

THE DEPARTMENT OF THE TREASURY
2019 Sustainability Report and Implementation Plan

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2019

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Executive Summary

About the Department of the Treasury

The Department of the Treasury is responsible for the nation's debt management, cash production, loans made to other federal agencies, tax collection, and economic policy formulation. It provides advice and support to the President, formulating and recommending domestic and international financial, economic, and tax policy in order to strengthen America's economic health and security.

Mission

The Department of the Treasury's mission is to maintain a strong economy and create economic and job opportunities by promoting the conditions that enable economic growth and stability at home and abroad, strengthen national security by combatting threats and protecting the integrity of the financial system, and manage the U.S. Government's finances and resources effectively.

Accomplishing this mission in a cost-effective environmentally sustainable manner can improve the value of the services that we deliver to the American public. As responsible stewards of taxpayer resources, we will tirelessly seek efficiencies and pursue new capabilities to manage our operations more effectively. Within this strategic plan, the goals identify larger impacts that Treasury aims to achieve, while the objectives are actions that can make an improvement in our sustainability efforts.

Sustainability Objectives FY 2020-2021

The Department of the Treasury has identified the following three operational opportunities for FY 2020-2021 to advance Agency-wide sustainability performance for improvement.

1. **Improve Energy Efficiency of Buildings:** Improve the energy efficiency of buildings in order to reduce energy intensity and cost.
 - Work to implement increased ESPCs assessments at facilities, seeking opportunities to improve the sustainability performance of operations through the use of energy efficient systems and equipment.
 - Promote employee work mobility to decrease real property square-footage needed.
 - Establish guidance for Treasury-wide workspace standards in all new real property acquisitions and large scale renovation projects for improved and more efficient space utilization.
 - Look for opportunities to reduce and consolidate data server room facilities, with proactive management practices to ensure maximized gains in energy efficiency.
2. **Reduce Water Intensity:** Find ways to improve water use, wastewater, and storm water management in an environmentally sound and cost-efficient manner.
 - To improve potable water management, consider installing and monitoring sub-metering systems at Treasury's older owned facilities in which they do not currently exist.
 - Explore the utility of establishing site-specific landscape management plans that focus on improved practices to minimize outdoor water usage.
 - As building plumbing systems are maintained and updated, whenever practicable, utilize more efficient WaterSense certified plumbing hardware and fixtures to replace existing dated hardware.
3. **Reduce Waste and Pollution:** Work to reduce pollution and waste through sustainable acquisition practices, electronic stewardship, recycling, and other waste diversion practices.
 - Develop initiatives to promote employee awareness on the use of appropriate waste disposal practices and recycling opportunities that are in place at Treasury locations, and implement practices to minimize printer and copier usage.

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- Work to incorporate, whenever possible, recycling requirements into contracts for construction and renovation work.
- In accordance with Treasury Fleet Management's increase in the use of electric and electric hybrid vehicles, and reduce overall fleet use of traditional fueled vehicles, and associated emissions.

Implementation Summary: Facility Management

1. FACILITY ENERGY EFFICIENCY

FY18 Energy Intensity Progress (% Btu/GSF):

21% reduction from FY03

1.6% increase from FY17

FY19-FY20 Plan:

3% reduction in FY19 from FY18

3% reduction in FY20 from FY19

Implementation Status:

The Treasury Department has continued efforts to reduce total energy consumption at facilities through the implementation of a variety of projects and initiatives. Energy intensity reduction is influenced by progress in a number of key goal areas, as a central component of: ESPC & USEC implementation, Green Buildings initiatives, Sustainable Acquisition, Electronic Stewardship, and data center modernization.

- With respect to innovations for energy use reductions in Green Buildings certification; in January 2019 the Treasury owned facility at 1700 G ST NW DC received LEED Gold Certification status (for New Construction) in conjunction with a full-scale building renovation initiative, which had just recently been completed. While Green Buildings certifications focus on a fairly comprehensive and diverse set of sustainability considerations for improvement, overall reduction in energy consumption is a primary and core component among certification initiatives. Accordingly, the collective certification actions and improvements made will generally result in significant energy intensity reductions at the certified facilities.
- Treasury continues to maintain and update buildings, to include periodic replacement of dated building systems with newer more efficient systems. For example in 2018 at the Main Treasury Building, the building's aged chiller system was replaced with a newer and more advanced system providing for increased energy and water efficiencies.
- One primary operational consideration in assessing Treasury wide energy intensity performance, is that among Treasury's real estate portfolio approximately half the owned facilities consist of production based operations, with the Mint's coinage manufacturing facilities, and Bureau of Printing and Engraving (BEP) paper currency production operations. These large scale industrial facilities are significantly more energy intensive than typical Agency workspace, and account for an increased proportion of Treasury's total energy inventory. An additional challenge at these facilities, is that energy usage correlates directly with the facility's production quantities, which are determined and mandated outside the Treasury scope, at other Federal Government organizations. This requisite energy consumption thus presents a unique challenge in establishing strategy and goals for further energy use reductions at these facilities.

Priority Strategies & Planned Actions

- In 2019 Treasury continues to progress with advancement in ESPCs; with ESPC implementation at the IRS Brookhaven facility, and project finalization of the Denver Mint Facility. Both ESPC projects include aspects that focus largely on increased energy efficiencies at the facilities. At Brookhaven for example, according to the Technical Proposal and IGA once completed the fully implemented ESPC project is expected to yield an annual 57% reduction in total purchased energy, and reduce the facility utility spend by \$1.7M per year.
- Treasury plans to work towards increasing the frequency of energy audits and assessments for ESPCs and UESCs at facilities through 2020 and 2021. The effort will focus on identifying additional opportunities for performance contract implementation, with aim to further increase energy efficiencies and reduce intensity moving forward.

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- Workspace renovations and reconfiguration projects include considerations for new and updated hardware, lighting systems, layout and design, for more energy efficient and often higher capacity renovated workspaces.
- Wherever practical, participate in demand management programs.
- Continue required bureau data updates and tracking in EPA Energy Star Portfolio Manager for each goal facility.

2. EFFICIENCY MEASURES, INVESTMENT, AND PERFORMANCE CONTRACTING

FY18 Performance Contracting – Investment value and number of new projects awarded:

\$14M and 3 project in FY18

FY19-FY20 Plan:

\$29.5M and 2 projects in FY19

TBD in FY20

Implementation Status

Treasury continues to progress with successful implementation of ESPCs at number of Agency facilities in recent years, to include new ESPC projects underway in 2018 and 2019.

- IRS has completed the Investment Grade Audit (IGA) phase for planned implementation of the \$29.5M ESPC at the Brookhaven campus facility location in Long Island, NY. The performance contract initiative will include updating and replacement of large scale building systems and hardware installments, for improvements in efficiency and quality of performance with the new and more advanced systems. According to the IGA and Technical Proposal the completed project is slated to reduce annual facility energy usage by 57%, and reduce annual water consumption by 24%, with a total utility cost reduction of \$1.7M per year at Brookhaven.
- The Mint continues progress towards full instillation of ESPC projects at the Denver Mint facility, where they expect to complete the ESPC implementation this year.
- The Bureau of Printing and Engraving and The Bureau of Fiscal Services have both successfully contracted with USECs for the implementation of lighting systems replacement and air handling unit's retro-commissioning projects.

Priority Strategies & Planned Actions

- Treasury has determined that further facility-grade utility and energy auditing should be implemented at this time, in order to meet with EISA guidelines, and to identify any additional facilities that qualify for and ESPC and UESC implementation.
- Work with FEMP to plan and coordinate efforts for implementation of increased utility and energy audits at Treasury facilities, in order to determine optimal target areas for improvement, and identify any additional performance contract opportunities at facilities.

3. RENEWABLE ENERGY

FY18 Renewable Electricity Use:

15.7% of total electricity in FY18

FY19-FY20 Plan:

16% of total electricity in FY19

16% of total electricity in FY20

Implementation Status

Treasury continues to be a leader among Federal Agencies in Renewable Energy Use, and has rated among the top Federal Agencies in the EPA Green Power Partnership.

- Implementation of Renewable Energy Credits (RECs) at Treasury facilities has been the primary means for continued success in Renewable Energy performance.

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- In 2018 Treasury maintained RECs that accounted for 100% electrical use at five goal subject facilities. This included the Main Treasury Complex, along with two production locations; the BEP DC Facility, and the Denver Mint.
- Treasury continues to maintain the on-site renewable energy project, with the solar electric system at the IRS Austin TX facility.
- In 2015 Treasury had facilities in the DC area assessed for onsite solar power installations. Although due to the site specific and roof top conditions, it was determined that none of the locations were ideal, and did not qualify per the project engineering assessments.

Priority Strategies & Planned Actions

- Ensure continued success in Renewable Energy goal by maintaining facility RECs currently in place.
- Evaluate opportunity to employ additional RECs at goal facilities, and implement where feasible.
- Maintain established onsite renewable energy project in place, and continue to assess for potential new project opportunities.

4. WATER EFFICIENCY

FY18 Water Intensity Progress (Gal/GSF):

26.3% reduction from FY07

12.7% reduction from FY17

FY19-FY20 Plan:

1% reduction in FY19 from FY18

1% reduction in FY20 from FY 19

Implementation Status

Treasury continues to work in implementing overarching strategy for increased water efficiency at goal facilities, this includes initiatives for reduced potable and non-potable water consumption, and proper stormwater management.

- At the Treasury's 1700 G ST NW DC facility, full scale building renovations were recently completed to incorporate the LEED Gold certification initiative which included aspects for increased water use efficiency.
- The Main Treasury Building has assessed and adapted landscaping practices to reduce associated water usage.
- The Mint has worked to implement two ESPCs at production facilities in recent years, which included facility improvements for increased water efficiency.
- At Main Treasury recent replacement of the building's primary chiller system will provide for increased water efficiency in the coming years.

Priority Strategies & Planned Actions

- Recent Green Building Certification and ESPC initiatives at Treasury will result in additional facility-specific reductions in water intensity in the coming years.
- Install and monitor water meters/sub-meters and utilize data to advance water conservation.
- Install high efficiency technologies, e.g. WaterSense fixtures and hardware where plumbing systems are slated for updating and replacement in building renovations.

5. HIGH PERFORMANCE SUSTAINABLE BUILDINGS

FY18 Sustainable Buildings Progress:

1 sustainable Federal buildings

9.1% of buildings / 12.1% of gross square footage (GSF)

FY19-FY20 Plan:

16.6% of buildings in FY19

16.6% of buildings in FY20

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Implementation Status

Treasury has continued to work for advancement in high performance and sustainable buildings within its portfolio, with the addition of a new LEED Gold Certification at an Agency owned facility in 2019.

- In January of 2019, with recent completion of full-scale building renovations at the 1700 G ST NW DC facility, Treasury was successful in a Green Buildings initiative, where the facility achieved LEED Gold Certification (in New Construction attributes); for a second certified Green Buildings facility among the Treasury portfolio.
- With this additional LEED Gold facility, Treasury has progressed in meeting the Green Buildings metric 15% threshold (with a total 16.6% Green Buildings inventory) for scorecard performance, where Treasury should achieve the Green rating in 2019.

Priority Strategies & Planned Actions

- Treasury is currently working to complete a floor-by-floor building renovation project at the Freedman's Bank Building, which resides just adjacent to the Main Treasury Building. Upon completion of the multi-year full scale building renovation, Treasury plans to have the updated facility assessed for Green Buildings certification.
- Although moving forward, with the remainder of the real estate portfolio consisting primarily of Mint and BEP industrial manufacturing operations, where the more significant and costly facility grade updates required would not be fiscally feasible at present, there are some limitations for further advancement in the Green Buildings metric goal.

6. WASTE MANAGEMENT AND DIVERSION

FY18 Non-hazardous Waste Management and Diversion:

13,703 metric tons of non-hazardous solid waste generated*

16% sent to treatment and disposal facilities

*not including construction and demolition waste

Implementation Status

Treasury continues to work in development and support of overarching strategy to implement waste prevention and recycling measures, including reducing hazardous and non-hazardous waste generation, and increasing waste diversion in facility operations at our worksite locations.

- Work towards increased reductions in waste generation through programs of elimination, source reduction, and recycling.
- Recycling of paper and metal scrap at Mint and BEP manufacturing facilities have accounted for the most significant gains in waste diversion for Treasury.
- CIO has a continued effort focused on development of IT enterprise business solutions and improving enterprise on-line content management in order to reduce the need for printing/paper. The Treasury-wide Print Policy includes requirement that standard default print settings include double sided printing to encourage efficiency and reduced paper usage.

Priority Strategies & Planned Actions

- Continue to institute programs and practices that maximize recycling quantities at Mint and BEP manufacturing facilities, where large amounts of paper, metal scrap, and other materials from production activities are recovered and recycled in operations.
- Implement promotional campaigns and initiatives to increase employee awareness on facility based recycling programs, and the use of Treasury-provided recycling infrastructure and opportunities (e.g. battery recycling...).
- Utilize standard statements of work (SOWs) in contracts that incorporate requirements for use of new and alternative green products that are less toxic and safer to handle, for the reduction of toxic and hazardous chemicals in the performance of contractor work at Treasury facilities.

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Implementation Summary: Fleet Management

1. TRANSPORTATION / FLEET MANAGEMENT

FY18 Petroleum Reduction Progress (Gal):

- 81.8% reduction in petroleum fuel since 2005
- 10% reduction in petroleum fuel since FY17

FY19-FY20 Plan:

- 5% reduction in FY19 from FY18
- 5% reduction in FY20 from FY19

Implementation Status

Treasury has had continued success through 2018 in efforts aimed to maximize fleet efficiencies, reduce usage of conventional hydrocarbon based fuels, and minimize air pollution derived from fleet operations.

- The Agency fleet consists of approximately 3,000 total vehicles nationwide; with Treasury's largest bureau the IRS, maintaining the largest portion of the fleet inventory.
- In regard to fleet makeup and operational use, approximately 2/3 of the fleet are designated law enforcement vehicles.
- Continue work to maintain accurate fleet data accounting and reporting practices in order to ensure effective data and metrics evaluation.
- The Treasury fleet largely consists of leased vehicles that are replaced every three years. This allows for maximized fuel efficiencies in newer models, and increased opportunity for use of alternatively fueled and electric vehicles where determined feasible in vehicle replacements.

Priority Strategies & Planned Actions

- Collect and utilize agency fleet operational data and metrics through deployment of vehicle telematics.
- Ensure that agency annual asset-level fleet data is properly and accurately accounted for in a formal Fleet Management Information System as well as submitted to the Federal Automotive Statistical Tool (FAST) reporting database, the Federal Motor Vehicle Registration System, and the Fleet Sustainability Dashboard (FLEETDASH) system.
- Continue to assess opportunities for acquisition of electrical plug-in and alternative fuel vehicles at facilities where accessible charging infrastructure and stations are available, in order to further reduce conventional fuel use where possible.

Implementation Summary: Cross-Cutting Operations

1. SUSTAINABLE ACQUISITION / PROCUREMENT

FY18 Sustainable Acquisition Progress:

- 0.5% of contract actions and 0.8% of obligations (in dollars), for a total of \$129.2M in contract actions with statutory environmental requirements

Implementation Status

Treasury continues work to support incorporation of proper management practices to ensure sustainable sourced acquisition and procurement actions and initiatives are implemented throughout the Agency.

- The Treasury Department Affirmative Procurement Plan (APP) establishes Agency guidelines, best practices, and required procedures for inclusion in the bureau-level Sustainable Acquisition policies and programs.
- The APP comprises relevant detail on Federal green procurement law, purchasing regulations, and standardized acquisition guidelines for implementation Treasury-wide.

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- In accordance with the APP members of the acquisition workforce, to include Treasury CORs and purchase card holders, are required to take Green Purchasing Training every other year to reinforce the requirements and guidelines for Sustainable Acquisition.

Priority Strategies & Planned Actions

- Continue work to implement effective sustainable acquisition policies that meet statutory mandates requiring purchasing preference for recycled content products, ENERGY STAR qualified and FEMP-designated products, and Bio Preferred and bio based products designated by USDA.
- Treasury utilizes the GSA Schedule for a large portion of acquisitions. GSA Schedule includes Sustainable Acquisition Use Category Management Initiatives and established government-wide acquisition vehicles that already include required sustainable acquisition criteria.

2. ELECTRONICS STEWARDSHIP

FY18 Electronics Stewardship Progress:

99.8% of newly purchased or leased equipment met energy efficiency requirements

99.9% of equipment with power management enabled*

100% of electronic equipment disposed using environmentally sound methods

**excluding exempted equipment*

Implementation Status

Treasury continues to employ Electronics Stewardship applications in a manner that promotes energy efficiency and minimizes environmental impacts for electronics hardware, including acquisition, inventory management, and reuse/recycling at end of life.

- Electronics Stewardship at Treasury includes standard practices for electronic hardware end-of-life, that ensure equipment is managed in accordance with Federal guidance on reuse, donation, transfer, sale, de-manufacturing, and recycling of electronics.
- Treasury’s comprehensive asset management programs ensure minimized impacts on the environment “from cradle to grave...”, and maximized energy efficiencies in respect to usage and operation of Agency hardware.
- The Treasury APP details Federal regulatory requirements for prioritizing acquisition of EPEAT and Energy Star rated products, with requisite power management capabilities, as applicable.

Priority Strategies & Planned Actions

- Have all monitor, desktop and notebook product purchases EPEAT approved and Energy Star compliant. For imaging products (i.e. printers and scanners) use the EPEAT system assuring that 90% of all products are approved. For any remaining devices, require that the equipment be Energy Star compliant.
- Monitor, track, and evaluate Data Center operations energy consumption via established sub metering to identify center locations with greatest potential opportunity for improvement in energy use reduction (both as a facility percentage, and in regard to total use in center consolidations which reduce total source energy consumption).
- Use of government-wide category management acquisition vehicles ensures procurement of equipment that meets applicable sustainable electronics EPEAT and Energy Star efficiency criteria.

3. GREENHOUSE GAS EMISSIONS

FY18 Scope 1&2 Greenhouse Gas (GHG) Emissions:

50.2% reduction from FY 2008

4.5% reduction from FY 2017

Implementation Status

Since inception of the Federal Agency energy data and GHG Emissions tracking in 2008, in little more than a decade, the Treasury has implemented energy conservation measures, reduced fleet petroleum usage, and incorporated use

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of diverse renewable energy sources, in order to achieve a more than 50% total reduction in the overarching Agency carbon footprint.

- Treasury continues to track, monitor, and assess the FEMP GHG emissions inventory report to target areas with greatest opportunities for improvement in GHG reduction.
- Establish and manage effective and proactive Preventive Maintenance (PM) services programs to ensure maximum efficiencies in building systems and equipment operations.
- Treasury continues to focus on implementing the most impactful means to reduce GHGs from goal facility operations, with actions for the reduction in site energy intensities, and increasing use of renewable energy credits (RECs) at facilities for clean and renewable energy sources.

Priority Strategies & Planned Actions

- Reduce GHG emissions through emphasis on optimizing cost effective fuel efficient vehicle acquisitions and optimizing fleet size for efficient and effective performance.
- Continue to implement planned actions for energy intensity reductions across Treasury.
- Continue to be a federal leader in the use of clean and renewable energy by maintaining current stock of RECs, and assessing opportunity for increased use of RECs where possible.

Agency Priorities and Highlights

AGENCY IDENTIFIED PRIORITIES

In support of Treasury’s strategic plan objective to prioritize improvement projects for Treasury-owned buildings, we are developing and instituting a non-IT capital planning process that ensures risks to personnel, facilities, and mission are identified and prioritized to better enable mission delivery by improving the reliability, security, and resiliency of Treasury’s infrastructure. Capital planning will also facilitate the identification of opportunities for improving energy and water efficiency of Treasury owned buildings in conjunction with other capital improvement projects.