



Strategic Sustainability Performance Plan



a New Day for Federal Service



MEMORANDUM FROM THE OPM SENIOR SUSTAINABILITY OFFICER

As the largest employer in the United States, the federal government has a unique opportunity to influence our country's ecological and financial future. The U.S. Office of Personnel Management (OPM) is excited to play a part in the worldwide sustainability movement. OPM is tasked with recruiting, retaining, and honoring a world-class workforce for the American people. There is no better way to honor government employees and all Americans than to help ensure their communities are healthy. With this goal in mind, OPM will continue with the implementing our Strategic Sustainability Performance Plan.

Several current initiatives will aid OPM's sustainability agenda. We are in the process of updating the HVAC system at the DC headquarters building and installing solar panels on the headquarters' roof. OPM is continuing to work with the Department of the Interior and the General Services Administration on local food programs such as a farmer's market and community gardens around the Washington, D.C. buildings. We are promoting flexible work arrangements that will lead to reduced building energy use and vehicle emissions. Furthermore, we are continuing to investigate sustainability opportunities and improvements at all of our facilities.

To tackle these environmental and energy initiatives, OPM established an internal sustainability team comprised of both senior leadership and employee volunteers. The group's main objectives for the upcoming year are to raise awareness, provide guidance, create a broader recycling program and supply employees with information on various energy efficiency and recycling topics that can be used at both work and home. The group will use creative approaches to integrate sustainability efforts into daily operations.

In upcoming years, OPM will continue to develop its sustainability strategy to ensure the agency continually improves and builds upon our sustainability program. OPM is confident that changes made will have far reaching effects. As employees are educated and taught the best stewardship practices, they will be given the ability and power to influence exponential numbers of lives as they take these lessons back to their own homes and communities.

Conscious and concerted efforts to reduce the negative impact of daily operations are essential to the Federal government's standing in both the business and the public community. The environmental consequences of our actions are passed on through multiple sectors of society, and to ignore these externalities would be a disservice to those who have served in the past and those that hope to serve in the future. Achieving our greening initiatives will not only ensure that OPM remains in compliance with the major requirements laid out in federal environmental provisions such as EO 13514, EO 13423, EISA 2007, and EPAct 2005, but that the agency is a highly desired place of employment and a stewardship leader.

Environmental and financial sustainability are inherently linked. The healthier our environment, the more resources will be available for ourselves and future generations to live more prosperous, fulfilling and enjoyable lives. To best serve the American people, OPM will pursue positive environmental policies to its fullest capability.

Sincerely,

Tina McGuire
Director, Facilities, Security, and Contracting
Senior Sustainability Officer

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SECTION 1: AGENCY POLICY & STRATEGY

AGENCY SUSTAINABILITY POLICY STATEMENT

It is the policy of the Office of Personnel Management that all business and operations will be conducted with the least environmental impact possible and that energy and resource efficiency will be an agency priority. Due to OPM's unique role in affecting the work habits of federal employees, work in this area will be particularly geared toward increasing employee education in sustainability and leveraging flexible work environments to enhance environmental performance.

II. SUSTAINABILITY AND THE AGENCY MISSION

The core mission of OPM is to recruit, retain, and honor a world-class workforce for the American people. OPM recognizes the connection between its mission principles and sustainability in at least three major areas.

First, OPM recognizes sustainability as an opportunity to make its operations more efficient and robust. For example, the energy generated and stored by rooftop solar generation at headquarters will allow the agency to continue operating in the case of an emergency power outage. In addition, by focusing on energy efficiency initiatives, OPM will be able to redirect money saved into supporting its core mission.

Second, sustainability initiatives create a positive physical work environment which serves to recruit and retain top talent. The quality of the work environment indicates the respect and appreciation the employer has for its workforce, striving to create physical and cultural space that fosters a healthy, comfortable environment. If OPM and the Federal government are to attract the leaders we need, our facilities and operations should be of the highest caliber and efficiency. The physical work space impacts productivity and job satisfaction, and OPM intends to communicate that the Federal workforce is ahead of the curve and constantly moving forward. The future of modern building and construction is green and OPM is embracing this effort.

Finally, conscious and concerted efforts to reduce the negative impact of daily operations are essential to the Federal government's standing in both the business and the public community. The environmental consequences of our actions are passed on through multiple sectors of society, and to ignore these externalities would be a disservice to those who have served in the past and those that hope to serve in the future. If OPM hopes to be the premier employer of the 21st century, we cannot simply follow the trend, we need to lead it.

OPM faces two key technical sustainability challenges. First, the Theodore Roosevelt Building (TRB) contains outdated heating, ventilation and air-conditioning systems. For example, the HVAC system was installed in the mid-1960's, and it was designed for wide open office areas, not the current configuration of cubicles. Therefore, the system is hard to control, extremely inefficient, and costly to upgrade.

Second, OPM provides applicant testing for other federal agencies that often occurs on weekends. When this testing is performed outside normal building operating hours, OPM facilities personnel must

operate the A/C chiller plant and other HVAC systems. These energy intensive devices are inefficient and costly to operate but must be run to maintain building comfort levels during testing.

OPM also faces non-technical challenges, such as internal coordination of sustainability goals, agency culture shift to 'green' thinking, and internal and external sustainability communications. Because sustainability is not traditionally considered part of the HR portfolio, OPM employees at all levels are unaccustomed to including these concerns in their work. It has been difficult to communicate the level of commitment and investment required by the EO 13514 goals. Integrating environmental responsibility into all areas of agency work will be a great challenge. There is no central office of environmental management, nor any position that focuses on agency sustainability. As a result, most of the planning and implementation will be done by a wide swath of employees with no background in this area. Employee education and communication will be critical for all of OPM's efforts. This also means that defining roles and assigning responsibilities will be extremely complicated, since currently all those working on sustainability have competing work objectives.

Table A: Agency Size & Scope of Operations

Table 71.7 Geney Size & Stope of Operations	
Total # Employees	6,568
Total Acres Land Managed	13.34
Total # Facilities Owned	0
Total # Facilities Leased (GSA lease)	66
Total # Facilities Leased (Non-GSA)	7
Total Facility Gross Square Feet (GSF)	1,636,255
Operates in # of Locations throughout U.S.	64
Operates in # of Locations outside of U.S.	1
Total # Fleet Vehicles Owned	1
Total # Fleet Vehicles Leased	1,698
Total # Exempted-Fleet Vehicles (Tactical, Emergency, Etc.)	0
Total Operating Budget FY 2010 (\$MIL)	240.071
Total # Contracts Awarded FY 2010	15,690
Total Amount Contracts Awarded FY 2010 (\$MIL)	\$1,724,498,852.88
Total Amount Spent on Energy Consumption FY 2010 (\$MIL)	\$3,102,237
Total MBTU Consumed per GSF	5.50
Total Gallons of Water Consumed per GSF	15.85
Total Scope 1&2 GHG Emissions (Comprehensive) FY 2008 Baseline MMTCO2e	6,547.18
Total Scope 1&2 GHG Emissions (Subject to Agency Scope 1&2 Reduction Target)	6,547.18
FY 2008 Baseline MMTCO2e	
Total Scope 3 GHG Emissions (Comprehensive) FY 2008 Baseline MMTCO2e	21,295.49
Total Scope 3 GHG Emissions (Subject to Agency Scope 3 Reduction Target) FY	21,295.49
2008 Baseline MMTCO2e	

III. GREENHOUSE GAS REDUCTION GOAL

OPM has committed to reducing its Scope 1 and 2 greenhouse gas emissions by 20% from 2008 levels by FY 2020. We believe such a reduction will be an ambitious, yet achievable task, and will complement the many smaller efforts the agency has made in the past ten years to become more energy efficient.

OPM also aims to reduce its Scope 3 greenhouse gas emissions. The three main emission sources OPM will look at are transmission and distribution losses, contracted waste and employee commuting. OPM

can have the most influence over employee commuting. OPM has committed to reducing 5% of Scope 3 emissions from the FY08 baseline by FY 2020.

IV. PLAN IMPLEMENTATION

- a. Internal Coordination and Communication The agency Senior Sustainability Officer (SSO) will coordinate and delegate the implementation of the Strategic Sustainability Performance Plan. Internal coordination will occur through the Sustainability Team, whose members come from the Director's Office, Communications, Congressional Relations, Chief Financial Office, Chief Information Office and Facilities, Security and Contracting. In future plans, OPM will create an organizational chart to show the members of the sustainability team and their designated responsibilities.
- b. **Coordination and Dissemination of the Plan to the Field** OPM is only responsible for a few field offices under the latest Executive Order (a total of three buildings where OPM pays utility bills). Any agency-wide policies or changes in operation that will affect field offices will be disseminated via directives from OPM's central office.
- c. Leadership and Accountability The SSO will be responsible for reporting all progress to the Director and also for submitting plans and evaluations to CEQ and OMB. This new responsibility will be added to the SSO's official portfolio, and they will have discretion to delegate duties to others within OPM. Currently, there is no full-time staff devoted to environmental initiatives. If OPM is to successfully carry out the requirements of Executive Order 13514, an additional full-time employee (FTE) will be needed, at least, on top of the current Facilities staff. While recognizing that part of the underlying objective of EO 13514 is to reduce the compartmentalization of energy and resource conservation, it is also unfeasible to take on goals of such technical detail without the knowledge and expertise to support the effort. OPM will investigate how to best integrate such positions into the operations and work of the agency, without creating the impression that sustainability is a stand-alone initiative.
- d. **Agency Policy and Planning Integration** The goals set out in the following plan will be circulated to senior staff so that they may integrate the relevant strategies into daily operation and plans for coming years. Additionally, the SSO will participate in writing every Strategic Plan, with the purpose of representing the intentions and priorities of this Executive Order.
- e. **Agency Budget Integration** OPM has coordinated with the Chief Financial Officer to have a budget expert consult with the Sustainability Team. That representative will go through the team's recommendations and thoughts for future actions and advise the team on financial implications and logistics of each. OPM will include the goals and priorities of EO 13514 in preparing the annual budget, and have a senior sustainability team member attend budget meetings. Many of OPM's proposed actions are low- or no-cost, relying principally on policy or voluntary behaviors. However, there are a number of structural and personnel proposals that will require additional funding, which OPM will seek in upcoming budget cycles. OPM is also aware that such actions may not be "mission critical", and thus hopes that they will not be discounted for funding as a result.
- f. **Methods for Evaluation of Progress** Facilities Management has secured the services of Utilities Management Corporation who will provide ongoing monitoring, diagnosing and the optimization of energy and water use, billing and operations at the OPM headquarters building and Macon facility. The Chief of Building Operations and the Theodore Roosevelt Building (TRB) Building Manager will review all energy related data to evaluate progress being made by agency.

OPM has not yet implemented an environmental management system (EMS) at the agency or at the facility level. There is an EMS in place for Facilities Management with SIEMENS. However, efforts toward environmental stewardship have been made related to many of the goals outlined in this plan without the EMS in place. OPM will work on creating an EMS or a Compliance Management Plan agency-wide.

OPM will integrate this sustainability plan with other planning and reporting efforts across the agency. The table below illustrates opportunities for integrating sustainability requirements into existing planning documents and vice versa. This table is a guide for ensuring that sustainability programs are supported in the appropriate agency planning processes.

Table B: Critical Planning Coordination

Table B. Cittical Flamming Cool amation										
Originating Report / Plan	Scope 1 & 2 GHG Reduction	Scope 3 GHG Reduction	Develop and Maintain Agency Comprehensive GHG Inventory	High-Performance Sustainable Design / Green Buildings	Regional and Local Planning	Water Use Efficiency and Management	Pollution Prevention and Waste Elimination	Sustainable Acquisition	Electronic Stewardship and Data Centers	Agency Specific Innovation
GPRA Strategic Plan	No	No	No	No	No	No	No	No	No	No
Agency Capital Plan	No	No	No	No	No	No	No	No	No	No
A-11 300s	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Annual Energy Data Report	No	No	No	No	No	No	No	No	No	No
EISA Section 432 Facility Evaluations/Project Reporting	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Budget	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Asset Management Plan / 3 Year Timeline	No	No	No	No	No	No	No	No	No	No
Circular A-11 Exhibit 53s	No	No	No	No	No	No	No	No	No	No
OMB Scorecards	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	No
DOE's Annual Federal Fleet Report to Congress and the Presidenti	Yes	No	Yes	N/a	Yes	N/A	N/A	Yes	N/A	N/A
Data Center Consolidation Plan	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Environmental Management Systemii	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Instructions for Implementing Climate Change Adaptation Planning	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes
Other (reports, policies, plans, etc.)iii	No	No	No	No	No	No	No	No	No	No

EVALUATING RETURN ON INVESTMENT

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ECONOMIC LIFECYCLE COST/RETURN ON INVESTMENT

Assessing the return on investment is essential for the integrity of any government funded project. If the benefits of a given action are not significantly more than the costs incurred, it may not be a worthy use of funds. Using money and other resources wisely and for the most benefit to the American public is the

guiding principle of federal government. However, OPM also recognizes that the traditional definition of a cost or benefit in monetary terms may fail to capture the more abstract value of alternatives.

SOCIAL COSTS AND BENEFITS

Government actions often have multiplied effects on social institutions that do not get accounted for in traditional financial cost-benefit analyses. Since these effects cannot be expressed in monetary terms, OPM's goal is to use quantitative terms whenever possible (e.g. number of jobs saved or internships created). When quantitative terms are inappropriate (e.g. historical/cultural significance, aesthetic value, etc.), OPM will fully describe the context of the cost or benefit, the audience it affects, and any mediating steps that could be taken. For example, when assessing the need for targeted recruitment, one may give more weight to the potential for more diverse candidates than would be possible in purely numerical terms.

ENVIRONMENTAL COSTS AND BENEFITS

Similarly, environmental costs and benefits may or may not be quantifiable, yet they must be incorporated into any comprehensive return on investment analysis. Environmental costs and benefits are difficult to estimate because many effects are not produced immediately. OPM will take a more long-term perspective when weighing the relative costs and benefits of different courses, so that delayed benefits are not overly discounted when compared to immediate benefits.

Before such standards can take effect, however, OPM will need to train and educate employees about the principles behind social and environmental cost-benefit accounting. OPM will plan and hold training specifically addressing methods for meeting this standard. After the first round of trainings, the included information will be integrated with standard employee orientations so that all future OPM employees will continue the process.

In partnership with the General Services Administration (GSA), OPM has already incorporated return on investment calculations, in terms of energy efficiency, into its capital project assessments. The headquarters renovations funded by the American Recovery and Reinvestment Act (ARRA) were designed based on the estimated annual energy savings per dollar of construction cost. OPM was able to choose the renovations that would yield the largest energy savings per investment, and thus maximize its future financial savings.

MISSION SPECIFIC COSTS AND BENEFITS

The mission of the Office of Personnel Management is to recruit, retain, and honor a world-class workforce for the American people. OPM is integrating the goals of EO 13514 with existing goals to ensure that the agency is in position to provide the best possible workforce and have a positive effect on the environment. The agency believes integrating sustainability into the mission of OPM will ensure the best possible talent is retained and current personnel will see the agency is investing in their future prosperity.

OPERATIONS AND MAINTENANCE AND DEFERRED INVESTMENTS

OPM maintains equipment on a regular schedule to ensure all facilities and equipment are running efficiently and to stay ahead of equipment failure. OPM will integrate technologies and practices that help reduce the agency's deferred maintenance costs in delegated buildings. OPM will coordinate with

GSA in the agency's leased spaces to ensure that all facility management departments are taking necessary steps to keep mechanical systems in efficient working order.

CLIMATE CHANGE RISK AND VULNERABILITY

OPM has little climate change risk and vulnerabilities. The main OPM buildings are being fitted with double paned windows that will help with heating and cooling costs and reduce energy use. Even with changing climate, OPM facilities anticipate energy use will not increase because of the equipment upgrades proposed in this plan. Facilities Management is looking into other ways to mitigate climate change impacts on OPM.

VI. TRANSPARENCY

OPM has added a page dedicated to sustainability initiatives on its intranet site. This page includes energy conservation tips, links to helpful sites, and updates on what the Sustainability Team is doing. Any internal communication about the Sustainability Plan and its implementation will include updates to this site, as well as potential emails to staff.

As to what information will be publicly available, OPM is always happy to share our successes. Anything that is still in the planning/implementation stage, without actual completion, however, will be shared on a case-by-case basis. As per OMB A-4, the agency will publish environmental/energy related data with supporting documentation as it becomes available.

SECTION 2: PERFORMANCE REVIEW & ANNUAL UPDATE

SUMMARY OF ACCOMPLISHMENTS

OPM has taken the following steps to improve the energy efficiency and sustainability of its facilities, particularly the headquarters building in Washington, D.C.

- Replaced and installed low flow, metered, water reducing faucets in all TRB common area restrooms.
- Developed a commuter survey for employees on their mode of transportation to and from work.
- Partnering with GSA to develop the ARRA project and to move it towards construction phase.
- Replacement of the HVAC system in the snack bar with a new more energy efficient model.
- Replacement of the soda machines on the basement level with energy efficient models.
- Began work on amending the current trash removal contract or implementing a new contract to divert 100% of our solid waste to a waste to energy facility.
- Cleaning of the booster heating system to improve heat transfer and improve the energy efficiency of the system therefore reducing our steam usage.
- Installed energy efficient stand-alone Liebert air-conditioning units in the Macon, Georgia data center in FY2009/10.
- Installed energy efficient lighting in FY2010 throughout the entire Macon facility (74,801 rentable square feet).
- In Field Offices OPM has over the past year increased percentage of participation in recycling of paper from 87.1% to 96%, and increased percentage of recycling in bottles and cans from 66.13% to 76%.
- At the TRB location a new "wellness garden" has been planted. This landscaping strategy uses stone and foliage to cover a large area that requires very little water to survive; this will help reduce the amount of water, material consumption and energy that is used to cut grass, fertilize, and water grass and flowers that this wellness garden is replacing.
- Replacement of energy efficient computer room A/C unit at our Macon facility.
- Retrofit of all restrooms in the Macon facility with automatic flush valves and faucets.
- Implemented a building-wide recycling program for paper, plastic bottles, and aluminum cans.
- Recycled and repurposed OPM personal property in the amount of 67 skids (IT equipment), 6 copiers and 6 27' truck loads of furniture.

ARRA projects scheduled to start in late FY2011 include:

- Through the expanded use of employee telework, alternate work schedules, and relocation of employees an entire floor of the TRB will be able to be completed on a more compressed schedule for the ARRA projects.
- Installation of upgraded energy management system to include new Variable Air Volume (VAV) boxes, air handler fans, variable speed motors, chill water coils and dampeners on all floors
- Installation of a second inner pane of glass to all windows in the TRB

- Replace all existing urinals and commodes with low volume fixtures
- Replace a major portion of existing lighting fixtures and approximately 275,000 sq. ft. of metal pan ceiling to reduce the actual number of fixtures with energy efficient units
- Install photovoltaic panel system on roof
- Install new elevator controllers on all passenger elevators in the TRB
- Install backbone of a lighting control system
- Install LED lighting throughout the garage
- Building Automation Systems/ Energy Management Control System (EMCS) upgrade
- Replacement of the soda machines in the building with energy efficient models.
- Renovating the snack bar with more energy efficient lighting and equipment.
- Continue working on amending the current trash removal contract or implementing a new contract to divert 100% of our solid waste to a waste to energy facility.
- Replacement of air handling units in the building under the ARRA project.

GOAL 1: SCOPE 1 & 2 GREENHOUSE GAS REDUCTION

OPM has committed to a 20% reduction in Scope 1 & 2 greenhouse gas emissions from FY 2008 levels by FY 2020. We anticipate a significant portion of these reductions to come from renovations on the Theodore Roosevelt Building (OPM headquarters) planned to begin late FY 2011 and continue through FY 2013. OPM will also assess our fleet for opportunities to reduce gas consumption and increase fuel economy. Additionally, OPM will continue to increase employee education to reduce energy consumption intensity.

The agency lead for the strategy and oversight of this goal will be the SSO, while implementation will be through the Facilities, Security and Contracting team. OPM believes the Facilities team will need an additional FTE to stay in compliance with the EOs and the reporting that goes along with them. A request for this position is being included in the upcoming budget request.

IMPLEMENTATION METHODS

OPM will reduce Scope 1 and Scope 2 greenhouse gas emissions by focusing on reducing facility energy intensity and reducing vehicle fuel consumption. However, OPM does not own any facilities or vehicles; all facilities and vehicles are leased by GSA. Therefore, any physical alterations to facilities will have to be approved by GSA, and OPM will focus on behavioral change to meet GHG emissions reduction goals.

In addition to renovating the Roosevelt building, OPM will:

- Assess current energy usage and opportunities to reduce energy intensity by conducting an energy audit on facilities to identify inefficiencies,
- Monitor and track utility bills,
- Retrofit delegated facilities with more energy efficient fixtures and bulbs,
- Ensure all appliances are energy efficient and that energy efficiency options are enabled,
- Institute new policies and/or best practices that improve energy efficiency (set ambient temperatures, lights off, electronics off etc.),
- Develop a training and communications program to educate employees about energy efficient behaviors,
- Explore opportunities to switch to energy from renewable sources.
- In all new leasing requirements, OPM will strictly adhere to GSA policies in order to achieve energy efficiencies.
- In all new leasing requirements and renovation projects, OPM will minimize the overall footprint required, will centralize resources and significantly reduce ancillary equipment.

OPM also plans to assess the vehicle fleet for opportunities to reduce gas consumption and increase fuel economy. Where feasible, OPM will:

- Increase the number of hybrid vehicles in its fleet,
- "Right-size" its fleet, employing the most fuel-efficient vehicle for the required task and having the appropriate number of vehicles relative to need,
- Employ efficiency strategies such as low rolling resistant tire, synthetic oil, and other technologies,

- Reduce vehicle miles traveled through such methods as trip consolidation practices, increased use
 of videoconferencing and web conferencing, and the use of mass transportation/agency shuttles.
- OPM plans to replace its current Executive Fleet with low-GHG emitting and energy efficient vehicles by FY2012.
- Approximately 200 OPM employees will relocate to Union Square while ARRA renovations are completed in TRB. Collaborative efforts are underway with GSA to utilize their existing shuttle which already services the same neighborhood.

There are a few training opportunities for OPM employees to supplement the above. Current vehicle safety training will include eco-driving tips. Other educational materials will be developed as needed and provided to employees. Records of all trainings related to the SSPP goals and sub-goals will be maintained and will describe the date of training, attendees, trainer, and topics covered.

Reducing energy intensity means reducing the amount of energy consumed per square foot. In order to prioritize actions and focus resources at the outset, OPM with assistance from GSA, will conduct energy audits of facilities. Energy intensity reductions will come largely from behavioral changes, such as switching off lights and appliances, and from replacing appliances and electronics with more efficient models.

PLANNING TABLE

Table 1-1: Scope 1 & 2 Targets Planning Table

	SCOPE 1 AND 2 REDUCTIONS	COPE 1 AND 2 REDUCTIONS Basis* Unit FY 10 11 12 12 12 13 14 15 FY 13 14 15		FY 16		FY 20						
	Energy Intensity Reduction Goals (BTU/SF reduced from FY03 base year)		%	15	18	21	24	27	30	hold		Hold
Buildings	Planned Energy Intensity Reduction (BTU/SF reduced from FY03 base year)		%	0	0	0	10	14	15	16		20
Builc	Renewable Electricity Goals (Percent of electricity from renewable sources)		%	5	5	5	7.5	hold	hold	hold	hold	hold
	Planned Renewable Electricity Use (Percent of electricity from % 5 5 5 8 renewable sources)		8	hold	hold	hold	hold	hold				
Fleet	Petroleum Use Reduction Targets (Percent reduction from FY05 base year) ^{iv}		%	10	12	14	16	18	20	22		30
NE NE	Planned Petroleum Use Reduction (Percent reduction from FY05 base year)		%	TBD v	12	14	16	18	20	22		30
	Alternative Fuel Use in Fleet AFV Target (Percent increase from FY05 base year) ⁶		%	61	77	95	114	136		59 h	old	hold
	Planned Alternative Fuel Use in Fleet AFV (Percent increase from FY05 base year)		%	61	77	95	114	13	36 1	59 H	old -	Hold

	Senior Executive Fleet Replaced with Low-GHG, High Efficiency Vehicles (Percent replaced from FY08 base year)		%	33	66	95	100				
	Other, as defined by agency		?								
	Total Scope 1&2 GHG Emissions (Comprehensive)	MMTCO 2e	MMT CO2 e	6,51 1	6,5 K	6.4K	6.3K	6K	5.7K	5.4K	 5.2K
Total Scope 1&2 GHG Emissions (Subject to Agency Scope 1&2 GHG Reduction Target)		MMT CO2 e	6,51 1	6.5 k	6.4K	6.3K	6K	5.7K	5.4K	 5.2K	
	Overall Agency Scope 1 & 2 Reduction (reduced from FY08 base year) ⁷	%	%	-1	-1	-1	-1	-5	-5	-5	 -20

RETURN on INVESTMENT

All of the individual projects included in the ARRA-funded modernization of the headquarters building were ranked and chosen based on the return on investment, with payback measured in terms of both money and energy savings.

The OCFO is currently developing a standard template for calculating return on investment for small projects and purchases that program offices can use independently.

AGENCY STATUS

OPM has made many small-scale improvements in the headquarters building (see Highlights) to reduce the energy intensity and energy consumption of the facility. However, major reductions are not expected to be seen until after the ARRA-funded modernization is complete in FY 2013.

HIGHLIGHTS

- Developed a commuter survey for employees on their mode of transportation to and from work.
- Partnering with GSA to develop the ARRA project to move it towards construction phase.
- Replacement of the HVAC system in the snack bar with a new more energy efficient model.
- Replacement of the soda machines on the basement level with energy efficient models.
- Began work on amending the current trash removal contract or implementing a new contract to divert 100% of our solid waste to a waste to energy facility.
- Cleaning of the booster heating system to improve heat transfer and improve the energy efficiency of the system therefore reducing our steam usage.
- Installed energy efficient stand-alone Liebert air-conditioning units in the Macon, Georgia data center in FY2009/10.
- Installed energy efficient lighting in FY2010 throughout the entire Macon facility (74,801 rentable square feet).

GOAL 2: SCOPE 3 GREENHOUSE GAS REDUCTION & DEVELOP AND MAINTAIN AGENCY COMPREHENSIVE GREENHOUSE GAS INVENTORY

OPM has committed to reducing its Scope 3 emissions 5% by FY 2020, in relation to the 2008 baseline level. Scope 3 includes emissions from employee commuting, employee business travel, contracted waste disposal, and losses from transmission and distribution of purchased energy. OPM has also created a Greenhouse Gas Inventory, which it submitted to OMB in January 2010. Goal 2 requires OPM to continuously update and improve the Inventory and the methods used in collecting data.

Scope 3 GHG reductions at OPM will be the responsibility of the Office of the Director, the CFO, and the Facilities, Security and Contracting division. The agency's GHG Inventory tracking will be performed by Facilities Management and report the progress to the SSO. The Chief of Building Operations and the TRB Building Manager will also review all energy related data to evaluate progress being made by agency. As previously mentioned (Goal 1) we are requesting additional staffing to meet all existing EO's and their associated reporting requirements.

IMPLEMENTATION METHODS

As the personnel management agency for the federal government, OPM is in a unique position to influence employee travel guidance. OPM is initiating several strategies on this front. First, due to the high priority of work flexibility, more work can be done via telework and teleconferences and webinars. Second, OPM will increase marketing of Smart Benefits and the bike subsidy for all federal employees. OPM will also create a ride-share board on its internal website.

OPM will aim to reduce Scope 3 GHG emissions by focusing primarily on employee travel and waste disposed of in landfills. OPM will also take steps to improve data tracking for all scope 3 emissions, including waste water treatment and emissions from transmission and distribution of purchased energy.

Employees will be provided with awareness and/or training on strategies to reduce scope 3 emissions. For example, OPM will add a new section to employee orientation on the details of Smart Benefits and the biking subsidy. The agency will also create a ride-sharing board on the internal website. OPM employees responsible for tracking data will receive training on how to do so. Records of all trainings related to the SSPP goals and sub-goals will be maintained and will describe the date of training, attendees, trainer, and topics covered.

Completing the GHG inventory will inform progress towards meeting Scope 1, 2 and 3 goals, as well as data availability, accuracy and collection methods. Reducing waste at the source, i.e. source reduction, translates into reduced waste disposed of in landfills and reduced GHGs. Table 2-2 details specific actions that the agency will consider for future progress on this goal.

AGENCY STATUS

OPM has continued its efforts to reduce Scope 3 emissions from employee travel. The Office of the Director is working with the CFO on creating a travel office within the CFO devoted to better structuring and managing employee travel and the approval process for such travel. OPM has also become a

pioneer agency in its participation as a corporate member in the Capital Bikeshare program. OPM purchased 300 memberships from Capital Bikeshare, at a discount, and offered them free to employees. These memberships aim to provide a cost and emissions-free option for travel to offsite meetings, as well as for commuting.

The Greenhouse Gas (GHG) Inventory created by OPM in 2010 accounted for all GHG emissions required by the *Federal Greenhouse Gas Accounting and Reporting Guidance* over which the agency has operational control, and, in some instances, financial control, to the extent allowed by current methodologies. OPM included all facilities for which OPM has been given the "Delegation of Authority" to operate, including the responsibility for the payment of all utility bills. Emissions data was collected and consolidated by the OPM Energy Program Manager and Fleet Program Manager, and subsequently reviewed and approved for submission by the Senior Sustainability Officer.

OPM completed the inventory using the FEMP GHG Reporting Portal and the FEMP basic commuter survey. OPM created an inventory management plan that detailed all methods and assumptions to ensure consistency and transparency from year to year. OPM will ensure continual improvement to data collection and emissions estimation methods and consider the addition of new Scope 3 sources as data becomes available.

Table 2-1: Potential Methods

Concept	Actions
Business travel management	Investigate the possibility of a travel office within the OCFO to manage funding for and tracking of employee business travel.
	Develop internal guidance for employees on attending conferences and meetings in person or via videoconference, and, in the case of the former, choosing the best mode of transportation.
	Develop a system to record avoided travel across the agency.
Employee commuting	Develop and administer an awareness program on the Smart Benefits and the biking subsidy. Can be administered through new employee orientation.
	Develop a system to track how often employees work from home. Develop a ride-sharing board on the internal website.

PLANNING TABLE

Table 2-2: Scope 3 Planning Table

Table = = recept or ranning ranne								
			FY	FY	FY	FY		FY
SCOPE 3 GHG TARGET	Units ⁸	FY 11	12	13	14	15		20
Total Scope 3 GHG Emissions (Comprehensive)	MMTCO2 e	25,385.75	25K	24.5K	24K	23.5K	23K	
Total Scope 3 GHG Emissions (Subject to Agency Scope 3 GHG Reduction Target)	MMTCO2 e	25,385.75	25K	24.5K	24K	23.5K	23K	
Overall Agency Scope 3 Reduction (reduced from FY08 base year)9	%	+17	-2	-4	-6	-8	-10	
Other, as defined by agency	%	25,385.75	25K	24.5K	24K	23.5K	23K	

RETURN ON INVESTMENT

OPM is still waiting to evaluate the return on investment of participation in the Capital Bikeshare Program. The DC Department of Transportation will soon be providing data on the number and distance of rides taken by OPM employees, from which we can estimate the costs avoided from taxi fares and the emissions avoided.

HIGHLIGHTS

- Developed an annual employee Transit Benefits recertification awareness training.
- Hosted a breakfast for National Bike to Work day.
- OPM was the first agency to purchase a corporate membership to the Capital Bikeshare Program and offer free memberships to employees.

GOAL 3: HIGH-PERFORMANCE SUSTAINABLE DESIGN / GREEN BUILDINGS & REGIONAL AND LOCAL PLANNING

OPM currently occupies 32 GSA owned buildings throughout the country. OPM manages 3 delegated properties (Macon, GA, Boyers, PA, and Washington, DC) from the inventory. OPM does not plan on leasing any more facilities for which we would have delegated authority. The ARRA funded projects are expected to be completed in FY2015 and will put OPM in compliance with the 15% Guiding Principle target for existing buildings.

OPM's lead for the High Performance Sustainable Design/Green Buildings program is Facilities Management and Contracting. Progress toward a portfolio of high-performance green buildings has improved, but OPM continues to face a lack of personnel with the appropriate skill set to support sustainability initiatives. OPM will continue to train the staff involved in sustainability and look for opportunities to bring in those with more expertise (details, PMFs, etc.).

Regional and local planning incorporates the involvement of a wide variety of stakeholders. OPM uses GSA to procure space nationwide and OPM will coordinate with GSA to implement the objectives of this goal, as outlined in the table below. Sustainable approaches to planning include 'future-proofing' facilities, which often requires the involvement of city planners, area occupants, architects, experts, consultants and the general public.

IMPLEMENTATION METHODS

OPM commits to meet all requirements under EO 13514 that pertain to high-performance sustainable design and green buildings in OPM delegated buildings. It is not planned that OPM will alter its current practice of having the GSA acquire and assign OPM the spaces that this agency occupies. However, OPM will work with GSA to ensure that this goal is achieved for any new Federal building that OPM might occupy. When making minor repairs or alterations, all statements of work will be worded to make it mandatory that material and parts used must be recycled, energy efficient and low maintenance to the fullest extent possible.

OPM's schedule for meeting the sub-goal that at least 15% of the agency's existing buildings and building leases meet the guiding principles by FY 2015 is dependent on GSA's ability to procure funding for improvements in all OPM leased space. OPM will work closely with GSA in delegated buildings, like the Theodore Roosevelt Federal Building, to ensure all measurable steps are taken to achieve the objectives of this sub-goal.

OPM will integrate technologies and practices that help reduce the agency's deferred maintenance costs in delegated buildings. OPM will coordinate with GSA in the agency's leased spaces to ensure that all facility management departments are taking necessary steps to keep mechanical systems in efficient working order.

AGENCY STATUS

In February 2006, OPM was a signatory to the Federal Leadership in High Performance and Sustainable Buildings Memorandum of Understanding (MOU) to promote and encourage common strategies for

planning, acquiring, siting, designing, building, operating, and maintaining high performance and sustainable buildings. At present, OPM has fourteen green building and sustainable design projects slated for implementation. GSA has dedicated a portion of the American Recovery and Reinvestment Act (ARRA) funds allocated to their agency to sponsor OPM in the fulfillment of these projects. The combined impact of these projects will help OPM reduce agency wide GHG emissions, and provide cost-effective solutions to minimize energy, water, and material consumption within the Theodore Roosevelt Federal Building (see Table 3-1). OPM will replace aging out dated equipment with new energy efficient equipment whenever and wherever possible; this will greatly reduce energy, water and materials consumption which in turn will achieve a reduction in maintenance costs (see Table 3-2).

OPM does not currently have any existing policies relating to regional planning. OPM's opportunity to advance this goal rests in overall policy on such issues as telecommuting, parking, transportation subsidies, etc. OPM will coordinate with other GSA on whether such policy is needed.

Table 3-1: Projects Developed to Conform to Guiding Principles

Table 5 1. Frojects Developed to comorni to calaing Frinciples								
Concept	Actions							
Planned GSA	Below grade HVAC systems modernization							
sponsored ARRA	Supply Temperature Reset schedule into the control sequence for all AC							
projects	units							
	Chilled water Reset schedule into the control sequence for all AC units							
	CO ₂ Sensors							
	Install variable exhaust system to operate based on restroom occupancy							
	Reduce the lighting power density							
	Occupancy Sensors							
	Replace Garage Fixtures w/ LED type fixtures							
	Install Lighting Control System Backbone							
	Install adaptive controllers on all elevators							
	Toilet and urinal upgrade							
	Window Improvement							
	Reduce Infiltration through lobby doors							
	Install photovoltaic panel for lighting power							

Table 3-2: Minimizing Energy, Water and Materials Consumption Actions

Concept	Actions
Minimizing Energy	Continue to replace aging and out-dated equipment with new energy
Consumption	efficient equipment
Minimizing Water	Continue to replace aging and out-dated equipment with new water
Consumption	efficient equipment
Minimizing Materials	Continue to replace old worn out carpets with recycled content carpet
Consumption	Continue to use recycled content asphalt for repaving projects
	Continue to purchase office furniture and equipment that is durable and
	made from recycled-content

Continue to incorporate salvaged, refurbished, and remanufactured furniture and features into the building. If major renovations are being done, see if any of the materials from the original structure can be saved.
Continue to purchase materials that have been extracted and manufactured locally to the building site

Table 3-3: Reducing Deferred Maintenance Costs

Concept	Actions
Maintenance	Install an automated computer program to request and track work
Reporting	orders for system maintenance
	Work with GSA to audit facility conditions, and prioritize repair efforts
Mechanical Efficiency	Install leak detection and efficiency monitoring systems to accurately
	track mechanical system operations

PLANNING TABLE

Table 3-4: Sustainable High Performance Buildings Planning Table

SUSTAINABLE HIGH PERFORMANCE BUILDINGS (Buildings Meeting Guiding Principles ¹⁰)	Units	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15	 FY 20
Owned Buildings	N/A	N/A	N/A	N/A	N/A	N/A	N/A	 N/A
FRPP-Reported Leased Buildings	0	0	0	0				 N/A
Total Buildings	0	0	0	0				 N/A

RETURN ON INVESTMENT

See explanation of return on investment for Goal 2.

HIGHLIGHTS

- OPM provides the maximum allowed under law transit benefit to its employees.
- The OPM headquarters building (TRB) has joined the DC Bike Share Program and has a bike station on the premises. OPM has purchased a limited number of memberships to the bike share program and is providing them to employees.
- OPM is participating in National Bike to Work day to raise awareness of the bike share program.
- TRB has purchased, installed and is using the Maximo software for work order generation, tracking and PM program.
- The TRB uses the Siemens BAS system to control and monitor mechanical systems. Under the ARRA project this system will be up graded and have improved tracking capabilities.
- Installed variable frequency drives on all cooling towers.

GOAL 4: WATER USE EFFICIENCY AND MANAGEMENT

There already exist several Federal controls on water management and treatment. EO 13514 goes further by requiring agencies to reduce the total volume used and the use intensity, aimed as much at water conservation as at water pollution prevention. The water efficiency and management goal established several standards for water use intensity reduction that agencies must meet, listed as follows.

- A. Reduce potable water use intensity by at least 26% by FY 2020
- B. Reduce industrial, landscaping, and agricultural water use by at least 20% by FY 2020
- C. Identify and implement water reuse strategies
- D. Achieve objectives established by EPA in Stormwater Guidance for Federal Facilities

The lead for OPM is the Building Operations and Facilities Management staff. Water management is new territory for the agency and OPM continues to face a lack of personnel with the appropriate skill set to support these sustainability initiatives.

IMPLEMENTATION METHODS

To reduce potable water use by 26%¹¹, OPM will evaluate current building activities that use water and look for opportunities to improve efficiency (see Table 4-1).

Opportunities for OPM to reclaim water result from building activities such as dishwashing and bathing (greywater), and rain water (raw water). Collecting rain water has the most potential to generate a significant amount of non-potable water (see Table 4-2).

To achieve Stormwater Guidance for Federal Facilities objectives¹², it is OPM policy that any development or redevelopment project involving an OPM facility with a footprint that exceeds 5,000 square feet will use site planning, design, construction, and maintenance strategies for the property to maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property with regard to the temperature, rate, volume, and duration of flow.

OPM does not directly control landscaping at its facilities, as it does not own them. However, OPM recognizes that a sustainable landscape is in balance with the local climate and requires minimal resource inputs, such as fertilizer, pesticides and water. Sustainable landscaping begins with an appropriate design and includes functional, cost efficient, visually pleasing, environmentally friendly and maintainable areas. OPM will work with GSA to uphold these standards at OPM facilities.

Table 4-1: Potable Water Reduction Actions

Concept	Actions
Analyzing Efficiency	Calculate baseline water consumption metrics from 2008 usage.

Updating water	Replace existing toilets and urinals with low-flow and/or dual-flush
fixtures	models, or retrofit existing toilets with dual-setting flush valves ¹³
	 Replace faucets with low-flow models, or retrofit existing faucets with aerators
	 Replace kitchen appliances (e.g., dishwasher, steam cooker, etc.) with high-efficiency, Energy Star models.
Education and	Continue to create simple posters and signs offering tips on saving
Outreach	water in bathrooms, kitchens, etc.
	Work with cafeteria contractor to implement water saving behaviors.
Operation and	Install automatic shut-off valves for equipment not in operation
Maintenance	Develop and implement an SOP for checking, reporting, and resolving building water leaks every 6 months

Table 4-2: Non-potable Water Reduction Actions

Concept	Actions						
Industrial, Landscaping,	OPM will work with GSA to ensure that landscaping uses native plants,						
and Agricultural	reduces watering needs, and increases drainage (reduces runoff).						
	Continue to improve irrigation efficiency:						
	Inspect irrigation system monthly						
	Install rain shutoff and other sensory devices as appropriate for						
	site conditions to include selective watering.						
	Irrigate plants in early morning or evening as necessary						
	Place mulch around flower beds and under trees						
Water Reuse	Research local regulations for grey water reuse and accordingly assess						
	available mechanisms (rainwater barrels, air handling unit condensate,						
	etc.)						
Stormwater guidance	Continue installing a wellness garden at south end of the property						
	Calculate or verify the precipitation amount from the 95 th						
	percentile storm event						

PLANNING TABLE

Table 4-3: Water Use Efficiency & Management

WATER USE AND MANAGEMENT	Units	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15		FY 20
Potable Water Reduction Targets (gal/SF reduced from FY07 base year)	%	6%	8%	10%	12%	14%	16%		26%
Planned Potable Water Reduction									
(gal/SF reduced from FY07 base year)	%	6%	8%	10%	12%	14%	16%		26%
Industrial, Landscaping, and Agricultural Water Reduction Targets (gal reduced from FY10 base year)	%		2%	4%	6%	8%	10%		20%
Planned Industrial, Landscaping, and Agricultural Water Reduction (gal reduced from FY10 base year)	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AGENCY STATUS

OPM will depend upon and coordinate with GSA to identify opportunities for minimizing water consumption. As these opportunities are recognized, OPM will notify GSA and work with them to secure funding or cooperation to implement the opportunity.

The TRB currently runs an average of 4.5 to 5 cycles in its water cooling tower, and due to the phosphate added to the DC water this is about the best we can hope to achieve.

RETURN ON INVESTMENT

The OCFO is currently developing a standard template for calculating return on investment for small projects and purchases that program offices can use independently.

HIGHLIGHTS

OPM has taken the following steps:

- Replaced the bathroom faucets in the TRB with metering faucets.
- Removed the dish machine in the kitchen of the TRB.
- Installed upgraded water filtration system on our drinking water system.
- Executes a daily inspection and maintenance program for HVAC system.
- Installed conductivity controller on cooling tower.
- At the TRB, a "wellness garden" has been planted. This landscaping strategy uses stone and foliage to cover a large area that requires very little water to survive; this will help reduce the amount of water, material consumption and energy that is used to cut grass, fertilize, and water grass and flowers that this wellness garden is replacing.
- Installed low trajectory sprinklers.

GOAL 5: POLLUTION PREVENTION AND WASTE REDUCTION

Under Goal 5, OPM is required to reduce its production of waste and pollution through reducing sources of waste, diverting non-hazardous waste through reuse and recycling, reducing printing paper use, increasing use of bio-based materials, and minimizing the acquisition of hazardous chemicals and materials. Currently, OPM is not required to report under EPCRA, as it does not use/produce the threshold amount of hazardous materials.

EO 13514 establishes an abbreviated timeline for two of the goals mentioned in the pollution prevention sub-goals.

- Divert at least 50% non-hazardous solid waste by FY 2015, excluding construction and demolition (C&D) debris; and
- Divert at least 50% C&D materials and debris by FY 2015.

The remaining sub-goals of EO 13514 pertaining to pollution prevention and waste elimination are to be implemented on the FY 2020 timeline or sooner by OPM.

In conjunction with OPM's Senior Sustainability Officer and Facilities Operational Staff, and in compliance with EO 13514, the Facility Management Staff is responsible for developing and managing OPM pollution prevention system, as well as the hazardous materials and chemicals program. Pollution prevention and waste elimination is not new for the agency, but OPM continues to face a lack of personnel with the appropriate skill set to support these sustainability initiatives. OPM estimates one FTE or PTE for approximately 6-hours per week to complete Goal 5 tasks.

IMPLEMENTATION METHODS

Source reduction refers to the practice of designing, manufacturing, purchasing, or using materials in ways that reduce the amount or toxicity of trash created ¹⁴. For OPM, source reduction opportunities exist through sustainable acquisition (see Goal 6) and product reuse. OPM's Green Procurement Program (GPP) describes source reduction activities that employees should strive to implement. In addition, staff at the TRB facility have already begun developing a system to reuse products within the agency. OPM's GPP requires that all OPM locations will implement an office recycling program for waste white paper and other materials will be incorporated where feasible. Some specific actions for source reduction are listed below in Table 5-1.

OPM, through the Office of the Director and the CIO, is developing a print management framework to reduce the number of printers and the resources used by printing. The planned strategy includes:

- Programming network printers to automatic duplex printing,
- Ensuring that all new printers purchased are equipped with the duplex setting,
- Increasing the ratio of employees to printers to 6:1,
- Developing minimum criteria for granting a personal desktop printer, making the default a shared network MFD,
- Increasing the required percentage post-consumer content (research viable options e.g. 40% 50% etc).

In office spaces, food wastes are likely one of the most significant contributions to the solid waste stream. OPM has begun investigating the possibility of creating a composting program. Several staff members recently visited the Department of Interior to view its composting system. While the results of that system are impressive, it was concluded that, at least for the near future, a comparable composting system would be too expensive for OPM's current budget scenario. However, OPM will consider this a goal for the future.

Table 5-1: Waste and Material Diversion

Concept	Actions
Source Reduction Actions	 Develop a centralized web-based program for employees to share usable office products (similar to Craigslist) Increase employee education about products that can be reused
	 Reduce acquisition of material packaging: Research minimal packaging products needed in the office Develop a forum to coordinate bulk purchases with colleagues Communicate forum and research to colleagues through a bulletin or other method
Solid Waste Diversion	 Increase participation by OPM employees in recycling efforts: Continue holding meetings with the Pollution and Waste Control Committee to monitor the program and track recycling amounts Develop a "How to Dispose" chart for TRB and place on the intranet for easy access Set up a recycling area for less common materials (printer cartridges, CD/DVDs, household/office batteries, phone books/magazines, hard bound books, and colored paper). Maintain records of recycled non-hazardous solid wastes to demonstrate diversion Increase product donations
Construction and Demolition Material Diversion	 Research contractors that use advanced framing techniques and Optimum Value Engineering (OVE) for new construction Join EPA's WasteWise Building Challenge¹⁵ to receive implementation assistance Where possible, specify the reuse of suitable C&D materials within OPM, and if internal reuse is not possible, donate or sell materials for reuse or recycle, if possible. Require all contractors to recycle C&D waste in accordance with LEED certification criteria Maintain records of recycled C&D materials to demonstrate diversion
Compostable and Organic Material Diversion	Identify opportunities to substitute conventional single use items with compostable alternatives Identify materials already generated by OPM that could be composted (ex. cafeteria waste)

Table 5-2: Reducing Acquisition, Use, and Disposal of Hazardous Materials Actions

Concept	Actions
Reducing Acquisition, Use	Identify the types of hazardous materials used at OPM.
and Disposal of	Research EP alternatives for the materials identified and assess
Hazardous Materials	effectiveness, cost, and availability.
	If products are effective, reasonably priced, and readily available limit
	staff to the purchase of only these products.
	Use existing hazardous materials responsibly (40 CFR 1910.1200) ¹⁶ :
	 Obtain material safety data sheets (MSDSs) for all hazardous materials used¹⁷
	 Label hazardous materials with the name of the product and its associated hazards
	Train relevant employees on hazardous materials management
	(document date of training, who attended, who administered the
	training, and what topics were covered)
	Dispose of hazardous materials responsibly:
	Designate an individual or team to monitor hazardous materials management
	Where possible, reuse materials within OPM
	If the material can no longer be used, hire a hazardous waste
	contractor to appropriately dispose of the hazardous material
Phase out high global	Compile an inventory of all chemicals with high GWP (ex. AC units,
warming potential (GWP)	vending machines, refrigerators, vehicle AC units)
substances	Research replacement chemicals, processes, and/or systems that are
	EP and, if cost effective, test them
	If effective chemicals are identified replace current chemicals with
	alternatives and prohibit purchase and use of high GWP products
	Track the purchase of non-GHG emitting refrigerants in the EP product tracking tool

PLANNING TABLE

Table 5-3: Pollution Prevention & Waste Elimination Planning Table

POLLUTION PREVENTION & WASTE		FY	FY	FY	FY	FY	FY		FY
REDUCTION	Locations	10	11	12	13	14	15	•••	20
Non-Hazardous Solid Waste Diversion Targets									
(Non-C&D)	3	0	0	15	25	40	50		60
C&D Material & Debris Diversion Targets	3	0	0	12	20	30	50		50
If agency uses on-site or off-site waste-to-energy,									
estimated total weight of materials managed	Tons or								
through waste-to-energy	pounds	N/A	N/A	N/A	N/A	N/A	N/A		N/A
Number of sites or facilities with on-site									
composting programs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	•••	N/A

Number of sites or facilities recycling through off-									
site composting programs	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A
If agency has on-site or off-site composting									
programs, estimated total weight of materials	Tons or								
diverted to composting	pounds	N/A	N/A	N/A	N/A	N/A	N/A		N/A
% of agency-operated offices/sites with a									
recycling program	3	100	100	100	100	100	100		100
If agency offices located in multi-tenant buildings,									
% of those buildings with a recycling program	66	87.1	96.0	96.0	96.0	96.0	96.0		96.0
% of agency-operated residential housing with									
recycling programs	1	100	100	100	100	100	100	•••	100

AGENCY STATUS

In the headquarters building, TRB, OPM currently recycles newspapers, paper, cardboard, metal, copper, aluminum, plastic bottles, light bulbs, batteries and ink/toner cartridges, with regular deliveries to the local Recycling Center. We also donate computers to the Computers for Learning Program which keeps our computers out of the waste stream. The FEI field facility also has an extensive recycling program.

OPM already practices integrated pest management, and also requires its contractors to use bio-based, non-toxic products. To bolster these efforts, OPM plans to:

- Continue identifying the pests common in the OPM workplace that may require control
- Continue Evaluating methods to prevent the identified pests from entering the space (such as removing attractants)
- Continue to work with our contractors to research environmentally preferable control options (mechanical control and highly targeted chemicals such as pheromones are ideal).
- Continue to require contractors to use EP and/or biobased products in place of toxic or environmentally harmful products.
- Continue to require contractors to conduct an annual assessment to see if any toxic chemicals can be replaced by EP products.

RETURN ON INVESTMENT

The OCFO is currently developing a standard template for calculating return on investment for small projects and purchases that program offices can use independently.

HIGHLIGHTS

- Created a Sustainability room for the repurposing of office equipment and supplies.
- Discontinued the use of Styrofoam products in the cafeteria and switched to paper products which are bio degradable.
- Started supplying personal-desk paper recycling bins to employees at new employee orientation.
- Added 10 battery and ink cartridge recycling containers to the building, each.

GOAL 6: SUSTAINABLE ACQUISITION

OPM developed an agency-wide Green Procurement Program (GPP) in 2009 to address the environmental purchasing requirements set forth in paragraph 23.404 of the Federal Acquisition Regulation (FAR) and EO 13423. The plan will be updated to include new requirements described in EO 13514.

In conjunction with OPM Chief Sustainability Officer and Facilities Operational Staff, and in compliance with EO 13514, the Contracting Staff is responsible for developing and managing OPM sustainable acquisition. Responsible parties will be assigned for each sub-goal to ensure accountability but further delegation for tasks may be assigned. Sustainable acquisition is not new for the agency, but OPM has yet to institutionalize the idea of green/sustainable procurement throughout the entire agency. OPM continues to face a lack of personnel with the appropriate skill set to support these sustainability initiatives.

IMPLEMENTATION METHODS

In accordance with Goal 6, OPM has developed a GPP and will develop tool to track purchases of environmentally preferable (EP) products and services. EP products or services are those that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose¹⁸. Affirmative procurement plans (otherwise known as green purchasing or environmental purchasing plans) set forth policies to incorporate environmental considerations into purchases of goods and services. OPM contracting employees and those employees with purchase cards are provided GPP awareness training annually. The Contracting division has designated an employee that will be responsible for managing sustainable acquisitions and updating all future sustainability plans. This employee will also regularly review the existing GPP. The Contracting division will also develop a tool to track EP purchases.

This goal to directly relates to reducing greenhouse gas (GHG) emissions, constructing high-performance green buildings, efficiently managing water use, and preventing pollution and eliminating waste. By purchasing non-ozone depleting refrigerants, OPM will reduce its GHG emissions. OPM can purchase sustainably harvested wood, recycled content carpeting, low-volatile organic chemical (VOC) paints, and many other environmentally preferable products to support sustainable building design for construction and renovation projects. Purchasing water efficient products, such as those identified by the Environmental Protection Agency's (EPA) WaterSense program, will preserve valuable resources and likely reduce water management costs significantly in the long term. By purchasing EP products, such as those that are biodegradable, OPM can reduce the amount of waste generated and accumulated in landfills.

Specific actions for improving OPM sustainable acquisition practices are listed below in Table 6-1. OPM will also create an EP tracking tool, which will monitor purchases of all of the categories of sustainable products listed in Table 6-1.

Table 6-1: EP Products in New Contracts Actions

Concept	Actions
Green contract	Identify contracts that have the potential to incorporate EP products

and services
Train contracting staff on use of the EP product tracking tool
Identify products used at OPM that are available in Energy Star rated ¹⁹ or FEMP-designated ²⁰ varieties and phase out non-Energy Star/FEMP products as they get old or when new renovations are made
Identify products used at OPM that are sold in WaterSense ²¹ labeled varieties and phase out non-WaterSense products as they get old or when new renovations are made
Identify products used at OPM that are available in biobased varieties and phase in biobased products as non-biobased products are used
Identify products used at OPM that are available in recycled content varieties
Review the EPA's Comprehensive Procurement Guidelines (CPG) 23 (which contains requirements for minimum recycled content products)
Develop a procedure to phase in recycled content products
Develop a procedure to phase out ODSs as they are used up or when new renovations are made (incorporate into the GPP)
Identify the types of products used at OPM that may have EP alternatives and research EP alternatives (such as non-toxic hazardous materials (EO 13423 §2(e)(i)) Test EP products and assess effectiveness, cost, and availability
Staff will be instructed to utilize opportunities when available to purchase/install renewable energy equipment. Staff will be instructed to seek local vendors that supply renewable energy and equipment first.
When new vehicles are needed, consider hybrids, plug ins, or more fuel efficient options Develop and use a tool to compare fuel efficiency of sustainable vs. conventional vehicles within OPM

PLANNING TABLE

Table 6-2: Sustainable Acquisition Planning Table

SUSTAINABLE ACQUISITION		FY 10	FY 11	FY 12	FY 13	FY 14	FY 15	 FY 20
New Contract Actions Meeting Sustainable Acquisition Requirements		95%	95%	95 %	95 %	95 %	95 %	 100%
Energy Efficient Products (Energy Star, FEMP-designated, and low standby power devices)	%	30	30	30	50	50	70	 100
Water Efficient Products	%	0	0	10	20	25	25	 50

Bio-based Products	%	0	5	5	10	20	40	 60
Recycled Content Products	%	30	30	30	30	40	40	 75
Environmentally Preferable Products/Services (excluding EPEAT – EPEAT in included in Goal 7)	%	35	30	30	35	50	50	 100
SNAP/non-ozone depleting substances	%	0	0	10	10	15	15	 50

SUSTAINABLE ACQUISITION CONTRACT REVIEW	1st QTR FY 11	2 nd QTR FY 11	3 rd QTR FY 11 (Planned)	4 th QTR FY 11 (Planned)
Total # Agency Contracts	778	2649	3000	4000
Total # Contracts Eligible for Review	29	10	30	40
Total Contracts Eligible Contract Reviewed (i.e., 5% or more eligible based on previous OMB guidance)*	2	10	15	20
# of Compliant Contracts	2	10	15	20
Total % of Compliant Contracts	100	100	100	100

Contract Specialists' within OPM identified all contracts/BPA/TO/DO/and modifications exceeding the micro-purchase threshold. They were provided with the following categories and definition of each category:

- Biobased/BioPreferred
- Environmentally Preferable
- Energy Efficient/Energy Star
- Water Efficient/WaterSense
- Recycled Content
- SNAP
- EPEAT

The Contract Specialists that awarded any requirements within the specifications provided, filled out a spreadsheet with their awards. The contract management system was used to determine how many contracts were awarded in the second quarter. The rest of the awarded actions were services that didn't require green purchases, such as guard services, broadband cards, telephone services, leasing of space, food services.

AGENCY STATUS

In the year ahead, OPM will work to institutionalize sustainable acquisition throughout the agency. OPM will document the successes and challenges we encountered while trying to create a culture of sustainability. OPM currently incorporates 1752.233-71 in all of the contracts/solicitations.

RETURN ON INVESTMENT

N/A

HIGHLIGHTS

Green Purchasing training was on the annual Acquisition Training Conference that was held in April 2011. The training was administered by FSC/Contracting. The conference was attended by FSC/Contracting customers. The topic covered was EO 13514 and items that can be purchased that are considered green.

GOAL 7: ELECTRONIC STEWARDSHIP & DATA CENTERS

OPM is dependent on the efficient and optimal functioning of its datacenter²⁵. This has led OPM to develop policies to promote an Electronic Stewardship program. In order to further reduce our GHG footprint, OPM's Network Management (NM) commits to the following objectives prescribed by EO 13514:

- 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 agency policies as needed, but no less than annually, to reflect environmentally sound practices for disposition of all agency excess or surplus electronic products.
- Update agency policies as needed, but no less than annually, to ensure implementation
 of best management practices for energy efficient management of servers and Federal
 data centers

The Office of the Chief Information Officer (OCIO) will be the primary party responsible for implementing the objectives discussed under Goal 7: Electronic Stewardship and Datacenters. Other divisions will become an equal responsible partner where applicable. Examples of such partnerships include facilities in the areas of disposal of electronic equipment and contracting in the areas of procuring EPEAT and Energy Star electronics.

IMPLEMENTATION METHODS

Where current equipment is capable of greater energy efficiencies, establishing and implementing sustainability policies will require minimal cost. In addition, we expect a cost savings in many cases due to enforcement of such policies covering power management, duplex printing, and other energy efficient or environmentally preferred options and features on all eligible agency electronic products. When new IT equipment is purchased for refresh and other purposes (i.e. through Capital Planning Investment Control (CPIC) and other procurement processes), the new IT equipment will be held to "Green" standards (examples include, but not limited to Energy Star and EPEAT). Capital costs may be required to implement systems to reduce Green House Gas Emissions, but the expectation is that these costs will be recuperated over the life of the system.

Implementing datacenter and server best practices may require greater capital investment. These activities may be financed through alternative financing which will help finance energy efficient products. Appropriations may be requested as needed.

OPM's Information Technology (IT) Strategic Plan states that the Office of the Chief Information Officer (OCIO) will address any technology initiatives that arise related to Presidential initiatives, such as EO 13514²⁶. In addition, OCIO has committed to implementing innovative practices, such as green IT and cloud computing, to ensure the successful modernization of OPM's IT solutions and infrastructure. In its IT Strategic Plan, OPM has committed to implementing green IT practices such as enabling green settings on 50% of IT equipment in 2010 and 100% of equipment thereafter.

This goal relates to reducing GHG emissions, preventing pollution and eliminating waste, and implementing sustainable acquisition practices. The use of electronics requires energy, which is most often generated through processes that emit GHGs. Electronics contain heavy metals that, if not managed properly, can be harmful to human health and the environment. By managing electronics to extend their life and ensuring that electronics are properly disposed OPM can further prevent pollution. Purchasing electronics that are more energy efficient or that contain fewer hazardous substances will help OPM meet its sustainable acquisition goals. Efficiency can be increased even more if electronics are configured for optimal energy use and if staff is trained to shut down equipment when not in use.

If functional, electronics should be reused, donated, or sold before considering disposal. When complete diversion from the waste stream is not possible, electronics should be sent to an R2 to ensure that harmful constituents and recyclable pieces are removed and only true waste parts are disposed. Specific actions for electronics and data center best management practices are listed below in Table 7-1.

Table 7-1: EP Electronics Management Actions

Concept	Actions
EP Electronics	Update Electronic Stewardship Policy.
Management	Promote electronic alternatives to printing and enable the duplex
	printing feature for printing/copying
	Communicate policy revisions to staff via memo or training.
	Identify products used by OPM that are available in Energy Star certified varieties.
	Develop a procedure to phase non-Energy Star products as they get old or when new renovations are made (incorporate into the GPP).
	Enable energy & resource saving features on 100% of applicable workstations and monitors.
	Develop instructions for enabling energy and resource saving features.
	Update electronics procurement process and train staff or provide written guidance on enabling instructions
	Work with Contracting to update the GPP and include strategies to exceed the existing baseline of purchasing 95% EPEAT-registered electronics.

Table 7-2: Responsible Electronics Disposal Actions

Concept	Actions
Review and update	Continue to review the existing Electronics End-of-Life policy
End-of-Life policy	Research methods to extend the useful life of electronics and test
	methods
	Developed a standard operating procedure (SOP) describing proper
	recycling and disposal actions for employees to take
	Continue to communicate policy revisions and SOPs to staff via memo
	or training
Prepare equipment for	Remove sensitive data from electronic equipment
disposal	Determine if equipment is usable

Reuse equipment internally	Post equipment details on a centralized web-based program for OPM employees to share products (See Goal 7)
,	Develop and provide a disclaimer indicating that the new owner of the equipment must dispose of it using an R2 when the time comes
	Keep a record (in the form of a receipt or other statement) of the
	transfer of ownership to track the equipment's diversion from the
	waste stream (repeat for all steps listed below).
Give equipment to another federal agency	Prepare a report of Excess Property and submit to GSAXcess ²⁷
Donate equipment	Donate usable computers and related peripheral equipment to GSA's CFL Program ²⁸
	Develop and provide a disclaimer indicating that the new owner of the equipment must dispose of it using an R2 when the time comes
Sell equipment	Research appropriate sources to post unneeded equipment for sale and post
	Develop and provide a disclaimer indicating that the new owner of the equipment must dispose of it using an R2 when the time comes
Recycle equipment	Look up which Unicor ²⁹ recycling facility is closest to the office that needs to recycle equipment
	Complete and submit Unicor's vendor registration package
	Package and ship equipment according to Unicor's website

Table 7-3: Electronics and Data Center Best Management Practices Actions

Concept	Actions
Review and update polic	ies to include data center best management practices
Increase energy	Review cooling systems and research opportunities to enclose servers
efficiency of servers	in hot aisles in order to concentrate cooling directly onto the racks
	Review redundancy requirements and streamline use where possible
	Research and purchase high-efficiency power supplies for servers
	(ideally 80% or higher efficiency power supplies)
	Research methods to use source energy consumption as the
	preferred energy efficiency metric for data centers
	Identify underused servers and consolidate multiple physical servers
	into virtualized servers
	Research energy efficient appliances, such as cooling systems, to
	reduce energy use where Energy Star products are not available
Reduce GHG emissions	Research the feasibility of using alternative clean power sources such
	as photovoltaic systems, wind energy, and geothermal for the
	datacenters
	Review current contracts with energy providers to maximize use of
	renewable energy (i.e. wind, solar, geothermal, etc.)
	Allow employees to telework

PLANNING TABLE

Table 7-4: Electronic Stewardship & Data Center Planning Table

ELECTRONIC STEWARDHIP & DATA CENTERS	Unit	FY 10	FY 11	FY 12	FY 13	FY14	FY15
% of electronic product acquisition covered by current Energy Star specifications that must be energy-star qualified ³⁰	%	100%	100%	100%	100	100	100
% of covered electronic product acquisitions that are EPEAT- registered	%	95%	95%	95%	100	100	100
% of covered electronic product acquisitions that are FEMP- designated	%	N/A	N/A	N/A	N/A	N/A	N/A
% of agency, eligible PC, Laptops, and Monitors with power management actively implemented and in use	%	100%	100%	100%	100%	100	100
% of agency, eligible electronic printing products with duplexing features in use ³¹	%	Unknown	95%	95%	95%	95%	95%
% of electronic assets covered by sound disposition practices ³²	%	100%	100%	100%	100%	100	100
% of agency data centers independently metered, advanced metered, or sub-metered to determine monthly (or more frequently) Power Utilization Effectiveness (PUE).	%	0%	0%	10%	20%	30%	40%

AGENCY STATUS

In the year ahead, OPM will work to institutionalize electronic stewardship and green data center management throughout the agency. OPM will document the successes and challenges we encountered while trying to create a culture of sustainability within the OPM CIO.

In recent years, OPM has encountered issues that, unless addressed, will be detrimental to the Agency over time. For example, key infrastructure (e.g., hardware and software tools) is aging and in need of modernization. Necessary funding to accommodate a refresh of technology, equipment, and staffing is severely lacking, delaying the required modernization of the agency's IT infrastructure. Several mandates and requirements remain unfunded. Although OCIO continues to effectively manage its IT spending, issues of adequate funding remain in the forefront of OCIO priorities, it is hoped that these will be resolved expeditiously.

RETURN ON INVESTMENT

OPM is developing a standard ROI calculation method for use by program offices. ROI has not been done up to this point.

HIGHLIGHTS

- OPM IT has committed to ensuring that 50% of IT equipment that is green certified in 2010. 75% in 2011, 90% in 2012, and 95% in 2013
- OPM has committed to improving its power usage efficiency to be 1.94 in 2010, 1.8 in 2011, 1.7 in 2012, and 1.6 in 2013

GOAL 8: AGENCY INNOVATION & GOVERNMENT-WIDE SUPPORT

The OPM Director has encouraged innovation and creativity when designing OPM's strategy to meet EO 13514 sustainability goals. OPM intends to use its unique mission and position to investigate non-traditional personnel policies to incentivize federal employees to conserve resources and reduce greenhouse gas emissions.

OPM will approach agency innovation through several different avenues. First, OPM is experimenting directly with sustainability-supporting personnel policies within our own agency. For example, we are investigating new flexible work initiatives to reduce the number of commuting trips taken by employees. Second, OPM is executing cross-agency sustainability initiatives that have natural synergies with other internal initiatives such as health and wellness. Finally, the OPM Green Team is increasing employee education and participation in behavioral efforts such as recycling and energy conservation.

The Office of the Director will be responsible for developing and implementing new personnel policies and connecting these initiatives to sustainability to support Goal 8.

IMPLEMENTATION METHODS

OPM is currently experimenting with personnel policies to support the achievement of EO 13514 sustainability goals. Last year, OPM implemented an initiative called Results-Oriented Working Environment (ROWE). This program is designed to reduce employee commute greenhouse gas emissions and improve the quality of life for OPM employees. While traditional teleworking programs allow employees to work from home on pre-defined days, ROWE provides even greater flexibility. For example, an OPM employee could work an alternative work schedule one week, telework on Tuesday and Wednesday the next week, and telework Thursday and Friday of the following week. Although OPM had planned to track any reductions in emissions resulting from ROWE, it has so far been unable to devise an accurate and simple metric. This may be an area more suited for long-term study.

Also, OPM is executing cross-agency and cross-program sustainability initiatives. As one example, OPM is continuing its collaboration with GSA and DOI, two agencies located in close proximity to OPM headquarters, on a Federal Campus initiative to build a sense of community within these agencies. As one initiative, the group holds a weekly shared farmer's market in the OPM plaza, which features local produce and food products (breads, cheese, etc.). In addition, DOI, in consultation with a GSA horticulturist, has created an organic community garden at its South Building. OPM is participating in the garden by inviting employees to volunteer in planting and maintaining the garden.

OPM will track these innovations through metrics. OPM will track the number of cross-agency or cross-program events with greater than 50 attendees in which sustainability goals have been included. For example, a mid-week farmer's market that attracts more than 50 attendees will be counted as 1 event. OPM is also hoping to track employee awareness of sustainability initiatives as part of the annual employee commute survey. We will use these results to determine our effectiveness of SSPP training and internal outreach efforts. At this time, OPM does not anticipate these initiatives will require additional funding since they have been designed to integrate with existing programs.

OPM plays an important role in the use of telework government-wide. The Telework Enhancement Act of 2010 was signed on December 7, 2010. It directs the U.S. Office of Personnel Management to provide telework program policy guidance and support to agencies in the areas of pay and leave, agency closure, performance management and other human resources policy issues. The law requires each agency to designate a Telework Managing Officer (TMO) to work with management to achieve mission-related goals. This cadre of senior management officials will be instrumental in helping drive change and should work with agencies' senior sustainability officers.

By June 7, 2011, agencies are required to meet several goals: establish a telework policy, determine eligibility of employees, and notify all employees of their eligibility to telework. Continuing discussions and implementation efforts will help ensure teleworking employees enter into a required written agreement with managers, and that employees who are eligible to participate and their managers successfully complete an interactive telework training program prior to entering into an agreement.

Finally, the Act requires agencies to measure and report upon participation in telework and encourages them to assess the impact of telework on anticipated outcomes such as recruitment, retention, performance, and emergency preparedness.

Table 8-1: Agency Innovation & Government-Wide Support Table

AGENCY INNOVATION & Government-Wide Support		FY 10	FY 11	FY 13	 FY 20
Programs, Projects, Initiatives that support Gov-wide efforts	#	3	5	Hold	Hold
Employee awareness of SSPP goals as measured in the annual commute survey	%	10	25	33	90

RETURN ON INVESTMENT

See ROI for Goal 3.

AGENCY STATUS

OPM has executed the following steps to facilitate increased use of telework across government:

- Hosted meetings (March 28) and a learning forum (April 6) for TMOs and coordinators for further guidance from experts in the implementation of the Act, as well as facilitated the exchange of ideas and best practices as agencies work to develop telework programs,
- Revised and updated <u>www.telework.gov</u> to ensure timely and comprehensive resources to TMOs and other stakeholders. These revisions include the establishment of a major section dedicated to information on the Act. The website revisions are currently undergoing internal OPM clearance,
- Initiated improvements to the training available to agencies through telework.gov to ensure high-quality, interactive and broadly-accessible telework training for Federal employees and managers,

 Provided ongoing, individual consultation to multiple agencies as they work to achieve the requirements of the Act, develop programs, and set meaningful telework program goals.

W/L/W has formed the Interagency Telework Measurement group to assist agencies to address the mandated measurement requirements. Accomplishments during this quarter include improvement of existing instruments (e.g., annual telework data call; Employee Viewpoint survey) and development of a systematic plan to facilitate agency data collection and reporting.

OPM is coordinating with other agencies and offices, including GSA, FEMA, OMB and CEQ, to ensure that telework is used as a tool to improve continuity of operations (COOP), increase management effectiveness and improve employee work-life balance. In the management effectiveness category, reduction of real estate costs and environmental footprint are key areas of emphasis.

Internally, OPM has designated a Senior Executive as Telework Managing Officer (TMO), revised its telework policy in partnership with union leadership and will notify all employees of their eligibility to telework. Tools have been created to assist employees and supervisors in having results-based discussions about telework and other workplace flexibilities, and training sessions will be held to ensure that telework decisions are based on duties and desired outcomes. Since OPM has approximately 1,800 FTE who work in a mobile environment full-time (for the purposes of the Telework Enhancement Act, OPM's Federal Investigative Services (FIS) field investigators are not teleworkers) the TMO will work with FIS and our Senior Sustainability Officer to explore opportunities to reduce our real estate footprint for teleworkers and mobile workers.

OPM acknowledges the need for a greater culture of sustainability throughout the organization. Setting the example is the best way to do this, so OPM has made small changes, such as placing more recycling bins around the building and switching from Styrofoam to biodegradable trays in the cafeteria, that signal institutional change. Additionally, the Director held a Town Hall in September 2010 on the recent Sustainability initiative, to more directly communicate OPM leadership commitment to sustainability. This event informed all OPM employees about the goals of EO 13514 and what the agency is doing, and also introduced the Green Team and showed a short video of simple ways to help OPM meet its goals. The video is often replayed on the TVs in the headquarters lobby.

OPM has also worked with other agencies in achieving the goals set out in EO 13514. An employee from the Office of the Director has been participating in several of the working groups that have formed in response to EO 13514, such as Section 9 on Scope 3 Commuting emissions. OPM has also served as a model for other agencies that hope to implement their own partnership with Capital Bikeshare to offer memberships to employees. These agencies include GSA, DOI, and the Peace Corps.

SECTION 3 - AGENCY SELF EVALUATION

2010 QUESTIONS

Table C: 2010 CEQ Agency Sustainability Questions

Question	Yes/No
Does your Sustainability Plan incorporate and align sustainability goals, GHG targets and overarching objectives for sustainability with the Agency Strategic Plan?	Yes
Does it provide annual targets, strategies and approaches for achieving the 2015 and 2020 goals?	Yes
Is the Sustainability Plan consistent with the FY2012 President's Budget?	Yes
Does the Sustainability Plan integrate all statutory and Executive Order requirements into a single implementation framework for advancing sustainability goals along with existing mission and management goals, making the best use of existing and available resources?	Yes
Does your plan include methods for obtaining data needed to measure progress, evaluate results, and improve performance?	No*

^{*}OPM is still unable to accurately measure progress on some of our efforts, mainly related to Scope 3 emissions. This is due to the inconsistency of the variables.

Appendix 1: Energy & Sustainability Resources/Investments (Circular A-11, Section 25)
Submitted via MAX.

Appendix 2: Agency Climate Change Adaptation Policy Statement See attached.

Appendix 3: Draft Agency Energy & Sustainability Scorecard (July 2011)

- Place orders for 300 AFVs to replace existing vehicles. To date, OPM has received 205 AFV replacements.
- Institute AF fueling education to raise AF consumption by 10% in FY11; Report consumption monthly to each of 3 PM regions. OPM is in the process of instituting AF education to raise AF consumption by 10% by the end of FY11.
- Monitor contracts for green purchasing compliance; conduct corrective action as needed and will
 continue to integrate sustainable acquisition requirements into solicitations and new contracts
- The FEI established a 12-month baseline of 40% for ware-washing efficiency, with a goal to improve this by 10% for FY 2011.
- OPM in partnership with DOI, and GSA participated in a large Earth Day event where OPM personnel provided numerous informational handouts on energy conservation and greening topics that employees could use for both home and work.
- Replacement of the soda machines on the basement level with energy efficient models.
- Working on amending the current trash removal contract or implementing a new contract to divert 100% of our solid waste to a waste to energy facility.
- Cleaning of the booster heating system to improve heat transfer and improve the energy efficiency of the system therefore reducing our steam usage.

ACTIONS TAKEN SINCE JULY 1, 2010:

- Conducted green purchasing training, monitoring and developed corrective actions as needed.
- Reduced operating hours of equipment, Installed metered faucets and low-flow water heads, Posted
 educational displays on water/energy conservation and conducted a public awareness session at
 Theodore Roosevelt Building (TRB) Continued participation in an experimental greening water
 treatment program (TRB only);.
- Continue to participate in experimental greening water treatment program (TRB) only.
- Continue to conduct periodic public awareness sessions on all forms of energy conservation.
- Issued directive to order only compact and most efficient vehicles available.
- Installed energy efficient lighting in Macon office.
- Met all Electronic Stewardship goals; OMB approved Data Center Consolidation Plan.
- Demonstrated GPP compliance; Integrated requirements into solicitations and new contracts.
- Procured 5% renewable energy from new sources; partnered with GSA to secure a new renewable energy purchase agreement.
- Partnering with GSA once again to secure a new 5% renewable energy purchase agreement.
- Partnering with GSA to develop the ARRA projects to move them towards construction phase.
- Replacement of the HVAC system in the snack bar with a new more energy efficient model.

- Working on amending the current trash removal contract or implementing a new contract to divert 100% of our solid waste to a waste to energy facility.
- Installed energy efficient stand-alone Liebert air-conditioning units in the Macon, Georgia data center in FY2009/10.
- Installed energy efficient lighting in FY2010 throughout the entire Macon facility (74,801 rentable square feet).
- In Field Offices OPM has over the past year increased percentage of participation in recycling of paper from 87.1% to 96%, and increased percentage of recycling in bottles and cans from 66.13% to 76%.

ACTIONS PLANNED FOR NEXT 6 MONTHS:

- Starting construction on the ARRA project
- Replacing the soda machines in the building with energy efficient machines.
- Replacement of the soda machines in the building with energy efficient models.
- Renovating the snack bar with more energy efficient lighting and equipment.
- Continue working on amending the current trash removal contract or implementing a new contract to divert 100% of our solid waste to a waste to energy facility.
- Replacement of air handling units in the building under the ARRA project.
- Creation of a Sustainability room in the TRB, to repurpose office equipment and supplies.

Appendix 4: Acronyms & Abbreviations

AFV	Alternative Fuel Vehicle
ARRA	American Recovery and Reinvestment Act of 2009
BTU or Btu	British Thermal Unit
C&D	Construction and Demolition
CEQ	Council on Environmental Quality
CFL	Computer for Learning
CIO	Chief Information Officer
CPU	Central Processing Unit
EISA	Energy Independence and Security Act
EMS	Environmental Management System
EO	Executive Order
EPA	Environmental Protection Agency
EPAct	Energy Policy Act
EPCRA	Emergency Planning and Community Right-to-Know Act
EPEAT	Electronic Product Environmental Assessment Tool
EPP	Environmentally Preferable Purchasing
ESPC	Energy Services Performance Contract
EUL	Enhanced Use Lease
FEMP	Federal Energy Management Program
FTE	Full Time Employee
FY	Fiscal Year
gal	gallon

GHG	Greenhouse Gas
GPRA	Government Performance and Results Act
GSA	General Services Administration
GSF	Gross Square Feet
IT	Information Technology
MILCON	Military Construction
mtCO2e	Metric tons of Carbon Dioxide Equivalent
NEPA	National Environmental Policy Act
O&M	Operations and Maintenance
OMB	Office of Management and Budget
PPA	Power Purchase Agreement
PUE	Power Usage Efficiency
R2	Responsible Recyclers
RIA	Regulatory Impact Analysis
ROI	Return on Investment
SF	Square Feet or Square Footage
SNAP	Significant New Alternatives Policy
SRPO	Senior Real Property Officer
SSO	Senior Sustainability Officer
TRI	Toxics Release Inventory
USC	United States Code
UESC	Utility Energy Services Contract

ⁱ EPAct

ii Agencies that have a Compliance Management Plan rather than an Environmental Management System should modify the table accordingly.

ⁱⁱⁱ Sustainable Building Implementation Plans, Sustainable Procurement (also known as Green or Affirmative Procurement, or Green Purchasing), Electronic Stewardship Plans, Chemical Reduction Plans, Pollution Prevention Plans, Compliance Management Plans, etc.

iv In fleet vehicles.

v OPM has addressed the challenges with this goal in the narrative titled "Fleet: Reduce Petroleum Use and Optimize Fleet"

⁶ The increased percentage of alternative fuel use is relative to the FY 2005 baseline.

⁷ GHG emissions are measured in mtCO2e and the percentage reductions are reductions in mtCO2e.

⁸ GHG emissions are measured in mtCO2e and the percentage reductions are reductions in mtCO2e.

⁹ Refer to the OFEE Scope 3 GHG Emissions Reduction Target Tool and User's Manual for detailed descriptions of each scope 3 categories and calculation methods. When writing narrative for this goal area, please note that it is not necessary to provide a great deal of detail. Agencies should focus on general strategy for reducing Scope 3 emissions and should plan to provide greater detail on milestones and actions taken to reduce emissions associated with agency-specific targets in subsequent updates to this plan.

http://www.epa.gov/WaterSense/water efficiency/federal agencies.html

¹⁰ Applies to buildings at least 5,000 sf. Do not calculate the incremental cost associated with selecting a different leased facility. The costs should reflect actual quantifiable costs such as 3rd party certification programs, facility upgrades, or similar. If there are no quantifiable costs, enter \$0 for costs. Use the text write up to describe the methodology for working towards the goal.

¹¹ EPA Water Efficiency Guidance for Federal Agencies:

¹² Technical Guidance for Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the EISA: http://www.epa.gov/owow/NPS/lid/section438/pdf/final_sec438_eisa.pdf.

¹³ Toilet Retrofit Devices: http://www.allianceforwaterefficiency.org/Toilet Retrofit Devices.aspx

¹⁴ EPA's Reduce, Reuse, Recycle: http://www.epa.gov/osw/conserve/rrr/reduce.htm

¹⁵ EPA's WasteWise Program: http://www.epa.gov/osw/partnerships/wastewise/challenge/building.htm

¹⁶ OSHA's HazCom Program: http://www.osha.gov/dsg/hazcom/index.html

¹⁷ Siri MSDS Index: <u>http://hazard.com/msds/</u>

¹⁸ EPA's Environmentally Preferable Purchasing: http://www.epa.gov/opptintr/epp/index.htm

¹⁹ Energy Star: http://www.energystar.gov/

²⁰ Federal Energy Management Program: http://www1.eere.energy.gov/femp/

²¹ EPA's WaterSense Program: http://www.epa.gov/watersense/index.html

²² USDA Biopreffered Program: http://www.biopreferred.gov/?SMSESSION=NO

²³ EPA's Comprehensive Procurement Guidelines: http://www.epa.gov/wastes/conserve/tools/cpg/index.htm

²⁴ EPA's Significant New Alternative Policy Program: http://www.epa.gov/ozone/snap/

²⁵ OPM has one, centrally managed, logical datacenter with equipment in several locations to support the mission and DR. Locations include TRB (i.e. BH12, BH04, SB330, SB347, OIG's closet, etc), Macon (two server facilities), Ft. Meade (one server facility), and Boyers (two server facilities).

http://www.opm.gov/about opm/reports/OPM IT Strategic Plan FY10-13.pdf

GSA Xcess: http://gsaxcess.gov/

²⁸ GSA Computers for Learning: http://computersforlearning.gov/

²⁹ Unicor: http://www.unicor.gov/?navlocation=Recycling

³⁰ Device types are the electronic products listed under the Energy Star program that the Agency purchases or leases. This count should include the percentage of products that met energy star standards at the time of purchasing during the reporting period (FY10). Please note it includes products with stand-by power. For the purposes of this metric, Energy Star products are not electronics such as lighting and appliances that are covered by the Sustainable Acquisition Goal. You can go to http://www.energystar.gov/ under "Computers and Electronics" section for the list of targeted products. The goals/targets within Goal 7 are more narrowly scoped to include servers, computers, monitors, peripherals, and other office equipment.

³¹ Eligible electronic products include, but are not limited to, imaging equipment such copiers, faxes, printers, scanners, etc.

³² Electronic assets are generally those electronics products owned and/or leased by the Agency that need to be disposed of in accordance with acceptable end-of-life practices. Some examples of sound disposition practices include, but are not limited to, GSA Xcess, including transfer to eligible federal entities and donation to eligible states and nonprofits (Note: The use of GSA Auctions, public sales, and abandonment and destruction provided by GSA is outside of the scope of GSA Xcess and does not ensure sound disposition.); recycling through Unicor; donation through GSA's Computer for Learning (CFL) or other non-profit organizations; and/or recycling through a private recycler certified under the Responsible Recyclers (R2) guidance or equivalent certification. Agencies are encouraged to describe in the narrative write-up approximately which percentage is attributed to each disposal method. At this point, the percentage is set by the agency. Agencies should set a target as close to 100% as is reasonably achievable.



UNITED STATES
OFFICE OF PERSONNEL MANAGEMENT
Facilities, Security, and Contracting
1900 E Street, NW
Washington, DC 20415