

# 2014



*US Department of Health and Human Services*

# **Strategic Sustainability Performance Plan**

**July 17, 2014**

## Contents

US Department of Health and Human Services .....	0
Sustainability Policy Statement .....	0
Executive Summary .....	1
<u>Vision</u> .....	1
Figure 1. Program Integration to Develop Sustainable & Resilient Communities.....	1
<u>Leadership</u> .....	2
<u>Summary of Agency Performance on Executive Order 13514 Goals</u> .....	2
Goal 1 – Greenhouse Gas (GHG) Reduction.....	2
Goal 2 – Sustainable Buildings.....	3
Goal 3 – Fleet Management.....	4
Goal 4 – Water Use Efficiency & Management .....	4
Goal 5 – Pollution Prevention and Waste Reduction.....	5
Goal 6 – Sustainable Acquisition.....	5
Goal 7 – Electronic Stewardship and Data Centers .....	6
Goal 8 – Renewable Energy .....	6
Goal 9 – Climate Change Resilience .....	7
Goal 10 – Energy Performance Contracts .....	7
<u>Progress on Administration Priorities</u> .....	8
<u>Evaluation of Previous Year’s Strategies</u> .....	9
<u>Table 1: Agency Size &amp; Scope</u> .....	18
GOAL 1 – GHG Reductions.....	18
<u>Agency Progress toward Scope 1 &amp; 2 GHG Goals</u> .....	18
Figure 1 -1 Scope 1 & 2 GHG .....	20
<u>Table 1-1: Goal 1 Strategies - Scope 1 &amp; 2 GHG Reductions</u> .....	20
<u>Table 1-1a: Additional Scope 1 &amp; 2 GHG Reduction Strategies Identified by CEQ that are Not a Top 5 HHS Strategy</u> .....	22
Figure 1 -2 Scope 3 GHG .....	23
<u>Table 1-2: Goal 1 Strategies - Scope 3 GHG Reductions</u> .....	23
<u>Table 1-2a: Additional Scope 3 Reduction Strategies Identified by CEQ that are Not a Top 5 HHS Strategy</u> .....	25
GOAL 2 – Sustainable Buildings .....	25
<u>Agency Progress toward Facility Energy Intensity Reduction Goal</u> .....	25
Figure 2-1 Energy Intensity Reduction.....	25
<u>Agency Progress toward Total Buildings Meeting the Guiding Principles</u> .....	26
Figure 2-2 Total Buildings Meeting Guiding Principles .....	27

<u>Table 2: Goal 2 Strategies – Sustainable Buildings</u> .....	27
<u>Table 2a: Additional Sustainable Buildings Strategies Identified by CEQ that are Not a Top 5 HHS Strategy</u> ....	28
GOAL 3 – Fleet Management .....	29
<u>Agency Progress toward Fleet Petroleum Use Reduction Goal</u> .....	29
Figure 3-1 Fleet Petroleum Use Reduction.....	30
<u>Agency Progress toward Fleet Alternative Fuel Consumption Goal</u> .....	30
Figure 3-2 Fleet Alternative Fuel Consumption .....	30
<u>Table 3: Goal 3 Strategies – Fleet Management</u> .....	31
<u>Table 3a: Additional Fleet Management Strategies Identified by CEQ that are Not a Top 5 HHS Strategy</u> .....	32
GOAL 4 – Water Use Intensity .....	32
<u>Agency Progress toward Potable Water Intensity Reduction Goal</u> .....	32
Figure 4-1 Potable Water Intensity Reduction.....	33
<u>Table 4: Goal 4 Strategies – Water Use Efficiency &amp; Management</u> .....	34
<u>Table 4a: Additional Water Use Efficiency &amp; Management Strategies Identified by CEQ that are Not a Top 5 HHS Strategy</u> .....	35
GOAL 5 – Pollution Prevention & Waste Reduction .....	36
<u>Agency Progress toward Pollution Prevention &amp; Waste Reduction</u> .....	36
<u>Table 5: Goal 5 Strategies – Pollution Prevention &amp; Waste Reduction</u> .....	38
GOAL 6 – Sustainable Acquisition .....	41
<u>Agency Progress toward Sustainable Acquisition Goal</u> .....	41
Figure 6-1 Sustainable Acquisition.....	41
<u>Table 6: Goal 6 Strategies – Sustainable Acquisition</u> .....	42
<u>Table 6a: Additional Sustainable Acquisition Strategies Identified by CEQ that are Not a Top 5 HHS Strategy</u> .....	42
GOAL 7 – Electronic Stewardship .....	43
<u>Agency Progress toward EPEAT, Power Management (PM) &amp; End of Life Goals</u> .....	43
Figure 7-1 EPEAT, PM, End-of-Life .....	43
<u>Table 7: Goal 7 Strategies – Electronic Stewardship &amp; Data Centers</u> .....	43
<u>Table 7a: Additional Electronic Stewardship &amp; Data Centers Strategies Identified by CEQ that are Not a Top 5 HHS Strategy</u> .....	44
GOAL 8 – Renewable Energy .....	44
<u>Agency Renewable Energy Percentage of Total Electricity Usage</u> .....	44
Figure 8-1 HHS Use of Renewable Energy as a Percentage of Electricity Usage (FY 2013 Goal: 7.5%).....	45
<u>Table 8: Goal 8 Strategies – Renewable Energy</u> .....	46
<u>Table 8a: Additional Renewable Energy Strategies Identified by CEQ that are Not a Top 5 HHS Strategy</u> .....	47
GOAL 9 – Climate Change Resilience .....	48

<u>Agency Climate Change Resilience</u> .....	48
<u>Table 9: Goal 9 Strategies – Climate Change Resilience</u> .....	50
<u>Table 9a: Additional Climate Change Resilience Strategies Identified by CEQ that are Not a Top 5 HHS Strategy</u> .....	51
GOAL 10 – Energy Performance Contracts .....	52
<u>Agency Progress toward Energy Performance Contracts</u> .....	52
Figure 10-1 Energy Performance Contracts .....	52
<u>Table 10: Goal 10 Strategies – Energy Performance Contracting</u> .....	53
<u>Table 10a: Additional Energy Performance Contracts Strategies Identified by CEQ that are Not a Top 5 HHS Strategy</u> .....	54
Appendix A: FY 2013 HHS Green Champions Winners .....	55
Appendix B: 2014 HHS Climate Change Adaptation Plan .....	77

# **US Department of Health and Human Services**

## **Sustainability Policy Statement**

**July 17, 2014**

When President Obama signed Executive Orders 13514 and 13653, he committed the Federal Government to take a leadership role in promoting sustainability and responding to the threats of climate change. The recently released Third National Climate Assessment highlighted the fact that climate change threatens human health and well-being in many ways. As such, the US Department of Health and Human Services (HHS) considers climate change to be one of the top public health challenges of our time, and we understand that our mission to protect the health and well-being of people in the United States depends in part on healthy and sustainable environments, both natural and man-made.

HHS has outlined a wide range of actions in the 2014 Strategic Sustainability Performance Plan and HHS Adaptation Plan to mitigate and prepare for the effects of climate change on human health. In particular, our Department's completion of the 2014 Strategic Sustainability Performance Plan reiterates our commitment to sustainability, the use of Environmental Management Systems and overall compliance with environmental, energy, and public health statutes, regulations, and Executive Orders. As the primary driver to climate change, HHS has made great strides in reducing our own Green House Gas emissions. We have made progress in conserving water and reducing waste. We also continue 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, educating and communicating the relationship between the health of our citizens and the health of our environment.

Through our past accomplishments and future commitments, we set the example of responsible stewardship and sustainable operations to support a healthier future for the American people.

As the Senior Sustainability Officer for HHS, I am committed to leading the way on implementation of sustainable practices, provision of climate-resilient health and human services, and support of scientific research focused on environmental and public health, including research on the effects of climate change on human health and well-being. The Strategic Sustainability Performance Plan demonstrates the actions HHS plans to take to promote sustainability across our Department and our accomplishments in the past fiscal year. We are committed to achieving the sustainability goal and targets set forth in this Plan.

E.J. Holland, Jr.  
Assistant Secretary for Administration  
HHS Senior Sustainability Officer

# Executive Summary

## Vision

The HHS Strategic Sustainability Performance Plan (SSPP) clearly and emphatically states HHS’ policy and intention to lead development and implementation of health-related sustainability goals across the federal government. The Department continues to update and adjust its approach to sustainability and climate resilience by shifting from an initial focus on the understanding of specific Executive Order (E.O.) 13514 goals, collect baseline data, and draft plans and milestones to a focus on the implementation of actions through the development of Sustainability Implementation Plans (SIPs) for its four land-holding divisions (FDA, CDC, NIH and IHS) and “Green Office Guides” for the non-landholding divisions. HHS also continues to update the [HHS Climate Change Adaptation Plan](#), a complementary document to the Strategic Sustainability Performance Plan that lays the foundation for adaptation and resilience efforts.

While HHS has made significant progress, the Department recognizes further integration is required between the Sustainability Strategic Performance Plan and our health and human service programs. HHS now has a more strategic, cross-cutting approach with a Sustainability Task Force, which includes the Operating Division Chief Sustainability Officers that works to incorporate health program leadership, grants and strategic planning experts, and experts on the health and infrastructure impacts of climate change.

HHS will continue its focus on a strategic implementation of sustainability actions through incorporation of sustainable practices in mission related initiatives. In addition to integrating sustainability concepts into internal and external policies and procedures, HHS will work to better educate its grantees on sustainability and climate resilience-related guidance and best practices and will build partnerships with complementary programs such as the National Prevention Strategy, Environmental Justice Strategy, Healthy People 2020, and others shown in Figure 1.

**Figure 1.**  
**Program Integration to**  
**Develop Sustainable &**  
**Resilient Communities**



## Leadership

The Assistant Secretary for Administration (ASA) serves as the HHS Senior Sustainability Officer (SSO) to lead and oversee all aspects of HHS' plan. The SSO's key partners and program champions are:

- Operating Division Chief Sustainability Officers
- Assistant Secretary for Health (ASH)
- National Institute of Environmental Health Sciences (NIH/NIEHS)
- Chief Acquisition Officer (ASFR/OGAPA)
- Chief Procurement Officer
- Chief Financial Officer (ASFR/OF)
- Chief Information Officer (OCIO)
- Senior Real Property Officer (ASA/PSC)

## Summary of Agency Performance on Executive Order 13514 Goals

### **Goal 1 – Greenhouse Gas (GHG) Reduction**

- *For Scope 1&2 GHG Reduction Target of 10.3% by 2020: 12.3% reduction in 2013 and on track*
- *For Scope 3 GHG Reduction Target of 3.3% by 2020: 16.6% reduction in 2013 and on track*

To achieve the HHS GHG reduction targets, HHS has focused on reducing energy use for Scope 1 & 2 GHG emissions and reducing employee travel for Scope 3 emissions. HHS has achieved the FY 2020 GHG emissions reductions goals for Scope 1 & 2 and Scope 3 emissions.

- In FY 2010, HHS established a Scope 1 & 2 GHG emissions reduction target of 10.3% by FY 2020 as compared to the FY 2008 baseline year. As of FY 2013, HHS has reduced Scope 1 & 2 GHG emissions by 12.3% when compared to FY 2008.
- In FY 2010, HHS established a target to reduce Scope 3 GHG emissions 3.3% by FY 2020 as compared to the FY 2008 baseline year. As of FY 2013, HHS has reduced Scope 3 GHG emissions by 16.6% when compared to FY 2008.
- Since FY 2010, HHS developed and maintained a Department-wide GHG inventory addressing Scope 1, 2, and 3 emissions in accordance with E.O. 13514 and Federal GHG Accounting and Reporting Guidance. HHS has also developed a Greenhouse Gas Inventory Management Plan to accompany the inventory.
- HHS made significant strides in FY 2013 in limiting assumptions and relying on actual data, particularly in Scope 3 reporting.
- In FY 2013, HHS has been assessing the use of the General Services Administration (GSA) Carbon Footprint Tool for GHG inventory reporting, and the Department will continue that assessment in FY 2014.
- HHS uses alternative financing contracts to implement large-scale facility energy efficiency upgrades.
- Per the December 2011 Presidential Memorandum, "Implementation of Energy Savings Projects and Performance-Based Contracting for Energy Savings," HHS committed to an estimated \$59.6M of alternative financing contracts. To date, \$40.9M has been awarded with another \$24M in the pipeline.

**Greenhouse Gases** - Gases that trap heat in the atmosphere. (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride)

**Scope 1** - Direct greenhouse gas emissions from sources that are owned or controlled by the federal agency.

**Scope 2** - Direct greenhouse gas emissions resulting from the generation of electricity, heat or steam purchased by the federal agency.

**Scope 3** - Indirect greenhouse gas emissions from sources not owned or directly controlled by a federal agency but related to agency activities, such as vendor supply chains, delivery services and employee travel and commuting.

With the extension of the President's Performance Contracting Challenge for another three years into 2016, HHS committed an additional \$27.8M in performance contracts. This will yield a total of \$92.7M of performance contracts implemented in six years.

- To lower Scope 3 GHG emissions by reducing employee commuting and travel, HHS is implementing Operating Division (OPDIV) specific initiatives that will increase participation in telework. CDC implemented the Telework Management System (TMS) in FY 2011 to centralize the tracking of employee participation, including the number of days participating per two-week period and employee commute mileage. CDC currently boasts as 42% employee participation rate in telework. Similar to the success seen at CDC, the National Institutes of Health (NIH) developed and implemented an online automated system for approving telework agreements, providing training to all employees who are telework-eligible as well as to their supervisors.

## Goal 2 – Sustainable Buildings

- *Only .73% of HHS facilities demonstrate compliance with Guiding Principles on new construction, major renovations, or leases; not on track to meet 15% goal by 2015*
- *Reduction of energy use intensity as compared by FY 2003: 19.6% and on track for 30% by FY 2015*

HHS has reduced energy intensity in its facilities, most of which are energy-intensive laboratories and medical facilities. The Department is on track to meet E.O. 13514 reduction mandates. However, HHS is lagging on the E.O. 13514 requirements that 15% of new, existing, and leased buildings be compliant with the [Guiding Principles for Federal Leadership in High-Performance and Sustainable Buildings](#) (“Guiding Principles”) by FY 2015, and will not meet this goal. The shortfall is not only due to lack of funding, but that it would not be fiscally responsible to spend mission funding renovating the many older facilities in the HHS inventory.

HHS will continue to investigate the link between the built environment and human health, explored in the groundbreaking, Health in Buildings Roundtable (HiBR) Conference, that included social and behavioral psychologists; researchers in toxicology, environmental medicine and public health; experts in architecture; and practicing physicians. Participants discussed aspects of the built environment that are detrimental to human health as well as design elements that can support improved human health, to create a foundation for establishing a new agenda for public health research and policy.

- HHS is on track to meet the energy use intensity reduction of 30% by FY 2015. As of FY 2013, HHS has reduced energy use intensity by 19.6% when compared to FY 2003. While HHS did not meet the FY 2013 goal of 24% reduction, significant investments were made in performance contracting which will assist HHS in achieving the energy use intensity reduction goal.
- HHS is not on track to meet the FY 2015 goal that 15% of new, existing, and leased buildings be compliant with the Guiding Principles. The 2013 goal is 9%; however, currently only 0.73% of HHS buildings comply. The goal to incorporate Guiding Principles into at least 9% of GSF of building inventory over 5,000 GSF was also not met. The HHS total for 2013 was 4.05%. The biggest obstacle to successfully incorporating the Guiding Principles into the existing inventory remains inadequate funding.
- NIH's new Porter Neuroscience Research Center, Phase II, LEED Gold certification is pending. It has been certified by Green Globes at the 3 Globes level.
- CDC's latest LEED certified project is Building 107 on the Chamblee campus, which is LEED Gold. CDC now has five LEED-certified buildings. Over 23% of CDC buildings meet or exceed the GP, based on total square feet of owned property.
- IHS completed 35 energy performance evaluations; completed 116 GHG inventories; and documented nearly 2,300 Guiding Principles conformance evaluations in Energy Star Portfolio Manager.
- FDA, using utility UESC's at the Pacific Region Laboratory in Irvine, CA, anticipates completion of their first owned, LEED certified facility.

### **Goal 3 – Fleet Management**

- *Reduction in fleet petroleum use compared to 2005: 42% and on track for 20% by 2015*

HHS has updated its Fleet Management Program to optimize the efficiency and effectiveness of fleet assets across the Department. With most of the fleet sustainability goals on track, HHS will be focused on ways to reduce and/or better align assets to meet the needs of the agency while saving money, mitigating risk, and minimizing the program's negative impact on the environment. HHS has reduced petroleum use and increased alternative fuel use in the fleet vehicles.

- In FY 2013 and early FY 2014, HHS actively engaged with GSA in a collaborative fashion that led to a more robust selection of replacement of gasoline powered leased vehicles. This action resulted in a significant increase in volume for both alternative fuel vehicles and high efficiency (low green-house gas emitting) vehicles, e.g., HHS increased inventory of Hyundai Sonatas 134 + high efficiency gasoline powered vehicles and will still reduce petroleum use well below targets.
- Reduced the volume of leased replacement vehicles from GSA. The Department embarked on an austerity program beginning in late FY 2012 and continuing through FY 2013. The result reduced ordinary sedan replacements on an annual basis by roughly 8%. That action resulted in a reduced vehicle footprint. It is anticipated that FY 2014 ending balance will be in the range of 4,320-4,400 vehicles in the inventory.
- Increased pilot programs involving plug-in Electric vehicles, e.g., two in HHS HQ and four in Atlanta at CDC.
- Placed alternative fuel vehicles in locations where alternative fuel is more readily available.

### **Goal 4 – Water Use Efficiency & Management**

- *Reduction in potable water intensity compared with 2007: 6.5% and not on track for 26% reduction by 2020.*

HHS continues to work toward the E.O. 13514 and Energy Independence and Security Act of 2007 (EISA) goals for water use efficiency and management.

- HHS has reduced water intensity by 6.5% in FY 2013, as compared to the baseline year of FY 2007. HHS did not meet the 12% reduction goal for FY 2013. The Department does not predict the ability to meet the FY 2020 goal of a 26% reduction as compared to FY 2007. HHS facilities are energy and water intensive facilities including laboratories, vivariums and hospitals that will impede the ability to make further significant water intensity use reductions.
- Significant strides were seen in FY 2013, as water use intensity was reduced by 6.2% from FY 2012 to FY 2013.
- A primary area of concern for HHS has been the inability to monitor usage accurately and at detailed levels. To address this challenge, OPDIVs have installed, and will continue in FY 2014, additional potable water meters at the building or major use level to monitor use, identify additional savings, and meet Guiding Principles goals. The Indian Health Service (IHS) will focus on xeriscaping landscaping, which incorporates indigenous plants and gardening in ways that reduce or eliminate supplemental water needs for irrigation.
- HHS OPDIVs have established a best practice to convert all open-loop chilled water systems to closed-loop, because laboratory and medical equipment typically make HHS facilities highly water-intensive.
- OPDIV facility managers understand the water use reduction opportunities inherent in laboratory and medical equipment, and they are developing standards and procurement specifications for this equipment. Projects such as installing water misers on autoclaves/sterilizers, employing condensate and blowdown recovery systems, and incorporating reclamation strategies will be emphasized for FY 2013 and beyond and will be analyzed as new ESPC energy conservation measures (ECMs).

## Goal 5 – Pollution Prevention and Waste Reduction

- *HHS has robust programs in place and is actively addressing all 11 pollution prevention and waste reduction goals, including:*
- *Divert at least 50% non-hazardous solid waste by 2015 (Goals 5b, 5c and 5h): As of FY 2013, HHS land-holding OPDIVs have diverted 22.2% of non-hazardous waste from landfills through robust recycling and composting programs (diversion to Waste to Energy is also robust in metro areas) and are making significant progress towards meeting the 50% reduction (diversion) goal by FY 2015.*
- *Divert at least 50% Construction and Demolition (C&D) materials and debris by FY 2015 (Goal 5d)” HHS is on track to meet the goal of 50% diversion of construction and demolition (C&D) debris by FY 2015.*

Examples of OPDIV successes and best management practices include:

- Recycling at the CDC is continuously improving with four additional labs being brought into the Lab Plastics Program. Training is being scheduled for participating labs to learn what can and cannot be recycled as a part of the program.
- The FDA decreased solid waste disposed of via landfills by over 26% in 2013 vs. 2012. Composting collection was added at two facilities in 2013, generating 39 tons of solid waste that was composted – there were zero tons of solid waste composted in 2011. FDA diverted 46.5% of C&D waste from landfill to recycling facilities in 2013 and decreased Chem/Rad waste generated by 46% in 2013 vs 2012.
- The NIH achieved an agency-wide recycling diversion rate of 48.5% for FY 2013, on-track to reach the 50% diversion by FY 2015. Also, the NIH achieved an agency-wide construction and demolition recycling diversion rate of 97.4%, exceeding the goal of achieving 50% diversion by 2015. One of the many overall pollution prevention strategies is the continual development of the Substances of Concern initiative for procurement officials.
- Waste reduction at IHS is an ongoing strategy with increased recycling at many IHS offices and healthcare facilities. The IHS Recycling Guidance Document was completed and distributed throughout the agency. All new IHS construction projects contracts must include a waste management control plan describing how the contractor will divert waste and debris. Pollution prevention is promoted on many fronts, as demonstrated by IHS continued committed to offering Vector Control – Integrated Pest Management training for facilities staff.

## Goal 6 – Sustainable Acquisition

- *HHS has achieved 93.5% of new contract actions including applicable sustainability requirements; HHS will continue outreach and verification efforts in order to meet the goal of 95%.*

To support sustainable acquisition, HHS issues 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 provides the acquisition workforce with sustainable acquisition training, focusing on biobased products, further supporting the inclusion of sustainability requirements in applicable contracts.

In FY 2014, the HHS Senior Procurement Executive will continue to represent HHS on the Federal Sustainable Acquisition and Materials Management (SAMM) Working Group and will continue engaging 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 Operating Division’s through the HHS’s Sustainable Green Procurement Workgroup.

- In FY 2013, 93.5% of HHS new contract actions included applicable sustainability requirements (based on a minimum 5% quarterly review of applicable contract actions).
- HHS has implemented various policies, training, and contract review strategies to achieve its sustainable acquisition goals per E.O. 13514.

- The HHS Office of Acquisition Program Support has been looking at leading indicators by reviewing Sustainable solicitations on FedBizOpps for both Sustainable clauses and Sustainable language in the Statement of Work.
- In FY 2014, HHS will provide OPDIVs with separate quarterly sustainability compliance rates based on the Federal Procurement Data System (FPDS) reporting elements. The Department will emphasize the importance of accurately reporting sustainability information in FPDS, with a target of increasing sustainability compliance rates in FPDS by 10% in FY 2015.

## Goal 7 – Electronic Stewardship and Data Centers

■ *As of FY 2013, HHS reported the following metrics on electronics stewardship requirements per E.O. 13524.*

- Electronic Product Environmental Assessment Tool (EPEAT) procurement is 98%.
- Energy Star and FEMP designated energy-efficient product procurement is 55%.
- Power management features enabled on applicable products is 92%.
- Duplex printing enabled products is 100%.
- Sound practices used for electronic product disposition is 100% of products.

HHS is currently on track at 98% for the procurement of EPEAT (Electronic Produce Environmental Assessment Tool) electronics and the proper disposal of electronics at end-of-life requirement. HHS is currently at 92% and did not meet the FY 2013 goal for 100% of electronics with power management features enabled.

HHS is tracking 226 facilities that meet the current OMB data center definition. Twenty-six of the data centers are designated as core data centers. To date fifty of the non-core data centers have closed. HHS has plans to close a total of 60 non-core data centers by the end of CY 2015. The closure of the additional non-core data centers by the end of CY 2015 will bring the HHS non-core data center closure rate to 30%. The status of the core data centers will be reported through the OMB PortfolioStat data call.

CDC has been advising other OPDIVs based on its own Power Management experiences, and sharing best practices regarding data center management and electronics stewardship. CDC's ITSO has implemented mandatory power management settings on all qualifying equipment for some time now, and recently added the Veridium Power Management software to extend their Power Management posture.

## Goal 8 – Renewable Energy

■ *Use of renewable energy as a percentage of total electricity consumption: 10.9% and on track with goal of 7.5% for FY 2013.*

The Energy Policy Act of 2005 required that in FY 2013 7.55% of an agency's total electricity consumed must come from renewable energy. In addition, at least half of the renewable energy must come from new sources, placed in service after 1999.

- HHS is on track to meet these requirements, with 10.9% of its electricity consumed coming from renewable electricity sources, including 3.75% from new sources (thermal, mechanical, or electric). This result exceeded the FY 2013 goal of 7.5%. For FY 2014, HHS will use at least 7.5% renewable energy as mandated. Most of the renewable energy is obtained through the purchase of Green power or Renewable Energy Credits (RECs), but on-site applications are utilized wherever possible.
- IHS will complete two hybrid systems consisting of a 50-kW wind generator and 10-kw photovoltaic system at the Pine Ridge and Rosebud Hospitals in FY 2014.
- In FY 2014, FDA will install a 130-kW roof mounted PV Power Generation System at the Irvine laboratory.

The Energy Independence and Security Act of 2007 (EISA) requires that 30% of the hot water demand in new Federal buildings (and major renovations) be met using solar hot water equipment, provided that it is life-cycle cost-effective. In FY 2014, FDA will complete the installation a solar water heating system for the primary heating of the domestic water system at the Muirkirk Road Complex.

## **Goal 9 – Climate Change Resilience**

- *HHS completes the HHS Climate Adaptation Plan, in accordance to Executive Order 13653, Preparing the Nation for the Impacts of Climate Change.*

When President Obama signed [Executive Order 13653](#) in November 2013, he committed “to prepare the nation for the impacts of climate change by undertaking actions to enhance climate preparedness and resilience.” In addition, [Executive Order 13514](#) requires each agency to evaluate the risks and manage the effects of climate change on agency operations and mission. Given our mission to protect the nation’s health and well-being, HHS issued a policy statement in the [HHS Climate Adaptation Plan](#) that recognized “climate change to be one of the top public health challenges of our time.”

The HHS Climate Adaptation Plan includes the following sections:

- Policy statement from the Secretary
- Vulnerability assessment of the effect of climate change on people and services
- Related current and future activities on people, services, and data.
- Description of internal HHS administrative operations and continuity of operations.

The HHS Climate Adaptation Plan complements the HHS Strategic Sustainability Performance Plan (SSPP). Subsequent progress and updates made to the HHS Climate Adaptation Plan will be captured in the SSPP annual report.

## **Goal 10 – Energy Performance Contracts**

HHS committed to implement \$35.2M of performance contracting by December 31, 2013 in accordance with the 2011 President’s Performance Contracting Challenge. By December 31, 2013, HHS had awarded \$40.9M in performance contracts exceeding the commitment by \$5.7M. An additional \$24M of contracts is currently in the pipeline, which yields a total commitment surplus of \$29.7M.

With the extension of the President’s Performance Contracting Challenge for another three years into 2016, HHS committed an additional \$27.8M in performance contracts. This will yield a total of \$92.7M of performance contracts implemented in six years.

FDA and NIH led HHS in the first round of performance contracts by awarding the \$40.9M. NIH awarded \$35.3M and FDA \$5.6M. NIH has the additional \$24M in the pipeline. CDC, NIH and OS will award the newly committed performance contracts. HHS energy and contract personal are working diligently to implement the contracts within the next three years.

## Progress on Administration Priorities

The Council on Environmental Quality (CEQ) has identified the following Administration Priorities:

Administration Priority	HHS Update
<b>Climate Change Adaptation Planning</b>	In accordance with Executive Order 13653, HHS has substantially revised and updated its <a href="#">Climate Change Adaptation Plan</a> to articulate its latest strategy and planned actions. See the Goal 9, Climate Change Resilience, section at the end of this plan.
<b>Fleet Management Planning</b>	HHS continues to review its Fleet Management Program to optimize the efficiency and effectiveness of fleet assets across the Department. With most of the fleet sustainability goals on track, HHS will be focused on ways to reduce and/or better align assets to meet the needs of the agency while saving money, mitigating risk, and minimizing the program’s negative impact on the environment.
<b>Energy Savings Performance Contracts</b>	Per the December 2011 Presidential Memorandum Committing the Federal Government to reduce energy consumption using alternative financing contracts, HHS committed to an estimated \$59.6M of alternative financing contracts. To date, \$40.9M has been awarded, with \$24M in the pipeline. An additional commitment of \$27.8M, per the extension of the challenge to 2016, will yield a total of \$92.7M of performance contracts implemented in six years.
<b>Biobased Purchasing Strategies</b>	<p>The HHS Biobased Purchasing Strategy focuses on fully incorporating requirements and clauses for biobased products in relevant and appropriate contracts, as well as monitoring activities to ensure compliance with these requirements. In FY 2013, HHS used data from biobased reporting elements in the Federal Procurement Data System (FPDS) as the primary metric to create agency-level reports on biobased compliance.</p> <p>HHS has identified impediments to accurate reporting of sustainability data and is focused on improving the accuracy of acquisition data as part of the larger Independent Verification and Validation (IV and V) effort. HHS has begun to incorporate data accuracy as part of various sustainability training sessions for contracting personnel. This effort will continue in FY 2014. The HHS Green Purchasing Lead continues to meet frequently with OPDIV Green Procurement Mangers, providing feedback on sustainability data accuracy and underscoring the importance of accurate reporting. HHS will provide OPDIV Heads of the Contracting Activity (HCAs) with quarterly sustainability compliance rates based on FPDS reporting elements, while continuing to emphasize the need to accurately report sustainability information in FPDS.</p>

## Evaluation of Previous Year's Strategies

<b>Goal</b>	<b>Strategy</b>	<b>Did you implement this strategy? Yes/No</b>	<b>Was the strategy successful for you? Yes/No</b>	<b>Will you use this strategy again next year? (Please explain in 1-2 sentences)</b>
<b>Goal 1: Scope 1&amp;2 GHG Reductions</b>	Use the FEMP GHG emission report to identify/target high emission categories and implement specific actions to resolve high emission areas identified	No, not a top 5 strategy	N/A	This is an ongoing effort, but was not identified as a top 5 strategy for this goal in the 2013 SSPP.
	Ensure that all major renovations and new building designs are 30% more efficient than applicable code	No, not a top 5 strategy	N/A	This is an ongoing effort, but was not identified as a top 5 strategy for this goal in the 2013 SSPP.
	Implement in EISA 432 covered facilities all lifecycle cost effective ECMs identified	Yes	Yes	HHS OPDIVs will continue to implement performance contracting ECMs from awarded contracts and work to enter into new contracts.
	Reduce on-site fossil-fuel consumption by installing more efficient boilers, generators, furnaces, etc. and/or use renewable fuels	Yes	Yes	Boiler plant improvements are scheduled for FY 2014 and renewable energy procurement will be prioritized.
	Reduce grid-supplied electricity consumption by improving/upgrading motors, boilers, HVAC, chillers, compressors, lighting, etc.	Yes	Yes	HHS OPDIVs will implement several projects in FY 2014 to reduce grid-supplied electricity, such as lighting, building envelope improvements, and chiller plant upgrades.
	Employ operations and management best practices for energy consuming and emission generating equipment	Yes	Yes	Training will continue to be a priority in FY 2014. Other best practices to be implemented include maintenance software tracking system, updated SOPs, automated controls upgrades, and retro-commissioning.
	Install building utility meters and benchmark performance to track energy and continuously optimize performance	Yes	Yes	The upgrade and installation of utility meters will continue to be a priority in FY 2014, as well as monitoring and analysis of the data.

Goal	Strategy	Did you implement this strategy? Yes/No	Was the strategy successful for you? Yes/No	Will you use this strategy again next year? (Please explain in 1-2 sentences)
<b>Goal 1: Scope 3 GHG Reductions</b>	Develop and deploy employee commuter reduction plan	No, not a top 5 strategy	N/A	This is an ongoing effort, but was not identified as a top 5 strategy for this goal in the 2013 SSPP.
	Reduce employee business ground travel	Yes	Yes	Align Division plans to integrated enterprise strategy. Aim is to link travel system tools to GHG reduction plans to lower ground travel emissions.
	Reduce employee business air travel	Yes	Yes	Focus on aligning Division plans to enterprise integrated strategy. Approach calls for use of travel system tools to reduce GHG emissions in air travel.
	Develop and deploy employee commuter reduction plan	Yes	Yes	Focus on integrating Division level plans into comprehensive HHS level plan.
	Use employee commuting survey to identify opportunities and strategies for reducing commuter emissions	Yes	Yes	2014 HHS Commuter Survey in Feb 2014. Results review through 2014. Linkage to EVS custom question.
	Increase number of employees eligible for telework and/or the total number of days teleworked	Yes	Yes	While HHS continues to expand the use of telework, some managers express concerns around the ability to conduct appropriate and effective performance management when telework options are in place. HHS will explore some of the main concerns faced by managers and provide necessary adjustments to policies were needed, revisions/additions to performance management training programs, and incorporation of technology solutions to address shortfalls.
	Develop and implement bicycle commuter program	No, not a top 5 strategy	N/A	This is an ongoing effort, but was not identified as a top 5 strategy for this goal in the 2013 SSPP.
	Provide bicycle commuting infrastructure	No, not a top 5 strategy	N/A	This is an ongoing effort, but was not identified as a top 5 strategy for this goal in the 2013 SSPP.

<b>Goal</b>	<b>Strategy</b>	<b>Did you implement this strategy? Yes/No</b>	<b>Was the strategy successful for you? Yes/No</b>	<b>Will you use this strategy again next year? (Please explain in 1-2 sentences)</b>
<b>Goal 2: Sustainable Buildings</b>	Incorporate green building specifications into all new construction and major renovation projects	Yes	Yes	These requirements are outlined in the NIH, CDC, IHS, and FDA design requirements for all new construction and major renovation projects. The strategy has contributed to higher IHS quality buildings and customer satisfaction.
	Redesign or lease interior space to reduce energy use by daylighting, space optimization, sensors/control system installation, etc.	Yes	Yes	The sustainability checklist is used by NIH, CDC, IHS, and FDA to the maximum extent possible for leases and renovations. Challenges remain with leased space and in daylighting in existing IHS health care facilities.
	Deploy CEQ's Implementing Instructions – Sustainable Locations for Federal Facilities	Yes	Yes	Implementing instructions are followed by GSA for new leases and are used in NIH master planning and space planning, CDC rehab and new construction projects, IHS Site Selection Evaluation Guideline.
	Include in every construction contract all applicable sustainable acquisition requirements for recycled, biobased, energy efficient, and environmentally preferable products	Yes	Yes	These requirements are outlined in the NIH DRM and in the sustainability checklist, which the NIH IPT reviews and insures are included and implemented. IHS has been successful in locations with recycling contractors. FDA's Sustainable Design Guidelines are provided to each contractor.
	Apply Health Considerations to Real Property Program	Yes	Yes	In 2014, NIH will issue new Healthy Building Guidelines to supplement its Design Requirements Manual. These guidelines will be applied to all new construction and renovation projects. The CDC Worksite Wellness Office coordinates all initiatives with real property programs.
	Develop own system of assessing, addressing, documenting and certifying Existing Buildings as meeting the Guiding Principles	No, not a top 5 strategy	N/A	This is an ongoing effort, but was not identified as a top 5 strategy for this goal in the 2013 SSPP.

Goal	Strategy	Did you implement this strategy? Yes/No	Was the strategy successful for you? Yes/No	Will you use this strategy again next year? (Please explain in 1-2 sentences)
<b>Goal 3: Fleet Management</b>	Optimize/Right-size the composition of the fleet (e.g., reduce vehicle size, eliminate underutilized vehicles, acquire and locate vehicles to match local fuel infrastructure)	Yes	Yes	HHS has collaborated with teams to remove barriers. Received cooperation from GSA for replacement fleet assets. Saving money while meeting objectives.
	Reduce miles traveled (e.g., share vehicles, improve routing with telematics, eliminate trips, improve scheduling, use shuttles, etc.)	Yes	Yes	HHS will have to introduce telematics to gain a better model of effective mileage statistics. HHS is implementing cost effective scaled fleet monitoring solutions while increasing performance through use of telematics and big data analytics.
	Acquire only highly fuel-efficient, low greenhouse gas-emitting vehicles and alternative fuel vehicles (AFVs)	Yes	Yes	HHS has collaborated with GSA to increase replacement units at a faster pace and at lower incremental cost going forward.
	Increase utilization of alternative fuel in dual-fuel vehicles	Yes	Yes	Collaborating with an HHS site where we have in-house fueling and will streamline as well as increase alternative fuel delivery. HHS is collaborating with FEMP to provide improved performance visibility.
	Use a Fleet Management Information System to track fuel consumption throughout the year for agency-owned, GSA-leased, and commercially-leased vehicles	No, not a top 5 strategy	N/A	This is an ongoing effort, but was not identified as a top 5 strategy for this goal in the 2013 SSPP.
	Increase GSA leased vehicles and decrease agency-owned fleet vehicles, when cost effective	Yes	Yes	HHS/ASPR reducing owned fleet at a level $\geq 20\%$ .
<b>Goal 4: Water Use Efficiency &amp; Management</b>	Purchase and install water efficient technologies (e.g., Waterwise, low-flow water fixtures and aeration devices)	Yes	Yes	HHS will continue to install water efficient technologies in performance contracting ECMs, and renovation projects.
	Develop and deploy operational controls for leak detection including a distribution system audit, leak detection, and repair programs	Yes	Yes	CDC will initiate and complete water use studies for several campuses in FY 2014. NIH performance contracts IGAs will include water conservation measures.
	Minimize outdoor water use and use alternative water sources as much as possible	No, not a top 5 strategy	N/A	This is an ongoing effort, but was not identified as a top 5 strategy for this goal in the 2013 SSPP.
	Design and deploy water closed-loop, capture, recharge, and/or reclamation systems	Yes	Yes	NIH will complete a grey water ECM analysis in FY 2014.

Goal	Strategy	Did you implement this strategy? Yes/No	Was the strategy successful for you? Yes/No	Will you use this strategy again next year? (Please explain in 1-2 sentences)
	Develop and administer outreach/awareness/training tools for scientists, building operating and maintenance staff, custodial staff, employees, and visitors.	Yes	Yes	OPDIVS will continue awareness and training efforts in FY 2014.
	Install advanced meters to measure and monitor (1) potable and (2) industrial, landscaping, and agricultural water use	Yes	Yes	CDC will continue to install advanced meters on individual buildings to better monitor water use. Meters will be incorporated into the building automation system to facilitate data collection.
<b>Goal 5: Pollution Prevention &amp; Waste Reduction</b>	Eliminate, reduce, or recover refrigerants and other fugitive emissions	No, not a top 5 strategy	N/A	This is an ongoing effort, but was not identified as a top 5 strategy for this goal in the 2013 SSPP.
	Environmental Audit Protocol	Yes	Yes	EA protocols continue to be recommended for IHS locations, CDC plans to integrate environmental and safety protocols, NIH and FDA have additional multi-media audits scheduled. This will not however, be a top 5 strategy.
	Reduce waste generation through elimination, source reduction, and recycling	Yes	Yes	HHS will issue a non-hazardous solid waste data call. Waste reduction and recycling are actively promoted and ongoing at numerous locations. Many OPDIVS hold promotional events such as Earth Day and America Recycles Day, as well as hold office drop and swaps, chemical reuse and recycling and mercury collection efforts.
	Implement integrated pest management and improved landscape management practices to reduce and eliminate the use of toxic and hazardous chemicals/materials	No, not a top 5 strategy	N/A	This is an ongoing effort, but was not identified as a top 5 strategy for this goal in the 2013 SSPP.

Goal	Strategy	Did you implement this strategy? Yes/No	Was the strategy successful for you? Yes/No	Will you use this strategy again next year? (Please explain in 1-2 sentences)
	EMS Metrics	Yes	Yes	This will not be a top 5 strategy for FY 2014. CDC and IHS will continue to support organizational EMS, NIH uses the EMS as the primary means to support sustainability goals and FDA is revamping its EMS through development of a full EMS for the White Oak Campus and a headquarters EMS.
	Establish a tracking and reporting system for construction and demolition debris elimination	Yes	Yes	Construction and demolition debris data will be requested in the solid waste data call. Construction contracts typically include clauses related to the diversion of C&D debris from landfills. Reporting varies by OPDIVs. Two out of four landholding OPDIVs exceed 90% C&D diversion rate.
	Develop/revise Agency Chemicals Inventory Plans and identify and deploy chemical elimination, substitution, and/or management opportunities	Yes	Yes	Proper management including chemical substitution is at the forefront of HHS strategies with leadership from NIH in the development and implementation of the Substances of Concern (SOC) list, which will promote less toxic alternatives in the procurement system. Mercury elimination and recovery continue to be a focus area.
<b>Goal 6: Sustainable Acquisition</b>	Update and deploy agency procurement policies and programs to ensure that federally-mandated designated sustainable products are included in all relevant procurements and services	Yes	Yes	HHS will update the Sustainable Acquisition Program Guide and policies to strengthen the applicable sustainability requirements.
	Deploy corrective actions to address identified barriers to increasing sustainable procurements with special emphasis on biobased purchasing	Yes	Yes	HHS will review sustainable solicitations on FedBizOpps for leading indicators such as missing clauses or sustainable language.
	Include biobased and other FAR sustainability clauses in all applicable construction and other relevant service contracts	Yes	Yes	HHS will issue guidance to the acquisition workforce reinforcing the need to include all applicable FAR sustainability clauses in construction and other relevant service contracts.

Goal	Strategy	Did you implement this strategy? Yes/No	Was the strategy successful for you? Yes/No	Will you use this strategy again next year? (Please explain in 1-2 sentences)
	Review and update agency specifications to include and encourage biobased and other designated green products to enable meeting sustainable acquisition goals	No, not a top 5 strategy	N/A	This is an ongoing effort, but was not identified as a top 5 strategy for this goal in the 2013 SSPP.
	Use Federal Strategic Sourcing Initiatives, such as Blanket Purchase Agreements (BPAs) for office products and imaging equipment, which include sustainable acquisition requirements	Yes	Yes	HHS will continue to utilize the FSSI BPAs, Multiple Award Schedule 75 for Office Supplies needs, etc. in FY 2015.
	Generate and disseminate agency level reports on sustainability compliance using data from sustainability reporting elements in the Federal Procurement Data System - Next Generation (FPDS-NG).	Yes	Yes	HHS will continue to provide OPDIV's with sustainability compliance rates based on FPDS reporting elements on a quarterly basis and reinforce the need to accurately report sustainability information in FPDS.
	Report on sustainability compliance in contractor performance reviews	No, not a top 5 strategy	N/A	This is an ongoing effort, but was not identified as a top 5 strategy for this goal in the 2013 SSPP.
<b>Goal 7: Electronic Stewardship &amp; Data Centers</b>	Identify agency "Core" and "Non-Core" Data	Yes	Yes	HHS will continue to perform annual assessments to ensure "Core" data centers are designated accurately.
	Consolidate 40% of agency non-core data centers	Yes	No	HHS will work to identify other consolidation opportunities.
	Optimize agency Core Data Centers across total cost of ownership metrics	Yes	Yes	HHS will continue to strive to have the core Data centers meet minimum OMB TCO standards.
	Ensure that power management, duplex printing, and other energy efficiency or environmentally preferable options and features are enabled on all eligible electronics and monitor compliance	No, not a top 5 strategy	N/A	This is an ongoing effort, but was not identified as a top 5 strategy for this goal in the 2013 SSPP.
	Update and deploy policies to use environmentally sound practices for disposition of all agency excess or surplus electronic products, including use of certified eSteward and/or R2 electronic recyclers, and monitor compliance	Yes	Yes	HHS will continue to deploy environmentally sound practices for many years. Vendors and resources have been identified in each Area.

<b>Goal</b>	<b>Strategy</b>	<b>Did you implement this strategy? Yes/No</b>	<b>Was the strategy successful for you? Yes/No</b>	<b>Will you use this strategy again next year? (Please explain in 1-2 sentences)</b>
	Ensure acquisition of 95% EPEAT registered and 100% of ENERGY STAR qualified and FEMP designated electronic office products	Yes	Yes	HHS will continue to acquire EPEAT registered Energy Star qualified and FEMP designated electronic office products.
<b>Goal 8: Renewable Energy</b>	Purchase renewable energy directly or through Renewable Energy Credits (RECs)	Yes	Yes	HHS will continue to purchase Green power and RECs in FY 2014 to meet requirements.
	Install onsite renewable energy on federal sites	Yes	Yes	HHS will install onsite renewable energy projects in FY 2014 through performance contracting and direct agency funding.
	Lease land for renewable energy infrastructure	No, not a top 5 strategy	N/A	This is an ongoing effort, but was not identified as a top 5 strategy for this goal in the 2013 SSPP.
	Develop biomass capacity for energy generation	No, not a top 5 strategy	N/A	This is an ongoing effort, but was not identified as a top 5 strategy for this goal in the 2013 SSPP.
	Utilize performance contracting methodologies for implementing ECMs and increasing renewable energy	Yes	Yes	FDA is installing three new solar systems as ECMs developed from its UESCs. NIH also anticipates renewable energy systems from ESPC assessments in progress. CDC UESC evaluations will include renewable energy projects.
	Increase renewable energy training for facility and energy personnel	Yes	Yes	HHS OPDIV facility and energy personnel will attend FEMP, local vendor and online renewable energy training to the maximum extent possible. Employee awareness in regards to renewable energy will be addresses through awareness events and newsletters.
	Work with other agencies to create volume discount incentives for increased renewable energy purchases	Yes	Yes	NIH and PSC will continue to work with DLA and GSA to purchase electricity under the bulk buy contracts.
<b>Goal 9: Climate Change Resilience</b>	Ensure climate change adaptation is integrated into both agency-wide and regional planning efforts, in coordination with other Federal agencies as well as state and local partners, Tribal governments, and private stakeholders	Yes	Yes	See the Goal 9, Climate Change Resilience, section at the end of this plan.
	Update agency emergency response procedures and protocols to account for projected climate change, including extreme weather events	Yes	Yes	See the Goal 9, Climate Change Resilience, section at the end of this plan.

<b>Goal</b>	<b>Strategy</b>	<b>Did you implement this strategy? Yes/No</b>	<b>Was the strategy successful for you? Yes/No</b>	<b>Will you use this strategy again next year? (Please explain in 1-2 sentences)</b>
	Ensure workforce protocols and policies reflect projected human health and safety impacts of climate change	No, not a top 5 strategy	N/A	This is an ongoing effort, but was not identified as a top 5 strategy for this goal in the 2013 SSPP.
	Update agency external programs and policies (including grants, loans, technical assistance, etc.) to incentivize planning for, and addressing the impacts of, climate change	Yes	Yes	See the Goal 9, Climate Change Resilience, section at the end of this plan.
	Ensure agency principals demonstrate commitment to adaptation efforts through internal communications and policies	Yes	Yes	See the Goal 9, Climate Change Resilience, section at the end of this plan.
	Identify vulnerable communities that are served by agency mission and are potentially impacted by climate change and identify measures to address those vulnerabilities where possible	No, not a top 5 strategy	N/A	This is an ongoing effort, but was not identified as a top 5 strategy for this goal in the 2013 SSPP.
	Ensure that agency climate adaptation and resilience policies and programs reflect best available current climate change science, updated as necessary	Yes	Yes	See the Goal 9, Climate Change Resilience, section at the end of this plan.
	Design and construct new or modify/manage existing agency facilities and/or infrastructure to account for the potential impacts of projected climate change	No, not a top 5 strategy	N/A	This is an ongoing effort, but was not identified as a top 5 strategy for this goal in the 2013 SSPP.
	Incorporate climate preparedness and resilience into planning and implementation guidelines for agency-implemented projects	No, not a top 5 strategy	N/A	This is an ongoing effort, but was not identified as a top 5 strategy for this goal in the 2013 SSPP.

**Table 1: Agency Size & Scope**

<b>Agency Size &amp; Scope</b>	<b>FY 2012</b>	<b>FY 2013</b>
Total Number of Full-Time Equivalents (Source: President's Budget)	74,193	77,186
Total Acres of Land Managed (Source: Automated Real Property Inventory System - ARIS)	6,271	5,888
Total Number of Buildings Owned (Source: ARIS)	2,744	2,725
Total Number of Buildings Leased (GSA and Non-GSA Lease) (Source: ARIS)	975	964
Total Buildings Gross Square Feet (GSF) (Source: ARIS)	53,305,853	54,434,929
Operates in Number of Locations Throughout U.S. (Source: ARIS)	1,034	961
Operates in Number of Locations Outside of U.S. (Source: ARIS)	34	13
Total Number of Fleet Vehicles Owned (Source: HHS GHG Inventory)	841	846
Total Number of Fleet Vehicles Leased (Source: HHS GHG Inventory)	4,055	3,832
Total Number of Exempted-Fleet Vehicles (Tactical, Law Enforcement, Emergency, Etc.) (Source: HHS GHG Inventory)	2,347	3,249
Total Amount Contracts Awarded as Reported in FPDS (\$Millions)	19,300	19,980

## **GOAL 1 – GHG Reductions**

### Agency Progress toward Scope 1 & 2 GHG Goals

HHS is on track to meet the Scope 1 & 2 GHG emissions reduction of 10.3% for FY 2020. As of FY 2013, HHS has reduced Scope 1 & 2 GHG emissions by 12.3% when compared to FY 2008. The largest reductions have been achieved in the reduction of purchased electricity and steam, as well decreases the mobile FAST emissions.

HHS OPDIVs continuously pursue energy reductions through everyday activities and planning. For the past two decades, the HHS Energy Program has lead and fostered actions and training to integrate energy efficiency into the performance of facility and energy management personnel. In recent years, the Energy Program has combined efforts with other offices under the HHS Go Green Get Healthy sustainability initiative. HHS has implemented successful projects using alternative financing and direct agency funding. Highlights for FY 2013 are described below.

CDC has taken many steps within the past year to ensure that equipment and processes are operating efficiently in a manner that reduces energy consumption and allows personnel to contribute to a reduction in emissions. To reduce energy use, CDC continues to make repairs and upgrades to its facilities on campuses nationwide. CDC continues to exceed mandated targets for energy reductions. Plans have been put into place to implement alternative financing projects to fund a substantial steam distribution project in Pittsburg, as well as a host of smaller projects in the Atlanta area, all geared to reduce energy use.

In FY 2013, FDA continued the use of UESC at two sites installing energy conservation measures (ECMs) and awarding new investment grade audits. Upgrades to existing equipment and infrastructure were completed such as purchase of high efficiency freezers, improvement of building envelop, upgrade of controls, building retro-commissioning, steam and boiler plant improvements, and lighting upgrades. FDA has active Green teams at all

FDA owned sites. The Green Teams increase awareness through outreach events, Green Bag lunches, the Internet and Intranet, training and workshops, communications from the CSO and energy manager, posters, and FDA's annual Earth Day celebrations at FDA owned and leased sites. In addition, FDA has increasing training as engineers and facility operations personnel are attending webinars and classes on energy/water conservation and renewable energy, including FEMP 1<sup>st</sup> Thursday, Green Gov, Lab 21, and other training as resources allow.

In FY 2013, IHS completed energy and water performance evaluations audits for covered facilities; calculated GHG emissions inventories for 116 IHS installations; and completed the Guiding Principles checklist in Energy Star Portfolio Manager for nearly 2,300 IHS-owned facilities. In addition, IHS funded numerous projects related to energy efficiency and the reduction of GHG emissions. Energy efficiency considerations were included in the planning stages for all IHS projects.

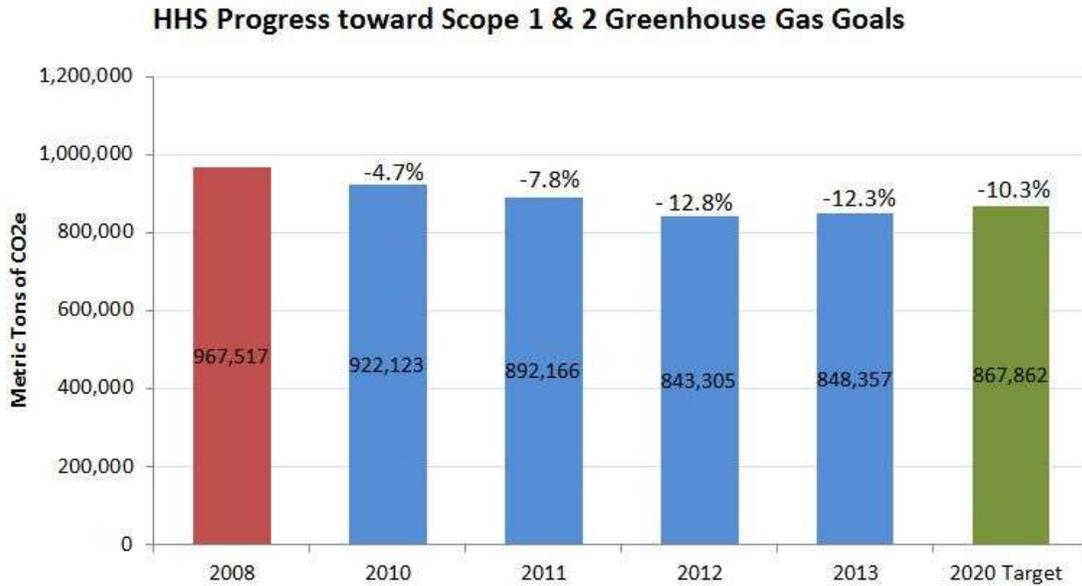
NIH signed \$34.3M of alternative financing in 2013. ECMs have been identified and design and construction has begun. NIH also completed a plug-load study in Building 6 on the Bethesda Campus using HHS Ignite funding. Lessons learned from study provided data on potential energy savings from turning off lab equipment when not in use. The study also demonstrated energy saving potential in right-sizing central ventilation equipment and the value of optimizing HVAC systems.

The PSC Parklawn Building continued a major renovation in FY 2013. The design will be submitted for a LEED Gold certification with a possible upgrade to Platinum. PEPCO utility rebates have been used by the building owner to install variable frequency drives (VFDs) on the large chilled water recirculation pumps and upgrade the domestic water pump design. PSC facility management has worked diligently with the design and construction team to ensure energy efficiency is paramount throughout the process.

HHS awarded seven HHS 2013 Green Champions Awards in the energy use efficiency and management category. The awards included the IHS Alaskan Native Tribal Health Consortium that partnered with local communities and tribal health corporations to develop and implement energy efficiency retrofits at 18 rural health clinics. The energy efficiency upgrades completed by this project are estimated to produce an operational cost savings of \$68,000 per year. Successful HVAC projects were recognized for CDC, FDA and PSC. Also awarded was the FDA MRC UESC project that consisted of mechanical, HVAC, electrical, solar, lighting, and water conservation ECMs that will reduce annual energy consumption by an estimated 12,249 MMBtu/year, greenhouse gas emissions by 539 tons/year CO<sub>2</sub> (equivalent to 106 passenger cars removed), and save \$252,095 per year.

The FDA Winchester Engineering and Analytical Center was recognized as a Green Champion for incorporating sustainability policies into daily operations thus achieving significant and quantifiable energy and greenhouse gas emission reduction requirements as outlined in Executive Orders 13423 and 13514 as well as meeting scope items 1 and 2 of Goal 1 of the HHS Strategic Sustainability Performance Plan. Areas targeted for evaluation were equipment performance and employee room-use trends. The data collected from these targets allowed WEAC to reduce purchased electric from 1,232,524 kWh in 2012 to 855,980 kWh purchased in 2013. This is an approximate 30% reduction in energy intensity.

**Figure 1 -1 Scope 1 & 2 GHG**



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

HHS Strategy to Achieve Goal	Strategy Narrative	Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
<p><b>Implement in EISA 432 covered facilities all lifecycle cost effective energy conservation measures (ECMs) identified.</b></p>	<p>HHS OPDIVs will work to implement ECMs in FY 2013. CDC inputs ECMs with a payback of 10 years or less into the Asset Business Plan for implementation and then prioritizes for installation based on specific CDC criteria and overall plan. ECMs will be based on most current covered facility evaluations. CDC, FDA and NIH are using alternative financing to implement ECMs. IHS is working to formulate a plan in FY 2014 to implement ECMs from audits completed in FY 2012.</p>	<ul style="list-style-type: none"> <li>• CDC Atlanta will initiate a UESC task order for an investment grade audit and select ECMs to install.</li> <li>• CDC Pittsburgh will initiate an ESPC.</li> <li>• FDA MRC will continue design and construction of UESC Phase 6, with 22 ECMs that includes lighting, water conservation, and renewable energy with 11032.2 MMBTU annual savings.</li> <li>• FDA Irvine will continue design and construction of UESC with 10 ECM that includes lighting, re-commissioning, window shading, controls, electrical distribution and 130-kW PV system.</li> <li>• FDA Jefferson Labs (JL) will perform a campus-wide audit.</li> <li>• FDA MRC Phase 7 investment grade will be completed by June 2014 and evaluated for ECM implementation.</li> <li>• NIH will continue design and construction of UESC/ESPC ECMs.</li> </ul>

<b>HHS Strategy to Achieve Goal</b>	<b>Strategy Narrative</b>	<b>Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months</b>
<b>Reduce on-site fossil-fuel consumption by installing more efficient boilers, generators, furnaces, etc. and/or use renewable fuels.</b>	HHS OPDIVs are currently purchasing RECs or Green power at or above the 7.5% requirement for FY 2014 and working toward the 10% requirement in FY 2015 per Presidential Memorandum. Renewable energy projects are planned for FY 2014. Several boiler plant upgrades are planned for the next year.	<ul style="list-style-type: none"> <li>• CDC will continue to purchase green power as available for Atlanta, Ft. Collins and Spokane campuses through Dec 2014.</li> <li>• CDC will incorporate new requirements from the recently released Presidential memorandum related to renewable energy into its energy purchases and plans.</li> <li>• FDA JL will replace a boiler in FY 2014.</li> <li>• FDA MRC will modify steam vent design for increased efficiency.</li> </ul>
<b>Reduce grid-supplied electricity consumption by improving/upgrading motors, boilers, HVAC, chillers, compressors, lighting, etc.</b>	HHS OPDIV Design and Construction contract guidelines include requirements for ongoing sustainable building practices, Energy Conservation, and Energy Star equipment selection. In addition, many HVAC upgrades are planned for FY 2014.	<ul style="list-style-type: none"> <li>• Apply Thermacote Coating to Roof Surface at CDC Chamblee Bldg. 109.</li> <li>• Replace Lighting with new LED type, and Controls in CDC Lawrenceville Building C.</li> <li>• Continue CDC Campus Loop for Chilled Water, Steam to Bldg. 103.</li> <li>• Connect Steam and Chilled Water CDC Bldg 109/105 from CUP.</li> <li>• Begin New CDC Atlanta Campus-wide initiative to replace existing Lighting with new LED type fixtures.</li> <li>• Initiate CDC Atlanta Expand Campus Loop Chilled usage Water in Bldg. 17 (remove existing remote chillers).</li> <li>• FDA JL Replacement of controls project 2&amp;3, bldg. 26.</li> <li>• FDA MRC Renovate Exterior windows and doors in service building.</li> <li>• FDA JL Replacement of 5 chillers in buildings 53 and 5.</li> <li>• FDA JL Replacement of controls project 4, 5 &amp; 6, bldg. 26.</li> <li>• FDA MRC Replace Computer room unit at Mod I.</li> <li>• FDA MRC will install instantaneous water heaters in the farm buildings.</li> <li>• FDA MRC Renovate 10 walk-in freezers.</li> </ul>

<b>HHS Strategy to Achieve Goal</b>	<b>Strategy Narrative</b>	<b>Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months</b>
<b>Employ operations and management best practices for energy consuming and emission generating equipment.</b>	HHS OPDIVs will focus on training and the use of improved building controls and retro-commissioning to improve energy efficiency of operations and maintenance.	<ul style="list-style-type: none"> <li>• FDA will increase training – currently engineers and facility operations personnel are attending webinars and classes on energy/water conservation and renewable energy, including FEMP, Green Gov, Lab 21, Tradelines, and other training as resources allow.</li> <li>• NIH plans to implement Maximo 7.5 software to assist in tracking maintenance on NIH Bethesda Campus Central Utility Plant (CUP) Assets and cogeneration plant, to improve energy efficiency.</li> <li>• Update Standard Operating Procedures (SOPs) for NIH Bethesda Campus CUP.</li> <li>• NIH will improve water treatment for chiller and boiler user through use of an automated system.</li> <li>• FDA BRF will complete retro-commissioning project.</li> <li>• FDA MRC controls upgrade by Jun 2015.</li> </ul>
<b>Install building utility meters and benchmark performance to track energy and continuously optimize performance.</b>	HHS OPDIVs will continue to install new meters for natural gas, steam, and potable water to track usage and monitor areas of improvement. Monitoring systems will continue to be fine-tuned for accuracy.	<ul style="list-style-type: none"> <li>• Compile data from NIH utility bills into a centralized system so that it can be analyzed for potential problems and potential greater efficiencies.</li> <li>• IHS will determine more efficient and accurate methods of metering and energy data collection.</li> <li>• IHS will install advanced electrical meters at remaining sites per IHS Metering Plan.</li> <li>• PSC Parklawn new data center will be separately metered and controlled.</li> </ul>

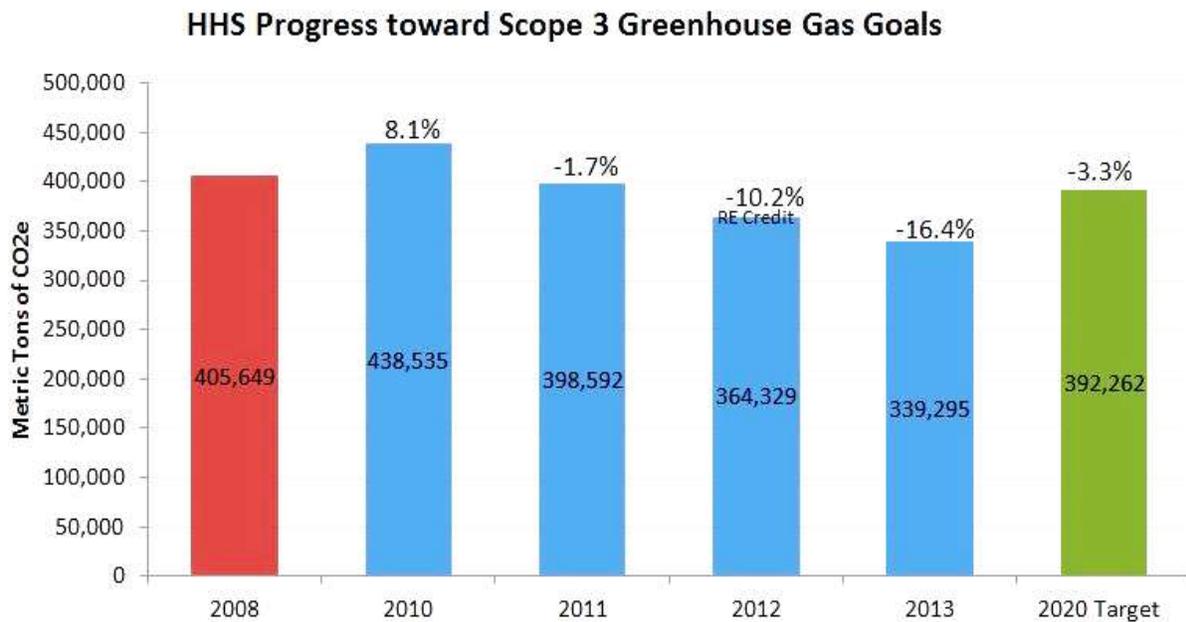
Table 1-1a: Additional Scope 1 & 2 GHG Reduction Strategies Identified by CEQ that are Not a Top 5 HHS Strategy

<b>CEQ Suggestion</b>	<b>HHS Response</b>
<b>Use the FEMP GHG emission report to identify/target high emission categories and implement specific actions to resolve high emission areas identified.</b>	HHS OPDIVs find the GHG emission report to be too high level to specifically highlight areas of reduction.
<b>Ensure that all major renovations and new building designs are 30% more efficient than applicable code.</b>	HHS OPDIVs will not be undertaking much new construction, and since this reduction is a mandate, it is not viewed to be a significant strategy.

## Agency Progress toward Scope 3 GHG Goals

HHS is on track to meet the Scope 3 GHG emissions reduction of 3.3% for FY 2020 as shown in Figure 1-2, *Scope 3 GHG*. HHS continues to make progress in the reduction of greenhouse gases related to employee travel and commuting. The below table illustrates that from 2012 to 2013 the levels of CO<sub>2</sub>e GHGs declined from 363,810 metric tons to 338,354 metric tons, or 7%. The largest reductions were seen in employee business ground and air travel as HHS offices are working hard to minimize travel and maximize the use of teleconferencing and video-conferencing for business meetings and transactions. Employee commuting decreased by 3.5%, which is a direct result of telework promotion within the HHS workforce. In January 2014, HHS administered the GSA Commuter Survey tool that yielded new information and data on employee commuting that will be used to focus efforts in 2014.

**Figure 1 -2 Scope 3 GHG**



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

HHS Strategy to Achieve Goal	Strategy Narrative	Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
<b>Reduce employee business ground travel.</b>	Currently there are efforts underway within the HHS Operating Divisions at the lower level units to develop and deploy employee business ground travel plans. Our HHS strategy in 2014 and forward is to review these Operating Division approaches to see where it makes sense to outline a more enterprise level approach. Since many of our Divisions travel to the same regional areas there are economies of scale that can be realized. We will also be exploring options to better understand our travel habits to seek ways in which to call upon technology solutions to reduce or eliminate needs for travel by ground.	<p>July – Oct 2014 Collect travel data. Review for economies of scale.</p> <p>Nov – Dec 2014 Outline travel reduction options for HHS.</p> <p>Jan – June 2015 Implement plans and collect data on usages. Review progress.</p>

<b>HHS Strategy to Achieve Goal</b>	<b>Strategy Narrative</b>	<b>Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months</b>
<b>Reduce employee business air travel.</b>	Currently there are efforts underway within the HHS Operating Divisions at the lower level units to develop and deploy employee business air travel plans. Our HHS strategy in 2014 and forward is to review these Operating Division approaches to see where it makes sense to outline a more enterprise level approach. Since many of our Divisions travel to the same regional areas there are economies of scale that can be realized. We will also be exploring options to better understand our travel habits to seek ways in which to call upon technology solutions to reduce or eliminate needs for travel by air.	<p>July – Oct 2014 Collect travel data. Review for economies of scale.</p> <p>Nov – Dec 2014 Outline travel reduction options for HHS.</p> <p>Jan – June 2015 Implement plans and collect data on usages. Review progress.</p>
<b>Develop and deploy employee commuter reduction plan.</b>	Currently there are efforts underway within the HHS Operating Divisions at the lower level units to develop and deploy employee commuter reduction plans. Our HHS strategy in 2014 and forward is to review these Operating Division approaches to see where it makes sense to outline a more enterprise level approach. Since many of our Divisions are situated in the same building or geographic area there are significant opportunities for us to set cross-division commuter options that multiple operating divisions can use such as: ride share, hoteling, and collective connections to existing mass transit options.	<p>July – Oct 2014 Assemble plans and review options.</p> <p>Nov – Dec 2014 Outline collective options for HHS.</p> <p>Jan – June 2015 Implement plans and collect data on usages. Review progress.</p>
<b>Use employee commuting survey to identify opportunities and strategies for reducing commuter emissions.</b>	The 2014 HHS Commuter Survey has provided a rich set of commuter data. Currently we are reviewing the data to distil patterns and themes in employees commuting. We also have a rich set of data from the 2013/2014 Employee Viewpoint Survey (EVS). The 2013/14 survey has a rich set of telework data that will be helpful to review in conjunction with the commuter survey data. Our strategy calls for bringing these data together in an enterprise review and work with the Operating Division partners in travel/commuting/teleworking offices to set for a comprehensive plan to reduce GHG in commuting.	<p>July – Oct 2014 Develop a comprehensive data report of commuter habits and opportunities for reduction.</p> <p>Nov – Dec 2014 Outline an HHS Commuter Reduction Action Plan at the HHS level.</p> <p>Jan – June 2015 Implement HHS and Operating Division plans and collect data on usages. Review progress.</p>
<b>Increase number of employees eligible for telework and/or the total number of days teleworked.</b>	HHS has made considerable progress in improving telework program and employee participation; although more work is needed. Efforts are underway to better understand the barriers (employees, supervisor / management, job/organizational, and technology) that keep us from fully actualizing a flexible workforce approach across HHS. Emphasis will be placed on supervisory/team training to set conditions for success. An OHR workshop for employees to develop optimal engagement and performance development plans, in collaboration with their supervisor, is being explored. EVS data is being reviewed by org unit to see where improvement is needed. Results to be linked to HRstat performance review process.	<p>July – Oct 2014 Revise OHR Telework Plan. Link to GHG data results.</p> <p>Nov – Dec 2014 Establish formal telework/GHG reduction orientation for telework coordinators across HHS.</p> <p>Jan – June 2015 Implement revised plans across HHS and collect data on GHG reductions. Review progress as part of HRstat performance reviews.</p>

Table 1-2a: Additional Scope 3 Reduction Strategies Identified by CEQ that are Not a Top 5 HHS Strategy

CEQ Suggestion	HHS Response
<b>Develop and implement bicycle commuter program.</b>	HHS action planning around this strategy for this period builds on work being within the Operating Divisions and at other agencies. However, this is the smallest component of employee commuting. HHS has recently worked with Capital Bikeshare to install a bike share station at the HHH Building in Washington D.C. to encourage bicycle commuting for the HHS HQ employees.
<b>Provide bicycle commuting infrastructure.</b>	HHS will work on this topic, but does not view this type of commuting option as the largest benefit to GHG reduction.

## GOAL 2 – Sustainable Buildings

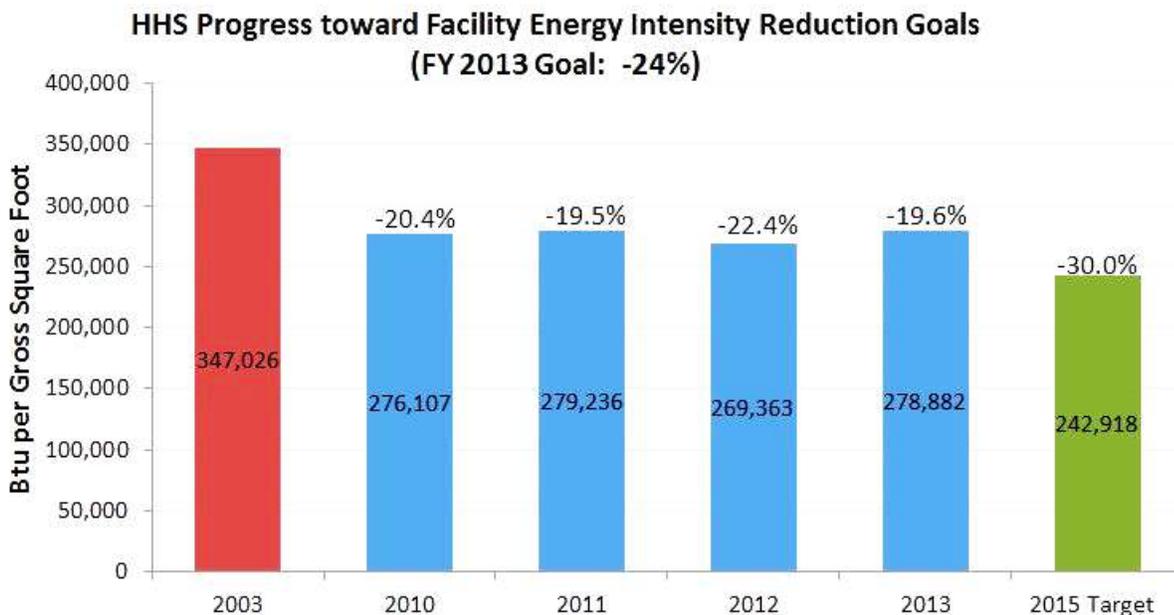
### Agency Progress toward Facility Energy Intensity Reduction Goal

HHS is on track to meet the energy use intensity reduction goal of 30% by FY 2015 as shown in Figure 2-1, *Energy Intensity Reduction*. As of FY 2013, HHS has reduced energy use intensity by 19.6% when compared to FY 2003. While HHS did not meet the FY 2013 goal of 24% reduction, significant investments were made in performance contracting which will assist HHS in achieving the energy use intensity reduction goal.

As described in the Goal 1 summary, *Scope 1 & 2 GHG Emissions Reductions*, HHS OPDIVs continue to pursue energy reductions in their everyday activities and planning. Most of the activities outlined in that goal area apply to the energy use intensity reduction of this goal area.

Whenever available, HHS OPDIVs use direct agency funding to install energy efficiency measures. Facility management personnel focus the operations and maintenance of HHS facilities to achieving energy savings through efficient operation.

**Figure 2-1 Energy Intensity Reduction**



## Agency Progress toward Total Buildings Meeting the Guiding Principles

E.O. 13514 requires that by FY 2015, 15 percent of agencies' new, existing, and leased buildings greater than 5,000 square feet meet the Guiding Principles. In order to meet the FY 2015 goal, agencies should have increased the percentage of conforming buildings by approximately 2 percent annually from their FY 2007 baseline. Currently, only 0.73% of the HHS facility inventory meets the goal, and therefore the agency will not meet the FY 2015 requirement. This goal shortfall is due in large part due to a lack of new construction projects at HHS. It would not be fiscally responsible to spend mission funding renovating the many 30 plus year old facilities in the HHS inventory in an attempt to meet this goal.

NIH's new Porter Neuroscience Research Center, Phase II, has been certified by Green Globes at the 3 Globes level. LEED Gold certification is pending. NIH uses ESPC (over \$35M) and UESC contracts as the primary mechanism for meeting the Guiding Principles.

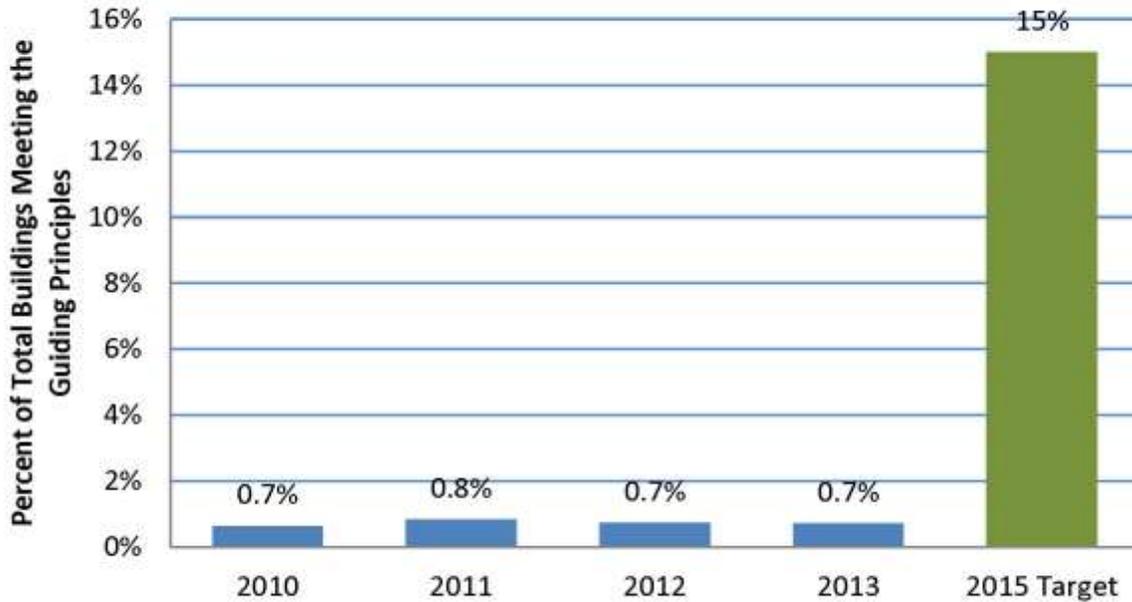
CDC continues its history of constructing LEED certified major capital projects, the latest being the LEED Gold Certified Building 107 on the Chamblee campus. CDC now has five LEED-certified buildings. Over 23% of CDC buildings meet or exceed the GP based on total square feet of owned property. CDC embeds GP-compliant features in all repair and improvement projects when feasible. The Building B project in Lawrenceville is projected to receive both LEED certification and GP compliant status.

IHS completed 35 energy performance evaluations; completed 116 GHG inventories; and documented nearly 2,300 Guiding Principles conformance evaluations in Energy Star Portfolio Manager. IHS calculated GHG emissions and completed GHG inventories for 116 IHS installations, and performed nearly 2,300 Guiding Principles evaluations in Energy Star Portfolio Manager. The Kayenta Staff Quarters Project is installing a solar hot water heating system to provide domestic hot water and contribute to the heating system. The Cheyenne River Health Center exceeded the 31% reduction in energy consumption from the Target Finder baseline with actual energy savings of 51% and total cost savings of \$188,000. Cheyenne River Staff Quarters were rated 55% to 61% more efficient than the 2004 IECC baseline during initial operation and achieved a HERS Index of 39-45.

FDA funding is inadequate to sustain the current condition of its facilities, which makes funding energy conservation projects difficult. However the FDA continues to make progress through the use of utility UESC's at the Pacific Region Laboratory in Irvine, CA. FDA anticipates a total annual energy cost reduction of approximately \$254,751 and a reduction in electric energy consumption of 5,018 MMBtu. Work, including energy conservation measures at the Irvine facility will result in the first FDA-owned LEED certified facility.

FDA's Muirkirk Road Complex (MRC), UESC Phase 3 project will have estimated annual savings of 8,137.55 MMBTU, with 8,764 kgal of water and 7020 kgal of sewer saving, saving \$306,441 annually with a simple pay back of 6.8 years. The MRC, UESC Phase 6 project will provide 11,032.2 MMBTU annual savings, 76.845 kgal water savings, and a \$143,706 annual cost savings with a simple pay back of 6.7 years. FDA funded the UESC without financing.

**Figure 2-2 Total Buildings Meeting Guiding Principles**



**Table 2: Goal 2 Strategies – Sustainable Buildings**

HHS Strategy to Achieve Goal	Strategy Narrative	Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
<b>Incorporate green building specifications into all new construction and major renovation projects.</b>	OPDIVs continue to update and incorporate green building specifications in construction projects	Sustainability-related chapters of the IHS Technical Handbook will be reviewed and updated.
<b>Redesign or lease interior space to reduce energy use by daylighting, space optimization, sensors/control system installation, etc.</b>	HHS OPDIVs complete redesigns to optimize energy efficiency. For example, the FDA UESC at Irvine Laboratory includes an interior lighting fixtures and DDC controls retrofit, retro-commissioning, roof-mounted solar photovoltaic power generation, and interior mechanical window shading and controls.	UESC/ESPC ECMs implemented at FDA and NIH through FY 2014.

<b>HHS Strategy to Achieve Goal</b>	<b>Strategy Narrative</b>	<b>Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months</b>
<b>Deploy CEQ's Implementing Instructions - Sustainable Locations for Federal Facilities.</b>	CDC's D&C Standards incorporate regional and local planning goals as part of the master planning and project planning process. Consideration is given to community connectivity, impact/access to public transportation and community, building orientation, on-site and off-site renewable energy sources, site hydrology, existing watersheds, local ecosystems, incorporation and maintenance of natural habitat, light trespass, air quality, reducing heat island effect, reducing waste, connection to community sidewalks, bike trails, and hiking trails.	Ongoing review and updating of requirements at all land-holding Operating Divisions. IHS will publish a new Site Selection Evaluation Guide.
<b>Include in every construction contract all applicable sustainable acquisition requirements for recycled, biobased, energy-efficient, and environmentally preferable products.</b>	Included in acquisition plans.	Ongoing review and updating of requirements at all land-holding Operating Divisions.
<b>Apply Health Considerations to Real Property Program</b>	NIH guidelines will be applied to all new construction and renovation projects. CDC Worksite Wellness Office coordinates all initiatives with real property programs.	In 2014, NIH will issue new Healthy Building Guidelines to supplement its Design Requirements Manual.  CDC Worksite Wellness Office will continue ongoing effort.

Table 2a: Additional Sustainable Buildings Strategies Identified by CEQ that are Not a Top 5 HHS Strategy

<b>CEQ Suggestion</b>	<b>HHS Response</b>
<b>Develop and deploy energy and sustainability training for all facility and energy managers.</b>	While training will continue for all facility and energy managers, it will not be a primary strategy.

## GOAL 3 – Fleet Management

### Agency Progress toward Fleet Petroleum Use Reduction Goal

HHS has surpassed the petroleum use reduction targets of 20% reduction by FY 2015 as shown in Figure 3-1, *Fleet Petroleum Use Reduction*. The FY 2005 baseline was 2.04M gasoline gas equivalent (GGE), and FY 2013 saw a total of 1.2M GGE for a decrease of 42%.

Successful Best Practices:

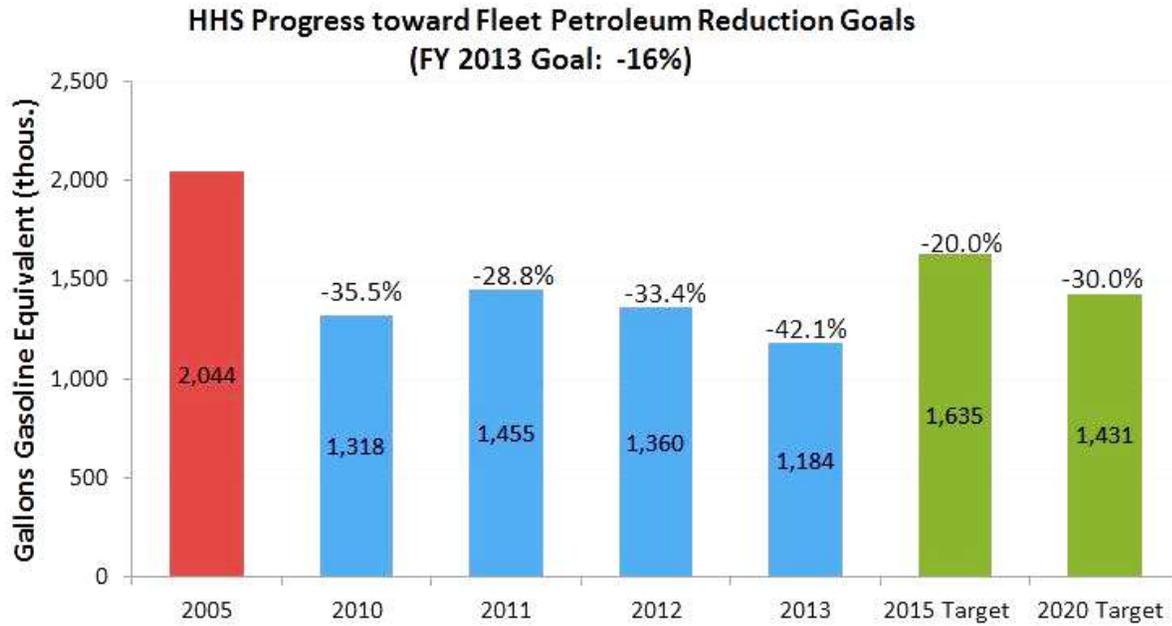
- In FY 2013 and early FY 2014, HHS actively engaged with GSA in a collaborative fashion that led to a more robust selection of replacement of gasoline powered leased vehicles. This action resulted in a significant increase in volume for both alternative fuel vehicles and high efficiency (low green-house gas emitting) vehicles, e.g., HHS increased inventory of Hyundai Sonatas 134 + high efficiency gasoline powered vehicles and will still reduce petroleum use well below targets.
- Reduced the volume of leased replacement vehicles from GSA. The Department embarked on an austerity program beginning in late FY 2012 and continuing through FY 2013. The result reduced ordinary sedan replacements on an annual basis by roughly 8%. That action resulted in a reduced vehicle footprint. It is anticipated that FY 2014 ending balance will be in the range of 4,320-4,400 vehicles in the inventory as shown in the table below.

**Estimated Total Fleet Count in FY 2014**

	Actual FY13	Estimated Plan FY14	Ratio	Change Statistics	
				Delta	% Change
GSA Leased	3,830	3,537	81.87%	(293)	-6.27%
Owned	846	781	18.08%	(65)	-1.38%
Com Lease	2	2	0.04%	(0)	0.00%
	<b>4,678</b>	<b>4,320</b>	<b>100.00%</b>	<b>(358)</b>	<b>-7.65%</b>

- Increased pilot programs involving plug-In Electric vehicles, e.g., two in HHS HQ and four in Atlanta at CDC.
- Convinced HHS Operating and Staff Divisions to share vehicles.
- Placed alternative fuel vehicles in locations where alternative fuel is more readily available.

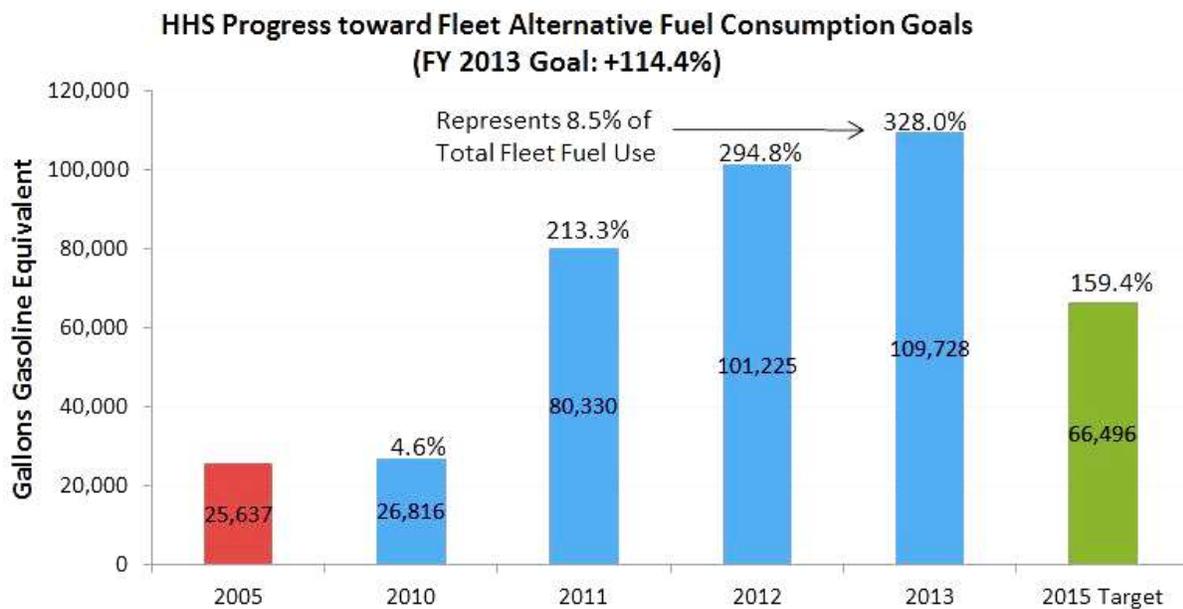
**Figure 3-1 Fleet Petroleum Use Reduction**



Agency Progress toward Fleet Alternative Fuel Consumption Goal

HHS also exceeds alternative fuel volume increase targets as the ethanol baseline of 25.6K GGE has increased by 328% to 109.7K GGE in FY 2013 as shown in Figure 3-2, *Fleet Alternative Fuel Consumption*.

**Figure 3-2 Fleet Alternative Fuel Consumption**



**Table 3: Goal 3 Strategies – Fleet Management**

<b>HHS Strategy to Achieve Goal</b>	<b>Strategy Narrative</b>	<b>Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months</b>
<b>Optimize/Right-size the composition of the fleet (e.g., reduce vehicle size, eliminate underutilized vehicles, acquire and locate vehicles to match local fuel infrastructure).</b>	HHS is reviewing its Fleet Management Program to optimize the efficiency and effectiveness of fleet assets across the Department. With most of the fleet sustainability goals on track, HHS will be focused on ways to reduce and/or better align assets to meet the needs of the agency while saving money, mitigating risk, and minimizing the program’s negative impact on the environment.	Target FY 2014 vehicle total to be in the range of 4,320 ± 5%.
<b>Use a Fleet Management Information System to track fuel consumption throughout the year for agency-owned, GSA-leased, and commercially-leased vehicles.</b>	Begin detailed, funding and development of an enhanced HHS Motor Vehicle Management System (MVMIS) that is compliant and optimizes existing software married (via interface) to modern more agile commercial solutions.	Target start Q2 FY 2015.
<b>Acquire only highly fuel-efficient, low greenhouse gas-emitting vehicles and alternative fuel vehicles (AFVs).</b>	HHS will create a matrix model of optimized vehicle selections detailing low greenhouse gas and highly efficient gasoline fleet units. Op/Staff Divisions will be empowered to select the best alternatives and incorporate cost efficiencies (e.g., stabilized incremental cost) and flexible choices to fit unique HHS mission specific needs.	Review and confirm acquisition actuals quarterly per Op/Staff Division - quarterly. Compare anticipated delivered quantities of selected fleet units with a clearly delineated (consolidated) HHS acquisition plan per Op/Staff Division.
<b>Increase utilization of alternative fuel in dual-fuel vehicles.</b>	HHS HQ and all affected Operating/Staff Divisions are utilizing a Federal Energy Management Program (FEMP) fleet alternative fuel use optimization and "missed opportunities" model. This tool captures all HHS leased and owned fuel use vs. alternative fuel decisions (go or no go) and tracks the results for each HHS Op/Staff Division, down to the fleet unit level. Increase training, exposure and auditing of alternative fuel change results.	Target = 150,000 to 175,000 gasoline equivalents by mid year 2015
<b>Increase GSA leased vehicles and decrease agency-owned fleet vehicles, when cost effective.</b>	Redistributing and/or placing underutilized vehicles in the GSA Xcess pool.	90 days after completion of the FY 2014 GSA replacement cycle deliveries, return 10% of the GSA Leased fleet with lowest utilization score.

**Table 3a: Additional Fleet Management Strategies Identified by CEQ that are Not a Top 5 HHS Strategy**

CEQ Suggestion	HHS Response
<b>Reduce miles traveled (e.g., share vehicles, improve routing with telematics, eliminate trips, improve scheduling, use shuttles, etc.).</b>	HHS will continue to implement a comprehensive approach to reduce costs and footprint through various HHS travel, telework, training, and fleet management guidance.

## **GOAL 4 – Water Use Intensity**

### **Agency Progress toward Potable Water Intensity Reduction Goal**

HHS has reduced water intensity by 6.5% in FY 2013 as compared to the baseline year of FY 2007. HHS did not meet the 12% reduction goal for FY 2013, but significant strides were seen in FY 2013, as water use intensity was reduced by 6.2% from FY 2012 to FY 2013. HHS will not be able to meet the FY 2020 goal of a 26% reduction as compared to FY 2007. HHS facilities are energy and water intensive facilities including laboratories, vivariums and hospitals that will impede the ability to make further significant water intensity use reductions.

Metering and monitoring has been a focus for HHS, especially at CDC. CDC continues to hold CDC Roybal Campus water use intensity mitigation meetings, involving leadership, facilities, sustainability and quality personnel, to determine the potential for reduction of water consumption on the Roybal campus. Efforts are being focused on heaviest consumers.

The CDC task force responsible for this effort has also embarked on an aggressive communication campaign in order to raise awareness that distributes monthly water usage assessments and estimated costs to consumers by building, emails to leadership, and flyers and announcements for general employees. Water meters are in place at each building on the Roybal campus, and data collection is giving CDC data at a much greater level of detail than was available previously.

CDC is also undergoing a study to identify the root of consumption and expected to generate a feasible and acceptable course of action for water use reduction. This study, and its near-million-dollar price tag, and campus wide, yet detailed scope of work demonstrates the agency’s commitment to do what it takes to reduce our water consumption.

In FY 2013, FDA MRC worked on the design and construction of three UESC water ECMs with water savings of 76,845 Kgal/year and energy savings of 850 MMBtu. FDA MRC also replaced existing 1.0 and .5 gallon urinals with pint flush urinals and valves, completed a boiler blowdown project to recover heat and conserve water, recovered once through cooling coil water for use in fish tanks and installed low flow faucets in all laboratory sinks. FDA WEAC installed three advance water meters, and San Juan replaced three leaking water storage tanks with new tanks and piping.

As part of the Sustainability Audits, IHS completed water conformance evaluations at the 27 “covered facilities” and eight sites that are not considered covered facilities but that have at least one building over 50,000 GSF. The Sustainability Audits identified water conservation measures (WCMs) and strategies that will improve water efficiency and reduce potable water consumption at IHS facilities in a fiscally responsible manner. Examples include installing water saving products, such as aerators and low-flow toilets; and utilizing Xeriscaping and water-

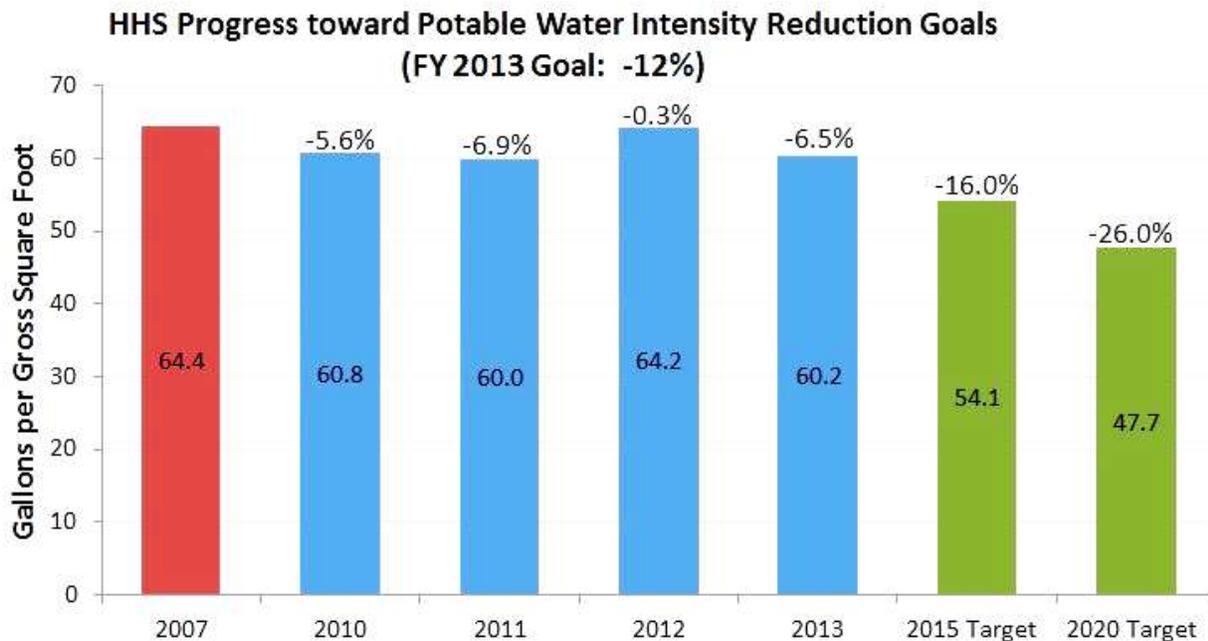
efficient landscaping techniques. In addition, IHS requires all new construction projects to reduce water consumption by 20 percent in accordance with LEED new construction requirements.

In 2013, NIH awarded of over \$35M of ESPC and UESC contracts that included several water conservation measures. NIH is still in the investment grade audit phase of an additional \$5M multi-building project, and continues to work on implementation of a \$19M project at National Cancer Institute at Frederick. Additionally, a new ECM has been identified for follow on activities and potential change order at our Research Triangle Park location. This ECM will use grey water from a nearby municipal waste water treatment plant for make-up water for NIH cooling towers.

As part of the LEED platinum renovation to the PSC Parklawn Building, the new design incorporates low flow/maintenance plumbing fixtures. The fixtures being installed include 1.28 GPM toilets, .125 GPM high efficiency urinals and Hands free Toto self-generating ecopower system faucets utilizing less than 0.17 gallons per cycle. A hydro-powered turbine charges the power supply during usage eliminating the need for battery replacement or consumption of external electrical power for up to 10 years in Parklawn. All landscaping water has been removed from the Parklawn Building, and potable water and cooling towers are separately metered.

HHS awarded five HHS 2013 Green Champions Awards in the water use efficiency and management category. The awarded projects included an autoclave project to change from a once through domestic water to a chilled water circulation system, a laboratory equipment project that replaced the need for water in one of the most common analyses in the lab, an extensive IHS water meter replacement project that installed data transmitting meters to facilitate remote monitoring/reading, and an IHS improved individual wastewater disposal system project.

**Figure 4-1 Potable Water Intensity Reduction**



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

<b>HHS Strategy to Achieve Goal</b>	<b>Strategy Narrative</b>	<b>Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months</b>
<p><b>Purchase and install water efficient technologies (e.g., Waterwise, low-flow water fixtures and aeration devices).</b></p>	<p>Low flow fixtures are considered and installed at all sites and in all projects with water conservation measures. Most HHS facilities have completed this and are now investigating specialty equipment, particularly for labs.</p>	<ul style="list-style-type: none"> <li>• FDA MRC will complete design and construction of three UESC water ECMs with water savings of 76,845 kgal/year.</li> <li>• NIH will begin design and construction for UESC/ESPC projects awarded in 2013.</li> <li>• New Parklawn Building design will incorporate low flow/maintenance plumbing fixtures.</li> <li>• Oversee the construction of the Parklawn green roof that will sequester the water on the P4 roof.</li> </ul>
<p><b>Develop and deploy operational controls for leak detection including a distribution system audit, leak detection, and repair programs.</b></p>	<p>HHS facility leak detection plans include frequent visual inspections (daily/weekly) and quarterly in-depth inspections. Sites monitor meter readings and consumptions for unusual use spikes.</p>	<ul style="list-style-type: none"> <li>• CDC will complete a \$900k project "CDC Roybal Campus Water Use Study" and internal evaluation of identified water reduction strategies.</li> <li>• CDC will award/initiate facility project "Conduct Energy &amp; Water Audits Cincinnati Morgantown Spokane Fort Collins San Juan"</li> <li>• NIH investment grade audit phase of an additional \$5M multi building project at NIH Bethesda, and implementation of a \$19M project at National Cancer Institute at Frederick will include water measures.</li> <li>• PSC Parklawn Building facilities management checks maintenance logs and service log to ensure a quick turn around on any reported leaks. Inspect repairs to ensure they were done correctly. Inspect construction area to ensure they are not using Government water.</li> </ul>
<p><b>Design and deploy water closed-loop, capture, recharge, and/or reclamation systems.</b></p>	<p>HHS OPDIVs have established a best practice to convert all open loop chilled water systems to closed loop. OPDIVs are installing water misers on autoclaves/sterilizers and employing condensate and blow-down recovery systems. Reclamation systems will be highlighted in new ESPC ECMs.</p>	<p>NIH will complete the analysis of an ECM that will use grey water from a nearby municipal waste water treatment plant for our cooling towers. If the results of the analysis are positive, we will add this project into the ESPC already in progress.</p>

<b>HHS Strategy to Achieve Goal</b>	<b>Strategy Narrative</b>	<b>Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months</b>
<b>Install advanced meters to measure and monitor industrial, landscaping, and agricultural water use.</b>	HHS OPDIVs will focus on installing additional potable water meters at the building or major use level to monitor use, identify additional savings, and meet Guiding Principles goals.	CDC will continue installation of domestic water meters on individual buildings as appropriate and incorporate meters into building automation systems for easier data collection. Atlanta campuses are currently approaching completion, with San Juan and Morgantown to follow.
<b>Develop and implement programs to educate employees about methods to minimize water use.</b>	HHS will continue efforts on outreach and water efficiency awareness efforts to improve employee participation. The upcoming year will focus on identifying online training for key focus groups.	<ul style="list-style-type: none"> <li>• CDC Roybal Campus will continue water reduction communications campaign, including monthly water usage assessments and announcements.</li> <li>• Building 23 vivarium water usage reduction initiative</li> <li>• OPDIVs will increase awareness through Green Teams; outreach events; Intranet; training and workshops; communications from the CSO and energy manager; internal TV messages, and annual Earth Day celebrations.</li> <li>• Continue to attend webinars and classes on energy/water conservation and renewable energy, including FEMP, Green Gov, Lab 21, and other training as resources allowed.</li> </ul>

Table 4a: Additional Water Use Efficiency & Management Strategies Identified by CEQ that are Not a Top 5 HHS Strategy

<b>CEQ Suggestion</b>	<b>HHS Response</b>
<b>Minimize outdoor water use and use alternative water.</b>	HHS OPDIVs have eliminated potable water use for landscaping, except for IHS. IHS will focus on implementing Xeriscaping at sites in the next 12 months.
<b>Prepare and implement a water asset management plan to maintain desired level of service at lowest life cycle cost.</b>	HHS OPDIVs are currently working to establish water baselines and analyses to implement savings projects. HHS views the development of a water asset management plan as the next phase of water use efficiency and management.
<b>Assess agency water strategy to determine the impact of water use on the agency's energy use and efficiency.</b>	HHS OPDIVs are working toward this strategy as a future action.

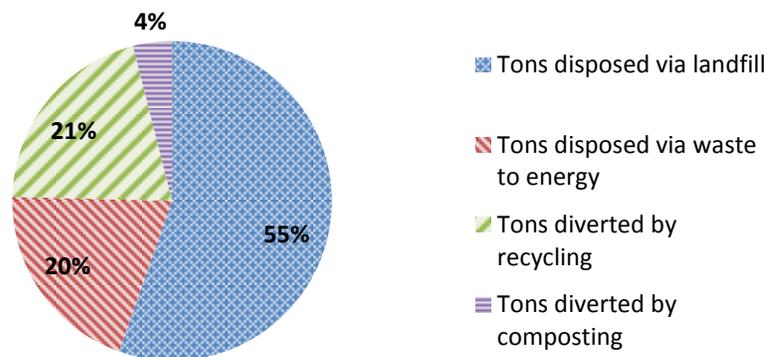
# GOAL 5 – Pollution Prevention & Waste Reduction

## Agency Progress toward Pollution Prevention & Waste Reduction

The pie chart below is a representative snapshot of HHS waste generation for FY 2013 Landholding Operating Divisions owned and operated facilities. (Data for NIH, CDC, and FDA was current for FY 2013; data for IHS and OS tracked facilities was from FY 2012.) These facilities produced 23,906 tons of waste, and of that waste 13,238 tons were disposed of through landfills, 4,790 through waste to energy, 4,937 through recycling, and 942 through composting for a diversion rate of 24.6%. While HHS as a Department has not met the diversion target of 50% set for FY 2015, many Operating Divisions are well on their way to meeting this target.

### 5-1. HHS Non Hazardous Solid Waste FY 2013

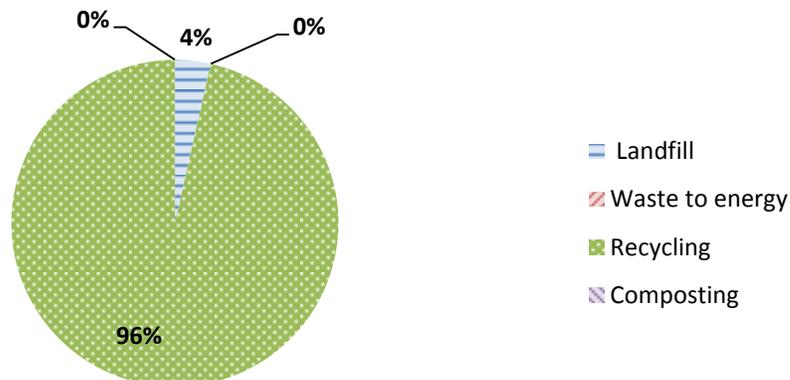
Total Waste: 23905.7 Tons  
 Diversion Rate: 24.6%



HHS Landholding Operating Divisions (CDC, NIH, FDA and IHS) reported disposal of 123,579 tons of C&D waste in FY 2013 with a diversion rate of 96.5%. (IHS data from FY 2012)

### 5-2. HHS C&D Waste FY 2013

Total Waste: 123,579 Tons  
 Diversion Rate: 96.5%



The Environmental Stewardship category of the Green Champion Awards recognizes efforts in pollution prevention, source reduction, solid waste diversion, environmental compliance, effective and innovative implementation of Environmental Management Systems (EMSs), sustainability outreach and communications, and organization or activities of Green Teams that have demonstrated exceptional commitment and effort to further the sustainability and environmental goals of E.O. 13423 and E.O. 13514 and the HHS SSPP. There were a total of 22 Green Champion nominations in the Environmental Stewardship Award Category from 5 operating divisions and the Office of the Secretary. The resulting 6 winners came from the NIH, FDA, IHS, DAB, OS, and CMS while there were an additional 10 honorable mentions from the NIH, FDA, and CDC. Award winning projects range from projects to reduce the use of mutagenic reagents in Green Labs to a campus-wide office supply swap program to encourage reuse of materials. While not all nominations could be awarded a Green Champion Award, HHS is excited and thrilled to have so many exceptional projects initiated by environmentally-conscious employees.

A majority of the landholding OPDIVs participated in the HHS non-hazardous solid waste and construction debris data call, which will be repeated for FY 2014.

Recycling at CDC is going full force and moving forward. The Agency has successfully brought four additional labs (3 at CDC's Clifton/Roybal campus and 1 at Chamblee) into its Lab Plastics Program. Multiple training dates have been identified for participating labs to learn what can and cannot be recycled as a part of the program. Several additional labs are working to order supplies needed to start up the Lab Plastic Program within their laboratories.

As part of the CDC LEED Certification effort, Chamblee Building 107 launched a single-stream desk-side recycling program last year as a pilot program. The program is currently being evaluated for application to other CDC campuses in the future. The Agency has also begun recycling Styrofoam and freezer packs at Chamblee campus and will expand to other Atlanta campuses as a next step.

The FDA White Oak campus introduced a service that collects and recycles rechargeable batteries completely free of charge. A total of 487 pounds of rechargeable batteries were collected in CY 2013, saving FDA a total of \$5,010 that would have been spent if the current waste contractor had recycled the batteries. The White Oak Campus continues to collect unwanted personal cell phones from employees for the Cell Phones for Soldiers organization. The organization provides phone cards and other communication services to military members stationed overseas. FDA collected 1,227 cell phones in 2013, an increase of 73% from 2012.

FDA decreased solid waste disposed of via landfills by over 26% in 2013 versus 2012. FDA added composting collection at two facilities in 2013, generating 39 tons of solid waste that was composted – there were zero tons of solid waste composted in 2011. FDA diverted 46.5% of C&D waste from landfill to recycling facilities in 2013 and decreased Chem/Rad waste generated by 46% in 2013 versus 2012.

The FDA developed a “Supply Swap” program that provides White Oak employees with a way to advertise unwanted office supplies and functioning non-accountable equipment and pick up items their office can use. This program will be for government use only.

Two Environmental Compliance Audits have been conducted at FDA facilities in the first half of FY 2014. The audits have identified program shortcomings, training deficiencies, and areas where resources should be deployed to improve environmental compliance.

IHS has taken action on many of the E.O. 13514 goals including the completion of the IHS Recycling Guidance Document that was distributed throughout the agency, as well as sponsoring the Vector Control – Integrated Pest Management training.

Waste reduction at IHS is ongoing strategy. Waste is being reduced through recycling at many IHS offices and healthcare facilities. IHS construction contracts typically include clauses related to the diversion of C&D debris from landfills. All new IHS construction projects contracts must include a waste management control plan describing how the contractor will divert waste and debris.

In accordance with LEED NC MR Credit 2 – Construction Waste Management, IHS requires all new construction projects to divert a minimum of 50 percent of non-hazardous construction and demolition materials from landfills, where recycling opportunities exist.

The NIH achieved an agency-wide recycling diversion rate of 48.5% for FY 2013, on-track to reach the 50% diversion by FY 2015. Also, the NIH achieved an agency-wide construction and demolition recycling diversion rate of 97.4%, exceeding the goal of achieving 50% diversion by 2015. Source reduction, reuse, recycling and [animal bedding & food] composting were promoted at the 2014 Earth Day events. The NIH Property Office promoted a future project of increased recycling of electronics and other office equipment/supplies at 2014 Earth Day.

The following NIH programs and initiatives were continually promoted, expanded, and/or re-enforced: post-consumer food waste compost in NIH Bethesda cafeterias, Bethesda Campus multi-building Life Technologies Styrofoam collection and reuse program, Mercury Amnesty collection events at all NIH facilities, and delivery of desk-side and common area recycling containers to offices and laboratories on the Bethesda. The reclamation of Life Technologies ice packs from the general trash was initiated, to be included for collection with Life Technologies Styrofoam cooler take-back program. Unused reagent chemicals for reuse were advertised and promoted on NIH Free Stuff and delivered to customers as part of the Surplus Chemical Redistribution Program. The NIH Bethesda campus solvent recycling program (xylene, ethanol, and formalin) was further developed and implemented. Continued to develop and implement SOC to reduce the toxic chemicals, which are procured through a more informed procurement process.

Through the Institute and Center Green Teams, the NIH will continue to foster these program initiatives: office/lab recycling, kitchen/dining area composting, animal bedding composting, NIH Free Stuff, Empty Chemical Bottle Recycling, Mercury Amnesty, and Styrofoam cooler/ice-pack take-back. All of the above listed will be promoted at Earth Day and other events.

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

<b>HHS Strategy to Achieve Goal</b>	<b>Strategy Narrative</b>	<b>Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months</b>
<b>Eliminate, reduce, or recover refrigerants and other fugitive emissions.</b>	This is an ongoing strategy. The reduction and recovery of refrigerant and other fugitive emission is a standard practice. As equipment is replaced, environmentally-friendly refrigerants are specified. During service and replacement operations, refrigerants are reclaimed to the maximum extent practicable.	<ul style="list-style-type: none"> <li>Standard operating Procedures (SOPs) for the NIH Bethesda Central Utility Plant (CUP) will be analyzed and updated to include better management of refrigerants and to decrease fugitive emissions.</li> <li>NIH will review Standard Operating Procedures for refrigerant management and implement recommended changes to ensure proper management and to reduce fugitive emissions.</li> </ul>

<b>HHS Strategy to Achieve Goal</b>	<b>Strategy Narrative</b>	<b>Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months</b>
<p><b>Reduce waste generation through elimination, source reduction, and recycling.</b></p>	<p>Waste reduction and recycling are actively promoted and ongoing at numerous locations. Many OPDIVS hold promotional events such as Earth Day and America Recycles Day, as well as hold office drop and swaps, chemical reuse and recycling and mercury collection efforts.</p>	<ul style="list-style-type: none"> <li>• HHS OS will issue a non-hazardous solid waste diversion data call for FY 2014.</li> <li>• CDC has set a goal to expand the CDC Styrofoam Recycling Program to other Atlanta campuses. CDC will work with cafeteria operations and waste contractor to explore options for implementing a food composting program. The pilot program will start first with the Roybal campus then extend to Chamblee. CDC will bring offices under one contract related to shredding of confidential documents and facilitate creation of a document shredding program. Additionally, CDC hopes to expand their Battery Recycling Program to include alkaline batteries in addition to the current type of batteries (rechargeable) accepted.</li> <li>• IHS will continue to support waste and pollution prevention efforts via the website, outreach, and webinars. Metrics show a consistent amount of traffic on the website. The Sustainability Webinar Series will continue through 2014-2015. IHS will also develop environmental compliance and pollution prevention training modules. These eight webinars will be hosted, recorded, and posted to the sustainability website. A downloadable factsheet will be provided for each training event. Sponsor a webinar highlighting a recycling program at an IHS clinic and a project to reduce paper use at a facility managed by HRSA.</li> <li>• FDA will continue to encourage recycling by holding special events such as Earth Day and America Recycles Day. FDA will also make frequent contact with FDA facilities staff who manages their own recycling and solid waste services.</li> <li>• NIH will continue the Life Technologies styrofoam cooler and ice pack take-back program and pursue “non-vendor specific” ice pack take-back program/pursue more vendors to take-back their own ice packs. NIH will also consider expansion of Life Technologies styrofoam cooler and ice pack take-back Bethesda program. NIH will further promote post-consumer composting in NIH Bethesda campus cafeterias and explore the logistics of post-consumer compost collection from coffee-shops at NIH Bethesda campus. NIH will continue the delivery of additional recycling containers, of all functional types, to increase laboratory recycling and encourage greater implementation of the Empty Chemical Bottle Recycling Program towards 90-100% participation. NIH will encourage the implementation of desk-side recycling pick-up and centralized trash collection and design in-classroom training on proper recycling and waste disposal as part of required new employee orientation and training. Additionally, NIH will continue to promote the NIH Free Stuff Surplus Chemical Redistribution, Solvent Recycling, and Mercury Amnesty collection programs.</li> </ul>

<b>HHS Strategy to Achieve Goal</b>	<b>Strategy Narrative</b>	<b>Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months</b>
<p><b>Establish a tracking and reporting system for construction and demolition debris elimination.</b></p>	<p>Construction contracts typically include clauses related to the diversion of C&amp;D debris from landfills. Reporting varies by OPDIVs. Two out of four landholding OPDIVs exceed 90% C&amp;D diversion rate.</p>	<ul style="list-style-type: none"> <li>• HHS OS will include C&amp;D debris diversion in the FY 2014 non-hazardous solid waste diversion data call.</li> <li>• HHS operating divisions will continue to include clauses in construction contracts to divert debris disposal away from landfills.</li> <li>• IHS will work with the Division of Engineering Services and the Division of Facilities Operations to improve data collection regarding diversion of construction and demolition debris from new facility construction projects.</li> </ul>
<p><b>Develop/revise Agency Chemicals Inventory Plans and identify and deploy chemical elimination, substitution, and/or management opportunities.</b></p>	<p>Proper management including chemical substitution is at the forefront of HHS strategies with leadership from NIH in the development and implementation of the Substances of Concern (SOC) list, which will promote less toxic alternatives in the procurement system. Mercury elimination and recovery continue to be a focus area.</p>	<ul style="list-style-type: none"> <li>• CDC will expand their Battery Recycling Program to include alkaline batteries in addition to the current type of batteries (rechargeable) accepted. CDC will also upgrade OWTS (waste tracking system) to include the following: Expanding Reports Query, Updating Waste/Surplus/Recycling Labels, Hazardous Waste Turn-In Request System, User Profile Creation, General User Access, Drum Packing/Drum Summary and Tracking of Universal Waste Tracking System.</li> <li>• The FDA enterprise chemical database system contract will be awarded by the end of May 2014. Implementation will begin as soon as the software and hardware are delivered and installed – estimated within the next 6 months at the White Oak Campus.</li> <li>• IHS will continue to develop industrial hygiene protocols to reduce occupational and patient exposure to airborne contaminants (fugitive emissions) and other physical stressors. In conjunction with the Oral Health Program, IHS will update the IHS Oral Health Program Guide to require the use of mercury amalgam separators at all IHS dental clinics.</li> <li>• NIH will continue to promote the NIH Free Stuff Surplus Chemical Redistribution, Solvent Recycling, and Mercury Amnesty collection programs. They will investigate the possibility of procuring a second solvent recycling unit to expand the program. NIH will conduct Mercury Amnesty collection events at all NIH facilities. Additionally, NIH will equip Institute/Center Green Teams with a new toolkit to further encourage and implement the Empty Chemical Bottle Recycling Program. NIH Will continue to develop and implement Substances of Concern to reduce the toxic chemicals, which are procured through a more informed procurement process.</li> </ul>
<p><b>Implement integrated pest management and improved landscape management practices to reduce and eliminate the use of toxic and hazardous chemicals/materials.</b></p>	<p>IPM is standard practice at HHS facilities. NIH Bethesda campus strategy has successfully included beneficial insects and birds to control insects since 1991. The IHS sponsors a vector control course to provide training on integrated pest management. CDC and FDA continue using IPM at targeted facilities.</p>	<ul style="list-style-type: none"> <li>• Future FDA environmental compliance audits will cover pesticide management, specifically the implementation status of IPM techniques.</li> <li>• IHS will continue to sponsor IPM training.</li> </ul>

# GOAL 6 – Sustainable Acquisition

## Agency Progress toward Sustainable Acquisition Goal

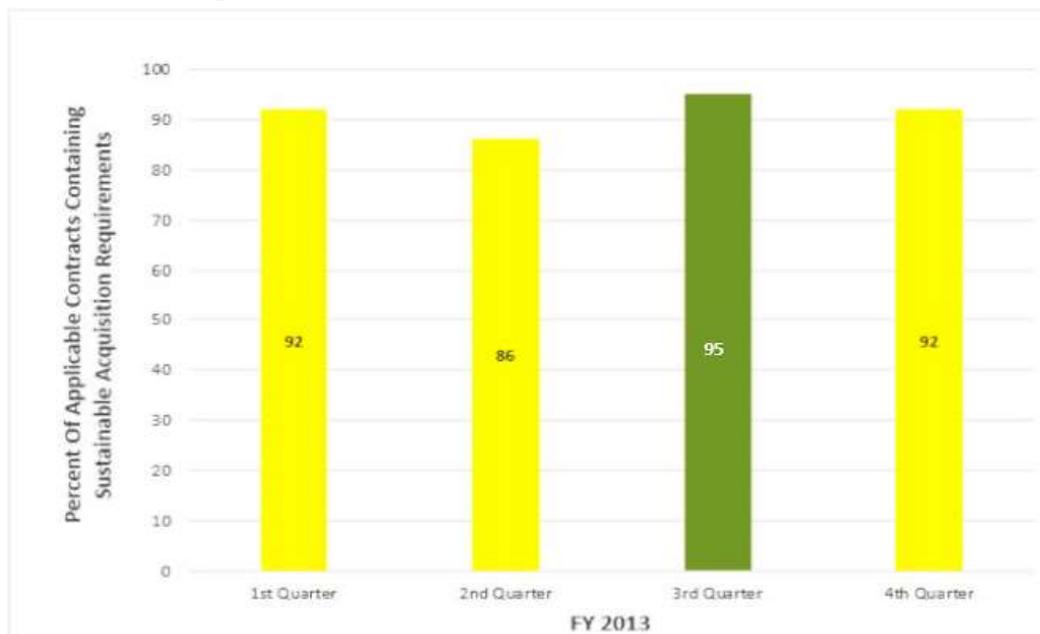
HHS has achieved 93.5% of new contract actions including applicable sustainability requirements; HHS will continue outreach and verification efforts in order to meet its goal of 95%.

To support sustainable acquisition, HHS issues 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 provides the acquisition workforce with sustainable acquisition training, focusing on biobased products, further supporting the inclusion of sustainability requirements in applicable contracts.

In FY 2014, the HHS Senior Procurement Executive will continue to represent HHS on the Federal Sustainable Acquisition and Materials Management (SAMM) Working Group and will continue engaging 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 Operating Division’s through the HHS’s Sustainable Green Procurement Workgroup.

- In FY 2013, 93.5% of HHS new contract actions included applicable sustainability requirements (based on a minimum 5% quarterly review of applicable contract actions).
- HHS has implemented various policies, training, and contract review strategies to achieve its sustainable acquisition goals per E.O. 13514.
- The HHS Office of Acquisition Program Support has been looking at leading indicators by reviewing Sustainable solicitations on FedBizOpps for both Sustainable clauses and Sustainable language in the Statement of Work.
- In FY 2014, HHS will provide OPDIVs with separate quarterly sustainability compliance rates based on the Federal Procurement Data System (FPDS) reporting elements. The Department will emphasize the importance of accurately reporting sustainability information in FPDS, with a target of increasing sustainability compliance rates in FPDS by 10% in FY 2015.

**Figure 6-1 Sustainable Acquisition**



**Table 6: Goal 6 Strategies – Sustainable Acquisition**

<b>HHS Strategy to Achieve Goal</b>	<b>Strategy Narrative</b>	<b>Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months</b>
<b>Update and deploy agency procurement policies and programs to ensure that federally-mandated designated sustainable products are included in all relevant procurements and services.</b>	HHS will update its Sustainable Acquisition Program Guide and policies to strengthen the applicable sustainability requirements. Also, HHS will review sustainable solicitations on FedBizOpps for leading indicators such as missing clauses or sustainable language.	At least 95% of applicable HHS contract actions will include sustainability requirements in FY 2015 (based on a minimum 5% contract review sample).
<b>Deploy corrective actions to address identified barriers to increasing sustainable procurements with special emphasis on biobased purchasing.</b>	HHS will continue to provide sustainable acquisition training to the acquisition workforce through classes i.e.. GSA schedules and Sustainable acquisition and Green Logistics: Planning for Sustainability.	At least 95% of applicable HHS contract actions will include sustainability requirements in FY 2015 (based on a minimum 5% contract review sample).
<b>Include biobased and other FAR sustainability clauses in all applicable construction and other relevant service contracts.</b>	HHS will issue guidance to the acquisition workforce reinforcing the need to include all applicable FAR sustainability clauses in construction and other relevant service contracts.	Increase inclusion of all applicable FAR sustainability clauses in construction and other relevant service contracts by 10% in FY 2015.
<b>Use Federal Strategic Sourcing Initiatives, such as Blanket Purchase Agreements (BPAs) for office products and imaging equipment, which include sustainable acquisition requirements.</b>	HHS will continue to utilize the FSSI BPAs and Multiple Award Schedule 75 for office supplies needs.	Increase usage of Multiple Award Schedule 75 for Office Supplies by 10% in FY 2015.
<b>Report on sustainability compliance in contractor performance reviews.</b>	HHS acquisition staff are responsible for requesting the report on some sustainable contracts.	HHS will request data more frequently on a quarterly basis.

**Table 6a: Additional Sustainable Acquisition Strategies Identified by CEQ that are Not a Top 5 HHS Strategy**

<b>HHS Strategy to Achieve Goal</b>	<b>Strategy Narrative</b>
<b>Review and update agency specifications to include and encourage biobased and other designated green products to enable meeting sustainable acquisition goals.</b>	HHS does not control any specification standards.
<b>Generate and disseminate agency level reports on sustainability compliance using data from sustainability reporting elements in the Federal Procurement Data System - Next Generation (FPDS-NG).</b>	This is an ongoing effort, but was not identified as a top 5 strategy for this goal.

## GOAL 7 – Electronic Stewardship

### Agency Progress toward EPEAT, Power Management (PM) & End of Life Goals

HHS is currently on track at 98% for the procurement of EPEAT (Electronic Produce Environmental Assessment Tool) electronics and the proper disposal of electronics at end-of-life requirement. HHS is currently at 92% and did not meet the FY 2013 goal for 100% of electronics with power management features enabled.

HHS OPDIVs have identified 25 Core data centers and 142 non-Core data centers. 27% of the non-core data centers are scheduled to close by the end of CY 2015. Status of the core data centers will be reported through the OMB PortfolioStat data call.

CDC has been advising other OPDIVs based on its own Power Management experiences, and sharing best practices regarding data center management and electronics stewardship. CDC’s ITSO has implemented mandatory power management settings on all qualifying equipment for some time now, and recently added the Verdium Power Management software to extend their Power Management posture.

**Figure 7-1 EPEAT, PM, End-of-Life**

EPEAT	POWER MANAGEMENT	END-OF-LIFE	COMMENTS
			

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

HHS Strategy to Achieve Goal	Strategy Narrative	Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
<b>Identify agency "Core" and "Non-Core" Data.</b>	HHS plans to have 25 core data centers and 142 non-core data centers when the DCCI effort ends in 2015.	HHS will continue to perform annual assessments to ensure “Core” data centers are designated accurately.
<b>Consolidate 40% of agency non-core data centers.</b>	HHS currently has plans to close 58 non-core data centers through 2015.	HHS will work to identify other consolidation opportunities, and reassess the current data center inventory to uncover further opportunities for optimization.
<b>Optimize agency Core Data Centers across total cost of ownership metrics.</b>	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 TCO standards.

<b>HHS Strategy to Achieve Goal</b>	<b>Strategy Narrative</b>	<b>Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months</b>
<b>Update and deploy policies to use environmentally sound practices for disposition of all agency excess or surplus electronic products, including use of certified eSteward and/or R2 electronic recyclers, and monitor compliance.</b>	Each HHS OPDIV has their own specific policies to ensure their compliance.	Certifying report due by the end of the 12 months.
<b>Ensure acquisition of 95% EPEAT registered and 100% of ENERGY STAR qualified and FEMP designated electronic office products.</b>	Each HHS OPDIV has their own specific policies to ensure their compliance.	Certifying report due by the end of the 12 months.

Table 7a: Additional Electronic Stewardship & Data Centers Strategies Identified by CEQ that are Not a Top 5 HHS Strategy

<b>CEQ Suggestion</b>	<b>HHS Response</b>
<b>Ensure that power management, duplex printing, and other energy efficiency or environmentally preferable options and features are enabled on all eligible electronics and monitor compliance.</b>	This is an ongoing effort, but was not identified as a top 5 strategy for this goal.

## **GOAL 8 – Renewable Energy**

### Agency Renewable Energy Percentage of Total Electricity Usage

HHS surpassed the FY 2013 goal for renewable energy, deriving a total of 10.9% of its energy use from renewable electricity sources, including 2.9% from new sources (thermal, mechanical, or electric). This result is ahead of the FY 2013 goal of 7.5% as shown in Figure 8-1, *Renewable Energy Percentage of Total Electricity Usage*. For FY 2014, HHS will purchase at least 7.5% renewable energy as mandated.

CDC has entered into green purchasing contracts with local utilities providers at several campuses across the country to meet renewable energy requirements. At the Fort Collins, CO, and Spokane, WA, campuses, 100% of energy consumed is 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.

While CDC does not maintain a sizeable renewable installation on any of its campuses, the OPDIV has incorporated the potential for major renewables projects into master plans and into newly constructed facilities, including Chamblee Building 107, which it hopes to utilize during potential upcoming Utility Energy Savings Contract (UESC) projects. CDC has begun the process of researching UESCs, sending several representatives from its facilities and contracting offices to UESC/ESPC training, and has identified multiple campuses (Roybal, Chamblee, Lawrenceville and Pittsburgh) on which to complete renewables projects funded by these types of contracts. CDC will continue to move forward with this project and to continuously review its green power purchases to ensure compliance with all Federal requirements.

FDA has installed solar projects in previous years and, in FY 2014, is working on the following projects:

- Installation of a 130-kW roof mounted solar photovoltaic power generation system at the Irvine Lab.
- The expansion of existing solar thermal heating system at MRC MOD I is under design. The new system will increase the existing 2 collector panels to expand to 10 panels. The increased capacity will yield an approximate 30% solar fraction of water heating demands. The system will provide 2,026 therms/year in gas savings, with \$2,412 cost savings, \$45,040 project cost and 18.6 years simple pay back. The project is expected to be completed by November 2014.

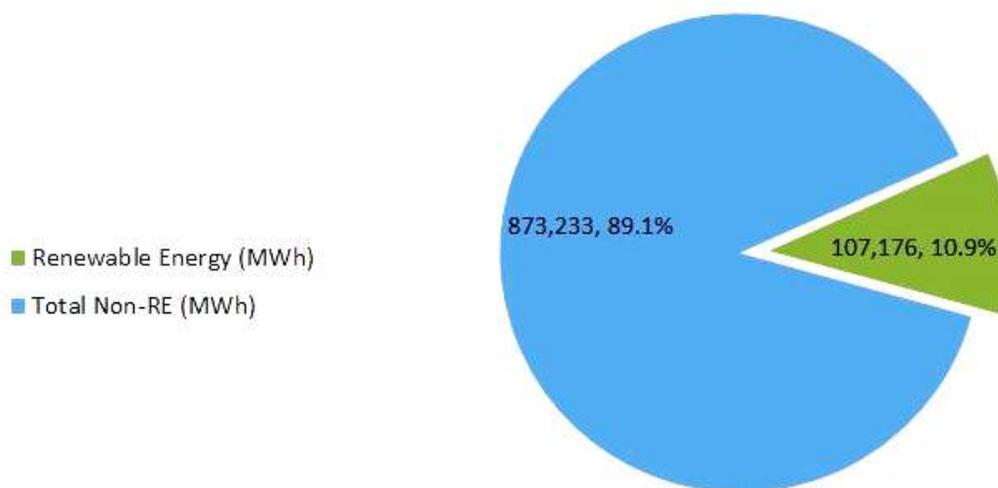
IHS surpassed the required renewable energy target for 2013, and has already purchased the necessary renewable energy credits (RECs) for FY 2014. Several renewable energy projects were funded through the Environmental Steering Committee.

Renewable energy projects in the feasibility, design, or construction phase include:

- A 50-kW wind generator and 10-kW photovoltaic system are under construction at the Pine Ridge Hospital. A similar system is under construction at the Rosebud Hospital. Both projects are expected to be completed in 2014.
- The Kayenta Health Center is under construction and includes an 80-kW photovoltaic (PV) system.
- The Ft. Yuma Health Center design is complete and includes a 19-kW PV system. Construction funding is pending.
- The Southern California Youth Regional Treatment Center (YRTC) is in the Design Phase and the feasibility of a 30-kW PV system is being evaluated.
- The Northern California Youth Regional Treatment Center (YRTC) is in the Design Phase and the feasibility of a 30-kW photovoltaic system is being evaluated.

NIH continues to solicit and procure renewable energy credits to exceed quantities described by law and/or executive order. NIH has also actively studied solar photovoltaic (PV) arrays, and has included installation of several PV arrays in current ESPC activities. NIH is also actively investigating opportunities for large-scale PV applications.

**Figure 8-1 HHS Use of Renewable Energy as a Percentage of Electricity Usage (FY 2013 Goal: 7.5%)**



**Table 8: Goal 8 Strategies – Renewable Energy**

<b>HHS Strategy to Achieve Goal</b>	<b>Strategy Narrative</b>	<b>Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months</b>
<p><b>Purchase renewable energy directly or through Renewable Energy Credits (RECs).</b></p>	<p>HHS OPDIVs will continue to purchase Green Power and RECs to meet requirements. OPDIVs are currently developing plans to meet the new requirements of the latest FEMP Consolidated Renewable Energy Guidance.</p>	<ul style="list-style-type: none"> <li>• CDC will continue to purchase green power as available for Atlanta, Ft. Collins and Spokane campuses through Dec 2014.</li> <li>• CDC will incorporate new requirements from the recently released Presidential memorandum related to renewable energy into its energy purchases and plans.</li> <li>• CDC will confirm with Xcel Energy (Ft. Collins) and Avista (Spokane) that their green power program will comply with all new requirements of the latest FEMP Consolidated Renewable Energy Guidance.</li> <li>• Execute a new Exhibit A with Georgia Power Company to contract additional green power to meet the FY 2016 requirement of 15% electricity from renewable sources per the latest FEMP Consolidated Renewable Energy Guidance.</li> <li>• NIH will begin preliminary solicitation efforts for FY 2015 and beyond requirements.</li> <li>• FDA will purchase roughly 9% RECs for FY 2014.</li> </ul>
<p><b>Install onsite renewable energy on federal sites.</b></p>	<p>HHS OPDIVs will install solar thermal and photovoltaic systems, as well as wind turbines as applicable. Alternative financing will also be used to help achieve this strategy.</p>	<ul style="list-style-type: none"> <li>• IHS Pine Ridge Hospital is installing a 50-kW wind generator and 10-kW photovoltaic. A similar system is under construction at the IHS Rosebud Hospital. Both projects are expected to be completed in 2014.</li> <li>• The IHS Kayenta Health Center is under construction and includes an 80-kW photovoltaic (PV) system.</li> <li>• The IHS Ft. Yuma Health Center design is complete and includes a 19 kW PV system. Construction funding is pending.</li> <li>• The IHS Southern California Youth Regional Treatment Center (YRTC) and Northern California YRTC are in the Design Phase and the feasibility of a 30-kW PV system is being evaluated for each site.</li> <li>• NIH will also actively investigate opportunities for large-scale PV applications.</li> </ul>

<b>HHS Strategy to Achieve Goal</b>	<b>Strategy Narrative</b>	<b>Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months</b>
<b>Utilize performance contracting methodologies for implementing ECMs and increasing renewable energy.</b>	FDA is installing three new solar systems as ECMs developed from its UESCs. NIH also anticipates renewable energy systems from ESPC assessments in progress. CDC UESC evaluations will include renewable energy projects.	<ul style="list-style-type: none"> <li>• CDC will include on-site PV for the roof of B107 as an ECM under the UESC at the Roybal, Chamblee, and Lawrenceville campuses if the Industrial Grade Audit (IGA) indicates projects are life-cycle cost effective.</li> <li>• FDA MRC UESC Phase 6 includes construction of a solar domestic water heating system to be completed Nov 2014.</li> <li>• FDA MRC UESC Phase 7, investment grade audit will evaluate the site for further development of solar water heating at the out buildings.</li> <li>• FDA Irvine UESC includes construction of 130-kW PV system.</li> </ul>
<b>Work with other agencies to create volume discount incentives for increased renewable energy purchases.</b>	FDA and NIH work with Defense Logistics Agency (DLA) to purchase renewable energy. PSC works with GSA under electricity bulk buy contract.	NIH and PSC will continue to work with DLA and GSA to purchase electricity under the bulk buy contracts.
<b>Increase renewable energy training for facility and energy personnel</b>	OPDIVs will promote increased completion of renewable energy training and webinars for facility and energy personnel.	<ul style="list-style-type: none"> <li>• OPDIV personnel will attend FEMP and others online training and webinars as funding for course attendance is available.</li> <li>• OPDIV facility &amp; energy personnel will attend local vendor training to the maximum extent possible.</li> <li>• OPDIVs will provide training for building occupants through awareness events and newsletters.</li> </ul>

**Table 8a: Additional Renewable Energy Strategies Identified by CEQ that are Not a Top 5 HHS Strategy**

<b>CEQ Suggestion</b>	<b>HHS Response</b>
<b>Lease land for renewable energy infrastructure.</b>	Not under consideration at this time.
<b>Develop biomass capacity for energy generation.</b>	Not under consideration at this time.

## GOAL 9 – Climate Change Resilience

### Agency Climate Change Resilience

When President Obama signed [Executive Order 13653](#) in November 2013, he committed “to prepare the nation for the impacts of climate change by undertaking actions to enhance climate preparedness and resilience.” In addition, [Executive Order 13514](#) requires each agency to evaluate the risks and manage the effects of climate change on agency operations and mission. Given our mission to protect the nation’s health and well-being, HHS issued a policy statement in the [HHS Climate Adaptation Plan](#) that recognized “climate change to be one of the top public health challenges of our time.” The HHS Climate Adaptation Plan is designed to complement the HHS Strategic Sustainability Performance Plan (SSPP).

The Office of the Assistant Secretary for Health (OASH) plays a leading role in coordinating climate change activities within HHS. OASH collaborates closely with the Office of the Assistant Secretary for Administration (ASA), Office of the Assistant Secretary for Preparedness and Response (ASPR), Centers for Disease Control (CDC) and Prevention, and National Institutes of Health (NIH). Each plays an essential role in climate adaptation, preparedness, and resilience.

The HHS Climate Adaptation Plan included the following sections, in accordance to Executive Order 13653:

- Policy Statement Affirming HHS’s Commitment
- Assessment of Risks to HHS Mission – Populations and Provision of Health and Human Services
- Description of Current and Future Activities
  - Activities Regarding Populations
  - Activities Regarding the Provision of Health and Human Services
  - Activities to Assess Risk via Data Initiatives
- HHS Risk Assessments of Facilities and Continuity of Operations

Highlighted activities are listed below. More details are in the [HHS Climate Adaptation Plan](#).

**National Climate Assessment and Special Interagency Report on Climate Change and Human Health:** In May 2014, the [Third U.S. National Climate Assessment](#) (NCA) was released. It is a comprehensive, authoritative scientific report on climate change and its impacts on the United States. The report confirms that climate change is affecting Americans in every region of the United States and key sectors of the national economy—including agriculture, energy, and health. Because the impacts of climate change on health are complex and often dependent on multiple confounding socioeconomic and environmental factors, the methodology for developing appropriate climate and health indicators is challenging and still emerging. As a result, the Interagency Crosscutting Group on Climate Change and Human Health (CCHHG) and a subset of the Interagency National Climate Assessment Working Group initiated an *Interagency Special Report on the Impacts of Climate Change on Human Health* in the United States. The lead and coordinating federal agencies are the Centers for Disease Control and Prevention (CDC), National Institutes of Health (NIH), National Oceanic and Atmospheric Administration (NOAA), and Environmental Protection Agency (EPA). A draft of this special report is expected to be made available for public comment early in 2015, with final publication expected in late 2015.

**Sustainable Climate Resilience Healthcare Facilities Initiative:** As part of the [President’s Climate Action Plan](#), HHS initiated a public-private partnership to develop specific tools and information related to resilience of health care facilities in a context of climate change-exacerbated stressors. It includes development of a resource packet that includes an overview guide, a catalog of existing resources, checklists, a database of relevant case studies organized by type of hazard, type of facility, and location, and additional briefing documents. It will be released in fall 2014.

**State and Local Health Department Climate Adaptation Planning:** Through its [Climate Ready States and Cities Initiative](#), also referenced in the [President’s Climate Action Plan](#), CDC is providing cooperative agreements, guidance and technical support to 16 states and 2 city health departments to implement, evaluate, and document their experience with implementing the climate adaptation framework, “Building Resilience Against Climate Effects (BRACE).” The BRACE framework provides state and local health departments with a process for integrating the best available atmospheric science into its planning and response activities, and supports the development and implementation of a unified climate and health adaptation strategy for a jurisdiction. CDC will continue to develop and disseminate best practices to assess and communicate climate change risks and resilience measures to ensure public health professionals, physicians, and clinical health care providers have the tools they need to prepare their communities for the health consequences of climate change.

**Environmental Justice:** HHS is participating in the efforts of the federal Environmental Justice Interagency Working Group to develop an interdepartmental approach to facilitate climate change adaptation in environmental justice communities.

**Climate Data Initiative:** The Climate Data Initiative is a broad effort to leverage the federal government’s freely-available, climate-relevant data resources to stimulate innovation and private-sector entrepreneurship in support of national climate-change preparedness. The Administration has recently launched a climate-focused section on [Data.gov](#), the federal government’s open data platform. This website currently offers resources on coastal flooding and sea level rise, and will eventually encompass other factors impacted by climate change including human health, the food supply, and energy infrastructure. HHS staff are leading and participating in the interdepartmental Human Health group of the Council on Climate Preparedness and Resilience’s Data and Tools working group that is developing health data and tools for this website.

**CDC's National Environmental Public Health Tracking Network:** The Tracking Network uses data from many sources to track the effects of climate change. Although there are a number of indicators related to climate change, the Tracking Network is focusing on extreme heat to better evaluate the number of heat-related deaths at the national level, while allowing for comparisons across states. These comparisons can help local communities design interventions and better understand the possible health effects and risks to specific groups of people. In spring 2014, CDC released [climate change indicators](#) that combine weather and health data to identify patterns in extreme heat and their associated health effects. These indicators use data from the past to identify extreme temperatures, extreme heat days and events, deaths that might be related to heat, and conditions that make people vulnerable to heat.

Key actions for FY 2014 are in support of SSPP’s climate change strategies:

- HHS will hold a Department-wide briefing on August 6, 2014, on climate change and health. The top climate change experts from CDC and NIH will present the latest scientific findings from the National Climate Assessment. It will include climate change projections for the country as well as regional snapshots. It will be a live webcast for regional offices to participate and ask questions. This webcast will also be archived for future viewing, and the webcast link could be disseminated more broadly to other stakeholders.
- HHS will also host in the fall of 2014 an Adaptation Planning Workshop to teach HHS Operating Divisions and Staff Divisions (OPDIVS/STAFFDIVS) about adaptation planning activities. This first-of-its-kind workshop will bring together climate change adaptation experts with mission-related program planners, emergency preparedness coordinators, chief sustainability officers, continuity of operations planners, and occupant emergency planners from each OPDIV/STAFFDIV to catalyze adaptation planning activities.
- HHS will develop a climate change communication and outreach strategy. It will be activated as scientific studies and guidance are released on a rolling basis. HHS will leverage its comprehensive network of stakeholders involved in the receipt or delivery of health and human services to disseminate climate change and health information. Outreach and communication for at-risk populations will be a significant part of this strategy.

As required by Executive Orders 13653 and 13514, progress on each of these strategies and related activities will be reported annually through the [Strategic Sustainability Performance Plan](#).

**Table 9: Goal 9 Strategies – Climate Change Resilience**

<b>HHS Strategy to Achieve Goal</b>	<b>Strategy Narrative</b>	<b>Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months</b>
<b>Update agency external programs and policies (including grants, loans, technical assistance, etc.) to incentivize planning for, and addressing the impacts of, climate change.</b>	CDC’s <a href="#">Climate Ready States and Cities Initiative</a> provides cooperative agreements to evaluate grantees’ experience with implementing the climate adaptation framework, Building Resilience Against Climate Effects (BRACE). The BRACE framework provides state and local health departments with a process to integrate the best available atmospheric science into its planning and response activities, and supports the development and implementation of a climate and health adaptation strategy.	CDC will release the following guidance in 2014: <ul style="list-style-type: none"> <li>• Assessing Health-Related Vulnerabilities to the Changing Climate</li> <li>• Determining climate change relevant exposure-response relationships</li> <li>• Projecting the magnitude of climate-sensitive diseases</li> </ul>
<b>Ensure agency principals demonstrate commitment to adaptation efforts through internal communications and policies.</b>	HHS will host a Department-wide briefing on climate change and health. Its webcast will be accessible by HHS regional offices, and it will be an archived for future viewing. HHS will also develop a climate change communications and outreach strategy for specific stakeholders, e.g., environmental justice communities, minorities, women, tribes, state/local health departments, medical responders, and healthcare administrators.	<ul style="list-style-type: none"> <li>• HHS Climate Change and Health briefing on 8/6/2014</li> <li>• Communications and outreach strategy by Summer/Fall 2014</li> </ul>
<b>Identify vulnerable communities that are served by agency mission and are potentially impacted by climate change and identify measures to address those vulnerabilities where possible.</b>	HHS participates in the Environmental Justice Interagency Working Group (EJ IWG) to develop an interdepartmental approach to climate change adaptation in environmental justice communities. The MOU identifies climate change as an area of focus for agency Environmental Justice strategies and implementation activities.	Promote climate change and sustainability awareness as part of Environmental Justice activities as determined by the EJ IWG.
<b>Ensure that agency climate adaptation and resilience policies and programs reflect best available current climate change science, updated as necessary.</b>	HHS is convening an OPDIV Adaptation Workshop that will share the latest and best available climate change science from the National Climate Assessment with HHS audiences that will be using climate change science to update policies and programs including mission related programmatic planners, emergency coordinators, continuity of operations planners, occupant emergency planners, chief sustainability and facility officers, and HHS climate change experts.	Convene OPDIV Adaptation Workshop, Fall 2014.

<b>HHS Strategy to Achieve Goal</b>	<b>Strategy Narrative</b>	<b>Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months</b>
<b>Design and construct new or modify/manage existing agency facilities and/or infrastructure to account for the potential impacts of projected climate change.</b>	<p>HHS currently has in place a policy that requires compliance with the 2010 HHS Facilities Program manual. This manual is to be utilized by all HHS OPDIVs for construction of new facilities and facility modifications. This next iteration will include design guidance for potential impacts of projected climate change based upon guidance received from CEQ.</p> <p>HHS requires that all Landholding OPDIVs have in place a current Facility Master Plan and update the plan every 5 years. The next iteration of guidance will include requirements for including sustainability and climate adaptation resilience planning.</p>	<ul style="list-style-type: none"> <li>• Update all applicable sections of the HHS Facilities Program Manual by June 2015.</li> <li>• Update the HHS Facility Master Plan guidance by January 2015.</li> </ul>

Table 9a: Additional Climate Change Resilience Strategies Identified by CEQ that are Not a Top 5 HHS Strategy

<b>CEQ Suggestion</b>	<b>HHS Response</b>
<b>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.</b>	HHS will host an OPDIV Adaptation Planning Workshop with mission-related programmatic planners, emergency coordinators, continuity of operations planners, occupant emergency planners, chief sustainability officers, and climate change experts. This first-of-its-kind workshop will discuss the contents of an adaptation plan, tools to conduct risk/vulnerability assessments, review component mission essential functions, and identify adaptation activities for each OPDIV to consider.
<b>Update agency emergency response procedures and protocols to account for projected climate change, including extreme weather events.</b>	As part of the OPDIV Adaptation Planning workshop, HHS will encourage agencies to consider climate change in their risk/vulnerability assessments to update emergency response and COOP plans as needed.
<b>Ensure workforce protocols and policies reflect projected human health and safety impacts of climate change.</b>	HHS defers to OPM and OSHA for federal workforce protocols and policies regarding projected human health and safety impacts from climate change. HHS is willing to provide technical assistance in this effort upon their request.
<b>Incorporate climate preparedness and resilience into planning and implementation guidelines for agency-implemented projects.</b>	As part of the President’s Climate Action Plan, HHS initiated a public-private partnership to develop specific tools and information related to resilience of health care facilities in a context of climate change-exacerbated stressors. This Resource Packet includes an overview guide, a catalog of existing resources, checklists, a database of relevant case studies organized by type of hazard, type of facility, and location, and additional briefing documents.

# GOAL 10 – Energy Performance Contracts

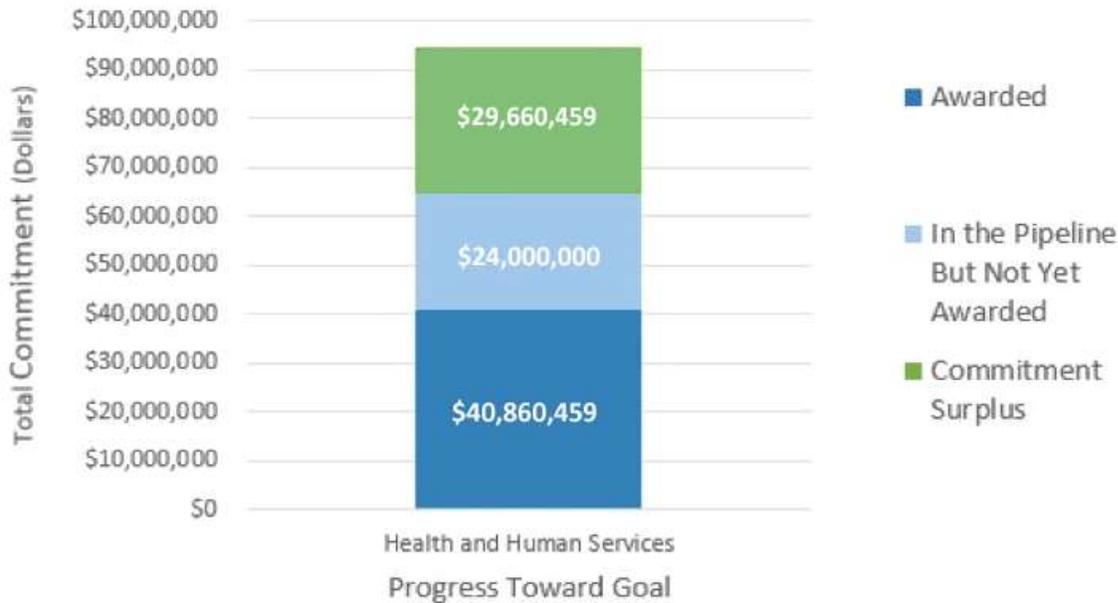
## Agency Progress toward Energy Performance Contracts

HHS committed to implement \$35.2M of performance contracting by December 31, 2013 in accordance with the 2011 President’s Performance Contracting Challenge. By December 31, 2013, HHS had awarded \$40.9M in performance contracts exceeding the commitment by \$5.7M. An additional \$24M of contracts is currently in the pipeline, which yields a total commitment surplus of \$29.7M.

With the extension of the President’s Performance Contracting Challenge for another three years into 2016, HHS committed an additional \$27.8M in performance contracts. This will yield a total of \$92.7M of performance contracts implemented in six years.

FDA and NIH led HHS in the first round of performance contracts by awarding the \$40.9M. NIH awarded \$35.3M and FDA \$5.6M. NIH has the additional \$24M in the pipeline. CDC, NIH and OS will award the newly committed performance contracts. HHS energy and contract personal are working diligently to implement the contracts within the next three years.

**Figure 10-1 Energy Performance Contracts**



**Table 10: Goal 10 Strategies – Energy Performance Contracting**

HHS Strategy to Achieve Goal	Strategy Narrative	Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
<p><b>Evaluate 25% of agency’s most energy intensive buildings for use with energy performance contracts.</b></p>	<p>HHS OPDIVs currently prioritize campuses and buildings for performance contracts based upon top energy use. When analyzing future contracts this strategy will be used.</p>	<ul style="list-style-type: none"> <li>• CDC will complete initial project development and prepare an acquisition plan for a UESC at the Roybal, Chamblee, and Lawrenceville campuses.</li> <li>• CDC will select a utility for the UESC and complete PAs, IGAs at each campus.</li> <li>• CDC will select the UESC contractor and initiate a task order to complete investment grade audits at the Pittsburgh site.</li> <li>• FDA will implement a new phase with 15 ECMs to existing UESC at MRC.</li> <li>• NIH will complete the investment grade audit phase of an additional \$5M multi building project at NIH Bethesda, and continue to work on implementation of a \$19M project at National Cancer Institute at Frederick.</li> </ul>
<p><b>Prioritize top ten projects, which will provide greatest energy savings potential.</b></p>	<p>HHS OPDIVs prioritize the top projects/ECMs when reviewing IGA reports and implement those projects, or combinations of projects, that provide favorable savings and economic contract results.</p>	<ul style="list-style-type: none"> <li>• CDC will select identified energy and water conservation measures with favorable ROI and initiate a task order under the UESC at the Roybal, Chamblee, and Lawrenceville campuses. The goal for this task order will be \$4.1M.</li> <li>• CDC will select identified energy and water conservation measures with favorable ROI and initiate a task order under the ESPC at the Pittsburgh site. The goal for this task order will be \$2.7M.</li> <li>• FDA will implement 38 ECMs under MRC UESC and 9 ECMs under the Irvine UESC.</li> <li>• NIH is still continually investigated potential projects and ECM’s through its SMART Team, and will act upon potential findings via ESPC’s and UESC’s.</li> </ul>
<p><b>Identify and commit to include 3-5 onsite renewable energy projects in energy performance contracts.</b></p>	<p>As part of any performance contract, HHS OPDIVs require ESCOs to analyze opportunities for onsite renewable energy projects. Where cost effective, the RE ECMs will be implemented.</p>	<ul style="list-style-type: none"> <li>• NIH will install two PV systems as part of RE ECMs, a 60-kW array at Poolesville and a 120-kW array at RTP.</li> <li>• FDA MRC will install a solar DHW heating and a passive boiler feed water preheat ECM.</li> <li>• FDA Irvine will install a rooftop solar 130-kW PV ECM.</li> </ul>
<p><b>Provide measurement and verification data for all awarded projects.</b></p>	<p>HHS OPDIVs include M&amp;V in all ESPC projects and in UESC projects were necessary.</p>	<p>NIH ESPCs will include M&amp;V.</p>
<p><b>Enter all reported energy savings data for operational projects into MAX COLLECT (max.gov).</b></p>	<p>HHS will continue to report performance contracting details and project information into MAX COLLECT.</p>	<p>Provide monthly updates on performance contracting line items in MAX COLLECT.</p>

**Table 10a: Additional Energy Performance Contracts Strategies Identified by CEQ that are Not a Top 5 HHS Strategy**

<b>CEQ Suggestion</b>	<b>HHS Response</b>
<b>Cut cycle time of performance contracting process by at least 25%.</b>	HHS views this strategy as extremely difficult and at this point, not a viable achievement.
<b>Assign agency lead to participate in strategic sourcing initiatives.</b>	HHS OPDIVs operate autonomously in all operations. Performance contracting is promoted and monitored from the headquarters Energy office.
<b>Devote 2% of new commitments to small buildings (&lt;20k sq. ft.).</b>	Most HHS performance contracts cover campuses and therefore, often include small buildings in ECMs.
<b>Ensure relevant legal and procurement staff are trained by FEMP ESPC/UESC course curriculum.</b>	HHS legal and procurement staff receive training as potential contracts are formed.

## Appendix A: [FY 2013 HHS Green Champions Winners](#)

### HHS INTRANET

[http://intranet.hhs.gov/abouthhs/programs\\_initiatives/gogreen/FY2013GreenChampionsAwards.html](http://intranet.hhs.gov/abouthhs/programs_initiatives/gogreen/FY2013GreenChampionsAwards.html)

### FY 2013 Green Champions Awards

This year marks the sixth annual HHS Green Champions Awards, which honors outstanding HHS employees and Native American tribal members involved in various sustainability projects.

These awards will feed into the federal GreenGov Awards (formerly, "White House Closing the Circle Awards"), which will be announced later this year.

- Have a Green Idea for your OPDIV/STAFFDIV? Let your OPDIV/STAFFDIV Go Green Get Healthy HHS contact person know!
- Visit the Go Green Get Healthy HHS website for other Green Ideas.
- Comments/Questions? Shoot us a note at GoGreen@hhs.gov.

---

### The four Green Champion Overall Winners are:

**Individual:** CDC - Kathleen Sobush

**Small Group:** CDC and City of Atlanta Green Building Cooperation

**Organization:** NIH (OD/OM/ORF Div. Environmental Protection) - Innovative Tools for Advance Sustainable Acquisition

**Video:** OS - Global Worming in Five Acts - Laura Annetta, CAPT Edward Pfister, Christian Fackrell, & Will Kim  
"Global 'Worming:' A Story in 5 Acts"

**Director:** William Kim (OS/ASA)

**Starring:** Laura Annetta (OS/ASA), Christian Fackrell (OS/ASA)

**YouTube embedded video:** <http://www.youtube-nocookie.com/embed/9XgbVgsv68U>

FY13 Green Champions Winners

---

### CDC - Adam B. Arthur - Virtual Platform Initiative

Adam B. Arthur, Virtual Platform Initiative Lead and Health Communications Specialist

The Public Health Informatics Virtual Event (PHIVE) was the sixth immersive virtual event use-case by the Centers for Disease Control and Prevention (CDC), utilizing an online tool developed for virtual government and partner public health projects by FTE, Adam B. Arthur.

Conceived in 2010, Arthur brought a few mock-ups to his leadership, pitching the idea of a “virtual campus” for events and training. Armed with a charter, custom graphics, and industry statistical data for expenditure and environmental savings – Arthur was given the “go” for a pilot, resulting in the country’s first and only virtual business engagement government program. This effort has resulted in multiple awards and international news.

Arthur's Virtual Platform Initiative (VPI) allows concurrent meetings and trainings without the typical negatives of high costs and emissions; while also adding capabilities for on-demand content, live collaboration, remote training, and the ability to leverage other technologies. The resulting implementations have produced cost and emission reductions in the millions, while achieving increased capacity, collaboration and communications.

The program has gained the attention of the Office of Personnel Management (OPM), which has partnered with CDC to begin developing virtual environments for business use – soon available to federal, state and local agencies.

---

### **IHS - Tucson Area SFC**

Norman Bia, Civil Engineering Technician

Tanya Davis, Environmental Engineer

Lawrence Denetso, Civil Engineering Technician

Donnell Hnat, Environmental Engineer

Marvin Klain, Civil Engineer Technician

Vern Tomanek, Engineering Consultant

The Tucson Area Sanitation Facilities Construction Branch serves tribal members of the Tohono O'odham Nation with improved individual wastewater disposal systems. These improved systems replaced failed septic systems or pit privies (outhouses). With respect to failed septic systems, since 2002, 131 homes have received replacement systems or, where available, connections to community collection systems. A typical failed system resulted in sewage backing up into the home or surfacing outdoors in close proximity to the home. At such locations, the untreated wastewater polluted the home environment and posed a serious potential public health threat to residents and nearby community members. With respect to new systems that replaced pit privies, since 2008, 84 homes have been served with new wastewater disposal systems as part of an interagency effort to provide modular bathrooms to tribal homes that lack basic sanitation. Before services were provided, these homes had no indoor plumbing which required residents to use outside yard hydrants for water supply, pit privies for wastewater disposal, and homemade outdoor showers for bathing. The outstanding dedication and effort put forth by the technicians and engineers named in this award have had a profound impact in reducing potentially harmful fecal contamination in tribal communities.

---

### **FDA - Cosmetic Export Certificate**

Jonathan Hicks, Policy Analyst

Katherine Hollinger, DVM, Director Regulatory

Adam Rixey, Information Technology Specialist

Linda Katz, MD, Director

Patricia Hansen, PhD, Deputy Director

Stanley Milstein, PhD, Senior Advisor to the Director

Wendy Good, PhD, Microbiologist

Donnie Lowther, Biologist

Fernando Gonzalez, Policy Analyst

Annette Elliott, Contractor

In June 2013, Food and Drug Administration (FDA), Center for Food Safety and Applied Nutrition (CFSAN), Office of Cosmetics and Colors (OCAC) became the first program office in the federal government to deliver export certificates in electronic format. OCAC replaced paper applications, processing, records, correspondence, and certificates with an electronic system known as Certificate Application Process (CAP) for Cosmetics. Significant efficiencies and savings were realized, including: elimination of paper and delivery costs, reduction in processing times from on average four weeks to two days, and reduction in staff required to process an application from five to less than one quarter of one staffer's time. OCAC's new Cosmetic Export Certificates are delivered in Portable Document Format (PDF) to industry and can be verified via a Web portal as authentic serving the U.S. Department of State, for issuance of Apostilles (or Authentications), or foreign governments granting entry of U.S. exports. Some of the technological innovations in CAP for Cosmetics have already been adopted by other FDA program offices that process export certificates and could be utilized throughout the federal government to make the processing of official documents more efficient.

---

### **OS - Kristin Gillham**

Kristin Gillham, Director, Travel & Transportation

Ms. Gillham is a true Change Agent building the HHS Sustainability Program. Starting with Executive Orders 13423 and 13514 and limited guidance from CEQ, Ms. Gillham engaged, energized, organized, collaborated with, and led HHS operating and staff divisions in creating the HHS sustainability program. Her efforts established multiple work groups with specific goals and focus areas through a Strategic Sustainability Performance Plan (SSPP). She lead/supported multiple planning sessions, workgroup meetings, strike teams, and task force meetings, and was responsible for the 4 iterations of the SSPP and HHS Climate Change Adaptation Plan.

The NIH and other OPDIVs benefited with focused goals, regular reporting, and naming OPDIV staff for each goal. Due to Ms. Gillham's leadership in sustainability, the Department expects to reap many benefits, including reduced GHG emissions 13.6%, energy use 19.6%, water use 6.5%, and fleet petroleum 42%. HHS has been in compliance with executive orders and strives to meet the goals in those orders.

Ms. Gillham created strategies, processes, and templates which have been used at various HHS operating and staff divisions. These same strategies could be employed at other federal agencies to help meet their sustainability goals as well.

---

### **NIH - Ann E. Brewer**

Ann E. Brewer, Director

It is my pleasure to nominate Ms. Ann Brewer for the 2013 HHS Green Champions Award, in the "Corporate Responsibility" category. Ann is the Director of the NIH Executive Secretariat (ES), and many of her workplace policies and practices are a model of corporate responsibility with regard to their impact on the environment.

Ann has championed and been at the forefront of the use of Telework and Alternative Work Schedules at the NIH, and Executive Secretariat staff fully utilize the flexibility these policies offer. ES staff have an average daily round-trip automobile commute of 44.7 miles. 79 percent of our staff (19 of 24) telework two days each week, and in 2013, that equated to 80,741 miles of automobile travel saved across the entire office – the equivalent of circling the Earth 3.2 times. That's a significant reduction in gasoline consumption and greenhouse gasses. Ann also has consistently encouraged the use of alternative meeting forums when needed. The office frequently uses Microsoft Lync as a way to include teleworking or off-site staff in meetings. In addition, through her active participation in the Council of Executive Secretariats, she has made presentations and speaks out frequently about how well telework works for the NIH ES, and how other Executive Secretariats might also implement the use of telework.

Finally, Ann has aggressively reduced the use of paper in the ES. The Executive Secretariat is the hub controlling all correspondence and documents that flow to and from the NIH Director and Deputy Director, and maintains the Director's official records. As a result, the office can consume and produce vast quantities of paper. Ann has embraced the transition to electronic records, and has modified policy and practice in the ES to move staff away from printing documents. The results have been dramatic. Between 2010 and 2013, the use of paper in the ES dropped by

75 percent; ES staff used 206,250 less pieces of paper in 2013 than they did in 2010. That amount of paper, if stacked, would be more than seven stories high. If laid out flat, it would cover 2.8 football fields. The reduction saved approximately 25 trees, by our calculation.

Ann is an excellent example of a manager who envisions and implements policies and procedures that promote sustainability.

---

### **NIH - Transit Program**

Joseph Cox, Chief, Transportation Services

Thomas Hayden, Associate Director, P&ES

Louise Davis

Nicole Huntington

Russell Mason

Michelle Mejia

Gary Peck

Marie Taboada

"The NIH Office of Research Services (ORS) facilitates the use of alternative commuting methods through the NIH Transit Program. The Transit Program helps the NIH to mitigate traffic congestion and reduce auto emissions that result in Greenhouse Gases by offering NIH employees various alternative commuting methods such as: the employee use of Metro buses; Metro subway; MARC train; teleworking; hoteling; carpooling; vanpool programs; and through bike to work programs. These methods help the NIH to mitigate traffic congestion and provide for cleaner air through reduced auto emissions.

The NIH has approximately 5,500 Transhare members, 15 vanpools, 320 carpool members, and newly incorporated Electronic Vehicle Charging Stations. It is estimated that NIH has annually reduced miles driven by employees by 58,680,000 and has saved 2,963,636 gallons of gas through these programs.

In addition, NIH was one of the first agencies in the country to start a Bike Subsidy Program for employees after leading the National Capital Region for the last seven years as the Employer with the most Bike-to-Work Day participants.

Because of the NIH's innovative alternative transportation programs, the Metropolitan Washington Council of Governments entitled NIH the "2013 Employer of the Year" (for Incentives)."

---

### **FDA ARL - Reduction of Transportation Greenhouse Gases**

Arkansas Regional Laboratory uses nitrogen gas for most of its analytical instrumentation. ARL worked with the analytical gas vendor to reduce the number of deliveries, thereby reducing the amount of fuel used for deliveries. The solution was to install a much larger on site storage system that would meet the current and future needs of ARL. This project realized a significant reduction in the amount of Green House Gasses (GHG) required to deliver bulk gases and resulted in a direct cost savings to the Agency. The idea was shared with National Center for Toxicological Research (NCTR), and similar actions and cost savings were implemented by their laboratory. ARL is collocated with NCTR in Jefferson, Arkansas. The complex as a whole is referred to as Jefferson Laboratories.

---

### **FDA - Joanne Hill**

Joanne Hill, Administrative Management Specialist

Executive Order 13423 mandates that the federal government reuse, donate, sell, or recycle 100% of electronic products using environmentally sound management practices. Joanne Hill has demonstrated exceptional environmental stewardship in her management of electronic assets at the Food and Drug Administration (FDA)'s Winchester Engineering and Analytical Center (WEAC). Ms. Hill's contributions are concentrated in two main programs, recycling unusable electronics and donation of functional computers. Working with a local electronics recycling corporation, Ms. Hill has seen to the recycling of 3,334 lbs. of unusable electronic devices from the laboratory in 2013. As of the end of 2013, WEAC has donated 92 computers to local schools. Thanks to Ms. Hill, not only has WEAC made a tremendous effort towards the green practices mandated by the federal government, but has also engaged and contributed to the local community, which is at the very heart of sustainability.

---

## **CDC - CDC/ITSO**

Howard M. Smith, Associate Director for Technology Services, CDC Information Technology Services Offices (ITSO)

Tim Horner, Senior TS Project Manager CDC Information Technology Services Offices (ITSO)

Dave Ausefski, Associate Director for Shared Services CDC Information Technology Services Offices (ITSO)

CDC ITSO played a key leadership role in Electronic Stewardship within HHS during 2013, which was further exemplified when CDC won the 2013 Federal Electronics Challenge (FEC) Platinum Award presented by the U.S. Environmental Protection Agency for the second consecutive year, and is CDC's fourth FEC award. Specifically, CDC has consistently met and surpassed all of the Electronic Stewardship requirements presented in Executive Order 13514. CDC used new and innovative techniques and solutions to achieve and surpass standards set in all areas of Electronic Stewardship, to include Electronics Acquisition and Procurement, Operation and Management, and End of life Management. Additionally, CDC initiated several projects such as the Single Computer Model project which encourages staff to use only one computing device thereby reducing the overall number of computing devices in use, as well as a Mobile Device Management project which will greatly assist in the reduction of the number of mobile devices in use. CDC has also assisted other HHS operational divisions by mentoring some of its partner OpDivs, providing assistance with power management practices and guidance on the use of Verdiem Power Management Software.

---

## **NIH - America Recycles Day Electronics Events**

NIH IC Green Team Leads Council

NIH celebrated America Recycles Day (ARD) during the week of November 12, 2012, focusing on the sustainable environmental stewardship of end-of-life disposition of electronics. Because employees are often unsure of what to do with non-accountable electronics, NIH's first event was a five-day collection drive of non-accountable electronics, one of NIH's most challenging waste issues. Employees turned in 3,420 pounds (1.71 tons) of electronics at 22 NIH locations in Montgomery County, MD. For the second event, NIH employees staffed Recycling Awareness tables at 13 NIH cafeterias in Montgomery County, MD on November 15.

These events were organized by a trans-NIH planning committee, the NIH Environmental Management System (NEMS) Green Team Leads Council (GTLC). This council includes representatives from all 28 Institutes and Centers (ICs). This group planned and managed all logistics at 22 locations for the collection drive and 13 sites for the recycling awareness event. The Division of Environmental Protection coordinated the efforts and the Office of Logistics and Acquisitions Operations (OLA) played a critical role in collecting the electronics.

The NEMS GTLC captured best practices so that these drives can be continued periodically throughout the year, as a best management practice for dealing with non-accountable electronics.

## **FDA - Richard Furno**

Richard Furno, Project Officer

The FDA, Muirkirk Road Complex, located in Laurel, MD is a 244 acre complex that consists of the main buildings, Module 1, Module 2, and the BRF, as well as the Animal Research Facility outbuildings. The Module 1 and Module 2 buildings are utilized for administration and laboratory/animal research, and the Animal Research outbuildings include numerous animal research facilities, feed processing and storage facilities and heating/cooling plant.

The Energy Conservation Measures (ECMs) implemented through this project consisted of mechanical, HVAC, electrical, solar, lighting, and water conservation ECMs. The benefits of implementing this project include energy and cost savings and result in reduction of energy consumption and green house gas emissions. The estimated reduction in annual energy consumption is 12,249 MMBtu/year, with a Green House Gas Emission reduction of 539 tonnes/year CO<sub>2</sub> (equivalent to 106 passenger cars removed). The calculated annual cost savings resulting from reducing the energy consumption through implementation of this project is \$252,095/year. This project was completed in September 2013.

---

## **FDA - Jefferson Labs Campus Energy Efficiency**

Nick Sartain, Contract Specialist

Corey Linen, Engineer

Greg Tapp, Director, JLCS

Adam Scully, Supervisor, Engineering Team

Tommy Baioni, Engineer

Rudy Rieple, Engineer

The Design and Construction Team at FDA Jefferson Labs worked with a TME Consulting Firm and CLEAResult Consulting to design, construct and measure the effectiveness of projects to improve the energy efficiency at Jefferson Labs.

A Boiler Replacement Feasibility Study for the aging boilers was completed to study the viability of existing steam generating plant for the Jefferson Labs campus. The study found that the Boilers were inefficient and oversized. The Engineering Team extensively surveyed the existing building to determine the appropriate sizing for the replacement boilers.

A lighting analysis was conducted to study the energy usage of the lighting in multiple buildings on the Jefferson Labs Campus. The analysis found the light fixtures were not the most energy efficient and the lack of occupancy sensors lead to wasted energy to light unoccupied spaces.

Jefferson Labs has also collaborated with local utility providers Entergy, CenterPoint, Energy Commercial and Industrial Solutions Program to generate firm figures for annual savings for implementation of these energy saving efforts. These savings will be applied to fund a Comprehensive Energy Audit of the entire Jefferson Labs Campus in 2014. This audit will keep Jefferson Labs in compliance with EISA 2007.

---

## **IHS ANTHC - Rural Energy Health Clinic Retrofits/ARUC Program**

Carl Remley, Consulting Engineer, Project Manager ANTHC-DEHE

CDR Eric Hanssen, Senior Engineering Project Manager ANTHC-DEHE

Gavin Dixon, Energy Auditor ANTHC-DEHE

Kolt Garvey, Senior Journeyman Electrician ANTHC-DEHE

Kyle Monti, Engineering Technician ANTHC-DEHE

Suzanne Wolf, Program Associate ANTHC-DEHE

A combination of increasing energy costs and shrinking operating budgets is threatening the sustainability of the important healthcare provided at rural health clinics across the state of Alaska. In 2013 ANTHC partnered with local communities and tribal health corporations to develop and implement energy efficiency retrofits at 18 rural health clinics. The energy efficiency upgrades completed by this project are estimated to produce an operational cost savings of \$68,000 per year. Most importantly, this project promotes sustainable healthcare infrastructure, lowers the overall cost of healthcare, and leads to healthier rural Alaskan communities.

---

### **PSC - Robert High Computer Room Consolidation**

Robert High, Energy Manager

The Program Support Center (PSC) remains strongly committed to efficient operation and design of our buildings and data centers. The PSC elected to consolidate the two Parklawn data centers into one, while the future data center is under design and construction. The new data center will house multiple DHHS OPDIVs beginning July, 2015. PSC Building Management has remained involved with the construction at the Parklawn Building and aware of all building activities. GSA had recommended an in-depth study and design of the current electrical and HVAC systems of the 2nd floor data center from the building owner to complete this consolidation. Due to the tight time constraints of completing the move, PSC Building Management Branch (Robert High) volunteered to complete both the electrical and HVAC requirements directly through the lessor approved electrical contractor and the Government's current HVAC contractor. This decision was based on the fact that both contractors have a thorough knowledge of the building systems. By doing this, he eliminated the need of a detailed engineering study and design, reducing both time and cost.

---

### **NIH - Minoo Shakoury-Elizeh**

Minoo Shakoury-Elizeh, Biologist

Minoo Shakoury-Elizeh, a biologist at the Liver Diseases Branch (LDB) and a member of NIH Environmental Management System (NEMS) Sustainable Lab Practices Working Group, has been a leader in the planning and execution of the 2012 and 2013 NIH Green Labs Fair. She has gone above and beyond her volunteer duties by coordinating and conducting outreach for these fairs and tirelessly visiting numerous labs at NIH. She has advocated for reduction in the usage of mutagenic reagents and their replacement with safer substitutes. Ms. Shakoury-Elizeh visited labs in NIDDK, NHLBI, NCI, NEI, NIAID, and NICHD to raise awareness of the availability of safer alternatives. As a result of her efforts, multiple laboratories are now testing and switching to the safer substitute chemical. Her efforts will reduce the introduction of potentially cancer-causing chemicals to the NIH waste stream and reduce the costs associated with disposal of hazardous waste. Ms. Shakoury-Elizeh has also promoted a pilot program to return and reuse styrofoam shipping containers and ice packs in Bldg 10. The measures Minoo advocates help NIH reach its goal for the HHS Strategic Planning Sustainability Performance Plan and are crucial for preserving the health of our environment for future generations.

---

### **FDA - White Oak Supply Swap Program**

Jay Collert, Environmental Protection Manager

Ann Wenzel-Hull, Sustainability Outreach Manager

Amanda Wyatt, Student Intern

In September 2013, Jay Collert, Ann Wenzel-Hull and Amanda Wyatt launched the FDA White Oak Supply Swap Program which utilizes the SharePoint platform to give employees on the White Oak Campus a tool to post, search and exchange free supplies and equipment in order to promote the reduction of waste and operational expenses through supply reuse and utilization of existing inventory. After months of meeting with NIH personnel and FDA IT staff, Jay and Ann determined that a simpler version of NIH's "Free Stuff" program would need to be developed to fit in the more restricted SharePoint platform available on the FDA network. They constructed the program to easily transition from Campus-wide to Agency-wide. With the program's simple, yet efficient design that requires minimal developer maintenance, the White Oak Supply Swap Program has a high potential to be replicated within the Federal Government and has been shared with the HHS Outreach Team.

---

### **IHS - Spirit Lake Health Center**

Arlene Krulish, Chief Executive Officer

"The Spirit Lake Health Center is located on the Spirit Lake Indian Reservation in North Central North Dakota. It is home to the Dakota Sioux People. The reservation is 383 square miles with a population of approximately 6,000 people. This service unit strives to practice good environmental stewardship and to protect mother earth. This is done by following a number of sound environmental practices that promote the overall efficiency of the service unit while lessening its environmental impact. This is achieved by utilizing energy efficient appliances, heating and cooling systems, lighting and reproducing systems, along with using environmentally friendly products and practicing recycling programs for paper, plastic, used copying cartridges, florescent lights, oil and paper. The entire staff of this service unit along with the support of management have formed voluntary programs that promote steps and activities that preserve the environment, and conserve our natural resources.

The true meaning of conservation starts with the concerns of the people for the environment and the Spirit Lake Health Center with its work force of sixty nine employees and medical providers have developed programs and patterns that maximize these efforts for the protection and preservation of our environment."

---

### **DAB - Constance B. Tobias, Chair, Dept. Appeals Board**

Constance B. Tobias, Chair

Constance B. Tobias, Chair of the Departmental Appeals Board (DAB), began to implement the use of electronic filing (e-file) and electronic records (e-records) in cases that are filed with the DAB's three adjudicatory bodies. Two of the three divisions have technology in place enabling appellants to e-file appeals, and by the end of FY2013, 70% of the Civil Remedies Division's cases were e-filed. E-filing will eventually be available in all of the DAB's divisions. Additionally, the Medicare Operations Division (MOD) launched an e-records pilot project for agency referral cases. MOD is now equipped to accept and transmit e-records in these cases and is working towards accepting and transmitting e-records in all of its cases (MOD receives over 4,000 cases per year). The implementation of e-file and e-records at the DAB has resulted in tremendous savings of paper, time, money, and environmental resources in the shipping and transport of paper files; and a heightened level of awareness about reducing the need to print. In addition, in FY 2013 approximately 80% of DAB employees were provided with a second computer screen to reduce the need to print documents.

---

## **OS - Go Green Get Healthy HHS Electronics Recycling**

Anna Calcagno, Management and Program Analyst

LTJG Laura K. Annetta, Environmental Protection Specialist

In celebration of Earth Day 2012 in the Hubert H. Humphrey Building, the Green Team organized an electronics recycling drive for employee's personal electronics. The pilot drive was so successful in recycling 3,188 lbs of electronics that the Green Team brought back the electronics recycling drive as a permanent fixture in the Humphrey Building. Anna Calcagno and LTJG Laura Annetta, Green Team volunteers, have led this effort since then, contributing to over 3,418 more lbs of electronics being recycled and diverted from landfills since the pilot. Volunteers serve as the POC in coordination with UNICOR, the Department of Justice organization that collects and recycles the material for free. Volunteers help with promotion of the initiative; for example, updating signage and webpages as appropriate. Additionally, they help to monitor the collection points to ensure HHS owned equipment is not disposed of through this program, and ensures any abandoned equipment is properly processed back to the HHS warehouse. Due to the success of the program at Humphrey, there has been discussion of expanding the program to other HHS buildings in the SW Complex should HHS operate other buildings on campus. Other HHS or federal agencies could reproduce this program at no cost.

---

## **CMS - Document and Workflow Management**

Mara Siler-Price, Branch Manager

Keri Toback, Health Insurance Specialist

Tannisse Joyce, HCBS Waiver Coordinator

Maria Chickering, Managed Care Coordinator

Eowyn Ford, Health Insurance Specialist

Jamie Miller, Financial Management Specialist

CMS DMCHO Region 5 has a comprehensive, long-range document management initiative which has enabled work functions to be completed, processed, approved and filed electronically. Our structure has enabled retention policies to be implemented successfully and has reduced our electronic storage and eliminated our paper storage of "Source of Record" Documentation. This plan has included 1) restructuring of electronic drives, including shadow folders to avoid duplication of storage; 2) development of a storage structure for the main drive for more effective storage and retrieval of information; 3) creation of a workflow enabled database to store information tied to specific regular and ad hoc tasks assigned to staff and 4) future development of Sharepoint and LaserFiche templates to further enhance search functionalities and workflow opportunities. We have also eliminated duplication of resources by cataloguing primary source locations for documentation maintained in other public sources, such as Medicaid.gov. This project began to create consistency in electronic folders. It has become a document management project. Using project management resources, we included the elimination of paper documentation and improvement of our search/retrieval capabilities to the effort. Our work is replicable and we have been asked to share our drive structure with other regions.

---

## **NIH - John Balbus**

John Balbus, Senior Advisor for Public Health

Dr. Balbus developed and initiated one of HHS's signature initiatives in the President's Climate Action Plan, which was released in June 2013. Dr. Balbus is a pioneer in promoting awareness of the health implications of climate change and has worked over the past several years to incorporate climate resilience and sustainability into the HHS mission the Department's activities. In developing the Sustainable and Climate Resilient Healthcare Facilities Initiative, Dr. Balbus identified an urgent need for hospitals and other health care facilities to prepare for and adapt to

global climate change. Dr. Balbus worked closely with the Executive Office of the President and the Office of the Assistant Secretary for Health to build support for the initiative and is now collaborating with other components of HHS to bring the project to fruition. In September of 2013, Dr. Balbus was appointed to direct the activities of the new WHO Collaborating Center for Environmental Health Sciences.

---

### **CDC - Kathleen E. Sobush**

Kathleen E. Sobush, Community Planner, Transportation Services Office

This nomination recognizes Kathleen Sobush for her outstanding knowledge of livability principles and engagement with local and regional communities to promote the goals of Executive Order 13514. Ms. Sobush was a technical advisor in three noteworthy local and regional planning projects that reached critical milestones in FY13 including the Atlanta Regional Commissions first-ever Transportation Demand Management Plan, the DeKalb County Community Transportation Plan, and the Clifton Corridor Transit Initiative. Ms. Sobush's position at CDC was created five years ago and since that time she has been collecting data on commuter behaviors; developing, implementing, and evaluating commuter programs; engaging in the local and regional planning process; and communicating opportunities for public involvement to CDC personnel. The results of this work have enabled Ms. Sobush to provide evidence based contributions to local and regional planning projects leading to planned projects that will increase pedestrian, bicycle, and mass transit infrastructure supporting transportation options in the Atlanta region and for CDC personnel. These activities can be replicated across the federal government in communities where federal facilities are located. Ms. Sobush will share this work in her keynote presentation to the Federal Planning Division Banquet at the American Planning Associations 2014 National Conference.

---

### **CDC and City of Atlanta Green Building Cooperation**

Joesph M. Henderson, Director, Office of Safety, Security and Asset Management

Jeffery Williams, Director, Asset Management Services Office

Angela Wagner, Portfolio Manager, Chamblee and Lawrenceville Campus

Alfreda Stukes, City of Atlanta, Department of Watershed Management

Jo Ann J. Macrina, Commissioner City of Atlanta, Department of Watershed Management

Liz York, Associate Director for Quality and Sustainability, Quality and Sustainability Office

Jo Ann Macrina, Commissioner from the Department of Watershed Management for the City of Atlanta, lead and coordinated a team involved in the future construction of a state of the art Training Academy to visit with CDC. The City of Atlanta's goal is to construct the new training academy to LEED specifications. Based on the CDC's portfolio of green buildings, the City of Atlanta team was eager to discuss the sustainable design and construction process with CDC staff, and tour some completed facilities, as well as others under construction. In preparation for the meeting, the City of Atlanta team prepared a series of questions that were fielded during the meeting and tours. Logistics, cost, maintenance, and building performance were among some topics discussed. The building tour of the completed BI10 project, as well as the BI07 project that was under construction at the time of the tour, was an excellent opportunity to put the rubber on the road, and demonstrate some of the concepts discussed during the preceding meeting first hand and in person.

---

## **NIH - HiBR Conference**

Michelle Coley, Business Specialist Division of Environmental Protection

Charles Blumberg, Program Specialist Division of Environmental Protection

Amy Blackburn, Program Specialist Division of Environmental Protection

LT Matthew Hunt, Engineer Division of Environmental Protection

Susan Hinton, Branch Chief, Sustainability Branch Division of Environmental Protection

William K. Floyd, Director, DEP Division of Environmental Protection

"On April 23, 2013 the NIH Division of Environmental Protection (DEP) in collaboration with the American College of Sports Medicine (ACSM) hosted a unique and innovative conference entitled the Health in Buildings Roundtable Conference (HiBR). In response to a national need to investigate the link between the built environment and human health, the conference was the first of its kind and was created to educate, incorporate, introduce ways to create healthier buildings, healthier employees and healthier communities not only at the NIH, but across the nation.

The NIH collaborated with local and regional communities, private corporations and consulting companies, non-governmental organizations, various governmental agencies, and other industry experts to create a foundation for the establishment of a National agenda for public health research and policy in order to further support healthy buildings and healthy communities. to include General Services Administration (GSA), the American College of Sports Medicine (ACSM), Cannon, Perkins and Wills, US Green Building Council (USGBC), University of Virginia, Virginia Technical University, University of Denver, Google Incorporated. Conference sessions focused on the increased use of natural lighting in buildings, interior environmental friendly furnishings, and surrounding environmental landscape options in an effort to support sustainable communities."

---

## **NIH - Idongesit Essiet-Gibson & Pia Lohse**

Idongesit Essiet-Gibson, Health Specialist/COR

Pia Lohse, Health Specialist/COR

The NIAID, DAIDS Contracting Officer's Representative (COR), and Alternate COR for the Regulatory Support Center (RSC) Contract, launched a "Go Green" initiative in 2013, which successfully engaged DAIDS personnel and collaborators in the utilization of a computer-based DAIDS Enterprise System (DAIDS-ES) and the DAIDS RSC Collaboration website to access key clinical trial research documents to support HIV/AIDS research. As a result, 70% of the existing RSC contract work task areas migrated from a paper to paperless environment. As a result of this initiative, contract deliverables are stored in a shared, searchable and web-accessible portal; the contractor employs electronic sign-off for final versions of key clinical trial documents; and electronic "how to" and e-learning videos have been deployed reaching collaborators throughout the globe. Migration to an electronic environment has reduced contract reproduction and courier delivery costs by 50% and increased effectiveness of communication with key collaborators such as our ability to reach personnel at 78 clinical trial sites in 10 countries, with critical information on changes to DAIDS protocol registration processes, through four e-Learning sessions hosted remotely. These efforts help to reduce environmental waste and maximize effectiveness of government operations.

---

## **CDC - Procurement and Grants Office - Chamblee Building 107 Acquisition**

Kenneth Ivery, Contracting Officer Procurement and Grants Office

Harry Marsh, Architect Office of Safety, Security, and Asset Management

Michael Payne, Contracting Officer's Representative Office of Safety, Security, and Asset Management

Daniel Sullivan, Architect Office of Safety, Security, and Asset Management

Steve Baughman, Contracting Officer Procurement and Grants Office

Dale DeFilipps, Contracts Manager Procurement and Grants Office

The Centers for Disease Control and Prevention (CDC) is commended for their outstanding efforts in planning, designing, building, and delivering a state of the art sustainable Building 107 at the Atlanta/Chamblee campus. The construction of the building began in the summer of 2011 and was completed on schedule and within budget in April 2013. At 268,594 square feet with 9 floors, it houses over 1,000 health professionals from the National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP). Building 107 is a vital asset to support NCCDPHP's goal to promote health and well-being through prevention and control of chronic diseases. This project was a collaborative team effort including CDC's senior project managers, lead acquisition professionals and various subject matter experts, and achieved substantial reductions in energy and water usage. Building 107 and the associated Parking Deck 161A are a continuation of CDC's Master Plan that includes a future Office Building 108, Laboratory Buildings 112 and 113, and a Central Utility Plant to support those laboratory buildings. Depending on available funding, Building 107's Lobby will also serve the future Research Support Building 108, a similar adjacent office building of 8 to 10 stories in height. The beneficial impact on the environment and human health are provided separately in the narrative section below.

---

**NIH (OD/OM/ORF Div. Environmental Protection) - Innovative Tools for Advance Sustainable Acquisition**

CAPT Edward H. Rau, Innovation Projects Lead

LCDR Leo Gumapas, GHG Program Manager

Dr. Yang Fann, IT Director

Steve Breslin, Architect

Rajiv Chainani, Mechanical Engineer

Kieth Ashe, Branch Chief, Safety Engineering Activity

Dana Arnold, Division Director GSA Program Analysis Div

Michael Bloom, Program Advisor/SF Tool Manager

Sandra Britz, Program Analyst GSA

Katie Miller, Program Analyst/GPC Co-Manager GSA

"The Division of Environmental Protection (DEP) of the Office of Research Facilities at NIH has conceived and is leading development of sustainable acquisition innovation initiatives to concomitantly meet the health goals of the HHS Secretary's Strategic Plan and Priorities, and the directives of Executive Order 13514 for federal agencies to apply their purchasing power to create markets for sustainable products and services. These ambitious, long term initiatives focus on two aspects of procurement policy and practice that were largely undeveloped: provisions for identifying and reducing procurement of products containing toxic, hazardous, polluting or unrenowable chemicals, referred to in our reduction initiative as Substances of Concern (SoC), and addressing unmet government-wide needs for user friendly, automated tools and systems to facilitate purchasing of healthier, more sustainable products, including those posing reduced chemical risks associated with SoCs.

These efforts are being carried out by small interagency teams of NIH employees working closely with their counterparts in the General Services Administration (GSA). While these initiatives are only in their earliest phases of implementation the unprecedented levels of collaboration established between the NIH and GSA teams have already produced a remarkable number of innovative sustainable acquisition tools that are now available for government-wide use."

## **NIH - Linwood Inscoc - Renovation of Building 16A**

Linwood N. Inscoc, Project Officer Division of Design and Construction Management

"NIH Building 16A is located at 9000 Rockville Pike, Bethesda, Maryland on the campus of the National Institutes of Health. The building, constructed circa 1930, is eligible for registration in the National Historic Register and therefore subject to federal preservation guidelines.

Prior to renovation Building 16A was unoccupied, had not been maintained for many years, and was in substantial disrepair. Building system problems included poor heating and cooling systems, substandard electrical service, lack of life safety systems, inadequate plumbing, and the presence of hazardous materials.

The renovation plan for Building 16A required a historically sensitive restoration that included infrastructure upgrades consistent with sustainability guidelines. In 2009, the project was selected for ARRA (American Recovery and Reinvestment Act) funding. To demonstrate sustainability compliance it was registered as a LEED (Leadership in Energy & Environmental Design) project and the design was developed to maximize building efficiency and minimize environmental impact.

Design development was completed in 2010. Construction began in 2011, with occupancy in October 2012. Mr. Inscoc managed the project from design to completion, and coordinated administrative requirements for the final LEED application through the summer of 2013. The project was awarded LEED Silver level certification, surpassing expectations and setting an example for future projects."

---

## **NIH - Green and Fit Retrofit at NIEHS**

Debra D. Del Corral, Space Management Specialist NIEHS, Office of Management

Amanda D. Thompson, Interior Designer NIEHS, Office of Management

Joseph F. Seufert, Engineer NIH, OD, Office of Research Facilities

"A major renovation at the National Institute of Environmental Health Sciences (NIEHS) combined sustainable design with improved employee fitness and health. NIEHS converted underutilized library space to house state-of-the art bioinformatics workspace, high-tech scientific training facilities, work-life resources and an employee fitness center.

Throughout the project, building materials were reused, furnishings were refurbished and reinstalled, metals materials were recovered and recycled, healthy paints, adhesives and finishes were applied, energy-efficient lighting and heating/cooling systems were installed, and water conserving fixtures were built in.

Overall construction costs were cut by 30-40% by eliminating multiple project phases. Other efficiencies saved at least \$160,000. The project improved space utilization by eliminating passageways and optimizing layouts.

The Institute improved its ability to meet its emerging scientific mission in bioinformatics and scientific training, and saved hundreds of thousands of dollars. At the same time, NIEHS kept tons of material out of landfills, installed healthy and efficient materials and engineering systems, and promoted employee fitness and quality of life."

---

## **IHS - Cheyenne River Health Center and Staff Quarters Innovative Energy Savings Design**

John L Bausch, P.E, Project Manager IHS/OEHE/Division of Engineering Services – Seattle

Delton D. Woodford, P.E., Great Plains Area Project Manager IHS/OEHE/Great Plains Area

Pierre Cecil J. Means, P.E., Facility Manager IHS/Cheyenne River Service Unit/Great Plains Area

Brian Boettcher, Facility Engineer IHS/Cheyenne River Service Unit/Great Plains Area – Eagle Butte

Lyle Smith, Project Manager CRST Tribal Projects Office

Dennis Barber, P.E., CRST Consultant CRST Engineering Consultant

The Cheyenne River Health Center and staff quarters are located in Eagle Butte, South Dakota. The Health Center is approximately 138,000 SF with 10 beds, and started serving patients in January of 2012. The staff quarters (133 units) were completed in phases starting in 2011, and ending in 2013. These facilities were designed and constructed through a P.L. 93-638 contract with the IHS and the CRST. One of the primary design goals for these facilities was to meet EO 13423 energy standards by targeting a 30% energy use reduction from a typical building complying with the ASHRAE standard. Many modern technologies were incorporated into the Health Center, including ground source heat pumps along with a high performance building envelope including precast concrete construction which limits infiltration, thermal insulation exceeding ASHRAE 90.1 standards, and advanced networked DDC controls employing an enthalpy economizer, discharge air temperature reset controls, and ventilation, heating and cooling zone demand controls combine to assure building systems continue to perform at design conditions for the life of the building saving nearly 50% of the energy that a basic code compliant building might use. The staff quarters design, also utilized ground source heat pumps and other innovations resulting in 60% more efficient quarters units than the prescribed baseline.

---

### **FDA - Dr. Abdur-Rafay Shareef**

Dr. Abdur-Rafay Shareef, Chemist FDA/ORA/WAEC

Executive Order (EO) 13514 mandates the reduction of potable water consumption intensity by 2 percent annually until 2020 in federal buildings. This is an especially daunting task in a regulatory laboratory, which depends on results from recognized procedures to take legal action and protect public health. Several such procedures require large amounts of potable water. In 2013, Dr. Abdur-Rafay Shareef of the Food and Drug Administration (FDA)'s Winchester Engineering and Analytical Center (WEAC) successfully implemented a change that resulted in tremendous reduction in potable water usage. He researched and identified a piece of equipment that replaced the need for water in one of the most common analyses in this lab. His efforts resulted in the savings of approximately 700 gallons of potable water in 2013, and a projected savings of over 1000 gallons in 2014. Thanks to the initiative of Dr. Shareef, WEAC has overcome the unique challenges faced by laboratories in reducing water use, and contributed to the federal government's green initiative.

---

### **CDC - Bldg. 18 Autoclave Upgrade**

Paul Probst, General Engineer OSSAM

Karen Moss, Mechanical Engineer OSSAM

Shahab Noormid, Mechanical Engineer OSSAM

Ken Ivery, Contract Specialist OCOO/PGO

"This project was driven by water consumption, poor operating conditions and maintenance problems with ten of Building 18 autoclaves. The autoclaves will be upgraded to have the circulation system changed from once through domestic water to a chilled water circulation system.

Notable project team members are as follows:

Paul Probst (OSSAM): As a Facility Manager, Paul identified the need for this project and provided technical and expert advice along the way .

Karen Moss (OSSAM): As Mechanical Engineer Karen headed up design efforts for the project.

Shahab Noormid (OSSAM): As COTR/Construction manager Shahab executes project build-out and makes sure design intent is carried out and installed per the contract's scope schedule and budget requirements.

Ken Ivery (OCO/PGO): As Contract Officer, Ken expedited the contract and coordinated all procurement tasks related the project."

## **IHS - Turtle Mountain Public Utilities Commission Metering Project**

Kenneth J Azure, Executive Director, PUC Public Utilities Commission

Kelly Laducer, Operator Public Utilities Commission

Harold Bruce, Operator Public Utilities Commission

Anthony Murphy, Operator Public Utilities Commission

Eric Thomas, Operator Public Utilities Commission

Shannon Gunville, Opeator Public Utilities Commission

Travis Delorme, Inspector Belcourt Indian Health Service OEH&E

Shirley Thomas, Office Staff Public Utilities Commission

Ann Brien, Office Staff Public Utilities Commission

Shauna LaVallie, Office Staff Public Utilities Commission

"The Turtle Mountain Reservation Public Utilities Commission (PUC) water system provides service to over 12,000 individuals through approximately 2,500 metered connections. Over 1000 meters on the PUC system were approaching 30 years in age, substantially past their recommended replacement cycle. The Environmental Protection Agency, Indian Health Service, and Bureau of Reclamation funded a project to replace all water meters with new magnetic meters which are 100% accurate, with a life span of 20 years. Along with installation of the new magnetic meters, radio read transmitters were installed which provided for transmitting the water meter data via a radio link to a receiver in a PUC utility vehicle.

This project was executed in a large part by the cooperation and administrative efforts of the Turtle Mountain PUC staff. Kenneth Azure, Executive Director of the PUC was the contracting officer for all contracts and administrative items related to this project. A contractor was hired to install approximately 1800 meters at the start of the project. The PUC operators installed the remainder of the 2500 meters and transmitters. The PUC office staff input all the accounts for the new meters in their billing software, and updated water use data for the new system."

---

## **OS - Global Worming in Five Acts Laura Annetta, Christian Fackrell, & Will Kim**

LTJG Laura K. Annetta, Environmental Protection Specialist

CAPT Ed Pfister, Environmental Program Manager

Christian V. Fackrell, HR Assistant Human Resources

Will Kim, Executive Assistant ASA

"A Story in 5 Acts: Global Worming" is a video (<https://www.youtube.com/watch?v=9XgbVgsv68U>) that was originally produced for the Earth Day Sustainability Hero Video Contest. The video takes viewer through the Go Green Get Healthy HHS pledge and covers the topics of "Turn it Off", "Public Transportation", "Recycle and Compost", "Water", and "Encourage and Educate". Since then it has been used to promote Sustainability at HHS and was displayed at the 2013 Humphrey Earth Day Expo. The video explains how to "Go Green" at the Humphrey Building, but many of the concepts can be used at other HHS facilities as well. The video can be produced in a more general format and shown to all HHS employees during new employee orientation training, or other OPDIVs could tailor the script to their buildings and reproduce the video for Sustainability Training at their location.

## **NIH - Solid Waste Team at NIH Bethesda Campus, team leader LTJG Ariell Lawrence**

In support of the Green Hero Video Outreach submission to Go Green HHS:

This nomination is to honor Sustainability Hero LTJG Ariell Lawrence, US Public Health Service, NIH Recycling Coordinator. LTJG Lawrence leads the NIH Waste Management Team; a group of extraordinary personnel who never fail to do the absolute best job in delivering solid waste management services for the NIH Bethesda campus. These services encompass medical pathological waste, construction debris, scrap metal, cardboard, wooden pallets, pipette tip racks, commingled materials, mixed paper, ink and toner cartridges, animal bedding compost, and food waste compost. During FY 2013, \$198,703.78 in remuneration from recycling was achieved to offset solid waste disposal cost. That is in large part due to the waste management staff's continued dedication to improve our recycling efforts. They even make special efforts to segregate the more lucrative metals from the scrap metal cans. Providing waste management to over 18,000 employees is no simple feat and the team at NIH Bethesda performs with great skill and dedication, under the capable leadership of LTJG Ariell Lawrence.

---

## **FY 2013 Green Champions Honorable Mentions**

NIH - Lab-Grade Freezer Lifecycle Management

Sonia E. Cross, Property Systems Specialist, Property Management Branch

Jadelin M.E. Iokepa, Program Analyst, Division of Logistics Services

LCDR Leo Angelo M. Gumapas, Environmental Engineer Division of Environmental Protection, Office of Research Facilities

The Lab-Grade (LG) Freezer Accountability Project was in collaboration with Division of Logistics Services (DLS) and the Division of Environmental Protection (DEP), Office of Research Facilities (ORF), to physically locate, identify, and add all NIH-owned LG freezers into the property system as accountable assets.

DEP's 2012 energy study found ultra-low temperature (ULT) laboratory freezers consumed about 20 kilowatt-hours per day of electricity, equivalent to the daily consumption of an average family household. This high electricity consumption was partially attributed to freezer temperatures of -56°C to -86°C, including the age of the freezer, poor maintenance, improper freezer location, contents stored improperly, and set points not monitored regularly. The estimated energy cost for an old, unmaintained freezer can exceed \$1,500 annually. ORF aimed to reduce the energy consumption with a subsidized acquisition of 125 new, energy-efficient freezers to replace 98 old ULT freezers; estimated \$55,000 annual cost avoidance of energy consumption.

A comprehensive inventory resulted in tracking and monitoring over 4,600 LG freezers, an increased average value of \$29M added assets, for lifecycle management and maintenance program to reduce electricity consumption, determine adequate space requirements for laboratories and facilities, and mitigate the risk for loss of valuable research due to freezer failures.

---

## **CDC - DSNS Telework Program**

Roy Herman, PPA, Branch Chief Program, Planning and Analysis Branch

The Centers for Disease Control and Prevention's (CDC) Division of Strategic National Stockpile (DSNS) launched an innovative telework (TW) program in 2012 that allows employees to work from an alternate location up to four days per week. The program began as a pilot with 28 participants and grew to a 97% participation rate in 2013 with support from the DSNS director and the division's branch chiefs and activity leads, who recognized the program's potential financial and sustainability benefits. Technology platforms including CITGO, VPN, and Microsoft Lync established channels of communication between staff in the office and those teleworking. A survey conducted by DSNS showed the TW program improved employee morale, worker productivity, and resulted in cost savings for employees who avoided long commutes. On a daily average, each DSNS employee teleworking reduces air pollutants by 56 pounds. The TW initiative enabled the division to consolidate its office footprint by reducing DSNS' workspace

requirement and by ending its commercial leased office space contract, saving the government \$200,000 annually. The DSNS TW program serves as an excellent example of flexibility and innovation at CDC and has the potential to serve as a model for the rest of the agency.

---

### **FDA - e-Letterhead image to Replace Expensive, Preprinted Letterhead Paper**

Ian Broverman, Medical Device Reviewer, Office of Device Evaluation

Our Office sends hundreds of official letters to medical device manufacturers every day. Workflow for these letters had been to print out a draft copy of the letter, then give it to a secretary who would then copy it onto heavy weight letterhead paper for mailing. I put a graphic image of our Office's standard letterhead onto an electronic copy of my draft, and suggested that the Office print that instead of using the letterhead. My Deputy Division Director, Dr. Peter Rumm, brought the idea to a management meeting. Everyone liked the idea, and all of our letters are printed once only (no draft copies), on standard copier paper instead of expensive letterhead.

---

### **CDC - Bldg. 17 HVAC Modification**

Karen Moss, Mechanical Engineer OSSAM

Bruce Jue, Electrical Engineer OSSAM

Meghan Ramsey, Civil Engineer OSSAM

Efficiency and responsible use of resources are a big part of sustainability. Modifications to the HVAC systems and airflows in CDC's Building 17 laboratory building resulted in the correction of several inefficiencies regarding air change rates and equipment installation in the labs. Work on this project significantly reduced the amount of energy used in the building to power the exhaust fans and air handling units and is calculated to result in significant annual energy savings for the Agency.

Notable project team members are as follows:

Karen Moss (OSSAM): As Mechanical Engineer Karen headed up design efforts for the project.

Bruce Jue (OSSAM): As Energy and Water Goal Manager, Bruce provided technical and expert advice as to quantifying estimated energy usage and savings for the project.

Meghan Ramsey (OSSAM): As COTR/Construction manager Meghan executed project build-out and made sure design intent was carried out and installed per the contract's scope schedule and budget requirements.

---

### **FDA - WEAC Green Committee**

Robert Donovan, Facility Management Manager FDA/ORR/WEAC

Stephanie Healey, Supervisory Engineer FDA/ORR/WEAC

Jenny Lau, Administrative Management Specialist FDA/ORR/WEAC

Crystal Nevins, Microbiologist FDA/ORR/WEAC

Louis O'Malley, Electronics Technician FDA/ORR/WEAC

Joseph Teixeira, Engineer FDA/ORR/WEAC

Kerry Walsh, Supervisory Engineer FDA/ORR/WEAC

James Wilson, Industrial Hygienist FDA/ORR/WAC

The Winchester Engineering and Analytical Center has incorporated forward thinking policies into daily operations thus achieving significant and quantifiable energy and Greenhouse Gas emission reduction requirements as outlined in Executive Orders 13423 and 13514 as well as meeting scope items 1 and 2 of Goal 1 of the HHS Strategic Sustainability Performance Plan. Areas targeted for evaluation were equipment performance and employee room-use trends. The data collected from these targets allowed WEAC to reduce our purchased electric kW hour from 1,232,524 in 2012 to 855,980 kW hours purchased in 2013. This is an approximate 30% reduction in energy intensity. In 2012, WEAC's GHG emissions totaled 466 metric tons of CO<sub>2</sub>. WEAC's energy intensity in 2013 reduced our GHG emissions to 324 metric tons of CO<sub>2</sub>, producing an approximate 30% reduction.

---

### **NIH - Effective Reutilization of Property at NIH**

Michael Kessler Sr., Property Disposal Specialist Property Reutilization and Disposal Section, Property Management Branch

Hayes Robinson, Property Disposal Specialist Property Reutilization and Disposal Section, Property Management Branch

Rene Richardson, Property Disposal Specialist Property Reutilization and Disposal Section, Property Management Branch

Keimar Clarke, Project Manager, SoBran Inc. Property Reutilization and Disposal Section, Property Management Branch

The Property Reutilization and Disposal Section (PRDS), Division of Logistics Services at the Gaithersburg Distribution Center collaborated with the NIH community and other Government agencies to reutilize surplus serviceable property items. Through this collaborative effort, the PRDS was able to reutilize over 3,000 property items, resulting in saving the Government over \$7.4 million dollars. By promoting eco-conscious throughout NIH, the PRDS successfully recycled 22,453 pieces of equipment, equivalent to over 56 tons and netted over \$86,000 of revenue for NIH in return. The Property Reutilization and Disposal Section recycled over 26 tons of freezers and refrigerators which contributed to the proper disposal of Freon, a refrigerant that negatively affects the ozone layer and environment; this recycling netted the NIH a savings of \$17,900 dollars. The PRDS advocated efficient business processes and procedures to avoid unnecessary scrapping and disposing of excess computer and scientific equipment by effectively managing the reutilization of surplus property such as the Direct Donation Program of IT and Laboratory equipment to local schools, Universities and Not-for-Profit organizations. Program participants received over 7,000 property items valued over \$13 million dollars.

---

### **NIH - Surplus Chemical Redistribution of Property at NIH**

Charlyn Lee, Team Lead, DEP/WRRB

Crispin Hernandez, Industrial Chemist, DEP/WRRB

John Prom, Industrial Chemist, DEP/WRRB

Roger Weidner, Industrial Chemist, DEP/WRRB

David Mohammadi, Industrial Chemist, DEP/WRRB

Thomas Carroll, Environmental Specialist, DEP/WRRB

Gwen Shinko, Director, NIHM Intramural Research Administration

Claro Yu, Program Team Lead, NIHM Intramural Research Administration

Ken Okojie, Supervisor, DEP/WRRB

Saeed Mermar-Ardestani, Chemical Waste Technical, DEP/WRRB

The NIH Surplus Chemical Redistribution Recycling Program was implemented to reduce the disposal of unused chemicals discarded as wastes and improve sharing them between institutes/centers (ICs) and buildings. The development of NIHs' FreeStuff website to post and share free chemicals was the key innovation that provided the NIH Division of Environmental Protection (DEP) with the tool to launch the program in April 2013. DEP staff strategized with NIAID staff to redesign, test, and deploy the chemical reagent page of the website. Promotions and operations were accomplished by partnering with NIAID staff, Lab Managers and Chemical Waste Services contractors. This program has significant impact NIH-wide, providing a cost savings associated with chemical procurement and cost avoidance for waste disposal. It also has positive health and environmental outcomes realized in reduction of greenhouse gases from manufacturing and transportation of new chemicals. The program has been expanded to include NIH leased facilities in Rockville and was already implemented at the NCI Frederick facility. It is a sustainable business practice designed to improve NIH environmental performance and conservation of resources. Additionally, it helps the NIH achieve its HHS Strategic Sustainability Plan (SSPP) goals and NIH Green Initiatives for pollution prevention, resource conservation and toxicity reduction.

---

### **FDA - WEAC Garden and Composting**

James Wilson, Industrial Hygienist FDA/ORAW/WEAC

Robert Donovan, Supervisory Utility Systems Repair OO/OFEMSS/DOMCR/FMOB

Stephanie Healey, Supervisory Chemist FDA/ORAW/WEAC

Jenny Lau, Administrative Management Specialist FDA/ORAW/WEAC

Crystal Nevins, Microbiologist FDA/ORAW/WEAC

Louis O'Malley, Electrical Engineer FDA/ORAW/WEAC

Joseph Teixeira, Mechanical Engineer FDA/ORAW/WEAC

Kerry Walsh, Supervisory Electronics Engineer FDA/ORAW/WEAC

Teresa Navas, Chemist FDA/ORAW/FLA-DO/Port Everglades-RP

Donald Bellemare, Maintenance Mechanic FDA/ORAW/WEAC

WEAC began an Earth Day tradition in 2013 of planting a community garden to promote healthy lifestyle. The garden is built from minimal materials and both local and donated seedlings were planted. The garden uses no pesticides, therefore providing healthy vegetables to employees. Fed by water collected from rain barrels, this garden consumes no metered resources from our building. This same day, our building unveiled a compost bin to not only feed into the garden, but to divert solid waste from the landfill. Several of these items are goals outlined in the HHS Strategic Sustainability Performance Plan (HHS SSPP). These assets will continue to serve our building for years to come with minimal cost going forward.

---

### **FDA - Single-Stream Recycling at Jefferson Labs**

Richard Keach, Program Analyst, NCTR

Jefferson Labs began a single-stream recycling program in late 2012 that provided 37.7 metric tons of recycled materials in FY2013. Members of the Sustainability Team at Jefferson Labs devised a communication strategy that included posters, video displays, and flyers. Team members also improved signage so employees could more easily identify which bins to use, discussed with management strategies for ensuring a successful implementation, and monitored use of recycling bins to strategically place recycling bins at the Center. Single-stream recycling continues to find success: total pounds of recycled materials increased by 11% in the last 6 months of the fiscal year.

---

**FDA - eNotice**

Todd Cato, SWID

Catherine Vieweg, SWID

James Klemashevich, SWID

James Hanus, SWID

Tracey Taylor, SWID

Sylvia Gaytan, SWID

Aida Ojeda, SWID

Jeanine Olivas, SWID

Patrick Dimapindan, LOS-DO

Madelyn Bell, LOS-DO

In FY13, Southwest Import District (SWID) underwent a transformation in how it provided custom brokers their legal notices through eNotice. This transformation has resulted in improved customer service and decreased District resource expenditure (paper, envelopes, postage, staff time).

---

**NIH/OD - Linda Mongelli**

Linda Mongelli, Program Manager Office of Human Resources/ WSDD/WEB

New Federal employees enter on duty with NIH and attend New Employee Orientation (NEO). At NEO, each new employee is provided with a folder containing color copies of the materials listed below:

- New Employee Handbook
- 29 pages copied front to back
- Dates to Remember form
- Agenda

Linda Mongelli performed an analysis of the paperwork provided and determined that placing these documents on the New Employee Orientation website would save approximately \$30,000 in paper alone. This does not factor in the cost of:

- Use of the copier
- Toner
- Recycling due to errors
- Storage of documents
- Staff time in moving the materials to the site of orientation

Linda's recommendation to put the documents on the New Employee Orientation website instead of printing the information was quickly approved, not just as a cost cutting measure, but also as a way for OHR to continue its efforts to "Go Green."

Linda also created a QR Code to allow new employees to access the documents through their tablets and phones while they are attending orientation and afterwards as a reference. This innovative strategy can easily be duplicated at other OP/Divs and Federal agencies to further sustainability and environmental goals of the Federal government.

---

### **CDC - Furniture Reuse Program-Sherri Johnson**

Sherri Johnson, Supply Management Specialist CDC/OD/OCOO/OSSAM/AMSO/Logistics Management Services Office (LMSO)

Ms. Johnson served as the project lead managing the disposition of an extraordinary amount of excess property generated by CDC staff moves from leased facilities. Over 6,749 assets were excessed as a result of the moves and the volume of these assets far exceeded the capacity of the CDC warehouse to store them. AMSO (BFO) secured temporary storage for the assets, but due to the cost of the storage a great deal of emphasis was placed on rapid disposition. Ms. Johnson formulated and executed a plan that leveraged resources from GSA and the Georgia State Surplus Office to minimize the time required to dispose of the property while maximizing reuse, sales or recycling to minimize waste. As a result:

- 6219 assets with an acquisition value of \$5,413,781 were transferred to other Federal and State agencies
- 460 assets with an acquisition value of \$2,829,403 were sold at GSA auction
- 70 assets with an acquisition value of \$22,000 were declared as scrap
- Metal products were provided to recycler
- Wood products were disposed of in dumpster

Ms. Johnson's efforts provided great value to the CDC and each organization that was able to benefit from dedicated effort to dispose of this property in the most efficient and effective manner. Her exceptional interpersonal skills, analytical ability, attention to detail, and selfless service were instrumental to the extraordinary success of this project. I highly recommend her for this award.

---

### **NIH/CC - Dr. Dawn Ionescu**

Dr. Dawn F. Ionescu, Clinical Fellow, Group 75545

Dr. Dawn Ionescu exemplifies what it means to truly be a "Green Champion". When she began working here, she noticed that our group threw away a lot of trash that could be recycled. She immediately placed a recycling bin in our office and personally empties it into larger recycling receptacles. We recently had our offices remodeled, which included throwing away a lot of old papers. Dr. Ionescu again took initiative to ensure that recycling bins were placed outside of our offices (instead of throwing papers in the regular trash). We actually filled about 4 large bins for recycling and everyone was grateful to her for ensuring that we remained "Green" during this process. Most recently, she arranged to have a "Coat and Recycled Holiday Lights" drive which was a huge success. She is a member of the NIH Green team and, although she is busy caring for patients on a daily basis, she uses her own time and, often her own resources, to ensure that NIH maximizes their efforts to care for the environment. Overall, Dr. Ionescu is an excellent advocate for the environment and extremely deserving to receive a 2013 Green Champions Award.

---

### **NIH/NINDS - Jon'Lethia King - Battery Recycle Program**

Jon'lethia Adams King, Program Support Assistant Client Services Division/IOOB

Jon'lethia Adams King facilitated the Battery Recycling program within NIH/NINDS in 2011 by working with NIH/ORS/ORF to obtain recycling bins and regular pickup of used batteries. In June 2013 she transferred to NIH/OHR/CSD and facilitated the start of battery recycling in the break rooms in the building where she currently works. The battery recycling program allows staff to recycle their batteries in a safe and environmentally friendly manner. Batteries are made from important resources and chemicals, including lead, cadmium, zinc, lithium and mercury. Each battery placed in the recycling bins will be taken apart and many of the materials will be recovered and used to make new batteries or something else.

## **CDC - Building 107 Construction Recycling**

Karen Moss, Mechanical Engineer, OSSAM

Bruce Jue, Electrical Engineer, OSSAM

Meghan Ramsey, Civil Engineer, OSSAM

Efficiency and responsible use of resources are a big part of sustainability. Modifications to the HVAC systems and airflows in CDC's Building 17 laboratory building resulted in the correction of several inefficiencies regarding air change rates and equipment installation in the labs. Work on this project significantly reduced the amount of energy used in the building to power the exhaust fans and air handling units and is calculated to result in significant annual energy savings for the Agency.

Notable project team members are as follows:

Karen Moss (OSSAM): As Mechanical Engineer Karen headed up design efforts for the project.

Bruce Jue (OSSAM): As Energy and Water Goal Manager, Bruce provided technical and expert advice as to quantifying estimated energy usage and savings for the project.

Meghan Ramsey (OSSAM): As COTR/Construction manager Meghan executed project build-out and made sure design intent was carried out and installed per the contract's scope schedule and budget requirements.

---

## **CDC - Community Garden**

Julie Fishman, Director for Program Development National Center for Environmental Health

Angela Wagner, Chamblee Campus Portfolio Manager Asset Management and Services Office

The Community Garden project is an initiative which will allow CDC/ATSDR employees to reap at their worksite the many benefits of community gardening—increased access to fruits and vegetables, physical activity, and community building. The CDC/ATSDR Employee Community Garden will also serve as a focal point for gatherings and discussions on public health approaches to increase access to healthy foods in communities, as well as sharing knowledge of gardening with the wider CDC community.

The project was a collaborative effort involving several groups within CDC at the Chamblee campus. Most notable are Julie Fishman, associate director for Program Development, from the National Center for Environmental Health, and president of the employee association formed to oversee the garden, and Angela Wagner, the Chamblee Campus Portfolio Manager and Sustainable Buildings Coordinator from the CDC Asset Management and Services Office. Julie acted as overall project coordinator, and brought together all parties, to make sure project meet all intended objectives. Angela provided technical assistance, and helped identify campus location, and optimal configuration of planting beds.

---

## **CDC - Lawrenceville Campus Power Pole Replacement, Repurposing and Recycling**

Harry Goslow, Electrical Engineer/Design Project Officer CDC/Office of the Director, Office of the Chief Operating Officer, Office of Safety, Security and Asset Management, Asset Management Services Office, Design, Engineering, And Management Services Office

Fatema Sadiq, Architect CDC/Office of the Director, Office of the Chief Operating Officer, Office of Safety, Security and Asset Management, Asset Management Services Office, Design, Engineering, And Management Services Office

Sarah Gray, Contract Specialist CDC, Office of the Director, Office of the Chief Operating Officer, Procurement and Grants Office, Office of Acquisition Services

CDC's Lawrenceville campus, located northeast of Atlanta, Georgia, completed an evaluation of its wooden power poles that resulted in a recommendation that the poles be replaced. While power poles are usually owned and maintained by the local power utility, these particular poles were owned in whole by the Agency itself. During the process of developing the scope-of-work for the pole replacement in FY2013, several CDC employees realized the opportunity to recycle and repurpose waste elements of the project. They included in the contract a requirement to inventory and account for copper wire removed from the poles, which was sold to a recycling operation at approximately 3% of the projected job cost, offsetting government costs. The project team also worked with contractors who repurposed the poles themselves as fence posts for clients at a separate property. The team not only ensured the diversion of waste materials from the landfill, they also accrued fiscal savings and set examples and priorities with contractors that have already resulted in subsequent sustainable actions and projects. The ingenuity and initiative exemplified by this group has helped to establish a precedent in contract preparation that will spur on incorporation of sustainability tenets throughout future agency projects.

---

### **IHS - Wastewater Disposal Improvements**

Norman Bia, Civil Engineering Technician IHS Tucson Area SFC

Tanya Davis, Environmental Engineer IHS Tucson Area SFC

Lawrence Denetso, Civil Engineering Technician IHS Tucson Area SFC

Donnell Hnat, Environmental Engineer IHS Tucson Area SFC

Marvin Klain, Civil Engineer Technician IHS Tucson Area SFC

Vern Tomanek, Engineering Consultant IHS Tucson Area SFC

The Tucson Area Sanitation Facilities Construction Branch serves tribal members of the Tohono O'odham Nation with improved individual wastewater disposal systems. These improved systems replaced failed septic systems or pit privies (outhouses). With respect to failed septic systems, since 2002, 131 homes have received replacement systems or, where available, connections to community collection systems. A typical failed system resulted in sewage backing up into the home or surfacing outdoors in close proximity to the home. At such locations, the untreated wastewater polluted the home environment and posed a serious potential public health threat to residents and nearby community members. With respect to new systems that replaced pit privies, since 2008, 84 homes have been served with new wastewater disposal systems as part of an interagency effort to provide modular bathrooms to tribal homes that lack basic sanitation. Before services were provided, these homes had no indoor plumbing which required residents to use outside yard hydrants for water supply, pit privies for wastewater disposal, and homemade outdoor showers for bathing. The outstanding dedication and effort put forth by the technicians and engineers named in this award have had a profound impact in reducing potentially harmful fecal contamination in tribal communities.

## **Appendix B: [2014 HHS Climate Change Adaptation Plan](#)**

**HHS INTERNET**

**<http://www.hhs.gov/about/sustainability/adaptation-plan.pdf>**