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US Department of Health and Human Services

Strategic Sustainability Performance Plan

June 27, 2013

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US Department of Health and Human Services Sustainability and Climate Change Adaptation Policy Statement

June 27, 2013

When President Obama signed Executive Order 13514 on October 5, 2009, he committed the Federal Government to take a leadership role in promoting sustainability and responding to the threats of climate change. Since then, the US Department of Health and Human Services (HHS) has made real progress in reducing greenhouse gas emissions, conserving water and other key resources, and evaluating risks and vulnerabilities associated with climate change's short and long-term effects.

A number of scientific panels, including the U.S. Global Change Research Program and Intergovernmental Panel on Climate Change, have published data indicating that climate change is already negatively affecting human health in the United States, and is likely to have harmful effects on human health in the future. Hazards linked to climate change include more frequent and severe heat waves, droughts, wildfires, heavy rainfall, and flooding; changes in the rates and ranges of infectious and allergic diseases; and threats to communities from rising sea levels and coastal erosion. Although climate change may reduce certain health risks, it will likely worsen many existing health threats while also introducing new problems. Individuals and communities with underlying vulnerabilities, such as being impoverished, experiencing disproportionate environmental exposures, having pre-existing health, including behavioral health, conditions, being very young or old, or living in geographically vulnerable areas, will be at the greatest risk of harm. HHS's responsibility is to protect the health of all Americans and provide essential human services, especially for those who are least able to help themselves. As such, our Department has two critical roles to play, reducing our own environmental impact while also facilitating understanding of and adaptation to climate change. Through these actions, we will set the example of responsible stewardship and improve individual and community resilience, supporting a healthier future for the American people.

With our Department's completion of the 2013 Strategic Sustainability Performance Plan, HHS expresses its continued commitment to comply with environmental, energy, and public health statutes, regulations, and Executive Orders. We are 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.

Our Department understands that the health and well-being of people in the United States depends in part on healthy and sustainable environments, both natural and man-made. We are committed to taking a leadership role in researching and communicating the relationship between the health of our citizens and the health of our environment. Through our past accomplishments and future commitments, the Department of Health and Human Services will lead the way toward a healthy future for all Americans.

Kathleen Sebelius Secretary, U.S. Department of Health and Human Services

Executive Summary

Vision

The first HHS Strategic Sustainability Performance Plan, published in 2010, clearly and emphatically stated HHS' policy and intention to lead development and implementation of health-related sustainability goals across the federal government:

"The Mission of the U.S. Department of Health and Human Services (HHS) is "...to protect the health of all Americans and provide essential human services, especially for those who are least able to help themselves." Sustainability has been defined as "the enduring prosperity of all living things." By this measure, sustainability is directly linked to the health of humans, the health of the environment, and the health of economic systems that support and promote our well-being. This triple bottom line – human health, environmental health and economic health – is integral to HHS' mission and the sustainability mandate of Executive Order (EO) 13514. Just as the Department of Energy (DOE) leads initiatives relating to energy reduction, HHS leads initiatives relating to health and well-being. As a key part of the federal community, HHS must assume a leadership role in promoting sustainability in government and public operations. Sustainability is integral to the HHS mission."

Since its first plan in 2010, the Department has continued to update and adjust its approach to sustainability and climate resilience. HHS was heavily goal-focused in the first two years, helping HHS partners understand the specific Executive Order (EO) 13514 goals, collecting baseline data, and drafting plans and milestones to achieve the long term objectives. In 2012, HHS began focusing more on implementation 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. Also in 2012, HHS conducted and published a high-level vulnerability assessment and HHS Climate Change Adaptation Plan to lay the foundation for adaptation and resilience efforts.

While HHS has made significant progress since 2010, the Department recognizes a gap between the conceptualization of its Sustainability and Climate Adaptation Plans and the actual implementation of those plans within health and human service programs. In 2013, HHS is shifting to a more strategic, cross-cutting oversight team. HHS's Sustainability and Climate Resilience Task Force, which already includes the Operating Division Chief Sustainability Officers, will also incorporate health program leadership, grants and strategic planning experts, and experts on the health and infrastructure impacts of climate change.

This year, HHS established a 10th sustainability goal, *Integration of Sustainability and Climate Change Resilience into the HHS Mission*, to ensure that sustainability efforts are incorporated into the Department's health and human services mission. 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.

<u>Figure 1.</u> 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)

<u>Summary of Agency Performance on Executive Order</u> 13514 Goals

Goal 1 – Greenhouse Gas (GHG) Reduction

- For Scope 1&2 GHG Reduction Target of 10.3% by 2020:14.7% reduction in 2012 and on track
- For Scope 3 GHG Reduction Target of 3.3% by 2020: 9.5% reduction in 2012 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.

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.

- 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 2012, HHS has reduced Scope 1 & 2 GHG emissions by 14.7% 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 2012, HHS has reduced Scope 3 GHG emissions by 9.5% 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 EO 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 2012 in limiting assumptions and relying on actual data, particularly in Scope 3 reporting.
- In FY 2012, HHS began 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 2013.
- 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, \$2M has been awarded, and we expect to award the remaining \$57M by December 2013. Of these contracts, \$13.6M comes through Utility Energy Service Contracts and \$46M through a Department of Energy (DOE) Super Energy Savings Performance Contract (ESPC) vehicle.
- 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 FY2011 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 in 2011, in 2012, 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.
- HHS is also developing a new IT system called "CAPS." This system will incorporate all employee
 commuting options (vehicle, carpool, mass transit, vanpool, and bicycle) and will capture commute survey
 information that will be used to calculate Scope 3 GHG for commuting. CAPS will also have a module
 called "Rideshare" that will allow all active, registered NIH personnel to find carpool/vanpools in their
 area.

Goal 2 - Sustainable Buildings

- Only .073% 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: 22.4% 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 EO 13514 reduction mandates. However, HHS is lagging on the EO 13514 requirements that 15% of new, existing, and leased buildings be compliant with the <u>Guiding Principles for</u> Federal Leadership in High-Performance and Sustainable Buildings ("Guiding Principles") by FY 2015.

HHS will continue to investigate the link between the built environment and human health, explored in the groundbreaking, April 2013 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.

In FY13, HHS will focus facilities-related sustainability and climate resilience efforts under a "sustainable facilities" umbrella, overseen by the HHS Senior Real Property Officer and OPDIV counterparts. While Communities of Practices (COP) will continue for program areas, this streamlining will help prioritize cross-cutting goals and initiatives.

- HHS is on track to meet the energy use intensity reduction of 30% by FY 2015. As of FY 2012, HHS has reduced energy use intensity by 22.4% when compared to FY 2003.
- 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 2012 was 3.9%.
- To improve incorporation of the Guiding Principles, the Food and Drug Administration (FDA) has
 developed a comprehensive Green Building Strategic Plan that identifies the assets most likely to achieve
 the 15% requirement. FDA also continues to work on projects that reduce the Backlog of Maintenance
 and Repair (BMAR) and improve compliance with the Guiding Principles. The Indian Health Service (HIS)
 has integrated sustainability assessments with energy and water assessments to maximize funding and
 meet multiple requirements. The Centers for Disease Control and Prevention (CDC) will incorporate
 sustainability assessments into Health Impact Assessments in facilities, which will combine sustainability
 requirements with health mission requirements.

Goal 3 - Fleet Management

Reduction in fleet petroleum use compared to 2005: 33.4% and on track for 20% by 2015

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. HHS has reduced petroleum use and increased alternative fuel use in the fleet vehicles.

- As of FY 2012, petroleum fuel use has decreased by 33% as compared to the FY 2005 baseline, an achievement better than the 30% required reduction by FY 2020.
- Alternative fuel consumption has increased by 295% above the 2005 baseline, well above the 159.4% increase required by FY 2015.
- In FY 2013, HHS will create a matrix model of optimized new vehicle selections detailing low greenhouse gas emitting and highly efficient gasoline fleet units. The HHS Fleet Manager will work with the Fleet Management workgroup to empower Operating and Staff Divisions to select the best alternatives.
- HHS OPDIVs continue to replace conventional gas vehicles with alternative fuel and electric vehicles.
- Hybrid vehicles are placed into shared motor pools, where the majority of personnel usage occurs. Less efficient vehicles have been designated to programs that use fleet vehicles less often.
- CDC has implemented a Vehicle Reservation Request system, designed to manage, coordinate, and pair up employees from different programs who are traveling to the same locations to reduce travel mileage.
- HHS OPDIVs are preparing to participate in the GSA Electric Vehicle Pilot Expansion program. Projects are being developed and implemented that will install electric charging stations on campuses.

Goal 4 – Water Use Efficiency & Management

• Reduction in potable water intensity compared with 2007: 0.3% and not on track for 26% reduction by 2020.

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

- HHS has reduced water intensity by 0.3% in FY 2012, as compared to the baseline year of FY 2007. HHS did not meet the 10% reduction goal for FY 2012 but is working to meet the FY 2020 target.
- A primary area of concern for HHS has been the inability to monitor usage accurately and at detailed levels. To address this challenge, in FY 2013 OPDIVs will install 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 2012, 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 FY2015.

Examples of OPDIV successes and best management practices include:

- The Food and Drug Administration (FDA) recycling rate for 2012 for all buildings was 18.3% an improvement of over 5% from FY 2011.
- NIH achieved an OPDIV-wide recycling diversion rate of 43.2% for FY2012. These figures included food and animal bedding that was diverted for composting. This FY 2012 rate puts NIH on track to achieve the goal of 50% diversion by FY 2015.
- CDC is partnering with a distributor of lab supplies to reuse the ice packs that are shipped to CDC with temperature-controlled products.
- FDA reduced its solid waste disposed of via landfills by over 26% in 2012 as compared to 2011.
- In FY 2010 IHS initiated a new partnership with the Leech Lake Reservation's Green Team to assist in developing a tribal-specific, practice-based environmental sustainability assessment tool. This tool establishes a baseline profile, prioritizes intervention strategies, and develops an action plan. In addition, funds were secured to support a community composting project estimated to divert 153,088 pounds of waste from the community's solid waste stream annually. This project will save approximately \$17,750 in disposal costs and reduce greenhouse gases by 28.3 metric tons carbon equivalent.

- NIH is diverting 43% of its nonhazardous solid waste and sending 49% of that material to Waste to Energy, with only 7% being sent to landfills.
- The Parklawn Building, which generated 351.8 tons of waste in FY 2012, diverted 33% of its nonhazardous solid waste to recycling. The remaining waste was diverted to Waste to Energy.
- The Centers for Medicare & Medicaid Services (CMS) leased headquarters building in Baltimore, working in consort with GSA, has achieved 65% waste diversion through recycling and composting.
- Construction contract language has been amended to reflect the diversion requirement.
- FDA diverted 46.5% of C&D waste from landfill to recycling facilities in 2012.
- NIH achieved an agency-wide construction and demolition C&D recycling diversion rate of 57% for FY 2012. The successful comprehensive C&D recycling program at the Bethesda Campus allowed for this extremely high rate.

In FY 2012, CDC reached a 96.9% diversion rate for C&D waste, more than twice what the agency diverted in FY 2010. CDC is monitoring C&D contracts to ensure maximum diversion, which supports SSPP goals as well as LEED (Leadership in Energy and Environmental Design) rating system attainment. Facilities management developed a procedure to donate salvaged building supplies to local nonprofits as part of CDC's broader demolition contracting activities. Waste diversion in rural facilities continues to present a challenge, especially compared to the greater-than-40% rates HHS achieves in urban areas. In FY 2013, HHS will benchmark its individual areas against national averages and will identify potential private and public partners for the most rural areas.

Goal 6 – Sustainable Acquisition

 HHS has met its initial goal of 95% of new contract actions including applicable sustainability requirements; HHS will continue outreach and verification efforts.

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 2013, HHS will leverage the Senior Procurement Executive forum to integrate sustainable procurement outreach and oversight into the established procurement community. Additionally, the 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 FY 2012, 95% 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 EO 13514.
- The HHS Office of Grants and Acquisition Policy and Accountability (OGAPA) implemented a supplemental sustainable acquisition contract review process in January 2013, resulting in a greater number of contracts being verified and validated for the inclusion of sustainable acquisition requirements.
- In FY 2013, 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 2014.

Goal 7 – Electronic Stewardship and Data Centers

- As of FY 2012, HHS is compliant with all electronics stewardship requirements per EO 13524; HHS will continue outreach and verification efforts.
 - o Energy Star product procurement is 99%.
 - Electronic Product Environmental Assessment Tool (EPEAT) procurement is 98%.
 - o FEMP designated energy-efficient product procurement is 99%.
 - o Power management features enabled on applicable products is 94%.
 - o Duplex printing enabled products is 99%.
 - o Sound practices used for electronic product disposition is 100% of products.

In addition, the HHS OPDIVs have designated 27 core data centers and 131 non-core data centers. 27% of the non-core data centers are scheduled to close by the end of CY 2015. The HHS Chief Information Officer (CIO) will review the data center consolidation plan by the end of FY 2014 and determine if additional data centers can be closed, as HHS strives to reach the OMB 40% closure goal.

In FY 2013, HHS will expand efforts to integrate Electronic Stewardship into existing OCIO domain governance activities by including additional stewardship goals as tracked activities within the HHS CIO Council. Additionally, the CIO will represent HHS on the Federal Electronics Stewardship Working Group.

Goal 8 – Renewable Energy

 Use of renewable energy as a percentage of total electricity consumption: 8.5% and on track with goal of 5% for FY 2012.

The Energy Policy Act of 2005 required that in FY 2012 5% of an agency's total electricity consumed must come from renewable energy, with that number rising to 7.5% in FY 2013 and thereafter. 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 8.5% of its electricity consumed coming from renewable electricity sources, including 2.5% from new sources (thermal, mechanical, or electric). This result exceeded the FY 2012 goal of 5%. For FY 2013, 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 2013.
- 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 2013, FDA will install 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 has conducted an initial high level vulnerability assessment and published an agency climate adaptation plan. In June 2011, Secretary Sebelius issued an HHS Sustainability and Climate Change Adaptation Policy Statement, affirming HHS' leadership role in promoting sustainability and responding to climate change. HHS committed to "set the standard for federal agencies in sustainable development, provide climate-resilient health and human services, and support scientific research focused on environmental and public health, including research on the effects of climate change on human health and well-being."

Several components of HHS have already been engaged in efforts to support education, research, and preparedness in the face of climate change:

- The National Center for Environmental Health (NCEH) at the Centers for Disease Control and Prevention (CDC) established the <u>Building Resilience Against Climate Effects (BRACE)</u> framework in 2012 to prepare for the health impacts climate change will have on US and world populations. In 2009, the CDC established its <u>Climate and Health Program</u>, aimed at making climate change science more readily understandable to states, local health departments, and communities; creating decision support tools to build capacity to prepare for climate change; and serving as a credible leader in planning for the public health impacts of climate change.
- The National Institute of Environmental Health Sciences (NIEHS) at the National Institutes for Health (NIH)
 has represented HHS as Principal to the US Global Change Research Program (GCRP) since the early 1990s.
 NIEHS is currently funding 11 grants to support research into the health impacts of climate change. NIH
 and CDC also co-chair the US Global Change Research Program's Interagency Climate Change and Human
 Health Working Group, which recently launched the Metadata Access Tool for Climate and Health, a webbased repository of meta-data that can direct users to a wide array of climate and health information,
 including EPA and CDC data.
- The Office of the Assistant Secretary for Preparedness and Response (ASPR) has begun to focus efforts on building community resilience and more sustainable health and emergency systems in the face of climate change impacts. In these efforts, ASPR is guided by the National Health Security Strategy (NHSS). Because climate change will increase the severity and frequency of severe weather events, ASPR plans to identify the populations most vulnerable to these disasters to assure their health and well-being.
- HHS recognizes and promotes programs, projects, and initiatives that support sustainability and climate
 resilience through HHS Green Champions and HHS Innovates awards programs. The annual HHS Green
 Champions Awards honors Federal employees and Native American tribal members who demonstrate
 measureable results towards integrating sustainability principles into the HHS mission and its daily
 operations. Key selection factors for both individual and team awards include innovation, collaboration,
 return on investment, and short and long-term impact. The 2012 HHS Green Champions Award winners
 are highlighted in Appendix A.

In 2012, HHS published an HHS Climate Change Adaptation Plan which includes a high-level vulnerability assessment and outlines a strategy to ensure sustainability by integrating climate change and environmental impact considerations into internal management functions and policies; by collecting, analyzing, and utilizing state of the science data; and by enhancing issue awareness and specialty training for our employees. (Appendix B).

While HHS has made significant progress since 2010, the Department acknowledges a gap between the conceptualization of its Sustainability and Climate Adaptation Plans and the actual implementation of those plans within health and human service programs. To help address this gap, in 2013, HHS is shifting to a more strategic, cross-cutting oversight approach. Integration strategies HHS will employ in 2013 include:

• In addition to the Operating Division Chief Sustainability Officers, the Sustainability and Climate Resilience Task Force will now include health program leadership, grants and strategic planning experts, and experts on health and infrastructure impacts of climate change.

- HHS has plans to partner with the health care industry to design guidance on cost-effective climate resilience measures for health care and biomedical research facilities.
- HHS established an additional sustainability goal, *Integration of Sustainability and Climate Change Resilience into the HHS Mission,* to help capture integration of these concepts into internal and external policies and procedures.
- HHS will work to better educate our grantees on sustainability and climate resilience-related guidance and best practices.
- HHS will continue to build partnerships with complementary programs such as the National Prevention Strategy, Environmental Justice Strategy, Healthy People 2020, and others.

Progress on Administration Priorities

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

Administration Priority	HHS Update
Climate Change Adaptation	While HHS has made significant progress since 2010, the Department acknowledges a gap
Planning	between the conceptualization of its Sustainability and Climate Adaptation Plans and the
	actual implementation of those plans within health and human service programs. To help
	address this gap, in 2013, HHS is shifting to a more strategic, cross-cutting oversight
	approach. Integration strategies HHS will employ in 2013 include:
	In addition to the Operating Division Chief Sustainability Officers, the Sustainability
	and Climate Resilience Task Force will now include health program leadership, grants and
	strategic planning experts, and experts on health and infrastructure impacts of climate
	change.
	HHS has plans to partner with the health care industry to design guidance on cost-
	effective climate resilience measures for health care and biomedical research facilities.
	HHS established a 10th sustainability goal, Integration of Sustainability and Climate
	Change Resilience into the HHS Mission, to help capture integration of these concepts into
	internal and external policies and procedures.
	HHS will work to better educate our grantees on sustainability and climate
	resilience-related guidance and best practices.
	HHS will continue to build partnerships with complementary programs such as the
	National Prevention Strategy, Environmental Justice Strategy, Healthy People 2020, and
	others.
	While HHS did not receive any public comments during the 60-day public comment
	period (Feb-April 2013), HHS did receive 20 internal comments and suggestions through
	an employee comment forum. HHS will consider updating its <u>Climate Change Adaptation</u>
	Plan to articulate its latest strategy and planned actions, including suggestions received
	from employees.
Fleet Management Planning	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
Francis Cavings Doufour-	the environment. Does the Descember 2011 Presidential Memorandum Committing the Federal Covernment to
Energy Savings Performance	Per the December 2011 Presidential Memorandum Committing the Federal Government to reduce energy consumption using alternative financing contracts, HHS committed to an
Contracts	estimated \$59.6M of alternative financing contracts. To date, \$2M has been awarded, and
	HHS expects to award the remaining \$57M by December 2013. Of these contracts, \$13.6M
	comes through Utility Energy Service Contracts and \$46M through a Department of Energy
	(DOE) Super Energy Savings Performance Contract (ESPC) vehicle.

Administration Priority	HHS Update	
Biobased Purchasing Strategies	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 2012, HHS used data from biobased reporting elements in the Federal Procurement Data System (FPDS) as the prima metric to create agency-level reports on biobased compliance.	
	The FPDS reports showed a compliance of 73% and 94% biobased compliance for 4 th quarter FY 2012 and 1 st quarter FY 2013, respectively. However, a 5% contract review sample was analyzed separately to determine whether the appropriate sustainability requirements and clauses were included in applicable contract actions. This analysis revealed that the Department's compliance rate is significantly lower than the FPDS report rate.	
	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 2013. 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.	

Table 1: Agency Size & Scope

Agency Size & Scope	FY 2011	FY 2012
Total Number of Full-Time Equivalents (Source: President's Budget)	73,704	74,193
Total Acres of Land Managed (Source: Automated Real Property Inventory System - ARIS)	6,265	6,271
Total Number of Buildings Owned (Source: ARIS)	2,769	2744
Total Number of Buildings Leased (GSA and Non-GSA Lease) (Source: ARIS)	967	975
Total Buildings Gross Square Feet (GSF) (Source: ARIS)	51,870,184	53,305,853
Operates in Number of Locations Throughout U.S. (Source: ARIS)	1,042	1,034
Operates in Number of Locations Outside of U.S. (Source: ARIS)	13	34
Total Number of Fleet Vehicles Owned (Source: HHS GHG Inventory)	772	841
Total Number of Fleet Vehicles Leased (Source: HHS GHG Inventory)	4,055	4,028

Agency Size & Scope	FY 2011	FY 2012
Total Number of Exempted-Fleet Vehicles (Tactical, Law Enforcement, Emergency, Etc.) (Sourc HHS GHG Inventory)	2,347	1,180
Total Amount Contracts Awarded as Reported in FPDS (\$Millions)	19,300	19,197

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 shown in Figure 1-1, *Scope 1 & 2 GHG*. As of FY 2012, HHS has reduced Scope 1 & 2 GHG emissions by 14.7% when compared to FY 2008. The largest reductions have been achieved in the reduction of purchased electricity and steam, as well as through decreases in mobile Federal Automotive Statistical Tool (FAST) emissions.

HHS OPDIVs continuously pursue energy reductions through everyday activities and planning. For the past two decades, the HHS Energy Program has led and fostered actions and training to instill energy efficiency into the job performance of facility and energy management personnel. Through direct agency funding and alternative financing, HHS has implemented successful projects. Highlights for FY 2012 are described below.

In FY 2012, CDC installed lighting reduction projects, including induction lighting fixtures in a new parking deck that resulted in savings over traditional metal halide fixtures. CDC Information Technology Services Office (ITSO) has contributed to energy use reduction through the implementation of the Verdiem Power Management System, which allows for automatic shutoffs of computers each night. The OPDIV also held its first "CDC Freezer Challenge" during FY 2012, which encouraged more sustainable storage practices in laboratories and resulted in 60 ultra-low temperature freezers being temperature-tuned and 44 freezers being emptied and unplugged, with items being consolidated and properly inventoried. The Freezer Challenge resulted in savings of approximately \$127,000 per year in operations and avoided costs and reduced energy demands by at least 320,000 kWh annually.

In addition to implementing Utility Energy Service Contracts (UESCs) at two sites, 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, internal TV messages, 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 1st Thursday, Green Gov, Lab 21, and other training as resources allow.

In FY 2012, IHS conducted 35 energy, water and sustainability audits (ASHRAE Level II audits) on IHS Installations (27 "Covered Facilities" and 8 non-"Covered Facilities"), and IHS is now in compliance with EISA 2007 audit requirements. Energy Star Portfolio Manager accounts were created for nearly 2,300 IHS-owned facilities in order to complete the Guiding Principles checklist for EISA 2007 compliance. IHS also conducted comprehensive GHG inventories on the 116 IHS Installations that report energy consumption.

NIH received preliminary assessments in FY 2012 by one UESC vendor and the DOE ESPC contractor for several sites. The list of proposed measures has been internally vetted, and Energy Conservation Measures (ECM) have been selected. The vendors will work on investment grade audits to develop firm proposals in FY 2013. NIH also

implemented the NIH Freezer Initiative, which retired 98 energy-inefficient ultra-low temperature freezers and replaced them with 70 new energy-efficient freezers. Finally, in FY 2012, 8 electric vehicle charging stations were installed for employee use on the NIH Bethesda Campus. Charging enabled 3,800 kWh of electric vehicle driving, which is equivalent of 14,000 miles of travel.

The PSC-operated Parklawn Building began a major renovation in FY 2012. The design has been upgraded from LEED Gold to Platinum, and PSC facility management is working with PEPCO to obtain rebates to install additional features, which will result in additional LEED credits.

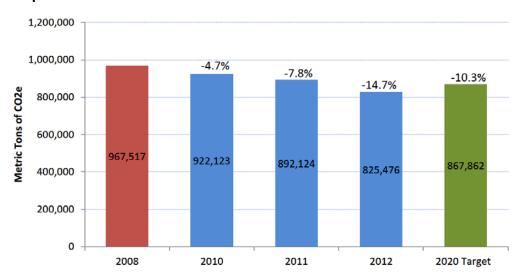


Figure 1 -1 Scope 1 & 2 GHG

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
Implement in EISA 432 covered facilities all lifecycle cost effective energy conservation measures (ECMs) identified.	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. FDA and NIH are using alternative financing to implement ECMs. IHS will formulate a plan in FY 2013 to implement ECMs from audits completed in FY 2012.	FDA Muirkirk Road Complex (MRC) Utility Energy Services Contract (UESC) will complete construction by Dec 2013 with savings realized and measured in 2014. The Irvine UESC will complete ECM installation by July 2014, saving will be realized thereafter. NIH ESPCs will be awarded by Dec 2013.

HHS Strategy to Achieve Goal	Strategy Narrative	Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Reduce on-site fossil- fuel consumption by installing more efficient boilers, generators, furnaces, etc. and/or use renewable fuels.	HHS OPDIVs are currently purchasing RECs or Green power at or above the 7.5% requirement for FY 2013. Renewable energy projects are planned for FY 2013. Several boiler plant upgrades are planned for the next year.	CDC is replacing boilers at Roybal and NIOSH campuses by Dec 2013. FDA is installing a solar water heating system at MRC (Dec 2013) and a 130-kW photovoltaic system at Irvine Laboratory (July 2014). FDA is replacing boiler #2 at Jefferson Labs (JL). NIH will use ESPCs to install boiler economizers and VFDs, renewables projects, steam trap upgrades and condensate recovery systems. PSC is replacing 900 hp boilers with 4 modular boilers and eliminating the dual-fuel option.
Reduce grid-supplied electricity consumption by improving/upgrading motors, boilers, HVAC, chillers, compressors, lighting, etc.	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 2013.	CDC will complete an evaluation by Dec 2013 on vending & drink machine usage to reduce its overall number of vending machines. Potential savings are estimated at 3373 MMBtu, or \$60,311. CDC and FDA are performing chiller replacements by Dec 2013. NIH will conduct plug load studies on various NIH laboratory equipment to establish an energy benchmark for purchasing energy-efficient equipment by Dec 2013.
Employ operations and management best practices for energy consuming and emission generating equipment.	HHS OPDIVs will focus on training and the use of improved building controls and retrocommissioning to improve energy efficiency of operations and maintenance.	CDC has mandated 76 degree summer and 68 degree winter temperature settings for all CDC administrative areas, with the minimum use of mechanical reheat system to accomplish this goal. FDA MRC and JL are installing new controls and will be retro-commissioned (Jan 2014). FDA Irvine is installing a power monitoring system in 2014. PSC Parklawn engineers will be trained on new equipment and NIH engineering will be trained on new ECMs from ESPCs.
Install building utility meters and benchmark performance to track energy and continuously optimize performance.	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 finetuned for accuracy.	OPDIVs will analyze buildings to be equipped with individual meters and determine method of installation by Jun 2014.

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

CEQ Suggestion	HHS Response
Use the FEMP GHG emission report to identify/target high emission categories and implement specific actions to resolve high emission areas identified.	HHS OPDIVs find the GHG emission report to be too high level to specifically highlight areas of reduction.
Ensure that all major renovations and new building designs are 30% more efficient than applicable code.	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*. As of FY 2012, HHS has reduced Scope 3 GHG emissions by 9.5% when compared to the FY 2008 baseline. Municipal solid waste disposal and employee business ground travel have seen the largest percent reductions in these emissions. Commuter travel is the prime component of HHS Scope 3 emissions, and on a total GHG basis, it has seen the largest decrease.

In FY 2012, HHS developed a more rigorous and detailed GHG accounting inventory for business ground travel and commuter travel. With these additional levels of detail, HHS will be able to determine commuter travel by OPDIV and by mode, and will determine GHG emission savings with specific goals to telework and/or commuting modes. This level of detail will enable OPDIVs to manage Scope 3 emissions more effectively.

CDC has made great strides towards reducing Scope 3 emissions by expanding and improving its Telework and Hoteling programs and coding processes. The percentage of CDC employees eligible for telework increased by 10% during the past fiscal year as a result of improvements to the coding system used to determine eligibility and the notification process. Additionally, the average number of days teleworked per month per employee increased by 43% (7 days/month to 10 days/month).

A CDC Hoteling Pilot Project also expanded the telework initiative and improved office use of telework. As a result of the pilot, telework increased from 311 employees teleworking an average of 3.8 days per pay period to 435 employees teleworking an average of 3.2 days per pay period, for a total reduction of 228 commute-to-work trips per pay period.

CDC has supported active commuters by developing a program to provide showers and long-term lockers to bicyclists at CDC Roybal Campus. This effort began as a pilot in 2011 and launched as a full program in 2012. The program will be expanded to Chamblee Campus in 2013. CDC has also been awarded "Best Workplace for Commuters" by the US EPA, and was recognized as a GOLD Employer at the University of South Florida's Center

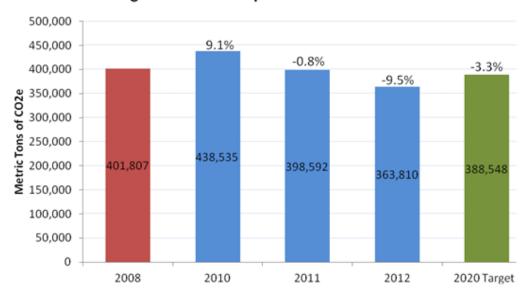
for Urban Transportation Research 2012 Race to Excellence Awards. CDC is a Platinum Level Partner with the Georgia Clean Air Campaign.

IHS is updating its Flexible Workplace Arrangement (telework) Program to a full Telework Arrangement Program (TAP) policy that will clearly establish participation criteria and demonstration of management support of the program. The TAP Policy is in the final stages of internal review and will be approved in FY 2014. An IHS Telework Activity Tracker (TAT) ACCESS database, will be implemented with the approval of the IHS TAP Policy. Participation in FWAP/Telework has increased over the past 12 month period from 84 to 110 active full-time/part-time teleworkers.

In FY 2012, NIH developed and implemented an online automated system for approving telework agreements, and provided training to all employees who are telework-eligible, as well as their supervisors. In addition, a new IT system called "CAPS" is under development. The system will incorporate all commuting options (vehicle, carpool, mass transit, vanpool, and bicycle) for employees and will capture commute survey information that will be used to calculate Scope 3 GHG for commuting. Survey information is mandatory for all commuters to receive a benefit (i.e. parking hanger). Data gathered include primary vehicle, engine type, and the number of days commuting, along with home and work addresses. The CAPS system will also have a "Rideshare" module that will allow all active NIH persons to register to see other carpool/vanpools in their area. The module will match participants based on their worksite locations and distance from home addresses. Users will be able to see distances from their home address and to send emails to other individuals who meet their search criteria, allowing them to establish a new carpool. Inclusion in the module is voluntary.

Figure 1 -2 Scope 3 GHG

HHS Progress toward Scope 3 Greenhouse Gas Goals



<u>Table 1-2: Goal 1 Strategies - Scope 3 GHG Reductions</u>

HHS Strategy to Achieve Goal	Strategy Narrative	Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Reduce employee business ground travel.	HHS is performing a focused review of current data capture capacities and methodologies. For example, at FDA progress is being made in the evaluation of business travel rental car bookings, along with coordination of travel preparers, agency booking agents, and reviews of travel policies.	November 30, 2013: Have in place a data collection, review, and sharing process related to employee business ground travel at HHS level; with progress made in having these data at OPDIV level breakouts.
Reduce employee business air travel.	HHS is performing a focused review of current data capture capacities and methodologies. OPDIVs will identify measures for reductions such as within FDA and CDC, where Live Meeting/Tele & Video-conferencing is being used to reduce business travel with increased bandwidth to support capacity of remote users.	January 31, 2014: Have in place a data collection, review, and sharing process related to employee business air travel at HHS level; with progress made in having these data at OPDIV level breakouts.
Develop and deploy employee commuter reduction plan.	HHS will focus on the identification of stakeholders best positioned to offer constructive input and procedural oversight of various commuter patterns and requirements. This includes stakeholders from the Office of Human Resources (OHR) and the Personnel Support Center (PSC) as well as Operating and Staff Division representatives as appropriate.	October 31, 2013: Initial formulation of stakeholder group to outline HHS Commuter Reduction Plan.
Use employee commuting survey to identify opportunities and strategies for reducing commuter emissions.	HHS will work to develop an annual or bi-annual commuter survey.	October 31, 2013: Final plans completed for rollout of survey to HHS by end of CY 2013.

HHS Strategy to Achieve Goal	Strategy Narrative	Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Increase number of employees eligible for telework and/or the total number of days teleworked.	The HHS Office of Human Resources will work with the Operating and Staff Division Telework Liaisons to increase the levels of telework across the Department.	October 31, 2013: Create a Telework Progress Dashboard (HHS Intranet) for posting of goals and progress.

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

CEQ Suggestion	HHS Response
Develop and implement bicycle commuter program.	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.
Provide bicycle commuting infrastructure.	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 2012, HHS has reduced energy use intensity by 22.4% when compared to FY 2003. The remaining 8% reduction is expected to be achieved through the alternative financing contracts underway at NIH and FDA, as well as through measures that will be implemented based upon the IHS energy audits performed in FY 2012.

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

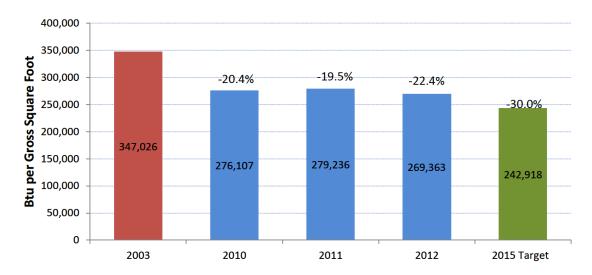
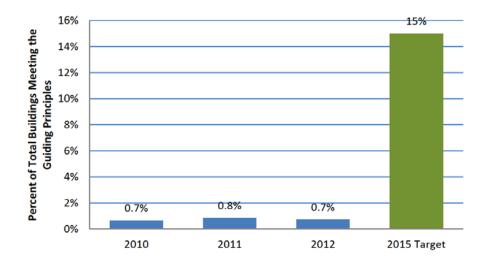


Figure 2-2 Total Buildings Meeting Guiding Principles



Agency Progress toward Total Buildings Meeting the Guiding Principles

HHS requires that all new construction, major renovation, or repair and alteration of Federal buildings comply with the Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings (GP).

HHS is not on track to meet the FY 2015 goal of 15% of new, existing, and leased buildings being compliant with the Guiding Principles as shown in Figure 2-2, *Total Buildings Meeting Guiding Principles*. While the 2013 goal is 9%, only 0.73% of HHS buildings currently comply. HHS has also not met the goal of incorporating Guiding Principles in at least 9% of gross square footage (GSF) of building inventory over 5,000 GSF. HHS's total for 2012 was 3.9%.

While the Department currently lacks the funds to carry out the required work, HHS Landholding Divisions have policies in place to maximize investments in areas that advance compliance as work is performed in existing buildings. FDA, for example, has developed a comprehensive Green Building Strategic Plan that identifies assets most likely to achieve the 15% requirement and continues to work on projects that reduce the Backlog of Maintenance and Repair (BMAR) and help meet GP compliance.

The NIH Porter Neuroscience Research Center, Phase II (in Bethesda MD) will be LEED and Green Globes certified and will meet the Guiding Principles when it is completed in fall 2013. NIH is analyzing and comparing the use of both systems.

CDC continuously evaluates its facilities. The division plans to incorporate Health Impact Assessments (HIAs) as a part of the existing NEPA/Environmental Assessment process for Master Plans and similar large projects in consultation with CDC's National Center for Environmental Health, Healthy Community Design Program.

IHS will require LEED Neighborhood Development to the maximum extent feasible and LEED for Homes Silver Certification at the planned Kayenta Arizona Staff Quarters, 129 units. IHS has a PL 93-638 Agreement with the Winslow Indian Health Care Center, Inc., to construct a new Medical Office Building that will meet the 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
Incorporate green building specifications into all new construction and major renovation projects.	OPDIVs continue to incorporate green building specifications in construction projects. For example, IHS is updating guidance in the IHS Architect/Engineer Design Guide, to be published in 2013. NIH Phase II of the Porter Neuroscience Research Center will be LEED and Green Globes certified and will meet the Guiding Principles.	Ongoing review and updating of requirements at all land-holding Operating Divisions. NIH will perform an analysis and comparison of the LEED and Green Globes certification processes.
Redesign or lease interior space to reduce energy use by daylighting, space optimization, sensors/control system installation, etc.	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.
Deploy CEQ's Implementing Instructions - Sustainable Locations for Federal Facilities.	CDC's D&C Standards will 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 and CDC updating site selection procedures through December 2013.
Include in every construction contract all applicable sustainable acquisition requirements for recycled, biobased, energy-efficient, and environmentally preferable products.	Included in acquisition plans.	Ongoing review and updating of requirements at all land-holding Operating Divisions.

HHS Strategy to Achieve Goal	Strategy Narrative	Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Apply Health Considerations to Real Property Program	CDC is continually evaluating its facilities and plans to incorporate Health Impact Assessments (HIAs) as a part of the existing NEPA/Environmental Assessment process for Master Plans and large projects. CDC's Office of Sustainability and other components, GSA's Region 2, and New York City's Active Design Program and Department of Health are developing a rating system for building amenities and policies that encourage healthful behaviors, called FIT-WEL.	Ongoing.

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

CEQ Suggestion	HHS Response
Develop and deploy energy and sustainability training	While training will continue for all facility and energy managers, it
for all facility and energy managers.	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 2012 saw a total of 1.4-M GGE for a decrease of 33%.

HHS Fleet Management is piloting the following initiatives:

- Electric Vehicles in HHS HQ Washington DC metro area (HHS/HQ): In FY 2012, HHS deployed two electric vehicles (Chevy Volt) and detailed a strategy relative to charging station use for government vehicles. Electric use data is collected and subsequently converted to GGE values.
- Electric vehicles in Atlanta (CDC): HHS/CDC is scheduled to deploy four (4) additional electric vehicles and resolve any charge station data capture anomalies going forward.
- Bishop Optimization Studies: Designed to maximize utilization (FDA).
- Drive-Cam use Assistant Secretary for Preparedness and Response (ASPR) nationwide: Drive-Cam deployment pilot effort will commence in June 2013. The purpose of this initiative is to reduce unwanted driving patterns, minimize unsafe practices, maximize use of alternative fuel (where it is appropriate) for

emergency/emergency response vehicles deployments, and minimize petroleum use due to idling during deployments.

HHS Fleet Management has implemented an annual fleet replacement acquisition strategy, which is designed to reduce overall fleet levels by 22% to 33% by FY 2015. Other features implemented include a fleet reservation system and vehicle registration systems to control utilization and monitoring and reduce miles traveled. In FY 2013, HHS will explore a pilot with GSA Fleet Management System (FMS) for all HHS owned vehicles. The GSA data capture resource will capture all owned fleet fuel use data and refine data quality by capturing data from individual fleet card use statistics. Its use will minimize manual transaction data input and rely on electronic data traffic.

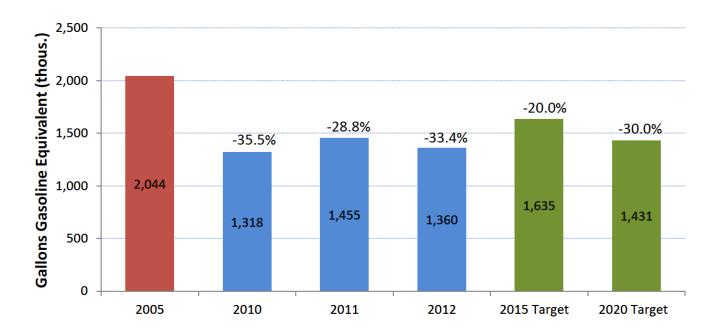
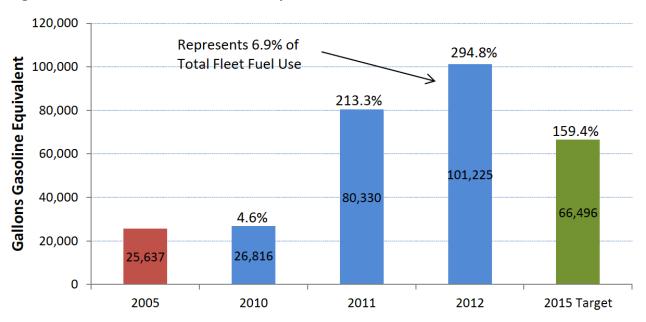


Figure 3-1 Fleet Petroleum Use Reduction

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 295% to 101.2K GGE in FY 2012 as shown in Figure 3-2, Fleet Alternative Fuel Consumption.

Figure 3-2 Fleet Alternative Fuel Consumption



<u>Table 3: Goal 3 Strategies – Fleet Management</u>

HHS Strategy to Achieve Goal	Strategy Narrative	Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Optimize/Rightsize the composition of the fleet (e.g., reduce vehicle size, eliminate underutilized vehicles, acquire and locate vehicles to match local fuel infrastructure).	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.	Decrease overall HHS fleet footprint by 4.8%. Decrease GSA leasing refresh rate by 10%.
Reduce miles traveled (e.g., share vehicles, improve routing with telematics, eliminate trips, improve scheduling, use shuttles, etc.).	HHS will continue to implement a comprehensive approach to reduce costs and footprint through various HHS travel, telework, training, and fleet management guidance.	TBD

HHS Strategy to Achieve Goal	Strategy Narrative	Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Acquire only highly fuel-efficient, low greenhouse gasemitting vehicles and alternative fuel vehicles (AFVs).	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.
Increase utilization of alternative fuel in dualfuel vehicles.	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.	In FY2013, HHS will introduce three fleet initiatives, each designed to use telematics as a means to measure effectiveness. They are (1) Bishop Fleet Optimization, (2) Drive-Cam installations in a critical HHS mission, and (3) Program Management Office (PMO) to interface MVMIS to HHS Unified Financial Management System. (Q2 FY14)
Increase GSA leased vehicles and decrease agency-owned fleet vehicles, when cost effective.	Conduct a Return on Investment (ROI) review for applicable HHS OPDIV/STAFFDIVs.	TBD

<u>Table 3a: Additional Fleet Management Strategies Identified by CEQ that are Not a Top 5</u> <u>HHS Strategy</u>

CEQ Suggestion	HHS Response
Use a Fleet Management Information	HHS HQ and all affected Operating/Staff Divisions are utilizing a
System to track fuel consumption	centralized Motor Vehicle Management Information System designed to
throughout the year for agency-owned,	collect and report on fleet policy matters, and to a lesser extent, fleet
GSA-leased, and commercially-leased	operational conditions. This will not be a major strategy for future
vehicles.	reductions.

GOAL 4 – Water Use Intensity

Agency Progress toward Potable Water Intensity Reduction Goal

HHS has reduced water intensity by 0.3% in FY 2012 as compared to the baseline year of FY 2007 as shown in Figure 4-1, *Potable Water Intensity Reduction*. While this result did not meet the 10% reduction goal for FY 2012, HHS is working to meet the FY 2020 target.

HHS will focus on metering to improve performance on water intensity goals. FDA has installed several new potable water meters for individual buildings and major areas of use. CDC is holding CDC Roybal Campus water use intensity mitigation meetings, involving leadership and facilities, sustainability, and quality personnel, to determine the potential for reduction of water consumption on the Roybal Campus in Atlanta, GA. These efforts focus on the heaviest consumers. This project will be expanded to include other campuses in the coming years. The meetings have produced the planned installation of individual building water meters to ensure proper tracking of water intensity reduction.

NIH plans to award a multi-site Energy Service Performance Contracts (ESPC) by December 2013 that will include water efficiency measures. NIH is also investigating water efficiency specialty equipment for laboratories to reduce potable water use. FDA is implementing two Utility Energy Service Contracts (UESC) in FY 2013 that include water efficiency measures. For example, the Muirkirk Road UESC has an estimated savings of almost 2 million gallons of water annually.

IHS has just completed 35 audits on its covered facilities; these studies highlighted a number of water efficiency measures including metering, low-flow fixtures, water use recovery and reclamation, and xeriscaping.

HHS awarded the FDA Muirkirk Road and the NIH National Cancer Institute with HHS 2012 Green Champions Awards to commend and promote their water efficiency efforts. FDA restored a condensate recovery system to save an estimated 4.5 million gallons and \$32,800 per year. NIH installed waterless urinals in a new facility to achieve savings of as much as 70,000 gallons per year per urinal.

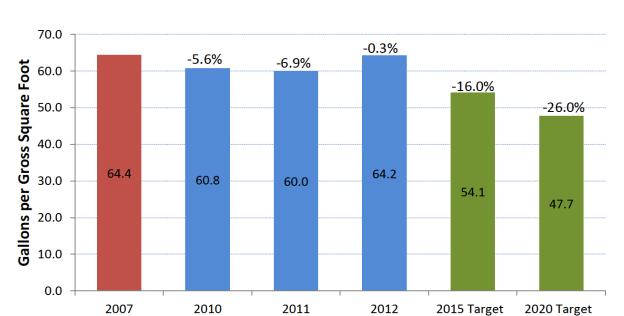


Figure 4-1 Potable Water Intensity Reduction

<u>Table 4: Goal 4 Strategies – Water Use Efficiency & Management</u>

HHS Strategy to Achieve Goal	Strategy Narrative	Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Purchase and install water efficient technologies (e.g., Waterwise, low-flow water fixtures and aeration devices).	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.	FDA MRC will complete a urinal upgrade at Mod I by December 2013. FDA Irvine will upgrade to automatic flush toilets and faucet by July 2014. NIH ESPC award by December 2013 to include water conservation measures.
Develop and deploy operational controls for leak detection including a distribution system audit, leak detection, and repair programs.	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.	FDA JL ultrasound leak detection to be completed by December 2013. FDA MRC ongoing ultrasound inspection & monitoring by an outside contractor. NIH Rocky Mountain & Research Triangle Park distribution system audits to be completed by July 2014.
Design and deploy water closed-loop, capture, recharge, and/or reclamation systems.	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.	NIH to award ESPC with water ECMs by December 2013. FDA Irvine UESC is anticipating water ECMs to be awarded by July 2013.
Install meters to measure and monitor industrial, landscaping, and agricultural water use.	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.	NIH ESPC will include water metering to be awarded by December 2013. CDC Roybal Campus will install key building level meters by July 2014.
Develop and administer outreach/awareness/training tools for scientists, building operating and maintenance staff, custodial staff, employees, and visitors.	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.	Promote use of GSA Facilities Management Institute Core Competency Self-Assessment Tool. Identify specific training courses for target groups by September 2013.

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

CEQ Suggestion	HHS Response
Design, install, and maintain landscape to reduce water use.	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.

GOAL 5 – Pollution Prevention & Waste Reduction

<u>Agency Progress toward Pollution Prevention & Waste Reduction</u>

Goal 5a - Increase source reduction of pollutants and waste:

- All Landholding OPDIVs participated in the 2012 Waste Data call, with waste diversion rates ranging from 1% in rural areas to over 75% in urban areas. The overall Department diversion rate among landholding operating divisions was 22.2% in FY 2012.
- IHS conducted a study of facilities' ability to include language in contracts for measurement of solid waste diverted.
- FDA 1st Annual Getting to Work the Green Way Event promotes greener commuting.
- CMS held an Earth Day Outreach Event and promoted waste reduction at home and at work.
- CDC is working to increase source reduction and reduce waste sent to landfills by a variety of methods, with emphasis on high volume materials such as polystyrene foam shipping containers, which can be reused rather than recycled. Other reuse and reduction programs include wood pallets, ice packs, duplex printing, the use of washable china in campus cafes, and property, such as furniture, that is determined to be excess.
- Plans are in place for a training module on hazardous waste reduction for insertion into required training for all 960 CDC Online Waste Ticket System (OWTS) users.
- CDC is implementing the Single Computer Model to minimize the number of computers required to support mission requirements, thereby reducing the number of computers entering the waste stream.
- CDC is implementing a "Bring Your Own Device (BYOD)" initiative that allows staff members to use their personal cell phones versus government provided BlackBerries, reducing the number of BlackBerries that will enter the waste stream.
- CDC is reducing future waste by maximizing use of network printers and minimizing acquisition of desktop printers.
- NIH launched NIH Free Stuff, an online tool that allows all NIH employees to list items that they no longer need and permits other employees to search for items that they would like to acquire. This tool facilitates the reuse or continued use of products, leading to cost avoidance and the reduction of waste.

Goals 5b and 5c Divert at least 50% non-hazardous solid waste by 2015 AND Discuss agency strategies to reduce municipal solid waste sent to landfill and how implementation will assist the agency in achieving FY 2020 GHG reduction targets

- CMS Increased waste diversion at the CMS Headquarters complex to 75.9% in the 1st Quarter of FY 2013.
- CMS Property management has actively pursued recycling or reuse for excess CMS property.
- FDA promoted sensible trash and recycling policies with new signage and placed additional recycling centers.
- FDA promoted and established sites to collect printer toner cartridges for recycling.
- All FDA buildings (owned, single and multi-tenant leased) continued to have active recycling programs in 2012.

- FDA's recycling rate for 2012 for all buildings was 18.3% an increase of over 5% from the previous year.
- IHS included waste diversion requirement language in the IHS A/E Design Guide and the Office of Environmental Health and Engineering (OEHE) Technical Handbook.
- IHS Earned an Honorable Mention in the HHS Green Champion Awards for a Health Center recycling program.
- The NIH achieved an agency-wide recycling diversion rate of 43.2% for FY2012. These figures included the data for food and animal bedding that was diverted for composting. This FY2012 rate puts the NIH on track to achieve goal of 50% diversion by FY2015.
- NIH continued the distribution of mini recycling containers to NIH Bethesda laboratories to promote and increase laboratory recycling.
- NIH promoted recycling and composting at the 2013 Earth Day Event on the Bethesda Campus.
- Staffs moving into CDC's new building, Chamblee 107, are being trained on recycling opportunities on that campus.
- CDC is partnering with a distributor of lab supplies to reutilize ice packs shipped to CDC with temperature controlled products.
- FDA decreased solid waste disposed of via landfills by over 26% in 2012 vs. 2011.
- In FY 2010 IHS initiated a new partnership with the Leech Lake Reservation's Green Team to assist in
 developing a tribal-specific practice-based environmental sustainability assessment tool that establishes a
 baseline profile, prioritizes intervention strategies, and develops an action plan. In addition, funds for a
 community composting project estimated to annually divert 153,088 pounds of waste from the solid waste
 stream, saving about \$17,750 in disposal costs, and reducing greenhouse gases by 28.3 metric tons carbon
 equivalent, were secured.
- NIH diverts 43% of their nonhazardous solid waste, and 49% is sent to Waste to Energy, with only 7% being sent to landfills.
- The Parklawn Building, which generated 351.8 tons of waste in FY12, diverted 33% of their nonhazardous solid waste to recycling and the remaining waste was disposed of through Waste to Energy.

Goal 5d - Divert at least 50% Construction and Demolition (C&D) materials and debris by FY 2015

- FDA diverted 46.5% of C&D waste from landfill to recycling facilities in 2012.
- The NIH achieved an agency-wide C&D recycling diversion rate of 57% for FY2012. This extremely high rate was due to the successful comprehensive C&D recycling program at the Bethesda Campus. This rate far exceeds the goal of 50% diversion by FY2015.
- CDC is monitoring C&D contracts to ensure maximum diversion in support of SSPP goals as well as LEED attainment. CDC/BFO developed a procedure to donate salvaged building supplies to local nonprofits as part of CDC's broader demolition contracting activities. CDC more than doubled the percent of C&D materials and debris diverted between 2010 (36.1%) and 2012 (96.9%). Two major Capital projects (Building 24 and Building 107) underway in FY 2012 helped to divert 34,950 tons of construction waste from landfill. As of February 2013, the construction of Building 107 on CDC's Chamblee campus had diverted 93% of its construction waste from landfill, exceeding both CDC's goal of 60% and the project goal of 75%.

Goal 5e - Reduce Printing Paper Use

- CDC is reducing the use of printing paper through the on-going implementation of duplex printing defaults. By Dec 2013, all network printers will be set to duplex printing by default. Duplex mode settings have saved the agency \$90,000 per year in paper procurement.
- NIH has also attained 100% compliance with duplex printing.
- At SAMHSA, 95% of network printers have duplex features in use.
- At FDA 90% of HQ network printer queues (~2900) were converted to duplex printing as the default.

Goal 5f - Increase use of uncoated printing and writing paper containing at least 30% post-consumer fiber;

• SAMHSA uses 100% recycled copy paper.

Goal 5g - Reduce and minimize the acquisition, use and disposal of hazardous chemicals and materials and discuss how implementation will assist the agency in achieving FY 2020 GHG reduction targets;

- CMS and other non-landholding OPDIVs and STAFFDIVs have introduced battery recycling programs, cell phone recycling programs, personal electronics recycling, eyeglasses recycling, and office supply sharing programs to reduce waste and encourage reuse.
- FDA Developed a new method for the Sr-90 procedure that:
 - o reduced the most chemically hazardous waste and mixed radionuclide/chemical waste to ~25% of the previous value, and
 - o significantly reduced the potential for exposure to waste gases by employees and maintained a very high level of method quality control.
- FDA introduced a service at White Oak that collects and recycles rechargeable batteries completely free of charge. A total of 159 pounds of rechargeable batteries have been collected in the first 6 months of operation, saving FDA a total of \$1,636 that would have been spent if the current waste contractor had recycled the batteries.
- FDA decreased Chem/Rad waste generated by 46% in 2012 compared to 2011.
- CMS held an e-recycling event at the CMS Headquarters complex during May 2013.
- FDA set up boxes throughout the White Oak Campus collecting 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 327 cell phones in 2012.
- NIH held an electronics recycling collection event on the Bethesda Campus during America Recycles Day that collected almost 2 tons of electronics.

Goal 5h - Increase diversion of compostables and organic materials from the waste stream;

- CMS introduced a Composting program at the CMS Headquarters building.
- The Hubert H Humphrey Building composted 6% of its waste in FY 2012, which contributed to its 44% diversion rate.
- FDA added composting collection at two facilities in 2012, generating 39 tons of solid waste that was composted. Zero tons of solid waste were composted in 2011.
- In January 2013, the NIH Bethesda Campus began collecting animal bedding from all campus animal buildings.
 This was achieved through a change to the types of vehicles and dumpsters used for collection. All collected
 animal bedding is consolidated with diverted cafeteria food scraps and delivered to the mid-Atlantic
 composting facility in Delaware.
- The NIH Bethesda Campus cafeteria food composting program successfully processed 404 tons of food scraps. The NIH RTP Campus cafeteria food composting program successfully processed 154 tons of food scraps. The cafeteria composting program at 6710&12 continued successfully in FY 2012.
- CDC is incorporating lessons learned into a draft Statement of Work (SOW) to contract for off-site composting
 services, with the capability of including food waste, animal bedding waste, restroom paper towel waste, and
 yard trimmings/storm debris as needed. Simultaneously, there is an effort to increase the existing use of
 compostable serviceware in CDC cafeterias, thereby facilitating faster implementation of food waste
 composting.

Goal 5i - Implement integrated pest management (IPM) and landscape management practices to reduce and eliminate the use of toxic and hazardous chemicals and materials;

- Integrated Pest Management (IPM) is standard policy incorporated in facility design guidelines and audit process.
- IHS provided an IPM webinar and 3-day course titled "Biology and Control of Vectors and Public Health Pests," which includes guidance and best practices on IPM. The IHS IPM course is available and promoted HHS-wide.

Goal 5j - Increase use of acceptable alternative chemicals and processes;

- CDC is collaborating with NIH to produce lessons learned on alternative chemicals and processes and is working internally with procurement officials to identify and purchase clinically proven alternatives to common hazardous chemicals and materials. CDC is inserting new training materials into the hazardous waste disposal training that is required for all laboratorians who utilize the Online Waste Ticket System (OWTS). CDC is analyzing OWTS data to identify the most commonly used hazardous chemicals and associated less toxic alternatives and is creating an intranet page for laboratorians interested in reducing toxics in labs, with a focus on peer-reviewed/clinically validated alternatives to common lab chemicals.
- NIH conducted a 2 day Mercury Amnesty collection program at an NIH Bethesda leased facility.
- NIH promoted the reduction and use of Mercury and other toxic chemicals through several Bethesda Campus outreach events in the past year.
- NIH is developing a list of Substances of Concern (SOC) in conjunction with federal and private sector partners. Lessons learned will be shared/adopted across the Department.

Goal 5k - Report in accordance with Sections (301-313) of the Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986

Other Accomplishments

- In 2012, HHS recognized six Green Champion winners in the Environmental Stewardship Category (2 from FDA, 1 from NIH, 1 from OIG, 1 from CMS, and 1 from OS/ASA), with 9 honorable mentions.
- Other Green Champion Awards included: 3 Change Agent Awards, 4 Corporate Responsibility Awards, 2 Electronic Stewardship Awards, 5 Energy Management Awards, 3 Good Neighbor Awards, 5 Sustainable Acquisitions Awards, 1 Sustainable Design and Facilities Award, 2 Federal Fleet Management Awards, and 2 Water Use Efficiency and Management Award.
- HHS Office of the Secretary (OS) and Operating Divisions held various outreach events such as Earth Day, America Recycles Day, Energy Awareness Day, Print Free Day, Bike to Work Day, and more.
 - Hubert H Humphrey Building held an Earth Day Expo celebration attended by over 415 employees.
 - Month of April: 3,188 lbs of personal electronics were recycled
 - Approximately \$16,000 worth of office supplies were reused at the event through the
 Office Supply Drop and Swap
 - The Humphrey Building hosted other outreach events such as America Recycles Day, Bike to Work Day, and Energy Awareness Day.
 - The Program Support Center held an Earth Day event at the Parklawn building.
 - The CDC held Earth Day events, launched the CDC.gov/Sustainability internet page, collected more than 188 pairs of shoes, and held Earth Walks at 12 campuses attended by 235 employees.
 - SAMHSA held an Earth Day event attended by over 250 employees.
 - o CMS held an Earth Day Fair attended by approximately 1,500 people, distributed 300 packets of wildflowers, held a wetland tour, and held a Print Free Day.
 - Earth Day at NIH was attended by approximately 2,000 people and included composting demonstrations, NIH commuting options, the New Green Terrace, recycling at NIH, an NIH Nature walk, and more.
 - Operating Divisions such as FDA have held Green Bag Lunch discussions on sustainability topics.

- FDA's Center for Tobacco Products held an Earth Day event attended by 125 employees where they learned about green transportation options, composting, recycling, green office practices, and more.
- o FDA Facilities held their 8th annual Earth Day event at the White Oak Campus:
 - A total of 15 outside vendors and 36 FDA/HHS groups participated by hosting a table display of information related to Earth Day topics.
 - A large number of recycled products were displayed along with local and state government personnel educating the public about their respective recycling programs.
 - Universal positive feedback, provided-both by those who attended and those who had a table display, was a measure of success for this event.
- FDA's Center for Drug Evaluation and Research (CDER) has a proactive and dynamic Environmental Assessment (EA) program that has help CDER personnel identify environmental stewardship opportunities.
- Green Teams have been established across operating divisions (OS, NIH, CDC, FDA, CMS, SAMHSA, AHRQ, and more).

<u>Table 5: Goal 5 Strategies – Pollution Prevention & Waste Reduction</u>

HHS Strategy to Achieve Goal	Strategy Narrative	Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Reduce waste generation through elimination, source reduction, and recycling.	OPDIVs continue to review opportunities for increased reduction and diversion, including enhanced recycling and composting efforts. Waste diversion in rural facilities continues to be challenging, urban area diversion rates exceed 40% with an overall HHS diversion rate of 21%.	IHS will develop and publish a best practices and guidance document on initiating a healthcare recycling program.
Establish a tracking and reporting system for construction and demolition debris elimination.	HHS Sustainable Building Implementation policy and contract language reflects tracking and reporting requirements for construction and demolition debris elimination - data is available by data call.	Continue coordination with sustainable buildings workgroup, and environmental and facility managers.
Develop/revise Agency Chemicals Inventory Plans and identify and deploy chemical elimination, substitution, and/or management opportunities.	HHS OPDIVs have efficient hazardous waste tracking and management systems, and chemical inventories are a focus of safety programs and audit protocols. NIH is developing Substances of Concern (SOC) in conjunction with federal and private sector patterns. Lessons learned will be shared/adopted across the Department.	Contract for SOC is ongoing along with FY 2014 funding requests.
Environmental Audit Protocol	Goal 5 and Environmental Managers to pursue unified audit protocol.	Develop pilot unified audit protocol - Aug 2014 (FDA lead)
EMS Metrics	Continue interagency level participation in community of practice and metrics development.	Revamp FDA EMS - June 2014

<u>Table 5a: Additional Pollution Prevention & Waste Reduction Strategies Identified by CEQ</u> that are Not a Top 5 HHS Strategy

HHS Strategy to Achieve Goal	Strategy Narrative
Eliminate, reduce, or recover refrigerants and other fugitive emissions.	While not a priority, HHS recognizes the importance of this element and will continue to review requirements (e.g. EPA phase out schedule) with the Goal 5 leads and environmental and facility managers. HHS will include appropriate element to address refrigerants and other fugitive emissions in the upcoming unified audit protocol.
Implement integrated pest management and improved landscape management practices to reduce and eliminate the use of toxic and hazardous chemicals/materials.	While not a priority, HHS recognizes the importance of integrated pest management (IPM) and has incorporated this as standard policy in facility design guidelines and audit processes.
Outreach and Promotion	HHS is committed to reaching out to staff to increase awareness of sustainability and its connections with the HHS Mission - "HHS Go Green Get Healthy." Continue to expand events (Energy Awareness Day-Oct, America Recycles Day-Nov, Earth Day-Apr, Farmers Mkt-Summer), expand Green teams, wellness initiatives, lunch presentations, small group meetings, and others.

GOAL 6 – Sustainable Acquisition

Agency Progress toward Sustainable Acquisition Goal

In FY 2012, 95% of the Department's new contract actions included applicable sustainability requirements (based on a minimum 5% quarterly review of applicable contract actions) as shown in Figure 6-1, *Sustainable Acquisition*. HHS has implemented various policies, training, and contract review strategies to achieve its sustainable acquisition goals. Specific HHS accomplishments are discussed below.

In January 2013, HHS's Office of Grants and Acquisition Policy and Accountability (OGAPA) implemented a supplemental contract review process aimed at sustainable acquisition, resulting in a greater number of contracts being verified and validated for the inclusion of applicable sustainable acquisition requirements. HHS buyers employed the Federal Strategic Sourcing Initiative (FSSI) Blanket Purchase Agreements (BPAs) to purchase office supplies, copiers, printer and multi-functional devices. The FSSI BPAs include all applicable sustainable acquisition requirements.

Individual HHS divisions also made progress on sustainable acquisition. CDC again earned the Federal Electronics Challenge (FEC) Platinum Award in 2012, the highest award conferred by the FEC, for its dedication to green procurement and training of procurement personnel. FDA provided sustainable acquisition training to all its acquisition personnel, which included a demo of the Green Products Compilation by GSA. The Program Support Center's (PSC) Strategic Acquisition Service (SAS) began tracking sustainable acquisition compliance through an acquisition workload report that will ensure contract actions for applicable green product and service codes are flagged for appropriate follow-up.

NIH integrated the Green Products Compilation with the NIH Purchase Online Tracking System (POTS) to develop a tool that is widely used at NIH. Through collaboration with GSA, the POTS tool will become available to all Federal agencies. This tool provides information to delegated procurement personnel as they select and purchase green products. Furthermore, the NIH Office of Acquisition and Logistics Management's Division of Acquisition Policy and Evaluation reviews a representative sample of acquisitions at the pre-solicitation and pre-award stages. These reviews include checks for compliance with all federally mandated sustainable acquisition requirements. NIH is simultaneously promoting sustainability and health throughout the Federal government through a new initiative, the Substances of Concern Reduction Initiative. This sustainability innovation initiative identifies services and products used in facilities and mission activities that contain or emit toxic, hazardous, polluting, or unsustainable substances over their life cycle of manufacturing, transportation, use, and disposal. The initiative promotes purchasing safer, environmentally-preferable alternatives and other strategies to reduce the hazards these substances present.

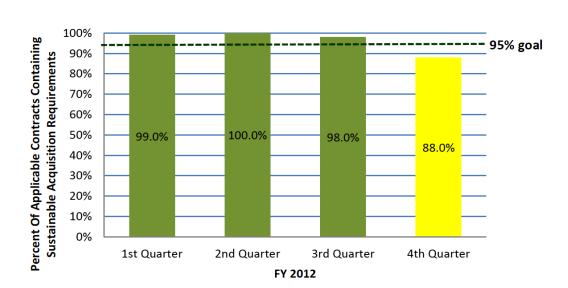


Figure 6-1 Sustainable Acquisition

<u>Federal Procurement Data System Standard Reports on Biopreferred Procurement Actions</u>

HHS achieved 73% and 94% biobased compliance for 4th quarter FY 2012 and 1st quarter FY 2013, respectively, based on a 5% contract review sample to determine whether the appropriate sustainability requirements and clauses were included in applicable contract actions. However, when examining biobased compliance via FPDS reports, the HHS compliance rate appears significantly lower. HHS understands that this discrepancy means that the Department faces challenges in the accurate reporting of sustainability data. As a result, HHS is focused on improving acquisition data accuracy as part of the larger Independent Verification and Validation (IV and V) effort. In addition to efforts to increase the sustainable acquisition, HHS has begun and will continue to incorporate data accuracy as part of various sustainability training sessions for contracting personnel. The HHS Green Purchasing Lead also meets with OPDIV Green Procurement Mangers frequently, providing feedback on sustainability data accuracy and emphasizing the need for accurate reporting. HHS will provide OPDIV Heads of the Contracting Activity (HCAs) with sustainability compliance rates based on FPDS reporting elements on a quarterly basis. 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 2014.

The Center for Health, Environment and Justice (CHEJ) is preparing to release a new guidebook, *Tools and Resources for Government and School Purchasers to Identify and Specify Safer Products and Building Material,* that includes a description of the NIH Substances of Concern Reduction Initiative as a model procurement resource for addressing chemicals of concern in products. The guidebook apparently provides the first compilation of these tools, and it should be a useful resource for purchasers, particularly those in building professions.

Figure 6-2 Biopreferred Procurement



<u>Table 6: Goal 6 Strategies – Sustainable Acquisition</u>

HHS Strategy to Achieve Goal	Strategy Narrative	Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Update and deploy agency procurement policies and programs to ensure that federally-mandated designated sustainable products are included in all relevant procurements and services.	HHS will update its Affirmative Procurement Plan (APP) and applicable Sustainable Acquisition policies to reinforce inclusion of applicable sustainability requirements.	At least 95% of applicable HHS contract actions will include sustainability requirements in FY 2014 (based on a minimum 5% contract review sample).
Deploy corrective actions to address identified barriers to increasing sustainable procurements with special emphasis on biobased purchasing.	HHS will continue to provide sustainable acquisition training to the acquisition workforce to reinforce inclusion of sustainability requirements in applicable contracts.	At least 95% of applicable HHS contract actions will include sustainability requirements in FY 2014 (based on a minimum 5% contract review sample).

HHS Strategy to Achieve Goal	Strategy Narrative	Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Include biobased and other FAR sustainability clauses in all applicable construction and other relevant service contracts.	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 2014.
Use Federal Strategic Sourcing Initiatives, such as Blanket Purchase Agreements (BPAs) for office products and imaging equipment, which include sustainable acquisition requirements.	HHS will continue to utilize the FSSI BPAs for applicable copier, multi- functional device, office supplies, and printer purchases.	Increase usage of the FSSI Office Supplies and Print Management BPAs by 10% in FY 2014.
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).	HHS will provide OPDIVs with sustainability compliance rates based on FPDS reporting elements on a quarterly basis and reinforce the need to accurately report sustainability information in FPDS.	Increase sustainability compliance rates in FPDS by 10% in FY 2014.

<u>Table 6a: Additional Sustainable Acquisition Strategies Identified by CEQ that are Not a Top 5 HHS Strategy</u>

HHS Strategy to Achieve Goal	Strategy Narrative
Review and update agency specifications to include and encourage biobased and other designated green products to enable meeting sustainable acquisition goals.	HHS does not control any specification standards.
Report on sustainability compliance in contractor performance reviews.	Not a top five strategy for HHS.

GOAL 7 – Electronic Stewardship

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

HHS is on track with the procurement of EPEAT (Electronic Produce Environmental Assessment Tool) electronics and the proper disposal of electronics at end-of-life as shown in Figure 7-1, EPEAT, PM, End-of-Life. HHS did not meet the FY 2012 goal for 100% of electronics with power management features enabled. Eight of the nine Operating Divisions have achieved Power Management (PM) compliance with the PM sub-goal: HHS is 94% Complaint in PM.

HHS OPDIVs have also designated 27 Core data centers and 131 non-Core data centers. 27% of the non-core data centers are scheduled to close by the end of CY 2015. The HHS Core data center designations were delivered to OMB on 4/19/2013. 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 PM experiences, sharing best practices regarding data center management and electronics stewardship. CMS performed a Data Center environmental efficiency; this study resulted in specific recommendations to upgrade the data center infrastructure and equipment according to best practices design standards, which have evolved since the data center was built in 1995.

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

EPEAT	POWER MANAGEMENT	END-OF-LIFE	COMMENTS

<u>Table 7: Goal 7 Strategies – Electronic Stewardship & Data Centers</u>

HHS Strategy to Achieve Goal	Strategy Narrative	Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Identify agency "Core" and "Non-Core" Data.	The HHS OPDIVs have designated 27 Core data centers and 131 non-Core data centers.	The HHS Core data center designations were delivered to OMB on 4/19/2013. Status of the core data centers will be reported through the OMB Portfolio Stat data call.
Consolidate 40% of agency non-core data centers.	27% of the non-core data centers are scheduled to close by the end of CY 2015.	The HHS CIO will review the data center consolidation plan by the end of FY 2014 to determine if additional data centers can be closed as HHS strives to reach the OMB 40% closure goal.

HHS Strategy to Achieve Goal	Strategy Narrative	Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Optimize agency Core Data Centers across total cost of ownership metrics.	Data center status, financial, and inventory data for the core data centers will be submitted to OMB through the PortfolioStat data call.	HHS Core data centers will be required to meet minimum OMB TCO standards by the end of FY 2014.
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.	OPDIVS will submit reports certifying compliance.	Certifying report due by the end of the 12 months.
Ensure acquisition of 95% EPEAT registered and 100% of ENERGY STAR qualified and FEMP designated electronic office products.	OPDIVS will submit reports certifying compliance.	Certifying report due by the end of the 12 months.

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

CEQ Suggestion	HHS Response
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.	Not a top 5 priority for HHS.

GOAL 8 – Renewable Energy

Agency Renewable Energy Percentage of Total Electricity Usage

HHS surpassed the FY 2012 goal for renewable energy, deriving a total of 8.5% of its energy use from renewable electricity sources, including 2.5% from new sources (thermal, mechanical, or electric). This result is ahead of the FY 2012 goal of 5% as shown in Figure 8-1, *Renewable Energy Percentage of Total Electricity Usage*. For FY 2013, HHS will purchase at least 7.5% renewable energy as mandated.

CDC has attained renewable energy use goals through sustainable installations and by purchasing Green power at multiple campuses, such as at the CDC Fort Collins, Colorado, site. CDC Fort Collins has entered into an agreement with the local power utility, XcelEnergy, to join their voluntary Windsource service. The agreement ensures that all electricity consumed by the site is from wind power generated by the Colorado Public Utilities

Commission. The Windsource program counts as a renewable Green Power Purchase. CDC's Spokane campus in Washington has entered a similar agreement with its local power utility to ensure that 100% of its power is generated by wind. CDC also purchases Green power for use at several of its Atlanta-area campuses.

CDC has installed solar panels at its South Surface Lot on the Roybal campus in Atlanta, GA. CDC has also completed PV solar evaluations for Building 107 at the CDC Chamblee campus in Atlanta, and the building's roof has been outfitted with the proper pre-installation equipment for solar panels should a PV project be approved in the future. PV solar evaluations have also been conducted for Buildings 101 and 102 at CDC's Chamblee campus.

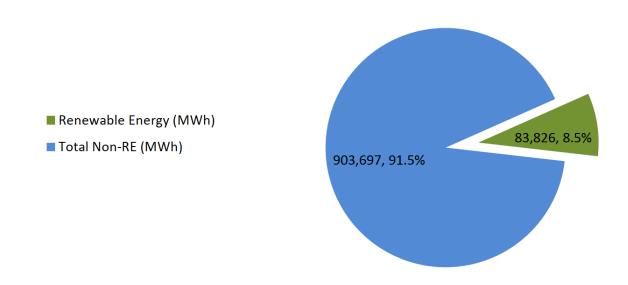
FDA has installed solar projects in previous years and, in FY 2013, is working on the following projects:

- Installation of a solar water heating system as the primary heating source for the domestic water at the Muirkirk Road Complex to reduce the energy used for domestic hot water to the building (the existing heating source will remain as the supplement to the solar system). This system will generate 100.4 MMBtu, with \$2,442 cost savings, \$71,965 project cost and 29.5 years simple pay back.
- Installation of a 130-kW roof mounted solar photovoltaic power generation system at the Irvine Lab.
- Proposed expansion of existing solar thermal heating system at MRC MOD I. The newly proposed system will increase the existing 2 collector panels to expand to 10 panels. The increased capacity will yield an approximate 20% 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.

At IHS, 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. These projects should be completed in 2013.

The IHS Kayenta Health Center is under construction and includes an 80-kw photovoltaic system. The Ft. Yuma Health Center design is complete and includes a 19-kw photovoltaic system. The Southern California Youth Regional Treatment Center (YRTC) is in the Schematic Design Phase and the feasibility of a 30-kw photovoltaic system is being evaluated.

Figure 8-1 Renewable Energy Percentage of Total Electricity Usage



<u>Table 8: Goal 8 Strategies – Renewable Energy</u>

HHS Strategy to Achieve Goal	Strategy Narrative	Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Purchase renewable energy directly or through Renewable Energy Credits (RECs).	HHS OPDIVs will continue to purchase Green Power and RECs to meet requirements.	Meet 7.5% renewable energy use requirement in FY 2013.
Install onsite renewable energy on federal sites.	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.	FDA will install a solar water heating system for primary heating of MRC domestic water system. FDA will install a 130-kW roof mounted solar PV system at Irvine in 2014. IHS will complete installation of a 50-kw wind generator and 10-kw photovoltaic systems currently under construction at the Pine Ridge and Rosebud Hospitals in FY 2013.
Utilize performance contracting methodologies for implementing ECMs and increasing renewable energy.	FDA is installing three new solar systems as ECMs developed from its UESCs. NIH also anticipates renewable energy systems from ESPC assessments in progress.	MRC UESC Phase 3 (Dec 2013) & Phase 6 (Planned, Dec 2014). Irvine UESC (July 2014). NIH ESPCs signed by Dec 2013.
Work with other agencies to create volume discount incentives for increased renewable energy purchases.	FDA and NIH work with Defense Logistics Agency (DLA) to purchase renewable energy. PSC works with GSA under electricity bulk buy contract.	Ongoing
Increase renewable energy training for facility and energy personnel	OPDIVs will promote increased completion of renewable energy training and webinars for facility and energy personnel.	Promote use of GSA Facilities Management Institute Core Competency Self-Assessment Tool. Identify specific training courses for target groups by September 2013.

<u>Table 8a: Additional Renewable Energy Strategies Identified by CEQ that are Not a Top 5</u> HHS Strategy

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

GOAL 9 – Climate Change Resilience

Agency Climate Change Resilience

In June 2011, Secretary Sebelius issued an HHS Sustainability and Climate Change Adaptation Policy Statement, affirming HHS' leadership role in promoting sustainability and responding to climate change. HHS committed to "set the standard for federal agencies in sustainable development, provide climate-resilient health and human services, and support scientific research focused on environmental and public health, including research on the effects of climate change on human health and well-being."

The 2012 HHS Climate Change Adaptation Plan described HHS's established initiatives linking climate and health, including the Assistant Secretary for Health's (ASH) implementation of HHS's Environmental Justice Strategy; which includes eight actions relating to climate change, climate adaptation, or sustainability. Other HHS divisions are also working on education, research, and building resilience, as discussed below.

Climate change resilience education is a key element of the CDC National Center for Environmental Health's (NCEH) Climate Ready States and Cities Initiative. NCEH's Climate and Health Program (CHP) has developed decision support tools for communication, education, and vulnerability-mapping related to climate change. Working with the Oregon Health Authority and Upstream Public Health, the CDC has designed a one-day course to educate Health Impact Assessment professionals about policies related to climate change. The course includes strategies for incorporating climate-sensitive health impacts when conducting a Health Impact Assessment. In FY2013, CDC will work with Oregon to distribute the training course materials for adoption and use by the HIA community. CDC has also developed and piloted 3 training webinars detailing the Building Resilience against Climate Effect (BRACE) Framework. Additional webinars will be conducted in 2013 for new grantees and members of the Association of State and Territorial Health Officials (ASTHO) and the National Association of County and City Health Officials (NACCHO).

Research into the potential health effects of climate change is a focus of NIH's National Institute of Environmental and Health Sciences (NIEHS). NIEHS has funded 13 two-year pilot grants to study the health implications of climate change, with the Fogarty International Center and National Institute on Aging supporting one grant each. These studies have included examinations of population and individual-level vulnerabilities to climate change's effects on air pollution, temperature, water quality and quantity, and infectious disease transmission. NIH and CDC also co-chair the US Global Change Research Program's Interagency Climate Change and Human Health Working Group. This Working Group recently launched the *Metadata Access Tool for Climate and Health*, a webbased repository of meta-data that can direct users to a wide array of climate and health information, including EPA and CDC data.

In addition to supporting education and research on climate change resilience, the Department it is working to improve the nation's climate resilience by incorporating climate considerations into broader HHS programs, in areas including community grants and support for the nation's health care infrastructure. NIH and the Office of the Assistant Secretary for Administration (ASA) have proposed a project, expected to begin in 2013, wherein HHS

will partner with the health care industry to design guidance on cost-effective climate resilience measures for health care and biomedical research facilities.

The Office of the Assistant Secretary for Preparedness and Response (ASPR) has begun to focus efforts on building community resilience and more sustainable health and emergency systems in the face of climate change impacts. In these efforts, ASPR is guided by the National Health Security Strategy (NHSS). Because climate change will increase the severity and frequency of severe weather events, ASPR plans to identify the populations most vulnerable to these disasters to assure their health and well-being.

The Substance Abuse and Mental Health Services Administration (SAMHSA) will be incorporating climate change considerations into its support of vulnerable populations. This will include providing mental health services for climate change-related psychological stress and anxiety, especially in areas affected either by severe weather events or long-term loss of habitability, such as in Alaska and along the Gulf Coast.

HHS recognizes and promotes programs, projects and initiatives that support sustainability and climate resilience through HHS Green Champions and HHS Innovates awards programs. The annual HHS Green Champions Awards honors Federal employees and Native American tribal members who demonstrate measureable results towards integrating sustainability principles into the HHS mission and its daily operations. Key selection factors for both individual and team awards include innovation, collaboration, return on investment, and short and long-term impact. The 2012 HHS Green Champions Award winners are highlighted in Appendix A.

Going forward in 2013, HHS will continue the transition to more sustainable, long-term initiatives that enhance the HHS mission. HHS is undertaking several interrelated efforts to integrate sustainability and climate resilience into agency and regional health planning efforts. These efforts include both knowledge-gathering and knowledge-sharing activities. Pilot projects at CDC and NIH relating to climate resilience will provide lessons learned that can be incorporated into broader climate resilience efforts at HHS.

Key actions for FY 2013 include:

- Partner with the health care industry to develop guidance on cost-effective climate resilience measures for health care and biomedical research facilities.
- Educate both grantees and internal HHS personnel about sustainability and climate resilience.
- Continue to work on HHS high-risk vulnerability assessment conducted in 2010, and examine at least one area that has been labeled as high-risk.
- Partner with the Department of Homeland Security to support integrated preparedness planning.
- Integrate climate resilience into HHS Green Champions program, and include HHS executives in the award process.
- Hold at least two climate resilience workshops: one workshop for grantees, and a workshop for an internal HHS audience.
- Hold at least one Senior Executive Service training forum on sustainability and climate resilience.
- Include sustainability and climate resilience in SES performance plans.

<u>Table 9: Goal 9 Strategies – Climate Change Resilience</u>

HHS Strategy to Achieve Goal	Strategy Narrative	Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Ensure climate change adaptation is integrated into both agency-wide and regional planning efforts, in coordination with other Federal agencies as well as state and local partners, Tribal governments, and private stakeholders.	HHS is undertaking several interrelated efforts to integrate climate resilience into agency and regional planning efforts. These efforts include both knowledge-gathering and knowledge-sharing activities The National Institutes for Health (NIH) and the Centers for Disease Control and Prevention (CDC) are both launching pilot projects relating to climate resilience. Lessons learned from these efforts will be incorporated into broader climate resilience efforts at HHS. HHS has plans to partner with the health care industry to design guidance on cost-effective climate resilience measures for health care and biomedical research facilities. HHS has also begun efforts to educate both grantees and internal personnel about climate resilience.	 Continue to work on high risk vulnerability assessment, and examine at least one area that has been labeled as high risk. Integrate climate resilience into HHS's Green Champions program. Hold at least two climate resilience workshops: one workshop for grantees, and a workshop for an internal HHS audience.
Update agency emergency response procedures and protocols to account for projected climate change, including extreme weather events.	The Office of the Assistant Secretary for Preparedness and Response (ASPR) has begun to focus efforts on building community resilience and more sustainable health and emergency systems in the face of climate change impacts. In these efforts, ASPR is guided by the National Health Security Strategy (NHSS). Because climate change will increase the severity and frequency of severe weather events, ASPR plans to identify the populations most vulnerable to these disasters to assure their health and well-being.	Partner with the Department of Homeland Security to support overall preparedness.
Update agency external programs and policies (including grants, loans, technical assistance, etc.) to incentivize planning for, and addressing the impacts of, climate change.	HHS is integrating sustainable and resilient communities into existing HHS programs while also assisting the grantee community as they incorporate climate resilience strategies into programs and requirements. In 2012, CDC and the National Institute of Environmental Health Sciences (NIEHS) conducted a 3-day sustainability and climate resilience symposium with their grants community. CDC has developed 3 training webinars detailing the Building Resilience against Climate Effect (BRACE) Framework. In 2013, HRSA Region 4 will help NIEHS, the Agency for Toxic Substances and Disease Registry, and the EPA partner with the community health center grant community on Brownfield's green infrastructure and climate resilience.	Add a scorecard element to HHS OPDIV scorecards that addresses climate resilience.

HHS Strategy to Achieve Goal	Strategy Narrative	Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Ensure agency principals demonstrate commitment to adaptation efforts through internal communications and policies.	The Secretary is anticipated to release a policy statement on sustainability and climate resilience, updated from the HHS 2011 statement. HHS also plans to publish and market climate resilience-related talking points for HHS senior leaders to use internally, further promoting awareness of climate change.	 Launch at least one Senior Executive Service training forum on sustainability and climate resilience. Include climate sustainability in to SES performance plans. Include HHS executives in green champions award process.
Ensure that agency climate adaptation and resilience policies and programs reflect best available current climate change science, updated as necessary	HHS possesses subject matter expertise on climate change science relating to health, and the agency is attempting to ensure that subject matter experts are available to HHS components as they integrate climate resilience into their planning efforts. In addition, NIH and CDC chair a working group that recently launched the Metadata Access Tool for Climate and Health, a web-based repository of meta-data that can direct federal and non-federal users to a wide array of climate and health information, including EPA and CDC data.	

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

CEQ Suggestion	HHS Response
Ensure workforce protocols and policies reflect projected human health and safety impacts of climate change.	HHS believes in the importance of ensuring that workforce protocols and policies consider climate change impacts, and the agency may undertake such an effort as a separate strategic initiative in the future; currently, efforts along these lines are included in the strategies above.
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.	In its efforts to integrate climate resilience into strategic planning, HHS is considering the effects of climate change on vulnerable communities under our Environmental Justice program; however, these efforts are included under the strategies listed above, rather than standing as a separate strategic effort.

CEQ Suggestion	HHS Response
Design and construct new or modify/manage existing agency facilities and/or infrastructure to account for the potential impacts of projected climate change.	HHS plans to design or modify its facilities to account for projected climate change impacts; however, implementing this strategy requires additional research and will not be a prioritized strategy for FY2013. HHS's sustainable buildings work group will be reviewing facilities plans and data, which should eventually help HHS adapt and design facilities that are resilient to climate change impacts.
Incorporate climate preparedness and resilience into planning and implementation guidelines for agency-implemented projects.	HHS believes in the importance of incorporating climate preparedness and resilience into agency-implemented project guidelines, but additional work is needed before this strategy can be broadly implemented. In FY 2013, NIH and CDC are planning to launch pilot projects in climate change resilience that should provide best practices data that will help future efforts to incorporate climate preparedness into agency project planning.

Appendix A: FY12 HHS Green Champions Winners

HHS INTRANET

http://intranet.hhs.gov/abouthhs/programs_initiatives/gogreen/FY2012GreenChampionsAwards.html

Appendix B: HHS Climate Change Adaptation Plan

HHS INTERNET

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