U.S. Department of Housing & Urban Development

Draft Strategic Sustainability Performance Plan

Submitted to the Federal Environmental Executive on June 2nd, 2010

Pursuant to Executive Order 13514
SECTION I: AGENCY POLICY & STRATEGY

1. 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 draft 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. We have awarded 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 The 42-year-old Weaver building is currently not energy efficient, and presents indoor air quality problems due to outdated and failing building equipment and systems. The planned ESPC project, awarded to Honeywell on December 31, 2009, 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. A feasibility study for this is already underway. HUD’s vision will be to transform the Weaver Building into a model of sustainability. Additionally, HUD will work with GSA to ensure all HUD building leases use sustainable building locations and fulfill the President’s vision of sustainability.

HUD has also worked to build partnerships for sustainability with other federal agencies. A new partnership with the Department of Energy has focused on overcoming barriers to the use of DOE weatherization funds in public and assisted housing, as well as other collaborative efforts between the two agencies, 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. To support these efforts, HUD has created a new Office of Sustainable Housing & Communities, which partners with HUD’s Federal Housing Administration to pilot new tools and programs in the residential energy efficiency sector that have the promise of replicability and can help create a standardized home energy efficient retrofit market, as well as coordinates sustainability measures and collaborates with other HUD offices to reduce energy consumption in public and assisted housing, and assumes a leadership role in incorporating sustainability principles for HUD throughout all program levels.

HUD’s plans for the near future prominently feature sustainability and energy efficiency. HUD has chosen to pursue a joint Office of Management and Budget High Priority Goal of enabling the cost effective energy retrofits of a total of 1.1 million housing units in FY 2010 and FY 2011 with the Department of Energy, 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. 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.” Through the Recovery Act, HUD has already made significant funding commitments for energy efficiency and green building in public and assisted housing. Roughly 1/3 of HUD’s Recovery Act funds ($4.86 billion) have been aimed at “greening” the public and assisted housing stock.

Building sustainable housing and communities is firmly built into the new HUD. I look forward to working to continue to ensure HUD pursues sustainability principles throughout the agency and throughout all its programs,

[Estelle Richman]
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 HUD directs federal interventions to. This sustainability drives not only resident opportunity and healthy community building, but positive environmental benefits as well.
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 MTC02 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 42 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: suggesting employees travel by train rather than airplane when appropriate; and changing contractual requirements for the next waste removal contractor 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.

The Robert C. Weaver HUD Headquarters building, then and now.
IV. Plan Implementation

Internal Coordination and Communication

The Office of Sustainable Housing & Communities (OSHC) has taken the lead in coordinating the input of a number of different offices from HUD in the development of the Strategic Sustainability Performance Plan (“Plan”). Going forward, HUD’s Office of the Chief Operating Officer and Office of the Chief Financial Officer will be the agency leads for achieving the plan’s goals. The Office of the Chief Human Capital Officer (OCHCO) has played a large role in the development of the Plan’s Goal 1 and 2 submissions (Greenhouse Gas Reduction), Goal 4 submissions (High Performance Sustainable Design & Green Buildings), Goal 6 (Water Use Efficiency and Management), and Goal 7 (Pollution Prevention and Waste Elimination) submissions. The Office of the Chief Procurement Officer (OCPO) has been instrumental in developing Goal 8 (Sustainable Acquisition) as well as parts of Goal 9 (Electronic Stewardship and Data Centers), while the Office of the Chief Information Officer (OCIO) has helped to develop the remainder of Goal 9.

Implementation of the plan will involve staff from these offices, as well as the 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. Moving forward, 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/, create an executive summary of the Plan, and highlight the Plan in a blast e-mail to all employees, including those in the field. HUD’s tips for employees will include environmentally friendly behavior, such as limiting printing, turning off lights, and taking transit to work that can be used by both field and headquarters employees.

HUD’s Office of the Chief Financial Officer will take the lead in coordinating any data submissions from the field for the plan, such as gathering data on employee commuting patterns from across the agency.

Leadership and Accountability

OCHCO 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 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 ensure that the funding implications of Plan are integrated into the next Budget request.

**Methods for Evaluation of Progress**

Progress 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. OCHCO will ensure policies and plans are available on web sites for the wide use of HUD employees.
Table 1: Critical Planning Coordination

<table>
<thead>
<tr>
<th>CRITICAL PLANNING COORDINATION</th>
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<tbody>
<tr>
<td>Originating Report/Plan</td>
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<tr>
<td>GPRA Strategic Plan: HUD 5-Year Strategic Plan</td>
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<td>Annual Energy Data Report</td>
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<td>Budget</td>
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<td>Circular A-11 Exhibit 300 / 53s *</td>
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<td>OMB Scorecards</td>
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<td>DOE's Annual Federal Fleet Report to Congress and the President</td>
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<tr>
<td>Data Center Consolidation Plan</td>
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</tbody>
</table>

* Infrastructure services identified in consolidated Departmental IT Infrastructure Exhibit 300

Table 1 reflects the planning coordination between various planning documents relevant to HUD. HUD will continue to work to ensure that the goals of EO 13514, and the measures taken to support them, are included in all relevant planning documents.
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.

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 pay particular attention to engaging staff that are directly tasked with overseeing and monitoring progress for the Plan. HUD will provide quarterly updates of information (when information is collected at least quarterly) via e-mail, and convene quarterly “Sustainability Working Group” meetings of the responsible staff to discuss progress.
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, on a 1 page summary sheet, with edited progress reports for each goal. These goal specific reports will discuss the target, the progress achieved, and why HUD achieved or failed to achieve the target goal.

SECTION II: PERFORMANCE REVIEW AND ANNUAL UPDATE

I. Summary of Accomplishments


HUD only exercises delegated operations and maintenance responsibility for the Robert C. Weaver Headquarters building out of all its offices, which is now 42 years old. HUD’s FY 2009 Energy Management Performance Summary reflects that HUD failed to meet its Energy Management Requirement under of a 12% reduction from FY 2003, while HUD did meet its goals for HUD’s renewable energy requirement (met FY2009 goal of 3%), and reductions in potable water consumption intensity (exceeded FY 2009 goal of 4%). 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 replaced numerous inefficient lighting with CFLs, and provided training to managers and staff with energy and environmental responsibilities.

HUD also has initiated plans to “right-size” its fleet in order to reduce gasoline consumption, and the greenhouse gases associated with it. HUD has moved forward in creating 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’s Headquarters Office has seen transit subsidy use by over 50% of employees, and HUD has recently greatly increased the maximum transit subsidy from $130 per month to $230 per month, spurring greater mass transit use. Implementation of a new Telework policy promises to drive further reductions in greenhouse gas emissions associated with commuting.
II. Goal Performance Review

Goal 1: Scope 1 & 2 Greenhouse Gas Reduction

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: Chief Operating Officer; Office of the Chief Financial Officer (CFO).

Implementation responsibility: Director of the Office of Facilities Management Services, Office of the Chief Human Capital Officer (OCHCO)

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.


As part of the commitment to reduce energy use intensity, and consequently Greenhouse Gas (GHG) emissions, HUD will be initiating 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:

Table 2: ESPC Contributions to 2020 Targets

<table>
<thead>
<tr>
<th>Energy Type</th>
<th>FY08 Baseline</th>
<th>2020 Target Consumption</th>
<th>Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity (MWH)</td>
<td>23,906.3</td>
<td>13,083.1</td>
<td>Electricity reductions will be achieved using the ESPC and in-house ECMs</td>
</tr>
<tr>
<td>Natural Gas (1,000 Cubic Ft)</td>
<td>176.6</td>
<td>14,170.6</td>
<td>Natural Gas consumption increases because the building heating will be generated from condensing boilers instead of purchased steam</td>
</tr>
<tr>
<td>Purchased Steam (BBtu)</td>
<td>28.7</td>
<td>0</td>
<td>HUD will discontinue purchased steam use.</td>
</tr>
<tr>
<td>REC Purchases (MWH)</td>
<td>Unknown</td>
<td>Power is procured under the GSA aggregate power procurement agreement with PEPCO</td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>---------</td>
<td>--------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Renewable Electricity (MWH)</td>
<td>0</td>
<td>50.2</td>
<td>Renewable electricity generation will result from the installation of Solar PV on the building roof.</td>
</tr>
</tbody>
</table>

The Department is also pursuing “in house ECMs”. For example, HUD performed several surveys which indicated tremendous numbers of desk lamps using incandescent light bulbs within the Headquarters facility. Accordingly, HUD initiated a project to begin installing Compact Fluorescents Lamps (CFLs) throughout the building for both desk and ceiling lighting (where applicable). Other in house ECMs include: installation of a new 160 ton chiller and renovation of tenth floor studio. The materials and equipment used would all count as points towards LEED certification. HUD also installed associated other energy efficient lighting, and required all equipment and appliances in the work spaces to be energy star rated.

There are no direct costs associated with this Energy Savings Performance Contract (ESPC), beyond the staff time needed to develop and monitor the contract. 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. Currently, HUD is undergoing a feasibility study to determine the advisability of pursuing a full building modernization in conjunction with the ESPC. Honeywell has agreed to delay start of the contract in order to determine the results, and to coordinate the work with any potential modernization that may change building design elements. HUD will coordinate with GSA to ensure that the most efficient and effective overall solution for the Headquarters building is chosen.

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 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.

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 below reflects at least a 2% reduction per year in petroleum usage, while maintaining the 2015 targeted alternative fuel usage.

<table>
<thead>
<tr>
<th>Fuel Type</th>
<th>FY 2008 Annual Consumption (GGE)</th>
<th>FY 2020 Annual Consumption (GGE)</th>
<th>FY 2008 Est. GHG Emissions (MTCO2e)</th>
<th>FY 2020 Est. GHG Emissions (MTCO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-85</td>
<td>16,258.00</td>
<td>31,682.20</td>
<td>2</td>
<td>3.9</td>
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<tr>
<td>Gasoline</td>
<td>261,585.00</td>
<td>139,408.60</td>
<td>32.4</td>
<td>17.3</td>
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<tr>
<td>TOTAL</td>
<td>277,843.00</td>
<td>171,090.80</td>
<td>34.5</td>
<td>21.2</td>
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Table 3. 2020 Target Reduction for Covered Federal Fleet

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 under utilization. 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 meet the requirements of reducing petroleum consumption, through monitoring vehicle mileage as well as ensuring that HUD purchase 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.

D. **Positions**

The Department is currently evaluating whether OCHCO is adequately staffed for this portion of the plan, based on current staff and future hiring plans.
## E. Planning Table

<table>
<thead>
<tr>
<th>SCOPE 1 &amp; 2 GHG TARGET</th>
<th>Units</th>
<th>FY 10</th>
<th>FY 11</th>
<th>FY 12</th>
<th>FY 13</th>
<th>FY 14</th>
<th>FY 15</th>
<th>FY 16</th>
<th>FY 17</th>
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<td>Buildings</td>
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<tr>
<td>Energy Intensity Reduction Goals (BTU/SF reduced from FY 03 base year)</td>
<td>%</td>
<td>15%</td>
<td>18%</td>
<td>21%</td>
<td>24%</td>
<td>27%</td>
<td>30%</td>
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<tr>
<td>Planned Energy Intensity Reduction (BTU/SF reduced from FY 03 base year)</td>
<td>%</td>
<td>15%</td>
<td>18%</td>
<td>21%</td>
<td>24%</td>
<td>27%</td>
<td>30%</td>
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<tr>
<td>Renewable Electricity Goals (Percent of electricity from renewable sources)</td>
<td>%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>7.5%</td>
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<tr>
<td>Planned Renewable Electricity Use (Percent of electricity from renewable sources)</td>
<td>%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>7.5%</td>
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<tr>
<td>Petroleum Use Reduction Targets (Percent reduction from FY 05 base year)</td>
<td>%</td>
<td>10%</td>
<td>12%</td>
<td>14%</td>
<td>16%</td>
<td>18%</td>
<td>20%</td>
<td>22%</td>
<td>24%</td>
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</tr>
<tr>
<td>Planned Petroleum Use Reduction (Percent reduction from FY 05 base year)</td>
<td>%</td>
<td>20%</td>
<td>24%</td>
<td>28%</td>
<td>16%</td>
<td>36%</td>
<td>40%</td>
<td>44%</td>
<td>28%</td>
<td>52%</td>
<td>56%</td>
<td>60%</td>
</tr>
<tr>
<td>Alternative Fuel Use in Fleet AFV Target (Percent increase from FY 05 base year)</td>
<td>%</td>
<td>61%</td>
<td>77%</td>
<td>95%</td>
<td>114%</td>
<td>136%</td>
<td>159%</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
</tr>
<tr>
<td>Planned Alternative Fuel Use in Fleet AFV (Percent increase from FY 05 base year)</td>
<td>%</td>
<td>67%</td>
<td>85%</td>
<td>105%</td>
<td>125%</td>
<td>149%</td>
<td>175%</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
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</tr>
<tr>
<td>Scope 1 &amp; 2 - Reduction Target (reduced from FY 08 base year)</td>
<td>%</td>
<td>0%</td>
<td>0%</td>
<td>12%</td>
<td>16%</td>
<td>19%</td>
<td>22.0%</td>
<td>27%</td>
<td>32%</td>
<td>37%</td>
<td>42%</td>
<td>47.4%</td>
</tr>
</tbody>
</table>
OFMS focused in FY2008 on developing the ESPC for the Weaver building. The ESPC was awarded on December 31st, 2009 to Honeywell.

HUD has completed capital projects utilizing energy efficient designs in the past few years, including renovations to the HUD Cafeteria, Brooke-Mondale Auditorium, and Children’s House Childcare Center. Recent projects also include: installation of a new 160 ton chiller and renovation of the tenth floor studio. HUD also installed associated other energy efficient lighting, and required all equipment and appliances in the work spaces to be energy star rated.

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: completing the CFL installation project, finalizing ECMs for the awarded ESPC at Robert C. Weaver Building, and providing training for all personnel with energy and environmental management responsibilities.

Goal 2: Scope 3 Greenhouse Gas Reduction

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 will move aggressively to gather more data on scope 3 greenhouse gas emissions. HUD’s planned implementation steps will likely lead to revision of this goal as a more appropriately sized target can be fitted to HUD’s existing conditions. HUD hopes further data gathering can support more aggressive targets for Scope 3 greenhouse gas emission reductions.

B. Agency Lead for Goal

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

Implementation responsibility: Director of the Office of Facilities Management Services, Office of the Chief Human Capital Officer (OCHCO)

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 will run for 3 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. 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 will move some electricity generation on site, minimizing transmission losses from those. Planned solar panel ECMs will generate 50.2 megawatts of power.

**Reducing Employee Travel: Commuting and Business Patterns**

HUD 9600 employees commute to work through a variety of methods, including bicycle, mass transit, and by automobile. Almost 3300 employees work at HUD’s Headquarters building, while the remaining 6300 employees work in one of HUD’s 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 to reduce commuting and business patterns and identifying 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 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.

One of the first duties of this Officer will be to administer an agency-wide anonymous survey to determine the mode and the mileage each employee uses in getting to work. This survey will be performed in cooperation with employee unions, and will verify and supplement existing data relating to employee commuting patterns. HUD will use the results of this survey to identify greenhouse gas emissions and set goals for Scope III. The Officer will be responsible for using this information to determine areas to focus on for improvement, including such efforts as comparing the mix of emissions per office against the norm for the area, and comparing the mix of modal uses to the norm. This information may be used for employee education.
The Officer will also be responsible for issuing a report 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. Fully 2,500 of 3,300 HQ employees (76%) use Transit Subsidy, from a range of commuting by metro bus all the way to commuting by Amtrak. Benefits are capped at the $230 a month maximum. Benefits were increased on May 2009 from a previous cap of $120 a month with the authorization of increased transit subsidies in the Recovery Act funds, and are one reason use of transit subsidy in HQ has increased from 55% in May 2009 to over 75% today, a very significant increase. It is uncertain if funding support for this level of benefits will be maintained indefinitely.

3050 HUD employees utilize transit subsidy in field offices. Public transit use on local and commuter bus lines, and local, commuter, and long-distance rail results in significantly lower greenhouse gas emissions than in commuting the equivalent distance by automobile. 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). The Commuting Sustainability Officer 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. The Officer will also investigate promotional campaigns, such as events in conjunction with National Bike to Work Day.

The Commuting Sustainability Officer 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 2009 HUD enabled telework for over 2600 employees out of 8850 employees, or roughly 29% of the HUD workforce. This represents a significant increase over 2008, when only 1900 employees teleworked out of 8700, 22% of the total population. In 2009, most participants in the program teleworked between 1 and 2 days a week (1700), although a not insignificant number teleworked 3 days a week (700).

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 issued a new teleworking policy, and anticipates working further with the Office of Personnel Management to promote a more open and sustainable workforce.

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. Planning Table

<table>
<thead>
<tr>
<th>SCOPE 3 GHG TARGET</th>
<th>Units</th>
<th>FY 10</th>
<th>FY 11</th>
<th>FY 12</th>
<th>FY 13</th>
<th>FY 14</th>
<th>FY 15</th>
<th>FY 16</th>
<th>FY 17</th>
<th>FY 18</th>
<th>FY 19</th>
<th>FY 20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Agency Scope 3 Reduction Target (reduced from FY08 base year)</td>
<td>%</td>
<td>0.0%</td>
<td>0.4%</td>
<td>1.3%</td>
<td>2.9%</td>
<td>4.2%</td>
<td>5.7%</td>
<td>7.4%</td>
<td>9.0%</td>
<td>11.4%</td>
<td>13.8%</td>
<td>16.2%</td>
</tr>
<tr>
<td>Sub - Target for Federal Employee Travel</td>
<td>%</td>
<td>0.0%</td>
<td>0.5%</td>
<td>1.3%</td>
<td>3.0%</td>
<td>4.3%</td>
<td>5.9%</td>
<td>7.6%</td>
<td>9.3%</td>
<td>11.8%</td>
<td>14.3%</td>
<td>20.0%</td>
</tr>
<tr>
<td>Sub - Target for Contracted Waste Disposal</td>
<td>%</td>
<td>0.0%</td>
<td>0.3%</td>
<td>0.7%</td>
<td>1.3%</td>
<td>1.7%</td>
<td>2.0%</td>
<td>2.5%</td>
<td>3.0%</td>
<td>3.5%</td>
<td>4.0%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Sub - Target for Transmission and Distribution Losses from Purchased Energy</td>
<td>%</td>
<td>0.0%</td>
<td>0.3%</td>
<td>0.7%</td>
<td>1.3%</td>
<td>1.7%</td>
<td>2.0%</td>
<td>2.5%</td>
<td>3.0%</td>
<td>3.5%</td>
<td>4.0%</td>
<td>5.0%</td>
</tr>
</tbody>
</table>
F. Agency Status

HUD’s planned 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.

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 the authorization of increased transit subsidies in the Recovery Act funds, and have led to substantial increase in mass transit use for commuting purposes.

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 almost 6200 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.

HUD will verify and complement information on actual commuting patterns through a survey that will be given to all HUD employees in FY 2011.

HUD has implemented a new telework policy in 2010 which it hopes will spur greater use of teleworking.

Goal 3: Develop and Maintain Agency Comprehensive Greenhouse Gas Inventory

HUD does not have any comments to add regarding development and management of the Department’s comprehensive GHG inventory at this point. HUD continues to work with DOE to develop a comprehensive greenhouse gas inventory, and look forwards to further instructions and further collaboration in the future.

Goal 4: High-Performance Sustainable Design / Green Buildings

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 4’s sub goals, including:

1. Beginning in FY 2020, all new Federal buildings are designed to achieve zero-net energy by FY 2030.
2. 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).”
3. 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].
4. Demonstrate annual progress towards 100% conformance with Guiding Principles for entire building inventory.
5. Demonstrate use of cost-effective, innovative building strategies to minimize energy, water and materials consumption.
6. Manage existing building systems to reduce energy, water, and materials consumption in a manner that achieves a net reduction in agency deferred maintenance costs.
7. Optimize performance of the agency’s real property portfolio – examine opportunities to decrease environmental impact through consolidation, reuse and disposal of existing assets prior to adding new assets.
8. Ensure use of best practices and technology in rehabilitation of historic Federal properties.

B. Agency Lead for Goal

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

Implementation responsibility: Director of Office of Facilities Management Services, Office of the Chief Human Capital Officer (OCHCO)

C. Implementation Methods

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 OCHCO 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 122 buildings. HUD will follow the Guiding Principles for any major renovation or repair or alteration of the Weaver building. OCHCO 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 will work with GSA to meet this goal. HUD’s 100% goal on the Planning Table reflects only buildings HUD exercises operational control over. HUD’s Weaver building does not currently meet the five guiding principles. OCHCO 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.

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

HUD will work to minimize consumption through the ESPC and will strive to identify innovative and cost effective building strategies. The proposed EPC project includes ECMs such as: installing variable frequency drives for hot water, chilled water, and condenser water pumps; discontinuing the use of purchased steam and using condensing boilers, water and sewer conservation measures, lighting improvements, Energy Management Control System (ECMS) upgrades, HVAC system improvements, and various others.

**Manage existing building systems to reduce energy, water, and materials consumption in a manner that achieves a net reduction in agency deferred maintenance costs.**

HUD will strive to manage its systems in such a manner. HUD efforts in pursuit of other goals detailed in this Plan should result in significant reduction in consumption and reduction in deferred maintenance costs.

**Optimize performance of the agency’s real property portfolio – examine opportunities to decrease environmental impact through consolidation, reuse and disposal of existing assets prior to adding new assets.**

HUD plans to modernize the Weaver building in collaboration with GSA to more efficiently utilize office space. The modernization will address the existing inefficient interior floor plan and will provide a much more open environment, maximizing the use of natural light and engendering improved collaboration and communication throughout the building. Additionally, the modernization will allow for consolidation of HQ employees, potentially eliminating the need for four nearby satellite offices, translating into approximately $11 million in annual rent savings upon project completion. This will decrease the environmental impact of HUD’s headquarters operations.

**Ensure use of best practices and technology in rehabilitation of historic Federal properties.**

The Weaver building is listed on the National Register of Historic Places. Relevant changes to the Weaver building will be reviewed by the District of Columbia Historic Preservation Review Board. HUD will ensure the use of best practices and technology are in place to preserve the essential features of the Robert C. Weaver building. HUD will work with GSA to ensure the use of best practices and technology in rehabilitation of HUD leased historic Federal properties. Planned improvements such as the lobby improvement project pay special attention to the historic character of the building. This project is in the latter stages of design and is planned to get underway late this year. The project addresses both the north and south lobbies, and will provide an updated look and feel while maintaining the character of the original architectural design of the 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’s current feasibility is funded by GSA, and has included a “vision-setting” interactive meeting. The next step in the feasibility study process is to conduct charrettes, which will consist of four sessions. These charrettes will be intense working sessions to review data collected through interviews (organizational structure, functions, requirements, population) and to confirm project goals.

**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. During the FY 2010 reporting period, the Department’s electric utility service provider (PEPCO) will be upgrading the electric meters so as to allow load profiling and access to data/graphs through the provider’s online access service, and will be performed in conjunction with the planned completion of the Energy Management Control System (ECMS). These will assist the Department in following Measurement and Verification procedures, including comparing actual performance data from the first year.

**Protect and Conserve Water**

HUD’s ESPC is expected to implement water saving technology throughout the entire building. During FY 2009, water consumption was reduced to 14.1 Gal/GSF representing a decrease of 7.2 % when compared to the FY 2007 baseline of 15.2 Gal/GSF. 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 runoff are in place for design and construction.

**D. Positions**

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

<table>
<thead>
<tr>
<th>SUSTAINABLE HIGH PERFORMANCE BUILDINGS (Buildings Meeting Guiding Principles)</th>
<th>Units</th>
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<th>FY 11</th>
<th>FY 12</th>
<th>FY 13</th>
<th>FY 14</th>
<th>FY 15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owned Facilities Targets*</td>
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<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Leased Facilities Targets**</td>
<td>%</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>100</td>
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<tr>
<td>Total Facility Targets</td>
<td>%</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
</tbody>
</table>

*HUD does not own any facilities.

**Targets for the one leased facility HUD exercises delegated authority over.
F. **Agency Status**

HUD’s lobby improvement project is in the latter stages of design and is planned to get underway late this year. The project addresses both the north and south lobbies, and will provide an updated look and feel while maintaining the character of the original architectural design of the building.

HUD has undertaken “in house” ECMs in the recent past which include renovating the first floor lobby bathrooms with low flush volume toilets, and installing new plumbing fixtures.

HUD has awarded an ESPC 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’s current feasibility for the Weaver building is funded by GSA, and has included a “vision-setting” interactive meeting. Design for the possible modernization will be collaborative.

During FY 2009, HUD water consumption was reduced to 14.1 Gal/GSF representing a decrease of 7.2 % when compared to the FY 2007 baseline of 15.2 Gal/GSF.

**Goal 5: Regional and Local Planning**

A. **Goal Description**

HUD will work to ensure that 100% of proposed new or expanded federal facilities for which HUD has planning responsibility are effectively coordinated with local planning efforts. HUD will ensure all National Environmental Policy Act reviews will identify and analyze impacts associated with energy usage and alternative energy source. HUD will also ensure coordination and (where appropriate) consultation with Federal, State, Tribal, and local management authorities regarding impacts to local ecosystems, watersheds, and environmental management for any such facilities.

HUD will also coordinate with GSA to ensure that, starting in FY11, that 100% of new Federal facilities or leases for agency operations incorporate sustainable building location into their planning.

B. **Agency Lead for Goal**

Overarching responsibility: Chief Operating Officer; Office of the Chief Financial Officer

Implementation responsibility: Director of Office of Facilities Management Services, Office of the Chief Human Capital Officer (OCHCO)

C. **Implementation Methods**

HUD will work with GSA to ensure that all Environmental Impact Statements and Environmental Assessments required under the National Environmental Policy Act (NEPA) for proposed new or expanded Federal facilities identify and analyze impacts associated with energy usage and alternative energy sources, and update any agency policy necessary to effectuate this.
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.

HUD will coordinate with GSA to ensure that new Federal facilities or leases for HUD incorporate sustainable building location into their planning. Sustainable building location will be defined by the Department of Transportation’s Recommendations for Sustainable Locations for Federal Facilities, to be submitted pursuant to Section 10 of EO 13514. HUD’s Office of the Chief Human Capital Officer (OCHCO) will be responsible for negotiating a Memorandum of Agreement with GSA that incorporates sustainable building location into planning as a matter of practice. OCHCO will also be responsible for including sustainable building location into any new HUD policies regarding new Federal facilities or leasing for which HUD is responsible, if HUD in the future is ever in the position of determining building locations and finds such a policy necessary.

D. Positions

The Department is currently evaluating whether OCHCO is adequately staffed for this portion of the plan, based on current staff and future hiring plans.
### E. Planning Table

<table>
<thead>
<tr>
<th>REGIONAL AND LOCAL PLANNING</th>
<th>Units</th>
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<th>FY 15</th>
<th>FY 16</th>
<th>FY 17</th>
<th>FY 18</th>
<th>FY 19</th>
<th>FY 20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposed new or expanded buildings coordinate/consult with appropriate entities for local ecosystem, watershed impacts, and impacts associated with energy usage and alternative energy sources</td>
<td>%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>New Federal Facilities and Leases incorporate sustainable building location into planning</td>
<td>%</td>
<td>0%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
F. **Agency Status**

Prior to commencement of work for the Weaver building pursuant to the ESPC or any other modernization effort, review and approval for the project design must be obtained from the Washington D.C. State Historic Preservation Office, along with the National Capital Planning Commission, and Commission of Fine Arts. Presently, HUD is working with GSA and Honeywell to initiate the required environmental and historical compliance process.

HUD has not participated in significant local and regional planning efforts. However, 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.

**Goal 6: Water Use Efficiency and Management**

**A. Goal Description**

HUD has set a goal to reduce its potable water consumption usage by 16% in FY 2015, and 26% in FY 2010 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 2010.

**B. Agency Lead for Goal**

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

Implementation responsibility: Director of Office of Facilities Management Services, Office of the Chief Human Capital Officer (OCHCO)

**C. Implementation Methods**

Potable water: ESPC

HUD’s ESPC is expected to implement water saving technology throughout the entire building. 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. OCHCO 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 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. OCHCO 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.

D. Positions

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

<table>
<thead>
<tr>
<th>WATER USE EFFICIENCY AND MANAGEMENT</th>
<th>Units</th>
<th>FY 10</th>
<th>FY 11</th>
<th>FY 12</th>
<th>FY 13</th>
<th>FY 14</th>
<th>FY 15</th>
<th>FY 16</th>
<th>FY 17</th>
<th>FY 18</th>
<th>FY 19</th>
<th>FY 20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potable Water Reduction Targets (gal/SF reduced from FY 07 base year)</td>
<td>%</td>
<td>6%</td>
<td>8%</td>
<td>10%</td>
<td>12%</td>
<td>14%</td>
<td>16%</td>
<td>18%</td>
<td>20%</td>
<td>22%</td>
<td>24%</td>
<td>26%</td>
</tr>
<tr>
<td>Planned Potable Water Reduction (gal/SF reduced from FY 07 base year)</td>
<td>%</td>
<td>6%</td>
<td>8%</td>
<td>10%</td>
<td>12%</td>
<td>14%</td>
<td>16%</td>
<td>18%</td>
<td>20%</td>
<td>22%</td>
<td>24%</td>
<td>26%</td>
</tr>
<tr>
<td>Industrial, Landscaping, and Agricultural Water Reduction Targets (gal reduced from FY 10 base year)</td>
<td>%</td>
<td>-</td>
<td>2%</td>
<td>4%</td>
<td>6%</td>
<td>8%</td>
<td>10%</td>
<td>12%</td>
<td>14%</td>
<td>16%</td>
<td>18%</td>
<td>20%</td>
</tr>
<tr>
<td>Planned Industrial, Landscaping, and Agricultural Water Reduction (gal reduced from FY 10 base year)</td>
<td>%</td>
<td>-</td>
<td>2%</td>
<td>4%</td>
<td>6%</td>
<td>8%</td>
<td>10%</td>
<td>12%</td>
<td>14%</td>
<td>16%</td>
<td>18%</td>
<td>20%</td>
</tr>
</tbody>
</table>
F. Agency Status

During FY 2009, water consumption was reduced to 14.1 Gal/GSF representing a decrease of 7.2 % when compared to a FY 2007 baseline of 15.2 Gal/GSF. The ESPC (discussed in more detail in Goal 1) has a significant water conservation component in its plans.

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 new plumbing fixtures.

Goal 7: Pollution Prevention and Waste Elimination

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.


C. Implementation Methods

HUD’s Office of Administrative & Management Services and Office of the Chief Procurement Officer will be responsible for implementing this goal.

HUD’s Headquarters recycling program provides for the collection of glass, cans, plastic, paper and cardboard. OCHCO oversees solid waste diversion (or recycling) through a contractor (Melwood) who currently participates in GSA’s National Capital Area Recycling Program. HUD recycled 246 tons of material in FY 2008, including half a ton of sorted white ledger paper, 13 tons of newspaper, 73 tons of old corrugated containers, and over 1 ton of telephone directories. This diversion generated over $11,129, which was distributed to the Children’s House (daycare center and preschool) for tuition assistance to HUD parents. 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. However, information for FY 2008 indicates over roughly 29% of generated waste was recycled. OCHCO 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 3 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 (cafeeteria, offices, mailroom, etc.) to determine areas of the building’s operation most in need of interventions, and other measures.
OCHCO 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 OCHCO. Improving cafeteria sustainability also offers an opportunity to increase source reduction of pollutants and waste. OCHCO 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 8 will enable more effective procurement once OCHCO 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. OCHCO 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. OCHCO 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. OCHCO 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 OCHCO 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 a 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 OCHCO to monitor chemicals use and to report if any new chemical use or storage requires additional reporting. OCHCO will be responsible for
following emergency reporting guidelines of EPCRA if any releases of Extremely Hazardous Substances occur from HUD controlled facilities.

D. **Positions**

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

<table>
<thead>
<tr>
<th>POLLUTION PREVENTION &amp; WASTE ELIMINATION</th>
<th>Units</th>
<th>FY 10</th>
<th>FY 11</th>
<th>FY 12</th>
<th>FY 13</th>
<th>FY 14</th>
<th>FY 15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Hazardous Solid Waste Diversion Targets (non C &amp; D)</td>
<td>%</td>
<td>0%</td>
<td>2%</td>
<td>5%</td>
<td>25%</td>
<td>35%</td>
<td>50%</td>
</tr>
<tr>
<td>C &amp; D Material &amp; Debris Diversion Targets</td>
<td>%</td>
<td>0%</td>
<td>10%</td>
<td>20%</td>
<td>30%</td>
<td>40%</td>
<td>50%</td>
</tr>
</tbody>
</table>
F. Agency Status

HUD recycled over 246 tons of material in FY 09. HUD is currently actively pursuing composting in the HUD cafeteria. HUD recently installed new recycling containers, which has led to an increase in recycling.

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.

Goal 8: Sustainable Acquisition

A. Goal Description

HUD will ensure that 95% of 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: Chief Operating Officer; Office of the Chief Financial Officer.

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

C. Implementation Methods

HUD’s Office of the Chief Procurement Officer (OCPO) issued an updated Affirmative Procurement Plan in February 2010. This plan does not reference Executive Order 13514; however, OCPO is currently working on updating the plan to include the elements of EO 13514.

In 2010, 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).

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. This data call contains information on HUD’s environmentally preferable purchasing, including acquisitions of recycled-content, biobased content, and EPEAT-registered products. This report also includes HUD information on solid waste diversion (recycling), greenhouse gas emissions avoided, green purchasing promotion, training, and compliance monitoring and auditing.
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 OCHCO, 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.

OCPO will update the Department’s Affirmative Procurement Plan and Electronics Stewardship Plan to reflect EO 13514.

For OMB’s Environmental Scorecard, OCPO will:

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 new contracts, task/delivery orders, solicitations, and service agreements.

Increase awareness of designated biobased products via OCPO’s green purchasing website.

Continue outreach and education program on EPP at HUD, including a web-based reference library, and holding training workshops on green purchasing for contracting and program staff, as well as Government Purchase Card (GPC) holders.

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

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

Continue to update HUD’s purchase card guidance to ensure compliance with the Department’s APP and ESP.

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.
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 working part-time on green purchasing issues.
### E. Planning Table

<table>
<thead>
<tr>
<th>SUSTAINABLE ACQUISITION</th>
<th>Units</th>
<th>FY 10</th>
<th>FY 11</th>
<th>FY 12</th>
<th>FY 13</th>
<th>FY 14</th>
<th>FY 15</th>
<th>FY 16</th>
<th>FY 17</th>
<th>FY 18</th>
<th>FY 19</th>
<th>FY 20</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Contract Actions Meeting Sustainable Acquisition Requirements</td>
<td>%</td>
<td>95%</td>
<td>95%</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
</tr>
<tr>
<td>Energy Efficient Products (Energy Star, FEMP-designated, and low standby power devices)</td>
<td>%</td>
<td>95%</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
</tr>
<tr>
<td>Water Efficient Products</td>
<td>%</td>
<td>95%</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
</tr>
<tr>
<td>Biobased Products</td>
<td>%</td>
<td>95%</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
</tr>
<tr>
<td>Recycled Content Products</td>
<td>%</td>
<td>95%</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
</tr>
<tr>
<td>Environmentally Preferable Products/Services (excluding EPEAT)</td>
<td>%</td>
<td>95%</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
</tr>
<tr>
<td>SNAP/non-ozone depleting substances</td>
<td>%</td>
<td>95%</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
<td>hold</td>
</tr>
</tbody>
</table>
F. **Agency Status**

HUD updated its Affirmative Procurement Plan in February 2010.

For OMB’s Environmental Scorecard (January 2010), HUD provided seven 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.

HUD held OFEE-sponsored green purchasing training in November 2009 for contracting officers/contract specialists, purchase cardholders, and GTRs/GTMs (CORs/COTRs).

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.

**Goal 9: Electronic Stewardship and Data Centers**

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: Chief Operating Officer; Office of the Chief Financial Officer.
Implementation Responsibility for Technology: Chief Information Officer, Office of the Chief Information Officer.

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

C. Implementation Methods

Office of the Chief Information Officer

Under OCIO’s “One HUD 2012” plan, HUD continues to pursue implementing its “Green IT” goals. Currently, HUD has outsourced its entire information technology (IT) infrastructure; thus acquiring private cloud solutions that meet business requirements according to contractual services level requirements that include data centers, networks, and desktop operations. Services are delivered through vendor managed services that are meeting the requirements of this goal through the following actions:

- **Data Centers** - HUD does not operate or own a data center. Instead, services are delivered through the HITS vendors private clouds, (that is a pair of vendor owned facilities and vendor owned hardware/software operated by Electronic Data Systems (EDS) and Lockheed Martin Corporation) where the vendor provides a managed service and has very strong control of their operations and architecture.

- **Electronic Stewardship** – 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.

Additionally, HUD is in the process of acquiring software that will securely and remotely enable the powering down of network computers that will result in further reductions in energy usage and carbon emissions.

The OCIO is currently planning the re-competition of our IT infrastructure services contract to occur in Fiscal Year (FY) 2012. While our acquisition strategy is currently under development, the OCIO will require that vendors comply with established federal electronic stewardship and data center regulations and guidance to ensure that the Department continues to meet goals.

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 9.

HUD’s Office of the Chief Procurement Officer (OCPO) issued an updated Affirmative Procurement Plan in February 2010. This plan does not reference Executive Order 13514; however, OCPO is currently working on updating the plan to include the elements of EO 13514. In 2010, OCPO also plans to update HUD’s Electronics Stewardship Plan to be in compliance with EO 13514.

In 2010, OCPO plans to pursue a number of actions related to Goal 9.

OCPO will report to 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. This data call contains information on HUD’s environmentally preferable purchasing, including acquisitions of recycled-content, biobased content, and EPEAT-registered products. This report also includes HUD information on solid waste diversion (recycling), greenhouse gas emissions avoided, green purchasing promotion, training, and compliance monitoring and auditing.

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 and incorporate provisions of EO 13514 and will post a revised APP and a revised ESP.

OCPO will update the Department’s APP and ESP to reflect 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 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 and, holding training workshop on green purchasing/electronics stewardship for contracting and program staff, as well as Government Purchase Card (GPC) holders.
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 update HUD’s purchase card guidance to ensure compliance with the Department’s APP and ESP.

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

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 working part-time on green purchasing issues. The Office of the Chief Information Officer also does not have an FTE devoted 100% to sustainability issues. OCIO could benefit from designating an FTE who focuses on sustainability issues at least 75% of his/her time; however, the Department is currently evaluating staffing needs for compliance with this Executive order.
### E. Planning Table

<table>
<thead>
<tr>
<th>ELECTRONIC STEWARDSHIP &amp; DATA CENTERS</th>
<th>Units</th>
<th>FY 10</th>
<th>FY 11</th>
<th>FY 12</th>
<th>FY 13</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of device types covered by current Energy Star specifications that must be Energy-Star qualified</td>
<td>%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>hold</td>
</tr>
<tr>
<td>% of electronic assets covered by sound disposition practices</td>
<td>%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>% of cloud activity hosted in data center</td>
<td>%</td>
<td>100%</td>
<td>30%</td>
<td>60%.*</td>
<td>hold</td>
</tr>
<tr>
<td>% of agency data centers independently metered or advanced metered and monitored on a weekly basis</td>
<td>%</td>
<td>N/A</td>
<td>90%</td>
<td>100%.*</td>
<td>hold</td>
</tr>
<tr>
<td>Reduction in the number of agency data centers</td>
<td>%</td>
<td>0%</td>
<td>20%</td>
<td>40%.*</td>
<td>hold</td>
</tr>
<tr>
<td>% of agency, eligible electronic products with power management and other energy-environmentally preferable features (duplexing) actively implemented and in use</td>
<td>%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>hold</td>
</tr>
<tr>
<td>% of agency data centers operating with an average CPU utilization of 60-70%</td>
<td>%</td>
<td>N/A**</td>
<td>50%</td>
<td>75%</td>
<td>hold</td>
</tr>
<tr>
<td>% of agency data centers operating at a PUE range of 1.3 - 1.6</td>
<td>%</td>
<td>N/A**</td>
<td>25%</td>
<td>50%</td>
<td>hold</td>
</tr>
<tr>
<td>% of covered electronic product acquisitions that are EPEAT - registered</td>
<td>%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>hold</td>
</tr>
<tr>
<td>% of agency data center activity implemented via virtualization</td>
<td>%</td>
<td>N/A**</td>
<td>30%</td>
<td>40%</td>
<td>hold</td>
</tr>
</tbody>
</table>

*Pending HITS recomplet strategy

** Cloud environment with service performance levels
F. Agency Status

HUD accomplishments in 2009 and 2010:

1) Updated its Electronics Stewardship Plan in February 2010. 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 February 2010.

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) Subpart 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 2009 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) Held OFEE-sponsored green purchasing training in November 2009 for contracting officers/contract specialists, Government Purchase Card (GPC) holders, and GTRs/GTM (CORs/COTRs). The training covered electronics stewardship.

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.

**Goal 10: Agency Innovation**

HUD does not have any especially innovative methods to expand its sustainability mission beyond what is required in EO 13514 and beyond what is described elsewhere in the document.
SECTION 3: AGENCY SELF EVALUATION

I. Agency “Yes” or “No” Self Evaluation

<table>
<thead>
<tr>
<th>Section III: Agency Self Evaluation</th>
<th>Yes or No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does your plan provide/consider overarching strategies and approaches for achieving long-term sustainability goals?</td>
<td>Yes</td>
</tr>
<tr>
<td>Does your plan identify milestones and resources needed for implementation?</td>
<td>Yes</td>
</tr>
<tr>
<td>Does your plan align with your agency’s 2011 budget submission?</td>
<td>Yes</td>
</tr>
<tr>
<td>Is your plan consistent with your agency’s FY 2011 budget and appropriately aligned to reflect your agency’s planned FY 2012 budget submission?</td>
<td>Yes</td>
</tr>
<tr>
<td>Does your plan integrate existing EP and statutory requirements into a single framework and align with other existing mission and management related goals to make the best use of available resources?</td>
<td>Yes</td>
</tr>
<tr>
<td>Does your plan provide methods for obtaining data needed to measure progress, evaluate results, and improve performance?</td>
<td>Yes</td>
</tr>
</tbody>
</table>

II. Narrative on Agency’s Planned Actions for Following Year (in 6-month increments, July-Dec 2010 and Jan-June 2011) to Achieve Sustainability and Energy Standards for Success on OMB Scorecard

Transportation Management Scorecard
Planned actions for next six months
- Conducting training session providing awareness of HUD’s fleet program to HUD’s fleet control personnel.
- Reduce quarterly the amount of non-AFV by 2%. Reductions will occur by replacing non-AFV with AFVs and eliminating low mileage vehicles. HUD will ensure AFVs are placed in locations with AF stations. By replacing the vehicles in AFV locations we will be able to reduce our petroleum consumption.
- Continued analysis to determine the most effective and efficient way to right size HUD’s fleet. Examples: Removing vehicles from our fleet with low mileage usage. Looking at public transportation vs. fleet where feasible.

HUD also plans to pursue a commuter survey in FY 2011.

Environmental Stewardship Scorecard
Planned actions for next six months:
- Coordinate with GSA to evaluate both delegated and leased facilities for sustainability.
- Issue Notice to Proceed for the ESPC
- Ensure APP compliance via contract compliance monitoring.
- Continue to build OCPO Green Purchasing website.
- Conduct Green Purchasing training for procurement staff.
- Update HUD’s Electronics Stewardship Plan and Affirmative Procurement Plan.
Throughout the remainder of FY10, and throughout FY11, HUD will continue to promote/enforce compliance with each of the areas listed. HUD plans to hold a Green Purchasing training course for contracting staff and Government Purchase Card (GPC) holders in FY 2010.

Energy Management Scorecard

Planned actions for next six months:

- Assess HUD Headquarters building using the Energy Star benchmarking tool.
- Issue Notice to Proceed for ESPC at Robert C. Weaver building and evaluate it for other potential ECMs to supplement planned ESPC.
- Provide training for three members of the Operations Division with energy and environmental responsibilities.

During FY11, HUD will begin construction on multiple energy conservation projects as part of the ESPC.

Conclusion

The U.S. Department of Housing & Urban Development looks forward to working with the Office of the Federal Environmental Executive and our other federal partners in reaching and surpassing the sustainability goals in EO 13514. HUD is committed to promoting a culture of sustainability throughout not only HUD’s programs, but in the day to day operations that support those programs as well. HUD looks forward towards further conversations of how to best build sustainability into the very fabric of what goes on at this federal agency to support HUD’s mission of creating “strong, sustainable, inclusive communities and quality, affordable homes for all.”