



*Treasury Strategic Sustainability Performance
Plan*

June2011

*Office of the
ASM/CFO*

Section 1: Agency Policy and Strategy

Agency Policy Statement

I. 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 supervising 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 through compliance with environmental and energy statutes, regulations, and Executive Orders. Treasury's headquarters (Departmental Offices) and its bureaus are collectively responsible for accomplishing these goals. Current priorities include:

- Following through on energy reduction projects throughout Treasury to ensure the aggressive goals for reducing greenhouse gas (GHG) emissions are met by 2020.
- Implementing a wiping solution recycling system that will save an estimated 12 million gallons of water on an annual basis 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 at Main Treasury in Washington, DC.
- Integrating the social cost of carbon into the budgeting process to ensure appropriate consideration when projects are selected for funding.
- Improving the life cycle environmental management of electronic assets.

Recent accomplishments at Treasury include:

- Treasury achieved all "green" ratings on the July 2010 and January 2011 OMB Sustainability and Energy Scorecard.
- The January 2011 Treasury GHG Inventory reveals emission reductions of 13.9% from the 2008 baseline for Scope 1&2. This places Treasury ahead of plan to reach its Scope 1&2 FY2020 GHG reduction goal.
- The Denver Mint, Main Treasury, and Treasury Annex buildings are all being powered with 100% renewable energy through the purchase of Renewable Energy Credits (RECs).
- The San Francisco Mint installed a "cool roof" that reduces the heat island effect and reduces stormwater runoff while providing habitat for wildlife.
- The Treasury Data Center Consolidation Plan was finalized in August, 2010.

Treasury is a leader in environmental management, minimizing waste and GHG emissions, as well as reusing and recycling material. Our challenges include integrating social costs into the budgetary process; and addressing the sustainability impacts of planned staff increases at the IRS.

Dan Tangherlini, Assistant Secretary for Management
and Chief Financial Officer

Date

II. Sustainability and the Agency Mission

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, rather than contradicts, 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.

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 vehicle refueling stations continues to be a issue nationwide. Developing a systematic way of making choices to put in place projects that will reduce greenhouse gas emissions in the midst of dramatic budget reductions is a challenge. Planned staff increases at IRS could significantly alter IRS' carbon footprint. Finally, Congressional mandates relating to raw materials for both paper money and coins limit Treasury's ability to explore more sustainable feedstock.

It is valuable to understand the structure of the Department of the Treasury when considering the implementation of this plan. Treasury had approximately 125,880 employees in April 2011. This number doesn't include contractors or interns working in our facilities. Treasury owns 11 of its operating facilities and leases over 680 others. Treasury consists of the policy offices in Treasury headquarters, known as the Departmental Offices (DO), and 11 other 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

DO – Departmental Offices

FinCEN – Financial Crimes Enforcement Network

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 uses 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. All 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.

Size and Scope of Operations	Number	Comment
Total # Employees	125881	
Total Acres Land Managed	167	
Total # Facilities Owned	11	
Total # Facilities Leased (GSA lease)	562	
Total # Facilities Leased (Non-GSA)	124	
Total Facility Gross Square Feet (GSF)	12865100	
Operates in # of Locations throughout U.S.	697	
Operates in # of Locations outside of U.S.	0	
Total # Fleet Vehicles Owned	3237	
Total # Fleet Vehicles Leased	625	
Total # Exempted-Fleet Vehicles (Tactical, Emergency, etc.)	0	
Total Operating Budget FY 2010 (\$MIL)	19863	
Total # Contracts Awarded FY 2010	38030	
Total Amount Contracts Awarded FY 2010 (\$MIL)	5844	
Total Amount Spent on Energy Consumption FY 2010 (\$MIL)	46	
Total BTU Consumed per GSF	0.452	
Total Gallons of Water Consumed per GSF	30.2	
Total Scope 1&2 GHG Emissions (Comprehensive) FY 2008 Baseline MMTCO _{2e}	.2633017	
Total Scope 1&2 GHG Emissions (Subject to Agency Scope 1&2 Reduction Target) FY 2008 Baseline MMTCO _{2e}	.2633017	
Total Scope 3 GHG Emissions (Comprehensive) FY 2008 Baseline MMTCO _{2e}	.5100492	

Size and Scope of Operations	Number	Comment
Total Scope 3 GHG Emissions (Subject to Agency Scope 3 Reduction Target) FY 2008 Baseline MMTCO _{2e}	.5100492	

III. 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 would decrease by 22 percent. However, Treasury has 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 have identified 30 energy reduction projects throughout our bureaus. These projects include conducting comprehensive energy audits, implementing major renovations on buildings and manufacturing facilities, utilizing renewable energy sources, reducing petroleum use, downsizing the agency fleet, and changing production schedules at some manufacturing facilities.

Greenhouse Gas Scope 3 emissions presented a data collection challenge. Using the spreadsheet tool that was provided by the Office of the Federal Environmental Executive in 2009, we estimated a portion of our emission inventory. This partial inventory was based on estimates of the transmission and distribution (T&D) losses from purchased energy, contracted waste disposal, and employee travel, including commuting. Employee travel was the largest contributor, followed by the T&D losses. Our challenges in setting a goal included 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 but the magnitude of potential growth in employees is difficult to forecast. So, for the purposes of goal setting, we have assumed steady state conditions for the number of employees between now and 2020.

We set a goal of reducing Scope 3 GHG emissions from the 2008 baseline level by 11% by 2020. 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.

The IRS is utilizing projects funded through the American Recovery and Reinvestment Act (ARRA) in order to meet emissions reduction goals. ARRA funding is being used to support projects at the Austin, Ogden and Brookhaven campuses. The Andover, Austin and Ogden projects, which are already in progress, include elements such as lighting retrofits, chiller and cooling tower replacements, fan system repair, and geothermal HVAC installation, among other initiatives. Energy and emissions savings from the ARRA projects are expected to be realized in FY11 and FY12 in Andover and Austin, in FY12 in Ogden, and after FY12 in Brookhaven, as the Brookhaven project is just entering the construction phase.

IV. Plan Implementation

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

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

Many offices throughout Treasury continue to be involved with the evolution of 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 Performance Budgeting; 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 measuring progress toward agency goals.

The new requirements of the Sustainability Plan were communicated to all Treasury bureaus through joint Environmental and Energy council meetings and by frequent email messages, as the requirements in the plan template from OFEE changed. The final plan that is submitted to OFEE will be distributed to the leadership throughout Treasury, including the heads of each of Treasury's 11 Bureaus, as well as 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 comes from Main Treasury to the environmental and energy points of contact. 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. We will also incorporate sustainability-related metrics in Treasury-STAT accountability reports and sessions. This process is further described in paragraph d.

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 4-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 four reporting periods, Treasury is the only agency to be rated green in both progress and status in all areas of sustainability/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 EMSs contain goals outlined in Executive Orders and Treasury's Environmental Management and Sustainability Program Directive, 75-09, and specifically address leadership and accountability.

d. Methods for Periodic Monitoring and Evaluation of Progress

Semi-annual reporting of sustainability and energy metrics through the OMB scorecard process provides important information regarding the progress toward sustainability goals. Tracking and reporting of greenhouses gas emissions

through an annual inventory submission sheds light on the effectiveness of projects that have been designed to reduce Treasury’s carbon footprint.

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 by the Office of Environment, Safety, and Health within Departmental Offices. The metrics will be confirmation that the project began by the proposed start date, and that the project progression is measured against the proposed completion date. A longer term metric is to measure the decreases in energy used. Initiatives to reduce 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 continuing to assess the feasibility of using budgetary systems to track costs of projects as well. Additionally, all Bureaus are required to submit quarterly reports as part of the Treasury STAT accountability initiative. Performance against established milestones are then reviewed in sessions with leadership from each Bureau and agency leadership. A few key sustainability metrics common to all bureaus will be incorporated into these reports to ensure they receive high-level visibility.

Table 1 provides a crosswalk of the different elements of this plan and whether or not they are reflected in current plans.

(Please note: The Department of the Treasury is a mix of centralized planning and reporting that occurs at the Departmental level, such as with the OMB Scorecard, 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.)

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	Yes	No	No	No	No	Yes	Yes	Yes	Yes	Yes
A-11 300s	No	No	No	No	No	No	No	Yes	Yes	Yes
Annual GHG Inventory and Energy Data Report	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
EISA Section 432 Facility Evaluations/Project Reporting/Benchmarking	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

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
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
Instructions for Implementing Climate Change Adaptation Planning	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Other (reports, policies, plans, etc.)										

V. 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 impacts 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 has been 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 will use a Social Costs of Carbon (SCC) model as an ROI input for sustainability related projects that may appear not 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.

This approach will involve two steps: 1) Determining the amount of carbon dioxide that the project will prevent from being released; 2) Multiplying that amount by an acceptable cost/carbon coefficient; and 3) Applying this product as a benefit over the period of performance. The amount of carbon dioxide deferred will be determined based on coefficients provided by the Department of Energy Federal Energy Management Program (FEMP) in their spreadsheets to help determine greenhouse gas Scope 1, 2, and 3 emissions. For instance, if an energy efficiency project is projected to save X number of Mega-Watt Hours of electricity annually, the budget analyst will multiply that number by the coefficients that convert energy usage to metric tons of carbon dioxide equivalent, or mtCO₂e.

The amount of deferred carbon released will then be monetized by multiplying the mtCO₂e by the SCC, based on the results of the Interagency Working Group on Social Cost of Carbon, United States Government as documented in the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866 . Currently that value is \$21.40 per metric ton of CO₂¹ . The SCC accounts for changes in net agricultural productivity, human health, property damages from increased flooding, and the value of ecosystem services.

c. Operations & Maintenance and Deferred Investments

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 Bureau responsible for funding each project. The metrics will be confirmation that the project was started by the proposed start date, and percent progress on the project measured against the 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.

The Treasury bureaus identified 30 projects over the next 3 years related to energy and sustainability resource investments. This information has been submitted to OMB through the Circular A-11, Section 25 process.

d. 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. In June of 2011, Treasury will issue its climate change adaptation policy. This will be followed by other analyses to increase understanding of the possible effects of climate change on the Treasury mission and its operations.

VI. Transparency

The complete Strategic Sustainability Performance Plan will eventually be available on the Fed Center website. Results of the Treasury Greenhouse Gas Inventory can be found on data.gov and the OMB Sustainability and Energy Scorecards are now being posted on the White House Council on Environmental Quality (CEQ) webpage.

Section 2: Performance Review & 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 measured areas of the Office of Management and Budget Sustainability and Energy Scorecard. 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/Energy Efficiency: Treasury has increased its purchase of Renewable Energy Credits (RECS). Currently, all the energy required to power the Denver Mint, Main Treasury and Treasury Annex buildings in Washington, DC is from renewable sources through these certificates.

In FY 2009, the United States Mint at Philadelphia completed a comprehensive energy and water evaluation and retro-commissioning. The retro-commissioning uncovered 21 energy conservation measures, eleven of which were closed out in FY 2010. This resulted in a total energy savings of 2,022,180 kWh of electricity and 7,839 Mlbs of steam, for a reduction in Scope 1 and 2 GHG emissions of 1,050 MTCO_{2e} and 1,380 MTCO_{2e}, respectively. The impact for the Mint was a reduction in the Bureau's Scope 1 and 2 GHG emissions of five percent below the FY 2008 baseline.

IRS is working to reduce energy use and green their consumption activities. In FY10, IRS reduced energy intensity by 17 percent from FY03 baseline levels at facilities for which they are responsible for operations and maintenance. IRS also purchased over 9 percent of our electricity through Renewable Energy Credits. In addition, our Andover, Austin and Memphis campuses have received the Energy Star rating for the past three years.

In FY 2010, the Mint obtained 11.8 percent of its total energy from renewable sources. This exceeds the requirement of the EAct for all Federal agencies to obtain five percent of their total energy from renewable sources by FY 2010 and 7.5 percent by FY 2013. In FY 2010, the Mint successfully concluded a Power Purchasing Agreement to supply the Denver Mint with wind energy for 100 percent of its electricity use. This reduced the facility's GHG emissions by 3,762 MTCO_{2e} and the bureau's Scope 1 and 2 GHG emissions by eight percent below the FY 2008 baseline.

To meet the energy reduction targets, the Bureau of Engraving and Printing (BEP) replaced and renovated many utility infrastructure components with higher efficiency components. Completed projects from FY 2010 to 2nd quarter of FY 2011 include rebuilding the compressed air plant at BEP's Washington DC Facility (DCF), and replacing the thermal oxidizer and controls on air handling units serving production areas at the Western Currency Facility (WCF). The out-year plan includes rebuilding the chiller plant, replacing lighting, and replacing three steam boilers at WCF; installing a supervisory control and data acquisition (SCADA) system to monitor and control utilities equipment, and installing variable frequency drives (VFDs) on cooling towers at DCF. The BEP utilizes and will continue to utilize the UESC vehicle to accomplish most of these projects.

Greening the Treasury Fleet. In FY2010, Treasury eliminated 15 SUVs, and purchased 19 hybrid vehicles. Petroleum use has decreased over 50% from the 2005 baseline which is well above the 10% established FY2010 goal. Currently,

25% of the Senior Executive Fleet has been replaced with more fuel efficient vehicles. In June 2011, a 240 volt AFV charging station will be installed at the Main Treasury building.

Greenhouse Gas Scope 1 and 2 Commitments: Treasury set an ambitious goal to reduce GHG emissions 33% by 2020. Results of the FY 2010 GHG inventory reveal a 13.9% reduction from the 2008 baseline figure. We have identified 30 energy efficient facility projects and numerous opportunities to green our fleet that will continue to help us accomplish this goal.

Electronic Stewardship: Treasury has made significant progress in the areas of electronic stewardship and power management.

Server Virtualization: The IRS virtualization project goal is to virtualize servers in the Data Centers in order to reduce the real estate footprint. This effort focuses both on new systems and servers that are overdue for refreshment. The IRS is virtualizing its x86 environments and to date has virtualized over 400 servers in the lab/development environment, over 1300 servers in the production environment, and over 400 servers in other business unit environments. Approximately 2,000 physical servers are projected to be retired as a result of virtualization by the end of FY 2013.

Sustainable Buildings: The former multiple building IRS Philadelphia campus was vacated and released as of April 15, 2011, and IRS is now occupying a renovated historic facility in Philadelphia, which they believe will receive Leadership in Energy and Environmental Design (LEED) Silver certification. In addition, in Memphis, a Utility Energy Services Contract was awarded for the implementation of energy conservation measures.

Additionally, the new Real Estate Facilities Management Headquarters office in Arlington, Virginia opened as a prototype office that serves as a model for future IRS office designs. The workstations are an innovation in office design that incorporates translucent panels that allow natural light to permeate the workplace. The space uses the Intelligent Office Workplace Alternatives (IOWA) concept, providing workstations that house employees who come to the office regularly as well as "hoteling"/shared workstations for employees who telework. The office space is also LEED Silver certified for commercial interiors.

Data Center Consolidation: This year the IRS has focused a thorough examination of physical data centers and hardware infrastructure inventories. Through a Preliminary Inventory Assessment for the Treasury Data Center Consolidation initiative: 15 data center locations were identified, housing over 4800 servers on 1300 racks and hosting 475 major business applications. The centralization of servers and server virtualization efforts are a priority for the IRS. IRS is working to complete a comprehensive utilization review at 15 primary data centers. The review will be used to inform data center consolidation efforts currently being planned. The Treasury Data Center Consolidation Plan was implemented in August of 2010.

II. Goal Performance Review

GOAL 1: Scope 1 & 2 Greenhouse Gas Reduction

a. Goal Description – The Department of the Treasury will reduce Scope 1 and 2 Greenhouse Gas emissions 33% by 2020, as compared with the 2008 baseline.

This goal has the following sub-goals:

- a. Buildings
 - 1) Reduce Facility Energy Intensity

- 2) Renewable Electricity Installation & Use
 - 3) Reduce per capita energy consumption through space management policies.
- b. Fleet
- 1) Reduce Petroleum Use in Fleet Vehicles
 - 2) Increase Use of Alternative Fuels in Fleet AFVs
 - 3) Optimize Use of Vehicles and Right-Size Fleet
 - 4) Increase Use of Low Emission and High Fuel Economy Vehicles
 - 5) Replace conventional senior executive fleet with low-GHG emitting, highly-efficient vehicles.
 - 6) Agencies operating shuttle buses should discuss efforts to streamline existing routes by consolidating ridership with other agencies. Identify specific challenges related to consolidation of and/or sharing of transportation services with other agencies.
 - 7) Discuss agency's efforts to implement sustainable transportation options by: acquiring low GHG emitting vehicles such as hybrids and AFVs; optimizing the number of vehicles in the agency's fleet, using alternative fuel in AFVs and FFVs; developing alternative fuel infrastructure; direct spending on training; and procurement of environmentally preferable motor vehicle products. Identify specific challenges in implementing these or other items related to implementation of sustainable transportation within your agency.

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 –

Buildings:

Treasury identified 30 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 regularly on progress in starting the projects and progress toward completion. Agency Directives and Implementation Plans, such as the Sustainable Buildings Implementation Plan and the Electronics Stewardship Implementation Plan, were updated in FY2010 to include guidance 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. A sampling of approaches taken by some of the Bureaus to reduce Scope 1&2 GHG emissions are highlighted here.

The GSA, in collaboration with the IRS, is implementing several ARRA-funded improvement projects. In Austin, the ARRA project has included replacing chillers, cooling towers, fans, and hot/chill water piping to increase efficiency. The project is also planned to encompass retrofitting the lighting, installing new motors and variable frequency drives

on air handlers, upgrading the building automation system, sealing exterior doors, and installing a solar photovoltaic system. Efficiency improvements are projected to help reduce energy consumption and GHG emissions starting in FY11 and continuing through FY12. As in Austin, the Ogden campus ARRA project also includes lighting retrofits, as well as repairs to the fan systems and variable air volume (VAV) boxes. Emissions and energy reductions from the Ogden efforts are projected to be realized in FY12. In Brookhaven, the ARRA project will include the replacement of old chillers with new energy-efficient chillers, the installation of a new computerized building management system controlling heating and air-conditioning, and an upgrade of parking lot lighting. The Brookhaven ARRA project is projected to yield energy and emissions savings after FY12. The ARRA project in Andover will provide for a complete interior renovation for the facility, install a geothermal HVAC system and energy efficient lighting, as well as a new roof for the facility, significantly reducing energy usage. The Andover facility has been designed to receive LEED Silver Certification, with projected energy savings starting in FY11 and being fully realized in FY13.

In addition to the projects designed to reduce emissions, in FY10, the National Energy Program Manager (NEPM) purchased over 9 percent of IRS FY10 energy purchases through Renewable Energy Credits to help meet energy goals.

Currently, the United States Mint at Philadelphia purchases steam for its operations from a provider that generates steam using electricity from a coal-intensive electric grid. The Philadelphia Mint will switch from this purchased steam to steam generated on-site produced using natural gas boilers, which is less carbon intensive. The Denver Mint will also implement the same project, even though the facility's steam is provided by a vendor who uses natural gas, because switching to site-generated steam will reduce the facility's Scope 3 GHG emissions from transmission and distribution losses associated with purchased steam. The estimates are that this project will reduce the Bureau's Scope 1 and 2 GHG emissions by 12.2 percent and help the Mint achieve the EISA requirements for reducing building energy intensity.

Three existing boilers at the BEPs Western Currency Facility (WCF) in Ft. Worth, Texas will be replaced with new high efficiency, low nitrogen oxide boilers. Funding was approved in April of 2011 at an investment cost of \$2.5 million. This project is expected to be completed at the end of FY 2012 and will result in an estimated reduction of 2433 metric tons of carbon dioxide emissions.

At present, the Mints at Denver and Philadelphia leave their circulating coin presses on when not being used for production. The Mint will install a "sleep mode" on circulating coin presses to reduce its energy consumption when not in use. The Mint estimates that this project will reduce the Bureau's Scope 1 and 2 GHG emissions by 4.4 percent and help the Mint achieve the EISA goal for reducing building energy intensity.

Install five new energy efficient chillers in Central Power Plant to replace existing chillers. This project also eliminates Ozone Depleting Substances (ODS). Investment cost is \$3.6 million. Estimated energy reduction is 1.5 MM KWh per year. This project is underway and completion is now estimated to be June 2011.

Fleet:

The Fleet Management office has ordered three Chevrolet Volt electric vehicles that are scheduled to arrive by the 2nd Quarter of FY2012. One is to go to the IRS in Los Angeles, CA, and the other 2 will be used by BEP and DO in the Washington, DC area.

The Bureau of Engraving and Printing (BEP) has taken aggressive measures to continuously right-size the fleet to reduce fossil fuel usage, increase alternative fuel usage, and reduce greenhouse gas emissions. The reduction of the fleet included the use of the minimum standard vehicles (4-cylinder) that meet the minimum emissions and alternative fuel requirements. In conjunction, we have had success in reducing our agency fleet usage requirements by encouraging the use of public/mass transportation, combining trips, car pooling, and teleconferencing and video conferencing whenever possible.

Internal policy reviews have been performed annually to ensure management oversight and fleet program control measures are enforced.

The BEP has been able to reduce the number of vehicles in the motor pool by 31% (48 vehicles in 2005 to 33 vehicles in 2010). To meet the petroleum fuel reduction and non-petroleum (alternative/E-85) fuel increase targets, BEP has converted all vehicles in the motor pool (excluding some mission critical law enforcement vehicles) from petroleum only to alternative/flex fuel. The BEP has consistently held the alternative fuel to petroleum fuel ratio above 75% in FY 2008, FY 2009 and FY 2010. The BEP has also consistently exceeded petroleum fuel reduction and non-petroleum fuel increase targets of 2% and 10% per year respectively from FY 2005 thru FY 2009. The “right sizing” of the fleet has also contributed significantly to the Bureau’s reduction in greenhouse gas emissions. The BEP has reduced greenhouse gas emission by 8% from FY2009 to FY2010 (from 9.2 to 8.5 metric tons of CO₂e).

d. Positions – The work to reduce GHG emissions is primarily completed by dedicated employees in the larger Treasury bureaus that own their own buildings or have delegated lease authority. These bureaus include the IRS, US Mint, BEP, OTS, and DO who have dedicated energy and environmental staff. In the smaller bureaus that do not own their buildings but do have fleets, employees often perform these tasks as collateral duty. At this time, Treasury has not identified a need to increase FTEs to accomplish this goal²

e. Planning Table – The following table illustrates the annual percent reduction targets for various items that impact Scope 1 and 2 GHG emissions.

.	SCOPE 1&2 GHG TARGET	Unit	FY10	FY11	FY12	FY13	FY14	FY15	...	FY20
Buildings										
Buildings										
Buildings	Energy Intensity Reduction Goals (BTU/SF reduced from FY03 base year)	%	15	18	21	24	27	30		
Buildings	Planned Energy Intensity Reduction (BTU/SF reduced from FY03 base year)	%							...	
Buildings	Renewable Electricity Goals (Percent of electricity from renewable sources)	%	5	5	5	7.5				
Buildings	Planned Renewable Electricity Use (Percent of electricity from renewable sources)	%							...	
Fleet	Petroleum Use Reduction Targets (Percent reduction from FY05 base year)	%	10	12	14	16	18	20		30
Fleet	Planned Petroleum Use Reduction (Percent reduction from FY05 base year)	%							...	
Fleet	Alternative Fuel Use in Fleet AFV Target (Percent increase from FY05 base year)	%	61	77	95	114	136	159		
Fleet	Planned Alternative Fuel Use in Fleet AFV (Percent increase from FY05 base year)	%							...	
Fleet	Senior Executive Fleet Replaced with Low-GHG, High Efficiency Vehicles (Percent replaced from FY08 base year)	%							...	
.	Other as defined by agency								...	

	SCOPE 1&2 GHG TARGET	Unit	FY10	FY11	FY12	FY13	FY14	FY15	...	FY20
	Total Scope 1&2 GHG Emissions (Comprehensive)	MMTCO ₂ e							...	
	Total Scope 1&2 GHG Emissions (Subject to Agency Scope 1&2 GHG Reduction Target)	MMTCO ₂ e							...	
	Overall Agency Scope 1 & 2 Reduction (reduced from FY08 base year)	%							...	

Goal-Specific Items

f. Agency status – FY2010 represents the first year that Treasury has conducted a complete GHG inventory. The resulting Scope 1&2 data indicates nearly a 14% reduction in emissions as compared to the FY2008 baseline. Treasury set an aggressive goal of reducing GHG 33% by 2020 and the inventory results place us ahead of our planned goal. Treasury bureaus identified 30 projects to reduce energy usage and several opportunities to green the fleet. Some projects are currently being designed and implemented, and we continue to track the progress of these projects. We are also continuing to explore ways to measure 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.

Treasury used the Department of Energy’s Federal Energy Management Program’s (FEMP) Annual GHG and Sustainability Data Report to collect agency-aggregated data necessary for calculating Scope 1, 2, and 3 GHG emissions in the commonly-used, native units of energy consumption and fugitive emissions as well as activity data for estimating Scope 3 indirect emissions. The workbook aligns with the CEQ GHG Reporting Guidance and transparently incorporates all of the approved methodologies and conversion factors contained in the GHG Reporting Technical Support Document. It provides users with the summation of their calculated emissions as well as other performance results for other sustainability goals.

This new Data Report also satisfies previous agency reporting requirements to FEMP for facility and operations energy and water use. The Data Report also accepts outputs from the Federal Automotive Statistical Tool (FAST) to calculate the GHG emissions from Federal covered fleet fuel use.

g. Return on Investment – Currently, there have been no projects or initiatives cancelled or suspended due to a lower than expected return on investment (ROI). Likewise, no projects have been expanded due to a higher than expected ROI.

h. Highlights – The IRS has created a governance process and a tracking database to use in the identification and evaluation of projects designed to improve energy efficiency and the environment. This Energy Project Prioritization Database (EPPD) will track project descriptions, cost measures, timelines, projected energy and water savings, savings to investment ratio, and other relevant measures. Proposed energy efficiency projects will be evaluated through the EPPD and through a process involving subject matter expert review and leadership approval.

On August 1, 2010, the Denver Mint signed an agreement with its local utility (Xcel Energy) to power the facility with 100 percent renewable electricity from wind energy. In FY 2010, they obtained 5,106 MWh of renewable electricity from wind power as a result of this project. This reduced the Denver Mint’s Scope 1 and 2 GHG emissions by 21 percent. Overall, the project reduced the United States Mint’s Scope 1 and 2 GHG emissions by nine percent in FY 2010, from 42,016 MTCO₂e to 38,253 MTCO₂e.

Beginning in FY 2011, the project will supply the Denver Mint with 13,000-18,000 MWh of renewable electricity each year. This will reduce the facility’s Scope 1 and 2 GHG emissions by approximately 70 percent and the Bureau’s

Scope 1 and 2 GHG emissions by approximately 26 percent below the FY 2008 baseline. This project resulted in the United States Mint successfully achieving the EAct 2005 and EO 13423 requirements for agency renewable energy installation and use.

For the WCF (BEP), the reduction of Scope 1 and 2 GHG emissions centers on several projects to include:

Replacement was completed January 19, 2010 of the thermal oxidizer with a more energy efficient version. For one complete year of operation the natural gas use by the regenerative thermal oxidizer (RTO) has been reduced 37% (normalized by production days) and overall the total facility consumption of natural gas has been reduced by 3.7%.

GOAL 2: Scope 3 Greenhouse Gas Reduction & Develop and Maintain Agency Comprehensive Greenhouse Gas Inventory

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

This goal has the following sub-goals:

- a. Reduce GHG emissions from Treasury employee business travel and commuting
- b. Reduce contracted waste diverted to landfills
- c. Reduce Transmission and Distribution loss associated with power transfer to Treasury facilities
- d. Discussion of planned Treasury activity or policy implementation to improve data accuracy and overall data collection and analysis methods related to Scope 3 GHG emissions.
- e. Discussion of the methods used by Treasury to calculate its scope 3 GHG emissions.
- f. Discussion of the development of Treasury's FY 2010 Greenhouse Gas inventory.

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 measure of 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 Goal 1. These same offices will be responsible for the reduction in waste diverted to landfills. The Office of Assets Management under the ASM is the Office that 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 explained previously.

c. Implementation methods – The inventory was developed using guidance from the Federal Energy Management Program (DOE) 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's 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 are all dependent on how many employees are in the agency. Treasury will likely increase in size due to anticipated staff increases at IRS, therefore it is difficult to accurately predict how many FTE will be in the Department in 2020. However, for purposes of goal setting, we have assumed steady state on 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, as was discussed earlier. Recent information from the Treasury Travel Program indicates that some rental car companies are offering hybrid vehicles with government rates. However the rental rates are typically 22% higher and the rental company must be contacted directly.

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.

Treasury used the Default Methodology Survey located on the FEMP Reporting Portal website to collect commuter information used to calculate the Scope 3 emissions estimate. The survey provided a "bare-bones" approach and required input information about the total number of miles travelled during FY2010 using each of the common modes of transportation (personal vehicle, van, car pool, bus, transit rail, etc.). The link to the anonymous survey was emailed to Treasury employees by the individual Bureau points of contact.

In order to determine contracted solid waste disposal levels and Scope 3 emissions from waste disposal, IRS utilizes waste management records from facilities over which it has operations and maintenance control. The IRS also uses energy bills and site records regarding electric/natural gas/steam use and wastewater treatment to calculate Scope 1 and 2 emissions. IRS field sites submit data for their specific facilities, and IRS Headquarters Real Estate & Facilities Management employees review field data prior to submission. IRS is confident in the accuracy of the inventory data due to the fact that it is based on actual records from energy, utility and waste contracts.

The IRS analyzes the waste stream to determine possibilities to help the agency meet the goal. Currently there are aggressive recycling programs in place, so new opportunities may be limited.

TTB noted that they monitor employee travel in order to evaluate and analyze travel trends. This allows 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. They promote webinars and live meeting sessions through Microsoft Outlook, teleconferences and video conferences.

d. Positions – The work on tracking and reducing GHG emissions, including scope 3, is primarily completed by dedicated employees in the larger bureaus, and often as collateral duty by employees in the smaller bureaus. At this time, Treasury has not identified a need to increase employees to accomplish this goal.

e. Planning Table – The following table illustrates the annual percent reduction targets for various items that impact Scope 3 GHG emissions.

SCOPE 3 GHG TARGET	Units	FY10	FY11	FY12	FY13	FY14	FY15	...	FY20
Total Scope 3 GHG Emissions (Comprehensive)	MMTCO ₂ e	.536565						...	
Total Scope 3 GHG Emissions (Subject to Agency Scope 3 GHG Reduction Target)	MMTCO ₂ e	.536565						...	
Overall Agency Scope 3 Reduction (reduced from FY08 base year)	%	0	1.1	2.2	3.3	4.4	5.5	...	11
Other, as defined by agency	%							...	

Goal-Specific Items

f. Status – This is the first year that Treasury has conducted a complete GHG inventory. Treasury takes advantage of a GHG Inventory Management Plan (IMP) to provide a framework for the management of GHG accounting within the Agency. The IMP is a way to manage inventory quality and outlines the data, methodologies, and tools required to perform the annual GHG inventory in an accurate, reliable, and repeatable manner. Details related to GHG data collection and verification methods can be found in the IMP. Notable challenges facing 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 vehicle refueling stations continues to be an issue on a nationwide basis. Also, Congressional mandates relating to raw materials for both paper money and coins limit Treasury’s ability to explore more sustainable feedstock.

Inventory results indicate a 4% increase in Scope 3 emissions as compared to the FY2008 baseline. This could be a result of improved data collection techniques resulting in more accurate inventory information for 2010 as compared to 2008. We will continue to adjust the FY2008 figures as inventory collection methods improve. Treasury set a goal of reducing Scope 3 GHG emissions 11% by 2020 which remains a very realistic and attainable goal.

g. Return on Investment – Currently, there have been no projects or initiatives cancelled or suspended due to a lower than expected return on investment (ROI). Likewise, no projects have been expanded due to a higher than expected ROI.

h. Highlights – N/A

GOAL 3: High-Performance Sustainable Design / Green Buildings & Regional and Local Planning

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).

This goal has the following sub-goals:

- a. Beginning in FY 2020, all new Treasury buildings are to be designed to achieve zero-net energy by FY 2030.
- b. All new construction, major renovation or repair and alteration of Treasury buildings will comply with the, “Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings (Guiding Principles),” in.
- c. At least 15% of Treasury’s existing government-owned buildings, agency direct-leased buildings, delegated authority leased buildings, and FRPP-reported leased buildings meet Guiding Principles by FY 2015 [5,000 GSF threshold for existing buildings and building leases].
- d. Demonstrate annual progress toward 100% conformance with Guiding Principles for entire building inventory by 2015 and thereafter.
- e. Incorporate sustainable practices into Treasury’s policy and planning for new Federal facilities and leases, and into lease renewal strategies.
- f. Demonstrate use of cost-effective, innovative building and sustainable landscape strategies to minimize energy, water and materials consumption.
- g. Operate and maintain, and conduct all minor repairs and alterations for existing building systems to reduce energy, water and materials consumption in a manner that achieves a net reduction in agency deferred maintenance costs.
- h. Optimize performance of Treasury’s real property portfolio – dispose and consolidate excess and underutilized property, co-locate field offices, consolidate across metropolitan and regional locations.
- i. Reduce need for new building and field office space by utilizing technologies to increase telework opportunities and expand delivery of services (over the internet or electronically).
- j. Conserve, rehabilitate, and reuse historic Federal properties, using current best practices and technology.
- k. Align Treasury space actions (new leases, new construction, consolidation) with agency Scope 1&2 and Scope 3 GHG reduction targets.

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 continues 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) Leadership in Energy and Environmental Design (LEED) silver or platinum certification by 2015. The IRS continues to explore 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.

In IRS facilities for which we have operations & maintenance control, as equipment repairs and replacement become necessary, the NEPM and FEMs seek to procure more energy-efficient equipment that will help to reduce energy use. The IRS O&M contracts specify that equipment repairs and replacements must utilize higher efficiency Energy Star equipment whenever possible.

As of April 28, 2011, 11% of IRS’ direct leased inventory meets the Guiding Principles. The Human Capital Office is currently developing an updated IRS telework policy.

The BPD has taken steps to reduce water consumption through landscaping irrigation efficiencies which include: weekly adjustment of the irrigation controller (timer) run time to allow for seasonal changes in weather, only running sprinklers during the morning hours, taking steps to reduce water run-off, ensuring sprinkler heads are not blocked by vegetation, and using drip irrigation where practical

d. Positions – The work on making Treasury’s inventory of buildings compliant with the Guiding Principles is primarily completed by dedicated employees in the larger bureaus, and often as collateral duty by employees in the smaller bureaus. At this time, Treasury has not identified a need to increase FTEs to accomplish this goal.

e. Planning Table – The following table illustrates the annual percent targets for Treasury owned and leased facilities to be in compliance with the Guiding Principles. (Note: 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).

GOAL 3 Targets	Units	FY10	FY11	FY12	FY13	FY14	FY15	...	FY20
Owned Buildings	%	0	9	9	18	18	18	...	
FRPP-Reported Leased Buildings	%	0						...	
Total Buildings	%	0	9	9	18	18	18	...	
Other (Buildings), as defined by agency								...	
Other (Reg/Local Planning), as defined by agency								...	

Goal-Specific Items

f. Agency status – This year continued Treasury’s progress toward ensuring our buildings are sustainable. Treasury owns 11 buildings and leases the remainder. We have identified two buildings, Treasury’s Main Building and the U.S. Mint in West Point, to apply for LEED certification. Main Treasury LEED Certification application paperwork was submitted in April 2011 to the USGBC. Certification is expected in late May or early June of 2011. This achievement along with LEED certification of the West Point facility, will accomplish our goal of having 15% of our buildings meet the Guiding Principles through our LEED certification.

g. Return on Investment – Currently, there have been no projects or initiatives cancelled or suspended due to a lower than expected return on investment (ROI). Likewise, no projects have been expanded due to a higher than expected ROI.

h. Highlights – The United States Mint at San Francisco has installed a “cool roof”. The new roof is a combination of a white roof that reduces the urban heat island effect and a green roof that reduces stormwater runoff and provides

a habitat for wildlife. The project satisfied the LEED requirements for construction waste management, material reuse, recycled content and regional materials.

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:

- a. Incorporate consultation with local and metropolitan planning organizations regarding the impact, or potential impact, of Federal actions on local transportation infrastructure and local development plans into existing policy and guidance.
- b. Align agency policies to increase effectiveness of local planning efforts regarding transportation, energy resources and the environment.
- c. Increase effectiveness of regional measures that enhance integrity of local ecosystems and watersheds.
- d. Update Treasury policy and guidance to ensure that all Environmental Impact Statements (EIS's) and Environmental Assessments (EA's) required under the National Environmental Policy Act (NEPA) for proposed new or expanded Federal facilities, and as appropriate, identify and analyze impacts associated with energy (including alternative energy sources) and climate change.
- e. Integrate methods and practices necessary to achieve the goals of this plan into Treasury master planning documents (i.e., high-performance, sustainable building goals, pollution prevention and waste reduction goals, water use reduction goals, sustainable acquisition goals, electronic stewardship and data center consolidation, etc.).
- f. Update Treasury policy and guidance to ensure coordination and (where appropriate) consultation with Federal, State, Tribal and local management authorities regarding impacts to local ecosystems, watersheds and environmental management associated with proposed new or expanded Federal facilities.
- g. Discuss Treasury participation in critical local and regional efforts and initiatives (i.e., Executive Order on Chesapeake Bay Protection and Restoration, Executive Order on Stewardship of the Ocean, Our Coasts, and the Great Lakes, etc.).

b. Agency lead for goal – 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, with the operational responsibilities 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.

Treasury continues to update 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 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 Buildings Program and Implementation Plan. This plan addresses energy efficiency, acquisition, sustainable buildings goals and requirements prescribed in Executive Order 13514, Federal Leadership in Environmental, Energy, and Economic Performance. 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.

Under the Department’s Energy Program (TD 75-04), 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 regarding the convenience of the public served, and to 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; the proximity to supporting services (equipment maintenance and supply, mail, etc.).

d. Positions – The work on regional and local planning is primarily completed by dedicated environmental, energy, and/or asset management employees, but may be collateral duty for some staff. At this time, Treasury has not identified a need to increase the number of employees to accomplish this goal.

e. Planning Table – Not Applicable.

f. Agency status – Treasury is in the process of reviewing directives to determine 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.

g. Return on Investment – Currently, there have been no projects or initiatives cancelled or suspended due to a lower than expected return on investment (ROI). Likewise, no projects have been expanded due to a higher than expected ROI.

h. Highlights – N/A

GOAL 4: Water Use Efficiency and Management

This goal has the following sub-goals:

- 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.
- e. Incorporate appropriate reduction strategies for non-potable water use into Treasury policy and planning.

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 water use reduction projects within their bureaus, with the operational responsibilities designated down as previously explained.

c. Implementation methods – The Department of the Treasury continues work 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 (which uses a solution to clean the wiping rollers in the Intaglio presses) accounts for approximately 25% of the BEP's total potable water consumption. In FY2011, the BEP expects to implement a 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 and it is estimated that the business case will be submitted by September 1, 2011.

The United States Mint is required to conduct comprehensive energy and water evaluations for one quarter of its covered facilities each year. These evaluations frequently identify water conservation measures. The Mint intends to implement these water conservation measures by capitalizing them internally or bundling them with cost-effective energy conservation measures in UESCs.

The 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 11 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.

To conform to EPA's reduction of potable water use, BPD has initiated a plan to harvest rain water and air conditioning condensation for the purpose of irrigation. This plan will be introduced as part of the energy audit conducted in early summer, 2011 for approval.

d. Positions – The work on water management is primarily completed by dedicated energy management employees, but may be collateral duty for some staff. At this time, Treasury has not identified a need to increase the number of employees to accomplish this goal.

e. Planning Table – The table below illustrates the annual percent targets for reducing water use as compared to the baseline year.

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

Goal-Specific Items

f. Agency status – This year continued Treasury’s progress toward reducing water use. In FY 2010, Treasury reduced usage by approximately 20% 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. Treasury has already surpassed that goal.

g. Return on Investment – Currently, there have been no projects or initiatives cancelled or suspended due to a lower than expected return on investment (ROI). Likewise, no projects have been expanded due to a higher than expected ROI.

h. Highlights – The Facility Energy Manager (FEM) at each covered IRS facility has established a water management plan based on the Federal Energy Management Programs (FEMP) 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 are utilized to identify projects for water conservation.

In FY 2009, the United States Mint at Philadelphia completed a comprehensive energy and water evaluation and retro-commissioning. The water evaluation uncovered numerous water conservation measures that the Mint successfully implemented in FY 2010. This reduced the facility’s water consumption from 25 million gallons in FY 2007 to 19.5 million gallons in FY 2010.

GOAL 5: Pollution Prevention and Waste Reduction

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. Discuss Treasury strategies to reduce municipal solid waste sent to landfills and how implementation will assist the agency in achieving FY 2020 GHG reduction targets [See Goals 1 and 2 above].
- d. Divert at least 50% C&D materials and debris by FY 2015, and discuss methods used to monitor and track progress.
- e. Reduce printing paper use.
- f. Increase use of uncoated printing and writing paper containing at least 30% postconsumer fiber.
- g. Reduce and minimize the acquisition, use, and disposal of hazardous chemicals and materials, and discuss how implementation will assist the agency in achieving FY 2020 GHG reduction targets [See Goals 1 and 2 above].
- h. Increase diversion of compostable and organic materials from the waste stream
- i. Implement integrated pest management and landscape management practices to reduce and eliminate the use of toxic and hazardous chemicals and materials.
- j. Increase Treasury use of acceptable alternative chemicals and processes
- 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 with operational responsibilities 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 is generated, Treasury attempts to reuse and recycle as much as possible to prevent material from going to landfills. Treasury will update its Toxic and Hazardous Chemicals Management Plan in CY 2011, and broaden it to be a more comprehensive Pollution Prevention plan. The Office of the Procurement Executive has been working 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 non-hazardous 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 IRS has a Program Management Office in REFM that 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. 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 29% 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 4, will reduce plant sludge significantly. Currently, approximately 1,700 tons of waste-water pretreatment plant sludge is generated annual which make this one of the BEP’s largest non-hazardous industrial waste streams. Of that total, 1,100 tons are landfilled and 600 tons are burned for energy recover.

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 45% 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. Bio-based products are being evaluated for use in the maintenance department, and would replace standard paints and thinners. Service contracts include a clause that all pesticides, and cleaning agents must follow guidelines outlined within the appropriate environmental Executive Orders. 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 generation; but as is the case with many of the Treasury Bureaus, 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.

As appropriate at contract renewals, IRS is incorporating standard language regarding landscape and pest management practices to reduce the use of toxic/hazardous chemicals and materials.

The IRS will work with GSA to ensure all construction projects completed on behalf of the IRS include provisions to reduce construction and demolition waste. IRS construction projects will have specifications that include provisions for reduction of C&D incorporated in the contract language.

d. Positions – The work on pollution prevention and waste elimination is primarily completed by employees at the individual Treasury facilities, and may be collateral duty for some staff. At this time, Treasury has not identified a need to increase the number of employees to accomplish this goal.

e. Planning table – The table below illustrates the annual percent targets for diverting waste from landfills compared to the amount of waste generated.

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

Pollution Prevention & Waste Reduction	Units	FY10	FY11	FY12	FY13	FY14	FY15	...	FY20
If agency uses on-site or off-site waste-to-energy, estimated total weight of materials managed through waste-to-energy	Tons	1031						...	
Number of sites or facilities with on-site composting programs	#	0	0	0	0	0	0	...	
Number of sites or facilities recycling through off-site composting programs	#	0	1	1	1	1	1	...	
If agency has on-site or off-site composting programs, estimated total weight of materials diverted to composting	Tons or pounds	0						...	
% of agency-operated offices/sites with a recycling program	%	85						...	
If agency offices located in multi-tenant buildings, % of those buildings with a recycling program	%	91						...	
% of agency-operated residential housing with recycling programs	%	N/A	N/A	N/A	N/A	N/A	N/A	...	
Other, as defined by agency								...	

Goal-Specific Items

f. Agency status – Treasury has been actively pursuing opportunities to minimize waste and prevent pollution. The new IRS copier contract will have impact in the out years as new copiers are deployed. Currently, there are 4,283 copiers in service and more than 3,000 will be replaced with new contract copiers and will be set to duplex print. This will have minimal impact on paper usage in FY 2011 but greater impact in out years and as more new copiers are deployed. REFM estimates the impact on the paper usage in copiers may be a 2% reduction in FY11 and an additional 10% reduction in each of the subsequent FYs.

At the Memphis campus, IRS is implementing a chemical-free water treatment process for cooling towers; IRS will evaluate the success of this initiative and consider the potential for implementation at other facilities.

Currently, the Main Treasury building dining facility is using compostable disposable products. While they are not being composted, they will fully decompose in a land fill within 90 days as opposed to the 20+ years that it takes for other standard foodservice disposables. Treasury had hoped to eventually compost these items along with pre- and post-production food waste. Following an analysis with the facilities office to determine the logistics and costs associated with this project, Treasury is currently not able to implement the plan but will re-evaluate this project in the future.

The BEP's largest municipal and non-hazardous industrial waste streams are currency paper and waste water treatment plant sludge. The Bureau generates approximately 1,750 tons/year of currency paper, which includes trimmed edges and disintegrated or shredded currency notes. Approximately 725 tons of currency trim is recycled, 950 tons are burned for energy recovery, and 75 tons are landfilled. During FY2011 the Bureau has started projects to identify waste diversion reuse and recycling opportunities for these waste streams. The Bureau must increase diversion of these materials to meet the FY2015 50% waste diversion target.

The BEP currently recycles 32 percent of non-hazardous industrial and municipal solid waste.

g. Return on Investment – Currently, there have been no projects or initiatives cancelled or suspended due to a lower than expected return on investment (ROI). Likewise, no projects have been expanded due to a higher than expected ROI.

h. Highlights – Under the guidance of the San Francisco Green Team, an employee organized group focused on sustainability, the United States Mint at San Francisco has implemented an extensive recycling program. They achieved a diversion rate of over 99 percent. Out of a total waste production of 434,869 pounds, only 3,692 pounds of waste were sent to the landfill. The San Francisco Mint recycles plastic, paper, cardboard, metal, electronics waste, and some hazardous waste.

GOAL 6: Sustainable Acquisition

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

This goal has the following sub-goals:

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 FEMP-designated), 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 Treasury affirmative procurement plans (also known as green purchasing plans or environmentally preferable purchasing plans), policies and programs to ensure that all mandated Federally-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, with the operational responsibilities designated down, as was 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. The IRS will advance sustainable acquisition to ensure that 95% 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, bio-based, 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 currently has limited methods of measuring sustainability; however, a re-write of their Contract Writing System in early FY 12 to include enhancements will allow them to monitor the purchase of environmentally preferred products/services and ensure applicable clauses and provisions are included in all contracts and solicitations. 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 has been 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 both responsible for providing training on buying green. On-line training has 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) . Six IRS facilities have Environmental Management Systems that include the purchase of environmentally preferred products/services. The IRS' long-term energy strategy is to issue energy contracts under the Energy Savings Performance Program (ESPC). These are 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 results of this assessment will enable the bureau to define planned new contract actions related to ongoing sustainability.

In FY 2011, the United States Mint will begin implementing its sustainable acquisition strategy by training all contract officers, COTRs, and purchase card holders in Federal green purchasing requirements, developing a system to track and report sustainable contract actions, and by reporting all sustainable contract actions to the ESHE Division, the Treasury Department, and OMB for review.

d. Positions – The IRS commented that implementing the Buying Green program would be more efficiently monitored by a full time employee (FTE). At present, only one Procurement Analyst has full responsibility for the program, in addition to her full-time duty as the IRS Small Business Specialist. Budgetary constraints prevent the agency from obtaining any additional FTE's for this program.

e. Planning Table – The following table illustrates the annual percent targets for new contracts that will include green acquisition language. (Note: FY10 data cannot be reported with a high level of confidence. However, for FY2011, a tracking system is in place that will provide accurate data which will be included in the 2012 Sustainability Plan.)

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

SUSTAINABLE ACQUISITION CONTRACT REVIEW	1st QTR FY 11	2nd QTR FY 11	3rd QTR FY 11 (planned)	4th QTR FY 11 (planned)
Total # Agency Contracts	1672	3483		

SUSTAINABLE ACQUISITION CONTRACT REVIEW	1st QTR FY 11	2nd QTR FY 11	3rd QTR FY 11 (planned)	4th QTR FY 11 (planned)
Total # Contracts Eligible for Review	84	80		
Total Contracts Eligible Contract Reviewed (i.e., 5% or more eligible based on previous OMB guidance)	88	110		
# of Compliant Contracts	62	97		
Total % of Compliant Contracts	87	95		

To complete the compliance monitoring portion of the OMB Environmental Stewardship Scorecard for the 2nd Quarter, an Ad Hoc report was generated in the Federal Procurement Data System - Next Generation (FPDS-NG) for the period of 1/1/11 through 3/31/11. The report included all Procurement Instrument Identifiers (PIIDS) generated during that period, sorted by Product Service Code (PSC). Sorting by PSC allowed us to identify products and services by commodity, to more visibly identify the applicable contract actions to determine whether they included requirements for green products and services. A random sample of the applicable actions were reviewed that represented the required 5% or greater sample.

Goal-Specific Items

f. 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 the first quarter of FY2011, the Treasury executed a total of 1672 contract actions. The IRS GPP has been updated to include guidance from the EO 13514 as appropriate.

The Mint and OCC are in the process of preparing a Bureau Affirmative Procurement Plan (APP). At DO, 100 percent of contract specialists completed green purchasing training in FY 2010. Green purchasing is also part of the training for all new purchase card holders and approving officials.

g. Return on Investment – Currently, there have been no projects or initiatives cancelled or suspended due to a lower than expected return on investment (ROI). Likewise, no projects have been expanded due to a higher than expected ROI.

h. Highlights – The most challenging aspect of implementing a successful sustainable acquisition program at the United States Mint will be getting COTRs to accept responsibility for buying green. The Mint Procurement Division has very little control over the technical aspects of the bureau's contracts. Because contracting officers depend on COTRs to supply the technical knowledge, COTRs will need to be the Mint personnel who ensure the bureau's applicable contracts satisfy at least one of the Federal green purchasing requirements. To achieve the bureau's sustainable acquisition goal, the Mint will have to train all of its COTRs in green purchasing in a way that motivates them to "buy green".

GOAL 7: 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 lifecycles.

- a. Ensure acquisition of EPEAT registered, ENERGY STAR qualified, and FEMP designated electronic office products when procuring electronics in eligible product categories.
- b. 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 Treasury electronic products.
- c. Update Treasury policy to reflect environmentally sound practices for disposition of all agency excess or surplus electronic products.
- d. Discussion of how Treasury will increase the quantity of electronic assets disposed through sound disposition practices.
- e. Discussion of how Treasury will require IT planning/Life Cycle Manager to replace and or waive equipment that does not meet “Green” compliance requirements.
- f. Update Treasury policy to ensure implementation of best management practices for energy efficient management of servers and Federal data centers, including how the agency will meet data center reduction goals included in the Federal Data Center Consolidation Initiative.

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 like 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 was updated in 2010 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 will establish and publish policy and guidance to ensure the power management of monitors, computers, printers and scanners are used where tax processing production is not impacted.

The new national copier contract which will be awarded on or about May 31, 2011, and will require all newly leased copiers to have duplex printing set as the default and to have power management features turned on. Older copiers will be replaced as their lease expires. There are 4,283 older copiers in place currently and more than 3000 will be replaced in late FY 2011 or early FY 2012.

Printers also have Power Save settings set to reduce energy consumption when not in use. IRS acquired the EiPower Saver Solution Software from Altiris to manage the power management settings on our IRS workstation computers (desktops and laptops). The software allows for systems to be available when needed, for example, they can be turned

on when patches/updates are required and turned off when done. This reduces PC energy waste and the carbon footprint by powering down PCs in IRS offices during non-work hours. Deployment is scheduled for early August 2011 pending completion of infrastructure upgrade which is scheduled for June 2011.

The Comprehensive Printing Strategy (CPS) is a planned approach to using enhanced technology to meet IRS' printing needs more cost-effectively, securely, reliably, and in an environmentally friendly way. It will affect the distribution, management and servicing of printers and copiers/printers/scanners (known as copier/multifunction devices or "C/MFD") throughout IRS. CPS will save IRS more than 60% of printing costs over five years; better protect the privacy of taxpayer information, reduce printer downtime, save paper, and comply with Government-wide and Treasury-wide "Green" guidance.

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 to all sites. Server virtualization will achieve increased CPU utilization in the data centers.

Disposition Practices: It is IRS policy under the Internal Revenue Manual (IRM) 1.14.12 to "use environmentally sound practices with respect to disposition of agency electronic equipment that has reached the end of its useful life." 100% of non-usable electronics equipment is reused or recycled. IRS transfers non-usable electronic equipment to eligible schools/education non-profits through the CFL program under Executive Order 12999 and reports these transfers to the Department of Treasury for 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 & Facilities Management (REFM) continues to coordinate with Modernization & Information Technology Services (MITS) on the Data Center Consolidation Plan to determine which data centers to sub-meter. The IRS faces challenges to sub-metering its current data centers since building infrastructure was not constructed to support separate metering, and a substantial cost is likely required for sub-metering at our data centers. IRS is in the process of conducting an analysis to assess which potential campus data center to meter, as consolidation efforts would affect this decision.

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, 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 update to reflect best management practices for energy efficient management of servers and Federal data centers. The Mint recycles electronic assets through donations to non-profit organizations and/or recycling through private recyclers and/or GSA Xcess program. The Mint will verify recyclers are certified under the Responsible Recyclers (R2) guidance or equivalent.

d. Positions – The work on electronic stewardship is primarily completed by dedicated employees at the individual Treasury facilities, and may be collateral duty for some staff. The IRS has a Facility Energy Manager (FEM) at each

of its covered facilities. They work in the building delegation section and perform the requirements of the FEM as a collateral duty. At this time, Treasury has not identified a need to increase the number of employees to accomplish this goal.

e. Planning table – The table below shows the annual percent targets for electronic stewardship.

ELECTRONIC STEWARDHIP & DATA CENTERS	Units	FY10	FY11	FY12	FY13	FY14	FY15
% of electronic product acquisition covered by current Energy Star specifications that must be energy-star qualified		100	100	100	hold	hold	hold
% of covered electronic product acquisitions that are EPEAT- registered		100	100	100	hold	hold	hold
% of covered electronic product acquisitions that are FEMP- designated		100	100	100	hold	hold	hold
% of agency, eligible PC, Laptops, and Monitors with power management actively implemented and in use		51	100	100	100	hold	hold
% of agency, eligible electronic printing products with duplexing features in use		67	95	100	100	hold	hold
% of electronic assets covered by sound disposition practices		100	100	100	100	hold	hold
% of agency data centers independently metered, advanced metered, or sub-metered to determine monthly (or more frequently) Power Utilization Effectiveness (PUE)		0	10	15	20	25	25
Reduction in the number of agency data centers		41	39	38	38	38	35
% of agency data centers operating with an average CPU utilization greater than 65%		5	5	10			
Maximum annual weighted average Power Utilization Effectiveness (PUE) for agency.		3.48				1.8	1.7

Goal-Specific Items

f. Agency status –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 Treasury 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.

The Memphis data center is fully-metered/sub metered. As mentioned previously, sub metering a building offers significant challenges and costs, and the IRS is finalizing the design and is developing a business case to provide metering for the chilled water at the Martinsburg data centers. The electrical metering for the Martinsburg main building data center has been included in the ongoing GSA prospectus-level Mechanical/Electrical/Plumbing (MEP) project scheduled to be completed in FY12.

In FY 2011, the United States Mint will take the following actions to finish implementing its Plan of Action and Milestones (POAM): 1. Enable power management features on computers, laptops, and printers and; 2. implement best practices for data center energy efficiency.

g. Return on Investment – Currently, there have been no projects or initiatives cancelled or suspended due to a lower than expected return on investment (ROI). Likewise, no projects have been expanded due to a higher than expected ROI.

h. Highlights – N/A

GOAL 8: Agency Innovation & Government-Wide Support

Treasury has taken an innovative approach to meeting and exceeding the goals in Executive Orders 13423 and 13514. Some of the recent achievements from Treasury include:

- The Denver Mint, Main Treasury, and Treasury Annex buildings are all being powered with 100% renewable energy through the purchase of Renewable Energy Credits (RECs).
- Treasury and the Department of Commerce were attempting to consolidate vehicle fleets in an effort to reduce costs and the individual agencies carbon footprint. However, after several discussions and “brain-storming” sessions, it was determined that vehicle parking in the DC Metro area, and security issues would make combining the fleets unpractical.
- The San Francisco Mint installed a “cool roof” that reduces the heat island effect and reduces stormwater runoff while providing habitat for wildlife. The project satisfied the LEED requirements for construction waste management, material reuse, recycled content and use of regional materials.
- The Bureau of Engraving and Printing has collaborated with the Department of the Treasury to identify Real Property Profile space reduction opportunities. The use of the Bureau’s existing warehouse to share space with other Treasury Bureaus with expiring leases is being explored.

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.

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

Goal-Specific Items

Section 3: Agency Self Evaluation

Agency Self Evaluation	Answer
Does your Sustainability Plan incorporate and align sustainability goals, GHG targets and overarching objectives for sustainability with the Agency Strategic Plan?	Yes
Does it provide annual targets, strategies and approaches for achieving the 2015 and 2020 goals?	Yes
Is the Sustainability Plan consistent with the FY2012 President's Budget?	Yes

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

Other Key Questions for 2011:

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

- Acquire at least 95% EPEAT-registered electronics
- Enable energy star or power management features on 100% of eligible PCs
- Extends the life and/or uses sound disposition practices for its excess or surplus electronics

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

3. Has your agency completed energy evaluations on at least 75% of its facilities? **Yes.** With completion of the IRS' Covington facility and the Denver Mint expected over the next 6 months, we anticipate reaching the 75% goal by the end of the 1st quarter of FY2012

4. Will your agency meet the deadline of October 1, 2012 (EPACT'05 Sec 103) for metering of energy use? **Yes**

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

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 and FY2012 budget submissions through the OMB Circular A-11, Section 25 include sustainability actions that take into consideration alternative financing mechanisms such as utility energy savings contracts. A few of Treasury's planned activities that will have an impact on sustainability are listed below.

a. Planned Actions

Greening the Treasury Fleet

Installation of a 240V electrical charging station at the Main Treasury for hybrid and electric vehicles.

Sustainable Acquisition

Integrating the social cost of carbon into the budgeting process to ensure appropriate consideration when projects are selected for funding.

Continue efforts with bureaus to identify opportunities for “greening” contract requirements.

Sustainable Buildings

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 the Main Treasury’s in Washington, DC.

Completion and implementation of the Main Treasury and Annex building EMS. IRS expects EMS declaration for the Kansas City campus.

Water Use Efficiency and Management

The BEP Washington DC facility is submitting the business case for the wiping solution recycling system and expects to implement this system during CY 2011. When operational, this system will save an estimated 12 million gallons of water annually.

Pollution Prevention & Waste Reduction

At the Memphis IRS campus, a chemical-free water treatment process for the cooling towers is being implemented.

Greenhouse Gas Scope 1 and 2

Begin FY2011 Treasury GHG Inventory process by September 2011. TTB intends to close four offices allowing those employees to telework 100% of the time.

Electronic Stewardship

Implement and activate 100% power management IRS-wide by September 2011.

Endnotes

¹Values are in 2007 numbers, assuming a discount rate of 3 percent.

²Though Treasury has not identified a specific need for additional employees at the time, Departmental Offices are still evaluating the necessary resources required to implement all the provisions of this plan. This comment applies to all goals.

