



U.S. Department of Health and Human Services 2016 Strategic Sustainability Performance Plan July 2016

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Policy Statement

At the U.S. Department of Health and Human Services (HHS), we consider climate change to be one of the top public health challenges of our time. We also understand that our mission, to protect the health and well-being of people in the United States, depends in part on healthy and sustainable naturally built environments. HHS outlined a wide range of actions in its 2015 Strategic Sustainability Performance Plan and 2014 HHS Climate Adaptation Plan to mitigate and prepare for the effects of climate change on human health. In particular, our Department's 2016 Strategic Sustainability Performance Plan reiterates our commitment to sustainability, and the use of Environmental Management Systems.

In order to reduce the primary driver of climate change, HHS made great strides in reducing greenhouse gas emissions. We made progress in conserving water, reducing waste, and establishing electric and zero vehicle emission programs. We also are continuing to provide tools and technical assistance to prepare for and adapt to climate change to ensure our ability to sustain HHS operations. We are committed to taking a leadership role in researching and communicating the relationship between the health of our citizens and the health of our environment. Through our Department's accomplishments and future commitments, we set the standard for responsible stewardship and sustainable operations and support a healthier future for the American people.

As the Chief Sustainability Officer for HHS, I am committed to leading the way on the implementation of sustainable practices, the provision of climate-resilient health and human services, and the support of scientific research focused on environmental and public health. This commitment includes research on the effects of climate change on human health and well-being. The 2016 Strategic Sustainability Performance Plan describes the actions HHS intends to take to promote sustainability across our Department and catalogs our accomplishments in the past fiscal year. We are committed to achieving the sustainability goals and targets outlined in this plan.

Colleen Barros
Acting Assistant Secretary for Administration
HHS Chief Sustainability Officer

Executive Summary

Vision

The HHS 2016 Strategic Sustainability Performance Plan (SSPP) clearly states the Department of Health and Human Services (HHS) policy and intention to lead development and implementation of health-related sustainability goals across the federal government. The Department's non-landholding divisions take actions outlined in the "Green Office Guides" to achieve the goals. Sustainability Implementation Plans (SIPs) guide the actions of the Department's four landholding Operating Divisions (OPDIVs): the Food and Drug Administration (FDA), the Centers for Disease Control (CDC), the National Institutes of Health (NIH), and the Indian Health Service (IHS). An SIP also guides the actions of the Department's Program Support Center (PSC), which has delegated authority to operate and maintain various HHS facilities occupied under occupancy agreements with the General Services Administration (GSA).

HHS also utilizes the 2014 HHS Climate Adaptation Plan, which complements the SSPP, to guide HHS climate adaptation and resilience strategies. HHS has made significant progress in achieving sustainability goals. However, additional opportunities for integrating the SSPP into health and human service programs exist. To capitalize on these opportunities, OPDIV Chief Sustainability Officers collaborate with HHS health-program leadership, grant and strategic planning professionals, and experts on the health and infrastructure impacts of climate change.

HHS will continue to incorporate sustainable practices into mission-related initiatives. In addition to incorporating sustainability concepts into internal and external policies and procedures, HHS will better educate grantees on sustainability and climate adaptation resilience guidance and best practices by building partnerships with complementary programs, such as the National Prevention Strategy, Environmental Justice Strategy, Healthy People 2020, Let's Move!, and the National Health Security Strategy.

Leadership

The Assistant Secretary for Administration (ASA) is the HHS Chief Sustainability Officer (CSO) who leads and oversees all aspects of HHS' plan. The CSO's key partners and program champions are as follows:

- OPDIV Chief Sustainability Officers
- Assistant Secretary for Health
- National Institute of Environmental Health Sciences
- Chief Acquisition Officer
- Chief Procurement Officer
- Chief Financial Officer
- Chief Information Officer
- Senior Real Property Officer
- Associate Director for Climate Change

Performance Summary Review

Goal 1 – Greenhouse Gas (GHG) Reduction

HHS met the Executive Order (E.O.) 13514, *Federal Leadership in Environmental, Energy, and Economic Performance*, Scope 1 and 2 greenhouse gas (GHG) reduction goal of 10.3% by FY 2020, with an FY 2015 actual reduction of 23.8% when compared to FY 2008. The E.O. 13693, *Planning for Federal Sustainability in the Next Decade*, Scope 1 and 2 GHG emissions reduction has increased to a 38.7% reduction in Scope 1 and 2 GHG emissions by FY 2025.

In FY 2015, HHS Scope 1 and 2 GHG emissions decreased by 3.4% due to large decreases in energy consumption at CDC and NIH facilities. The primary decrease was experienced in Scope 1 Stationary Combustion emissions from the NIH work on upgrading the NIH Bethesda Campus Central Utility Plant and CDC's emphasis on energy projects at the Roybal Campus. Future strategies that target the use of clean energy sources will assist in meeting the FY 2025 target.

HHS met the E.O. 13514 Scope 3 GHG reduction goal of 3.3% by FY 2020, with an FY 2015 actual reduction of 23.8% as compared to FY 2008. The E.O. 13693 Scope 3 GHG emissions reduction has increased to a 25.4% reduction in Scope 3 GHG emissions by FY 2025.

In FY 2015, HHS experienced a 2.3% reduction in Scope 3 GHG emissions. The reduction was due to a 37% reduction in employee business air travel emissions. Employee commuting emissions increased slightly due to more detailed methods of calculations at the NIH Bethesda Campus and a slight decrease in FDA employees who telework. In FY 2016, HHS Operating Divisions (OPDIVs) will focus on increasing telework and green commuting practices with employees.

Goal 2 – Sustainable Buildings

HHS nearly met the Energy Independence and Security Act of 2007 (EISA) energy intensity reduction goal of 30% by FY 2015 as compared to an FY 2003 baseline, with an FY 2015 reduction of 28.2%. CDC and NIH achieved significant improvements in energy intensity reduction in FY 2015. However, IHS experienced an increase in energy use due to more accurate reporting by the IHS sites.

E.O. 13693 requires agencies to promote building energy conservation, efficiency, and management and reduce building energy intensity by 2.5% annually through the end of FY 2025, relative to an FY 2015 baseline. To achieve the new goal, HHS OPDIVs will focus on performance contracting to install energy efficiency projects, including clean energy technologies. In addition, IHS is studying the availability, options, and costs associated with having a third party acquire or coordinate the utility information upload to ENERGY STAR Portfolio Manager to ensure better energy data reporting quality. If this strategy is cost effective, the IHS will procure services in FY 2017.

E.O. 13514 required that 15% of agencies' new, existing, and leased buildings greater than 5,000 square feet meet the *Guiding Principles for Sustainable Federal Buildings* (Guiding Principles) by FY 2015. HHS had achieved the Guiding Principles standard on 5.92% gross square feet (GSF) of the existing inventory greater than 5,000 GSF.

Per E.O. 13693, HHS will improve building efficiency, performance, and management and ensure that 7.4% of existing buildings above 5,000 gross square feet (GSF) are energy, waste, or water net-zero

buildings by FY 2025. In addition, 15% of the HHS GSF of existing buildings (above 5,000 GSF) will comply with the Guiding Principles by FY 2025.

IHS will complete three new facilities in FY 2016 and FY 2017 that will comply with Guiding Principles, ranging from Leadership in Energy and Environmental Design (LEED) certified to LEED Gold. NIH completed the design for their first Net Zero Energy Building, which will be LEED Platinum.

Goal 3 – Clean and Renewable Energy

HHS surpassed the E.O. 13514 FY 2015 renewable energy goal of 7.5% of energy use must be supplied from renewable electricity sources with 11.2% of energy use from renewable electricity sources. E.O. 13693 increases this goal to 10% in FY 2016-17. In addition, E.O. 13693 requires that 10% of HHS total electric and thermal energy must be from renewable and alternative energy sources in FY 2016-17.

To meet the new goals, HHS OPDIVs will focus on analyzing opportunities for on-site generation. CDC is installing a demonstrative solar array system at the Roybal Campus Visitor's Center, which will feature approximately 9-kiloWatt (kW) of solar capacity. The Utility Energy Savings Contract (UESC), as discussed in Goal 10, is also considering up to 500-kW of solar energy generation across all Atlanta owned campuses. NIH is also aggressively analyzing open space areas, parking garage roofs, and building roofs at the Bethesda Campus for large-scale solar array potential. In addition, NIH is working toward an 8-MegaWatt (MW) combined heat and power (CHP) project on the Bethesda Campus. The IHS Fort Yuma Health Center began construction on a photovoltaic (PV) system that incorporates both rooftop units as well as covered parking spaces. Also, a \$225,000 solar cell project was approved at the IHS Pokagon Reservation in the Bemidji Area. FDA plans to install additional PV arrays at the Irvine Laboratory as part of a new phase of the UESC on-site.

Goal 4 – Water Use Efficiency and Management

In FY 2015, HHS worked to meet the E.O. 13514 target of 26% reduction in potable water use intensity by FY 2020. FY 2015 water intensity use was 12.1% less than the FY 2007 baseline year. E.O. 13693 extends the potable water use intensity reduction goal by 2% annually through FY 2025 relative to an FY 2007 baseline. A 36% reduction is required by FY 2025.

In FY 2015, there was a chilled water leak at the NIH Bethesda Campus that required significant amounts of domestic water as makeup water for the chilled water system. A task force was initiated, which included management, engineering, and operating staff, to determine the cause of the chilled water loss, and develop action plans for repair. The task force was successful in repairing the chilled water leak and saving an average of 1.5 million gallons of water each month as a result of the repair. NIH has also implemented several projects for water efficiency improvements such as the use of municipal grey water for make-up water, water metering, steam trap and condensate unit improvements, and installation of low flow fixtures.

CDC achieved a 21.8% water use reduction in FY 2015 compared to FY 2014 due to an extensive water use assessment and implementation of measures at the Roybal Campus in Atlanta. The scope of the assessment included analysis and documentation of the existing campus domestic water system, identification of water sources and waste and identification of feasible water conservation measures (WCMs). Several low to no-cost WCMs have been implemented.

Goal 5 – Fleet Management

HHS has surpassed the E.O. 13514 and EISA 2007 petroleum use reduction targets of 20% reduction by FY 2015 with an FY 2015 reduction of 44.4%. In addition, HHS exceeded the FY 2015 goals for alternative fuel use of at least 5% of total fuel use and an increase of 159.4% relative to FY 2005. In FY 2015, HHS' use of alternative fuel equaled 8% of total fuel use. HHS has increased its alternative fuel use by 264% since FY 2005.

E.O. 13693 requires agencies to reduce fleet-wide per-mile GHG emissions from agency fleet vehicles relative to an FY 2014 baseline and sets new goals for percentage reductions of: not less than 4% by FY 2017; not less than 15 % by FY 2020; and not less than 30% by FY 2025. In FY 2015, HHS had a 1.4% increase from FY 2014.

Goal 6 – Sustainable Acquisitions

In FY 2015, 97.5% of new HHS contract actions included applicable sustainability requirements; exceeding the E.O. 13514 goal. HHS will continue outreach and verification efforts in order to continue to meet its goal of 95%.

To support sustainable acquisition, HHS issued guidance and provided training to the acquisition workforce that emphasized the inclusion of biobased products and all applicable FAR sustainability clauses in construction and other relevant service contracts.

E.O. 13693 requires agencies to establish an annual target for increasing the number of contracts to be awarded with BioPreferred and biobased criteria and the dollar value of BioPreferred and biobased products to be delivered and reported under those contracts in the following fiscal year. For FY 2017, HHS has established a target of 274 contracts and \$1.15 billion in products to be delivered.

Goal 7 – Pollution Prevention and Waste Reduction

E.O. 13693 continues the requirement that Federal agencies advance waste prevention and pollution prevention and annually divert at least 50% of non-hazardous construction and demolition debris. It further requires agencies to divert at least 50% of non-hazardous solid waste, including food and compostable material, and to pursue opportunities for net-zero waste or additional diversion. In FY 2015, HHS diverted 93.2% of non-hazardous construction and demolition debris and 49.7% of non-hazardous solid waste.

In FY 2016, HHS laboratories will continue to analyze how to recycle and divert laboratory waste from landfills. Successful programs such as the NIH Toxic Reduction Initiative, the NIH Substances of Concern Initiative, and the CDC Lab Plastics Program will be expanded and new initiatives will be evaluated. HHS OPDIVs will continue to review protocols involving toxic agent and radioactive materials prior to purchase and use, and seek substitution or other minimization opportunities.

Goal 8 – Performance Contracting

HHS committed to awarding \$92.6 million in performance contracts by the end of 2016 as part of the President's Performance Contracting Challenge. To date, HHS has awarded \$72.6 million in contracts with \$21 million in the pipeline. CDC has one UESC and one energy savings performance contract

(ESPC) project to be awarded at the end of the fiscal year. FDA has two UESCs that will be awarded in the summer of 2016, and NIH has a UESC that will be awarded by summer 2016.

E.O. 13693 requires that agencies implement performance contracts for Federal buildings and provide annual targets for performance contracting. HHS targets for the next two fiscal years are:

FY 2017: \$38.8 million

FY 2018: \$14.5 million

These targets are based upon the 2016 threshold of projects and will be adjusted based on completion of current projects and future funding. IHS is piloting a \$4 million UESC at Phoenix Indian Medical Center to encourage other IHS facilities to reconsider or pursue performance contracting. NIH is planning a performance contract to install a cogeneration plant.

Goal 9 – Electronic Stewardship and Data Centers

HHS is currently on track with both the procurement and end-of-life goals for sustainable electronic stewardship. The Department reached 98% in FY 2015 for the power management goal of 100% of electronics with power management features enabled. This showed an improvement from the FY 2014 report, where HHS reported 92% of non-exempted electronics had power management features enabled.

During FY 2015, HHS closed eight data centers (1 Core and 7 non-Core). Currently, HHS has plans to close 12 additional data centers by the end of FY 2018. This number may change after the Department receives its target numbers from the Office of Management and Budget (OMB) under the new Data Center Optimization Initiative.

Goal 10 – Climate Change Resilience

In FY 2015, the biggest accomplishment for the HHS Climate Change Resilience goal entailed the April 2016 release of a new final report, “[The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment](#)” as part of the sustained National Climate Assessment from the US Global Change Research Program. It significantly advanced what we know about the impacts of climate change on public health and the confidence with which we know it.

This report was developed by over 100 climate change science and public health experts from across the Nation representing eight Federal agencies with leadership in its development from the U.S. Department of Health and Human Services, the U.S. Environmental Protection Agency (EPA), and the National Oceanic and Atmospheric Administration (NOAA). HHS participation was extensive with 7 staff serving on the Steering Committee and over a couple dozen senior staff contributing as chapter authors for this report.

The Climate and Health Assessment reinforces that climate change is a significant threat to the health of the American people not just in the future but right now. As the climate continues to change, the risks to human health will grow, exacerbating existing health threats and creating new public health challenges, and impacting more people in more places. From children to seniors, every American is vulnerable to the health impacts associated with climate change, now and in the future.

The findings of the *Climate and Health Assessment* strengthen and broaden the scientific foundation for future decision making, allowing individuals, communities, organizations, and governments to

proactively manage the health risks of climate change. A better understanding of how climate change affects our health, and the health of our children and grandchildren, underscores the need for urgent action to combat the threats climate change poses on American citizens and communities. The U.S. Department of Health and Human Services sees the release of this report as a springboard to inform additional communication and outreach efforts.

Progress on Administration Priorities

President's Performance Contracting Challenge

HHS committed to awarding \$92.6M in performance contracts by the end of 2016 as part of the President's Performance Contracting Challenge. To date, HHS has awarded \$72.6M in contracts with more than \$21M in the pipeline. CDC has one UESC and one ESPC project that are currently valued at \$18.4M, and are anticipated to be awarded at the end of the fiscal year. FDA has two UESCs valued at \$6M that will be awarded in the summer of 2016, and NIH has a \$5.4M UESC that will be awarded by summer 2016.

E.O. 13693 requires that agencies implement performance contracts for Federal buildings and provide annual targets for performance contracting. The HHS target for FY 2017 is \$38.8M and for FY 2018 is \$14.5M. These targets are based on current projects in the pipeline that are expected to yield additional projects, a pilot UESC at IHS that may lead to additional contracts throughout the OPDIV, and the NIH performance contract for a cogeneration plant.

Electric and Zero Emission Vehicles

In FY 2016, HHS will request 35 zero emission vehicles to be deployed from the General Services Administration (GSA). HHS will also apply to the Federal Energy Management Program (FEMP) for guidance and support on installing plug-in charging stations. Charging station installations will be projected based upon HHS fleet vehicle replacements. In FY 2017, an estimated seven charging stations will be installed in the HHS headquarters complex.

In accordance with H.R. 22 *Fixing America's Surface Transportation Act's* guidance, HHS' federal employee workplace electric vehicle (EV) charging program will support and contribute to reducing greenhouse gas emission produced by HHS outlined in the 2015 Strategic Sustainability Performance Plan (SSPP).

Currently, HHS sustainability team leaders are working together towards establishing a foundation for electric vehicle charging station policies. Our interagency logistic meetings will help determine:

- the content of our initial surveys to gauge the needs of HHS employees and electric vehicle charging stations.
- a framework that will allow HHS to recover the costs of installing EV charging stations over a period of time.
- the proper methodology and cost-benefit analysis at unmetered locations.

OPDIVs have been active in implementing pilot programs in order to better understand the potential of EV charging stations on HHS campuses. CDC has already begun drafting an employee electric vehicle charging implementation strategy along with running a pilot program to test the policy's effectiveness.

Once HHS produces a viable electric vehicle charging station policy, Senior Leaders will expect Operating Division personnel responsible for providing federal employee with parking to enact a tailored federal employee workplace EV charging guideline. These select personnel should also coordinate with their respective sustainability outreach groups to further promote workplace charging.

Climate Preparedness and Resilience

As promised in the President's Climate Action Plan, "[The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment](#)" was released in April 2016 as part of the sustained National Climate Assessment from the US Global Change Research Program. The plan was developed over three years with over 100 climate change science and public health experts from across the nation representing eight Federal agencies with leadership from the U.S. Department of Health and Human Services, the U.S. Environmental Protection Agency (EPA), and the National Oceanic and Atmospheric Administration (NOAA).

Size & Scope of Agency Operations

Agency Size and Scope	FY 2014	FY 2015
Total Number of Employees as Reported in the President's Budget	77,436	78,515
Total Acres of Land Managed	5,914	5,905
Total Number of Buildings Owned	2,718	2,692
Total Number of Buildings Leased (GSA and Non-GSA Lease)	1,010	964
Total Building Gross Square Feet (GSF)	54,962,232	55,290,122
Operates in Number of Locations Throughout U.S.	955	829
Operates in Number of Locations Outside of U.S.	14	12
Total Number of Fleet Vehicles Owned	814	609
Total Number of Fleet Vehicles Leased	3,856	3,669
Total Number of Exempted-Fleet Vehicles (Tactical, Law Enforcement, Emergency, Etc.)	1,149	802
Total Amount Contracts Awarded as Reported in FPDS (\$Millions)	21,400	21,887

Agency Progress and Strategies to Meet Federal Sustainability Goals

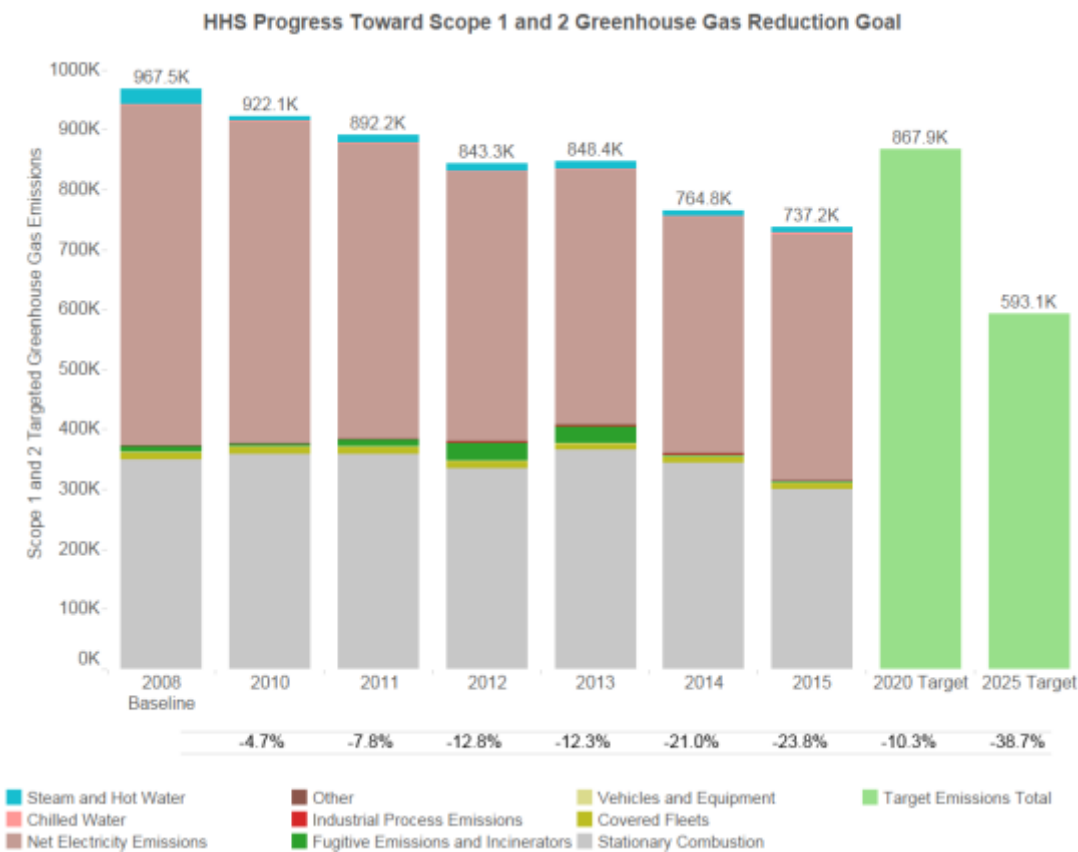
This section provides an overview of progress through FY 2015 on sustainability goals contained in Executive Order 13514, *Federal Leadership in Environmental, Energy, and Economic Performance*, and agency strategies to meet the new and updated goals established by Executive Order 13693, *Planning for Federal Sustainability in the Next Decade*.

Goal 1: Greenhouse Gas (GHG) Reduction

Scope 1 & 2 GHG Reduction Goal

E.O. 13693 requires each agency to establish a Scope 1 & 2 GHG emissions reduction target to be achieved by FY 2025 compared to a 2008 baseline. HHS' 2025 Scope 1 & 2 GHG reduction target is 38.7%.

Chart: Progress Toward Scope 1 & 2 GHG Reduction Goal



HHS is on target to meet the E.O. 13693 goal of a 38.7% reduction in Scope 1 and 2 GHG emissions. In FY 2015, HHS Scope 1 and 2 GHG emissions decreased by 3.4% due to large decreases in energy consumption at CDC and NIH facilities. The primary decrease was experienced in Scope 1 Stationary Combustion emissions from the NIH work on upgrading the NIH Bethesda Campus Central Utility Plant (CUP) and CDC's emphasis on energy projects at the Roybal Campus. Future strategies that target the use of clean energy sources will assist in meeting the FY 2025 target.

The chart above shows that the categories of stationary combustion shown in gray, fugitive emissions and incinerators shown in dark green, net electricity emissions shown in light red, and steam and hot water emissions have decreased in overall emissions since the baseline year of 2008. Covered fleet vehicles shown in yellow have remained about the same since the baseline year. Overall greenhouse gas emissions have decreased by 23.8% in FY 2015 as compared to the 2008 baseline year.

Scope 1 & 2 GHG Reduction Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Use the Federal Energy Management Program (FEMP) GHG emission report to identify/target high emission categories and implement specific actions to address high emission areas identified.	Yes	The OPDIVs' goal managers and sustainability offices review the OPDIV FEMP Workbook (WB) tabs to monitor progress in each GHG related target and their contributing factors. Priorities are established by the highest contributing sources.	<p>CDC and FDA will plan corrective action for any GHG reduction related targets that do not receive a "green" score.</p> <p>NIH will implement CUP preventative maintenance and calibrate meters and sensors to ensure reliable operations of the boiler and chiller plant. NIH plans to install additional meters within its distribution system, sensors and meters within the boilers and chillers to ensure steam and chilled water is produced as reliably and efficiently as possible.</p> <p>NIH has identified a series of technologies that have reduced energy consumption from biosafety cabinets by 75% and ultra-low temperature freezers (ULT) by 25% from the 2012 ULT freezer evaluation. The committee is exploring monitoring technologies to evaluate the health of ULT freezers and to determine ways to incentivize sustainable lab practice behaviors.</p> <p>IHS uses the GHG emissions report to trend individual facilities through time resulting in identification of anomalies of energy usage indicating facilities that are likely good opportunities for energy improvement contracts.</p> <p>PSC will collaborate with other OPDIVs for fresh ideas on how to utilize best practices at our site. PSC will continue to utilize the FEMP GHG emissions report for strategy prioritization.</p>
Identify and support management practices or training programs that encourage employee engagement in addressing	Yes	OPDIVs encourage staff to pursue training and accreditations related to energy conservation and GHG reduction.	Ongoing efforts by all HHS staff to attend in-person and webinar training continue. In addition, outreach to employees on GHG reduction is ongoing throughout the year in publications, at events, and

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
GHG reduction.		<p>NIH has instituted a CUP training program that is International Association for Continuing Education and Training (IACET) certified. The classes include safety, operations, maintenance, and environmental compliance.</p> <p>Performance Qualification Standards (PQS) to staff various watch stations within the CUP have been developed. The PQS program will form the basis to qualify operators and maintenance staff within CUP to ensure that they have the necessary skills and knowledge to staff a watch station.</p>	<p>through staff meetings and training.</p> <p>Additionally for FY 2016, CDC asset management and sustainability staff formed a panel to review various sustainable building standards with a goal of selecting which is a best applicable for future improvement and capital projects.</p> <p>IHS is hosting a Certified Energy Manager training/certification event scheduled for August 2016. There are 14 IHS employees projected to attend at a cost of \$30,000.</p> <p>Trainings are conducted on a weekly basis in the NIH CUP training room. Quizzes are developed from CUP Subject Matter Experts to test the attendee retention in order to certify attendee's knowledge base. PQS for each NIH supervisor and operator will be tracked for each employee. The PQS process may take approximately one to two years to qualify staff; however, it will form the basis to encourage engagement to address GHG reduction.</p>
Determine unsuccessful programs or measures to be discontinued to better allocate agency resources.	Yes	OPDIVs evaluate their programs and projects to ensure resource is allocated to meet its mission and sustainability goals.	<p>Ongoing at CDC. For example, as a result of recent energy audits, lighting energy conservation measures (ECMs) may be selected in FY 2017 that include multi-level dimming in stairwells.</p> <p>Ongoing at FDA. Projects are planned and prioritized to include deficiencies improvement, UESCs and conservation such as the renovation of processing area, Building (Bldg) 53B at the Jefferson Labs Complex (JLC) in FY 2016.</p> <p>In late FY 2016, IHS will eliminate reporting requirements for buildings under 5,000 sq. ft. to maximize benefit of resources required to track energy reporting.</p> <p>NIH is beginning to implement a CUP calibration master plan to identify the attributes associated with a meter or sensor to maintain data accuracy.</p>

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
			Calibration data is planned to be tracked within CUP Maximo system.
Given agency performance to date, determine whether current agency GHG target should be revised to a more aggressive/ambitious target.	No	The current HHS target is adequate for the agency.	

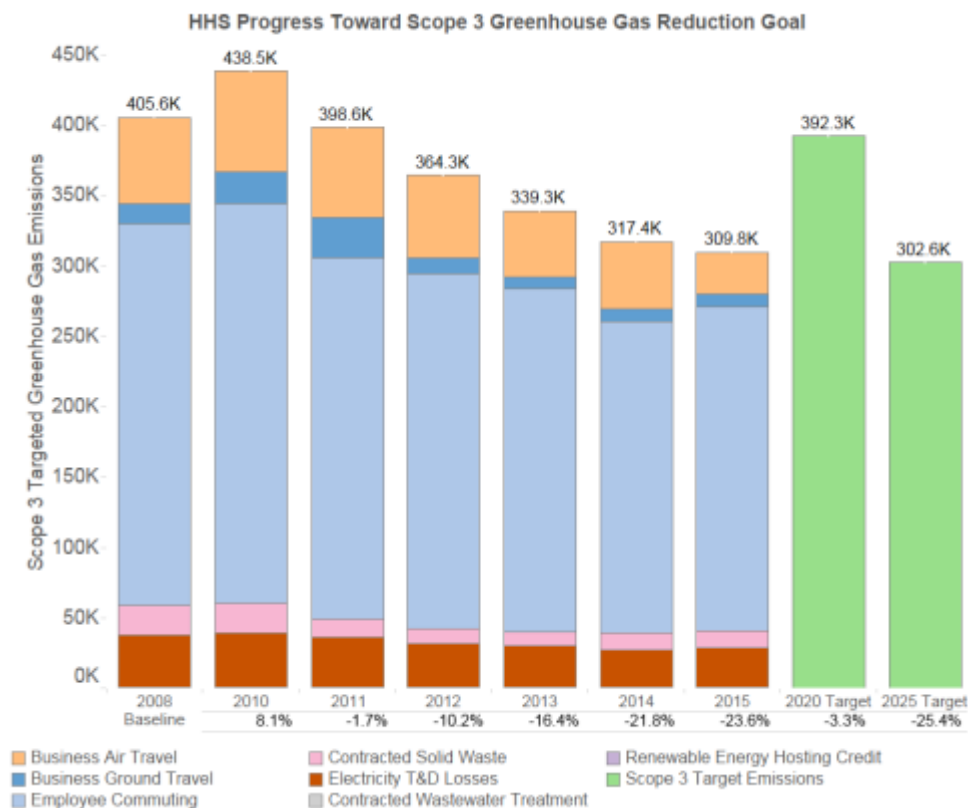
Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Employ operations and management (O&M) best practices for emission generating and energy consuming equipment.	Yes	HHS OPDIV facilities management and engineering staff including maintenance contractors continually make efforts to employ and improve best practices for O&M, and all emission generating equipment.	<p>In FY 2016, an ongoing phased project continues to improve CDC's Integrated Facilities Maintenance System (IFMS) requiring revised preventive maintenance procedures, additional equipment bar-coding, and more detailed corrective action/close-out descriptions.</p> <p>FDA has several projects in place for FY 2016 including replacing oversized equipment with more efficient models, replacing chillers and fan drives, upgrading controls, performing air balancing in a lab building and utilizing individual metering readings as a tool to better monitor consumptions.</p> <p>In FY 2016, IHS will be reviewing its national computerized maintenance management system (CMMS) for needed improvements to provide better management of building systems and equipment. A new CMMS will be procured in FY 2017.</p> <p>NIH will create an asset tree for electrical assets and water treatment assets, which is scheduled to be completed by the summer of 2016. NIH is also creating job plans for calibrating sensors, gauges, and transmitters by July 1, 2016.</p> <p>NIH metrics will be based on tracking job plan time assignments against CUP staff hours to assess utilization. Preventative Maintenance (PM) tasks will be evaluated whether or not they are completed within scheduled time frame.</p> <p>PSC will monitor and fine tune practices for the regular turning off building systems and powering down systems throughout FY 2016.</p>

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Identify additional sources of data or analysis with the potential to support GHG reduction goals.	Yes	<p>Investment Grade Audits (IGAs) within ongoing UESC and ESPC projects include new energy modeling for existing facilities.</p> <p>Waste-to-energy incineration is how NIH Bethesda Campus waste is handled; however, there is no methodology in FEMP Workbook to account GHG from this source.</p>	<p>IGAs for selected facilities at the CDC Atlanta campuses are ongoing and will be completed in FY 2016 and FY 2017.</p> <p>In late FY2016 or early FY 2017, IHS will have an IGA completed at the Phoenix Indian Medical Center. Also, IHS conducts energy audits at multiple facilities on an ongoing basis.</p> <p>Ongoing in FDA's facility as personnel assist in audits and development of data to identify potential ECMs and areas that can be improved.</p> <p>NIH Bethesda Campus has an active recycling program that is not incorporated into the GHG calculation due to the FEMP Workbook's lack of a source category for waste-to-energy incineration. Any reductions achieved through waste diverted to waste-to-energy incineration are not captured.</p>

Scope 3 GHG Reduction Goal

E.O. 13693 requires each agency to establish a Scope 3 GHG emission reduction target to be achieved by FY 2025 compared to a 2008 baseline. HHS' 2025 Scope 3 GHG reduction target is 25.4%.

Chart: Progress Toward Scope 3 GHG Reduction Goal



In FY 2015, HHS experienced a 2.3% reduction in Scope 3 GHG emissions. The reduction was due to a 37% reduction in employee business air travel emissions. Employee commuting emissions increased slightly due to more detailed methods of calculations at the NIH Bethesda Campus and a slight decrease in FDA employees who telework. As shown in the chart, the categories of electricity T&D losses shown in red, contracted solid waste shown in pink, business ground travel shown in dark blue, and business air travel shown in orange have decreased in greenhouse gas emissions as compared to the 2008 baseline year. Employee commuting emissions shown in light blue have remained steady and slightly increased in 2015.

Scope 3 GHG Reduction Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Reduce employee business ground travel.	Yes	HHS OPDIVs continuously work to identify methods for reducing business ground travel.	<p>FDA uses virtual meeting technology to reduce business travel, and transitioned from dispersed facilities to a consolidated campus setting to reduce business ground travel.</p> <p>In FY 2016, IHS will establish a policy/plan to reduce miles traveled when a telematics vendor is selected.</p> <p>PSC will ensure Travel Management Plan (TMP) events are held that educate occupants on strategies to increase the average vehicle occupancy (AVO) to 5600 Fishers Lane.</p>
Reduce employee business air travel.	No	This is not a top strategy within the Department.	
Develop and deploy an employee commuter emissions reduction plan.	Yes	HHS OPDIVs have an employee commuter emissions reduction plan that centers on maximizing telework, green commuting, and IT infrastructure to teleconference.	<p>In FY 2016, CDC transportation services will work closely with human resources to increase CDC employee participation in green commuting solutions.</p> <p>In FY 2016, NIH will track the number of employees on a compressed or alternate work schedules and the number of teleconference or live meetings that are conducted, and the number of Transhare members, carpools, and vanpools.</p> <p>In FY 2016, PSC will hold a TMP event to educate occupants on strategies to increase the AVO to 5600 Fishers Lane.</p>
Use an employee commuting survey to identify opportunities and strategies for reducing commuter emissions.	Yes	HHS deployed the 2016 GSA Carbon Footprint Commuter Survey to obtain commuting data from the OPDIVs. In addition, OPDIVs use additional commuter surveys to obtain information on employee commuting.	<p>CDC developed its own commuter survey instrument which will be updated and released quarterly. Data will be analyzed and applied to commuter support decisions.</p> <p>FDA and PSC also participate with the Montgomery County, Maryland, annual commuter survey that allows the OPDIVs to monitor the effectiveness of their programs to reduce commuter travel.</p> <p>NIH also conducts a biannual GHG commuter survey when employees apply for parking decal renewal. All drivers will be given information showing potential matches to increase the likelihood of carpooling.</p>

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Reduce employee business ground travel.	Yes	HHS OPDIVs continuously work to identify methods for reducing business ground travel.	<p>FDA uses virtual meeting technology to reduce business travel, and transitioned from dispersed facilities to a consolidated campus setting to reduce business ground travel.</p> <p>In FY 2016, IHS will establish a policy/plan to reduce miles traveled when a telematics vendor is selected.</p> <p>PSC will ensure Travel Management Plan (TMP) events are held that educate occupants on strategies to increase the average vehicle occupancy (AVO) to 5600 Fishers Lane.</p>
Reduce employee business air travel.	No	This is not a top strategy within the Department.	
Increase & track number of employees eligible for telework and/or the total number of days teleworked.	Yes	HHS OPDIVs work to promote existing telework programs.	<p>In FY 2016, CDC and FDA will expand education and resources dedicated to teleworking, in order to increase percentages of telework across all appropriate offices.</p> <p>IHS will implement the recently approved Telework Arrangement Program in FY 2016. This will include providing education and training to employees and developing an electronic tracking system to improve accuracy of reporting telework.</p> <p>NIH will use time and attendance data to track the number of increased employee telework days when the air quality index is deemed unhealthy. Historically there are approximately six days out of the year where the air becomes unhealthy to breathe in the Washington, DC metro area.</p>
Develop and implement a program to support alternative/zero emissions commuting methods and provide necessary infrastructure.	Yes	HHS OPDIVs support alternative/zero emissions commuting by promoting electric vehicles (EV), developing an EV charging infrastructure and fostering bicycle commuting.	<p>CDC is instituting a six-month trial period for employee EV charging. CDC is also ensuring that all future master plans include EV and alternative fuel vehicle (AFV) charging and parking.</p> <p>NIH has issued a bike subsidy and can track changes in bike ridership to the campus. NIH hosts a bike to work day, and it can continually track increased interest through its bike to work day registry process.</p> <p>In FY 2016, PSC will ensure infrastructure is provided to secure bicycles, and will work to improve bike safety and access into garage with security. PSC is also analyzing the installation of EV charging stations by locating electric power sources in each level of the 5600 Fishers Lane parking garage.</p>

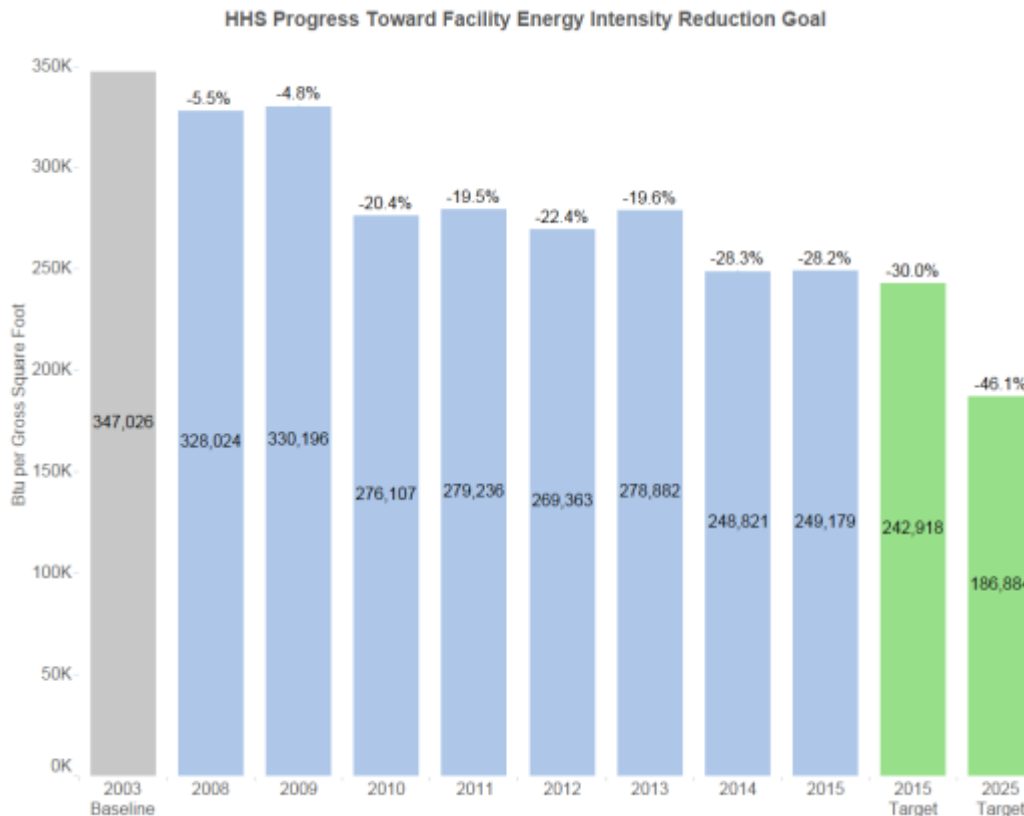
Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Reduce employee business ground travel.	Yes	HHS OPDIVs continuously work to identify methods for reducing business ground travel.	FDA uses virtual meeting technology to reduce business travel, and transitioned from dispersed facilities to a consolidated campus setting to reduce business ground travel. In FY 2016, IHS will establish a policy/plan to reduce miles traveled when a telematics vendor is selected. PSC will ensure Travel Management Plan (TMP) events are held that educate occupants on strategies to increase the average vehicle occupancy (AVO) to 5600 Fishers Lane.
Reduce employee business air travel.	No	This is not a top strategy within the Department.	
Establish policies and programs to facilitate workplace charging for employee electric vehicles.	No	This was covered in the above strategy.	
Include requirements for building lessor disclosure of carbon emission or energy consumption data and report Scope 3 GHG emissions for leases over 10,000 rentable square feet.	No	This action is occurring for buildings in this category, but it is not a top HHS strategy.	

Goal 2: Sustainable Buildings

Building Energy Conservation Goal

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

Chart: Progress Toward Facility Energy Intensity Reduction Goal



In FY 2015, HHS performance toward the energy intensity reduction goal was the same as in FY 2014. While, CDC and NIH recorded significant improvements in energy intensity reduction in FY 2015, IHS offset these improvements with an increase in energy intensity when compared to FY 2014. This increase was due to the fact that IHS relies upon site personnel inputting data into the ENERGY STAR Portfolio Manager to track consumption. FY 2014 was the first year that this process was used; and it is believed that the IHS data was not complete due to the change in reporting procedures. To remedy this quality data issue, IHS is studying the availability, options, and costs associated with having a third party acquire or coordinate the utility information upload to ENERGY STAR Portfolio Manager. If this strategy is cost effective, the IHS will procure services in FY 2017.

The NIH Office of Research Facilities, Facilities Management Branch accomplished two significant energy savings over the past year through the installation of a 60-kW photovoltaic (PV) array and the conversion of all exterior roadway and walkway lighting from metal halide to light emitting diode (LED) on the NIEHS campus in Research Triangle Park, NC. The project resulted in a net energy savings of approximately 300,000 kWh and \$18,000 annually as well as the recycling of approximately 300 tons of construction debris. These projects also led to greatly increased campus safety and security as well as reduced maintenance time.

HHS OPDIVs have targeted energy efficiency projects in FY 2016 and FY 2017 through direct agency funding and performance contracting. These projects are expected to achieve the annual energy intensity reductions set forth by E.O. 13693.

Building Energy Conservation Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Make energy efficiency investments in agency buildings.	Yes	HHS OPDIVs will invest in energy efficiency projects and technologies through direct agency funding, performance contracting, and new construction.	<p>CDC will place emphasis on ESPC and UESC projects in the upcoming two years.</p> <p>FDA continues to install building level and submetering in its new and existing buildings under renovation to identify energy efficiency areas of investment.</p> <p>Design for IHS Rapid City Health Center, Northern California Youth Regional Treatment Center (YRTC), and Phoenix Indian Medical Center (PIMC) SE planned for FY2016/2017 will include a 30% energy efficiency requirement. The IHS Environmental Steering Committee (ESC) approved over \$2M in sustainability projects for FY 2016.</p> <p>NIH will survey at least 10% of existing buildings for energy and water improvement projects. NIH will identify operational changes to achieve greater efficiency and continue special tiger teams to identify chilled water losses requiring corrective action.</p> <p>PSC will work with the 5600 Fishers Lane Building owner on energy projects. PSC will turn over Pepco rebates when feasible to help reduce project cost to encourage additional base building energy improvements.</p>
Use remote building energy performance assessment auditing technology	Yes	HHS OPDIVs use building automated systems (BAS) to monitor and assess energy consumption trends to make adjustments that provide more energy efficient operations while still meeting the building or function specific operation requirements.	<p>FDA will incorporate a state-of-the-art BAS systems in all new buildings and buildings with major renovation, where applicable. Ongoing.</p> <p>In FY 2016, IHS will evaluate the viability of third party services to streamline upload of utility data from utility providers to ENERGY STAR Portfolio Manager.</p> <p>NIH initiated a new software and hardware upgrade for meter data systems at all sites. Completion expected June 30, 2016.</p>

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Participate in demand management programs.	Yes	HHS OPDIVs continuously evaluate sites and their specific mission to determine if demand management programs are applicable.	FDA evaluates this strategy during the design and audit processes. PSC will continue with the electric load demand curtailment program with the local utility. PSC will encourage new occupants to conserve to the optimal amount during these events.
Incorporate Green Button data access system into reporting, data analytics, and automation processes.	No	HHS OPDIVs participate in several similar initiatives with similar objectives.	
Redesign interior space to reduce energy use through daylighting, space optimization, and sensors and control systems.	Yes	HHS OPDIVs continuously investigate the redesign of interior spaces for energy savings through performance contracting, facility upgrades, and renovations.	CDC will continue this practice moving forward prioritizing projects that bring existing facilities closer to achieving Guiding Principles (GP) compliance. IHS will incorporate into renovation projects to the extent possible. New facilities are designed to maximize daylighting, depending on Leadership in Energy and Environmental Design and space requirements. PSC will fine tune both lighting sensor operations and HVAC control systems for optimal performance.
Identify opportunities to transition test-bed technologies to achieve energy reduction goals.	No	This is not a top strategy for HHS.	
Follow city energy performance benchmarking and reporting requirements.	No	This is not a top strategy for HHS.	
Install and monitor energy meters and sub-meters.	Yes	Per the HHS OPDIV metering plans updated in FY 2016, the installation, upgrade and monitoring of energy meters continues to be a strategy.	CDC is continuously updating metering and working toward ongoing data center power usage effectiveness (PUE) mandates. The design for the IHS Rapid City Health Center, Northern California YRTC, and PIMC SE planned for 2016/2017 includes advanced meters. Meters are being replaced at existing IHS buildings as appropriate, pending funding availability. NIH is re-commissioning existing meters and installing new meters where appropriate. This effort started in 2015, and is expected to be completed by June 30, 2016. PSC will ensure the new Data Center energy

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
			tracking is working as designed. In FY 2016, PSC will investigate the installation of natural gas smart meters in FY 2016.
Collect and utilize building and facility energy use data to improve building energy management and performance.	Yes	HHS OPDIVs continue initiatives identifying energy loss and taking corrective measures. Facilities management staff are further enhancing building data review for performance improvement.	<p>CDC will use data collected via EISA required reports and other audits to prioritize projects that bring existing facilities closer to achieving GP compliance.</p> <p>IHS has developed training modules for facility and energy managers to improve data quality in ENERGY STAR Portfolio Manager. Webinars are scheduled for presentation in summer 2016.</p> <p>NIH will continue to use of GBAT and SMRT to identify energy improvement actions implementing proactive programs like the Chilled Water Loss Investigation Team.</p> <p>PSC will work with building owner to meet the Montgomery County Standard Energy Efficiency Data (SEED) Platform as required for 5600 Fishers Lane.</p>
Ensure that monthly performance data is entered into the EPA ENERGY STAR Portfolio Manager.	Yes	HHS OPDIVs are working to ensure all monthly building data is input into Portfolio Manager on a regular basis.	<p>CDC and FDA are developing processes to collect monthly data and input into Portfolio Manager.</p> <p>IHS continues to record monthly performance data in ENERGY STAR Portfolio Manager. Specific training on this will be administered in summer 2016.</p> <p>NIH will further enhance energy data capture in Portfolio Manager by adding all NIH buildings on a regular basis.</p>

Building Efficiency, Performance, and Management Goal

Section 3(h) of E.O. 13693 states that agencies will improve building efficiency, performance, and management and requires that agencies identify a percentage of the agency's existing buildings above 5,000 gross square feet (GSF) intended to be energy, waste, or water net-zero buildings by FY 2025 and implementing actions that will allow those buildings to meet that target. The HHS 2025 target is 7.4% and is detailed as follows:

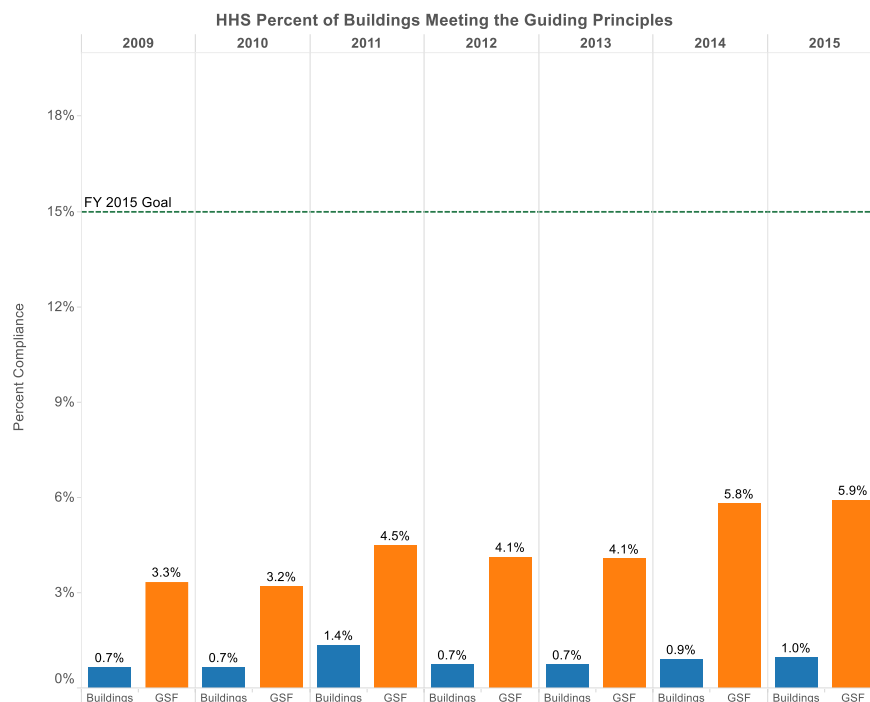
- Centers for Disease Control and Prevention (CDC) – one net-zero building by 2025.
- Food and Drug Administration (FDA) – 2% of stand-alone administrative buildings above 5,000 GSF by 2025.
- Indian Health Service (IHS) – no net-zero building by 2025.
- National Institutes of Health (NIH) – 20% of NIH buildings above 5,000 GSF by 2025.

Guiding Principles for Sustainable Federal Buildings

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

The HHS FY 2025 target is 15% of 38,410,833 estimated GSF.

Chart: Percent of Buildings Meeting the Guiding Principles



In FY 2015, sustainable green buildings comprised 0.95% of existing buildings, and 5.92% gross square feet (GSF) of existing inventory falling short of the previous E.O. goal. Landholding divisions' 2015 inventories include:

- Centers for Disease Control and Prevention (CDC) – CY 2015: 6.7% of buildings and 23.6% of GSF.
- Food and Drug Administration (FDA) – FY 2015: 0% of buildings and 0% of GSF.
- Indian Health Service (IHS) – FY 2015: 0% of total buildings and 0% of GSF.
- National Institutes of Health (NIH) – FY 2015: 0.6% of total buildings and 3% of GSF.

IHS will complete four new facilities in the next year that will comply with Guiding Principles, ranging from LEED certified to LEED Gold. NIH completed design for their first Net Zero Energy Building, which will be LEED Platinum.

Sustainable Buildings Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Include climate resilient design and management into the operation, repair, and renovation of existing agency buildings and the design of new buildings.	Yes	FDA will educate O&M and planning staff on climate resilience issues and incorporate changes where appropriate. NIH will define climate change goals and incorporate into Design Policy.	NIH is completing a Climate Change Plan and updating the Design Review Manual for scientific space, and developing and holding training classes for O&M staff on Climate Change Resilience Preparation.
In planning new facilities or leases, include cost-effective strategies to optimize sustainable space utilization and consideration of existing community transportation planning and infrastructure, including access to public transit.	Yes	All HHS new facilities or leases have a maximum of 170 USF per person.	Ongoing efforts.
Ensure all new construction of Federal buildings greater than 5,000 GSF that enters the planning process be designed to achieve energy net-zero and, where feasible, water or waste net-zero by FY 2030	No	FDA will analyze its program to identify possible net-zero projects. NIH will develop guidance for new projects and study feasibility for each major facility type. CDC is planning for net-zero in master plans. IHS budgets 4% of the total construction cost for onsite renewable energy systems. IHS is currently constructing a facility (Ft. Yuma) designed to generate 50% of the total annual energy onsite, and is investigating the feasibility of reaching net-zero at this site.	NIH will develop study requirements to implement in 2016 and 2017 when updating master plans.
Include criteria for energy efficiency as a performance specification or source selection evaluation factor in all new agency lease solicitations over 10,000 rentable square feet.	No	HHS generally relies on GSA for leasing. NIH will include language in their leases. CDC is evaluating feasibility and strategy for future compliance.	Ongoing efforts.
Incorporate green building specifications into all new construction, modernization, and major renovation projects.	Yes	These items are embedded in design and construction standards, which require certification and compliance with <i>Guiding Principles</i> in all new construction projects.	Design Requirements Manuals will incorporate as appropriate.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Implement space utilization and optimization practices and policies.	Yes	All HHS new facilities or leases have a maximum of 170 USF per person.	Ongoing efforts.
Implement programs on occupant health and well-being in accordance with the <i>Guiding Principles</i> .	Yes	<p>NIH continues research into healthy buildings and will establish programs to implement appropriate health and well-being initiatives. CDC embeds these items in design and construction standards.</p> <p>IHS promotes healthy and sustainable principles (e.g., using the stairs), which are posted on their website.</p>	NIH continues the Health in Buildings Roundtable, and implements health programs such as the Take A Hike campaign and the Surgeon General's Step It Up initiative. IHS is promoting healthy and sustainable principles to raise awareness in Indian Country.

Goal 3: Clean & Renewable Energy

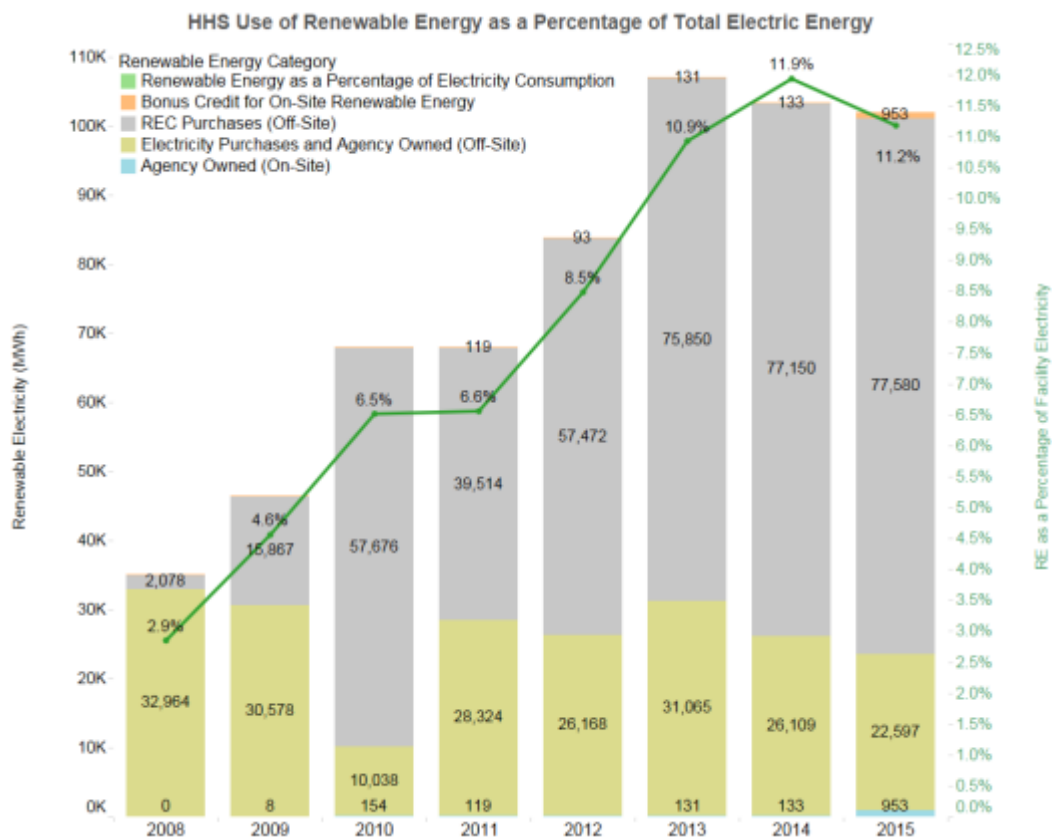
Clean Energy Goal

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

Renewable Electric Energy Goal

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

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



HHS met the FY 2015 renewable electricity goal at 11.2% of total electric energy. Agency owned or on-site renewable electricity shown in light blue increased in FY 2015, as did bonus credit for on-site renewable energy shown in orange and REC purchases shown in gray. These categories have shown an increase since the 2008 baseline year. Renewable electricity purchases shown in yellow has decreased since the 2008 baseline year.

In FY 2015, HHS OPDIVs focused on analyzing opportunities for on-site generation. CDC is installing a demonstrative solar array system at the Roybal Campus Visitor's Center, which will feature approximately 9-kW of solar capacity. The CDC UESC, as discussed in Goal 10, is also considering up

to 500-kW of solar energy generation across all CDC's Atlanta owned campuses. NIH is also aggressively analyzing open space areas, parking garage roofs, and building roofs at the Bethesda Campus for large-scale solar array potential. In addition, NIH is working toward an 8-MW combined heat and power (CHP) project on the Bethesda Campus. The IHS Fort Yuma Health Center began construction on a PV system that incorporates both rooftop units as well as covered parking spaces. Also, a \$225,000 solar cell project was approved at the IHS Pokagon Reservation in the Bemidji Area. FDA plans to install additional PV arrays at the Irvine Laboratory as part of a new phase of the UESC on-site.

CDC procures the largest amount of green power within HHS with the Fort Collins, Colorado, and Spokane, Washington, campuses purchasing 100% of energy consumed as wind power generated. Both locations will continue to procure solely green power for the foreseeable future as a part of their arrangements. CDC also purchases green power from Georgia Power for several of its Atlanta-area campuses as part of a three-year agreement, which it plans to renew at the contract's end.

In FY 2015, the IHS Alaska Native Tribal Health Consortium's (ANTHC) Rural Energy Initiative (REI) that developed community-wide biomass boiler projects that utilize cordwood boiler systems to provide heat to public water systems, water treatment plants, clinics, and community buildings. During 2015 three biomass projects were constructed in the communities of Hughes, Kobuk and Koyukuk with another biomass system in Anvik currently in the design phase. ANTHC's REI is also actively working with a biomass boiler manufacturer on a module that holds the promise of making energy saving benefits a reality for many more rural communities where the economics of constructing the system are currently not feasible.

The NIH Office of Research Facilities, Facilities Management Branch accomplished two significant energy savings over the past year through the installation of a 60-kW PV array and the conversion of all exterior roadway and walkway lighting from metal halide to LED on the NIEHS Campus in Research Triangle Park, NC. The project resulted in a net energy savings of approximately 300,000 kWh and \$18,000 annually as well as the recycling of approximately 300 tons of construction debris.

Clean and Renewable Energy Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Install agency-funded renewable on-site and retain corresponding renewable energy certificates (RECs).	Yes	HHS OPDIVs have committed to installing new PV systems in 2016 and 2017, as well as analyzing additional opportunities for on-site renewables.	<p>CDC has awarded a 9-kW PV R&I project that is scheduled for completion in FY 2016. The FY 2016 UESC IGA includes over 500-kW of PV systems. A construction task order (TO) for selected arrays is planned for FY 2017.</p> <p>FDA Irvine UESC Phase II, includes additional PV arrays plans for FY 2016-17. The FDA Muirkirk Road Complex (MRC), UESC Phase 8, includes a solar PV system.</p> <p>In FY 2016, IHS Phoenix Indian Medical Center is investigating the installation of a PV system. The Fort Yuma Health Center PV system will be capable of generating 50% of the annual</p>

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
			<p>electrical load (construction began in February 2016).</p> <p>NIH is analyzing parking garage roofs and building roofs at its main campus in Bethesda, MD for large-scale solar array potential. MD SREC market is being studied for best procurement process.</p>
Contract for the purchase of energy that includes installation of renewable energy on or off-site and retain RECs or obtain replacement RECs.	No	HHS OPDIVs are currently not planning any purchased power agreements (PPAs) for renewable projects. However, NIH will consider this an alternative to the option above, should on-site PV become economically or technically problematic	
Purchase electricity and corresponding RECs or obtain equal value replacement RECs.	No	Only CDC procures green power where feasible to meet E.O. requirements. CDC will continue to participate in utility green (renewable) energy purchase programs.	
Purchase RECs to supplement installations and purchases of renewable energy, when needed to achieve renewable goals.	Yes	To meet the increased renewable electric and clean energy targets outlined in E.O.13693, HHS OPDIVs will continue to purchase RECs.	<p>CDC, FDA and NIH will purchase RECs to meet E.O. targets after the green energy procurements and on-site generation components are completed.</p> <p>IHS has entered into a 5-year plan (FY 2015 to 2020) to purchase RECs through DLA.</p> <p>PSC is part of the GSA bulk electricity procurement that includes RECs.</p>
Install on-site thermal renewable energy and retain corresponding renewable attributes or obtain equal value replacement RECs.	No	This is not a top 5 strategy for HHS.	

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Install on-site combined heat and power (CHP) processes.	Yes	HHS OPDIVs are pursuing CHP opportunities at facilities.	<p>A Project Development Study for CDC's Roybal Campus and Chamblee Campus Master Plan (MP) is researching a natural gas-fueled CHP to contribute towards E.O. 13693 clean energy targets. Both efforts should be completed before the end of FY 2017.</p> <p>A CHP project was evaluated in the FDA MRC UESC Phase 7's IGA. However, it will be revisited in the future.</p> <p>NIH has awarded an IGA for 8-MW CHP with anticipated completion by end of FY 2016.</p>
Identify opportunities to install on-site fuel cell energy systems.	Yes	Efforts have been undertaken at HHS to analyze fuel cell opportunities. Availability of economic fuel distribution and space requirements are key.	<p>CDC Building Y, a new facility planned for the Lawrenceville Campus, includes a net-zero energy requirement that will utilize an on-site fuel cell.</p> <p>IHS is currently evaluating the feasibility of optimizing power systems via the use of microgrid technology or fuel cells.</p> <p>NIH is currently searching for areas and loads that have all the variables needed, such as load, space, and fuel, to provide fuel cell installation opportunities.</p>
Identify opportunities to utilize energy that includes the active capture and storage of carbon dioxide emissions associated with energy generation.	No	HHS OPDIVs plan to meet E.O. clean energy targets primarily with renewable electric and possibly CHP generators. Other "alternative energy" technologies such as biomass and ground source heat pump (GSHP) generators have not been identified as feasible ECMs.	
Identify and analyze opportunities to install or contract for energy installed on current or formerly contaminated lands, landfills, and mine sites.	No	HHS' owned portfolio does not include any formerly contaminated lands, landfills, and mine sites.	

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Identify opportunities to utilize energy from small modular nuclear reactor technologies.	No	Considering the regulatory approval process, costs, and proximity to residential properties, most HHS campuses and sites are not ideal candidates for modular nuclear reactor technologies.	

Goal 4: Water Use Efficiency & Management

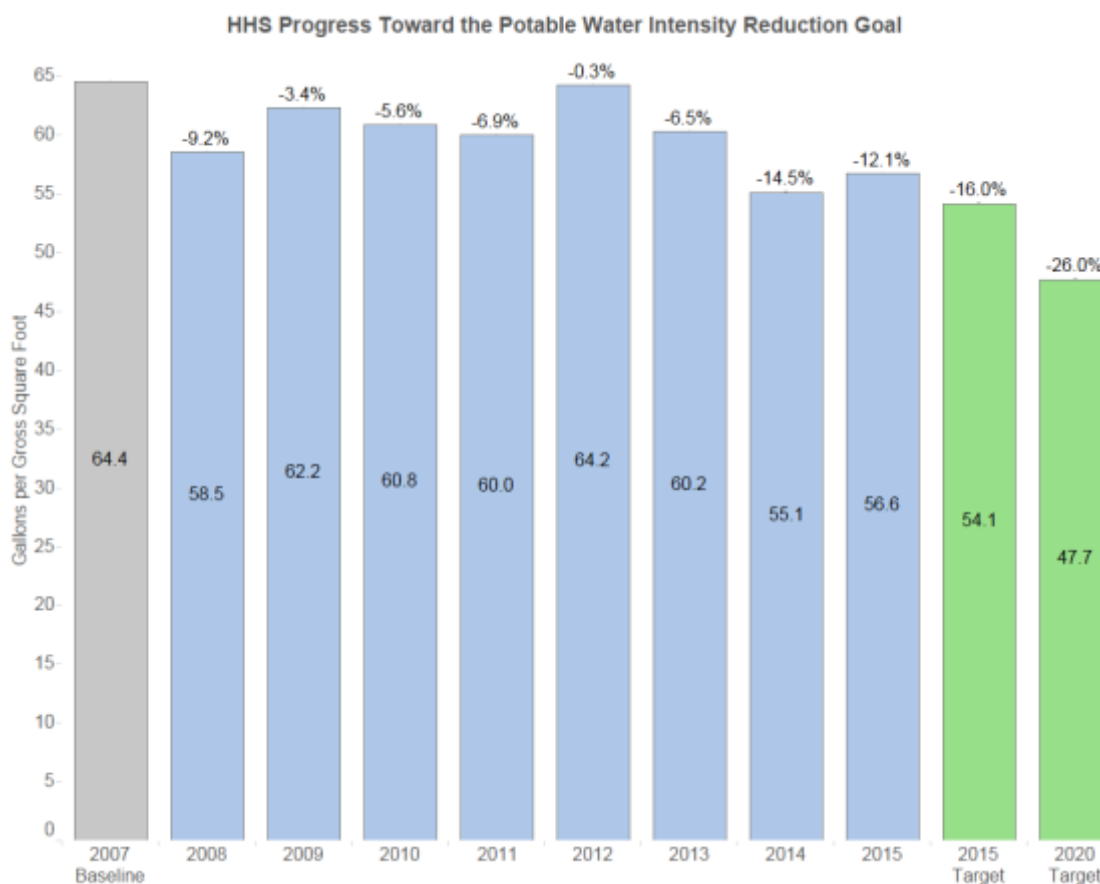
Potable Water Consumption Intensity Goal

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

Industrial, Landscaping and Agricultural (ILA) Water Goal

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

Chart: Progress Toward the Potable Water Intensity Reduction Goal



HHS potable water consumption intensity increased in FY 2015 due to a chilled water leak at the NIH Bethesda Campus. The chilled water leak required significant amounts of domestic water as makeup water for the chilled water system. A task force was initiated, which included management, engineering, and operating staff, to determine the cause of the chilled water loss, and develop action plans for repair. The task force was successful in repairing the chilled water leak and saving an average of 1.5 million gallons of water each month as a result of the repairs. NIH has also implemented several projects for

water efficiency improvements such as use of municipal grey water for make-up water, water metering, steam trap and condensate unit improvements, and installation of low flow fixtures.

CDC achieved a 21.8% water use reduction in FY 2015 compared to FY 2014 due to an extensive water use assessment and implementation of measures at the Roybal Campus in Atlanta. The scope of the assessment included analysis and documentation of the existing campus domestic water system, identification of water sources and waste and identification of feasible water conservation measures (WCMs). Several low to no-cost WCMs have been implemented.

FDA implemented a project that upgraded steam traps and their operation. This boiler system efficiency improvement resulted in a decrease of steam condensate being flushed down the sewer drain. The boiler system was then adjusted to compensate for a higher condensate return rate and this decreased the amount of make-up water required. Roughly 24,000 gallons per day of water was saved, or 8.8 million gallons of water and \$140,000, annually.

IHS has focused on implementing xeriscape landscaping projects to improve water use efficiency. In addition, the Claremore Indian Hospital installed a tankless water heater that delivers instantaneous hot water without the need of storing hot water in two 500-gallon storage tanks that were being heated up by continuous steam. This implementation has reduced hot water gas energy consumption by 18% and saved \$6,291 per year.

Water Use Efficiency & Management Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Install green infrastructure features to assist with storm and wastewater management.	No	Several HHS OPDIVs are incorporating green roofs, rainwater cisterns, minimizing impervious surfaces, and practicing green landscaping as priorities in capital project planning. However, it is not considered an overall HHS priority	<p>The CDC Roybal Campus B25 PDS and Chamblee Campus master plan efforts in FY 2016 incorporate additional facilities, green space, and a parking structure that will include green infrastructure strategies.</p> <p>IHS will continue to incorporate xeriscape landscaping and water-efficient irrigation techniques at new and existing facilities. For new IHS facilities, techniques include management of stormwater on-site flows via retention cells.</p> <p>PSC will ensure the new green roof plantings survive on the 4th floor lower roof at 5600 Fishers Lane.</p>

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Install and monitor water meters and utilize data to advance water conservation and management.	Yes	In early FY 2016, HHS OPDIVs updated their metering plans in accordance with current mandates. The plans outlined remaining meters to be installed.	<p>In FY 2016, existing domestic and process water meters at the Chamblee Campus will be integrated into the CDC <i>WaterSignal</i> account for web-based real time monitoring. In FY 2016, an advanced meter was installed to monitor domestic water for the CDC Chamblee Campus. In FY 2017, multiple advanced building level domestic water meters are planned for the National Institute for Occupational Health (NIOSH) Pittsburgh Campus under the ongoing UESC project.</p> <p>FDA plans to install meters as planned in its metering plan during FY 2016-20.</p> <p>NIH will complete a project by July 1, 2016 to re-commission all meters, and to upgrade data management hardware and software. NIH is installing metering ECMs in current ESPC projects now in progress such as adding meters, repairing existing meters, and re-commissioning the meter fleet and data systems.</p>
Install high efficiency technologies, e.g. WaterSense fixtures.	Yes	Water reducing measures and high efficiency fixtures/products are specified in the HHS OPDIV Design and Construction Manuals.	<p>Ongoing in CDC, NIH and PSC facilities.</p> <p>The FDA Irvine UESC Phase II includes installation of solar plumbing fixtures in FY 2017. At the FDA MRC, the renovation of 10 restrooms including efficient fixtures will be completed in FY 2016.</p>
Prepare and implement a water asset management plan to maintain desired level of service at lowest life cycle cost.	No	HHS OPDIVs utilize the OPDIV Meter Plans and Covered Facilities evaluations to maintain water management plans.	
Minimize outdoor water use and use alternative water sources as much as possible.	Yes	HHS OPDIVs ensure irrigation and outdoor water use minimizes potable water use through use of cisterns, well water and sustainable landscaping practices.	Ongoing.
Design and deploy water closed-loop, capture, recharge, and/or reclamation systems.	Yes	HHS OPDIV project designs are reviewed to include closed loop and reclamation systems.	In FY 2016, CDC began market research to develop a business case for infrastructure investment and terms for the purchase of reclaimed water from Emory University's

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
			<p>“Water Hub” for Central Utility Plant (CUP) process uses at the Roybal Campus.</p> <p>FDA San Juan will install a water recirculation system for the distilled water system in FY 2016.</p>
Install advanced meters to measure and monitor potable and ILA water use.	No	Per HHS OPDIV Water Metering Plans, advanced water meters will be installed and this has been addressed in the metering strategy above.	
Develop and implement programs to educate employees about methods to minimize water use.	Yes	HHS OPDIVs continuously focus on areas to improve employee engagement and raise water efficiency awareness.	<p>CDC developed a water conservation training video and educational outreach information that will be distributed to CDC employees through the CDC Connects intranet site and Sustainability Newsletter announcements in FY 2016 and beyond.</p> <p>This is ongoing at FDA with posters and signs displayed at all facilities. Conservation messages run on electronic monitors and screens throughout the facilities.</p> <p>IHS will develop flyers for distribution in the field starting in summer 2016 to promote methods to minimize water use and raise awareness in Indian Country. They will also be posted to the IHS Sustainability website.</p> <p>PSC will hold annual Earth Day events to raise awareness and will distribute PSC’s 111 ways to conserve water handout throughout FY 2016.</p>

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Assess the interconnections and dependencies of energy and water on agency operations, particularly climate change's effects on water which may impact energy use.	No	HHS OPDIVs are assessing the interconnections of energy and water at their facilities, and identifying climate change effects that concern their facilities. Specific actions have been outlined below in the strategy for implementation of regional and local drought management and preparedness strategies that reduce agency water consumption.	
Consistent with State law, maximize use of grey-water and water reuse systems that reduce potable and ILA water consumption.	No	HHS OPDIVs will continue to assess the implementation of grey-water use and water reuse, but this is not a top strategy at this time.	
Consistent with State law, identify opportunities for aquifer storage and recovery to ensure consistent water supply availability.	No	Not a top 5 strategy for HHS at this time.	
Ensure that planned energy efficiency improvements consider associated opportunities for water conservation.	Yes	HHS OPDIVs design, project and facility management ensure that all design, renovation, upgrade and performance contracting projects include opportunities for water conservation.	IGA ECMs for selected CDC facilities at the Atlanta campuses are ongoing and will be completed in FY 2016 and FY 2017. The FDA MRC will replace a steam generator in FY 2016. The FDA JLC will perform water fountain repairs in FY 2016.

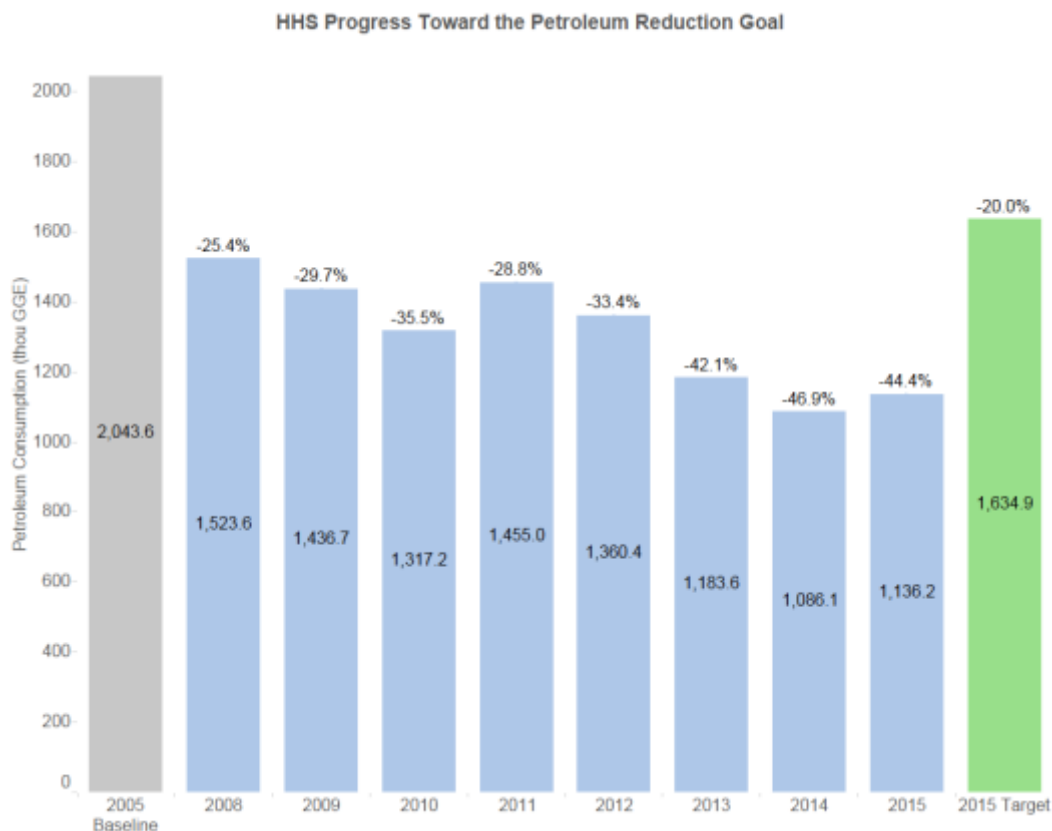
Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Where appropriate, identify and implement regional and local drought management and preparedness strategies that reduce agency water consumption	Yes	HHS OPDIVs follow drought and emergency management and preparedness strategies where appropriate. HHS OPDIVs are assessing the interconnections of energy and water at their facilities, and identifying climate change effects that concern their facilities to address preparedness.	<p>CDC policy standards require the use of native, low maintenance, noninvasive, climate appropriate, and drought/pest resistant plants for improvements and capital projects, ongoing. CDC has experienced severe drought at campuses in past years and will prioritize reasonable efforts to minimize drought impact on energy use. Specifically, CDC is considering a climate resiliency project for FY 2017 to study CDC's entire owned portfolio to consider climate change and all E.O. 13693 related requirements through FY 2025.</p> <p>The FDA Irvine Lab will continue to practice drought management as required by the state of California. Native vegetation and grey-water use is maximized on site.</p> <p>NIH will design and construct chilled water storage and industrial water storage tanks to maintain service through emergency conditions. Construction is estimated to be completed by October 31, 2017</p>

Goal 5: Fleet Management

Fleet Petroleum Use Reduction Goal

E.O. 13514 and the Energy Independence and Security Act of 2007 (EISA) required that by FY 2015 agencies reduce fleet petroleum use by 20% compared to an FY 2005 baseline.

Chart: Progress Toward the Petroleum Reduction Goal



Fleet Alternative Fuel Consumption Goal

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

In FY 2015, HHS' use of alternative fuel equaled 8% of total fuel use. HHS has increased its alternative fuel use by 264% since FY 2005.

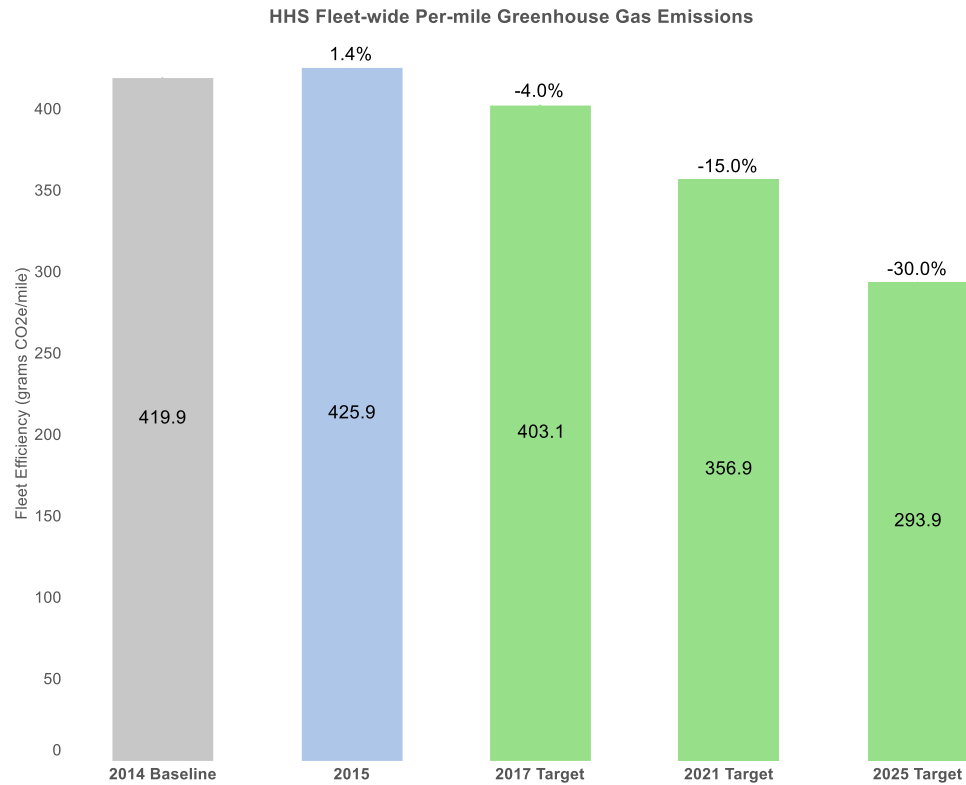
Fleet Per-Mile Greenhouse Gas (GHG) Emissions Goal

E.O. 13693 Section 3(g) states that agencies with a fleet of at least 20 motor vehicles will improve fleet and vehicle efficiency and management. E.O. 13693 section 3(g)(ii) requires agencies to reduce fleet-wide per-mile GHG emissions from agency fleet vehicles relative to an FY 2014 baseline and sets new

goals for percentage reductions: not less than 4% by FY 2017; not less than 15 % by FY 2020; and not less than 30% by FY 2025.

E.O. 13693 Section 3(g)(i) requires that agencies determine the optimum fleet inventory, emphasizing eliminating unnecessary or non-essential vehicles. The Fleet Management Plan and Vehicle Allocation Methodology (VAM) Report are included as appendices to this plan.

Chart: Fleet-wide Per-mile GHG Emissions



Fleet Management Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Collect and utilize agency fleet operational data through deployment of vehicle telematics.	Yes	<p>HHS implemented a telematics trial solution incorporating an in-the-vehicle Event Recorder (ER) approach involving two groups, e.g., Group 1 = control group compared to Group 2 = non-controlled group. HHS will use a commercial Best Practice as an HHS prototype, e.g., Lytx Corp Drive-Cam pilot program with telematics capability.</p> <p>HHS will address compliance with E.O. 13693 implementation instructions and highlight /mitigate frequency and severity of HHS accident/incidents.</p> <p>HHS will deploy a comprehensive telematics solution using at least two options: 1) GSA offering (AT&T Telematics) 2) Event Recorders (Drive-Cam).</p>	<p>Beginning in the fourth quarter of FY 2016, HHS will recommend that Drive-Cam ERs with telematics be deployed in selected vehicles to meet diverse HHS missions.</p> <p>Beginning in the fourth quarter of FY 2017, HHS will recommend a less robust commercial Telematics solution via GSA, e.g., AT&T Telematics, be deployed for rudimentary missions.</p> <p>FY 2016 telematics trials are ongoing in the following Op/Staff Divisions: ASPR, HHS/OS/PSC, HHS/Atlanta/Pittsburg; IHS multiple locations nationwide; NIH Bethesda and Centers for Medicare and Medicaid Services (CMS) nationwide.</p> <p>A trial was applied and will continue on roughly 200 vehicles and many drivers nationwide.</p> <p>Metrics measured:</p> <ul style="list-style-type: none"> • Speeding • Seat belts • Cell phone use • Vehicle utilization • Idling
Ensure that agency annual asset-level fleet data is properly and accurately accounted for in a formal Fleet Management Information System as well as submitted to the Federal Automotive Statistical Tool reporting database, the Federal Motor Vehicle Registration System, and the Fleet Sustainability Dashboard (FLEETDASH) system.	Yes	<p>The HHS Fleet Manager requested \$98.0K to update the existing HHS Fleet Management Information System (FMIS) currently called the HHS Motor Vehicle Management Information System (MVMIS) so as to be in compliance with CFR 41 Chapter 102 § 102-34.347.</p> <p>HHS will ensure that the Idaho National Laboratory MVMIS team will capture the new</p>	<p>Update HHS MVMIS on or before September 30, 2016; enable [it] to receive all telematics inputs end of FY 2016.</p> <p>Collaborate with NIH with its MAXIMO Fleet Management System. Integrate a commercial fleet management data management tool.</p>

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
		vehicle level data (VLD) elements then make the necessary adjustments as required for the FY 2016 FAST report.	
Increase acquisitions of zero emission and plug-in hybrid vehicles.	Yes	Respond to the GSA offering for up to 49 all-electric - Zero Emission Vehicles (ZEVs).	FY 2016 goal is for 72% of 49 vehicles, or 35 ZEV units to be deployed.
Issue agency policy and a plan to install appropriate charging or refueling infrastructure for zero emission or plug-in hybrid vehicles and opportunities for ancillary services to support vehicle-to-grid technology.	No	HHS is working toward infrastructure upgrades and an agency policy to address charging for plug-in vehicles, but this is not a top priority.	
Optimize and right-size fleet composition, by reducing vehicle size, eliminating underutilized vehicles, and acquiring and locating vehicles to match local fuel infrastructure.	Yes	HHS reviewed utilization of current fleet, then provided documentation/ recommendation to management and programs for review.	For FY 2016, to date three vehicles have been turned in and two vehicles are pending at this time in Atlanta. For FY 2016/2017, vehicles are pending turn in and will be replaced with electric golf carts.
Increase utilization of alternative fuel in dual-fuel vehicles.	No	HHS provides instructions/directions to HHS Operating/Staff Division Fleet managers via the HHS MVMIS resource. Locations of the nearest alternative fueling stations are detailed to ensure compliance with the law.	
Use a FMIS to track real-time fuel consumption throughout the year for agency-owned, GSA-leased, and commercially-leased vehicles.	Yes	HHS currently uses MVMIS to enter/track data.	In FY 2016/2017, all data will be entered by HHS deadlines.
Implement vehicle idle mitigation technologies.	Yes	HHS plans to implement a telematics system in the domestic fleet vehicles.	In the third quarter of FY 2017, HHS will implement an “idling” reduction target program.
Minimize use of law enforcement exemptions by implementing GSA Bulletin FMR B-33, <i>Motor Vehicle Management, Alternative Fuel Vehicle Guidance for Law Enforcement and Emergency Vehicle Fleets</i> .	No	HHS does not have a significant number of law enforcement vehicles.	

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Where State vehicle or fleet technology or fueling infrastructure policies are in place, meet minimum requirements.	No	This is not a top strategy for HHS.	
Establish policy/plan to reduce miles traveled, e.g. through vehicle sharing, improving routing with telematics, eliminating trips, improving scheduling, and using shuttles, etc.	No	HHS will collect and analyze data using the new telematics. After four to six months of data collection, HHS will review and determine what changes to policy or procedures are required.	

Goal 6: Sustainable Acquisition

Sustainable Acquisition Goal

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

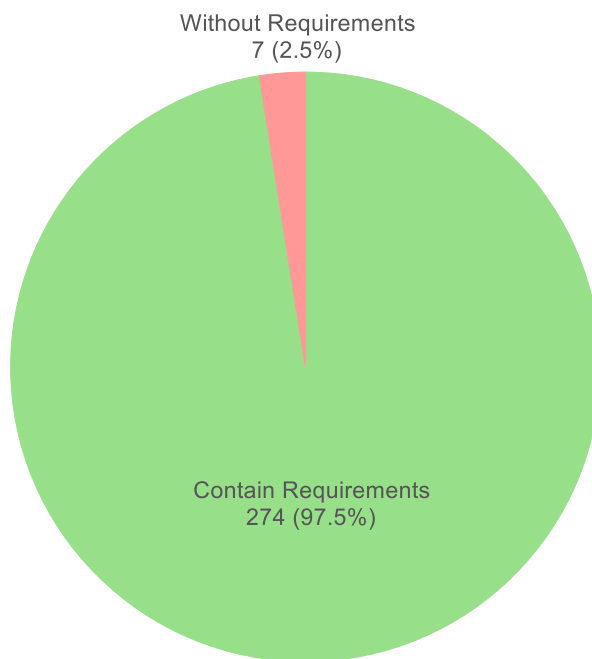
Biobased Purchasing Targets

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

For FY 2017, HHS has established a target of 274 contracts and \$1.15 billion in products to be delivered.

Chart: Percent of Applicable Contracts Containing Sustainable Acquisition Requirements

HHS Percent of Applicable Contracts Containing Sustainable Acquisition Requirements
(FY 2015 Goal: 95%)



Total Number of Contracts Reviewed: 281

Based on agency-reported results of quarterly reviews of at least 5% of applicable contract actions

HHS exceeded the 95% goal established in FAR Part 23 by achieving 97.5% compliance for the inclusion of applicable sustainability requirements in new contract actions. HHS will continue outreach and verification efforts to ensure continued compliance with the 95% goal.

To support sustainable acquisition, HHS issued guidance to the acquisition workforce that emphasizes the inclusion of biobased products and all applicable Federal Acquisition Regulation (FAR) sustainability clauses in construction and other relevant service contracts. HHS provided the acquisition workforce with sustainable acquisition training, focusing on biobased products, and further supporting the inclusion of sustainability requirements in applicable contracts.

In FY 2016, the HHS Senior Procurement Executive represents HHS on the Federal Sustainable Acquisition and Materials Management (SAMM) Working Group and continues to engage the GSA and other Federal partners on healthy/green procurement initiatives. In doing so, best practices and lessons learned are gathered and then passed along to the Divisions through the HHS Sustainable Green Acquisition Workgroup.

Sustainable Acquisition Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Establish and implement policies to meet statutory mandates requiring purchasing preference for recycled content products, ENERGY STAR qualified and FEMP-designated products, and Biopreferred and biobased products designated by USDA.	Yes	Include FAR clauses for energy and water efficient products and services, such as ENERGY STAR qualified and FEMP-designated products by EPA and DOE in all new applicable requirements.	In FY 2016, relative to FY 2015, HHS will increase purchases of energy and water efficient products and services, such as ENERGY STAR qualified and FEMP-designated products, identified by EPA and DOE by 5%.
Establish and implement policies to purchase sustainable products and services identified by EPA programs, including SNAP, WaterSense, Safer Choice, and Smart Way.	No	This is an ongoing effort, but was not identified as a top strategy for this goal in this SSPP.	
Establish and implement policies to purchase environmentally preferable products and services that meet or exceed specifications, standards, or labels recommended by EPA.	No	This is an ongoing effort, but was not identified as a top strategy for this goal in this SSPP.	
Use Category Management Initiatives and government-wide acquisition vehicles that already include sustainable acquisition criteria.	Yes	HHS will continue to utilize the Category Management Initiatives in the Federal Strategic Sourcing Initiatives (FSSI). OMB Memorandum 16-02, "Category Management Policy 15-1, identified the NIH Information Technology Acquisition and Assessment Center (NITAAC) as one of the purchasing vehicles	In FY 2016, relative to FY 2015, HHS will increase purchases of services and products using FSSI including sustainable requirements, through utilization of Category Management Initiatives by 5%.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
		through which to make the majority of purchases of basic desktops and laptops computers in standard configuration. The NITAAC GWAC incorporates ENERGY STAR, Electronic Product Environmental Assessment Tool (EPEAT), and FEMP standards in all applicable commodities.	
Ensure contractors submit timely annual reports of their BioPreferred and biobased purchases.	Yes	HHS will update the Sustainable Acquisition Program Guide and policies to ensure contractors submit timely reports of their BioPreferred and biobased purchases.	In FY 2016, relative to FY 2015, HHS will add this additional subject item on reporting to the Sustainable Acquisition Program Guide.
Reduce copier and printing paper use and acquiring uncoated printing and writing paper containing at least 30 percent postconsumer recycled content or higher.	No	This is an ongoing effort, but was not identified as a top strategy for this goal in this SSPP.	
Identify and implement corrective actions to address barriers to increasing sustainable acquisitions.	Yes	HHS will review sustainable solicitations on FedBizOpps for leading indicators such as missing clauses or sustainable language.	In FY 2016, relative to FY 2015, HHS will increase monitoring to a daily basis of sustainable solicitations on FedBizOpps to identify leading indicators such as missing clauses or sustainable language.
Improve quality of data and tracking of sustainable acquisition through the Federal Procurement Data System (FPDS).	No	This is an ongoing effort, but was not identified as a top strategy for this goal in this SSPP.	
Incorporate compliance with contract sustainability requirements into procedures for monitoring contractor past performance and report on contractor compliance in performance reviews.	No	This is an ongoing effort, but was not identified as a top strategy for this goal in this SSPP.	
Review and update agency specifications to include and encourage products that meet sustainable acquisition criteria.	Yes	HHS will update the Sustainable Acquisition Program Guide and policies to strengthen the applicable sustainability requirements.	In FY 2016, relative to FY 2015, HHS will add this additional subject item on reporting to the Sustainable Acquisition Program Guide.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Identify opportunities to reduce supply chain emissions and incorporate criteria or contractor requirements into procurements.	No	This is an ongoing effort, but was not identified as a top strategy for this goal in this SSPP.	

Goal 7: Pollution Prevention & Waste Reduction

Pollution Prevention & Waste Reduction Goal

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

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

In FY 2015, HHS continued to advance in Waste Reduction and Pollution Prevention as evidenced by the following representative efforts:

- CMS achieved a recycling rate of 56% at its Headquarters Building and continues to vigorously promote recycling and composting. CMS continues to promote recycling and composting through ongoing outreach and awareness campaigns, and the reduction of paper use through electronic document review and signoff.
- CDC has developed and implemented an innovative communication device in the form of shadow boxes that display at the point of disposal those items that can be recycled. The shadow boxes are mounted directly above the receiving bins and enable the discarder to instantly understand how and where to recycle the item. CDC has centralized the waste removal and recycling contract at its Atlanta campuses into one vendor to greatly improve control, efficiency, and reporting. A pilot composting program has begun at the Chamblee Campus and is very promising. Since FY 2014, the CDC recycling rate has increased by nearly 8%.
- FDA diverted 97% of C&D waste from landfill to recycling facilities. Its Call2Recycle program for rechargeable batteries continues to be a success with 1,973 pounds of such batteries collected in CY 2015 at a savings of \$20,230. In addition, 1,428 cell phones were collected in the same period for the Cell Phones for Soldiers, an increase of 22% over the previous year. Approximately \$15,000 of office supplies and functioning non-accountable equipment and were reused avoiding the purchase of new supplies and equipment.
- NIH diverted 92.2% of C&D waste and achieved a 60.4% Waste Goal Rate. The promotion, expansion, and reinforcement of its Life Technologies Styrofoam collection and reuse program, Mercury Amnesty collection program, delivery of deskside and common area recycling containers, Surplus Chemical Redistribution Program (unused reagent chemicals available to others for use), and spent solvent recycling program continued.
- IHS has revamped its scope of work boilerplate language for new construction to require the diversion of C&D waste from landfills. As a result, a recent construction project in California reported a 90% diversion of its C&D waste.

Pollution Prevention & Waste Reduction Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Report in accordance with the requirements of sections 301 through 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986 (42 U.S.C 11001-11023).	No	This is an ongoing, iterative effort by the landholding OPDIVs. HHS will continue to comply with EPCRA and, while this is not an HHS top five strategy, examples of its efforts are cited in the adjacent column.	<p>FDA is in the process of auditing all FDA facilities to ensure EPCRA reporting compliance. Completion of audit of all facilities anticipated by December 2018.</p> <p>All 28 IHS hospitals will be surveyed by October 2016 to ensure EPCRA reporting compliance.</p> <p>NIH will reinvigorate collaboration among the three Divisions sharing responsibilities for EPCRA reporting to ensure continued 100% compliance.</p>
Reduce or minimize the quantity of toxic and hazardous chemicals acquired, used, or disposed of, particularly where such reduction will assist the agency in pursuing agency greenhouse gas reduction targets.	No	HHS OPDIVs are actively engaged in reducing and minimizing the quantities of toxic and hazardous chemicals acquired, used, and disposed of. While this is not an HHS top five strategy, examples of these ongoing efforts are cited in the adjacent column.	<p>FDA will update its Chemical Hygiene Plan (CHP) and Chemical Management SOPs, monitor waste generation on a semi-annual basis, and strive to reduce hazardous waste volume by 5%.</p> <p>CDC will continue its vigorous efforts to assist its laboratories in finding and using less toxic chemicals in their research.</p> <p>NIH will continue environmental audits of all its facilities, implement a Web-based waste disposal authorization process, update its Substances of Concern database and public access site, update its Toxic Chemical Reduction Initiative (TCRI), continue to promote its many outreach events and waste management programs via the NIH Environmental Management System (NEMS), continue its search for a composting facility capable of handling 100 tons/month, and continue to evaluate the feasibility of acquiring a second solvent recycling unit.</p>
Eliminate, reduce, or recover refrigerants and other fugitive emissions.	Yes	This is an ongoing, iterative effort by HHS landholding OPDIVs.	<p>FDA will continue its audits of facilities to ensure that training and practices are in compliance.</p> <p>CDC will continue to use certified vendors to service refrigerant-using equipment.</p> <p>NIH will continue its annual refrigerant causality transfer training, monitor its chiller performance with calibrated sensors, and collect and analyze hydrofluorocarbon (HFC) historical usage data to optimize chiller performance.</p>

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
			IHS will continue to replace existing refrigeration units with ecofriendly units. Newly constructed facilities have ecofriendly units as standard equipment.
Reduce waste generation through elimination, source reduction, and recycling.	Yes	The HHS OPDIVs are pursuing and implementing a broad and growing variety of source reduction, reuse, and recycling strategies. These efforts are promoted via Earth Day and America Recycles Day in addition to a steady stream of agency websites, webinars, and newsletters.	<p>CMS will continue to vigorously promote its recycling and composting efforts and its paper use reduction efforts through its outreach and awareness campaigns, which have resulted in a 56% waste diversion rate.</p> <p>IHS will continue to work with its widely dispersed facilities to promote effective recycling. IHS will complete its survey by October 2016.</p> <p>CDC will continue to conduct training and promotional campaigns, and use recognition of top performers to motivate innovative and effective approaches to this effort.</p> <p>NIH will continue to apply its Waste Minimization and Management Policy coupled with its NEMS to vigorously promote reduction, reuse, and recycling efforts. It will conduct surveys and use results to develop and continuously convey reduction, reuse, and recycling to targeted audiences, seek upper management support for such efforts, conduct employee training, continue to install upgraded recycling containers and messaging, conduct Universal Waste training for facility O&M staff, and conduct non-regulatory "10-point" checkups at laboratories.</p>
Implement integrated pest management and improved landscape management practices to reduce and eliminate the use of toxic and hazardous chemicals and materials.	Yes	Integrated Pest Management (IPM) is mature at some OPDIVs and in development and implementation at others.	<p>NIH has pursued IPM since 1991. Its program is mature and uses almost no toxic or hazardous materials. It continues to conduct plan reviews to incorporate IPM concepts in all NIH occupied facilities, to collaborate with and support other Office of Research Services (ORS) components in areas related to IPM; e.g., animal feed and bedding operations, solid waste management, building and grounds maintenance, and housekeeping. It continues to evaluate new pest management technologies.</p> <p>CDC maintains IPM plans for its facilities and uses contract language to ensure that its contractors use no toxic or hazardous chemicals.</p> <p>IHS has sponsored a vector control course</p>

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
			incorporating IPM that it is disseminating to its widely dispersed components. Complete dissemination is scheduled by June 2016.
Develop or revise Agency Chemicals Inventory Plans and identify and deploy chemical elimination, substitution, and/or management opportunities.	Yes	The chemical-using OPDIVs are aggressively pursuing source reduction, repurposing of chemicals through voluntary exchanges, onsite recycling and reuse, substitution, and other opportunities.	<p>NIH will continue to promote its CHP and Hazard Communication Plan (HazCom) through routine safety inspections. It will continue to monitor and refine the Toxic Reduction Initiative and the Substances of Concern Initiative. The NIEHS will continue to review protocols involving toxic agent and radioactive materials prior to purchase and use, and with seeking substitution or other minimization opportunities.</p> <p>IHS will complete chemical inventory plans at 100% of its hospitals by October 2016.</p> <p>FDA will continue monitoring chemical purchasing and updating of its Chemical Hygiene Plan and its Chemical Management SOPs. It will continue to seek chemical elimination, substitution, and reduction.</p> <p>CDC will continue to seek opportunities for chemical elimination, substitution, and reduction.</p>
Inventory current HFC use and purchases.	Yes	NIH and FDA are the primary users of HFCs. Both are engaged in extensive inventory tracking and control actions.	<p>NIH Bethesda has installed refrigerant tank scales, which allow the refrigerant charges in the CUP chillers to be optimized. Baseline refrigerant weights for each chiller are being established. Similar efforts are planned for facilities in North Carolina, Montana, and Maryland.</p> <p>FDA is in the process of inventorying its current HFC use and purchases.</p>
Require high-level waiver or contract approval for any agency use of HFCs.	No	HFCs are currently necessary for the operation of large- scale chillers at NIH.	No high-level waiver will be required. Efforts to optimize and closely track HFC use will continue.
Ensure HFC management training and recycling equipment are available.	Yes	EPA 608 training is conducted annually.	<p>NIH has integrated EPA 608 training into its CUP training program. It is conducted for new CUP employees and as annual refresher training for current employees.</p> <p>FDA continues to audit its facilities for compliance with HFC usage, management, availability of recycling equipment, and training requirements.</p>

Goal 8: Energy Performance Contracts

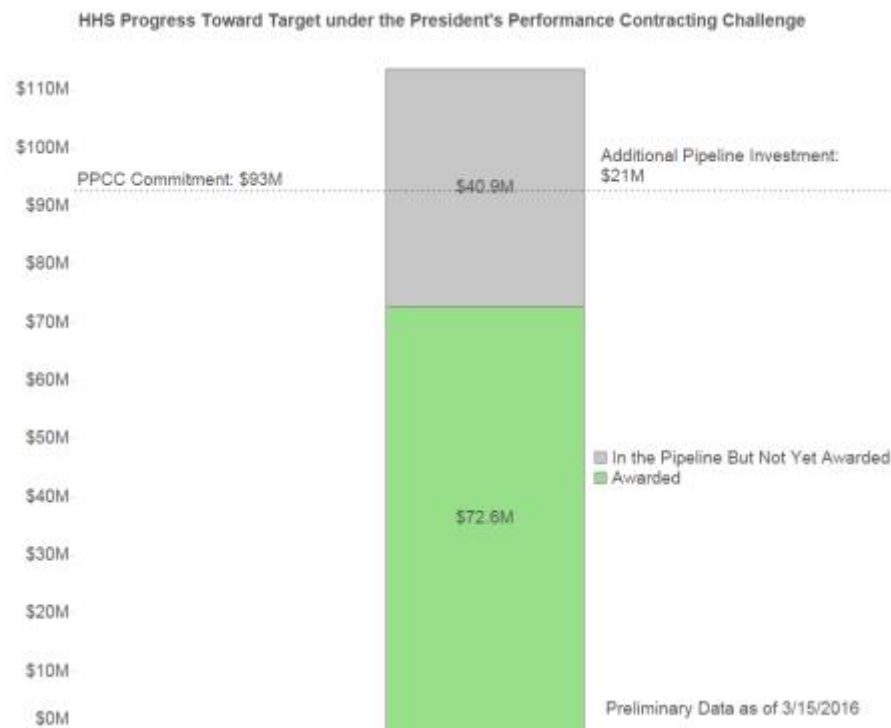
Performance Contracting Goal

E.O. 13693 section 3(k) requires that agencies implement performance contracts for Federal buildings. E.O. 13693 section 3(k)(iii) also requires that agencies provide annual agency targets for performance contracting. The HHS commitment under the President’s Performance Contracting Challenge (PPCC) is \$92.6 million in contracts awarded by the end of calendar year 2016. The HHS targets for the next two fiscal years are:

FY 2017: \$38.8 million		
CDC = \$7 million	FDA = \$3.8 million	IHS = \$4 million
NIH = \$24 million	PSC = TBD	
FY 2018: \$14.5 million		
CDC = \$7 million	FDA = TBD	IHS = TBD
NIH = \$7.5 million	PSC = TBD	

The CDC target is based upon the FY 2016 threshold of projects and will be adjusted based on completion of current projects and future funding. The FDA target is based upon a completed IGA to be implemented and awaiting a new IGA for FY 2018 projects. Due to challenges relating to implementing an ESPC for small facilities at remote locations and failed ventures in recent years, IHS has not pursued energy performance contracting. A \$4 million UESC at Phoenix Indian Medical Center is being used as a pilot to encourage other facilities to reconsider or pursue performance contracting. NIH is planning a performance contract to install a cogeneration plant.

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



Performance Contracting Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Utilize performance contracting to meet identified energy efficiency and management goals while deploying life-cycle cost effective energy and clean energy technology and water conservation measures.	Yes	HHS OPDIVs are pursuing performance contracting to the maximum extent possible to install energy efficiency technologies.	<p>CDC Atlanta campuses UESC and Pittsburgh ESPC to be awarded by end of FY 2016. Follow-on contracts are expected.</p> <p>FDA MRC UESC Phase 7 and Irvine UESC Phase II, to be awarded in FY 2016. FDA MRC UESC Phase 8 is planned for FY 2017/18.</p> <p>IHS will promote a UESC at Phoenix Indian Medical Center.</p> <p>NIH will award a UESC contract by September 2016. A future cogeneration performance contract is in early stages.</p> <p>PSC will continue to seek UESC opportunities at the 5600 Fishers Lane building.</p>
Fulfill existing agency target/ commitments towards the PPCC by the end of CY16.	Yes	HHS is on track to meet 2016 PPCC commitments.	<p>CDC Atlanta campuses UESC and Pittsburgh ESPC to be awarded by end of FY 2016.</p> <p>FDA MRC UESC Phase 7 and Irvine UESC Phase II, to be awarded in FY 2016.</p> <p>NIH will award a UESC contract by September 2016.</p>
Evaluate 25% of agency's most energy intensive buildings for opportunities to use ESPCs/UESCs to achieve goals.	Yes	HHS maintains compliance with EISA auditing intervals, which is 25% each year, or 100% per four years. Action plans to implement ECMs include performance contracting.	<p>CDC will continue this practice moving forward prioritizing projects that bring existing facilities closer to achieving GP compliance.</p> <p>This is ongoing at FDA. The IGAs are extended beyond the covered facilities to cover entire campuses.</p> <p>NIH has reviewed completed sustainability audits for potential energy and water conservation opportunities. Next steps will be to move to ESPC or UESC feasibility on identified cost effective measures.</p> <p>PSC will continue to seek UESC opportunities at the 5600 Fishers Lane</p>

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
			building.
Prioritize top ten portfolio wide projects, which will provide greatest energy savings potential.	Yes	HHS OPDIVs will use building audit data to identify and prioritize projects with the greatest potential.	CDC will complete annual review of audit data and ECMs. In FY 2016, IHS will analyze sites for projects with largest savings potential.
Identify and commit to include onsite renewable energy projects in a percentage of energy performance contracts.	Yes	All HHS performance contracts include renewable energy projects where cost effective.	The first PV project at CDC's Roybal Campus will be complete in 2016 with others identified for near future. IHS is considering a PV system that might be valued up to \$800,000 at Phoenix Indian Medical Center pending completion of an IGA for a UESC. Additional on-site renewable energy projects at NIH are currently in the analysis phase, and will be reviewed for inclusion in performance contracting. PSC will initiate discussion in FY 2016 with 5600 Fishers Lane owner on renewable energy projects.
Submit proposals for technical or financial assistance to FEMP and/or use FEMP resources to improve performance contracting program.	Yes	HHS OPDIVs seek assistance from FEMP on as-needed basis.	CDC applied for FEMP AFFECT grant in FY 2015 but was not selected. CDC will continue to utilize FEMP FOA opportunities in future. FDA MRC UESC Phase 8 will be reviewed by FEMP in FY 2016-17. All other UESCs will be sent to FEMP for review. IHS will consult with FEMP for assistance, as needed, with the UESC for Phoenix Indian Medical Center in FY 2016 and 2017.
Work with FEMP/USACE to cut cycle time of performance contracting process, targeting a minimum 25% reduction.	No	Not a top five strategy for HHS.	
Ensure agency legal and procurement staff are trained by the FEMP ESPC/UESC course curriculum.	Yes	HHS OPDIVs work to ensure appropriate staff are trained by the FEMP curriculum.	All OPDIVs use the FEMP online training for appropriate personnel. This is ongoing.

Goal 9: Electronics Stewardship & Data Centers

Electronics Stewardship Goals

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

Agency Progress in Meeting Electronics Stewardship Goals

Procurement Goal:

At least 95% of monitors, PCs, and laptops acquired meet environmentally sustainable electronics criteria (EPEAT registered).

FY 2015 Progress: 95.6%

Power Management Goal:

100% of computers, laptops, and monitors have power management features enabled.

FY 2015 Progress: 97.8% of equipment has power management enabled.
3% of equipment has been exempted.

End-of-Life Goal:

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

FY 2015 Progress: One OPDIV stated that “the monitors and printers are not managed by the network and there is no central process to excess the equipment since they are non-accountable property.” All other OPDIVs are at 100%.

Data Center Efficiency Goal

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

HHS is currently on track with both the procurement and end-of-life goals. The Department reached 98% in FY 2015 for the power management goal of 100% of electronics with power management features enabled. This showed an improvement from the FY 2014 report, where HHS reported 92% of non-exempted electronics had power management features enabled.

During FY 2015, HHS closed eight data centers (1 Core and 7 non-Core). Currently, HHS has plans to close 12 additional data centers by the end of FY 2018. This number may change after the Department receives its target numbers from OMB under the new Data Center Optimization Initiative.

Electronics Stewardship Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Use government-wide strategic sourcing vehicles to ensure procurement of equipment that meets sustainable electronics criteria.	Yes	Review HHS and OPDIV standard procurement language to ensure EPEAT, ENERGY STAR, FEMP, and other necessary clauses are included in future procurements.	HHS will continue to work with any OPDIVs not currently meeting this metric.
Enable and maintain power management on all eligible electronics; measure and report compliance.	Yes	Review HHS and OPDIV policies for enabling power management features on eligible agency electronic products and revise, as needed.	The HHS target is 100% for eligible electronic products with power management as outlined by OMB and the Council on Environmental Quality (CEQ). HHS will continue to work with any OPDIV not currently meeting this metric.
Implement automatic duplexing and other print management features on all eligible agency computers and imaging equipment; measure and report compliance.	Yes	Review HHS and OPDIV policies for enabling duplex printing and other print management features on eligible agency electronic products and revise, as needed.	The HHS target is 100% for eligible desktop and network printers (as outlined by OMB and CEQ). HHS will continue to work with any OPDIVs not currently meeting this metric.
Ensure environmentally sound disposition of all agency excess and surplus electronics, consistent with Federal policies on disposal of electronic assets, and measure and report compliance.	Yes	Review HHS and OPDIV practices and policies for disposition of excess or surplus electronic products and identify best practices and areas for improvement.	The HHS target is 100% for all disposition of electronic products excess and surplus (as outlined by OMB and CEQ). HHS will continue to work with any OPDIVs not currently meeting this metric.
Improve tracking and reporting systems for electronics stewardship requirements through the lifecycle: acquisition and procurement, operations and maintenance, and end-of-life management.	Yes	HHS will continue to improve tracking and reporting systems for electronics stewardship requirements through the lifecycle.	HHS will track 100% of electronic stewardship data for all laptops, monitors, and printers. HHS will continue to work with any OPDIVs not currently meeting this metric.

Data Center Efficiency Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
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Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Develop, issue and implement policies, procedures and guidance for data center energy optimization, efficiency, and performance.	Yes	An updated Departmentwide strategy will be forthcoming in the HHS Data Center Strategy as required in OMB Memo – Data Center Optimization Initiative.	To be determined. Updated HHS Data Center Strategy will be developed through collaboration with the OPDIVs.
Install and monitor advanced energy meters in all data centers (by fiscal year 2018) and actively manage energy and power usage effectiveness.	Yes	Of the 24 HHS core data centers, 18 are already power metered. The remaining six are investigating pricing to install power meters and/or undergoing cost/benefit analysis to determine whether leases should be updated to include metering or data centers should be closed.	HHS will receive quotes for installing power meters for three agency-owned data centers by end of CY 2016 and evaluate responses. HHS will conduct cost/benefit analyses for three commercially-owned data centers for feasibility of adding metering to the leases or potentially closing these data centers when the leases expire.
Minimize total cost of ownership in data center and cloud computing operations.	Yes	Data center status, financial, and inventory data for the core data centers will be submitted to OMB through the PortfolioStat data call.	HHS will continue to strive to have the core data centers meet minimum OMB total cost of ownership (TCO) standards.
Identify, consolidate and migrate obsolete, underutilized and inefficient data centers to more efficient data centers or cloud providers; close unneeded data centers.	Yes	HHS will continue to evaluate our existing data center inventory to identify opportunities for consolidation and closure.	Currently, HHS has plans to close 12 additional data centers by the end of FY 2018. OMB is expected to give HHS an updated target number of closures as part of the Data Center Optimization Initiative Memo. HHS will work with its OPDIVs to determine how we will achieve this target.
Improve data center temperature and air-flow management to capture energy savings.	Yes	HHS facilities staff members have addressed this as part of the modernization of the core data centers that will not close.	HHS has already incorporated an elevated data center operating temperature as part of standard procedures in the HHS Data Center Management Policy. HHS will continue to review data center temperature and air-flow management and continue to address where possible.
Assign certified Data Center Energy Practitioner(s) to manage core data center(s).	No	Some OPDIVs are working to obtain new certified personnel and/or train existing personnel, but this is not a top 5 priority for FY 2017.	

Goal 10: Climate Change Resilience

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

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

In FY 2015, HHS progress on climate change strategies included:

- Promoted the [*Impacts of Climate Change on Human Health in the United States: A Scientific Assessment*](#) as part of the National Climate Assessment.
- Hosted Climate Justice Conference to provide environmental justice stakeholders an overview of recently released climate and health data and tools.
- Released HHS Climate Change and Health Communications and Outreach Strategy.
- Created HHS [website](#) on climate change and health.
- Released CDC and American Public Health Association's [Climate and Health fact sheets](#).
- Released CDC's technical guidance on [projecting climate-related disease burden](#).
- Updated the [Sustainable and Climate Resilient Health Care Facilities Initiative \(SCRHCFI\) Toolkit](#).
- Provided funding and technical assistance via [CDC's Climate and Health Program](#) to 16 states and two cities to investigate, prepare, and adapt to the health effects of climate change.
- Launched emPOWER Map to identify dependent Medicare beneficiaries who rely on electricity-dependent medical equipment and who may require rapid assistance during power outages.
- Promoted Extreme Heat Week as part of [PrepareAthon!](#) that released webinars and tools for community planners and public health officials to enhance community preparedness to extreme heat events. Information for at-risk populations was also included (e.g., athletes, workers, emergency responders, and seniors).
- Initiated the HHS/NIH Climate and Health Data Innovation Challenge Series as part of [Challenge.Gov](#). Each challenge improves our understanding of climate change's health impacts,

increases resilience to those impacts, or raises awareness of the linkages between actions that mitigate climate change and improve our health.

- Launched NIH/NIEHS [Climate Change and Environmental Exposures Challenge](#) for innovators to develop data visualization tools to connect current science on climate change to the exposure pathways for environmental hazards.
- Sponsored Children and Climate Change Policy Roundup under the President's Task Force on Environmental Health Risks and Safety Risks to Children to compile Federal, State, and Tribal policy actions to highlight during national Children's Health Month.

Climate Change Resilience Strategies

Strategy	Priority for FY 2017	Strategy Narrative (100 Word Limit)	Targets and Metrics
Strengthen agency <i>external</i> mission, programs, policies and operations (including grants, loans, technical assistance, etc.) to incentivize planning for, and addressing the impacts of, climate change.	Yes	Leverage NIH's Climate Resilience website to help grantees prepare for climate change.	NIH will revise grant language to promote use of HHS Climate Change Toolkits and recognize the need to plan for climate change.
Update and strengthen agency <i>internal</i> mission, programs, policies, and operations to align with the Guiding Principles, including facility acquisition, planning, design, training, and asset management processes, to incentivize planning for and addressing the impacts of climate change.	Yes	<p>Collaborate with HHS Staff Divisions (STAFFDIVs) and OPDIVs on adaptation planning, particularly climate vulnerability assessments.</p> <p>HHS will integrate climate resilience in all applicable sections of the latest update of the HHS Facilities Program Manual and HHS Facility Master Plan.</p> <p>NIH will develop an internal formal climate change plan (CCP) for NIH operations.</p>	<p>HHS will discuss adaptation planning and climate vulnerability assessments with STAFFDIVs/OPDIVs in 2016-2017.</p> <p>HHS will integrate climate resilience in the latest update of the HHS Facilities Program Manual and HHS Facility Master Plan guidance by December 31, 2016.</p> <p>NIH will identify stakeholders, hold initial planning meeting, identify regional climate change impacts, and develop goals for operational resilience, initial draft by Oct 2016. The CCP will also identify a process for setting new goals annually and reevaluate new climate change data.</p>
Update emergency response, health, and safety procedures and protocols to account for projected climate change,	Yes	The Office of the Assistant Secretary for Preparedness and Response (ASPR) will collaborate with all OPDIVs to revise COOP plans to	ASPR will address Continuity Of Operations Planning (COOP) for extreme weather identifying appropriate triggers

Strategy	Priority for FY 2017	Strategy Narrative (100 Word Limit)	Targets and Metrics
including extreme weather events.		<p>incorporate additional procedures for extreme weather events.</p> <p>ASPR will incorporate climate change issues into its health resilience promotion efforts.</p>	<p>to initiate proposed response</p> <p>ASPR will add climate change as key topic for National Community Health Resilience Coalition forum. ASPR will integrate climate change into ASPR equities planning undertaken by ASPR Integration of Health in Preparedness group.</p>
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	<p>NIH proposes to continue the climate change challenges to promote health-changing actions to mitigate climate change and extend the CCP to regional facilities.</p> <p>At CMS, the Center for Clinical Standards and Quality/ Survey and Certification Group plans to post a link to the Sustainable and Climate Resilient Health Care Facilities Initiative (SCRHCFI) toolkit.</p> <p>CDC's Climate and Health Program will continue to help support local and state public health agencies as they prepare for the effects of climate change on their populations.</p> <p>CDC/NIOSH has formally established a Climate Change Initiative to protect workers from the adverse impacts of climate change.</p>	<p>NIH's previously identified tools will be promoted through the website with new tools developed through the challenge. The NIH CCP will provide a framework that can be easily modified to each of the regional facilities.</p> <p>CMS will post a link to SCRHCFI toolkit in 2016-2017.</p> <p>CDC's Climate and Health Program plans to expand with the Climate-Ready Tribes and Territories Initiative and release technical guidance on health interventions for climate change.</p> <p>CDC/NIOSH will continue progress in the development of a strategic plan and research agenda and in raising awareness among stakeholders.</p>
Ensure that vulnerable populations potentially impacted by climate change are engaged in agency processes to identify measures addressing relevant climate change impacts.	Yes	<p>HHS will follow-up on the Climate Justice Conference.</p> <p>NIH/NIEHS will sponsor a Climate Change and Elderly Workshop.</p> <p>HHS participates in the Environmental Justice Interagency Working Group (EJ IWG) to develop an interdepartmental approach to climate change adaptation in environmental justice communities.</p>	<p>HHS will follow-up on the Climate Justice conference as needed.</p> <p>NIH/NIEHS has planned a Climate and Elderly Workshop for June 2017.</p> <p>HHS will continue to participate in the EJ IWG.</p>

Strategy	Priority for FY 2017	Strategy Narrative (100 Word Limit)	Targets and Metrics
Identify interagency climate tools and platforms used in updating agency programs and policies to encourage or require planning for, and addressing the impacts of, climate change.	Yes	HHS will update the SCRHCFI toolkits and related material in collaboration with the U.S. Global Change Research Program (USGCRP).	HHS will monitor and revise applicable toolkits and related material, as needed.