Department of the Treasury



Treasury Strategic Sustainability Performance Plan

June 2010

Office of the ASM / CFO

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1. Agency Policy Statement

The Treasury Department is the executive agency responsible for promoting economic prosperity and ensuring the financial security of the United States. Treasury is responsible for a wide range of activities, including advising the President on economic issues, encouraging sustainable economic growth, and governing financial institutions. Treasury operates systems critical to the nation's finances, such as coin and currency production, disbursement of payments to the public, revenue collection, and borrowing.

Treasury is committed to demonstrating leadership in environmental stewardship. Treasury also commits to complying with environmental and energy statutes, regulations, and Executive Orders. Treasury's bureaus are responsible for accomplishing these goals. Current priorities include:

- Following through on energy reduction projects throughout Treasury to ensure the aggressive 33% goal for reducing Scope 1 and 2 emissions by 2020 is met.
- · Completing the design/build phases for the wiping solution recycling system at the Bureau of Engraving and Printing in Washington, DC.
- · Obtaining Leadership in Energy and Environmental Design (LEED) certification and complying with the Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings at the West Point Mint facility and Treasury's Main Building in Washington, DC.
- Improving the life cycle environmental management of electronic assets.

Recent accomplishments at Treasury include:

- · Treasury has increased its purchase of Renewable Energy Credits (RECS), and as of July 31, 2010, all the energy required to power the Main Treasury Building and Treasury Annex will be from renewable sources through these certificates.
- . In March, Treasury revised its order for 87 new vehicles for its fleet, eliminating 15 SUVs, and purchasing 19 hybrid vehicles. Over 90% of the vehicles exceed the required greenhouse gas (GHG) rating of 6, and the projected GHG emissions decreased over 400% from the original order.
- Twenty-five employees were recognized in November 2009 for their commitment to eliminating waste and collectively recycling more than two million pounds of electronics. Also, the Department received the Electronics Reuse and Recycling Campaign award from the Council on Environmental Quality.
- · Bureau of Public Debt's (BPD) data centers have been consolidated and a significant energy sub-metering project has been completed.
- The Internal Revenue Service (IRS) submitted a Preliminary Inventory Assessment for the Data Center Consolidation initiative, including 15 data centers with over 4800 servers. IRS plans to retire about 2000 servers by 2013.

Treasury is a leader in environmental management, minimizing waste and GHG emissions, and reusing and recycling material. We face a number of challenges, including integrating social costs into the budgetary process. However, this plan addresses these issues.

Dan Tangherlini, Assistant Secretary for Management and Chief Financial Officer

I. Sustainability and the Agency Mission

a. Mission alignment

Treasury remains resolute in being the steward of U.S. economic and financial systems and an influential participant in the global economy. Performing this mission in an environmentally-friendly manner compliments Treasury's goals.

Treasury will conduct its business in a way that reaffirms its commitment to protecting the environment. Achieving the sustainability goals outlined in this plan is consistent with Treasury's mission of serving the American people and strengthening national security by managing the U.S. Government's finances effectively.

Treasury is in the process of migrating to more efficient electronic infrastructure operations. Server virtualization, power management, and data center consolidation are initiatives that will drastically reduce energy consumption. Energy reduction projects such as these will reduce greenhouse gas emissions and save money by lowering energy, water, and gas consumption. Adopting sustainable practices will ultimately reduce maintenance and operating expenses; use less energy overall and ensure that what is used will come from cleaner sources; and make Treasury an even better place to work.

Notable challenges faced by Treasury bureaus include how to handle furnace shut-downs associated with the move to a four-10 hour day work schedule at the U.S. Mint in Denver. The availability of alternative fuel vehicles and refueling stations continues to be an issue on a nationwide basis. Also, developing a systematic way of making choices to implement projects to reduce greenhouse gas emissions when the lifecycle costs outweigh the benefits is a challenge. Finally, Congressional mandates relating to raw materials for both paper money and coins limit Treasury's ability to explore more sustainable feedstock.

b. Agency overview

It is valuable to understand the structure of the Department of the Treasury when considering the implementation of this plan. According to the Department of Labor, Treasury had approximately 108,000 employees at the end of 2009¹. This number fluctuates throughout the year. Treasury owns 11 of its operating facilities and has delegated lease authority from the General Services Administration for several others. Treasury consists of the policy offices in Treasury headquarters, collectively known as the Departmental Offices (DO), and 11 bureaus. These bureaus will be referred to by their acronyms or initialisms throughout this report.

BEP – Bureau of Engraving and Printing BPD – Bureau of Public Debt FinCEN – Financial Crimes Enforcement Network

www.osha.gov. Statistics downloaded on May 19, 2010.

FMS – Financial Management Service

IRS - Internal Revenue Service

Mint - United States Mint

OCC – Office of the Comptroller of the Currency

OIG – Office of the Inspector General

OTS – Office of Thrift Supervision

TIGTA – Treasury Inspector General for Tax Administration

TTB - Alcohol and Tobacco Tax and Trade Bureau

The IRS is the largest bureau - employing almost 90% of Treasury personnel. Both BEP and the U.S. Mint have manufacturing facilities. In this report, the terms "Department" and "Treasury" mean the entire department, including all bureaus. Treasury is a mix of centralized planning and reporting that occurs at the Departmental level, such as with the OMB scorecards, and decentralized planning and implementation that occurs at the bureau level, such as through Environmental Management Systems and agency specific budgets. The Office of Environment, Safety, and Health in Departmental Offices submits environmental and energy reports on behalf of the Agency. The DO and bureaus have personnel dedicated to implementing environmental, energy, and fleet management programs. Many people are full time environmental professionals, and others have this responsibility as collateral duty.

II. Greenhouse Gas Reduction Goals

The Department of the Treasury has set ambitious goals in all areas of greenhouse gas (GHG) emission reduction. Scope 1 and 2 GHG emissions refer to releases from those assets that are directly owned by the government or relate to energy generated for use by the government. The baseline year was 2008 and the reduction target was set for 2020. Projections show that if Treasury met energy reduction targets in Executive Orders 13423 and 13514, Scope 1&2 emissions decrease by 22 percent. However, Treasury set a more ambitious goal of reducing emissions by 33 percent.

Treasury has a specific plan to reach the Scope 1 and 2 GHG emissions goal. We identified 45 energy reduction projects throughout our bureaus. These projects include conducting comprehensive energy audits and implementing major renovations on buildings and manufacturing facilities, utilizing renewable energy sources, reducing petroleum use, and downsizing the agency fleet.

Greenhouse Gas Scope 3 emissions have presented a challenge for data collection. Using the spreadsheet tool that was provided by the Office of the Federal Environmental Executive, we have estimated a portion of our emission inventory. This partial inventory is based on estimates of the transmission and distribution (T&D) losses from purchased energy, contracted waste disposal, and employee travel, including commuting. Employee travel is the largest contributor, followed by the T&D losses. Our challenges in setting a goal include the correlation between the number of employees and the corresponding GHG releases, for example from commuting and wastewater treatment. Treasury could grow significantly in the coming years as a result of recently passed and pending legislation, such as health care and financial reform. For this reason, the magnitude of potential growth in employees is difficult to forecast and for the purposes of

goal setting, we have assumed steady state conditions for the number of employees between now and 2020.

We have set a goal of reducing Scope 3 GHG emissions by 11% by 2020 as compared to the 2008 baseline. We will work to achieve this goal by decreasing energy usage (which directly results in less energy loss), reducing our solid waste disposal, and continuing to encourage alternate work arrangements to decrease travel where appropriate and in a way that does not impede our mission.

III. Plan Implementation

Treasury is committed to effective implementation of Executive Orders. 13514, 13423, and other applicable Executive Orders (E.O.) and statutes. The activities to meet targets in these requirements will be integrated into the daily operations and maintenance of our facilities.

a. Internal Coordination, Communication, and Dissemination to the Field

Many offices throughout Treasury were involved in developing this plan and oversee the various areas of sustainability, including the Office of Environment, Safety, and Health; Office of the Procurement Executive; Office of Asset Management; Office of Management and Budget; and the Chief Information Office. These offices collected information from the respective offices in the Treasury bureaus and gathered their input on their internal goals, which assisted in setting the agency goals.

The requirements of the Sustainability Plan were communicated to all Treasury bureaus through joint Environmental, Energy, and Fleet Council meetings and by ongoing email messages as the requirements in the plan template from OFEE changed. All bureaus provided input into the plan. The final plan that is submitted to OFEE will be distributed to the leadership in offices throughout Treasury Headquarters, to the Heads of each of Treasury's 11 Bureaus, and among the environment, energy, and fleet management professionals.

b. Leadership and Accountability

Treasury has identified a Senior Sustainability Officer to have overall responsibility for the Sustainability Plan. Responsibility for implementing the requirements in executive orders is embedded in the position descriptions and performance plans of the Senior Sustainability Officer, and Environmental, Energy and Real Property staff.

Coordination and dissemination of the plan to the field offices come from Departmental Offices to various contacts within the bureaus. When new information is received by the contacts, it is then disseminated to all appropriate personnel for their review to ensure that they are aware of the goals that have been set. For the Electronic Stewardship and Data Center initiatives, a Sustainability Representative will be assigned to ensure that a communication plan is developed addressing employee's responsibilities.

c. Agency Policy and Planning Integration

Treasury continues to integrate sustainable practices into all areas of procurement, operations, information technology, and finances. We continue to update, implement, and maintain existing plans and policies to include sustainability. Department-wide policies are addressed through a series of Treasury Directives, which include requirements in Executive Orders 13423 and 13514. The 5-year strategic plan is being developed at the same time this plan is being finalized, and draft sustainability language has been proposed and is being edited to include in the strategic plan. Progress toward sustainability goals is included in various documents such as the annual energy reports and the bi-Annual Office of Management and Budget (OMB) scorecards. For the last three reporting periods, Treasury is the only agency to be rated green in both progress and status in all areas of environmental/energy/fleet management.

The sustainability goals in Executive Orders and regulations are also tracked through the formal Environmental Management Systems (EMS) that exists within many of Treasury's larger facilities. The EMS contain goals outlined in Executive Orders and Treasury's *Environmental Management and Sustainability Program* Directive, 75-09, and specifically address leadership and accountability. Table 1 provides a crosswalk of the different elements of this plan and whether or not they are reflected in current plans.

Table 1: Critical Planning Coordination

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Originating Report / Plan	Scope 1 & 2 GHG Reduction	Scope 3 GHG Reduction	Develop and Iviaintain 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
"Sample Plan"	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Yes	No
GPRA Strategic Plan	No	No	No	No	No	No	No	No	No	No
Agency Capital Plan	Yes	No	No	No	No	Yes	Yes	Yes	Yes	Yes
A-11 300s	No	No	No	No	No	No	No	Yes	Yes	Yes
Annual Energy Data Report	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes
EISA Section 432 Facility Evaluations/Project Reporting	Yes	No	No	No	No	Yes	No	Yes	Yes	Yes
Budget	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
Asset Management Plan / 3 Year Timeline	Yes	Yes	Yes	n/a	n/a	Yes	Yes	Yes	Yes	Yes
Circular A-11 Exhibit 53s	No	No	No	No	No	No	Yes	No	Yes	No
OMB Scorecards	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
DOE's Annual Federal Fleet Report to Congress and the President	Yes	Yes	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Data Center Consolidation Plan	Yes	Yes	No	No	Yes	No	No	Yes	Yes	Yes
Environmental Management System	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Electronic Stewardship Implementation Plan	No	No	n/a	n/a	n/a	n/a	n/a	n/a	Yes	No
Sustainable Buildings Implementation Plan	No	No	n/a	Yes	n/a	n/a	n/a	n/a	No	No

Please note: The Department of Treasury is a mix of centralized planning and reporting that occurs at the Departmental level, such as with the OMB scorecards, and decentralized planning and implementation that occurs at the bureau level, such as through formalized Environmental Management Systems. Some bureaus also have their own strategic plans. A "Yes" in this table reflects a "Yes" within the Department, but does not necessarily imply a "Yes" for all bureaus.

d. Agency Budget Integration

Treasury is setting in place a process of aligning sustainability projects with each budgetary submission. The following language was included in the 2012 budget data call from the Office of Management and Budget at Treasury headquarters to the bureaus.

o "Going Green: The Department supports the President in his efforts to have the Federal government lead the way with regards to environmentally-responsible

practices and "going green" and each bureau is strongly encouraged to discuss the various ways in which they are working to implement environmentally-sound practices. It is important to note that all efforts to "go green" should be done within the framework of existing resources and should not require greater financial investment. Below is a list that captures some, but not all, of the efficiency goals the department is working to achieve:

- Greenhouse Gas Reduction
- Increased Energy Efficiency
- High-Performance Sustainable Design / Green Buildings
- Improve Water Use Efficiency and Management
- Pollution Prevention and Waste Elimination
- Sustainable Acquisition
- Electronic Stewardship and Data Centers"

The Treasury bureaus indentified 45 projects over the next 10 years to reduce Scope 1 and 2 greenhouse gas emissions. This information has been forwarded to the budget office for coordination with OMB submissions beyond year 2012. For the Electronic Stewardship and Data Center initiatives, a Treasury Leadership team is being established and will ensure that projects are integrated into strategic planning and the budgeting processes.

e. Methods for Evaluation of Progress

Each bureau is responsible for implementing projects to reduce energy consumption (e.g., electricity, natural gas, petroleum) and consequently decrease greenhouse gas emissions. These projects will be tracked quarterly by the Office of Environment, Safety, and Health within Departmental Offices. The metrics will be confirmation that the project was started by the proposed start date, and percent progress on the project measured against proposed completion date. A longer term metric is to measure the decreases in energy used. Initiatives to decrease the size of our fleet, purchase more efficient vehicles, and decrease miles driven will be tracked by the Office of Asset Management. We are also in the process of determining how we may be able to use budgetary systems to track costs of projects as well.

IV. Evaluating Return on Investment

Treasury attempts to balance the demands of being an effective steward of government resources and carefully considers all purchases and expenses, while also making necessary investments in our facilities and equipment to assist in moving the United States toward sustainability. Monetary and non-monetary items are considered with major projects.

a. Economic Lifecycle Cost/Return on Investment

Our bureaus consider the economic lifecycle costs and return on investment for major initiatives. For example, the BPD performs a life cycle cost analysis on potential energy, water saving and environmental initiatives to determine the economic impact of the project. This cost analysis allows the project to have a ten (10) year simple payback while still qualifying for implementation. In accordance with OMB Circulars A-4, A-11 and

A-94, TTB utilizes the Capital Planning and Investment Control (CPIC) process to select, control, and evaluate investments. TTB includes quantitative and qualitative benefits, lifecycle analysis, and Return on Investment (ROI) as part of each investment evaluation. The CPIC process, combined with leveraging Exhibit 300 forms, helps strengthen alignment of the Bureau's investments with mission needs by ensuring the CPIC process maps to the Bureau's strategic goals through strategic portfolio reviews. The United States Mint Financial Department evaluates the ROI for sustainability projects. The Mint is developing internal policy and guidance for calculating ROI, including steps for performing cost benefit analysis and cost effectiveness analysis, following guidance in OMB Circulars A-4 and A-94. Mint projects, initiatives and efforts will be prioritized based on lifecycle return on investment while taking into account economic, social, and mission related costs and benefits.

DO examines the difference between benefits and costs to ascertain the net present value so senior leadership can determine whether a project is justifiable on economic principles or not, or which project from a range of options is the most economically feasible. Operations and Maintenance costs are listed over a period of performance. This approach of considering costs and benefits can also be used to determine the risks of deferred investments, by analyzing the so-called "do nothing" option against the range of other investments. Properly characterizing the potential costs associated with deferring investments allows managers to make decisions based on the range of possibilities and unintended consequences.

b. Social, Environmental, and Mission-Specific Costs and Benefits

The Office of Environment, Safety and Health is currently working with the DO and Bureau Budget Offices to provide guidance on how to consider social and environmental costs and benefits for major initiatives in the coming years. Specifically on the issue of greenhouse gas emissions, Treasury proposes to use a Social Costs of Carbon (SCC) model as an ROI input for sustainability related projects that may appear <u>not</u> to be cost beneficial considering initial economic investments balanced against annualized savings. Savings may be in the form of decreased energy purchases and decreased operating and maintenance costs.

c. Climate Change Risk and Vulnerability

Treasury is a large agency with facilities throughout the United States. We have facilities on the coasts, such as the San Francisco Mint, that will likely be impacted more directly due to climate change than other facilities. Treasury will convene a sub-committee from our Environmental and Energy Committees and review the literature on climate change effects. We will target having a more comprehensive assessment of the likely impact on our facilities throughout the United States by the end of calendar year 2010. One resource we will use will be the United States Global Change Research Program at http://www.globalchange.gov/publications/reports/scientific-assessments/us-impacts

V. Transparency

The complete Strategic Sustainability Plan will be available to Treasury employees on the DONet Portal. The Strategic Sustainability Plan will be available to the general public through the Treasury internet site and through releases by the Office of the Federal Environmental Executive.

Section 2: Performance Review and Annual Update

I. Summary of Accomplishments

Treasury has worked hard to continue our leadership in environmental management in the past year. We were honored to again receive green ratings in all areas of environmental, energy, and fleet management on the Office of Management and Budget Scorecards. There have been significant steps taken to ensure environmental sustainability throughout all Treasury bureaus. Some specific initiatives and accomplishments are discussed in this section.

Renewable Energy. Treasury has increased its purchase of Renewable Energy Credits (RECS), and as of July 31, 2010, all the energy required to power the Main Treasury and Treasury Annex buildings in Washington, DC will be from renewable sources through these certificates.

<u>Greening the Treasury Fleet</u>. In March, Treasury revised its order for 87 new vehicles for its fleet, eliminating 15 SUVs, and purchasing 19 hybrid vehicles. Over 90% of the vehicles exceed the required greenhouse gas (GHG) rating of 6, and the projected GHG emissions decreased over 400% from the original order, from 38.7 metric tons CO2e to 9.6.

Reuse and Recycling. The Department collectively recycled more than two million pounds of electronics, and received the Electronics Reuse and Recycling Campaign award from the Office of the Federal Environmental Executive, of the Council on Environmental Quality. The United States Mint will receive the 2010 Federal Electronics Challenge Bronze Level Award for acquisition and procurement activities in FY 2009. Twenty-five employees were recognized in November 2009 for their commitment to eliminating waste. The BPD recycling program has been a great success enabling us to divert approximately 270,000 pounds of materials away from the landfill. Thus far, BPD has recycled approximately 142,000 pounds of materials in this fiscal year.

<u>Greenhouse Gas Scope 1 and 2 Commitments:</u> Treasury set an ambitious goal to reduce GHG emissions 33% by 2020. We identified 45 energy efficient facility projects and numerous opportunities to green our fleet that will help to accomplish this goal.

<u>Electronic Stewardship.</u> Treasury has made significant progress in the area of electronic stewardship, including power management and data centers consolidation.

Power Management and Green IT Purchasing: Treasury's largest bureau, the IRS, maintains power settings for 110,000 monitors. Monitors go into sleep mode after 15 minutes of idle time. In FY 2009, all desktop and laptops purchased were EPEAT Gold. A new IRS contract now requires all new copiers have duplex print functionality as the default. Efforts are underway to ensure all existing copiers that are duplex capable have the default setting enabled. The Bureau of Engraving and Printing (BEP) has established policies in purchasing energy efficient technology that has power management features implemented. FinCEN has implemented Power Management on all Computers, and 100% of electronic purchases are Energy Star (if available) and all FinCEN Printers are set up for duplex printing. The TTB recycles 100% of end-of-life electronics through UNICOR or a qualified recycling vendor, and new laptops and monitors purchased in FY 2009 were EPEAT Gold. All DO copiers now default to double-sided copies.

Data Center Consolidation: Treasury is actively pursuing this initiative. The Department is currently collecting metrics from all bureaus with a due date of June 30, 2010. Once the information is received, then a corrective action plan will be developed and implemented based on the results. The IRS submitted a Preliminary Inventory Assessment for the Federal Data Center Consolidation Initiative, including 15 data centers with over 4,800 servers. IRS plans to retire about 2,000 servers by 2013. The IRS is in the process of migrating applications and functionality from physical servers in "field" locations on to the newly deployed VMware infrastructure. The BPD data centers have been consolidated, and a significant energy sub-metering project has been completed

II. Goal Performance Review

- 1. GOAL: Scope 1 and 2 Greenhouse Gas Reduction
- a. Goal Description The Department of the Treasury will reduce Scope 1 and 2
 Greenhouse Gas (GHG) emissions 33% by 2020, as compared with the 2008 baseline.

- a. Buildings
 - 1) Reduce Facility Energy Intensity
 - 2) Renewable Electricity Installation & Use
- b. Fleet
 - 1) Reduce Petroleum Use in Fleet Vehicles
 - 2) Increase Use of Alternative Fuels in Fleet Alternate Fuel Vehicles
 - 3) Optimize Use of Vehicles and Right-Size Fleet
 - 4) Increase Use of Low Emission and High Fuel Economy Vehicles
- **b. Agency lead for goal –** The overall progress toward the goal will be the responsibility of the Office of Environment, Safety, and Health, Departmental Offices Operations, under the Office of the Assistant Secretary for Management (ASM). The Head of each bureau will ultimately be responsible for implementing energy reduction projects and decreases to fleet inventories within their bureaus, but the operational responsibilities are designated down, as explained in the *Implementation methods* section below.

c. Implementation methods – Treasury identified 45 energy efficient initiatives to improve building efficiencies and reach energy reduction goals. Also, bureaus have been asked to reconsider their existing fleets and make changes in terms of total number of vehicles, size of vehicles, and use of alternative fuels. The projects are being tracked by the Office of Environment, Safety, and Health, within Departmental Offices Operations. The bureaus report quarterly on progress in starting the projects and progress toward completion. Agency Directives and Implementation Plans, such as the Sustainable Buildings Implementation Plan, are currently being updated to include projects to reduce GHG emissions.

At the field level, each bureau has a representative responsible for implementing energy reduction projects and offices responsible for audits and corrective actions. For example, at Treasury's largest bureau, the IRS, the Agency Lead is the Director of Real Estate and Facilities Management, Agency-Wide Shared Services. The majority of the GHG emissions from the Department of the Treasury are from IRS activities, so their approach is highlighted here.

The IRS does not own any buildings, but has delegated lease authority in about 25% of the spaces they occupy. For the buildings where they do not have delegated lease authority, and therefore less ability to directly implement facility improvements, they make requests of the General Services Administration to lease space that incorporates the *Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings*, which came from the Interagency Sustainability Working Group. The IRS will continue to complete energy and water audits at its covered facilities and use life cycle cost methodologies (including societal cost of carbon), simple payback, return on investment, and agency mission objectives to determine which projects to implement and with what priority. The IRS will determine the financing avenue for these projects based on the availability of appropriated funds for the fiscal year in which the projects begin. Each covered facility has a Facility Energy Manager (FEM) responsible for audits. Each FEM has been trained within the guidelines outlined in The Energy Policy Act of 1992 and referenced in EISA 2007. They also attend GovEnergy on an annual basis. The IRS purchases more than the required amount of renewable electricity.

Business units within the IRS must justify requirements to lease vehicles based on the mission. The IRS will continue to "right size" the general fleet of underutilized vehicles. Each business unit is responsible for identifying underutilized vehicles. In fiscal year 2009 the IRS decreased the general fleet from 339 to 318. When Hybrid vehicles become available through GSA, IRS will replace fleet vehicles with Hybrids.

<u>Petroleum Reduction</u>: The IRS is committed to support E.O.13423, and decrease the use of petroleum consumption by 2% annually. It will also,

- Replace vehicles with the most fuel-efficient vehicles available from the GSA to include Hybrids
- Encourage the use of public transportation, teleconferencing, and rental of Zip Cars

<u>Alternative Fuel Increase</u>: The IRS will continue to support E.O.13423, by increasing the use of alternative fuel by 10% annually;

- IRS will continue to mandate the use of alternative fuel where it is available. IRS
 will identify private facilities that have alternative fuel available and explore
 options to allow IRS Alternate Fuel Vehicles (AFV's) to refuel at these stations
- **d. Planning Table –** Table 2 shows the annual percent reduction targets for various items that impact Scope 1 and 2 GHG emissions.

Table 2: Scope 1 and 2 GHG Targets

	SCOPE 1&2 GHG TARGET	Unit	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15	FY 16		FY 20
	Energy Intensity Reduction Goals (BTU/SF reduced from FY03 base year)	%	15%	18%	21%	24%	27%	30%	hold		hold
S	Planned Energy Intensity Reduction (BTU/SF reduced from FY03 base year)	%	15%	18%	21%	24%	27%	30%	hold		hold
Buildings	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 renewable sources)	%	5%	5%	5%	7.5%	hold	Hold	hold	hold	hold
	Petroleum Use Reduction Targets (Percent reduction from FY05 base year)	%	10%	12%	14%	16%	18%	20%	22%		30%
	Planned Petroleum Use Reduction (Percent reduction from FY05 base year)	%	10%	12%	14%	16%	18%	20%	22%		30%
Fleet	Alternative Fuel Use in Fleet AFV Target (Percent increase from FY05 base year)	%	61%	77%	95%	114%	136%	159%	hold		hold
	Planned Alternative Fuel Use in Fleet AFV (Percent increase from FY05 base year)	%	61%	77%	95%	114%	136%	159%	hold		hold
	Scope 1 & 2 - Reduction Target (reduced from FY08 base year)	%	2%	8%	19%	22%	23%	26%	28%		33%

e. Agency status – This year has been focused on goal setting and planning. Treasury set an aggressive goal of reducing Scope 1 and 2 GHG 33% by 2020. Treasury bureaus identified 45 projects to reduce energy usage and several opportunities to green the fleet. Some projects are currently being designed and implemented, and we are tracking the progress on a monthly basis. We are also exploring ways to track progress through the budgeting system. A number of other factors should help all agencies to move toward their goals, as we assume that there will generally be more "green energy" available, but this potential could not be accurately considered in our goal setting.

2. GOAL: Scope 3 Greenhouse Gas Reduction

a. Goal Description – The Department of the Treasury will reduce Scope 3 Greenhouse Gas emissions 11% by 2020, as compared with the 2008 baseline.

- a. Reduce Transmission and Distribution loss associated with power transfer to Treasury facilities
- b. Reduce waste diverted to landfills
- c. Reduce emissions from business travel and commuting

- **b. Agency lead for goal –** The sub-goals have different areas of responsibility. The reduction of Transmission and Distribution (T&D) is directly related to the reduction in overall energy use. The overall progress toward this goal will be the responsibility of the Office of Environment, Safety, and Health, Departmental Offices Operations, under the Office of the Assistant Secretary for Management (ASM). The Head of each bureau will ultimately be responsible for implementing energy reduction projects within their bureaus, but the operational responsibilities are designated down, as explained in the *Implementation methods* section for Scope 1 and 2 goals. These same offices will be responsible for the reduction in waste diverted to landfills. The Office of Assets Management under the ASM oversees the Treasury fleets and will be responsible for tracking reductions in business travel. The Bureau Heads will be responsible for implementing policies to assist in decreasing travel including commutes, but the operational responsibilities are designated down, as previously explained.
- **c. Implementation methods –** The inventory was developed using guidance from the Office of the Federal Environmental Executive, and includes the following:
 - Purchased electricity transmission and distribution losses;
 - Business air travel;
 - Business ground travel;
 - Employee commuting;
 - · Contracted solid waste; and
 - Contracted wastewater treatment.

The transmission and distribution losses are directly related to the amount of energy that is consumed, and Treasury has a plan to decrease energy usage that is explained in the Scope 1 and 2 Greenhouse Gas Reduction goal. Business air travel, business ground travel, employee commuting, and contracted wastewater treatment all depend on how many employees are in the agency. Treasury will likely increase in size due to recently passed and pending legislation, such as health care and financial reform, therefore it is difficult to accurately predict how many FTE's will be in the Department in 2020. However, for purposes of goal setting, we are assuming steady state for the number of employees between 2008 and 2020. To decrease both business travel and commuting, our bureaus will continue to experiment with alternate work arrangements and alternatives to business travel to decrease the Scope 3 emissions, but approach specific targets in a way to ensure the agency continues to meet its mission goals.

We have already taken significant steps to green our fleet, discussed earlier. The OESH will work with the travel office and issue guidance to Treasury employees that will urge them to request hybrids when renting vehicles for official duties. This may require coordination with other governmental entities that address provisions of federal travel. Employees at the BPD are encouraged to attend meetings via video or phone conferencing when possible. When travel is necessary, employees are encouraged to travel together and use the most efficient vehicles needed for the trip. The IRS notes that they are currently analyzing data from their travel system to establish specific approaches to reducing Scope 3 emissions. FINCEN noted that it will increase alternative work schedules and shuttle service between facilities and the metro system.

Contracted solid waste will continue to be an area of focus. Our bureaus have made significant progress and will continue to explore ways to reuse, recycle, and purchase to avoid sending material to landfills.

d. Planning Table – Table 3 shows the annual percent reduction targets for various items that impact Scope 3 GHG emissions.

Table 3: Scope 3 GHG Targets

SCOPE 3 GHG TARGET	Units	FY 10	FY 11	FY 12	FY 13	FY 14	 FY 20
Overall Agency Scope 3 Reduction Target (reduced from FY08 base year)	%	1.1%	1.1%	1.1%	1.1%	1.1%	11%
Sub-Target for Federal Employee Travel	%	1%	1%	1%	1%	1%	 10%
Sub-Target for Contracted Waste Disposal	%	1%	1%	1%	1%	1%	 12%
Sub-Target for Transmission and Distribution Losses from Purchased Energy	%	3%	3%	3%	3%	3%	 30%

e. Agency status – This year has been focused on goal setting and planning. Treasury has set goal of reducing GHG Scope 3 emissions by 11% by 2020. Treasury will be addressing all areas of the Scope 3 emissions, although some inputs are based on factors that are directly related to the number of personnel in the agency, such as waste water treatment. For purposes of goal setting, we have assumed steady state in the number of employees, though this assumption may need to be revisited in the future. The IRS will develop baselines, and develop specific strategies to decrease Scope 3 emissions.

GHG emissions from commutes were estimated based on the number of employees, surveys indicating the number of employees that collect transit benefits, and available statistics on alternate work arrangements within the department such as telework. Using these inputs, carbon dioxide emissions were calculated assuming average commute miles in the U.S., proportion of cars to trucks, and average miles per gallon for cars in 2008. The Corporate Average Fuel Economy of cars is expected to increase in 2016, which will help to decrease the amount of fuel consumed and consequent GHG emissions; however, the spreadsheet tool from OFEE is not able to account for this potentiality.

3. GOAL: Develop and Maintain Agency Comprehensive Greenhouse Gas Inventory

Comments were made in the specific Scope 1, 2, and 3 sections. Estimates were provided using the spreadsheet tools that OFEE provided. These tools were helpful to get a partial inventory and set goals. Treasury will evaluate more specific guidance on setting inventories, expected in FY 2011. That guidance is expected to include additional requirements for Scope 3, such as emissions from vendors and contractors.

Treasury will maintain and manage its Greenhouse Gas Inventory for the leased vehicle fleet through GSA. GSA has measures in place to assure that all vehicles provided through them are within the Greenhouse Gas Emissions guidelines. Fleet GHG reductions will primarily be achieved by reducing vehicle fleet as appropriate and utilizing hybrid and alternative fuel vehicles. In addition, Treasury will explore methods to

establish a baseline for our Greenhouse Gas Emission inventory in regard to employee travel.

At this early stage, measuring Scope 3 emissions has been a challenge. The Office of the Federal Environmental Executive has provided a tool which has allowed us to get an estimate on a portion of our inventory. This partial inventory is based on estimates of the transmission and distribution (T&D) losses from purchased energy, contracted waste disposal, and employee travel, including commuting. Consistent with forthcoming guidance, Treasury will work to refine estimates of alternate work schedules. Also, Treasury may grow significantly in the coming years as a result of recently passed and pending legislation including health care and financial reform. For this reason, the potential growth in the number of employees is difficult to forecast, but could contribute significantly to GHG emissions in the future.

4. GOAL: High-Performance Sustainable Design / Green Buildings

a. Goal Description – The Department of the Treasury will increase the inventory of buildings meeting the Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings (i.e., Guiding Principles).

- a. Beginning in FY 2020, all new Federal buildings are designed to achieve zero-net energy by FY 2030
- b. All new construction, major renovation or repair and alteration of federal buildings complies with the Guiding Principles
- At least 15% of agency's existing buildings and building leases meet guiding principles by FY 2015 [5,000 GSF threshold for existing buildings and building leases]
- d. Demonstrate annual progress toward 100% conformance with Guiding Principles for entire building inventory
- e. Demonstrate use of cost-effective, innovative building strategies to minimize energy, water and materials consumption
- f. Manage existing building systems to reduce energy, water and materials consumption in a manner that achieves a net reduction in agency deferred maintenance costs
- g. Optimize performance of the agency's real property portfolio examine opportunities to decrease environmental impact through consolidation, reuse and disposal of existing assets prior to adding new assets
- h. Ensure use of best practices and technology in rehabilitation of historic Federal properties
- **b. Agency lead for goal –** The overall progress toward the goal will be the responsibility of the Office of Asset Management, under the Office of the Assistant Secretary for Management (ASM). The Head of each bureau will ultimately be responsible for implementing sustainable design projects within their bureaus, but the operational responsibilities are designated down, as previously explained.
- **c. Implementation methods** All new construction or major renovations to federal buildings that are occupied by the Treasury will comply with the Guiding Principles, since

GSA now requires all new construction and major renovations to meet Leadership in Energy and Environmental Design (LEED) Silver certification. Treasury is currently exploring options for increasing sustainability and meeting Guiding Principles in leased space and is considering including LEED provisions in future lease agreements, though we have not set specific targets, which will require further dialogue with GSA. Treasury will pursue ways to promote water and energy efficiency, improve indoor environments, and reduce the impact of materials and sustainable designs in buildings occupied by Treasury. The US Mint and Departmental Offices are conducting assessments to achieve the US Green Building Council's (USGBC) LEED silver (or higher) certification by 2015. The IRS is exploring ways to pursue LEED ratings within the context and control of their lease agreements. In addition, Treasury occupies several facilities that have achieved the Environmental Protection Agency Energy Star rating.

d. Planning Table - Table 4 shows the annual percent targets for Treasury owned and leased facilities to be in compliance with the Guiding Principles.

Table 4: Sustainable High Performance Building Targets

SUSTAINABLE HIGH PERFORMANCE BUILDINGS (Buildings Meeting Guiding Principles) ²	Units	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15
Owned Facilities Targets	%	0%	9%	9%	18%	18%	18%
Leased Facilities Targets	%	N/A ³	N/A	N/A	N/A	N/A	N/A
Total Facility Targets	%						15%

e. Agency status - This year, Treasury continued making progress toward ensuring our buildings are sustainable. Treasury owns 11 buildings and leases the rest. We have identified two buildings, Treasury's Main Building and the U.S. Mint in West Point, to apply for LEED certification. This achievement will meet our goal of having 15% of our buildings meet the Guiding Principles, which we will have through our LEED certification.

5. GOAL: Regional and Local Planning

a. Goal Description - The Department of the Treasury will ensure that regional and local planning includes consideration of environmental impacts. This goal has the following sub-goals:

- Incorporate participation in regional transportation planning (recognition and use of existing community transportation infrastructure) into existing policy and guidance
- Align agency policies to increase effectiveness of local energy planning b.
- Incorporate sustainable building location into policy and planning for new C. Federal facilities and leases
- Update agency policy and guidance to ensure that all Environmental d. Impact Statements and Environmental Assessments required under the

² Based on the percent of number of buildings, not square footage, per OMB guidance at OFEE workshops.

³ Treasury has not set a specific goal for leased facilities, but instead has relied on GSA to secure leases in such buildings. Treasury has, however, communicated with GSA that it is our desire to work in buildings that meet the Guiding Principles.

- National Environmental Policy Act (NEPA) for proposed new or expanded Federal facilities identify and analyze impacts associated with energy usage and alternative energy sources
- e. Update agency policy and guidance to ensure coordination and (where appropriate) consultation with Federal, State, Tribal and local management authorities regarding impacts to local ecosystems, watersheds and environmental management associated with proposed new or expanded Federal facilities
- **b. Agency lead for goal –** The overall progress toward the goal will be the responsibility of the Office of Asset Management, under the Office of the Assistant Secretary for Management (ASM). The Head of each bureau will ultimately be responsible for implementing regional planning within their bureaus, but the operational responsibilities are designated down, as previously explained.
- **c.** Implementation methods Existing plans and new "green" contracts will assist with minimizing the impacts to local watersheds and ecosystems by providing opportunities to reduce waste streams from Treasury activities. The Public Transportation Incentive Program (PTIP) encourages Treasury employees to commute via public transportation, helping to reduce traffic congestion, energy consumption and vehicular pollution. Whenever possible, Treasury will work with local transportation planning groups in an effort to bring public transportation opportunities to Treasury employees that do not currently have them.

Over the next year, Treasury will begin updating environmental directives so that NEPA documents for any new construction or building rehabilitation will analyze the use of alternative energy sources where possible. Treasury Directive (TD) 72-02 (Acquisition, Utilization, Management and Disposal of Treasury Real Property Asset) was signed by the Assistant Secretary for Management and Chief Financial Officer on September 24, 2009. It establishes policy and responsibility for acquiring, using, managing, and disposing of real property assets. This directive complies with Executive Order 13327 (Federal Real Property Asset Management) and the "Guiding Principles for Asset Management" established by the Federal Real Property Council (FRPC) and Treasury Strategic and Asset Management Plans. This directive also incorporates requirements set forth by E.O. 13423 (Strengthening Federal Environmental, Energy, and Transportation Management) of January 24, 2007, which have been implemented in the Treasury Sustainable Building Program and Implementation Plan. This plan addresses energy efficiency, acquisition, sustainable buildings goals and requirements. Treasury will include provisions in contracts to ensure conformance with Federal Management Regulations and this directive, and encourage lease provisions that support sustainable design and development, energy efficiency, and verification of building performance requirements set forth by EO 13423.

The Agency Integrated Design Teams are led by a manager who plans major renovations and new building construction. Treasury Directive 75-01 (Department of the Treasury Historic Preservation Program) sets policies and procedures to protect the integrity of all Treasury buildings. Under the Department's Energy Program, our bureaus are required to work with GSA and local energy providers to achieve economies (by way of energy saving contracts) and to promote innovation and enhance transportation

program support initiatives (i.e., TD 74-10 [Public Transit Benefits Program]) in these local areas as well. As required by TD 72-02, Treasury bureaus with GSA delegated leasing authority are implementing GSA lease requirements and sustainable building location planning and preferences for any new facilities and leases consistent with the ASM/CFO goal to be a leader in environmental management and sustainability.

Treasury Directive 72-03 (*Location of New Offices and Facilities in Rural Areas*) sets Departmental policy on locating new Treasury offices and other facilities in rural areas and conforms to the Rural Development Act of 1972. Under this TD, establishment or relocation of any new Treasury facilities (involving more than 50 employees), must be approved by the Deputy Chief Financial Officer. The following must be considered: Efficient performance of the Department's missions and programs, convenience of the public served, and the maintenance and improvement of safe and healthful working conditions for employees. Other considerations in locating facilities include: Use of existing government-owned facilities which are adequate or economically adaptable; impact on other Treasury organizations, Federal agencies, and State and local governments; and the proximity to supporting services (equipment maintenance and supply, mail, etc.).

Under E.O. 13514, Treasury was specifically tasked to work on the National Shuttle Bus Service Project. GSA, in concert with Treasury and other agencies was asked to submit recommendations for revised policies and practices to CEQ. In early March, our Department reviewed and concurred with the Federal Shuttle Bus Study Report recommendations and is working with GSA to implement the recommendation that provides for wider use of the Shuttle Bus Service provided by the Treasury Financial Management Service within the Washington, DC, area. Our Department is continuing to work with GSA to better focus on policy and partnering opportunities in this regard.

d. Planning Table – Not Applicable.

e. Agency status – Treasury is in the process of reviewing directives to see how local and regional planning for sustainability may be better imbedded into our policies. This goal invokes a larger focus on sustainability considerations into our negotiations for building space, and invites opportunities to co-locate when possible with other Treasury bureaus and federal agencies in the area to conserve resources.

6. GOAL: Water Use Efficiency and Management

a. Goal Description – The Department of the Treasury will reduce water usage over the next 10 years.

- 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

- **b. Agency lead for goal –** The overall progress toward the goal will be the responsibility of the Office of Environment, Safety, and Health, Departmental Offices Operations, under the Office of the Assistant Secretary for Management (ASM). The Head of each bureau will ultimately be responsible for implementing energy reduction projects and decreases to fleet inventories within their bureaus, but the operational responsibilities are designated down, as previously explained.
- **c.** Implementation methods The Department of the Treasury continues working to improve water efficiency through facility improvements, such as more efficient fixtures, and other means to help achieve reductions in potable and landscaping/agricultural water use. The energy managers at each covered facility have established a water management plan based on the Federal Energy Management Programs (FEMP) 14 Best Management Practices for water management. Each site is incorporating the applicable best management practices to reduce potable water consumption. Also, the water audits required by EISA 2007 will identify projects for water conservation. Consistent with EPA stormwater guidance, any Treasury project involving new construction or rehabilitation to an existing building with a footprint greater than 5,000 square feet will attempt to maintain or restore the hydrology of the property regarding temperature, rate, volume, and duration of flow.

The BEP is developing strategies to continue reducing water consumption. In addition, BEP is in the process of implementing a wiping solution recycling system. The current wiping solution process accounts for approximately 25% of the BEP's total potable water consumption. The BEP expects the revised system to reduce water consumption from this wiping solution process by 95%, amounting to approximately 12 million gallons annually. The BEP is utilizing a Utility Energy Service Contract (UESC) for this project. The BPD will continue reducing water use for landscaping through better management of the irrigation process. BPD staff evaluated the potential reuse of evaporation coil condensate water for irrigation, but determined that it was not cost effective.

The United States Mint will implement a project to recover condensate from air handling units and use it for cooling tower make-up. This project will be rolled into the proposed Utility Energy Service Contract with Philadelphia Gas Works. The simple payback for this project is 8.46 years, with an annual cost savings of \$1,187. The Mint will continue to investigate and implement water reuse strategies focusing on the wastewater treatment process.

d. Planning Table – Table 5 shows the annual percent targets for reducing water use as compared to the baseline year.

Table 5: Water Use Reduction Targets

WATER USE EFFICIENCY & MGMT	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)	%	-	2%	4%	6%	8%	10%	 20%

e. Agency status –Treasury continues to reduce water use. In FY 2009, Treasury reduced usage by approximately 22% compared to the 2007 baseline by implementing best management practices at our covered facilities. Treasury also updated the Energy Management Program directive in FY 2009 to explicitly require bureaus to reduce water consumption by at least 2 percent annually, or 16 percent by the end of 2015.

7. GOAL: Pollution Prevention and Waste Elimination

a. Goal Description- The Department of the Treasury will reduce pollution by applying strategies at the sources of generation.

- a. Increase source reduction of pollutants and waste
- b. Divert at least 50% non-hazardous solid waste by FY 2015, excluding construction and demolition (C&D) debris
- c. Divert at least 50% C&D materials and debris by FY 2015
- d. Reduce printing paper use
- e. Increase use of uncoated printing and writing paper containing at least 30% postconsumer fiber
- f. Reduce and minimize the acquisition, use, and disposal of hazardous chemicals and materials
- g. Increase diversion of compostable and organic materials from the waste stream
- h. Implement integrated pest management and landscape management practices to reduce and eliminate the use of toxic and hazardous chemicals and materials
- i. Increase agency use of acceptable alternative chemicals and processes
- j. Decrease agency use of chemicals to assist agency in achieving FY 2020 GHG reduction targets [See Section II 1 and 2 above]
- k. Report in accordance with Sections (301-313) of the Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986
- **b. Agency lead for goal –** The overall progress toward the goal will be the responsibility of the Office of Environment, Safety, and Health, Departmental Offices Operations, under the Office of the Assistant Secretary for Management (ASM). The Head of each bureau will ultimately be responsible for implementing pollution prevention projects within their bureaus, but the operational responsibilities are designated down, as previously explained.

c. Implementation methods – The Department of the Treasury reduces pollution and waste by applying strategies to prevent generating it in the first place. When waste must be generated, Treasury attempts to reuse and recycle as much as possible to keep material from going to landfills. Treasury will update its Toxic and Hazardous Chemicals Management Plan in CY 2010, and broaden it to be a more comprehensive plan for pollution prevention. The Office of the Procurement Executive will also work to embed language into disposal contracts over the coming year that specifically requires diversion targets according to our Departmental goals.

Several initiatives are occurring within Treasury's bureaus to accomplish this goal. The IRS is the largest bureau and consequently generates the most waste. The IRS will inventory its covered facilities to establish a baseline and specific strategies for nonhazardous solid waste reduction. The IRS will divert 50% construction and demolition (C&D) waste and work with GSA to ensure all construction projects completed on behalf of the IRS include provisions to reduce construction and demolition waste. The Program Management Office in REFM will develop guidance and monitor implementation of the diversion of Construction and Demolition debris in IRS construction and alteration projects. The IRS construction projects will have specifications that include provisions for reduction of C&D incorporated in the contract language. Also, the new national copier contract to be awarded summer 2010 requires newly leased copiers to have the default set to duplex printing. IRS will conduct a broad environmental awareness campaign on reducing paper usage and the need for duplex printing. Existing contracts will be modified to reduce or eliminate the use of toxic and hazardous chemicals and materials by the contractor. The IRS will look for opportunities to divert compostable and organic materials from the waste stream and use alternative chemicals and processes.

The BEP currently diverts approximately 32% of all non-hazardous industrial and municipal solid waste from disposal to various forms of recycling at its facilities, and will modify contracts to increase diversion of C&D waste. The project to recycle wiping solution, discussed under Goal 6, will reduce plant sludge significantly. Waste-water pretreatment plant sludge is one of the BEP's largest non-hazardous industrial waste streams.

The BPD is on track to achieve the goal of diverting 50% of its waste from landfills by FY 2015. The BPD is currently diverting 40% of its waste and has an agreement in place with several local recycling sources to recycle various items. The bureau will continue to explore opportunities to improve solid waste diversion with additional awareness training and new opportunities for recycling. Hazardous chemical use has been minimized. BPD's janitorial department has substituted the standard cleaning products with new environmental friendlier versions. Environmental friendly products are being evaluated for use in the maintenance department, and these bio-based products would replace standard paint and thinners. Service contracts include a clause that all pesticides, and cleaning agents must follow guidelines outlined within the appropriate environmental Executive Orders. And the TTB regularly encourages employees to reduce printing and paper use by utilizing Share Point, shared drives, and web pages to disseminate information. In addition, TTB has developed software applications for on-line submission of tax forms, label approvals, and tax permits, which results in a significant reduction in paper use. The TTB has encouraged building management and employees to reduce

solid waste; however, they have no baseline because they lease space through GSA, and non-hazardous waste is calculated for the whole building rather than by individual tenants.

d. Planning table – Table 6 shows the annual percent targets for diverting waste from landfills compared to the amount of waste generated.

Table 6: Pollution Prevention/Waste Elimination Targets

POLLUTION PREVENTION & WASTE ELIMINATION	Units	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15
Non-Hazardous Solid Waste Diversion Targets (non C&D)	%	5	10	20	30	40	50%
C&D Material & Debris Diversion Targets	%	5	10	20	30	40	50%

e. Agency status – Treasury has been actively pursuing opportunities to minimize waste and prevent pollution. The IRS will do an inventory of covered facilities to develop a baseline and establish strategies to meet the 50% diversion goal. But the IRS is also taking steps to decrease waste in the interim. The new copier contract will have impact in the out years as new copiers are deployed. REFM is suggesting the impact on the paper usage in copiers may be 2% reduction in FY10 and an additional 10% reduction in each of the subsequent years. The BEP currently recycles 32 % of non-hazardous industrial and municipal solid waste.

8. GOAL: Sustainable Acquisition

a. Goal Description- The Department of the Treasury will ensure that purchases of goods and services are from sustainable sources.

- a. Ensure 95% of new contract actions, including task and delivery orders under new contracts and existing contracts, require the supply or use of products and services that are energy efficient (Energy Star or FEMPdesignated), water efficient, biobased, environmentally preferable (excluding EPEAT-registered products), non-ozone depleting, contain recycled content, or are non-toxic or less toxic alternatives.
- b. Update agency affirmative procurement plans (also known as green purchasing plans or environmentally preferable purchasing plans), policies and programs to ensure that all Federally-mandated designated products and services are included in all relevant acquisitions.
- **b.** Agency lead for goal The overall progress toward the goal will be the responsibility of the Office of the Procurement Executive, under the Office of the Assistant Secretary for Management (ASM). The Head of each bureau will ultimately be responsible for implementing pollution prevention projects within their bureaus, but the operational responsibilities are designated down, as previously explained.
- **c. Implementation methods** The Treasury Department has updated agency affirmative procurement plans (also known as green purchasing plans or environmentally preferable purchasing plans), policies, and programs to ensure that Federally-mandated designated products and services are included in all relevant acquisitions. The IRS has

set goals in accordance with federally mandated Executive Orders. In accordance with the Department of the Treasury Acquisition Bulletin (AB) 10-05, the IRS will advance sustainable acquisition to ensure that 95 percent of new contract actions, including task and delivery orders, for products and services are energy-efficient (Energy Star® or Federal Energy Management Program (FEMP) designated), water-efficient, biobased, environmentally preferable (e.g., Electronic Product Environmental Assessment Tool (EPEAT) certified), non-ozone depleting, contain recycled content, or are non-toxic or less toxic alternatives, where such products and services meet agency performance requirements. The IRS anticipates a re-write of the contract writing system to monitor the purchase of environmentally preferred products/services. The IRS has in place an agency affirmative procurement plan that ensures all Federally-mandated designated products and services are included in all relevant acquisitions.

The method of implementation of this goal is achieved through the issuance of the IRS Green Procurement Plan (GPP), and extensive training on the buying green program. Policy and Procedures (P&P), Buying Green, contains the IRS GPP and is revised annually. The GPP will be updated to include requirements set forth in E.O. 13514. The IRS Office of Procurement Policy and the Real Estate Facilities Management (REFM) Environmental Coordinator, are responsible for providing training on buying green. Initially, classroom training was provided to over 400 acquisition employees by the IRS Office of Procurement Policy. On-line training has since been implemented via our Electronic Learning Management System (ELMS). Annual training is required for IRS contracting officers, contract specialists, and contracting officer's technical representatives (COTRs). Purchase card holders are also trained by way of annual and refresher Purchase Card holder training. This is monitored through a database. The IRS will conduct random reviews of contract files during semi-annual Verification and Validation (V&V). Three IRS facilities have Environmental Management Systems that include the purchase of environmentally preferred products/services, and all IRS facilities that are currently developing EMSs are striving to improve green purchasing by IRS employee and contractors. The IRS' long-term energy strategy is to issue energy contracts under the Energy Savings Performance Program (ESPC). contracting vehicles that allow energy projects without special appropriations to pay for facilities improvements.

The FMS actively implements green purchasing according to E.O. 13423, and uses Federal Business Opportunities (FedBizOpps) to publicize and promote requirements for green products and services and/or sustainable acquisitions. The FMS also requires that green purchasing requirements roll down to subcontractors. The Procurement Services Division at DO implemented a mandatory Green Purchasing Training for all Departmental Offices' Contract Personnel, COTRs, and Purchase Card holders. FinCEN requires all of its electronic equipment to meet or exceed Energy-Star and EPEAT requirements. The OTS will complete a comprehensive building and environmental assessment in FY2010 that will provide the structure for the bureau's implementation and ongoing consideration of E. O. 13514 sustainability plan requirements. The results of this assessment will enable the bureau to define planned new contract actions related to ongoing sustainability.

d. Planning Table – Table 7 shows the annual percent targets for new contracts that will include green acquisition language.

Table 7: Sustainable Acquisition Targets

SUSTAINABLE ACQUISITION	Units	FY 10	FY 11	FY 12		FY 20
New Contract Actions Meeting Sustainable Acquisition Requirements	%	72%	95%	hold	hold	hold
Energy Efficient Products (Energy Star, FEMP-designated, and low standby power devices)	%	92%	95%	hold	hold	hold
Water Efficient Products	%	69%	95%	hold	hold	hold
Biobased Products	%	32%	95%	hold	hold	hold
Recycled Content Products	%	40%	95%	hold	hold	hold
Environmentally Preferable Products/Services (excluding EPEAT)	%	44%	95%	hold	hold	hold
SNAP/non-ozone depleting substances	%	61%	95%	hold	hold	hold

e. Agency status – Treasury has made significant progress in the area of green purchasing and has plans to meet the 95 percent goal by the end of FY 2011. The IRS procurement offices are working on several contracts to improve energy efficiency at various buildings. In Fiscal Year 2009, the IRS executed a total of 15,893 contract actions. Of that number, 8,289 were contract actions with sustainability clauses valued at \$230,472,743. The IRS anticipates that the number of contract actions for FY10 will remain constant. This year, with upper management support, the IRS will achieve 100% compliance in the area of training. The IRS GPP will be updated to include guidance from EO 13514 as appropriate. At DO, 100 percent of contract specialists completed green purchasing training in FY 2009. Green purchasing is also part of the training for all new purchase card holders and approving officials.

9. GOAL: Electronic Stewardship and Data Centers

a. Goal Description- The Department of the Treasury will ensure that the use of electronic equipment employs sustainable practices throughout all life cycles.

- 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 policy to reflect environmentally sound practices for disposition of all agency excess or surplus electronic products.
- c. Update agency policy to ensure implementation of best management practices for energy efficient management of servers and Federal data centers
- d. Meet technology energy consumption reduction goals in data centers.
- e. Increase the quantity of electronic assets disposed through sound disposition practices.
- **b. Agency lead for goal –** The overall progress toward the goal will be the responsibility of the Chief Information Office, under the Office of the Assistant Secretary for Management (ASM). The Head of each bureau will ultimately be responsible for implementing sustainable acquisitions within their bureaus, but the operational responsibilities are designated down, as previously explained.

- **c.** Implementation methods The Treasury Electronic Stewardship Program provides Treasury-wide guidance on meeting the electronics stewardship requirements of Executive Orders and other related federal mandates. It establishes Department-wide efforts and implementation strategies to:
 - Improve the life cycle environmental management of electronic assets, including acquisition, operations, and maintenance, and end-of-life disposition;
 - Track and ensure accurate measurement and timely reporting of Treasury's progress toward meeting electronic stewardships goals; and
 - Achieve the standards of success in sustainable electronics stewardship as defined and measured by the Office of Management and Budget (OMB) Environmental Management Scorecard or superseding metric.

Treasury's Electronic Stewardship plan is currently being updated to include the requirements in E.O. 13514. The Treasury bureaus have made significant progress in meeting electronic stewardship goals. The IRS has the majority of the electronic equipment and data centers in the Department of the Treasury. The IRS is mandating duplex printing and power management on copiers in its new contract. At the IRS, 100% of non-usable electronics equipment is reused or recycled. IRS uses the GSAXcess Program, including Computers for Learning (CFL), to identify approved schools for direct transfers of computer equipment. All CFL transfers are reported to Treasury for Departmental reporting to GSA. Electronic equipment that is not reused is recycled through UNICOR. EPA has already conducted due diligence activities for UNICOR to ensure they follow environmentally sound recycling practices. The Real Estate and Facilities Management (REFM) group will work with their information office to coordinate the Data Center Consolidation Plan. The IRS faces serious challenges to sub-metering its current data centers since the building infrastructure was not constructed to support the separate metering of offices and data centers. An engineering effort is underway to determine the practicality, benefits, and costs for sub-metering installations. Obtaining a PUE Range of 1.3 - 1.6 will be challenging until the data centers are fully sub-metered. The REFM will continue to look for opportunities to reduce power requirements for support equipment associated with the delivery of power and cooling to the data centers, which has a direct correlation in improving the PUE number. The IRS will achieve additional space reduction by virtualizing 75% of all x86 servers.

The IRS Data Center Consolidation and Server centralization efforts are reinforced by the development of enterprise-wide standards including policies requiring all new and refreshed servers be evaluated for virtualization potential and placed at one of the consolidated data center locations. The IRS has completed a Proof of Concept (POC) consolidation effort at the New Carrollton Federal Building. During this POC, there has been a 50% reduction in computer room space and plans are underway to remove 90% of all servers from the environment by moving them to a Consolidated Data Center location through the virtualization project. This will further reduce computer space by an additional 40%. Plans are being developed to target 4 campus locations each year for possible reduction of space. In addition, plans are being developed to consolidate many of the smaller data centers into the larger Data centers. The IRS already employs the power management setting for all monitors. Printers also have Power Save settings to reduce energy consumption when not in use. The IRS is committed to implementing

power management on desktops; however, additional planning and assessments need to be done to outline the most effective way to meet the requirement and not impact tax processing. IRS has begun this activity to determine the most cost effective and less intrusive solution to accomplish this requirement.

Considerable gains have been achieved through server virtualization and consolidation efforts. Physical servers are being converted to virtual servers, which is decreasing the real estate footprint. The new virtual environments have been deployed at 9 of the 14 sites with the remaining 5 sites to be deployed in FY 2010. The next phase of the Server Consolidation and Virtualization Plan is to virtualize eligible x86 servers in those environments. In addition, consolidation efforts are underway in other business units and the enterprise test facilities to consolidate servers into one of three Enterprise Computing Centers.

The BPD has enabled the hibernation feature on all eligible personal computers, and is currently undergoing a comprehensive study to move towards better managed printing through networked, centralized printing, scanning, and copying devices. BPD also participates in the Federal Electronics Challenge (FEC) with Treasury as a "Facility Partner," and recycles 100% of electronic equipment devices (computers, etc.) through UNICOR.

The United States Mint initiated data center consolidation and virtualization efforts in 2003. Since that time the Mint has reduced the number of physical servers by more than 70%. In 2010 the Mint reduced the physical footprint of its Washington, DC region data centers by 80%, increased utilization rates to approximately 75%, and installed state of the art power management technologies including sub-metering that will enable energy-usage monitoring. Going forward, the Mint is exploring expanding the use of virtualization technologies to support disaster recovery and business continuity needs. A 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 was implemented as part of the FEC Challenge procurement and acquisition program. The guidelines for purchasing green products will be updated to reflect best management practices for energy efficient management of servers and Federal data centers. The United States Mint recycles electronic assets through donations to non-profit organizations and/or recycling through private recyclers and/or GSA Xcess program. The United States Mint will verify recyclers are certified under the Responsible Recyclers (R2) guidance or equivalent.

TIGTA currently uses sound disposition practices by using programs such as GSA Xcess, 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. TIGTA will review and update existing policies to ensure best management practices for energy efficient management of server equipment are being used.

d. Planning table – Table 8 shows the annual percent targets for electronic stewardship.

Table 8: Electronic Stewardship Targets

Table 6. Liectionic Stewardship Targets	1		1		1
ELECTRONIC STEWARDHIP & DATA CENTERS	Units	FY 10	FY 11	FY 12	FY 13
% of device types covered by current Energy Star specifications that must be energy-star qualified	%	90%	90%	95%	hold
% of electronic assets covered by sound disposition practices	%	85%	100%	100%	100%
% of cloud activity hosted in a data center	%	10%	30%	60%	hold
% of agency data centers independently metered or advanced metered and monitored on a weekly basis	%	TBD	90%	100%	hold
Reduction in the number of agency data centers	%	TBD	20%	40%	hold
% of agency, eligible electronic products with power management and other energy-environmentally preferable features (duplexing) actively implemented and in use	%	45%	50%	100%	hold
% of agency data centers operating at an average bandwidth utilization of 85%	%	TBD	33%	50%	hold
% of agency data centers operating with an average CPU utilization of 60-70%	%	TBD	50%	75%	hold
% of agency data centers operating at a PUE range of 1.3 – 1.6	%	TBD	25%	50%	hold
% of covered electronic product acquisitions that are EPEAT- registered	%	85%	95%	95%	hold
% of agency data center activity implemented via virtualization	%	15%	30%	40%	hold
Other, as defined by agency	(DOOL) F				

Note: Treasury's Data Center Consolidation Initiative (DCCI) Plan may have more up to date measures based on the most recent analysis.

e. Agency status - Treasury's bureaus are actively working to meet all the electronic stewardship goals. The IRS is currently determining the ability to sub-meter selected data centers and in select campus locations. The IRS will continue to actively participate in the Federal Electronic Challenge (FEC) group and report its outcomes through the FEC reporting requirement. The United States Mint currently disposes of electronic equipment through the General Services Administration's Xcess program or through donation. The BEP has established policies in purchasing energy efficient technology that has power management and environmentally preferable features in use and The BEP is modernizing systems supporting administrative and implemented. manufacturing operations. Plans are to move most administrative systems into cloud based computing as new systems go live. Metering necessary to measure energy usage at BEP managed data centers is undergoing planning and design. And TIGTA is currently reviewing and implementing energy efficiencies and environmentally preferred options on eligible agency electronic products, and has policies in place to ensure all agency excess or surplus electronic products are donated if possible or disposed of according to Responsible Recycler guidelines.

10. GOAL: Agency Innovation

Treasury has taken an innovative approach to meeting and exceeding the goals in Executive Orders 13423 and 13514. Recent accomplishments at Treasury include the following:

- Treasury has increased its purchase of Renewable Energy Credits (RECS), and as of July 31, 2010, all the energy required to power the Main Treasury Building and Treasury Annex will be from renewable sources through these certificates.
- In March, Treasury revised its order for 87 new vehicles for its fleet, eliminating 15 SUVs, and purchasing 19 hybrid vehicles. Over 90% of the vehicles exceed the required greenhouse gas (GHG) rating of 6, and the projected GHG emissions decreased over 400% from the original order.
- Twenty-five employees were recognized in November 2009 for their commitment to eliminating waste and collectively recycling more than two million pounds of electronics. Also, the Department received the Electronics Reuse and Recycling Campaign award from Council on Environmental Quality.
- The Bureau of Public Debt's (BPD) data centers have been consolidated, and a significant energy sub-metering project has been completed.
- The Internal Revenue Service (IRS) submitted a Preliminary Inventory
 Assessment for the Data Center Consolidation initiative, including 15 data
 centers with over 4800 servers. IRS plans to retire about 2,000 servers by 2013.

Treasury is a leader in environmental management, minimizing waste and GHG emissions, recycling material, and preventing pollution. We are meeting our sustainability challenges with innovative solutions.

Section 3: Agency Self Evaluation

Note: OMB and CEQ will update these questions annually to reflect Administration priorities. For 2010, please respond to the following items. Each agency's total response for this section should be limited to one or two pages.

Table 9. Treasury Self Assessment

Does your plan provide/consider overarching strategies and approaches for achieving long-term sustainability goals?	Υ
Does your plan identify milestones and resources needed for implementation?	Υ
Does your plan align with your agency's 2011 budget submission?	N
Is your plan consistent with your agency's FY 2011 budget and appropriately aligned to reflect your agency's planned FY 2012 budget submission?	N
Does your plan integrate existing EO and statutory requirements into a single framework and align with other existing mission and management related goals to make the best use of available resources?	Y
Does your plan provide methods for obtaining data needed to measure progress, evaluate results, and improve performance?	Υ

The reduction in energy use must become a core element of procurement, finance, office services, human resources, manufacturing, engineering, facilities management, and protection activities. The FY 2011 budget request needs to be revised to reflect planned sustainability actions. Likewise, 2012 budget submissions must include

sustainability actions including consideration of alternative financing mechanisms such as utility energy savings contracts. Items from Treasury's current Environment, Energy, and Transportation scorecards are listed below.

a. Planned Actions

Renewable Energy.

- Main Treasury and Annex Building will have electricity provided by 100% renewable sources through renewable energy credits by July 31, 2010.
- BPD currently has a contract to purchase renewable energy certificates; the attributes of energy produced from bio-mass generators, and has initiated a procurement action to purchase 3,000 MWhrs of renewable energy certificates for FY 2010.

Greening the Treasury Fleet

- Assess the bureau's fleet baselines and make recommendations for enhanced fuel use and fleet size reduction.
- Develop Fleet Management Information System to enhance program performance management and decision making.

Sustainable Acquisition

- BPD and IRS will continue to provide green purchasing training to purchase card holders.
- Continue efforts with bureaus to identify opportunities for "greening" contract requirements.

Sustainable Buildings

- The United States Mint at West Point is scheduled to conduct a sustainability assessment of existing buildings for LEED in FY 2010. The results of this survey will be a roadmap to an Energy Star rating and LEED Silver certification of the facility.
- TTB will continue to decrease the amount of leased space with GSA and/or close offices where possible.
- Mint headquarters is initiating a Mint-wide project to implement sustainability elements in the EMS using the High Performance Sustainable Building (HPSB) Guidance.

Water Use Efficiency and Management

- Installation of an instantaneous water heater pilot project at BPD to evaluate the potential for saving energy and reducing water consumption.
- The United States Mint at Denver is scheduled to conduct a comprehensive energy and water evaluation and retro-commissioning in FY 2010.

Reuse and Recycling

 The BEP Washington DC facility will complete the conceptual design for the wiping solution recycling system during CY 2010. When operational, this system will save an estimated 12 million gallons of water annually.

Greenhouse Gas Scope 1 and 2 Commitments

- The BPD is using data from metering equipment installed at the Third Street and Avery Street buildings to evaluate loads and take necessary action to reduce energy consumption.
- TTB will monitor employee travel in order to evaluate and analyze travel trends.
 This will allow them to implement strategies and accommodations for transit,
 travel, training, and conferences that will actively reduce carbon emissions
 associated with commuting and travel by agency staff.

Electronic Stewardship

- The IT Manual portion of the TD 81-01 has been updated to incorporate Electronics Stewardship. TD 81-01 is currently in the clearance process.
- The Mint is exploring expanding the use of virtualization technologies to support disaster recovery and business continuity needs.