

U.S. Department of Housing & Urban Development

Strategic Sustainability Performance Plan



I. Agency Policy Statement

The U.S. Department of Housing & Urban Development is committed to working towards its mission in a sustainable manner. As Senior Sustainability Officer (SSO), I am firmly committed to see HUD achieve this through compliance with environmental and energy statutes, regulations, and Executive Orders (EOs). These include, among others: the Resource Conservation and Recovery Act (RCRA), the Energy Policy Act of 1992 (EPAct), the Farm Security and Rural Investment Act of 2002 (FSRIA), the Energy Policy Act of 2005, the Energy Independence and Security Act of 2007 (EISA), Executive Order 13423, and Executive Order 13514. This Strategic Sustainability Performance Plan (“Plan”) is submitted pursuant to Section 8 of Executive Order 13514.

HUD is determined to meet President Obama’s sustainability targets and goals, through initiatives both internal to the agency and in conjunction with external partners and grantees. We have awarded and initiated an Energy Savings Performance Contract (ESPC) to modernize the Robert C. Weaver Headquarters Building, the only building for which HUD has delegated operations and maintenance authority from the General Services Administration (GSA). The 43-year-old Weaver building is currently energy inefficient, and presents indoor air quality problems due to outdated and failing building equipment and systems. The ongoing ESPC project, performed by Honeywell, will provide dramatic energy improvements as well as improved indoor air quality. In addition to the ESPC, HUD is working with GSA to pursue a possible full building modernization. Currently, HUD and GSA are working cooperatively to complete a “Demonstration” open space layout plan that will serve as an example of HUD’s vision to transform the Weaver Building into a model of sustainability. Additionally, HUD continues to work with GSA to ensure all HUD building leases use sustainable building locations.

HUD has also worked to build partnerships for sustainability with other federal agencies. A recent partnership with the Department of Energy has overcome barriers to the use of DOE weatherization funds in public and assisted housing, as well as collaborating in the areas of home energy labeling and energy efficient mortgage financing. HUD is a core member of the Federal Partnership for Sustainable Communities, with the Environmental Protection Agency and Department of Transportation. This initiative promotes a broad-based strategy to lower carbon emissions and household costs through integrated housing and transportation programs and planning. HUD’s Office of Sustainable Housing & Communities continues to coordinate sustainability measures throughout HUD programs and promote sustainable principles nationwide, through successful new initiatives including regional planning grants and community challenge grants to support more livable and sustainable communities nationwide.

HUD’s plans for the near future prominently feature sustainability and energy efficiency. HUD has chosen to pursue a joint High Priority Performance Goal with the Department of Energy of enabling the cost effective energy retrofits of a total of 1.1 million housing units in FY 2010 and FY 2011 with HUD contributing retrofits in 126,000 HUD-assisted and public housing units. HUD also plans to complete green and healthy retrofits of an additional 33,000 units during this time period. In FY 2010, HUD exceeded its combined target for energy and green retrofits by 64 percent through the completion of retrofits to about 92,000 units. These commitments substantiate HUD’s new FY2010 – FY 2015 Strategic Plan and the fourth overarching goal to “Build Inclusive and Sustainable Communities Free From Discrimination.” HUD is also considering how to adapt to climate change and developing associated actions.

Building sustainable housing and communities is firmly integrated into HUD's operations. I look forward to continue working to ensure HUD pursues sustainability principles throughout the agency and its programs,

[Estelle Richman]

I. Agency Policy Statement (optional image)

II. Sustainability and the Agency Mission

HUD's mission is to "Create strong, sustainable, inclusive communities and quality, affordable homes for all". HUD's new mission statement harkens back to the Housing Act of 1949 and the directive to create "a decent home and suitable living environment for every American family." Building on this founding mandate, HUD will continue to develop and preserve quality, healthy, and affordable homes. HUD will reinvigorate its commitment to community development, recognizing the importance of place in shaping the lives of the American people. This renewed commitment includes a focus on the physical, social, economic, and environmental sustainability of our communities.

HUD's mission clearly identifies sustainability as a core agency goal. Achieving Executive Order 13514 sustainability targets and goals will support agency goals by promoting sustainability in the communities where HUD employees work, as a component and a microcosm of HUD's effort to promote sustainable communities throughout the country through various policy interventions and coordination. The fourth overarching goal in HUD's new Strategic Plan, "Build Inclusive and Sustainable Communities Free From Discrimination," explicitly ties together the building of sustainable housing and communities with HUD's mandate to affirmatively further fair housing, and recognizes that improving the energy efficiency of HUD-assisted housing and the quality of neighborhoods, cities, and metropolitan areas is essential to a successful housing policy.

There are few mission-related challenges in achieving the sustainability goals of Executive Order 13514 due to the synergies between those goals and the priorities outlined in HUD's mission. In the distant past, HUD's efforts have been heavily oriented towards the specific issue of producing affordable housing. Today, the Department clearly realizes that broadening HUD's focus to include livability and creating opportunity for housing residents has been a necessary adjustment to fully address the problems the Department was created to help solve. HUD currently is focused on creating sustainability in the communities to which HUD directs federal interventions. This sustainability drives not only resident opportunity and healthy community building, but positive environmental benefits as well.

Size and Scope of Operations

Size and Scope of Operations	Number	Comment
Total # Employees	9462	
Total Acres Land Managed	0	
Total # Facilities Owned	0	
Total # Facilities Leased (GSA lease)	108	
Total # Facilities Leased (Non-GSA)	0	
Total Facility Gross Square Feet (GSF)	4277361	

Size and Scope of Operations	Number	Comment
Operates in # of Locations throughout U.S.	108	
Operates in # of Locations outside of U.S.	0	
Total # Fleet Vehicles Owned	0	
Total # Fleet Vehicles Leased	176	
Total # Exempted-Fleet Vehicles (Tactical, Emergency, etc.)	417	
Total Operating Budget FY 2010 (\$MIL)	46152	FY 2010 HUD net discretionary budget authority
Total # Contracts Awarded FY 2010	4732	Includes new contract awards and new orders issued
Total Amount Contracts Awarded FY 2010 (\$MIL)	1598	
Total Amount Spent on Energy Consumption FY 2010 (\$MIL)	4	
Total BTU Consumed per GSF	74950	
Total Gallons of Water Consumed per GSF	15.0	
Total Scope 1 & 2 GHG Emissions (Comprehensive) FY 2008 Baseline MMTCO _{2e}	17715	
Total Scope 1 & 2 GHG Emissions (Subject to Agency Scope 1 & 2 Reduction Target) FY 2008 Baseline MMTCO _{2e}	17715	
Total Scope 3 GHG Emissions (Comprehensive) FY 2008 Baseline MMTCO _{2e}	31726	
Total Scope 3 GHG Emissions (Subject to Agency Scope 3 Reduction Target) FY 2008 Baseline MMTCO _{2e}	31726	

II. Sustainability and the Agency Mission (optional image)

III. Greenhouse Gas Reduction Goals

HUD has set a goal for Scope 1 and Scope 2 greenhouse gas emissions to reduce CO₂ emissions by 10,671 MTCO₂ by Fiscal Year 2020, a reduction of 47.4% over the baseline. HUD's goal for Scope 3 greenhouse gas emissions (GHG) is to reduce CO₂ emissions in this category 16.2% by Fiscal Year 2020 from the Fiscal Year 2008 baseline.

HUD's strategy to reduce greenhouse gas emissions is focused upon twin strategies of vehicle fleet right sizing and the pursuit of an Energy Savings Performance Contract (ESPC) for the 43 year old Robert C. Weaver building.

Analysis of fleet usage and replacements and reductions will reduce the amount of gasoline expended and lower GHG emissions. Meanwhile, energy and water conservation measures will lower the need for heating power and water in the inefficient Weaver building, lowering costs and emissions.

HUD is investigating strategies to reduce indirect greenhouse gas emissions for which it is responsible. HUD's ESPC will reduce greenhouse gas emissions through electricity demand reduction, resulting in reduced generation requirements for the supplier. The Department's changes in transit subsidy policy and telework policy should lead to noticeable reductions in the numbers of employees on the roads for their morning commute. In addition, HUD is considering a number of strategies to reduce indirect GHG emissions, including: changes in employee travel guidance, and changing contractual requirements for waste removal to reduce GHG emissions during travel for waste disposal. HUD also plans to develop a campaign to promote bicycle use for employee commuting. HUD anticipates employee outreach campaigns in conjunction with all of these strategies.

Eventually, HUD looks forward to addressing contractor travel patterns and office usage, working with GSA to address greenhouse gas reductions in the numerous buildings HUD leases under GSA, and addressing issues relating to Goals 1 and 2. HUD has or will be very soon requesting a LEED Silver rating for design in the Atlanta, Denver, and Portland office relocations. These office relocations are planned for FY2012, FY2014, and FY2012, respectively

ARRA investments have not been the main drivers of anticipated goal achievement in FY 2011 and FY 2012. Notably, however, through the use of ARRA funding, GSA will be initiating an almost complete roof replacement for the Weaver Building during FY11. This will include the installation of material with increased R-value which is anticipated to help with energy conservation goals. In addition, the finished surface of the proposed ARRA roof replacement will include a low emissivity/reflective type "cool roof". This type of roofing is known for reducing the "urban heat island" effect.

III. Greenhouse Gas Reduction Goals (optional image)

IV. Plan Implementation

Internal Coordination and Communication

HUD's Office of the Chief Financial Officer (CFO) will serve as a single point of contact for interaction with other agencies on activities relating to sustainability. The Office of Facilities Management Services (OFMS) has played a large role in the development of the Plan's Goal 1 and 2 submissions (Greenhouse Gas Reduction and Inventory), Goal 3 (High-Performance Sustainable Design / Green Buildings & Regional & Local Planning), Goal 4 (Water Use Efficiency and Management), and Goal 5 (Pollution Prevention and Waste Elimination) submissions.

The Office of the Chief Procurement Officer (OCPO) has been instrumental in developing Goal 6 (Sustainable Acquisition) as well as parts of Goal 7 (Electronic Stewardship and Data Centers), while the Office of the Chief Information Officer (OCIO) has helped to develop the remainder of Goal 7.

Implementation of the plan will continue to involve staff from these offices, as well as the Budget Office, Office of Strategic Planning, and other offices as necessary. The Office of Strategic Planning and the Office of the Chief Financial Officer will take the lead in evaluating the plan. CFO will coordinate the update of the plan.

Moving forward, during the FY11- FY12 reporting cycle, CFO will coordinate a “Sustainability Working Group” that will meet at least quarterly to discuss obstacles to progress, reporting, and other issues of concern. The Working Group will also convene in advance of major planning deadlines, such as the preparation of the Budget. CFO will maintain a clear delegation of roles for the participating offices and will monitor progress in completing required reports, such as some of the elements listed in Table 1.

Coordination and Dissemination of the Plan to the Field

HUD will post the Plan to its internal “hud@work” homepage at <http://hudatwork.hud.gov/>, and highlight the plan through communication to all employees, such as a blast e-mail or inclusion in a regularly e-mailed newsletter. HUD’s Office of the Chief Financial Officer will take the lead in coordinating any data submissions from the field for the plan.

Leadership and Accountability

CFO will play a key leadership role, and will feature a link to the Plan on its website. Key personnel involved will have elements of the plan they have responsibility for incorporated into their annual Performance Review. CFO will coordinate training for relevant personnel to ensure staff are knowledgeable and properly equipped to implement the plan. CFO will take responsibility for monitoring overall progress of the plan, and will assume a proactive role in encouraging relevant offices.

Agency Policy and Planning Integration

Agency policy and planning will be integrated. CFO will monitor planning efforts and coordinate the submission of comments reflecting policy driven by the Plan in order to integrate that into Agency planning, such as Budget submission. CFO will coordinate with the Office of Strategic Planning to ensure that all appropriate planning documents are updated.

Agency Budget Integration

CFO will be responsible for coordinating with the Budget Office to ensure that the funding implications of Plan are integrated into the next Budget request. CFO will work with the Budget Office for any Congressional Justifications necessary.

Methods for Evaluation of Progress

Progress during the FY11-12 reporting period shall be evaluated at the quarterly meetings of the “Sustainability Working Group” based on projected targets. These projected targets shall be developed after the submission of the annual Plan’s update, and after evaluation of the annual plan. The agency will continue to update, implement,

and maintain existing plans, policies, and internal systems as necessary. CFO will ensure policies and plans are available on web sites for the wide use of HUD employees.

*Note for Critical Planning Coordination Table: Infrastructure services are identified in consolidated Departmental IT Infrastructure Exhibit 300.

IV. Plan Implementation (optional image)

Table 1: Critical Planning Coordination

Originating Report / Plan	Scope 1 & 2 GHG Reduction	Scope 3 GHG Reduction	Develop and Maintain Agency Comprehensive GHG Inventory	High-Performance Sustainable Design/Green Buildings	Regional and Local Planning	Water Use Efficiency and Management	Pollution Prevention and Waste Elimination	Sustainable Acquisition	Electronic Stewardship and Data Centers	Agency Specific Innovation
GPRAs Strategic Plan	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A
Agency Capital Plan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
A-11 300s	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	N/A
Annual GHG Inventory and Energy Data Report	Yes	Yes	Yes	N/A	N/A	Yes	N/A	N/A	N/A	N/A
EISA Section 432 Facility Evaluations/Project Reporting/Benchmarking	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Budget	No	No	No	N/A	N/A	No	No	No	No	N/A
Asset Management Plan / 3 Year Timeline	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Originating Report / Plan	Scope 1 & 2 GHG Reduction	Scope 3 GHG Reduction	Develop and Maintain Agency Comprehensive GHG Inventory	High-Performance Sustainable Design/Green Buildings	Regional and Local Planning	Water Use Efficiency and Management	Pollution Prevention and Waste Elimination	Sustainable Acquisition	Electronic Stewardship and Data Centers	Agency Specific Innovation
Circular A-11 Exhibit 53s	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
OMB Scorecards	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
DOE's Annual Federal Fleet Report to Congress and the President	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Data Center Consolidation Plan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	N/A
Environmental Management System	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Instructions for Implementing Climate Change Adaptation Planning	No	No	No	Yes	Yes	No	No	No	No	No
Other (reports, policies, plans, etc.)										

V. Evaluating Return on Investment

HUD strives to allocate resources efficiently by continually evaluating programs, consulting with stakeholders, and measuring performance. HUD's Five Year Strategic Plan emphasizes that HUD, for the purposes of both the Strategic Plan and the Department's Annual Performance Plans, will set annual national fiscal year targets for

these outcome measures, based on the budgeted activities of contributing programs. The Department will also set annual place-based fiscal year targets for these same outcome measures, where applicable.

HUD takes into account both monetary and non-monetary factors when prioritizing projects and initiatives.

Executive Order 13423 requires agencies to consider lifecycle cost analysis and savings in planning and making determinations about investments in all capital assets, services, and procurements to lower total lifecycle costs, achieve sustainable design principles, reduce energy and water consumption, and reduce the environmental impact and footprint of government operations. OCPO's Affirmative Procurement Plan instructs acquisition personnel to utilize lifecycle cost analysis in their duties. Acquisition personnel should use life cycle cost analysis in making decisions about investments in products, services, construction, and other projects to lower the Department's costs and to reduce energy and water consumption. Additionally, HUD has pursued a detailed cost benefit analysis for the possible modernization of the Weaver Headquarters building with a feasibility study performed in conjunction with GSA, which is aimed at determining and recommending the most practical, cost-effective, and sustainable options for a full building remodel design. Of note, considerations include: the historical character of the Weaver building (a planned lobby improvement project will provide an updated look and feel as part of GSA's First Impressions Program, while maintaining the character of the building's original architectural design), and the social benefits of increasing employee collaboration and interaction.

HUD strives to minimize deferred investments in building operations and maintenance. HUD pursued an ESPC in order to reduce deferred investment in the Robert C. Weaver building. Studies performed by GSA contractors as part of the contemplated modernization will analyze building improvement proposals in light of deferred maintenance and other issues.

HUD considers social costs and benefits in its programs in a holistic manner. As the Secretary emphasizes in the introduction to HUD's new FY 2010 – FY 2015 Strategic Plan, HUD embraces changes that could not have been imagined when HUD was created over forty years ago—to work with new partners in local government, housing finance, and community development; to recognize the new geography of America's increasingly metropolitan economy and address the increasingly common problems cities, suburbs, and rural areas share. The Department is investigating pursuing place-based target-setting and tracking where appropriate, in order to ensure that not only are prioritizing decisions made with consideration of social costs, but that performance is tracked based on social impacts as well to the extent possible.

HUD considers environmental costs and benefits when prioritizing programs and initiatives. HUD's Strategic Plan explicitly recognizes the negative environmental effects from distended development patterns. HUD's focus on revitalizing the urban environment recognizes and emphasizes the importance of environmental considerations in HUD planning and direction-setting.

HUD's emphasis on "place-based" policies and viewpoints reflects mission-specific cost and benefit considerations.

HUD's mission of "Create strong, sustainable, inclusive communities and quality, affordable homes for all" has led to consideration of the places and communities that interact with housing and ultimately lead to quality housing.

Lastly, HUD is very active in considering the effects of climate change risk and vulnerability. Deputy Secretary Ron Sims is nationally known for his prior work in the King County area in planning for climate change at the local government level, and HUD continues to have conversations about sharing ideas and innovations in preparing and planning for climate change. Moving forward, HUD will continue to consider the costs and benefits from climate change in its programmatic priorities.

HUD will continue to follow guidance from OMB Circulars A-4, Regulatory Impact Analysis (RIA) and A-94, Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs.

V. Evaluating Return on Investment (optional image)

VI. Transparency

Internal Agency Communication

HUD will provide regular updates to all employees through its blast e-mail system describing the submission of the Plan and progress made towards achieving results. This information will also be prominently displayed on the default “hudatwork” homepage. This communication will provide tips to all employees on how they can help to implement the Plan.

HUD will also establish a webpage where employees can suggest ideas for “greening” HUD operations, in line with the sustainability goals. Relevant personnel will be able to access the website for ideas. This will operate in a similar manner to the interactive and collaborative site “HUD Ideas in Action” which was launched in conjunction with HUD’s FY 2010-2015 Strategic Planning process.

HUD will also develop websites as practicable to help personnel implement the plan. OCPO currently has a green purchasing website and continues to add new resources to it.

HUD will pay particular attention to engaging staff that are directly tasked with overseeing and monitoring progress for the Plan. HUD will convene quarterly “Sustainability Working Group” meetings of the responsible staff to discuss progress.

HUD’s regional sustainability officers, who disseminate information about HUD’s sustainability efforts to other HUD regional and field office employees, will also help communicate sustainability efforts.

External Agency Communication

HUD will put the completed Sustainability Plan in an easily accessible location on its public website at <http://www.hud.gov>. HUD welcomes comments from the public regarding strategies to improve the sustainability plan. HUD will publicize its progress annually by publishing the latest Sustainability Plan online.

VI. Transparency (optional image)

Section 2: Performance Review & Annual Update (Update and Submit Annually)

I. Summary of Accomplishments

HUD has made significant progress towards the targets and goals of other Executive Orders and statutory requirements, largely driven by the ongoing Energy Savings Performance Contract improvements to the Weaver building. This project addresses a number of specific mandates, including: the National Energy Conservation Policy Act (NECPA), the Energy Policy Act of 1992 (EPAAct of 1992), the Energy Policy Act of 2005, the Energy Independence and Security Act of 2007 (EISA 2007) Executive Order 13423, as well as Executive Order 13514.

Out of all of its offices, HUD only exercises delegated operations and maintenance responsibility for the Robert C. Weaver Headquarters building, which is now 43 years old. HUD's OMB Scorecard reflects that HUD failed to meet its Energy Management Requirement of a 15% reduction from FY 2003, and failed to meet the goal of a 6 percent reduction in potable water intensity while HUD did meet its goals for renewable energy (FY2010 goal of 5%). HUD's ESPC should take significant steps towards ensuring energy savings that meet the goals set forth, as well as greatly furthering water consumption savings. Additionally, HUD provided more training to managers and staff with energy and environmental responsibilities.

HUD also begun "right-sizing" its fleet in order to reduce gasoline consumption, and the greenhouse gases associated with it. HUD has moved forward in updating plans for sustainable procurement, an important component for numerous goals as many functions, including information technology functions and building management functions, are currently outsourced. HUD has consolidated its data centers down to only 2, and is one of five federal agencies with two or fewer data centers. HUD's commuting survey has given the agency valuable information to inform efforts to reduce greenhouse gas emissions associated from commuting to the workplace.

Goal 1: Scope 1 & 2 Greenhouse Gas Reduction (Basic Performance Discussion, A - H)

A. Goal Description

Executive Order 13514 establishes that agencies will set a percentage reduction target for agency-wide reductions of scope 1 and 2 greenhouse gas emissions in absolute terms by fiscal year 2020, relative to a fiscal year 2008 baseline. These emissions refer to actions for both buildings and fleet vehicles. HUD's FY 2008 total Scope 1 and 2 emission baseline is 20,283 MTCO₂. The FY 2020 goal for Scope 1 and Scope 2 is 10,671 MTCO₂, a reduction of 47.4%. HUD plans to reach to reduce its GHG emissions by 22% by FY 2015 in order to remain on track for this goal.

B. Agency Lead for Goal

Overarching responsibility: Estelle Richman, Chief Operating Officer, Office of the Chief Financial Officer (CFO).

Implementation responsibility: Robert Byrd, Director of Office of Facilities Management Services.

POC: Jacob Weisman, Office of Facilities Management Services; Lesley Stewart, Office of Facilities Management Services.

C. Implementation Methods

Two main sub goals will contribute to the achievement of the overall goal. These sub goals are: 1) reducing energy intensity in agency buildings and increasing agency use of renewable energy and 2) reducing the use of fossil fuels and increasing the use of alternative fuels in HUD’s fleet.

D. Positions

The Department is currently evaluating whether or not OFMS is adequately staffed for this portion of the plan, based on current staff and future hiring plans.

F. Agency Status

During FY10, OFMS efforts were primarily focused on finalizing the ESPC design which required regular coordination between the Energy Services Company (ESCO), GSA and HUD. In addition, OFMS expended significant effort to reserve and prepare swing space for occupant relocations that will be required during the more major portions of the ESPC. HUD issued notice to proceed during 2010 for both the lighting retrofits and water conservation measures included as part of the ESPC.

Fleet assessments have been conducted and the results showed that much of the HUD fleet is being underutilized. Planning is underway to significantly reduce the fleet and relocate vehicles by July 2011.

Ongoing projects for OFMS include: Coordinating and finalizing ECMs for the awarded ESPC at Robert C. Weaver Building, and providing training for all personnel with energy and environmental management responsibilities.

G. Return on Investment

No change to previously described initiatives has been made due to the return on investment.

H. Highlights

Currently, the most significant project related to HUD’s sustainability efforts is the ESPC. This project is made of several ECMs that have and will continue to require day to day coordination and oversight.

Goal 1: Scope 1 & 2 Greenhouse Gas Reduction (Planning Table)

.	SCOPE 1&2 GHG TARGET	Unit	FY10	FY11	FY12	FY13	FY14	FY15	...	FY20
Build-ings										

.	SCOPE 1&2 GHG TARGET	Unit	FY10	FY11	FY12	FY13	FY14	FY15	...	FY20
Buildings										
Buildings	Energy Intensity Reduction Goals (BTU/SF reduced from FY03 base year)	%	15	18	21	24	27	30		
Buildings	Planned Energy Intensity Reduction (BTU/SF reduced from FY03 base year)	%	15	18	21	24	27	30	...	
Buildings	Renewable Electricity Goals (Percent of electricity from renewable sources)	%	5	5	5	7.5				
Buildings	Planned Renewable Electricity Use (Percent of electricity from renewable sources)	%	5	5	5	7.5			...	
Fleet	Petroleum Use Reduction Targets (Percent reduction from FY05 base year)	%	10	12	14	16	18	20		30
Fleet	Planned Petroleum Use Reduction (Percent reduction from FY05 base year)	%	20	24	28	32	36	40	...	60
Fleet	Alternative Fuel Use in Fleet AFV Target (Percent increase from FY05 base year)	%	61	77	95	114	136	159		
Fleet	Planned Alternative Fuel Use in Fleet AFV (Percent increase from FY05 base year)	%	67	85	105	125	149	175	...	
Fleet	Senior Executive Fleet Replaced with Low-GHG, High Efficiency Vehicles (Percent replaced from FY08 base year)	%	50	50	50	50	50	50	...	100
.	Other as defined by agency								...	
.	Total Scope 1 & 2 GHG Emissions (Comprehensive)	MMTCO ₂ e	17715	17715	15589	14881	14349	13817	...	9318

.	SCOPE 1&2 GHG TARGET	Unit	FY10	FY11	FY12	FY13	FY14	FY15	...	FY20
.	Total Scope 1 & 2 GHG Emissions (Subject to Agency Scope 1 & 2 GHG Reduction Target)	MMTCO2e	17715	17715	15589	14881	14349	13817	...	9318
.	Overall Agency Scope 1 & 2 Reduction (reduced from FY08 base year)	%	0	0	12	16	19	22	...	47.4

Goal 1: Scope 1 & 2 Greenhouse Gas Reduction (Goal-Specific Items)

1) Reducing Energy Intensity in Agency Buildings and Increasing Agency Use of Renewable Energy

As part of the commitment to reduce energy use intensity, and consequently Greenhouse Gas (GHG) emissions, HUD has initiated an Energy Savings Performance Contract (ESPC). The ESPC will result in substantial energy savings, the results of which will have major impact on HUD’s GHG emissions reduction. The ESPC is the foundation of HUD’s targeted reduction and is represented below:

There are no direct costs associated with this Energy Savings Performance Contract (ESPC), beyond the staff time needed to develop and monitor the contract and hazardous material handling and abatement costs. Savings from reductions in energy and water usage will pay for the costs of the contract.

Successful completion of the ESPC will require close coordination between HUD (which does not own the Weaver building, but rather is responsible for Operations and Maintenance), GSA, and the ESPC contractor Honeywell.

The successful implementation of the ESPC and any potential modernization will depend heavily on ongoing maintenance and monitoring. HUD’s Office of Facilities Management Services (OFMS) will be responsible for ensuring that maintenance and operations staff are trained to properly maintain the energy conservation measures.

In addition, the Energy Services Contractor (ESCO) will be performing ongoing Measurement and Verification (M&V) to ensure that reduction targets are met.

The Department has a comprehensive maintenance program that incorporates many of the Best Management Practices identified by the Federal Energy Management Program at DOE into everyday requirements for operations and maintenance to maximum extent practical. The program includes a user-friendly method to report water leaks and repair them immediately. The program also encourages cleaning and custodial crews to report problems as soon as they are identified. Training and education have also been undertaken as HUD employees attended workshops and seminars provided by FEMP, and employees have attended meetings and sponsored by the Office of the Federal Environmental Executive.

Monitoring and overseeing the measures is also a key component. Presently the Director, Facilities Management Division, the Chief, Building Maintenance and Energy Branch, and the Building Maintenance and Energy Branch staff have performance evaluation plans that include energy and water conservation goals. The established performance plans directly affect the employees' performance evaluations. This will ensure the measures work at the anticipated effectiveness.

HUD also promoted the National Energy Awareness Month in October and used FEMP Energy Conservation materials such as posters, calendars, stickers, etc. to increase employee awareness of energy conservation at work and at home. This will help ensure building occupants participate in resource conservation efforts. HUD will coordinate energy awareness activities with the Field offices to the extent possible.

HUD does not have in place an environmental management system (EMS), as it is only responsible for operations and maintenance at the HUD Headquarters building. HUD does not own any buildings at any of its offices. The Robert C. Weaver Headquarters Building is the only facility for which the Department receives the utility bills for reporting purposes.

Efforts related to this goal will have spillover effects with other goals. Lowered energy consumption will enable the Weaver building to comply with the Sustainable High Performance Building Targets in Goal 4, and the ESPC's planned Energy Conservation Measures will reduce water consumption and help address Goal 6, Water Use Efficiency and Management.

GSA will be initiating an almost complete roof replacement for the Weaver Building during FY11. This will include the installation of material with increased R-value which is anticipated to help with energy conservation goals. In addition, the finished surface of the proposed ARRA roof replacement will include a low emissivity/reflective type "cool roof". This type of roofing is known for reducing the "urban heat island" effect.

Reducing per Capita Energy Consumption through Space Management Policies.

HUD will creatively examine ways to reduce per capita energy consumption through improving its space management policies.

2) Reducing the Use of Fossil Fuels in HUD Covered Federal Fleet

HUD will continue to plan and implement strategies to meet reduction goals for Covered Fleet Vehicles by reducing petroleum use and increasing the use of alternative fuels. The 2020 target reduction shown in the Fleet table reflects at least a 2% reduction per year in petroleum usage, while maintaining the 2015 targeted alternative fuel usage.

HUD's strategy to reduce GHG emissions through petroleum reduction involves "right sizing the fleet", as well as an awareness campaign on Alternative Fueling Stations. The process of right sizing HUD's fleet will be accomplished by reviewing mileage logs on a quarterly basis, as well as conducting a needs assessment for the entire department. If vehicles have mileage that is below 1,000 average miles per month, they will be returned to GSA due to underutilization. HUD's goal is to reduce its fleet by two percent per quarter. This plan will "right size" HUD's fleet, and reduce the amount of vehicles substantially.

HUD will employ an awareness campaign that informs vehicle drivers of the options of using alternative fuel, and the tools that are accessible for drivers when planning their trip. This awareness campaign will encompass both headquarters and field office staff.

HUD's fleet mission for the future and present is to ensure that the fleet not only meets the requirements outlined in executive orders but to exceed the requirements. OFMS' fleet management personnel will make a personal commitment and effort to ensure that the office meets the requirements of reducing petroleum consumption, through monitoring vehicle mileage as well as ensuring that HUD purchases vehicles that are alternative fuel.

Assessments of the percentage of fleet utilization have been conducted and the results showed that a surprisingly large portion of the 199 non-exempt vehicles in HUD fleet is being underutilized. Therefore, HUD's plan is to reduce the fleet by a significant portion by July 2011. The reduction in fleet will reduce the amount of vehicles that use petroleum. HUD has concluded through the assessment that the remaining vehicles that have not been identified as low usage can be replaced with alternative fuel vehicles. Once implemented, HUD will meet the requirements of reducing petroleum consumption, and will be increasing its alternative fuel usage.

These plans do not currently incorporate Office of Inspector General (OIG) vehicles because they are considered to be law enforcement. As of the last assessment, OIG had 225 vehicles. However, OFMS' Fleet Management personnel are working with OIG to develop ways to decrease the petroleum consumption and increase alternative fuel usage. Assessments are being conducted to see where Alternative vehicles can be placed within the OIG fleet.

Replacing Conventional Senior Executive Fleet with Low-GHG Emitting, Highly Efficient Vehicles

Currently the Department has 4 vehicles for the executive fleet; two of the vehicles are hybrid vehicles. The two vehicles have a GHG (Greenhouse Gas) score of 5. The Fleet Management program in conjunction with the Executive Secretary is working with GSA to ensure that all vehicles in the fleet will remain hybrid vehicles. HUD is working towards a goal of having all senior executive fleet vehicles be highly efficient vehicles by FY 2020.

Shuttle Bus Streamlining and Ridership Consolidation

HUD will evaluate the possibility of shuttle bus route consolidation/sharing. However, the department operates a shuttle bus service at its Headquarters location. The bus service will likely remain due to increased ridership associated with the recent occupant relocation for the ESPC. Performance of the ESPC has required HUD to obtain swing space adequate to relocate a portion of the Weaver Building occupants during the construction. There will be 8 phases/moves that will extend over a period of nearly 3 years.

Goal 2: Scope 3 Greenhouse Gas Reduction & Develop and Maintain Agency Comprehensive Greenhouse Gas Inventory (Basic Performance Discussion, A - H)

A. Goal Description

Executive Order 13514 requires agencies to establish and report a percentage reduction target for agency-wide scope 3 greenhouse gas emissions in absolute terms by fiscal year 2020, relative to a fiscal year 2008 baseline. HUD's goal is to reduce agency-wide scope 3 greenhouse gas emissions by 16.2% by FY 2020. HUD has also conducted a greenhouse gas emissions inventory.

B. Agency Lead for Goal

Overarching responsibility: Estelle Richman, Chief Operating Officer; Office of the Chief Financial Officer.

Implementation responsibility: Robert Byrd, OFMS

C. Implementation Methods

Reducing Emissions in Contracted Waste Disposal

Currently all of HUD's waste disposal services are contracted out to Melwood, a 501(c)3 nonprofit, and administered by OFMS. Melwood's contract is in an option year and will run for 2 more years. Currently, Melwood uses a subcontractor to pick up trash from the HUD loading dock twice a week. To the extent possible, HUD will work within the existing contract to implement greenhouse gas emission reducing strategies. OFMS has interviewed the current contractor about the waste stream and has discovered potential areas to increase recycling. Once the existing contract is complete, OFMS will work to ensure measures to reduce greenhouse gas emissions are included in the next contract.

Reducing Transmission and Distribution Losses from Purchased Energy

HUD purchases electricity and steam through aggregated procurement contracts with GSA. HUD has arrangements to purchase natural gas directly from Washington Gas, and to purchase water/sewer services from WASA. HUD's OFMS will work directly with these providers to estimate transmission and distribution losses.

HUD's steam purchases, in particular, have experienced significant leaks. HUD's ESPC will totally replace purchased steam, as the planned natural gas fired boilers ECM will generate heat on-site. As transmission and distribution losses increase the farther the end user is from the energy source, this will put the source within the building (as close as possible to the end user). Similarly, the ESPC plans to put solar panels on the roof which will move some electricity generation on site, minimizing transmission losses from those. Planned solar panel ECMs will generate an expected 50.2 MWh (megawatt -hours) of power annually.

Reducing Employee Travel: Commuting and Business Patterns

HUD's 9462 employees commute to work through a variety of methods, including bicycle, mass transit, and by automobile. Roughly 1/3 of all HUD employees work at HUD's Headquarters building, while the remaining 2/3 employees work in one of HUD's many field offices. HUD's Weaver Headquarters building has a secure bike rack for employees who wish to commute by bicycle. The Weaver building also has a below-ground parking garage.

HUD is still in the process of gathering information on commuting and business patterns in order to identify strategies to meet the Scope 3 goals HUD will set. OFMS will be responsible for coordinating this information gathering with the relevant offices. HUD's OFMS office is broadly responsible for agency travel (not considering GHG reductions due to Scope 1 and 2 fleet reductions of agency vehicle fleet). A number of other offices deal with information related to employee commuting, including HUD Transit Subsidy Offices both in HQ and in the field, Human Resources (for information on Alternative Work Schedules and Telecommuting), and Parking Services in OFMS. OFMS will, for the next reporting cycle, take a leadership role in determining and encouraging milestones for reduction of Scope 3 GHG by designating a "Commuting Sustainability Officer" to oversee integration of goals to reduce GHG associated with commuting and track progress.

In order to complete the comprehensive GHG Inventory, OFMS utilized the commuter survey offered by FEMP. HUD will use the results this survey generated to better consider strategies to reduce Scope 3 emissions. HUD plans to develop a report for the FY 2011-2012 reporting cycle which identifies existing commuting patterns, discusses policies and incentives to change commuting behavior and lower GHG emissions, and offers recommendations. OFMS will be responsible for reviewing this and working with the program and field offices to adopt appropriate recommendations.

Currently, HUD offers transit subsidy in its Headquarters offices and to some field offices, depending on the availability of public transit, and the vast majority of Headquarters employees utilize the transit subsidy. Benefits are capped at the \$230 a month maximum. Benefits were increased on May 2009 from a previous cap of \$120 a month with Recovery Act funds. It is uncertain if funding support for this level of benefits will be maintained indefinitely. Regardless, HUD will continue to promote transit subsidies to new employees and highlight the benefits of public transit utilization during environmental awareness campaigns.

HUD currently supports biking to work by offering a secure bike storage facility, as well as having shower facilities on site for those with a HUD gym membership (pricing variable depending on pay). For the FY 2011-2012 reporting cycle, HUD will investigate methods to encourage greater bike use, including the possibility of offering free access to the locker rooms for bikers, a bike subsidy program that provides positive incentives for biking, preferential use of gym locker facilities for bicyclists, and improved bike storage facilities. HUD will also investigate promotional campaigns, such as events in conjunction with National Bike to Work Day. HUD will also investigate ways to highlight information on mass transit and bicycling options for new hires, such as including links to a greenhouse gas emissions calculator and highlighting biking options in the new hire package, and encouraging contact of the Commuting Officer for any questions.

Telecommuting also offers a valuable way to reduce greenhouse gas emissions by avoiding the need to commute from home to a duty station for employees. In 2010 HUD enabled telework for 33% of responding employees, a slight increase from the 30% rate in 2009, and a significant increase from 22% in 2008. HUD has set a goal

of increasing the number of employees teleworking, which will have the effect of avoiding carbon emissions by reducing commuting into duty stations. HUD will continue to work in pursuit of its Strategic Plan Goal to “Transform the Way HUD Does Business” by promoting appropriate use of teleworking. HUD has recently reached an agreement with both unions to allow bargaining unit employees to utilize all or portions of the new Telework Policy (announced in May 2010, which previously did not apply to them). HUD anticipates this agreement will lead to significantly higher use of teleworking in the future. HUD has encouraged the use of telework to the maximum extent for those employees affected by the ESPC swing moves.

Methods Used by Agency to calculate Scope 3 GHG emissions

HUD utilized the FEMP offered commuter survey to gather information about its employees commuting habits and to finalize comprehensive GHG data for both the FY08 baseline and the FY10 inventory.

HUD utilized the FEMP commuter survey, default methodology, to collect data on federal employee commuting.

Business air and ground travel data were collected using the GSA Travel MIS system.

Contracted solid waste disposal data was collected from data gathered directly from the waste collection contractor.

Contracted wastewater treatment was calculated using the reporting tool and based on estimated number of employees served within the Goal Subject facility.

T&D losses associated with purchased electricity were reported using electricity consumption data.

Development of the Agency’s FY 2010 Greenhouse Gas inventory

Stationary combustion data was reported based on natural gas billing data. The agency does not utilize stationary combustion to produce heat and steam. Steam is currently purchased. Notably, the agency will decommission the purchased steam heating system and begin producing hot water on-site as a result of an Energy Savings Performance Contract (ESPC). This is expected to be complete within one year.

HUD did not upload FAST data to the reporting portal. This was offered as an optional FEMP function and HUD has elected to have FEMP populate the data.

The agency operates the building cooling system which includes several large chillers. Data collections efforts resulted in no known refrigerants purchased, or returned to stock.

HUD does not operate on-site wastewater treatment facilities or landfills.

HUD reported purchased electricity, steam, renewable energy credits (REC) based on data from utility providers and GSA provided information.

The agency purchases power through an aggregate power procurement agreement with GSA. This agreement requires the minimum REC purchases to meet renewable energy requirements.

HUD owns an on-site emergency generator which is not used for any other purpose than emergency backup. Since there have been no major power outages at the building in the past three reporting cycles, the only fuel consumed is through testing and exercising the equipment. This information has not been collected, but will be researched further during the next reporting period.

HUD intends to implement an GHG Inventory Management Plan (IMP) during the FY 2011-12 reporting period.

D. Positions

The Department is currently evaluating whether or not OFMS is adequately staffed for this portion of the plan, based on current staff and future hiring plans.

F. Agency Status

HUD's ongoing ESPC includes measures to reduce transmission losses, by totally replacing purchased steam with on-site generated steam from the planned natural gas fired boilers ECM and by installing solar panels on the building's roof.

HUD's completed commuting patterns survey has provided a valuable base of information which will guide HUD's strategy for reducing commuting greenhouse gas emissions.

Transit subsidies have been substantially increased during the FY 2008 baseline, effective since March 1 2009. Benefits were increased from a previous cap of \$120 a month with Recovery Act funds, and have led to an increase in mass transit use for commuting purposes.

HUD also recently expanded the number of employees who fell under the Department's relatively new teleworking policies, which should expand use of teleworking as reported in the next cycle.

HUD currently has a large portion of employees who participate in "Flex Time", allowing them to arrive at work up to one hour earlier or later than their scheduled on-duty arrival time, without needing the approval of their supervisor. These employees can currently arrive as early as 6 A.M. or as late as 9:30 A.M. The employees who participate in "Flex Time" can avoid some of the worst commuting patterns, reducing their commute time and their associated greenhouse gas emissions while idling in traffic.

G. Return on Investment

No changes were made due to higher or lower than expected returns on investment.

H. Highlights

HUD does not have any Goal 2 initiatives that it would like to highlight.

Goal 2: Scope 3 Greenhouse Gas Reduction & Develop and Maintain Agency Comprehensive Greenhouse Gas Inventory (Planning Table)

SCOPE 3 GHG TARGET	Units	FY10	FY11	FY12	FY13	FY14	FY15	...	FY20
Total Scope 3 GHG Emissions (Comprehensive)	MMTCO2e	33142	33147	32716	32186	31755	31258	...	27777
Total Scope 3 GHG Emissions (Subject to Agency Scope 3 GHG Reduction Target)	MMTCO2e	33142	33147	32716	32186	31755	31258	...	27777
Overall Agency Scope 3 Reduction (reduced from FY08 base year)	%	0	0	1.3	2.9	4.2	5.7	...	16.2
Other, as defined by agency	%							...	

Goal 2: Scope 3 Greenhouse Gas Reduction & Develop and Maintain Agency Comprehensive Greenhouse Gas Inventory (Goal-Specific Items)

Discussion contained in section above.

Goal 2 (optional image)

Goal 3: High-Performance Sustainable Design/Green Buildings & Regional and Local Planning (Basic Performance Discussion, A - H)

A. Goal Description

Executive Order 13514 requires agencies to implement high performance sustainable Federal building design, construction, operation and management, maintenance, and deconstruction. HUD plans to meet all of Goal 3’s High-Performance Sustainable Design / Green Buildings sub goals, including:

1. Beginning in FY 2020, all new Federal buildings are to be designed to achieve zero-net energy by FY 2030.
2. Comply with the, “Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings (Guiding Principles),” in all new construction, major renovation or repair and alteration of Federal buildings.
3. Assess and demonstrate that at least 15% of agency’s existing government-owned buildings, agency direct-leased buildings, delegated authority leased buildings, and FRPP-reported leased buildings meet Guiding Principles by FY 2015 [5,000 GSF threshold for existing buildings and building leases].
4. Demonstrate annual progress toward 100% conformance with Guiding Principles for entire building inventory by 2015 and thereafter.

5. **(New)** Incorporate sustainable practices into agency policy and planning for new Federal facilities and leases, and into lease renewal strategies.
6. **(New)** Demonstrate use of cost-effective, innovative building and sustainable landscape strategies to minimize energy, water and materials consumption.
7. **(New)** Operate and maintain, and conduct all minor repairs and alterations for existing building systems to reduce energy, water and materials consumption in a manner that achieves a net reduction in agency deferred maintenance costs.
8. **(New)** Optimize performance of the agency's real property portfolio – dispose and consolidate excess and underutilized property, co-locate field offices, consolidate across metropolitan and regional locations.
9. **(New)** Reduce need for new building and field office space by utilizing technologies to increase telework opportunities and expand delivery of services (over the internet or electronically).
10. **(New)** Conserve, rehabilitate, and reuse historic Federal properties, using current best practices and technology.
11. **(New)** Align agency space actions (new leases, new construction, consolidation) with agency Scope 1&2 and Scope 3 GHG reduction targets.

HUD also plans to meet all of Goal 3's Regional and Local Planning subgoals, including:

- a. Incorporate consultation with local and metropolitan planning organizations regarding the impact, or potential impact, of Federal actions on local transportation infrastructure and local development plans into existing policy and guidance.
- b. Align agency policies to increase effectiveness of local planning efforts regarding transportation, energy resources and the environment.
- c. Increase effectiveness of regional measures that enhance integrity of local ecosystems and watersheds.
- d. Update agency policy and guidance to ensure that all Environmental Impact Statements (EIS's) and Environmental Assessments (EA's) required under the National Environmental Policy Act (NEPA) for proposed new or expanded Federal facilities, and as appropriate, identify and analyze impacts associated with energy (including alternative energy sources) and climate change.
- e. **(New)** Integrate methods and practices necessary to achieve the goals of this plan into agency master planning documents (i.e., high-performance, sustainable building goals, pollution prevention and waste reduction goals, water use reduction goals, sustainable acquisition goals, electronic stewardship and data center consolidation, etc.).

f. **(New)** Update agency policy and guidance to ensure coordination and (where appropriate) consultation with Federal, State, Tribal and local management authorities regarding impacts to local ecosystems, watersheds and environmental management associated with proposed new or expanded Federal facilities.

g. **(New)** Discuss agency participation in critical local and regional efforts and initiatives (i.e., Executive Order on Chesapeake Bay Protection and Restoration, Executive Order on Stewardship of the Ocean, Our Coasts, and the Great Lakes, etc.).

B. Agency Lead for Goal

Overarching responsibility: Estelle Richman, Chief Operating Officer; Office of the Chief Financial Officer.

Implementation responsibility: Robert Byrd, Director of Office of Facilities Management Services.

Staff Point of Contact: Jacob Weisman, OFMS

C. Implementation Methods

HUD's discussion of implementation methods is included in detail in the goal-specific item section.

D. Positions

The Department is currently evaluating whether or not OFMS is adequately staffed for this portion of the plan, based on current staff and future hiring plans.

E. Agency Status

HUD's ESPC is underway, which should improve the water consumption and energy consumption of the Weaver building. The work anticipated will significantly move the Weaver building towards satisfaction of the Five Guiding Principles.

HUD is participating in National Capital Planning Commission's (NCPC) Southwest Ecodistrict Initiative. Although HUD does not own or plan to construct any new buildings, HUD will coordinate with GSA to ensure that any events at which HUD's presence would be of significant value to the local and regional planning process are attended by relevant HUD staff.

G. Return on Investment

No changes were made due to different than expected return on investments.

H. Highlights

HUD does not wish to note any highlights for this goal.

Goal 3: High-Performance Sustainable Design/Green Buildings & Regional and Local Planning (Planning Table)

GOAL 3 Targets	Units	FY10	FY11	FY12	FY13	FY14	FY15	...	FY20
Owned Buildings	%	N/A (HUD does not own any facilities)	N/A	N/A	N/A	N/A	N/A	...	N/A
FRPP-Reported Leased Buildings	%	N/A	N/A	N/A	N/A	N/A	N/A	...	N/A
Total Buildings	%	N/A	N/A	N/A	N/A	N/A	15	...	15
Other (Buildings), as defined by agency								...	
Other (Reg/Local Planning), as defined by agency								...	

Goal 3: High-Performance Sustainable Design/Green Buildings & Regional and Local Planning (Goal-Specific Items)

High-Performance Sustainable Design / Green Buildings

Beginning in FY 2020, all new Federal buildings are designed to achieve zero-net energy by FY 2030.

HUD has not designed any new Federal buildings, and does not currently plan to do so. HUD’s OFMS will collaborate with GSA to ensure any new Federal buildings designed for HUD meet this goal.

All new construction, major renovation or repair and alteration of federal buildings complies with “Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings (Guiding Principles).”

HUD has signed a Memorandum of Understanding (MOU) with GSA, which has operational responsibility for all HUD buildings except the Weaver Building. This MOU requests GSA to incorporate the Guiding Principles “green lease” language into all its leases for HUD-occupied facilities as a matter of standard practice. HUD currently leases 108 buildings. HUD will follow the Guiding Principles for any major renovation or repair or alteration of the Weaver building. OFMS will be responsible for developing and incorporating this into agency policy, and monitoring policy effectiveness, in the event of a major renovation or repair or alteration of the Weaver building.

At least 15% of agency’s existing buildings and building leases meet guiding principles by FY 2015 [5,000 GSF threshold for existing buildings and building leases].

HUD does not exercise operational control over most of its building leases, but has coordinated with GSA to meet the Guiding Principles for its field office locations. HUD has or will be very soon requesting a LEED Silver rating for design in the Atlanta, Denver, and Portland office relocations. These office relocations are planned for FY2012, FY2014, and FY2012, respectively.

HUD's Weaver building does not currently meet the five guiding principles. OFMS will develop and implement a plan with a goal of having the building meet the principles by FY 2015. HUD's ESPC, discussed at length in Goal 1, should play a major role in ensuring the Weaver building complies with the guiding principles by FY 2015.

Demonstrate annual progress towards 100% conformance with Guiding Principles for entire building inventory.

-

HUD will work with GSA towards this goal for the entire building inventory, as HUD only exercises delegated authority over the Weaver Headquarters building.

Satisfaction of Guiding Principles for the Weaver Building

Employ Integrated Design Principles

HUD will pursue a collaborative, integrated planning and design process for any modernization of the Weaver Building. HUD worked in close coordination with GSA and a contractor team to see a modernization feasibility study to completion in December 2010. The study's recommendations would bring the Weaver Building into the 21st century, following the Guiding Principles. However, the projected costs are daunting and future implementation planning would assume a start no earlier than 2015.

Optimize Energy Performance

If HUD pursues a full building renovation, the Department will strive to ensure that it meets the Guiding Principle's goal of a 20% reduction of the energy cost budget below pre-renovations 2003 baseline, as well as earn the Energy Star rating for major renovation if applicable. However, a renovation of this scale is not anticipated at this time for any future modernization resulting from the feasibility study. HUD has received upgraded meters in the Headquarters building (installed in 2004), and currently monitors and records meter readings monthly.

Protect and Conserve Water

HUD's ESPC is expected to implement water saving technology throughout the entire building. During FY 2010, water consumption increased to 18.6 Gal/GSF representing an increase of 22% when compared to the FY 2007 baseline of 15.2 Gal/GSF. One of the largest contributors to the increase in water consumption is attributed to a major breakdown of the building cooling tower resulting in the loss of a significant volume of water. The ESPC is expected to implement water saving technology throughout the entire building and has already initiated the installation of water saving faucets. HUD will continue to monitor building equipment, plumbing fixtures, fire protection sprinkler systems, and outside irrigation systems, and repair leaks immediately.

HUD will evaluate the current outdoor landscaping and irrigation systems to identify any potential for water conservation, including evaluating the possibility for rainwater recapture. Currently, landscaping and irrigation systems are subcontracted, and the main contract will be evaluated before rebid to ensure any potential water conservation implementation measures are included. It should be noted that there is currently very little landscaping at the Weaver building. HUD will take necessary measures to ensure that strategies to reduce storm water runoff and polluted site run off are in place for design and construction.

Incorporate sustainable practices into agency policy and planning for new Federal facilities and leases, and into lease renewal strategies.

HUD has and will continue to maintain a Memorandum of Understanding (MOU) with GSA requiring that all new leases entered into on behalf of HUD contain green lease language.

Demonstrate use of cost-effective, innovative building and sustainable landscape strategies to minimize energy, water and materials consumption.

HUD does not own any facilities and consequently does not perform landscape design. However, HUD will be seeking ways to improve the landscaping and reduce water and materials consumption at the Weaver Building.

Operate and maintain, and conduct all minor repairs and alterations for existing building systems to reduce energy, water and materials consumption in a manner that achieves a net reduction in agency deferred maintenance costs.

HUD's operation and maintenance contract includes requirements and incentives for the contractor to save energy and water.

Optimize performance of the agency's real property portfolio – dispose and consolidate excess and underutilized property, co-locate field offices, consolidate across metropolitan and regional locations.

HUD does not own any buildings; all field offices are leased.

Reduce need for new building and field office space by utilizing technologies to increase telework opportunities and expand delivery of services (over the internet or electronically).

HUD has and will continue to promote telework to the fullest extent.

Conserve, rehabilitate, and reuse historic Federal properties, using current best practices and technology.

HUD's ESPC will upgrade many of the antiquated systems at the Weaver Building. This is the only Federal property for which HUD has responsibility. The ESPC project will help perform much needed improvements to a GSA owned facility.

Align agency space actions (new leases, new construction, consolidation) with agency Scope 1&2 and Scope 3 GHG reduction targets.

HUD's Space Management Division is part of OFMS, which has overarching responsibility for many of the GHG reduction goals. OFMS will work to develop policy requiring the incorporation of GHG reduction goals to agency space actions.

HUD has coordinated with GSA to meet the Guiding Principles for its field office locations. We have or will be very soon requesting a LEED Silver rating for design in the Atlanta, Denver, and Portland office relocations. These office relocations are planned for FY2012, FY2014, and FY2012, respectively.

Regional & Local Planning

Incorporate consultation with local and metropolitan planning organizations regarding the impact, or potential impact, of Federal actions on local transportation infrastructure and local development plans into existing policy and guidance.

HUD will update relevant policies to ensure consultation for appropriate Federal actions.

Align agency policies to increase effectiveness of local planning efforts regarding transportation, energy resources and the environment.

The Office of Sustainable Housing & Communities new Regional Planning Grants have provided more than \$98 million in funding for local planning efforts in FY 10. HUD continues to play a strong role in the Partnership for Sustainable Communities, which works to align federal policies to increase the effectiveness of local planning efforts. HUD continues to explore ways to align other agency policies to increase the effectiveness of local planning efforts.

Increase effectiveness of regional measures that enhance integrity of local ecosystems and watersheds.

The Office of Sustainable Housing & Communities Regional Planning Grants provided grants to more than 45 regions. These jurisdictions housed 80 million U.S. residents. Many of these grants enhanced the integrity of local ecosystems and watersheds.

Update agency policy and guidance to ensure that all Environmental Impact Statements (EIS's) and Environmental Assessments (EA's) required under the National Environmental Policy Act (NEPA) for proposed new or expanded Federal facilities, and as appropriate, identify and analyze impacts associated with energy (including alternative energy sources) and climate change.

HUD will update agency policy and guidance to ensure coordination and (where appropriate) consultation with Federal, State, Tribal and local management authorities regarding impacts to local ecosystems, watersheds and environmental management associated with proposed new or expanded Federal facilities. However, HUD does not own or construct any Federal facilities.

Integrate methods and practices necessary to achieve the goals of this plan into agency master planning documents (i.e., high-performance, sustainable building goals, pollution prevention and waste reduction goals, water use reduction goals, sustainable acquisition goals, electronic stewardship and data center consolidation, etc.).

HUD will explore how to integrate the goals of this plan into agency master planning documents that do not already reflect updated goals.

Update agency policy and guidance to ensure coordination and (where appropriate) consultation with Federal, State, Tribal and local management authorities regarding impacts to local ecosystems, watersheds and environmental management associated with proposed new or expanded Federal facilities.

HUD does not own or construct any Federal facilities.

Discuss agency participation in critical local and regional efforts and initiatives (i.e., Executive Order on Chesapeake Bay Protection and Restoration, Executive Order on Stewardship of the Ocean, Our Coasts, and the Great Lakes, etc.).

HUD participates in the National Capital Planning Commission's (NCPC) Southwest Ecodistrict Initiative. HUD participates in the group which is led by NCPC in coordination with the District Office of Planning and other local and federal agencies. The purpose of the initiative is to assess the current conditions of the southwest quadrant and according to NCPC's website, "to create a model sustainability showcase of innovative technologies and sustainable urban development and infrastructure practices in the nation's capital".

Goal 3 (optional image)

GOAL 4: Water Use Efficiency and Management (Basic Performance Discussion, A - H)

A. Goal Description

HUD has set a goal to reduce its potable water consumption usage by 16% in FY 2015, and 26% in FY 2020 from a FY 2007 base year. HUD will also strive to reduce its Industrial, Landscaping, and Agricultural water consumption by 10% by FY 2015, and 20% by FY 2020.

B. Agency Lead for Goal

Overarching responsibility: Estelle Richman, Chief Operating Officer; Office of the Chief Financial Officer.

Implementation responsibility: Robert Byrd, Director of OFMS.

Staff Point of Contact: Jacob Weisman, OFMS.

C. Implementation Methods

HUD's ESPC will drive the basis of water consumption savings in the future. This is discussed in the goal-specific section in more detail.

D. Positions

The Department is currently evaluating whether or not OFMS is adequately staffed for this portion of the plan, based on current staff and future hiring plans.

F. Agency Status

During FY 2010, water consumption increased to 18.6 Gal/GSF representing an increase of 22% when compared to the FY 2007 baseline of 15.2 Gal/GSF. One of the largest contributors to the increase in water consumption is attributed to a major breakdown of the building cooling tower resulting in the loss of a significant volume of water. The ESPC is expected to implement water saving technology throughout the entire building and has already initiated the installation of water saving faucets.

G. Return on Investment

No changes have been made due to a higher or lower than expected return on investment.

H. Highlights

HUD does not have any specific initiatives it would like to highlight.

GOAL 4: Water Use Efficiency and Management (Planning Table)

Water Use Efficiency & MGMT	Units	FY10	FY11	FY12	FY13	FY14	FY15	...	FY20
Potable Water Reduction Targets (gal/SF reduced from FY07 base year)	%	6	8	10	12	14	16	...	26
Planned Potable Water Reduction (gal/SF reduced from FY07 base year)	%	6	8	10	12	14	16	...	26
Industrial, Landscaping, and Agricultural Water Reduction Targets (gal reduced from FY10 base year)	%		2	4	6	8	10	...	20
Planned Industrial, Landscaping, and Agricultural Water Reduction (gal reduced from FY10 base year)	%		2	4	6	8	10	...	20
Other, as defined by agency								...	

GOAL 4: Water Use Efficiency and Management (Goal-Specific Items)

Potable water: ESPC

During FY 2010, water consumption increased to 18.6 Gal/GSF representing an increase of 22% when compared to the FY 2007 baseline of 15.2 Gal/GSF. HUD did not meet its reduction goal as planned. One of the largest

contributors to the increase in water consumption is attributed to a major breakdown of the building cooling tower resulting in the loss of a significant volume of water. The ESPC is expected to implement water saving technology throughout the entire building and has already initiated the installation of water saving faucets.

HUD's Office of Facilities Management Services will be responsible for monitoring the ESPC and the water consumption savings, as outlined in Goal 1. HUD will continue to monitor building equipment, plumbing fixtures, fire protection sprinkler systems, and outside irrigation systems, and repair leaks immediately.

The Department has a comprehensive maintenance program that incorporates many of the Best Management Practices identified by the Federal Energy Management Program at DOE into everyday requirements for operations and maintenance. The program includes a user-friendly method to report water leaks and repair them immediately.

The program also encourages cleaning and custodial crews to report problems as soon as they are identified. OFMS will coordinate with FEMP to ensure HUD representatives attend any relevant training on maintenance or oversight of potable water conservation measures, and will incorporate new best practices into maintenance requirements.

HUD has also performed "in house" ECMs in the recent past which include renovating the first floor lobby bath rooms with low flush volume toilets, and installing new plumbing fixtures.

Industrial, Landscaping, and Agricultural Water Consumption

HUD will, for the FY 2011-12 reporting period, evaluate the current outdoor landscaping and irrigation systems to identify any potential for water conservation. Landscaping and irrigation are currently subcontracted, and once the current contract expires the new one will include measures for greater water conservation. The new contract will also explore the possibility of utilizing rainwater harvesting to accomplish or assist with irrigation needs. It should be noted that there is currently very little landscaping at the Weaver building. OFMS will be responsible for monitoring water conservation in landscaping. The very small amount of landscaping that HUD exercises responsibility and control over may make satisfaction of the target difficult, as slight changes in water consumption at the Weaver building in downtown Washington, D.C. will result in large percentage shifts in the consumption reported for the agency. Potential weather and climatic fluctuations in the Washington, D.C. metro area that require greater irrigation intervention may adversely affect achievement of this goal in some years.

Non-Potable Water Use Reduction Strategies Into Agency Policy and Planning

HUD will examine where non-potable water use reduction strategies can be incorporated into relevant agency policy and planning documents.

Goal 4 (optional image)

GOAL 5: Pollution Prevention and Waste Reduction (Basic Performance Discussion, A - H)

A. Goal Description

HUD has set a goal of diverting at least 50% of both Construction & Demolition (C & D) Materials & Debris & of Non-Hazardous Solid Waste by FY 15.

B. Agency Lead for Goal

Overarching responsibility: Estelle Richman, Chief Operating Officer; Office of the Chief Financial Officer.

Implementation responsibility: Robert Byrd, Director of Office of Facilities Management Services.

C. Implementation Methods

HUD’s Office of Facilities & Management Services and Office of the Chief Procurement Officer will be responsible for implementing this goal. Details are provided in the goal-specific section.

D. Positions

The Department is currently evaluating whether or not OFMS is adequately staffed for this portion of the plan, based on current staff and future hiring plans.

E. Agency Status

HUD is currently actively pursuing composting in the HUD cafeteria.

HUD has recently installed energy efficient electronic displays in the first floor lobbies and cafeteria, reducing the requirements for posting paper flyers for events. Recent HUD construction projects have been accomplished using low or no volatile organic compound (VOC) materials.

G. Return on Investment

There have been no changes due to a higher or lower than expected return on investment.

H. Highlights

HUD does not have any specific projects or initiatives to highlight.

GOAL 5: Pollution Prevention and Waste Reduction (Planning Table)

Pollution Prevention & Waste Reduction	Units	FY10	FY11	FY12	FY13	FY14	FY15	...	FY20
Non-Hazardous Solid Waste Diversion Targets (Non-C & D)	%	0	2	5	25	35	50	...	?
C & D Material & Debris Diversion Targets	%	0	10	20	30	40	50	...	?

Pollution Prevention & Waste Reduction	Units	FY10	FY11	FY12	FY13	FY14	FY15	...	FY20
If agency uses on-site or off-site waste-to-energy, estimated total weight of materials managed through waste-to-energy	Tons or Pounds	N/A	N/A	N/A	N/A	N/A	N/A	...	N/A
Number of sites or facilities with on-site composting programs	#	0	0	0	0	0	0	...	0
Number of sites or facilities recycling through off-site composting programs	#	0	0	0	0	0	1	...	1
If agency has on-site or off-site composting programs, estimated total weight of materials diverted to composting	Tons or pounds	0	0	0	0	0	? (HUD only operates 1 building and is working with cafe vendor to implement off site composting program)	...	?
% of agency-operated offices/sites with a recycling program	%	100	100	100	100	100	100	...	100
If agency offices located in multi-tenant buildings, % of those buildings with a recycling program	%	?	?	?	?	?	100 (Unknown - HUD will work with GSA to ensure recycling at leased facilities)	...	100
% of agency-operated residential housing with recycling programs	%	N/A	N/A	N/A	N/A	N/A	N/A	...	N/A
Other, as defined by agency								...	

GOAL 5: Pollution Prevention and Waste Reduction (Goal-Specific Items)

HUD’s Headquarters recycling program provides for the collection of glass, cans, plastic, paper and cardboard. OFMS oversees solid waste diversion (or recycling) through a contractor (Melwood) who currently participates in GSA’s National Capital Area Recycling Program. HUD recycled 265.9 tons of material last year, up from 246 tons of material in FY 2008. The most recent figure includes 3.8 tons of comingled recycling, 35.5 tons of Grade 1 White Ledger, 11 tons of Grade 3 newspaper, 78.4 tons of Grade 4 Corrugated containers/cardboard, and 137.2

tons of Commercial Office Mix. The contractor does not currently weigh non-diverted trash for HUD under the contract, so HUD does not regularly monitor what percentage is currently being recycled. OFMS will work with the contractor to encourage greater recycling within the existing contract, and will work to promote recycling for the HUD community through awareness campaigns. HUD recently installed new recycling containers, which has led to an increase in recycling.

Once the existing contract has expired in 2 years, HUD will work with OCPO to include provisions that will lead to more waste diversion into the next contract. These may include: diversion of compostable and organic materials from the cafeteria and possibly at elevator locations, weighing of non-recycled solid waste to ensure a valid measure to monitor for the Plan, estimates of waste tonnage removed at various locations (cafeteria, offices, mailroom, etc.) to determine areas of the building's operation most in need of interventions, and other measures.

OFMS is actively pursuing composting in the cafeteria, including converting to using compostable containers and utensils, which may significantly increase the percentage of waste diverted. Cafeteria operations offer another possibility for improvement, as non-compostable plastics and waxed paper may be replaced with compostable biobased plastics and recycled paper products, and these operations will be examined in detail by OFMS.

Improving cafeteria sustainability also offers an opportunity to increase source reduction of pollutants and waste.

OFMS and OCPO will continuously watch for best practices in better enabling source reduction of pollutants and waste, including FAR clauses for use in contracts. OCPO sustainable procurement practices in Goal 6 will enable more effective procurement once OFMS has the opportunity to re-procure contracted services.

HUD currently does not have procedures in place for diverting C & D materials and debris. HUD only exercises delegated operational authority over the Robert C. Weaver building. HUD is considering, in collaboration with GSA, moving forward with a modernization of the building that would produce significant C & D materials and debris. OFMS will work with OCPO and collaborate with GSA to implement "best practices" for C & D materials and debris diversion into any renovation that is performed of the Weaver building, which is owned by GSA.

HUD currently has an employee who acts as the safety officer and maintains Material Safety Data Sheets (MSDS) on the chemicals used in HUD's operations. HUD does not utilize many extraordinarily dangerous chemicals – most chemical use occurs in typical operations for an office building, such as cleaning. OFMS will put into place policies to reduce and eliminate the use of toxic and hazardous chemicals and materials, increase agency use of acceptable alternative chemicals and processes. This policy will also take into account greenhouse gas emissions from certain chemicals, and will strive to minimize to the extent practicable chemicals responsible for GHG emissions when alternatives are available. This policy will consider implementing integrated pest management and landscape management practices, although HUD's landscaping is limited. OFMS will work with existing contracts of contractors who use chemicals, such as the cleaning contractor, to minimize the use of such chemicals, and will work with OCPO to put in place contractual requirements once the contracts expire that follow the policy.

HUD currently purchases uncoated printing and writing paper containing 30% postconsumer fiber for all regular printing activities in the building for copiers, printers, and fax machines. HUD also operates a Xerox iGen Print-on-demand machine which stores documents and can print them on demand, alleviating the need to have

pre-printed extras on hand, and thus lowering printer paper use. CFO will work with OFMS to promote awareness campaigns to lower printing paper use and promote the use of electronic documents.

HUD will report in accordance with any requirements of the Emergency Planning and Community Right-to-Know Act (EPCRA). HUD's Weaver building is not currently a facility that needs to report to the Toxic Release Inventory under the EPCRA, and HUD does not anticipate that it will be listed as one in the foreseeable future. HUD does not utilize dangerous chemicals and does not anticipate additions of any new Extremely Hazardous Substances to on-site storage in greater amounts than the relevant Threshold Planning Quantities. CFO will coordinate with OFMS to monitor chemicals use and to report if any new chemical use or storage requires additional reporting. OFMS will be responsible for following emergency reporting guidelines of EPCRA if any releases of Extremely Hazardous Substances occur from HUD controlled facilities.

Strategies to Reduce Municipal Solid Waste Sent to Landfills

HUD is currently considering how to reduce solid waste, through improved contracting practices and other means. Implementation will assist HUD in achieving FY2020 GHG reduction goals by reducing GHG emissions associated with solid waste transport to landfills.

Goal 5 (optional image)

GOAL 6: Sustainable Acquisitions (Basic Performance Discussion, A - H)

A. Goal Description

HUD will ensure that 95% of applicable new contract actions, including task or delivery orders under new contracts and existing contracts, meet sustainable acquisition requirements, and require the supply or use of products and services that are energy efficient (Energy Star or FEMP-designated), water efficient, biobased, environmentally preferable, non-ozone depleting, contain recycled content, or are non-toxic or less toxic alternatives.

HUD will ensure its affirmative procurement plan, policies, and programs are updated to ensure all Federally-mandated designated products and services are included in all relevant acquisitions.

B. Agency Lead for Goal

Overarching Responsibility: Estelle Richman, Chief Operating Officer; Office of the Chief Financial Officer.

Implementation Responsibility: Jemine Bryon, Chief Procurement Officer, Office of the Chief Procurement Officer

Staff Point of Contact: Linda Stivaletti-Petty in OCPO

C. Implementation Methods

HUD's Office of the Chief Procurement Officer (OCPO) issued an updated Affirmative Procurement Plan in February 2011. This plan incorporates the green purchasing elements of EO 13514.

D. Positions

The Department is evaluating whether or not adequate staffing exists for this portion of the plan, based on current staff and future hiring plans.

Currently, OCPO has one FTE who works on green purchasing issues; however, this only comprises 10% of her time. It is likely that more time may need to be devoted to sustainable acquisition. OCPO has not been able to successfully recruit qualified procurement analysts due to the shortage of GS-1102s in the D.C. area.

F. Agency Status

HUD updated its Affirmative Procurement Plan in February 2011.

For OMB's Environmental Scorecard (January 2011), HUD provided the required number of examples of service and products solicitations/ contracts containing green product requirements to demonstrate compliance.

HUD conducted sample contract audits for APP compliance & identified potential areas for improvement.

HUD increased awareness of designated biobased products via the Office of the Chief Procurement Officer, Green Purchasing website.

Provided contracting personnel with FedCenter link for green purchasing training.

HUD implemented ESP milestones. This included educating IT, acquisition, property management, and other staff on ESP requirements.

HUD updated HUD's Acquisition Regulation and the HUD Handbook to reflect policies outlined in the APP and ESP.

G. Return on Investment

There has been no change in the return on investment from last year's Sustainability Plan and no significant projects or initiatives have been suspended or expanded.

H. Highlights

HUD does not have any highlights it would like to note.

GOAL 6: Sustainable Acquisitions (Planning Table)

Sustainable Acquisition	Units	FY10	FY11	FY12	FY13	FY14	FY15	...	FY20
New Contract Actions Meeting Sustainable Acquisition Requirements	%	95	95					...	
Energy Efficient Products (Energy Star, FEMP-designated, and low standby power devices)	%	95						...	
Water Efficient Products	%	95						...	
Biobased Products	%	95						...	
Recycled Content Products	%	95						...	
Environmentally Preferable Products/Services (excluding EPEAT - EPEAT is included in Goal 7)	%	95						...	
SNAP/non-ozone depleting substances	%	95						...	
Other, as defined by agency								...	

GOAL 6: Sustainable Acquisition Contract Review

SUSTAINABLE ACQUISITION CONTRACT REVIEW	1st QTR FY 11	2nd QTR FY 11	3rd QTR FY 11 (planned)	4th QTR FY 11 (planned)
Total # Agency Contracts	776 actions listed in FPDS-NG for 1st QTR 2011 (NOTE: Many of these 776 actions were modifications (e.g., contract closeouts))	Currently working on 2nd QTR	700 actions listed in FPDS-NG for the 3rd QTR	900 actions listed in FPDS-NG for the 4th QTR
Total # Contracts Eligible for Review	9	?	12?	13?
Total Contracts Eligible Contract Reviewed (i.e., 5% or more eligible based on previous OMB guidance)	9 (this is based on the descriptions and product service codes reviewed)	?	12?	13
# of Compliant Contracts	9	?	12?	13?
Total % of Compliant Contracts	100	?	100?	100?

GOAL 6: Sustainable Acquisitions Contract Review

The contracts in the table above were randomly selected for review.

GOAL 6: Sustainable Acquisitions (Goal-Specific Items)

In 2011, OCPO plans to pursue a number of actions.

OCPO will track HUD's procurement of EPA-designated recycled content products and environmentally preferable products and services through the Federal Procurement Data System - Next Generation (FPDS-NG).

If required by OMB, OCPO will report to the Office of the Federal Environmental Executive (OFEE) the Department's purchasing of EPA-designated items and environmentally preferable products and services and other applicable requirements in the annual data call to OFEE.

OCPO will incorporate environmental considerations into procurement management reviews; and develop corrective action procedures to address deficiencies identified in assessments, reviews, and audits.

Procurement will continue contract compliance monitoring to ensure compliance with the affirmative procurement plan, develop plans for corrective action, and address any shortcomings.

OCPO will continue implementation of milestones targeted in HUD's Electronics Stewardship Plan. Signatory offices to the Electronics Stewardship Plan include OFMS, OCIO, OCPO, and the Office of the Chief Financial Officer.

OCPO will continue to build OCPO's Green Purchasing website and incorporate provisions of EO 13514.

For OMB's Environmental Scorecard, OCPO will:

Continue to provide the required number of contracts, task/delivery orders, solicitations, etc. that contain green product and service requirements to demonstrate compliance.

Continue to integrate sustainable acquisition requirements into applicable new contracts, task/delivery orders, solicitations, and service agreements.

OCPO will increase awareness of designated biobased products via OCPO's green purchasing website.

OCPO will continue outreach and education on EPP at HUD, including providing websites for green purchasing training.

OCPO will continue to implement HUD's Electronics Stewardship Plan milestones and continue to educate IT, acquisition, property management, and other staff on Electronic Stewardship Plan requirements.

OCPO will continue to emphasize environmentally responsible purchasing decisions. OCPO will strive to obtain the “best value” by balancing short and long-term costs, including consideration of the environmental, life cycle, and maintenance costs in purchasing products and services.

OCPO will continue to assist HUD offices transition to more “green” (environmentally preferable & energy efficient) products, including recycled content and biobased content, EnergyStar/FEMP, EPEAT-registered electronics, low standby power, non-ozone depleting, and WaterSense attributes.

Goal 6 (optional image)

GOAL 7: Electronic Stewardship and Data Centers (Basic Performance Discussion, A - H)

A. Goal Description

HUD will:

- a) Establish and implement policy and guidance to ensure use of power management, duplex printing, and other energy efficient or environmentally preferred options and features on all eligible agency electronic products.
- b) Update its policy to reflect environmentally sound practices for disposition of all agency excess or surplus electronic products.
- c) Update agency policy to ensure implementation of best management practices for energy efficient management of servers and Federal data centers.
- d) Identify how it intends to meet technology energy consumption reduction goals in its data centers.
- e) Plan to meet the technology energy reduction goals in data centers (include details on the investment plan, covered vs. non-covered facilities, and how the agency identified the covered facilities).
- f) Increase the quantity of electronic assets disposed through sound disposition practices.

B. Agency Lead for Goal

Overarching responsibility: Estelle Richman, Chief Operating Officer; Office of the Chief Financial Officer.

Implementation Responsibility for Technology: Jerry Williams, Chief Information Officer, Office of the Chief Information Officer.

Implementation Responsibility for Procurement: Jemine Bryon, Chief Procurement Officer, Office of the Chief Procurement Officer

Technology Staff Point of Contact: Mike Milazzo, Deputy CIO, OCIO

Procurement Point of Contact: Linda Stivaletti-Petty, OCPO

C. Implementation Methods

Details are provided in the goal specific section of the plan. OCPO and OCIO are the responsible offices for Goal 7.

D. Positions

The Department is evaluating whether or not adequate staffing exists for this portion of the plan, based on current staff and future hiring plans.

Currently, OCPO has one FTE who works on green purchasing issues; however, this only comprises 10% of her time. It is likely that more time may need to be devoted to sustainable acquisition. OCPO has not been able to successfully recruit qualified procurement analysts due to the shortage of GS-1102s in the D.C. area.

The Office of the Chief Information Officer has outsourced IT-related sustainability issues under the HITS contracts and has one FTE overseeing compliance with Departmental goals.

E. Agency Status

HUD accomplishments in 2010 and 2011:

- 1) Updated its Electronics Stewardship Plan in 2010 and 2011. The plan states that HUD should purchase 95% of electronic products as EPEAT-registered equipment, for products where EPEAT standards exist. HUD should strive to procure EPEAT Silver-rated electronic products or higher, if available. HUD should issue IT solicitations that consider including EPEAT-registered and energy-efficient products as an evaluation factor. HUD should also include EPEAT requirements in new contracts when purchasing energy-consuming products covered by EPEAT.
- 2) Updated its Affirmative Procurement Plan in 2010 and 2011.

Power Management: HUD's Affirmative Procurement Plan (APP) includes the following policy: when purchasing computer products and services that require the furnishing of computer products, solicitations and contracts shall contain language that Energy Star® features are enabled on 100% of computers and monitors. 100% of HUD's leased computers and monitors provided by Lockheed Martin are Energy Star enabled. The OCIO has a system to track PM for computers, laptops and monitors etc. Computers provided to HUD are set at the basic workstation minimum requirement (e.g., monitors are set to sleep after 30 minutes, etc.). This lock system does not contain proprietary software. HUD's outsourced data center service provider (EDS) made infrastructure improvements that replaced a large number of stand-alone servers with a Solaris virtual storage server system. This replacement reduced the power and cooling requirements and systems footprint.

Duplex Printing: With regard to duplex printing, HUD's APP states that the Department promotes cost-effective waste prevention and recycling of reusable materials in all its facilities (including the acquisition and management of all leased space and in the construction and improvements of buildings). The APP policy states: "Contracting and program officials should consider all waste prevention opportunities such as recyclability, reusability, and

repairability when acquiring products and services. To promote waste prevention throughout the Department, employees are strongly encouraged to use such techniques as electronic transfer and double-sided copying on all documents. It is HUD policy that a contractor submitting paper documents relating to an acquisition should, if possible, submit those documents double-sided and on recycled paper (see Federal Acquisition Regulation (FAR) 4.303).”

Environmentally Sound Practices for Disposition of Agency Excess or Surplus Electronic Products : HUD's APP includes the following language: HUD promotes cost-effective waste prevention and recycling of reusable materials in all its facilities (including the acquisition and management of all leased space and in the construction and improvements of buildings). Contracting and program officials shall consider all waste prevention opportunities such as recyclability, reusability, and repairability when acquiring products and services. The APP also states: “HUD will follow the Federal Management Regulations for the donation, sale, and recycling of electronic equipment no longer needed by the Federal Government. HUD will make maximum use of its program to donate used electronics through the General Services Administration’s (GSA) Computers for Learning program. When electronics are unable to be reused, HUD will dispose of them through the Federal Prison Industries electronics recycling program, GSA Bulletins, Recycling Electronics and Asset Disposition (READ) Services Contract, or other environmentally responsible recyclers such as the EPA’s Plug-In to eCycling . HUD will ensure due diligence to ensure that products that have reached the end of their useful life are recycled using environmentally sound management practices.”

HUD's Electronics Stewardship Plan contains the following policy: HUD will follow the FMR for the donation, sale, and recycling of electronic equipment no longer needed by the Federal Government. HUD will make maximum use of its program to donate used electronics through the General Services Administration’s (GSA) Computers for Learning (CFL) program. When electronics are unable to be reused, HUD will dispose of them through the Federal Prison Industries (UNICOR) electronics recycling program, GSA Bulletins, Recycling Electronics and Asset Disposition (READ) Services Contract, or other environmentally responsible recyclers such as the EPA’s Plug-In to eCycling. (HUD uses GSA Xess to include CFL. Equipment not suitable for reuse is excessed through GSA for proper disposal. The HUD-owned older model PCs and notebooks will be excessed.

The agency uses UNICOR or private recycling company off the GSA schedule. The agency follows EPA's plug-in guidance for most effective and practical methods for safely managing used electronic equipment. 95% of surplus and/or electronic products in the end of its product lifetime are reused through donations, transfers, or CFL).

- 3) Conducted sample contract audit in 2010 and 2011 for APP compliance & identified potential areas for improvement.
- 4) Increased awareness of Electronics Stewardship via Office of the Chief Procurement Officer, Green Purchasing website.
- 5) Provided contracting personnel with FedCenter link for green purchasing training.
- 6) Implemented Electronic Stewardship Plan (ESP) milestones. Educated IT, acquisition, property management, and other staff on ESP requirements.

7) Updated HUD's Acquisition Regulation and the HUD Handbook to reflect policies outlined in the APP and ESP.

G. Return on Investment

There has been no change in the return on investment from last year's Sustainability Plan.

H. Highlights

N/A.

GOAL 7: Electronic Stewardship and Data Centers (Planning Table)

ELECTRONIC STEWARDHIP & DATA CENTERS	Units	FY10	FY11	FY12	FY13	FY14	FY15
% of electronic product acquisition covered by current Energy Star specifications that must be energy-star qualified			100	100			
% of covered electronic product acquisitions that are EPEAT- registered			95	95			
% of covered electronic product acquisitions that are FEMP- designated			95	95			
% of agency, eligible PC, Laptops, and Monitors with power management actively implemented and in use			100	100	100		
% of agency, eligible electronic printing products with duplexing features in use			95	100	100		
% of electronic assets covered by sound disposition practices			100	100	100		
% of agency data centers independently metered, advanced metered, or sub-metered to determine monthly (or more frequently) Power Utilization Effectiveness (PUE)			0	0	100* (* indicates Pending HITS recompute strategy)	100*	100*
Reduction in the number of agency data centers		2	2	1*	1*	1*	1*
% of agency data centers operating with an average CPU utilization greater than 65%			100	100	100	100	100

ELECTRONIC STEWARDHIP & DATA CENTERS	Units	FY10	FY11	FY12	FY13	FY14	FY15
Maximum annual weighted average Power Utilization Effectiveness (PUE) for agency.			1.8	1.7	1.6	1.5	1.4

GOAL 7: Electronic Stewardship and Data Centers (Goal-Specific Items)

Office of the Chief Information Officer

HUD has achieved consolidation of its Federal data centers via the HUD Information Technology Services (HITS) Contracts. Our HITS contracts are fixed price, performance-based and have allowed us to achieve many important benefits -- including a fully virtualized data center which allows scalability and agility in meeting on-demand business requirements, improved quality of service, cost efficiencies and robust service level metrics

While HUD does not have data center consolidation planning budget requirements, requirements gathering and acquisition planning efforts are underway for the re-competition of our HITS contracts. In preparation for the acquisition and transition to a new infrastructure services contract, HUD is completing a thorough requirements definition effort, evaluating acquisition strategies, and leveraging Government and industry’s best practices. During the requirements definition and acquisition phases, we will determine the extent to which we will leverage cloud computing services, as well as develop a comprehensive set of requirements for managed services that can deliver the capabilities and requirements demanded by our business programs.

The HITS vendors are providing managed services that include technology solutions that result in reduced energy consumption and carbon emission. These solutions include the following:

- Duplex Printing – Duplex printing is enabled on all networked printers that are reducing paper consumption and energy usage.
- Power management - Automated power management is enabled for all computers and printers across the Enterprise. Automated power management provides remote management of power, ensuring less consumption when not needed and thus lower electricity consumption levels.
- Acquiring Electronic Product Environmental Assessment Tool (EPEAT) rated computer desktops, laptops, and monitors through our managed service provider. The EPEAT is a procurement tool to help large volume purchasers in the public and private sectors evaluate, compare, and select desktop computers, notebooks, and monitors based on their environmental attributes.
- Extending the use of electronics products to a 4-year minimum.

Office of the Chief Procurement Officer

HUD's Office of the Chief Procurement Officer will also play a critical role in enabling the Department to reach Goal 7.

HUD's Office of the Chief Procurement Officer (OCPO) issued an updated Affirmative Procurement Plan and Electronics Stewardship Plan in February 2011 to reflect Executive Order 13514.

In 2011, OCPO plans to pursue a number of actions related to Goal 7 .

If required by OMB, OCPO will report to OFEE the Department's purchasing of EPA-designated items and environmentally preferable products and services and other applicable requirements.

OCPO will incorporate environmental considerations into procurement management reviews; and develop corrective action procedures to address deficiencies identified in assessments, reviews, and audits.

OCPO will continue contract compliance monitoring to ensure compliance with the Affirmative Procurement Plan (APP) and Electronics Stewardship Plan (ESP) and develop plans for corrective action and address any shortcomings.

OCPO will continue implementation of milestones targeted in HUD's ESP.

OCPO will continue to build OCPO's Green Purchasing website. _

For OMB's Environmental Scorecard , OCPO will:

Continue to provide the required number of contracts, task/delivery orders, solicitations, etc. that contain green product and service requirements to demonstrate compliance.

Continue to integrate sustainable acquisition requirements into applicable new contracts, task/delivery orders, solicitations, and service agreements.

OCPO will continue outreach and education program on APP and EPP at HUD, including a web-based reference library.

OCPO will continue to emphasize environmentally responsible purchasing decisions. OCPO will strive to obtain the "best value" by balancing short and long-term costs, including consideration of the environmental, life cycle, and maintenance costs in purchasing products and services.

OCPO will continue to assist HUD offices transition to more green (environmentally preferable & energy efficient) products, including recycled content and biobased content, EnergyStar/FEMP, EPEAT-registered electronics, low standby power, non-ozone depleting, and WaterSense attributes.

Goal 7 (optional image)

GOAL 8: (New) Agency Innovation & Government-Wide Support (Basic Performance Discussion, A - H)

HUD does not have any notable efforts or initiatives where it provides support to other agencies.

However, of note, several years prior to the implementation of our Sustainability Plan, HUD consolidated federally owned data centers under the HITS contracts. While HUD cannot achieve any additional significant savings from this consolidation, the HITS contract affords HUD the ability to purchase specific data center services as managed services, including hosting, storage, end user environment, and data transport services. Significant results from this effort are:

1. HUD is one of only five federal agencies having 2 or fewer data centers;
2. HUD is reported to have the third best CPU utilization in government at just under 60% and second most efficient in its use of storage at over 80%. (Source: INPUT Assessment of the 2010 Federal Data Center Consolidation Initiative)

HUD is leading the way to a cost-effective, shared, business-aligned services supporting the Electronic Stewardship goals and enhancing our mission effectiveness.

GOAL 8: (New) Agency Innovation & Government-Wide Support (Planning Table)

AGENCY INNOVATION & Government-Wide Support	Units	FY10	FY11	FY12	FY13	FY14	FY15	...	FY20
Programs, Projects, Initiatives that support Gov-wide efforts									
Other, as defined by agency									

GOAL 8: (New) Agency Innovation & Government-Wide Support (Goal-Specific Items)

Goal 8 (optional image)

Section 3: Agency Self Evaluation

Agency Self Evaluation

Agency Self Evaluation	Answer
Does your Sustainability Plan incorporate and align sustainability goals, GHG targets and overarching objectives for sustainability with the Agency Strategic Plan?	Yes
Does it provide annual targets, strategies and approaches for achieving the 2015 and 2020 goals?	Yes

Agency Self Evaluation	Answer
Is the Sustainability Plan consistent with the FY2012 President's Budget?	Yes
Does the Sustainability Plan integrate all statutory and Executive Order requirements into a single implementation framework for advancing sustainability goals along with existing mission and management goals, making the best use of existing and available resources?	Yes
Does your plan include methods for obtaining data needed to measure progress, evaluate results, and improve performance?	Yes

Explanations & Other Key Questions for 2011

Other Key Questions for 2011:

1. Did your agency meet by 12/30/10 due date and/or is it now able to demonstrate comprehensive implementation of the EO 13423 Electronic Stewardship goals?

Acquire at least 95% EPEAT-registered electronics

Yes. The HITS contracts have incorporated the provisions of EO 13423 and are currently acquiring EPEAT registered desktops, laptops, and monitors on all new orders for HITS.

- Enable energy star or power management features on 100% of eligible PCs

Yes. Automated power management is enabled for all computers and printers across the Enterprise. Automated power management provides remote management of power, ensuring less consumption when not needed and thus lower electricity consumption levels

- Extends the life and/or uses sound disposition practices for its excess or surplus electronics

Yes.

2. Is your agency tracking and monitoring all of its contract awards for inclusion of requirements for mandatory federally-designated green products in 95% of relevant acquisitions?

Yes.

3. Has your agency completed energy evaluations on at least 75% of its facilities?

(If agency has not met this goal, then it should describe plans for catching up on this requirement in the next 6 months.)

Yes, HUD has performed a comprehensive energy study of the Weaver Building, which is the only included building which the agency operates and pays utilities for. This was performed as part of the ESPC and will continually be assessed in the future as part of measurement of verification (M&V) for the ESPC.

4. Will your agency meet the deadline of October 1, 2012 (EPACT'05 Sec 103) for metering of energy use? (Agency should provide current status of buildings metered and plans for meeting the deadline).

Yes. HUD currently has meters for all of its utilities at the Weaver Building.

5. If your agency reports in the FRPP, will it be able to report by December 2011 that at least 7% of its inventory meets the High Performance Sustainable Guiding Principles?

(If no, agency needs to provide schedule and plan for actions to be taken in the next six months.)

HUD does not report in the FRPP.

Resource/Investment Allocation by Goal