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**Department of Homeland Security  
2019 Sustainability Report and Implementation Plan**

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**June 2019**

Department of Homeland Security  
2019 Sustainability Report and Implementation Plan

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### **MISSION**

The Department of Homeland Security (DHS) was established by the Homeland Security Act of 2002 (6 U.S.C. 101) and came into existence on January 24, 2003. Administered under the supervision and direction of the Secretary of Homeland Security, the Department's mission is to safeguard the American people, our homeland, and our values. DHS is comprised of over 240,000 employees and has a very diverse mission set which includes ten distinct Components; including U.S. Customs and Border Protection (CBP), Cyber and Infrastructure Security Agency (CISA), Federal Emergency Management Agency (FEMA), U.S. Immigrations and Customs Enforcement (ICE), Transportation Security Administration (TSA), U.S. Coast Guard (USCG), U.S. Citizenship and Immigration Services (USCIS), the U.S. Secret Service (USSS), Science and Technology Directorate (S&T), and the Federal Law Enforcement Training Centers (FLETC).

DHS has 8,173 owned facilities and 4,347 leased facilities in its real property portfolio. The real property assets are very diverse, consisting of a variety of use types, including office, warehouse, family housing, laboratory, shore facilities, and structures such as navigational aids and utility systems. Real property is one of the Department's largest expenses, costing in excess of \$5 billion annually for rent, operations and maintenance, construction, and tenant and capital improvements for a portfolio of more than 1.2 million square feet of owned and leased space.

The DHS Mobile Assets Program is comprised of 51,514 foreign and domestic vehicles which include 41,356 agency-owned, 9,466 GSA-leased and 212 commercially-leased vehicles. It includes a wide variety of vehicles, encompassing everything from small plug-in electric and light-duty flex-fuel sedans to mobile cargo shipment screening units. Due to the varied and diverse missions, the DHS organizational fleet management structure is decentralized - each Component operates, maintains, acquires, and funds its own motor vehicle program.

### **OPERATIONS**

The DHS Sustainability Report and Implementation Plan (Sustainability Plan) reflects the Department's strategic vision for doing business more efficiently and sustainably. Components develop and deploy tactical implementation plans in accordance with their mission objectives. These plans are called Operational Sustainability Performance Plans (OSPPs) and support the Department's efforts by driving sustainability at the Component level. This allows for Components to meet their mission needs and requirements, manage their motor vehicle program, and institute sustainable practices in alignment with Departmental policy and guidance. Information from the latest versions of the OSPPs are incorporated into this year's DHS Sustainability Plan.

### **LEADERSHIP**

Strong leadership remains the key to achieving sustainability goals – strengthening the departmental unity through improved accountability between strategic objectives, budgeting, acquisition, decisions, operational planning and mission execution. The Department leadership and accountability roles for the Sustainability Plan are as follows: The Deputy Under Secretary for Management (DUSM) was designated by the Secretary to serve as the Chief Sustainability Officer for the Department. The DUSM is accountable for DHS conformance with Executive Order 13834, Efficient Federal Operations. The following key functions, referred to as the CXOs, report to the DUSM and are responsible for

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implementation of the Sustainability Plan: Chief Readiness Support Officer (CRSO) with responsibility for fleet, energy, resilience, personal property, real estate, operations support, sustainability and environmental compliance; Chief Financial Officer (CFO); Chief Human Capital Officer (CHCO); Chief Procurement Officer (CPO); and Chief Information Officer (CIO). The CRSO provides coordination and management for the Chief Sustainability Officer on the Sustainability Plan and performs the following functions: Maintains the Sustainability Plan and coordinates input from the Sustainability and Environmental Committee, CXOs, and Components; Reports progress on the Sustainability Plan to the Chief Sustainability Officer and others as required; Monitors and reports on EO 13834 compliance; and Prepares required reports and metrics for submittal to the Office of Management and Budget and the Council on Environmental Quality.

### Performance Summary Review

DHS was successful in achieving its internal goals in the areas of Greenhouse Gas Emissions, Water Intensity, Renewable Electricity, and Electronics Stewardship. DHS is working toward the goals in Facility Energy Intensity, Sustainable Acquisitions, Petroleum Fuel Use, and Sustainable Buildings. The FY 2018 results are provided in the Progress Table below. DHS goals are tracked through internal scorecard metrics, program management reviews, Component Operational Sustainability Performance Plans and Sustainable Buildings Plans.

### PROGRESS TABLE

Metric Item	DHS FY 2018 Goal	DHS Status	Comments
Scope 1&2 GHG	31%	38.8%	Achieved Goal and is on track to achieve 51% by 2025
Scope 3 GHG	10%	40.6%	Achieved Goal and is on track to exceed goal of 19.2% by 2025
Water Intensity	22%	27.3%	Achieved Goal and is on track to achieve 36% by 2025
Facility Energy Intensity	30%	28.6%	Did not achieved goal of 30% compared to FY 2003 baseline;
Sustainable Acquisitions	Contract Actions/Dollar	3.0%/-1.0%	Contract actions increased 3.0%, but dollar amount decreased 1.0%
Renewable Electricity	10%	11.2%	Achieved Goal, EO 13834 established goal for FY 2018 of 7.5% and DHS is on track.
Petroleum Fuel Use	-20%	15.9%	*DHS mission has increased significantly since 2005 baseline
Electronics Stewardship	EPEAT 95% Power Mgmt 100% End-of-Life 100%	EPEAT 99.31% Power Mgmt 94% End-of Life 100%	Achieved Goal; and won a Green Electronics Council EPEAT Purchaser of the Year Award for the 5 <sup>th</sup> year in a row.
Sustainable Buildings (GSF)	15%	13.0%	DHS is on track to achieve 15% by 2025.

\*DHS fleet sustainability metrics for FY18 used a different approach for law enforcement designation than in FY17 and do not reflect a complete accounting due to challenges in implementing new asset level data requirements.

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## **SUCSESSES**

DHS has demonstrated success that has received internal and external recognition. The 2019 DHS Sustainable Practices Awards Program recognized 9 winners (teams and individual awards) for their efforts in advancing the Department's sustainability goals. The winning nominations included 41 employees from six Components; USCG, ICE, CBP, S&T, FLETC and the Office of the General Counsel. The winners attended a ceremony hosted by the Acting Under Secretary for Management in June of 2019. This is the ninth year the Department has formally recognized exceptional sustainability projects in the field.

In 2019 the Department was recognized by external entities as well. DHS recently received the Most Utilized award for the General Services Administration's (GSA) first-ever Plug-In Hybrid Electric Vehicle (PHEV) Charging Challenge, with the Department averaging a 36% increase in PHEV miles traveled. The award recognized the best utilization of PHEVs across the federal leased fleet. The award was announced at the recent FedFleet 2019 event.

DHS was recognized by the Green Electronics Council for accomplishments in purchasing EPEAT (Electronic Product Environmental Assessment Tool) registered products. DHS earned three gold stars for having a sustainable purchasing policy, setting EPEAT specifications in contracts, and establishing a tracking system for accurate reporting. DHS's EAGLE II and FirstSource II strategic sourcing contracts provided the mechanism for the purchase of green products, including televisions, computers, printers, monitors and copiers. In FY 2018 DHS purchased 89,747 EPEAT registered units which consume less energy resulting in a reduction in 16,682 metric tons of greenhouse gas emissions and \$2,782,370 in cost savings over the life of the products. DHS is continuing this program in FY 2019.

## **TOP 4 STRATEGIES**

### **Resilience Framework**

Following the 2017 and 2018 hurricanes and wildfire events that occurred on the mainland United States, Puerto Rico, and Virgin Islands, DHS focused efforts to formalize a Department-wide process for incorporating resilience. This framework integrates the mission assurance continuity processes, to improve the security, reliability, and performance of our critical infrastructure. This process ensures sustained resilience of mission essential functions and related supporting infrastructure during all phases of mission operations (normal operations, disruptive event, response, and recovery). This Resilience Framework focuses on four key critical infrastructure areas: 1) Energy and Water, 2) Facilities, 3) Information and Communication Technology, and 4) Transportation.

In June of 2018 DHS Sustainability and Environmental Programs hosted a "Leadership in Resilience Summit" which was attended by key speakers from Department of Defense (DoD), Department of Energy (DOE), and Council on Environmental Quality (CEQ) among other subject matter experts. Over 100 DHS employees attended. On August 13, 2018, the DUSM signed the Resilience Framework, a roadmap for the Department in operational resilience and readiness. Components are working towards completing Resilience Framework plans by August of 2019. In November 2018, DOE, Federal Energy Management Program (FEMP) selected DHS as their recipient of the special Director's Award for key contributions that have widespread positive effects on energy management across the federal government and for our partnership on a resilience framework used to reduce energy use and strengthen resilience in DHS facilities.

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### **Sustainable Buildings**

DHS established a goal to achieve at least 15% of sustainable buildings by 2025 and is on track to meet it. As directed by the Sustainability Council, DHS developed a Sustainable Buildings Plan template to identify a new and realistic target. In FY16 each Component developed a Sustainable Buildings Backlog which included an accurate building inventory, planned construction, budget information and timelines to achieve compliance. Annual goals were established by each Component and compiled to develop the Department's goals from FY17 through FY25. These plans provide the roadmap forward to improving the Department's sustainable buildings inventory. The Component Sustainable Building Plans were updated in FY18 and DHS exceeded its annual goal of 9% and achieved 13.0%. Due to a change in Federal guidance (changing the owned inventory from buildings over 5,000 square feet to 10,000 square feet), DHS plans to evaluate changing its sustainability buildings requirements from buildings over 5,000 square feet to buildings over 10,000 square feet.

### **Program Management Reviews**

Sustainability and Environmental Program Management Reviews (PMR) are used to provide an understanding of each Component's sustainability performance, challenges and successes. The PMR is a face to face meeting that allows for an open dialogue between the Component and DHS HQ. The PMRs are conducted annually with each Component and follow a PowerPoint template developed by DHS HQ to obtain standardized information. This template is revised as needed with input from the Environmental and Sustainability, Energy, and Environmental Planning and Historic Preservation Committees. Information that is needed for external reports, such as waste diversion rates, is incorporated during annual updates. The process includes review and approval by senior level management. The Sustainability and Environmental PMRs have been a successful way to obtain pertinent information for reporting to stakeholders, monitoring, and improving Component programs. In FY18 the DUSM signed Directive 107-02 expanding the PMR framework to other functional areas within the Office of the Chief Readiness Support Officer.

### **Recycling**

In September of 2018 DHS finalized its Recycling Directive Number: 023-06, Recycling Funds, which establishes policy to maintain positive control over the receipt and expenditures of recycling funds. The purpose of the Directive is to encourage recycling, realize economic value added, track recycling funds and ensure they are used in accordance with established procedures. Each Component now tracks recycling revenue and reports it in their Operational Sustainability Performance Plan. The Federal Law Enforcement Training Centers have been doing this for several years. In FY18 FLETC realized over \$1 million in revenue from recycling.

## [Implementation Summary: Facility Management](#)

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### **FACILITY ENERGY EFFICIENCY**

#### **FY18 Energy Intensity Progress (Btu/GSF):**

28.6% reduction from FY03

5.6% increase from FY17



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FY19-FY20 Plan:

2.0% reduction in FY19 from FY18

2.0% reduction in FY20 from FY19

### **Implementation Status**

Through the Mission Sustainable Energy program, the DHS community contributes to America's energy security by cultivating sustainable energy practices to strengthen energy independence, promote resilience, and foster environmental and fiscal stewardship. DHS' strategy is to implement energy and water conservation measures (EWCMS) through alternative finance contracts and appropriations as available, assessing our facilities every 4 years through comprehensive energy and water evaluations, tracking our utility use through our Consolidated Asset Portfolio and Sustainability Information System (CAPSIS), Sustainability Performance Management (SPM) program, and deploying new tools, such as the DHS Building Assessment Tool (BAT) to facilitate comprehensive and standardized facility assessments across the Department.

In FY 2018, Customs & Border Protection (CBP) worked on continuous program improvements and met its EISA Section 432 requirements by developing a written audit program SOP to ensure consistent audit planning, implementation, and data management; achieving 100% audit compliance in FEMP EISA 432 CTS and DHS Chief Readiness Support Officer Scorecard; implementing a process for the tracking of audit findings in CBP's real property database of record (TRIRIGA) as Environmental Opportunities and entering audit data from FY2017 audits into the system; and establishing building profiles and benchmarking in ENERGY STAR® Portfolio Manager.

In compliance with EISA (2007) Section 432, the USCG developed a covered facility list consisting of facilities which, in aggregate, consume more than 75% of Coast Guard shore energy. In June 2018, the Coast Guard completed its fourth round of audits on 100% of the covered facilities (as required by EISA (2007) Section 432) and has since begun, or is in the process of completing, audits on all facilities that were audited approximately four years ago. Currently, the Coast Guard is scheduled to meet the requirements for June 2019, having already developed an audit plan and secured contract support.

In FY 2018, the USCG energy use intensity (BTU per square foot) represented a 42.5% decrease from the 2003 baseline, or a decrease of 6.6% compared to 2015. The USCG achieved this decrease in energy intensity based on several initiatives, including, leveraging an Alternately-Financed Projects Green Book to execute comprehensive alternatively-financed projects including ESPCs, UESCs, and PPAs; incorporating energy efficiency into new designs and renovations; increasing outreach and awareness program to help change the culture to incorporate and sustain energy efficiency throughout the Coast Guard; and expanding energy team to include strategic consultants for facility and tactical vehicle energy, as well as ad hoc team members throughout the organization.

FEMA has been actively pursuing and implementing energy conservation measures. These energy conservation measures were derived from the annual energy audits and Facility Condition Assessments (FCA's) and provide the context which FEMA uses to incorporate energy efficiency within its operations. As a result, FEMA has been able to prioritize these opportunities into its five (5) year Real Property Plan for future implementation. Additionally, prior joint planning with components between the energy program has had a significant impact on the agency's overall energy reduction. Specifically,

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the last two years' highlights include: Investing \$575,000 in energy conservation such as boiler upgrades, HVAC control upgrades, and LED lighting upgrades at the Center for Domestic Preparedness.

**Priority Strategies & Planned Actions**

In August 2019, Operational Component Plans for Resilience are due to the CRSO team. These Plans will identify assets with highest vulnerability and potential projects for reduction of these vulnerabilities, improved resilience and reliability, and energy and water efficiency. Through our energy management program our Components will continue to improve their energy footprint, while increasing their resilience in our mission critical assets.

FEMA is developing agency wide, Installation Master Plans which are centered on developing short and long-range plans for improving facility infrastructure as well as implementation strategies for reducing risk across the agency portfolio; optimizing resources; developing renewable energy opportunities; and coordinating program foresight and value across lines of business.

**EFFICIENCY MEASURES, INVESTMENT, AND PERFORMANCE CONTRACTING**

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

\$18.8 M and 2 Projects in FY18

FY19-FY20 Plan:

\$3M and 2-3 projects in FY19

\$2M and 1-2 projects in FY20

**Implementation Status**

In FY2018, through our DHS Energy Management Committee (EMC) and external sources, such as DOE FEMP training in alternative financing was provided to our Components and encouraged to execute projects immediately to gain energy efficiencies and potential avoided costs for inefficient equipment and systems. In FY 2018, the CBP energy investment program was deployed to assist stakeholders with managing existing Energy Service Performance Contracts (ESPC) projects. CBP's first two ESPC projects currently include border lighting retrofits through the DOE ESPC ENABLE program and are in year two of 12-year performance period. It is anticipated that this project will receive \$250,000 in annual savings and a simple payback period of 9 years for 9 miles of border fence lighting. The El Centro/Yuma Facilities construction is near completion and is anticipated \$935,000 annual savings, with a simple payback period of 11 years for 36 buildings and 430,000 Gross Square Feet (GSF).

In FY 2018, construction began of the USCG awarded a UESC at the Coast Guard Academy in New London, Connecticut, following the cross-programmatic procedures specified within the Green Book. The project will replace the aged, fuel oil–fueled central plant with a high-efficiency natural gas plant supplemented by a 1-MW CHP plant, expand the central chiller plant, and implement 20 other ECMs. These capital improvements are worth \$39M and will reduce consumption at the site by 24,488 MBTU per year.

ICE awarded an ESPC ENABLE project managed under the Department of Energy Federal Energy Management Program and implemented three Energy Conservation Measures at five ICE Service Processing Centers in Krome, FL, Batavia, NY, Port Isabel, TX, El Paso, TX, and Florence, AZ. The



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measures include lighting improvements, water improvements, and HVAC controls. As part of the project, the Energy Service Company installed 15,183 lighting fixtures and 1,130 water fixtures. Because the ESPC ENABLE project pays back the contractor through the savings incurred over time, ICE did not have to pay the contractor any up-front costs. Through these energy conservation measures, ICE will successfully comply with the executive order by reducing energy and water consumption, while avoiding operations and maintenance costs that would have accompanied performing the required improvements in-house

### **Priority Strategies & Planned Actions**

Enhancing facility energy resilience is a priority for the Department. It is anticipated that Components will include performance contracting as a tool for implementing projects supporting facility energy resilience and energy efficiency.

### **RENEWABLE ENERGY**

#### **FY18 Renewable Electricity Use:**

11.2% of total electricity in FY18

#### **FY19-FY20 Plan:**

7.5% of total electricity in FY19

7.5% of total electricity in FY20

### **Implementation Status**

DHS encourages efforts that support on-site renewable projects for resilience and grid relief or for energy/water conservation measures that decrease demand and increase efficiencies. DHS OCRSO has contracted with the U.S. Department of Energy's National Renewable Energy Laboratory to provide training and technical assistance to DHS Components to help them identify renewable energy opportunities and implement projects, especially on-site renewable energy generation. Many of the on-site renewable energy efforts conducted by the Components were assisted by this DHS-wide contract resource.

FEMA has seen the expansion of two solar projects within its portfolio of covered facilities. The NETC Emmitsburg, Maryland, has installed a 40kw photovoltaic solar system that is currently supplying administrative buildings. The project will allow NETC to offset a larger portion of their energy usage and reduce reliance on grid power. The project is notable because it involved planning and securing clearance from the Maryland State Historic Preservation Office (SHPO). Funding was secured and the photovoltaic (PV) Solar Array was installed on Building Q (historic barn) and became operational December 1, 2017. This solar array installation has since been providing usable power to USFA-NETC and producing reliable savings of \$4400/month. Additionally, as part of the agency resilience initiative, the NETC has plans to expand their solar footprint to include a larger photovoltaic system to be installed on buildings, where permissible. Analysis is underway to determine feasibility of other power infrastructure improvements (including battery storage, frequency control, etc.) that will only add to the value of this system. In addition, the Mobile Emergency Response Center in, Maynard, Massachusetts installed solar power parking lights. The solar lighting is providing an efficient means of lighting at Maynard's employee parking lot without the need for standard utility power.

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In FY 2017, FLETC completed a Detailed Feasibility Study with Washington Gas and Light Energy Services, a subsidiary of Washington Gas and Light, at the Cheltenham, MD campus. Several Energy Conservation Measures (ECMs) were recommended including a 2 Megawatt (MW) PV Solar Array, Light Emitting Diode (LED) Lighting Upgrades, and Conversion to Natural Gas-Fired Boilers. With the implementation of these ECMs, FLETC will improve its resilience posture to be prepared to recover more quickly from disruptions that impact its training mission. During FY 2018, FLETC signed the contract to move forward with these ECMs, where \$6,658,603 of the total \$10,309,307 will be financed for 17 years. It is estimated that as result of this investment, the government will see an annual savings of more than \$456,000. The 2 MW PV is estimated to generate 60 percent of Cheltenham's electricity. The LED Lighting Upgrade will retrofit 2,280 fixtures to LEDs, and the Conversion to Natural Gas-Fired Boilers will bring natural gas to Cheltenham's campus, replacing 13 boilers in ten buildings. In addition to these infrastructure upgrades, eliminating heating fuel oil greatly reduces the chance for oil spills or leaks, and thus reduces the risk of a costly cleanup or fines from state regulators.

After hurricanes Irma and Maria in 2017, ICE had to replace power on Vieques, a remote island off the east coast of Puerto Rico. Instead of repairing severely damaged infrastructure and power lines, ICE completed a new ground-mounted 97KW photovoltaic microgrid system at the Vieques Tactical Communications site situated on Monte Pirata, Puerto Rico. This was the best option to improve the site's resilience and improve the reliability of electricity. The electricity generated from the Vieques site will contribute toward the DHS's renewable electricity mandate of 7.5% of total electricity consumption.

### **Priority Strategies & Planned Actions**

Enhancing facility energy resilience is a priority for the Department. It is anticipated that Components will include renewable energy as part of their resilience framework plans which are due in August of 2019. DHS plans to make this a high priority moving forward.

### **WATER EFFICIENCY**

FY18 Water Intensity Progress (Gal/GSF):

27.3% reduction from FY07

0.7% increase from FY17

FY19-FY20 Plan:

2.0% reduction in FY19 from FY18

2.0% reduction in FY20 from FY 19

### **Implementation Status**

DHS' strategy is to implement energy and water conservation measures (EWCMs) through alternative finance contracts and appropriations as available, assessing our facilities every 4 years through comprehensive energy and water evaluations, tracking our utility use through our Consolidated Asset Portfolio and Sustainability Information System (CAPSIS), Sustainability Performance Management (SPM) program, and deploying new tools, such as the DHS Building Assessment Tool (BAT) to facilitate comprehensive and standardized facility assessments across the Department.

In FY 2018, FLETC averaged 19.6 gallons per square foot as compared to the FY 2007 baseline of 36.5 gallons per square foot, a 46.3 percent reduction.

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In FY 2018, CBP began working to implement several water conservation strategies. Through the integration of energy audit findings and energy and water conservation measures into TRIRIGA, CBP improved the availability and likelihood of water conservation measures being implemented in future projects. CBP also continued to identify water conservation resources for educational outreach and training and began exploring resources to develop a water asset management plan.

The Coast Guard continues to pursue water conservation measures along with all energy conservation measures as part of larger energy performance contract and resiliency pursuits. The UESC at the Coast Guard Academy included 5,464 kgal in water conservation measures.

### **Priority Strategies & Planned Actions**

Enhancing resilience is a priority for the Department. Components will continue to identify potential water conservation measures in current and future projects. Through resilience assessments using the DHS Resilience Baseline Assessment Scoring (RBAS) tool, Components will also identify vulnerabilities in water and begin to identify solutions and technology to improve resilience of critical water assets.

The Coast Guard will install advanced meters to measure and monitor potable, and industrial, landscaping and agricultural water use. To improve leak management, the Coast Guard is improving maintenance and connectivity of the Advanced Metering Infrastructure system. These improvements will allow a better tracking of water consumption and should lead to quicker responses to leaks.

### **HIGH PERFORMANCE SUSTAINABLE BUILDINGS**

#### **FY18 Sustainable Buildings Progress:**

123 sustainable Federal buildings  
13.5% of buildings / 13.0% of gross square footage (GSF)

#### **FY19-FY20 Plan:**

14% of GSF in FY19 (to be evaluated due to changes in federal guidance)  
14% of GSF in FY20 (to be evaluated due to changes in federal guidance)

### **Implementation Status**

The Sustainable Buildings Program at DHS continues to show improvement, increasing its total square footage from 10.5% in FY17 to 13% in FY18. Each Component develops an annual Sustainable Buildings Plan, incorporates sustainability into its capital planning efforts, and reports on sustainable buildings during its annual program management review.

The new National Bio and Agro-Defense Facility in Manhattan, KS, being built by the Science and Technology Directorate, will enable the U.S. to conduct comprehensive research, and develop vaccines and anti-virals. Once transferred to U.S. Department of Agriculture and operational, the facility will provide enhanced diagnostic capabilities to protect our country from emerging and zoonotic diseases to help protect our food supply, the nation's agriculture economy, and public health. The facility's design process included sustainability goals and plans to meet the Guiding Principles for Sustainable Federal Buildings from the beginning. These, along with the complex technical and regulatory requirements of the facility, were integrated during a structured, multi-disciplinary approach at each stage of the design. The project team included federal experts, a partnership of design firms, and a joint venture of construction firms providing reviews and concurrence all the way through development. Final designs

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underwent external risk assessments and reviews, including the National Academies of Science, to develop the facility specifications which are now under construction. Construction has surpassed 75 percent and remains within schedule and budget estimates. The facility is on-track to realize all operational key performance parameters and sustainability goals including Leadership in Energy and Environmental Design, Silver Certification.

### **Priority Strategies & Planned Actions**

DHS plans to continue its emphasis on integrating sustainable buildings in its design and capital planning processes. Component Sustainable Building reports are included on the OCRSO internal scorecard metrics with progress tracked quarterly. The Department will reevaluate its current policy of incorporating sustainable principles in new construction over 5,000 square feet and make adjustments to Component plans if necessary.

### **WASTE MANAGEMENT AND DIVERSION**

#### **FY18 Non-hazardous Waste Management and Diversion:**

99,562 metric tons of non-hazardous solid waste generated\*

87.85% sent to treatment and disposal facilities

\*not including construction and demolition waste

### **Implementation Status**

The overarching effort for waste management and diversion at the Department resides in a 2012 Sustainable Practices Directive Number: 025-01-01, Section V.A.9, with an established policy and goal to achieve a waste diversion rate of at least 50% and maintain cost effective waste prevention and recycling programs. Oversight and governance is provided through required auditing, program management reviews, and the Component Operational Sustainability Performance Plans. In an effort to improve this process, in FY18 DHS finalized its Recycling Directive Number: 023-06, Recycling Funds, that establishes policy to maintain positive control over the receipt and expenditures of recycling funds. The purpose of the Directive is to encourage recycling, realize economic value added, track recycling funds and ensure they are used in accordance with established procedures. The Federal Law Enforcement Training Centers have been doing this for several years. In FY18 FLETC realized over \$1 million in revenue from recycling.

### **Priority Strategies & Planned Actions**

With the new Recycling Directive, each Component now tracks recycling revenue as part of their Operational Sustainability Performance Plan. This will be reviewed in FY 20 and FY 21 to ensure funds are being used appropriately. FLETC produced an educational awareness video on recycling. In FY19 the video will be shared with other Components to encourage recycling.

## **[Implementation Summary: Fleet Management](#)**

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### **1. TRANSPORTATION / FLEET MANAGEMENT**

#### **FY18 Petroleum Reduction Progress (Gal):**

15.9% increase in petroleum fuel since 2005

73.8% decrease in petroleum fuel since FY17

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**FY19-FY20 Plan:**

TBD % reduction in FY19 from FY18

TBD % reduction in FY20 from FY19

**Implementation Status**

*Note: DHS fleet sustainability reporting for FY18 used a different approach for law enforcement designation than in FY17 and do not reflect a complete accounting due to challenges in implementing new asset level data requirements. These will be evaluated for FY19 and FY20.*

The U.S. Coast Guard has demonstrated success in its Electric Vehicle Infrastructure Program. Prior to calendar year 2018, only ten charging stations existed Coast Guard-wide. In 2018, the Coast Guard constructed 26 new charging stations at six locations while completing planning for the construction of 38 additional stations at eight locations.

The new ports allowed the Coast Guard to add 31 Plug-in hybrid vehicles to its fleet. The additional hybrid vehicles will reduce greenhouse gas emissions of the Coast Guard fleet by over 4,800 tons of carbon dioxide over the life of the vehicles and save the Coast Guard over \$34,000 in fuel and maintenance cost. Over time the Coast Guard vehicle program expects nearly half of the fleet to become plug-in hybrid battery electric vehicles, resulting in a reduction of 23,000 tons of greenhouse gas emissions and a savings of over \$1.6 million of rolling life cycle costs. The Coast Guard is also publishing a semi-annual Energy and Fuel Matters Newsletter that helps to increase awareness on efforts that reduce GHG emissions.

In FY 2018, CBP pursued the telematics component of the Fleet Management Tool and Telematics (FMTT) Integrated System telematics component and awarded the CBP Vehicle Telematics (CVT) contract. In an effort to optimize and right-size fleet consumption, CBP monitored fleet reduction progress and tracked office inventories. In FY 2018, CBP reduced its inventory from 21,887 to 21,663, right-sizing 224 vehicles.

**Priority Strategies & Planned Actions**

USCIS is working with GSA to obtain electric vehicle charging stations at the new USCIS Headquarters location. The facility is projected to have six charging stations. USCIS also encourages facilities to prioritize the use of alternative fuel vehicles before conventional fuel vehicles.

CISA has an aggressive program whereby FY20 all new vehicle acquisitions will be procured with E-85, low Greenhouse Gas Emissions or hybrid sedans.

CBP will continue to monitor progress of reductions, track office inventories to Table of Vehicles, and plans to reduce 90 more vehicles from its inventory in FY 2019.

[Implementation Summary: Cross-Cutting Operations](#)

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**1. SUSTAINABLE ACQUISITION / PROCUREMENT**

**FY18 Sustainable Acquisition Progress:**

5,619 of contract actions and 8.97% of obligations (in dollars), for a total of \$1,551.2M in contract actions with statutory environmental requirements.

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**FY19 Sustainable Acquisition Planned Progress:**

6,612 of contract actions and 11.53 % of obligations (in dollars), for a total of \$2,011.9M in contract actions with statutory environmental requirements.

Biobased Actions: 585; Biobased dollars: \$104,933,442.92

**FY20 Sustainable Acquisition Planned Progress:**

6,700 of contract actions and 12.57% of obligations (in dollars), for a total of \$2,122.2M in contract actions with statutory environmental requirements.

Biobased Actions: 600; Biobased dollars: \$107,950,459.97

**Implementation Status**

The DHS sustainable acquisitions guidance is included in the Homeland Security Acquisition Manual (HSAM) and the DHS Affirmative Procurement Plan at Appendix Q of the HSAM. Sustainable acquisitions are reviewed during the Departmental Program Management Reviews. FEMA has implemented a review for contract actions at or above \$500K. FEMA tracks sustainable acquisitions and requires contracting personnel to consider sustainable requirements before making a purchase by including as a part of the contract review checklist a “Green Consideration Memo.” The memo details the specialist’s rationale as to whether to consider sustainability as a part of the award. The memo is reviewed by the Acquisition Program & Policy Division and the decision to include/not include sustainable FAR clauses/language is evaluated. Incorrect information is required to be corrected prior to award. Compliance is determined by the number of Green Consideration Memoranda returned to the contracting personnel for correction.

**Priority Strategies & Planned Actions**

DHS Office of the Chief Procurement Officer developed a Federal Acquisitions Regulation (FAR) Part 23 checklist which was rolled out to the Components through the DHS Sustainable Acquisition Work Group (SAWG), which consists of environmental and contracting personnel. In FY19-FY20, DHS plans to increase the use of the checklist to increase sustainable acquisition clauses in contracts. Ongoing dialogue will continue at the Component level between the contracting offices and sustainability officers. The SAWG meets quarterly to discuss ways to improve meeting the FAR requirements.

TSA Contracting and Procurement is currently reviewing and revising procedures for recording assessments of contractor performance under TSA contracts and will identify opportunities for reporting improvement by Contracting Officer’s Representatives (COR). Additionally, the upcoming revision of the TSA COR Guide will include supplemental procedures for the documentation of contractors’ sustainable acquisition performance when required under a contract.

**2. ELECTRONICS STEWARDSHIP**

**FY18 Electronics Stewardship Progress:**

99.3% of newly purchased or leased equipment met energy efficiency requirements  
94% of equipment with power management enabled\*



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100% of electronic equipment disposed using environmentally sound methods  
*\*excluding exempted equipment*

**Implementation Status**

DHS has continued its robust program in Electronic Stewardship. The Federal Strategic Sourcing Initiative Contracts, FirstSource II and Eagle II, were utilized to purchase 89,747 EPEAT registered units in FY18. By using EPEAT registered units the Department consumes less energy resulting in a reduction in 16,682 metric tons of greenhouse gas emissions and \$2,782,370 in cost savings over the life of the products. DHS Directive 025-01-001, Duplex Printing and DHS Directive 025-01-002, Systems Power Management continue to be implemented.

One example of successfully implementing the Duplex Printing Directive was by ICE. The ICE sustainability team orchestrated a joint effort between the Office of the Chief Information Officer and the Office of the Chief Financial Officer to develop and implement a Print Management Initiative that aims to reduce operating expenses, streamline printing and I.T. device inventory, and increase resource efficiency through improved management of office printers and scanners.

Using print management software, the team evaluated its use of printers. The pilot yielded valuable results that allowed ICE to eliminate existing print servers, centrally manage all printers from a single web-based administrative console, and track both desktop and server printers. Because data proved desktop printers redundant and network printers were underused, the team estimated ICE could save more than \$1.7 million dollars per year by eliminating all 680 of its desktop printers.

ICE is expanding the pilot to other headquarters and field offices, and plans call for enterprise deployment of print management services throughout ICE in fiscal year 2019.

**Priority Strategies & Planned Actions**

DHS will continue to use its Federal Strategic Sourcing Initiative Contracts, FirstSource II and Eagle II through the end of the base year. During this time options to utilize government-wide strategic sourcing vehicles will be evaluated. DHS Directive 025-01-001, Duplex Printing and DHS Directive 025-01-002, Systems Power Management will continue to be implemented.

**3. GREENHOUSE GAS EMISSIONS**

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

- 38.8% reduction from FY 2008
- 9.1% reduction from FY 2017

**Implementation Status**

DHS' strategy is to implement energy and water conservation measures (EWCMs) through alternative finance contracts and appropriations as available, assessing our facilities every 4 years through comprehensive energy and water evaluations, tracking our utility use through our Consolidated Asset Portfolio and Sustainability Information System (CAPSIS), Sustainability Performance Management (SPM) program, and deploying new tools, such as the DHS Building Assessment Tool (BAT) to facilitate comprehensive and standardized facility assessments across the Department. Scope 1 and 2 GHG emission reductions are driven most significantly by energy use reductions, therefore our same strategies for energy efficiency improvements apply.

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Hurricane supplemental work at the Coast Guard focuses on energy reliability and resiliency, which will increase distributed generation capacity at several locations across the Coast Guard, allowing the decrease of source energy. For example, the Coast Guard implemented distributed generation at the Coast Guard Academy (CHP), Base Elizabeth City (demand management generator), and the Coast Guard Yard (repair and restoration followed by expansion of the renewable energy center output) to reduce source emissions.

**Priority Strategies & Planned Actions**

Through our sustainability, resilience, and energy management programs our Components will continue to improve their footprint, while increasing their resilience in our mission critical assets.

The Coast Guard plans to develop and improve internal procedures and processes to improve and modernize how the Coast Guard handles energy data and analysis, executes energy performance contracts, and coordinates energy resiliency within funded civil engineering projects. In FY17, the Coast Guard awarded a UESC project at the Coast Guard Academy that included over \$39M in capital improvements, including new natural gas boilers supplemented by combined heat and power, a new chiller plant, and 450 kW in solar PV, among several other measures. This project will eliminate the use of no. 6 fuel oil at the Academy and reduces the EUI by 57% (including site/source reductions). Construction in FY18 was successful and the project is on schedule for a timely completion of Q4 FY19.