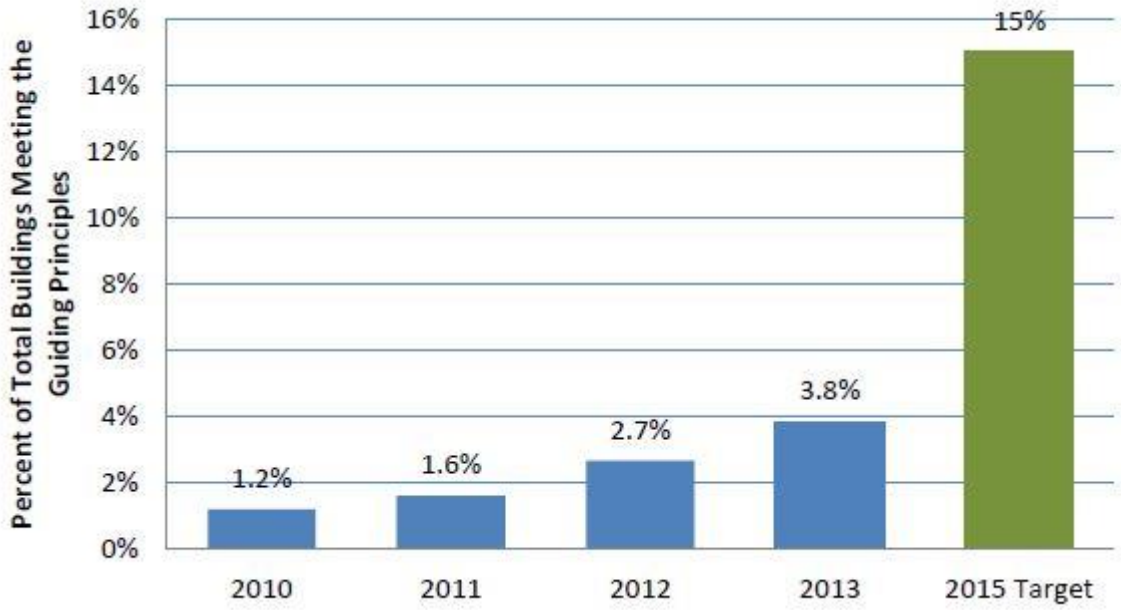


Table 2-1: Goal 2 Strategies – Sustainable Buildings

(A) **Will the agency implement the following strategies to achieve this goal?**	(B) **Top Five? Yes/No/NA**	(C) **Strategy Narrative** (100 word limit)	**(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months**
Incorporate green building specifications into all new construction and major renovation projects.	Yes	DOE requires that all new construction, major renovations, and alterations of buildings greater than 5,000 GSF must comply with the Guiding Principles and where the work exceeds $5 million, must achieve LEED–NC Gold certification, unless determined not to be cost effective by the Senior Acquisition Official.	(1) DOE will continue to monitor the incorporation of green building principles into construction and renovation projects.
Redesign or lease interior space to reduce energy use by daylighting, space optimization, sensors/control system installation, etc.	Yes	When acquiring new leased space, including build-to-suit lease solicitations, DOE will meet the requirements for leased facilities included in E.O. 13514 and include a preference for buildings certified as ENERGY STAR per EISA 2007 Section 435, LEED Gold or higher certified, and/or those that use renewable energy to the maximum extent practicable. When entering into renegotiation or extension of existing leases, DOE will include lease provisions that support the HPSB GPs.	(1) Existing DOE Green Lease Policies and Procedures for Lease Acquisition will be further evaluated for additional opportunities to reduce energy use.

(A) **Will the agency implement the following strategies to achieve this goal?**	(B) **Top Five? Yes/No/NA**	(C) **Strategy Narrative** (100 word limit)	**(D)** **Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months**
Deploy CEQ's Implementing Instructions –Sustainable Locations for Federal Facilities.	Yes	As new buildings are constructed on existing DOE sites, DOE will focus on strengthening regional transportation partnerships to increase the use of public transportation and existing infrastructure.	(1) DOE will identify a recent relocation project to capture lessons learned that may be applicable to other Department sites
Include in every construction contract all applicable sustainable acquisition requirements for recycled, biobased, energy efficient, and environmentally preferable products.	Yes	Use sustainable construction contract baseline to establish path forward for full compliance.	(1) Utilize sustainable construction contract baseline from quarterly sustainable acquisition contract review to develop path forward, as needed, to incorporate sustainable attributes in all construction contracts.

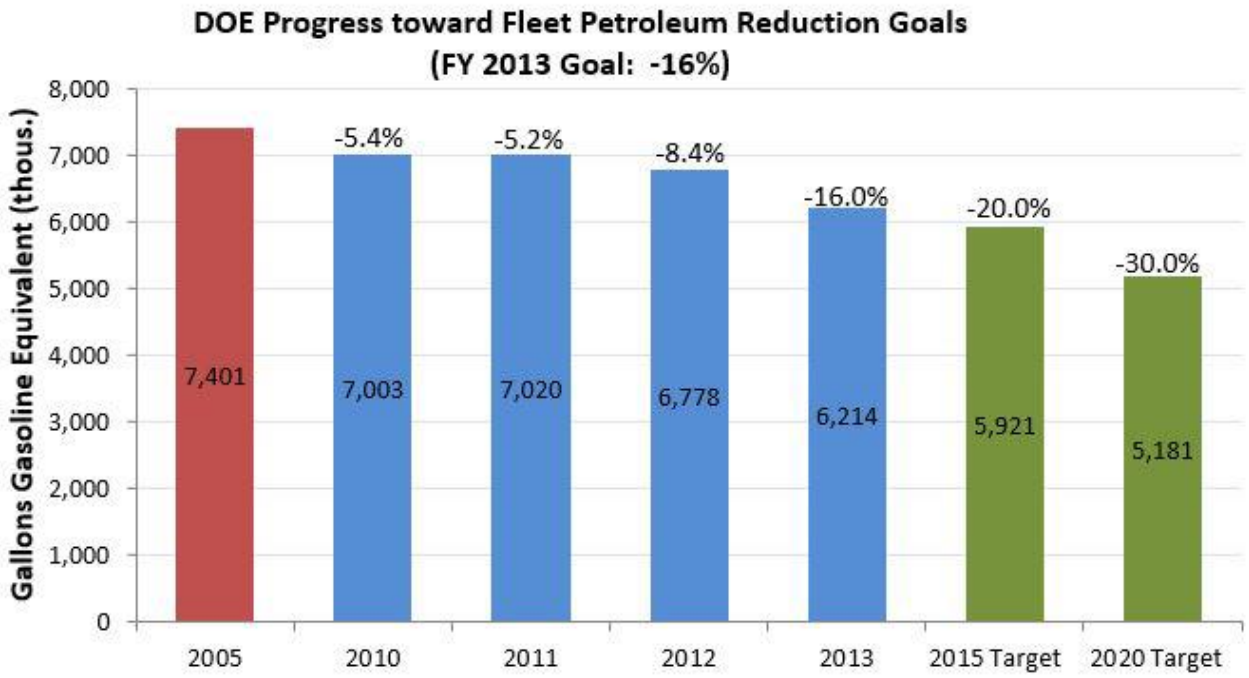
(A) **Will the agency implement the following strategies to achieve this goal?**	(B) **Top Five? Yes/No/NA**	(C) **Strategy Narrative** (100 word limit)	**(D)** **Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months**
Develop and deploy energy and sustainability training for all facility and energy managers.	Yes	As required by the Federal Buildings Personnel Training Act (FBPTA), DOE will provide training to ensure that staff is proficient in the appropriate core competencies. In addition, DOE regularly utilizes FEMP and other vendor training opportunities. The DOE Energy and Facility Contractors Group (EFCOG) maintains an Energy and Sustainability Subgroup (ESSG) comprising site energy and facility managers and staff. The ESSG hosts a monthly teleconference on a variety of sustainability topics.	(1) Continue EFCOG teleconference sessions. (2) Ensure facility and energy managers are informed of training opportunities. Upcoming training events are disseminated through email, the SPO's website, and DOE's sustainability newsletter (SPOtlight). (3) Continue to increase the number of facility energy managers that can demonstrate core competencies for facility managers as identified by GSA under the Federal Buildings Personnel Training Act (FBPTA) or are qualified Certified Energy Managers.

GOAL 3: FLEET MANAGEMENT

Agency Progress toward Fleet Petroleum Use Reduction Goal

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

Figure 3-1



Agency Progress toward Fleet Alternative Fuel Consumption Goal

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

Figure 3-2

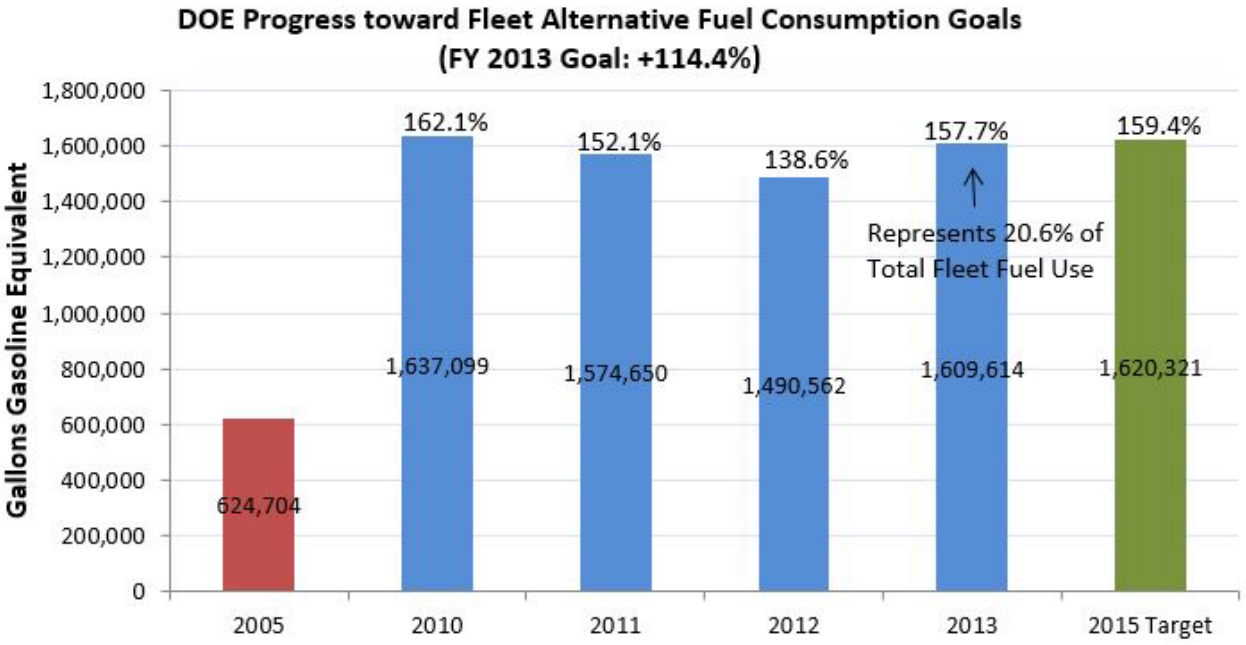


Table 3-1: Goal 3 Strategies – Fleet Management

(A) **Will the agency implement the following strategies to achieve this goal?**	(B) **Top Five? Yes/No/NA**	(C) **Strategy Narrative** (100 word limit)	(D) **Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months**
Optimize/Right-size the composition of the fleet (e.g., reduce vehicle size, eliminate underutilized vehicles, acquire and locate vehicles to match local fuel infrastructure).	Yes	In December 2013, DOE sites developed first-ever fleet management plans, submitted along with their annual Site Sustainability Plans. DOE will continue to execute site-level fleet management plans, augmenting Departmental-level planning, to ensure the fleet is properly composed to perform mission requirements.	(1) Perform Department-wide vehicle allocation methodology on an annual basis. (2) Perform site-level vehicle allocation methodology and develop site-level fleet management plans.
Reduce miles traveled (e.g., share vehicles, improve routing with telematics, eliminate trips, improve scheduling, use shuttles, etc.).	No	The Department will continue to promote innovative methods to reduce miles travelled. DOE will encourage vehicle pooling, ride sharing, and the use of video-teleconferencing as an alternative to vehicle transportation.	

(A) **Will the agency implement the following strategies to achieve this goal?**	(B) **Top Five? Yes/No/NA**	(C) **Strategy Narrative** (100 word limit)	(D) **Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months**
Acquire only highly fuel-efficient, low greenhouse gas-emitting vehicles and alternative fuel vehicles (AFVs).	Yes	The Department will continue to comply with EPAct 2005 requirements and strive to meet the 2015 Presidential Memorandum goal requiring all light-duty vehicle acquisitions are alternative fueled vehicles. To the extent practical, DOE will evaluate each vehicle acquisition and acquire only highly fuel-efficient and alternative fueled vehicles. Note: The ability to acquire these vehicles is dependent upon GSA availability and mission requirements.	(1) 75 percent of light-duty vehicle acquisitions are alternative fueled vehicles in FY 2013 - 2015. (2) 100 percent of light-duty vehicle acquisitions are alternative fueled vehicles, including hybrid and electric vehicles, by December 31, 2015.
Increase utilization of alternative fuel in dual-fuel vehicles.	Yes	DOE will continue to utilize available tools (e.g., online alternative fuel station databases) to locate alternative fuel stations in close proximity to DOE facilities and operations. The Department will also expand training and resources to educate fleet vehicle drivers on the benefits of alternative fuel.	(1) Increase alternative fuel utilization rate by 20 percent by FY 2016.

(A) **Will the agency implement the following strategies to achieve this goal?**	(B) **Top Five? Yes/No/NA**	(C) **Strategy Narrative** (100 word limit)	(D) **Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months**
Use a Fleet Management Information System to track fuel consumption throughout the year for agency-owned, GSA-leased, and commercially-leased vehicles.	Yes	In 2013, DOE achieved initial operating capability of a Fleet Management System (FedFMS) to track agency-owned fleet assets. DOE's fleet assets are managed at DOE sites with oversight and support at the Headquarters level. The new FedFMS will receive input from fleet managers on a regular basis to track fuel use, maintenance schedules, and other vehicle use information.	(1) Expand deployment of FedFMS throughout DOE.
Increase GSA leased vehicles and decrease agency-owned fleet vehicles, when cost effective.	No	DOE evaluates all factors involved (e.g., cost, use, location) when acquiring fleet assets. DOE will look to replace agency-owned vehicles with GSA-leased vehicles as a means to standardize costs.	
Perform fleet data analysis to improve petroleum performance.	Yes	DOE will perform fleet data deep dives to examine goal gaps and areas for improvement. The deep dives will include review of progress, discussion of best practices, and direct technical assistance to meet the fleet petroleum requirements.	(1) Perform data deep dives and provide analysis to DOE programs and sites.

GOAL 4: WATER USE EFFICIENCY & MANAGEMENT

Agency Progress toward Potable Water Intensity Reduction Goal

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

Figure 4-1

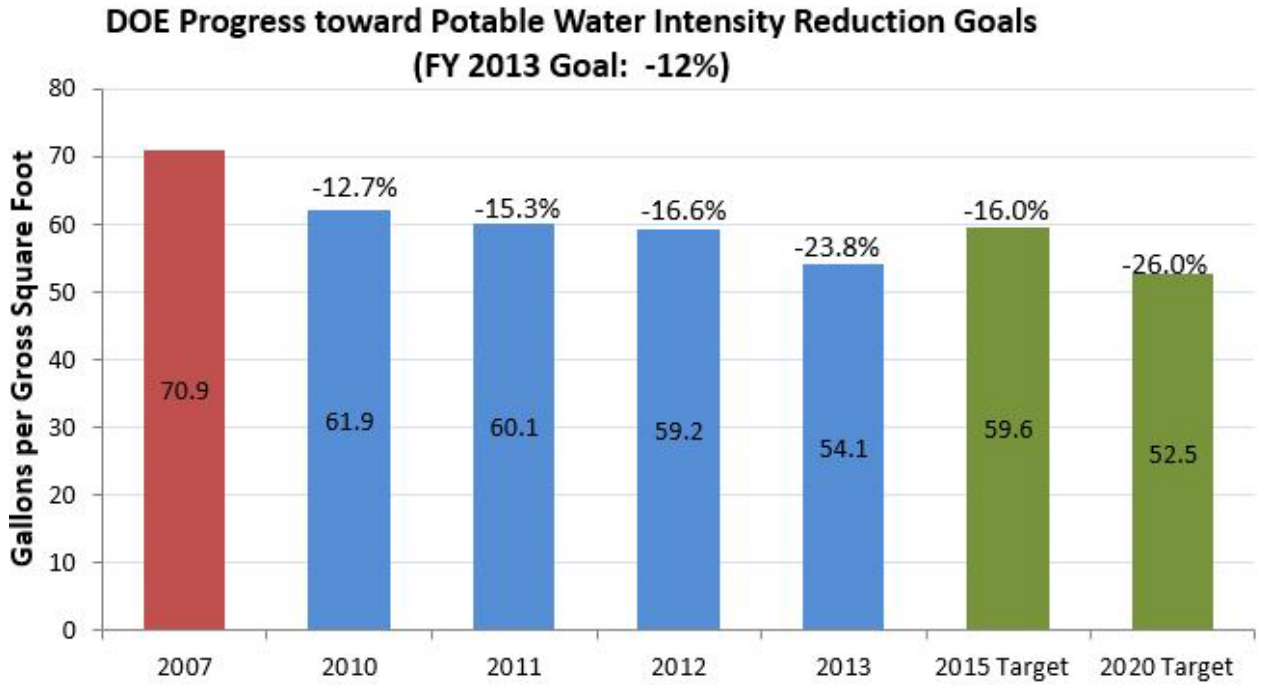


Table 4-1: Goal 4 Strategies – Water Use Efficiency & Management

(A) **Will the agency implement the following strategies to achieve this goal?**	(B) **Top Five? Yes/No/NA**	(C) **Strategy Narrative** (100 word limit)	(D) **Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months**
Purchase and install high efficiency technologies (e.g., WaterSense).	Yes	DOE will continue to perform audits and evaluations to identify opportunities to replace current water fixtures and devices with more efficient technologies. The installation of water efficient technologies will continue to be encouraged and best practices and successes will be shared throughout the DOE complex.	(1) Update plumbing and water fixtures at 10 facilities across DOE sites with more water efficient technologies, such as low-flow faucets, WaterSense products, and aerators. (2) Finalize and issue a list of water efficient technologies along with cost estimates and savings to inform decision-makers when designing or replacing/upgrading water fixtures and systems.
Prepare and implement a water asset management plan to maintain desired level of service at lowest life cycle cost (for best practices from the EPA, go to http://go.usa.gov/KvbF)	No	DOE sites prepare site-level water asset management plans. At this time, DOE does not produce a corporate level plan. DOE will review EPA best practices and investigate the development of a corporate plan.	

(A) **Will the agency implement the following strategies to achieve this goal?**	(B) **Top Five? Yes/No/NA**	(C) **Strategy Narrative** (100 word limit)	(D) **Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months**
Minimize outdoor water use and use alternative water sources as much as possible.	Yes	DOE is on track to achieve the interim targets for reductions in potable water intensity and industrial, landscaping, and agriculture water consumption. DOE will continue to ensure compliance with EISA Section 438 for new buildings and renovations.	(1) Finalize and issue best practices document on landscape and water management, to include design and installation best practices, including the use of xeriscaping and/or use of local plants.
Design and deploy water closed-loop, capture, recharge, and/or reclamation systems.	Yes	DOE will promote and encourage the deployment and replacement of cooling systems with closed-loop, condensate capture systems, along with use of alternative water sources for processes, when permitted by state/local laws.	(1) Develop and issue best practices document on lessons learned from a successful closed-loop water recapture project.

(A) **Will the agency implement the following strategies to achieve this goal?**	(B) **Top Five? Yes/No/NA**	(C) **Strategy Narrative** (100 word limit)	(D) **Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months**
Install advanced meters to measure and monitor (1) potable and (2) industrial, landscaping and agricultural water use.	Yes	DOE will encourage the use and expansion of cost-effective water meters and the collection of site-level water meter data at a building and/or process level, for both potable and ILA water. DOE will continue to encourage the metering of water as a best practice for usage reduction and water management.	(1) Install 25 additional water meters at DOE sites.
Develop and implement programs to educate employees about methods to minimize water use	Yes	DOE will continue to share management best practices and encourage the reduction of both potable and ILA water.	(1) Conduct a best practices teleconference on water management best practices to share success and challenges among DOE sites. (2) Finalize and issue best practices document for in-house water leak detection and repair program.
Assess agency water strategy to determine the impact of water use on the agency's energy use and efficiency	No	DOE will evaluate the impact of water efficiency strategies on energy use when selecting projects.	

GOAL 5: POLLUTION PREVENTION & WASTE REDUCTION

Agency Progress toward Pollution Prevention & Waste Reduction

E.O. 13514 requires that Federal agencies promote pollution prevention and eliminate waste. The E.O. requires agencies to minimize the use of toxic and hazardous chemicals and pursue acceptable alternatives. It also requires agencies minimize waste generation through source reduction, increase diversion of compostable materials, and by the end of FY 2015 divert at least 50% of non-hazardous and 50% of construction and demolition debris.[1]

[1] Waste guidance will be issued in mid-late FY 2014, and agencies will be expected to begin implementation in FY 2015. Next year's SSPP will include strategies as appropriate, and accounting will begin in FY 2016.

Table 5-1: Goal 5 Strategies – Pollution Prevention & Waste Reduction

(A) **Will the agency implement the following strategies to achieve this goal?**	(B) **Top Five? Yes/No/NA**	(C) **Strategy Narrative** (100 word limit)	(D) **Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months**
Eliminate, reduce, or recover refrigerants and other fugitive emissions.	Yes	DOE tracks and focuses on reducing all fugitive emissions within the complex. SF_6 is used for a variety of purposes within DOE, and comprises nearly 90 percent of all DOE fugitive GHG emissions. In 2013, 11 DOE sites emitted more than 100 pounds of SF_6, all of which have a documented SF_6 capture program. Best practices for fugitive emissions reductions are shared between DOE laboratories. The Power Marketing Administrations have also instituted effective SF_6 leak detection and repair processes and utilize low-leak breakers during replacements and upgrades.	(1) In FY 2013, DOE sites installed new stationary SF_6 reclaimers to improve recovery efficiency at two major pulsed power experiments. DOE will monitor the progress of these projects, share lessons learned, and look to install additional reclaimers as appropriate.
Reduce waste generation through elimination, source reduction, and recycling.	Yes	In FY 2013, DOE diverted 56 percent of municipal solid waste from landfills. DOE will give preference to contracts which allow the greatest range of products to be recycled.	(1) Increase waste diversion rate. (2) Share lessons learned and best practices from successful and innovative recycling programs at DOE sites.

(A) **Will the agency implement the following strategies to achieve this goal?**	(B) **Top Five? Yes/No/NA**	(C) **Strategy Narrative** (100 word limit)	(D) **Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months**
Implement integrated pest management and improved landscape management practices to reduce and eliminate the use of toxic and hazardous chemicals/materials.	Yes	In FY 2013, DOE recorded new integrated pest management plans at two sites. DOE will continue to reduce use of toxic materials and evaluate alternatives for landscaping applications.	(1) Increase number of DOE sites with site-level integrated pest management programs.
Establish a tracking and reporting system for construction and demolition debris elimination.	No	DOE tracks construction and demolition debris and municipal solid waste at the site level. Two C&D categories are tracked: landfill and diverted waste. Six MSW categories are tracked: on-site landfill, off-site landfill, waste-to-energy, diverted, on-site composting, and off-site composting.	
Develop/revise Agency Chemicals Inventory Plans and identify and deploy chemical elimination, substitution, and/or management opportunities.	No	In response to E.O. 13423, DOE sites develop individual strategies to reduce chemicals through their Environmental Management System. DOE sites established performance-based goals for toxic chemical reduction and elimination efforts.	

(A) **Will the agency implement the following strategies to achieve this goal?**	(B) **Top Five? Yes/No/NA**	(C) **Strategy Narrative** (100 word limit)	(D) **Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months**
Take inventory of current HFC use and purchases	Yes	DOE's annual sustainability reporting process tracks HFC purchases and use at the site level.	(1) Continue site-level reporting of HFC purchase and use. (2) Streamline and clarify reporting as applicable.
Require high-level waiver or contract approval for any agency use of HFCs	No	DOE sites independently manage the use and purchase of HFCs. The Department will evaluate the potential for additional management and oversight.	
Ensure HFC management training and recycling equipment are available	Yes	DOE sites independently manage the use and purchase of HFCs. The Department will look to share management best practices on the purchase, use, and recycling of HFCs.	(1) DOE will pursue opportunities and conduct training for personnel who manage and use HFCs.

GOAL 6: SUSTAINABLE ACQUISITION

Agency Progress toward Sustainable Acquisition Goal

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

Figure 6-1

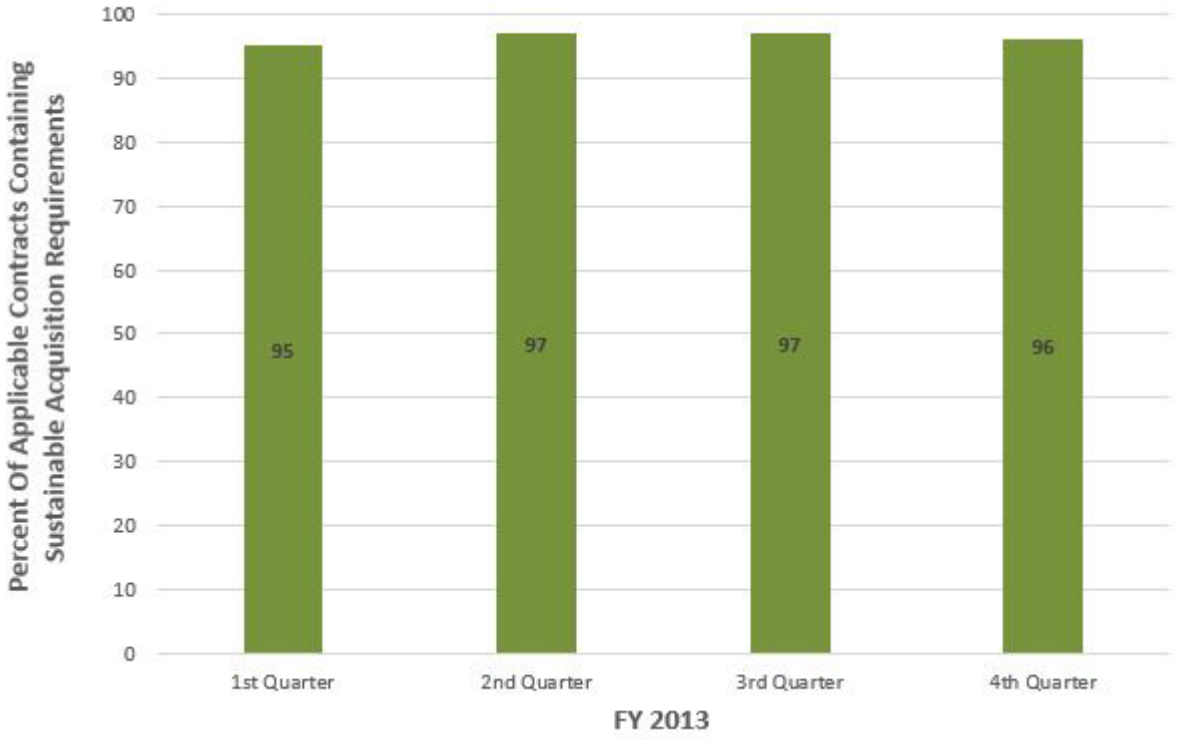


Table 6-1: Goal 6 Strategies – Sustainable Acquisition

(A) **Will the agency implement the following strategies to achieve this goal?**	(B) **Top Five? Yes/No/NA**	(C) **Strategy Narrative** (100 word limit)	(D) **Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months**
Update and deploy agency procurement policies and programs to ensure that federally- mandated designated sustainable products are included in all relevant procurements and services.	Yes	In FY 2014, DOE issued an update to its Sustainable Acquisition Procurement Guide. DOE will ensure the guide is disseminated to appropriate field personnel and training is made available.	(1) Ensure acquisition guide is disseminated to appropriate headquarters and field personnel.
Deploy corrective actions to address identified barriers to increasing sustainable procurements with special emphasis on biobased purchasing.	Yes	DOE will continue to evaluate findings from quarterly sustainable acquisition contract reviews to increase procurement of sustainable goods and services.	(1) Evaluate findings from contract reviews to identify common areas of weakness. (2) Draft corrective plan of action targeted at areas of weakness based on contract review analysis.
Include biobased and other FAR sustainability clauses in all applicable construction and other relevant service contracts.	Yes	DOE promotes the inclusion of sustainability and biobased related clauses into new contract actions, as applicable, to ensure compliance with 95 percent of all new contracts actions. During FY 2013 contract reviews, DOE found that 58 percent of new applicable contracts contained biobased product clauses, exceeding the FY 2014 DOE target of 50 percent, one year ahead of schedule.	(1) Analyze FY 2013 contract review data. (2) Perform FY 2014 sustainable acquisition quarterly contract reviews. (3) Perform analysis on FY 2014 contract review data; amend baseline and goal target as necessary.

(A) **Will the agency implement the following strategies to achieve this goal?**	(B) **Top Five? Yes/No/NA**	(C) **Strategy Narrative** (100 word limit)	(D) **Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months**
Review and update agency specifications to include and encourage biobased and other designated green products to enable meeting sustainable acquisition goals.	N/A	While the Department does not maintain agency product specifications, DOE utilizes other agencies' certified products, programs, and tools to promote sustainable purchasing, including USDA's biopreferred products and EPA's Electronic Product Environmental Assessment Tool (EPEAT).	
Use Federal Strategic Sourcing Initiatives, such as Blanket Purchase Agreements (BPAs) for office products and imaging equipment, which include sustainable acquisition requirements.	Yes	The Department pursues strategic sourcing initiatives to increase widespread adoption of sustainable contracting. Blanket Purchase Agreements will serve as one tool for the Department to ensure sustainable products and services are readily accessible for Departmental procurement officials. The Integrated Contractor Purchasing Team, an organization of DOE M&O contractors, is currently pursuing the establishment of a blanket purchase agreement that all DOE sites could utilize.	(1) Issue guidance to procurement specialists for implementing strategic sourcing initiatives to promote sustainable purchasing.

(A) **Will the agency implement the following strategies to achieve this goal?**	(B) **Top Five? Yes/No/NA**	(C) **Strategy Narrative** (100 word limit)	(D) **Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months**
Report on sustainability compliance in contractor performance reviews.	Yes	DOE will encourage the incorporation of sustainability compliance aspects into support service contractor performance reviews, as appropriate.	(1) Issue guidance on incorporating sustainability compliance into contractor performance reviews.

GOAL 7: ELECTRONIC STEWARDSHIP & DATA CENTERS

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

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

Figure 7-1

EPEAT	POWER MANAGEMENT	END-OF-LIFE	COMMENTS
			Identified struggling Power Management sites and will target these for technical support to achieve compliance.

EPEAT:

	95% or more Monitors and PCs/Laptops purchased in FY2013 was EPEAT Compliant Agency-wide
	85-94% or more Monitors and PCs/Laptops purchased in FY2013 was EPEAT Compliant Agency-wide
	84% or less Monitors and PCs/Laptops purchased in FY2013 was EPEAT Compliant Agency-wide

Power Management:

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

End-of-Life:

	100% of Electronics at end-of-life disposed through GSA Xcess, CFL, Unicor, USPS Recycling Program or Certified Recycler (R2, E-Stewards). *Submitted annual report to GSA for Federal Electronics Assets furnished to non-Federal recipients.*
	100% of Electronics at end-of-life disposed through GSA Xcess, CFL, Unicor, USPS Recycling Program and/or non-Certified Recycler. *Submitted annual report to GSA for Federal Electronics Assets furnished to non-Federal recipients.*
	Less than 100% of Electronics at end-of-life disposed through GSA Xcess, CFL, Unicor, USPS Recycling Program or non-Certified Recycler. *No annual report submitted to GSA for Federal Electronics Assets furnished to non-Federal recipients.*

Table 7-1: Goal 7 Strategies – Electronic Stewardship & Data Centers

(A) **Will the agency implement the following strategies to achieve this goal?**	(B) **Top Five? Yes/No/NA**	(C) **Strategy Narrative** (100 word limit)	(D) **Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months**
Identify agency "Core" and "Non-Core" Data.	Yes	DOE will continue to develop criteria for agency Core and Non-core data to begin the process of classifying the data. Subsequently, DOE will identify Core and Non-Core data and begin tracking identified datacenters.	(1) Finalize development of criteria. (2) Identify Core and Non-core data.
Consolidate 40% of agency non-core data centers.	Yes	DOE will prioritize data centers for consolidation based on core/non-core determinations with consideration given to all costs involved.	(1) Reassess and update, as necessary, agency data centers previously targeted for closure.
Optimize agency Core Data Centers across total cost of ownership metrics.	Yes	Additional measures will be implemented that optimize cost effectiveness and energy efficiency, including operational best practices, such as, hot and cold aisle containment, liquid cooling, virtualization, and other measures where appropriate.	(1) Conduct assessments of core data centers upon determining which are core and non-core.

(A) **Will the agency implement the following strategies to achieve this goal?**	(B) **Top Five? Yes/No/NA**	(C) **Strategy Narrative** (100 word limit)	(D) **Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months**
Ensure that power management, duplex printing, and other energy efficiency or environmentally preferable options and features are enabled on all eligible electronics and monitor compliance.	Yes	DOE sites continue to implement cost-effective software applications for advanced power management and strive to maintain 100% compliance. DOE is currently providing technical assistance to sites not meeting the goal to identify issues and work to achieve compliance. DOE will issue a Print Management Guide for use with DOE Order 436.1, Departmental Sustainability. The Guide will identify print management best practices and provide recommendations.	(1) Issue a Print Management guide. (2) Provide ongoing technical assistance to sites on power management and issue best practices and guidance to further compliance.

(A) **Will the agency implement the following strategies to achieve this goal?**	(B) **Top Five? Yes/No/NA**	(C) **Strategy Narrative** (100 word limit)	(D) **Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months**
Update and deploy policies to use environmentally sound practices for disposition of all agency excess or surplus electronic products, including use of certified eSteward and/or R2 electronic recyclers, and monitor compliance.	Yes	DOE is committed to continuing disposal of electronic assets through sound disposition practices through GSA Xcess, recycling through Unicor, donation through GSA's Computer for Learning (CFL) and other non-profit organizations, and/or recycling through a private recycler certified under the R2 or eStewards. The Department also recently partnered with the United States Postal Service's (USPS) electronic recycling program, which offers a free-of-charge service for recycling outdated and unused electronics.	(1) Review existing policies and update as needed. (2) Execute electronic recycling programs. (3) Provide technical assistance to sites currently using non-certified recyclers to encourage use of the USPS program or to find and use certified recyclers.
Ensure acquisition of 95% EPEAT registered and 100% of ENERGY STAR qualified and FEMP designated electronic office products.	Yes	DOE ensures acquisition of EPEAT registered, ENERGY STAR qualified, and FEMP designated electronics where cost-effective.	(1) Review existing procurement and training policies and update as needed.

GOAL 8: RENEWABLE ENERGY

Agency Renewable Energy Percentage of Total Electricity Usage

E.O. 13514 requires that agencies increase use of renewable energy. Further, EPACT 2005 requires agencies to increase renewable energy use such that 7.5 percent of the agency's total electricity consumption is generated by renewable energy sources for FY 2014 and beyond. For FY 2012, the required target was 5 percent of an agency's total electricity consumption.

Figure 8-1

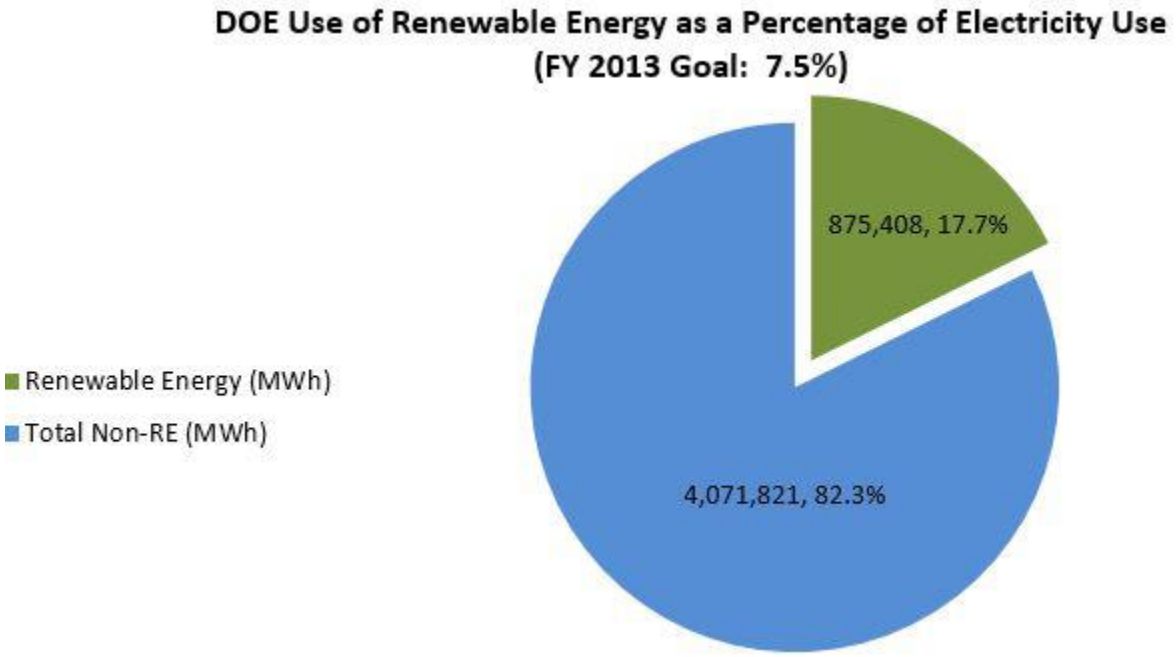


Table 8-1: Goal 8 Strategies – Renewable Energy

(A) **Will the agency implement the following strategies to achieve this goal?**	(B) **Top Five? Yes/No/NA**	(C) **Strategy Narrative** (100 word limit)	(D) **Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months**
Purchase renewable energy directly or through Renewable Energy Credits (RECs).	Yes	DOE encourages the development of on-site renewable energy systems to the greatest extended practical. RECs and green energy purchases are utilized to supplement on-site generation. Whenever possible, RECs will be purchased through third party bundlers to achieve the greatest cost savings and provide verification. Moreover, DOE policy provides preference to tribal renewable energy. In FY 2013, 17.7 percent of electricity purchased or generated by DOE came from renewable sources.	(1) Continue to purchase RECs to supplement on-site renewable energy generation to meet renewable energy and greenhouse gas goals.

(A) **Will the agency implement the following strategies to achieve this goal?**	(B) **Top Five? Yes/No/NA**	(C) **Strategy Narrative** (100 word limit)	(D) **Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months**
Install onsite renewable energy on federal sites.	Yes	DOE will continue to pursue on-site renewable energy systems where possible. At the moment DOE has nearly 400 on-site renewable energy systems, with several large systems to come on line in the near future.	(1) Continue construction of the Pantex Plant wind turbines and begin construction of the Argonne National Laboratory Combined Heat and Power plant. (2) Continue development of internal scoping study evaluating the feasibility of renewable energy on DOE land based on current technologies and economic environment. (3) Continue development of guidance promoting the integration of on-site renewable energy systems into all new construction projects, whenever feasible.
Lease land for renewable energy infrastructure.	Yes	DOE will continue to encourage the use of excess land for beneficial public uses when practical.	(1) DOE does not expect to enter into new leases within the next 12 months, but will continue to pursue opportunities to lease out land for renewable energy development.

(A) **Will the agency implement the following strategies to achieve this goal?**	(B) **Top Five? Yes/No/NA**	(C) **Strategy Narrative** (100 word limit)	(D) **Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months**
Develop biomass capacity for energy generation.	No	DOE views biomass as a key renewable energy resource and will continue to pursue applicable systems whenever feasible. DOE currently has six operating biomass plants.	
Utilize performance contracting methodologies for implementing ECMs and increasing renewable energy.	Yes	DOE will continue to promote the use of ESPCs, UESCs, and PPAs to finance large scale renewable energy projects. The most recent renewable energy ESPC awards have been by the Pantex Plant (January 2013) and Argonne National Laboratory (March 2014).	(1) Continue to strive toward DOE's $175 million commitment to the President's Performance Contracting Challenge, and report progress on a monthly basis to OMB/CEQ.
Work with other agencies to create volume discount incentives for increased renewable energy purchases.	Yes	DOE will continue to encourage sites to purchase RECs through third party groups to pool resources and minimize costs. The primary third party purchasers utilized by DOE sites are the Western Area Power Administration and Defense Logistics Agency Energy.	(1) DOE sites will continue to purchase their RECs through third party groups, where applicable.

GOAL 9: CLIMATE CHANGE RESILIENCE

Agency Climate Change Resilience

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

Table 9-1: Goal 9 Strategies – Climate Change Resilience

(A) **Will the agency implement the following strategies to achieve this goal?**	(B) **Top Five? Yes/No/NA**	(C) **Strategy Narrative** (100 word limit)	(D) **Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months**
Ensure climate change adaptation is integrated into both agency-wide and regional planning efforts, in coordination with other Federal agencies as well as state and local partners, Tribal governments, and private stakeholders.	Yes	DOE continues to incorporate adaptation into a multitude of planning efforts consistent with our 2014 Adaptation Plan.	(1) DOE will ensure participation in the Council on Climate Preparedness and Resilience as well as the State, Local and Tribal Task Force created under EO 13653 (2) Complete a review of DOE Orders, Guides and Technical Standards scheduled for update and work to ensure adaptation and resilience are incorporated as appropriate. (3) Identify program specific planning documents and guidance that should be updated for climate change resiliency. (4) Expand regional collaboration efforts with universities and government agencies at the site and agency level. (5) Collect information on site-level regional

(A) **Will the agency implement the following strategies to achieve this goal?**	(B) **Top Five? Yes/No/NA**	(C) **Strategy Narrative** (100 word limit)	(D) **Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months**
			coordination efforts through internal planning documents; disseminate best practices with DOE community.
Update agency emergency response procedures and protocols to account for projected climate change, including extreme weather events.	Yes	As outlined in DOE's 2014 Adaptation Plan, the Department began updating agency emergency response procedures and protocols to prepare for the potential effects of climate change, including extreme weather events. DOE included climate change language in its update of the Departmental Order 150.1A *Continuity of Operations Planning*. Through groups, such as the DOE Emergency Management Issues Special Interest Group (EMI SIG), DOE is conducting dialogue regarding communication and education of climate adaptation in emergency response. Led by the Office of Electricity Delivery and Energy Reliability (OE), DOE will continue to leverage lessons learned from responses to extreme weather disasters, such as	(1) Continue to review and update Emergency Response planning mechanisms for climate change, as appropriate, in accordance with updated DOE orders, guides and technical standards. (2) DOE will look to expand its site vulnerability assessments in order to provide sites with appropriate information to update emergency response procedures and protocols.

(A) **Will the agency implement the following strategies to achieve this goal?**	(B) **Top Five? Yes/No/NA**	(C) **Strategy Narrative** (100 word limit)	(D) **Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months**
		Hurricane Sandy.	
Ensure workforce protocols and policies reflect projected human health and safety impacts of climate change.	Yes	The 2014 DOE Adaptation Plan specifically identifies human health as a vulnerability for the Department. Current workforce protocols call for natural hazard assessments and DOE will look specifically at climate change as part of this process.	(1) Continue to review and update workforce protocols, policies, and planning mechanisms for climate change, as appropriate, in accordance with updated DOE orders, guides and technical standards.
Update agency external programs and policies (including grants, loans, technical assistance, etc.) to incentivize planning for, and addressing the impacts of, climate change.	Yes	DOE's recent study of the climate change vulnerabilities of the U.S. energy sector was publicly released in FY 2013. This report serves as an example of DOE external technical assistance regarding the impact of climate change on the energy sector. The incorporation of climate change adaptation considerations into external policies, guidance, and programs will continue, where appropriate.	(1) DOE will assess appropriate external programs and policies to incentivize addressing the impacts of climate change. This process will work in concert with DOE's effort to address barriers to climate change investment included in the 2014 Adaptation Plan.

(A) **Will the agency implement the following strategies to achieve this goal?**	(B) **Top Five? Yes/No/NA**	(C) **Strategy Narrative** (100 word limit)	(D) **Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months**
Ensure agency principals demonstrate commitment to adaptation efforts through internal communications and policies.	Yes	DOE developed an internal agency adaptation working group to share strategies and best practices throughout the Department. Additionally, DOE sites and programs are required to report on adaptation activities at the site and programmatic levels through annual internal plan. This structure ensures awareness and commitment to climate change efforts across the Department.	(1) Continue the multitude of efforts already in place, including maintaining the DOE Adaptation Working Group and requiring reporting on program and site level climate change adaptation.
Identify vulnerable communities that are served by agency mission and are potentially impacted by climate change and identify measures to address those vulnerabilities where possible.	No	DOE's mission does not directly serve vulnerable communities, however the Department operates at 47 major sites throughout the country and has identified risks in all U.S. climate regions. DOE is in the process of conducting site level pilot vulnerability assessments. Through this effort DOE has ensured that local stakeholders and regional vulnerabilities (such as transportation to and from sites) are included. DOE will continue to engage local communities in our adaptation and	

(A) **Will the agency implement the following strategies to achieve this goal?**	(B) **Top Five? Yes/No/NA**	(C) **Strategy Narrative** (100 word limit)	(D) **Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months**
		resilience efforts.	
Ensure that agency climate adaptation and resilience policies and programs reflect best available current climate change science, updated as necessary.	No	DOE utilizes the best available data and science to inform decision making in all climate change activities. For example, DOE's Adaptation Plan utilized internal resources as well as climate data produced by other agencies in our vulnerability assessments and planning exercises. DOE will continue to leverage internal resources, such as work being conducted by the Office of Biological and Environmental Research (BER). In addition, DOE will utilize coastal and water vulnerability mapping, and other readily available data from the upcoming National Climate Assessment.	
Design and construct new or modify/manage existing agency facilities and/or infrastructure to account for the potential impacts of projected climate change.	No	DOE operates in 47 geographically dispersed locations across the U.S. in every major climate region. The Department began assessing facility level vulnerabilities, but does not currently have specific plans to address	

(A) **Will the agency implement the following strategies to achieve this goal?**	(B) **Top Five? Yes/No/NA**	(C) **Strategy Narrative** (100 word limit)	(D) **Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months**
		this strategy. DOE is currently conducting multiple site vulnerability assessment pilots, which will serve to inform future year infrastructure planning. Additionally, DOE will look to incorporate climate change into EISA water assessments and building technical assistance efforts.	
Incorporate climate preparedness and resilience into planning and implementation guidelines for agency-implemented projects.	No	As outlined in DOE's 2014 Adaptation Plan, DOE is assessing internal policies and orders in regards to climate change, and will determine which require updating, and prioritize updates according to a multi-year schedule. As applicable, DOE will support and utilize the updated CEQ guidance to incorporate climate change considerations in the NEPA review process.	

GOAL 10: ENERGY PERFORMANCE CONTRACTS

Agency Progress Toward Goal

Energy Performance Contracts, including both Energy Savings Performance Contracts (ESPCs) and Utility Energy Service Contracts (UESCs), enable agencies to obtain energy efficiency investments in buildings and deploy on-site renewable energy through long-term contracts with the private sector, which are in turn paid through savings derived from those investments.[2]

Agency Awarded Energy Performance Contracts

The chart below represents the agency's performance contracting commitment and progress toward that commitment reported through December 31, 2013 (for agencies subject to the 2011 President's Performance Contracting Challenge). The bar graph shows the total dollar value (in millions) of (1) already awarded projects, (2) projects in the pipeline but not yet awarded, and (3) the pipeline shortfall or surplus depending on whether the agency has reached their commitment goal.
NOTE: All agencies are to meet or exceed their initial target no later than June 30, 2014.

Figure 10-1

[2] Goal 10 Section is relevant only to agencies subject to the PPCC.

Table 10-1: Goal 10 Strategies – Energy Performance Contracting

(A) **Will the agency implement the following strategies to achieve this goal?**	(B) **Top Five? Yes/No/NA**	(C) **Strategy Narrative** (100 word limit)	(D) **Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months**
Evaluate 25% of agency's most energy intensive buildings for use with energy performance contracts	Yes	DOE guidance on EISA 432 directs sites to prioritize covered facility selection in order of energy-intensiveness. All covered facilities are evaluated on a four-year cycle.	(1) Facility evaluations will be conducted in accordance with the EISA 432 audit cycle and will be reported in CTS.
Prioritize top ten projects which will provide greatest energy savings potential	No	DOE will continue to pursue cost effective energy efficiency and renewable energy projects throughout the complex.	
Cut cycle time of performance contracting process by at least 25%	No	DOE strives to minimize unnecessary delays in cycle time.	
Assign agency lead to participate in strategic sourcing initiatives	No	DOE will continue to work with qualified ESCOs and serving utilities to implement performance-based contracts.	

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Devote 2% of new commitments to small buildings (<20k sq. ft.)	Yes	DOE has many small buildings that are potential candidates for ESPC ENABLE. ENABLE is part of the overall strategy for maximizing the use of performance-based contracts.	(1) Initiate an ENABLE project by July 2015.
Identify and commit to include 3-5 onsite renewable energy projects in energy performance contracts	Yes	NREL is updating a 2008 study of onsite renewable energy opportunities at DOE sites.	(1) Preliminary findings of the study will be available in June 2014 and will be used to target implementation using performance-based contracts.
Ensure relevant legal and procurement staff are trained by FEMP ESPC/ UESC course curriculum	No	DOE will continue to encourage participation in FEMP training for all staff members who work on ESPC and UESC.	
Provide measurement and verification data for all awarded projects	Yes	DOE plans to add to its existing ESPC life of contract services by reviewing draft M&V reports prior to finalization. This will help ensure that savings are tracked appropriately	(1) DOE will provide measurement and verification data in the Compliance Tracking System (CTS) within one month of the issuance of the annual M&V report.

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Enter all reported energy savings data for operational projects into MAX COLLECT (max.gov)	Yes	DOE will add to its existing ESPC life of contract services by reviewing draft M&V reports prior to finalization. This will help ensure that savings are tracked appropriately.	(1) Energy savings data will be reported in MAX COLLECT for all operational projects within one month of the issuance of the annual M&V report.