

Department of the Treasury
2018 Sustainability Report and Implementation Plan

Executive Summary

The Department of the Treasury identified the following three operational opportunities for FY2018-2020 to advance Treasury’s sustainability performance improvement.

1. Improve Energy Efficiency of Buildings: Improve the energy efficiency of buildings in order to reduce energy intensity and cost.
 - Whenever opportunities present themselves, seek to improve the sustainability performance of owned and leased buildings 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 space utilization.
 - Look for opportunities to reduce and consolidate server room facilities, with proactive management practices to ensure maximized gains in energy efficiencies

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 Water Sense 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 practices for minimizing printer and copier usage.
 - 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, reduce overall fleet use of traditional fueled, and associated emissions.

Implementation Summary

1. Facility Management:

FACILITY ENERGY EFFICIENCY

FY 2017 Status: 22% reduction from 2003 Baseline, and a 6.1% reduction from 2015 Baseline (Btu/GSF)

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Implementation Status	Operational Context	Priority Strategies & Planned Actions
<ul style="list-style-type: none"> - Green Building Certification and energy savings performance contracts (ESPCs) implementation have proven as effective means for gains in comprehensive facility energy intensity reductions. - At OCC's 17th & G Streets (NW DC) facility, full scale renovations were completed in 2017 for LEED Platinum certification, and included substantial energy efficiency improvements. - Mint has instituted two ESPCs at production facilities in recent years, and continues progress towards finalizing the Denver facility ESPC in 2018. - At Main Treasury recent building system upgrades to include replacement of electrical switchgear, and chiller system (underway in 2018) will result in reduced energy intensity moving forward. - At BEP energy reduction projects in 2018 include; lighting systems replacement with LED lamps; retro-commissioning of air handling units; and replacement of air compressors. 	<ul style="list-style-type: none"> - At Treasury, Energy Intensity Reduction is influenced by progress in a number of key goal areas, as a central component of: ESPCs, Sustainable Building projects, Fleet Management, Sustainable Acquisition, Electronic Stewardship, and Data Center Modernization. - Individual projects that also provide for measurable gains in energy efficiency at facilities include: making investments in updating outdated or inefficient building systems; redesigning interior spaces to reduce energy use, install and monitor energy meters and sub-meters; collect and analyze data to improve facility energy management and performance. - These types of facility level improvements can result in long term benefits for energy use reduction, that are impactful for years to come. 	<ul style="list-style-type: none"> - Have energy audits carried out at Treasury owned facilities to determine optimal target areas for improvement and identify additional opportunities for application of ESPCs at Treasury facilities. - Wherever practical, participate in demand management programs. - Require quarterly data updates in EPA Energy Star Portfolio Manager for each owned facility in order to better track and sustainable performance.

EFFICIENCY MEASURES, INVESTMENT, AND PERFORMANCE CONTRACTING

ESPC and UESC investment / number of projects FY 2017: \$11.9M / 2 projects

Planned investment / number of projects FY 2018: \$11.5 M / 3 projects

Planned investment / number of projects FY 2019: \$25.8M / 1 project

Implementation Status	Operational Context	Priority Strategies & Planned Actions
<ul style="list-style-type: none"> The IRS and the Mint both successfully finalized ESPCs in 2016-2017, increasing efficiencies and reducing impacts on the environment at their respective facilities. - In 2018 Mint continues progress towards finalizing the ESPC at the Denver facility. - BEP has contracted with UESCs to implement lighting replacement project and an air handling units retro-commissioning project in FY 2018. 	<ul style="list-style-type: none"> - A number of bureau facilities have benefited from the implementation of ESPCs and USECs in recent years. - However further facility-specific utility and energy auditing is needed at this time, in order to identify additional facilities that qualify for ESPC and UESC implementation. 	<ul style="list-style-type: none"> - Have energy audits carried out at Treasury owned facilities to determine optimal target areas for improvement and identify additional opportunities for application of ESPCs and UESCs at Treasury facilities.

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RENEWABLE ENERGY

FY 2017 Status: 11% renewable electricity

Implementation Status	Operational Context	Priority Strategies & Planned Actions
<ul style="list-style-type: none"> - Treasury has been a leader in Renewable Energy in recent years, as rated among the top-10 Federal Agencies in the EPA Green Power Partnership. - Implementation of Renewable Energy Credits (RECs) at goal facilities has been the primary means for this continued success. - In 2017, Treasury maintained RECs that accounted for 100% facility electrical use at five goal subject buildings. - This included Main Treasury Complex, along with two production facilities; the BEP DCF, and the Denver Mint. 	<ul style="list-style-type: none"> - While the large majority of Renewable Energy is comprised of RECs, some on-site projects have also been implemented and maintained. - Primary challenges for on-site have stemmed from urban locations of most goal subject facilities; lacking sufficient landscape or features to accommodate projects. - Treasury’s DC facilities were recently evaluated for roof top solar installations, though none were chosen due to structural constraints. 	<ul style="list-style-type: none"> - 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 as feasible. - Maintain established onsite renewable energy projects in place, and continue to assess new project opportunities.

WATER EFFICIENCY

FY 2017 Status: 15.6% reduction in potable water (Gal/GSF) – vs. 2007 Baseline

Implementation Status	Operational Context	Priority Strategies & Planned Actions
<ul style="list-style-type: none"> - Recent Green Building Certification and ESPC initiatives have resulted in facility-specific reductions in water use and intensity. - At OCC’s 17th & G Streets facility, full scale building renovations were recently completed for LEED Platinum certification to include improvements for increased water use efficiencies. - Mint has instituted two ESPCs at production facilities in recent years, and continue progress towards finalizing the Denver ESPC in 2018. - At Main Treasury, replacement of primary chiller system is underway in 2018 and will result in substantial water & energy use reductions. 	<ul style="list-style-type: none"> - In compilation of 2017 GHG and Energy Data Inventory, an error was discovered among bureau-facility water use data reporting. - While this error was corrected prior to submittal of the 2017 Inventory, further review has shown that this data error had been made previously, and incorporated into prior years reporting as well. - Accordingly, Treasury is working to correct and update the respective facility water use data from the previous year’s Treasury Inventories, for re-submittal to FEMP with the upcoming 2018 Inventory, as appropriate. 	<ul style="list-style-type: none"> - Identify specific project items as means to reduce potable and non-potable water use at Treasury facilities via ESPCs and Sustainable Buildings initiatives. - Install and monitor water meters/sub-meters and utilize data to advance water conservation. - Install high efficiency technologies, e.g. WaterSense fixtures where plumbing systems are slated for updating.

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HIGH PERFORMANCE SUSTAINABLE BUILDINGS

FY 2017 Status: 12% buildings

Implementation Status	Operational Context	Priority Strategies & Planned Actions
<ul style="list-style-type: none"> - At the OCC's 17th & G Streets facility, full scale building renovations were recently completed for LEED Platinum certification to include improvements for increased water use efficiencies. - Treasury maintains a real estate inventory with a total 11 owned facility locations. They consist of 4 building locations comprised predominantly of office space that house Federal Agency operations in Washington DC; the remaining 7 facilities house Treasury manufacturing based operations maintained by Mint and BEP which are disbursed nationwide. 	<ul style="list-style-type: none"> - The BEP's DC production facility has been identified as outdated and in need of replacement for some years. - Due to the nature of the facility operations, it would be significantly more cost effective to move and construct a new efficient and sustainable production facility, rather than retrofit operations at the current location. - BEP continues to work with GSA for identification of a permanent site for establishment of a new and more efficient facility to replace the existing location. 	<ul style="list-style-type: none"> - Incorporate green building specifications into all new construction, modernization, and major renovation projects. - Implement space utilization and optimization practices and policies to increase facility efficiency.

WASTE MANAGEMENT AND DIVERSION

FY 2017 Status: 84.6 % waste diverted

Implementation Status	Operational Context	Priority Strategies & Planned Actions
<ul style="list-style-type: none"> - Reduce waste generation through elimination, source reduction, and recycling. - Well-marked recycling receptacles are distributed throughout Treasury facilities to provide employees' ample opportunity to recycle. - The CIO has a focused effort on developing IT enterprise business solutions and improving enterprise content management which should reduce the need for printing/paper. 	<ul style="list-style-type: none"> - IRS and DO have utilized a waste management/ recycling review to generate lessons learned and potential action items for sites. - Despite the fact that receptacles are provided throughout Treasury facilities for recycling, employees' use of appropriate receptacles can be improved. - Recycling initiatives and practices integrated within operational processes at Treasury's manufacturing based facilities increase efficiency and waste diversion performance. 	<ul style="list-style-type: none"> - Implement promotional initiatives to increase employee awareness and use of Treasury-provided recycling opportunities. - Utilize standard statements of work (SOWs) that incorporate the reduction of toxic and hazardous chemicals in the performance of facility management duties.

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2. Fleet Management:

TRANSPORTATION / FLEET MANAGEMENT

FY 2017 Status: 6.7 % reduction in petroleum & 19.5% increase in alt fuel

Implementation Status	Operational Context	Priority Strategies & Planned Actions
<ul style="list-style-type: none"> - In 2018 Treasury continues work towards implementation of fleet Telematics program and data tracking. - Works to maintain accurate fleet data accounting and reporting practices in order to ensure effective data metrics evaluation. - Treasury replaces leased vehicles every three years in order to maximize fuel efficiencies in newer models. - In 2018 Treasury is working to acquire an increased number of electrical vehicles to further reduce conventional fuel usage. 	<ul style="list-style-type: none"> - Treasury is evaluating GSA’s government BPAs with a variety of Telematics service providers to acquire Telematics technology for a competitive price. - Plug in vehicles will be purchased in locations where assessable charging stations are available. - Review GSA’s Reports Carryout, monthly reports, for leased vehicles and the FedFMS monthly reports for owned vehicles in order to ensure data is correct. 	<ul style="list-style-type: none"> - Collect and utilize agency fleet operational data 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 reporting database, the Federal Motor Vehicle Registration System, and the Fleet Sustainability Dashboard (FLEETDASH) system. - Increase acquisitions of zero emission electrical vehicles and plug-in hybrid vehicles.

3. Cross-Cutting:

SUSTAINABLE ACQUISITION / PROCUREMENT

FY 2017 Status: -0.3% change in contracts & 0.7% change in contract dollars with environmental clauses

Implementation Status	Operational Context	Priority Strategies & Planned Actions
<ul style="list-style-type: none"> - The Treasury Department Affirmative Procurement Plan (APP) outlines guidelines, best practices, and required procedures for institution of bureau-level Sustainable Acquisition programs and policy. - It comprises relevant detail on green procurement law, purchasing regulation, and acquisition standards with standardized implementation guidelines for Treasury-wide compliance assurance. 	<ul style="list-style-type: none"> - In 2016, Treasury’s Office of the Procurement Executive (OPE) worked in concert with senior bureau acquisition counterparts, and Treasury Operations Environment, Health, and Safety, to review and evaluate the APP to identify needed plan updates and revisions. - Efforts largely focused on identification of newly established and recently adapted Federal regulatory/statutory requirements. - Final plan revisions included updates in accordance with respective regulatory findings, and improved direction for composition of policy and program areas for continued compliance assurance. 	<ul style="list-style-type: none"> - In accordance with the APP, members of the acquisition workforce, to include CORs and purchase card holders, are required to take Green Purchasing Training, at a minimum every other year. - Establish and implement policies to 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 uses the GSA Schedule for a large portion of acquisitions. GSA Schedule includes sustainable ac Use Category Management Initiatives and government-wide acquisition vehicles that already include sustainable acquisition criteria.

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ELECTRONICS STEWARDSHIP

FY 2017 Status: 100% equipment acquisition meeting EPEAT requirements
 99% equipment with power management, &
 98% compliance with disposal guidelines

Implementation Status	Operational Context	Priority Strategies & Planned Actions
<p>- Treasury continues to implement Agency-wide Electronics Stewardship initiatives and projects in accordance with the APP. This includes standard practices for acquisition, maintenance, and proper recycling at end of life for Agency owned electronic hardware. This comprehensive asset management program ensures minimized impacts on the environment “from cradle to grave...”, and maximized efficiency of respective Agency hardware.</p> <p>- Treasury’s APP details Federal regulatory requirements for prioritizing acquisition of EPEAT and Energy Star rated products, as applicable.</p>	<p>- Treasury-wide Data Center operations require direct energy consumption from operation of IT hardware and server equipment, but is further compounded by significant energy draw from required HVAC units and CRAC units, in use to counter act the heat output from the IT related hardware.</p> <p>- Due to their high rate of energy consumption, which affect facility performance in related sustainability goal areas, Treasury has identified this as a priority sustainability issue to be addressed at the bureau facility locations.</p> <p>- At IRS Windows native power management settings are being utilized on all desktops, laptops and monitors - pending implementation of IBM’s <i>Big Fix Software</i> slated for execution through 2018.</p>	<p>- 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.</p> <p>- Monitor, track, and evaluate Data Center operations consumption via established sub metering.</p> <p>- Utilize tracked data to identify center locations with potential for greatest energy reductions (both percentage and total use).</p> <p>- Use of government-wide category management acquisition vehicles ensures procurement of equipment that meets applicable sustainable electronics criteria.</p>

GREENHOUSE GAS EMISSIONS

FY 2017 Status: 45.7% reduction in Scope 1 & 2 emissions from 2008 baseline.

Implementation Status	Operational Context	Priority Strategies & Planned Actions
<p>- Treasury continues to track, monitor, and assess the FEMP GHG emissions inventory report to target areas with greatest opportunities for improvement.</p> <p>- Establish and manage effective and proactive Preventive Maintenance (PM) Services to ensure maximum efficiencies for systems and equipment.</p>	<p>Treasury was able to increase its percentage of EISA compliant vehicles during the 2018 replacement cycle due to GSA’s expanded EISA-compliant offerings, particularly in the compact/crossover SUV models.</p> <p>- The most impactful means to reduce GHGs from goal facility operations are reduction in energy intensities and increasing use of clean and renewable energy sources.</p>	<p>- Reduce GHG emissions through emphasis on optimizing cost effective fuel efficient vehicle acquisitions and optimizing fleet size for efficient and effective performance.</p> <p>- Continue to implement planned actions for energy intensity reductions across Treasury.</p> <p>- Continue to be a federal leader in the use of clean and renewable energy increasing the procurement of renewable energy credits (RECs)</p>