

U.S. Department of Labor

2018 Sustainability Report and Implementation Plan

Executive Summary

The U.S. Department of Labor (DOL) fosters and promotes the welfare of job seekers, wage earners, and retirees of the United States by improving their working conditions, advancing their opportunities for profitable employment, protecting their retirement and health care benefits, providing workers' compensation, helping employers find workers, strengthening free collective bargaining, and tracking changes in employment, prices, and other national economic measurements.

In carrying out this mission, the Department administers a variety of federal labor laws including those that guarantee workers' rights to safe and healthful working conditions; a minimum hourly wage and overtime pay; freedom from employment discrimination; unemployment insurance; and other income support. These programs are not involved significantly in substantial energy and natural resource use. However, the Department believes that it has a significant contribution to make to federal leadership in energy and economic performance by helping to reduce energy and natural resource use in its buildings and operations and by training America's workers, including Job Corps students, for jobs that expand America's clean energy portfolio. For example, for the period July 1, 2017 through June 30, 2018, Job Corp Centers (JCCs) trained 7,158 students in "green" jobs of which 6,768 were in the construction field and 390 were in renewable resources and energy.

Though the Department notes that its programs are not involved significantly in activities that cause adverse energy and natural resource impacts, DOL has significant challenges in the energy efficiency arena. More than 99 percent of the Department's buildings are located on 123 JCC campuses across the nation and are comprised of aged, energy inefficient buildings. In addition, the Department's nearly 2 million square foot headquarters, the Frances Perkins Building (FPB) in Washington, D.C., which was built in the energy-intensive early 1970s, has limited potential for future energy efficiency upgrades without incurring significant operational and cost impacts.

Despite these substantial challenges, the Department is working diligently to reduce the Government's costs, improve energy and natural resources efficiency, and achieve or exceed statutory and Executive Order goals by:

- Pursuing annual average reductions in electrical usage;
- Continuing to identify ways to reduce the consumption of potable water (in fiscal year (FY) 2017, DOL reduced water use by 30.7 percent from the 2007 baseline, exceeding the FY 2017 goal of a 18 percent reduction); and
- Ensuring that new buildings over 5000 gross square feet are designed to energy and water efficient engineering standards.

With respect to the Department's FY 2017 fleet of 3,797 vehicles (reduced from 4,300 in FY 2012), the Department exceeded the Energy Policy Act of 2005 (EPA) 75 percent alternative fuel vehicle acquisition goal with an EPA compliant percentage of 145 percent (including credits), and decreased petroleum fuel use 32.3 percent from the 2005 baseline. These examples show DOL's commitment and success at achieving resource efficiencies and cost reductions that the Department has taken and will continue to take as responsible fiscal and resource stewards.

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Implementation Summary

1. Facility Management:

FACILITY ENERGY EFFICIENCY

FY 2017 Status: 35.4 percent reduction (British thermal unit/gross square foot (Btu/GSF)) from the 2003 baseline.

Implementation Status	Operational Context	Priority Strategies & Planned Actions
<p>DOL completed a total of 14 Energy Independence and Security Act (2007), Section 432, (EISA 432) audits during FY 2017 to identify energy and water efficiency opportunities; as of July, 2018 an additional 22 EISA 432 audits were performed. In total these audits reviewed 10,163 thousand GSF.</p> <p>A total of 242 potential energy conservation measures (ECM) were identified that if all are implemented could result in investment costs of over \$7.8 million and estimated annual energy and water savings of almost \$885,000, over 47,520 Million British Thermal Units (MBTU), and almost 9.5 million gallons of water.</p>	<p>The vast majority (99 percent) of the Department’s buildings are located on 123 JCC campuses nationwide and are comprised of aged, energy inefficient buildings. Job Corps’ 2,333 buildings are on average 42 years old.</p> <p>These energy inefficient structures have hindered DOL’s ability to make rapid progress. Further, the budget available for facility improvements has not matched inflation or the increasing needs of aging buildings.</p> <p>ECM projects return on investment range from one year to an unreasonable 47.2 years.</p> <p>Job Corps uses Energy Watchdog, a web-based energy utility tracking and monitoring system, for all JCCs. Centers self-report energy usage data; if data errors are discovered, corrections are made and JCCs are notified to reduce the risk of future errors.</p>	<p>DOL will perform 9 audits pursuant to EISA 432 by December 2019 to identify energy and water efficiency opportunities.</p> <p>Continue to use Energy Watchdog for all JCCs to target Job Corps conservation initiatives. Implement improvements in Energy Watchdog to improve data accuracy, data tracking, and reporting.</p> <p>Primary identified ECM investment opportunities include upgrading interior and exterior lighting to light emitting diode (LED), installing high-efficiency mechanical equipment, and commissioning systems to assure proper operation of existing systems. DOL will implement ECM projects that are identified to be life-cycle cost-effective as per EISA 432 and budget availability.</p> <p>New construction at the Atlanta JCC will meet the <i>Guiding Principles for Sustainable Federal Buildings</i>.</p> <p>The Frances Perkins Building (FPB) will continue to implement an ongoing effort to replace existing florescent bulbs with either an LED fixture retrofit or LED direct bulb replacement.</p>

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EFFICIENCY MEASURES, INVESTMENT, AND PERFORMANCE CONTRACTING

ESPC and UESC investment / number of projects FY 2017: \$0/0

Implementation Status	Operational Context	Priority Strategies & Planned Actions
<p>DOL contracted for a \$5.2 million Energy Savings Performance Contract (ESPC) at the 40 year-old Mine Safety and Health Administration (MSHA) Training Academy. The ESPC project was completed February 26, 2018 and resulted in infrastructure upgrades including improved lighting and climate control. Projections estimate that this work will realize a 41 percent energy savings, which results in a cost avoidance of \$21,667 per month or \$260,000 per year.</p>	<p>The MSHA Training Academy ESPC project provided DOL the only opportunity for facility ESPC project. In 2013, DOL explored the potential for an ESPC or Utility Energy Savings Contract (UESC) at the FPB. Because the FPB is a General Service Administration's (GSA) building, DOL needs GSA concurrence for upgrades.</p>	<p>Monitor monthly utility bills and conduct measurement and verification process at MSHA Academy for the recently completed ESPC project.</p> <p>Continue to implement energy efficiency measures at JCCs identified in EISA 432 energy and water efficiency audits.</p>

RENEWABLE ENERGY

FY 2017 Status: 25.4 percent renewable electricity.

Implementation Status	Operational Context	Priority Strategies & Planned Actions
<p>Job Corps produces renewable energy with wind turbines at the Pine Ridge, Angell, Hawaii/Maui, Muhlenberg, Joliet, Shreveport, Pittsburgh, and Northlands JCCs. Job Corps produces solar photovoltaic energy at the Muhlenberg, Oneonta, Pittsburgh, Westover, Edison, and Woodland JCCs. The Boxelder and Albuquerque JCCs produce domestic hot water using biomass.</p> <p>Renewable Energy Certificate (REC) purchases were made in January 2018.</p>	<p>Contractors at JCCs that have renewable energy generation are responsible for maintaining the systems and are encouraged to assure that the systems are functional.</p>	<p>If needed, RECs will be purchased prior to January 2019 to meet the EAct (2005) statutory minimum that DOL's total amount of electric energy consumed during the fiscal year is at least 7.5 percent renewable energy.</p> <p>The FPB will continue to purchase renewable electricity from GSA's electricity contract that guarantees a minimum of 10 percent renewable electricity.</p>

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WATER EFFICIENCY

FY 2017 Status: 30.7 percent reduction in potable water intensity (gallons/GSF (Gal/GSF)) from 2007 baseline.

Implementation Status	Operational Context	Priority Strategies & Planned Actions
<p>In FY 2017, the MSHA Training Academy installed water efficient fixtures.</p> <p>In FY 2017, the JCCs:</p> <ul style="list-style-type: none"> - Used a web-based utility tracking and monitoring system to analyze utility data and advance efficiency measures; - Mandated that all new buildings use low-flow water fixtures and equipment; - Installed low-flow water fixtures in many of its facilities; - Identified and promoted water reuse strategies consistent with state laws that reduce public water consumption; - Reduced its infrastructure footprint by planned demolition of older, less water efficient structures at JCCs. 	<p>Many JCCs have aging underground water pipes and leaks may be difficult to quantify, locate, and repair. Any significant increases in water use, as tracked by Energy Watchdog, will be investigated for potential water infrastructure issues.</p>	<p>DOL will perform nine EISA 432 audits by December 2019 to identify water efficiency opportunities.</p> <p>Web-based training to educate Job Corps employees and contractors about methods to minimize water use will be developed; training will be provided to all JCCs by the end of FY 2019.</p> <p>To reduce the energy, water, and waste associated with plastic bottles, the FPB will continue an innovative program to retrofit existing water fountains with bottle water filling stations to reduce water and waste; at least three JCCs will install bottle filling stations and high efficiency coolers, an imitative that can be replicated overtime.</p>

HIGH PERFORMANCE SUSTAINABLE BUILDINGS

FY 2017 Status: 7.0 percent buildings and 8.8 percent by GSF.

Implementation Status	Operational Context	Priority Strategies & Planned Actions
<p>Green building specifications are being incorporated into all new construction, modernization, and major renovation projects at the DOL JCCs.</p> <p>The Atlanta JCC is currently being constructed to incorporate green building specifications.</p>	<p>New construction for aged Job Corps buildings is designed to and meets the <i>New Construction Standard of the Federal Guiding Principles for High Performance Buildings (Guiding Principles)</i>.</p>	<p>Legacy buildings which are inefficient and lack sustainable features will be replaced as budgets allow.</p> <p>DOL will continue construction of the Atlanta JCC to meet the <i>Federal Guiding Principles</i>.</p>

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WASTE MANAGEMENT AND DIVERSION

FY 2017 Status: 25 percent non-hazardous solid waste diverted.

Implementation Status	Operational Context	Priority Strategies & Planned Actions
<p>DOL reduces waste through reuse, elimination, source reduction, and recycling. For example:</p> <ul style="list-style-type: none"> - FPB’s annual event to repurpose and reuse agency property in FY 2018 resulted in over 1,100 items selected for reuse, over \$185,000 in acquisition/disposal cost avoidances, and kept about 18,255 pounds from landfill; - Cleveland and CD Perkins JCCs have removed trays from food service, which reduces food and water waste; - The Treasure Island, Penobscot, and Oneonta JCCs compost landscaping waste and some food waste for vegetable gardens and landscaping. 	<p>Job Corps generates the vast majority of DOL’s solid waste. New Job Corps contracts were awarded in FY 2017 and new contractors require time to understand and ramp up on the implementation of all Job Corps policies, including waste diversion requirements.</p> <p>In FY 2017, Job Corps non-hazardous solid waste diversion percentages declined to 25 percent compared to FY 2016 diversion rates of 43 percent. Therefore, FY 2019 strategies will focus on supporting JCCs to increase waste diversions.</p>	<p>The Job Corps will provide web based training on waste diversion and composting to all JCCs by March 2019. Specific waste diversion opportunities will be identified by facility surveys and EISA 432 audits.</p> <p>FPB will continue to hold a repurposing and reuse event for DOL agencies to donate and acquire DOL excess property.</p> <p>National Office property office will continue to use GSAXcess to dispose of excess property, as appropriate, to other Federal agencies and approved non-federal receipts.</p>

2. Fleet Management:

TRANSPORTATION / FLEET MANAGEMENT

FY 2017 Status: 32.3 percent petroleum and 5.3 percent alternative fuel decrease from 2005 baseline.

Implementation Status	Operational Context	Priority Strategies & Planned Actions
<p>DOL’s FY 2017 fleet inventory of 3,797 vehicles represents a 13 percent reduction of the fleet in FY 2017 as compared to FY 2012; during this period 558 vehicles were eliminated, saving DOL over \$6 million in FY 2017 in vehicle leasing and acquisition costs as compared to FY 2012 costs.</p>	<p>DOL’s strategy in recent years to meet mission requirements has been to reduce the fleet inventory and substitute ethanol (E-85) fueled vehicles with smaller, more fuel-efficient gasoline models and gasoline-electric hybrids, which has</p>	<p>DOL will continue to optimize and right-size the fleet composition, by reducing vehicle size, eliminating underutilized vehicles, and acquiring and locating vehicles to match local fuel infrastructure.</p> <p>DOL will report to the Federal Automotive Statistical Tool (FAST) at the vehicle asset level in December 2018. The Department will ensure that</p>

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<p>Use of the Department of Energy’s (DOE) Fleet Sustainability Dashboard (FleetDASH) system has allowed DOL to identify missed opportunities for use of alternative fuel (AF) and to target DOL agencies and drivers for improvement efforts. As a result, in FY 2017 compared to FY 2016, AF use in DOL fleet vehicles increased by 39.8 percent to 513,000 gallons of AF.</p>	<p>resulted in reduced cost and fuel use.</p> <p>DOL is moving away from E-85 fueled vehicles because, frequently, either the vehicles required to meet mission requirements are not available as E-85 models or the local ethanol infrastructure is lacking nearby vehicle garage locations.</p> <p>Further fleet vehicle reductions will be more modest in future years because DOL fleets are already optimized to the size needed to meet mission requirements. Future cost savings will be more difficult to achieve because GSA leasing rates are increasing.</p>	<p>annual asset-level fleet data including petroleum and alternative fuel consumption is properly accounted for in DOL’s Fleet Management Information System (AUTOS), and in GSA FedFMS System for DOL agency-owned vehicles and will use this data to look for further fleet optimization opportunities.</p> <p>DOL will continue to use DOE’s FleetDASH system to identify opportunities to increase alternative fuel use in DOL alternative fuel vehicles.</p>
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3. Cross-Cutting:

SUSTAINABLE ACQUISITION / PROCUREMENT

FY 2017 Status: -0.8 percentage point difference of sustainable contract actions and -0.6 percentage point difference of value of contracts with sustainable requirements from the FY 2016.

Implementation Status	Operational Context	Priority Strategies & Planned Actions
<p>DOL issued the Department’s acquisition community (e.g., contracting officers, contract specialists, and programs’ personnel) guidance on the requirements to acquire products and services complying with environmental and sustainability standards, including, but not limited to: bio-based; energy efficient and Energy Star products; and products containing recycled</p>	<p>New protocols that use Federal Procurement Data System—Next Generation (FPDS-NG) standardized sustainability reports, that includes applicable and non-applicable contracts, identified 635 applicable contract actions (a total of \$428.7 million in value) which contained sustainability clauses. Due to these new</p>	<p>Review high dollar value contract actions for sustainable procurement FAR clauses and modify contract actions to incorporate missing clauses, as applicable.</p> <p>Review high dollar value contract actions for sustainable procurement FAR clauses and correct FPDS-NG, if required.</p> <p>Continue to implement policies to purchase sustainable products and</p>

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<p>content. DOL updates the agency affirmative procurement plans, policies and programs for Federally-mandated sustainable products and services. DOL’s contract writing system, Acquisition Management System (AMS), has sustainability clauses to be included in relevant procurements and services.</p>	<p>protocols, it appears that DOL’s sustainable procurement performance declined in FY 2017.</p> <p>As a result, DOL is actively taking steps to improve data quality and to increase the percentage of sustainable contract actions.</p>	<p>services identified as: U.S. Environmental Protection Agency (USEPA) Environmentally Preferred Products, Recycled Content, and Energy Star; Federal Energy Management Program energy efficient; U.S. Department of Agriculture Bio-based or Bio-Preferred; and others, as required.</p> <p>Target sustainable acquisition strategies as topics for DOL-wide training.</p>
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ELECTRONICS STEWARDSHIP

FY 2017 Status: 100 percent equipment acquisition meeting EPEAT requirements, 100 percent equipment with power management, and 100 percent compliance with disposal guidelines

Implementation Status	Operational Context	Priority Strategies & Planned Actions
<p>DOL’s priority is to ensure that information technology electronic equipment is properly disposed, including appropriate media sanitization and recycling by R2/e-Steward certified recyclers. Additionally the Department has an ongoing effort to reutilize excess office supplies, furniture and computer peripherals to reduce waste and redistribute excess or surplus materials.</p> <p>DOL awarded a nationwide disposal contract for the environmentally sound disposition of all agency excess and surplus electronics, consistent with Federal policies on recycling and disposal of electronic assets.</p> <p>In 2018, FPB held an “Electronics Disposal Amnesty Day” in which streamlined electronics disposal procedures, in accordance with compliance standards, resulted in 5,400 obsolete electronics being safely eliminated.</p>	<p>During FY 2017, the implementation of the nationwide electronics stewardship disposal contract was delayed because of procedural refinements to security procedures.</p>	<p>Continue to require computers, laptops, monitors, and tablets to meet EPEAT requirements.</p> <p>Ensure that power management is enabled on 100 percent of laptops and computers.</p> <p>Begin regional implementation of the nationwide disposal contract for electronic stewardship by the first quarter of FY 2019 with remaining nation-wide coverage following sequentially throughout FYs 2019 and 2020. Monitor agency utilization of the electronics stewardship disposal contract.</p>

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GREENHOUSE GAS EMISSIONS

FY 2017 Status: 35.1 percent reduction in Scope 1 & 2 emissions from 2008 baseline.

Implementation Status	Operational Context	Priority Strategies & Planned Actions
<p>DOL reduced FY 2017 Scope 1 & 2 greenhouse gas (GHG) emissions by 35.1 percent from the 2008 baseline and Scope 3 GHG emissions by 55.3 percent.</p> <p>These GHG reductions were achieved through implementation of strategies to reduce energy and water use, increase renewable energy, increase waste diversions, optimize the DOL fleet with alternative fleet vehicles and adding low GHG vehicles, implementation of employee telework and commuting programs.</p>	<p>The vast majority (99 percent) of the Department’s buildings are located on JCC campuses nationwide and are comprised of aged, energy inefficient buildings. Job Corps buildings are on average 42 years old. These energy inefficient structures have hindered DOL’s ability to make rapid progress.</p> <p>The budget for facility improvements has not increased to match inflation or increasing needs of aging buildings.</p>	<p>DOL will continue to implement strategies that reduce GHG emissions. These strategies include those listed in the sections above such as: reduce energy and water use; increase energy and water efficiency; increase renewable energy; increase solid waste diversions; reduce vehicle petroleum use; increase adoption of low GHG emitting vehicles; and employee strategies that encourage GHG emissions resulting from employee commuting.</p>

Notable Projects and Highlights

FACILITY ENERGY EFFICIENCY

Highlights:

- DOL implemented a \$5.2 million ESPC at the MSHA Training Academy to upgrade the 40 year old facility for energy conservation improvements.
- At JCC campuses a total of 21 projects containing efficiency measures, at an investment of \$417,000, were implemented in FY 2017. Example projects included installing high efficiency heat pumps with controls throughout Wolf Creek JCC and the installation of a new large package heating, ventilation, and air conditioning (HVAC) unit for the Mississippi JCC gymnasium.
- The Grafton Culinary Arts JCC building was completed in FY 2018 and features a variable refrigerant flow (VRF) heating and cooling system, LED lighting, and high efficiency water heaters.
- Cleveland JCC improved building envelopes throughout the Center. The newer building materials increased the overall insulation values of each building.
- Detroit JCC completed a “Center Redevelopment Project,” which replaced older and more inefficient buildings.
- Woodland JCC and Flint/Genesee JCC had new high efficiency boilers installed.

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- MSHA Approval and Certification Center in Triadelphia, West Virginia (MSHA Triadelphia): upgraded the outside lighting to LED lighting and the indoor fluorescent lighting ballasts; put timers on the hot water circulating pumps for domestic water, chiller pump motors, and exhaust fans; upgraded the majority of HVAC systems to new energy efficient systems that utilize R410 refrigerant; and replaced some building roofs with a reflective white coating to facilitate cooling in the summer.

RENEWABLE ENERGY

Highlights:

- The FPB, DOL's headquarters, purchases 10 percent of its electricity from renewable electricity sources as part of a GSA electric supply contract.
- Job Corps produces renewable energy with wind turbines at the Pine Ridge, Angell, Hawaii/Maui, Muhlenberg, Joliet, Shreveport, Pittsburgh, and Northlands JCCs.
- Job Corps produces solar photovoltaic energy at the Muhlenberg, Oneonta, Pittsburgh, Westover, Edison, and Woodland JCCs.
- The Boxelder and Albuquerque JCCs produce domestic hot water using biomass.

WATER EFFICIENCY

Highlights:

- The \$5.2 million ESPC implemented at the MSHA Training Academy included upgrades to improve facility water efficiency.
- DOL has installed low-flow water efficient fixtures at the JCCs, the FPB, and at the MSHA Training Academy.
- The Weber Basin, Los Angeles, Inland Empire, and Albuquerque JCCs have hardscape or xeriscape dry weather plantings in place.
- Timber Lake JCC has large cisterns to collect storm water and irrigate plantings.
- Iroquois JCC in upstate New York is using cisterns for landscape watering.
- MSHA Triadelphia installed water-circulating pumps on the domestic hot water so that users do not have to run and squander water before hot water is delivered to the faucet.

HIGH PERFORMANCE SUSTAINABLE BUILDINGS

Highlights:

- DOL continues to show progress on meeting the *Guiding Principles* that qualify a building as being a high performance sustainable building. The *Guiding Principles* have been added to the Job Corps Building Design Guidelines (JCH-814) and to the Job Corps Compliance Tracking Tool required on all major construction projects.

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TRANSPORTATION / FLEET MANAGEMENT:

Highlights:

- DOL fleet optimization efforts in FY 2017 resulted in a 3,797 vehicle fleet inventory, which is a 13 percent reduction of the inventory (558 vehicles eliminated) as compared to FY 2012.
- Acquisition and leasing costs in FY 2017 were reduced by \$6 million as compared to FY 2012.
- Alternative fuel (ethanol / E-85) use increased by 39.8 percent in FY 2017 as compared to FY 2016 due to strategies that used the Department of Energy’s FleetDASH reports to target “missed opportunities” for alternative fuel use and notifying DOL agencies of these missed opportunities.

GREENHOUSE GAS EMISSIONS:

Highlights:

- To help achieve the Scope 1 and 2 greenhouse gas emissions reduction, the Department is reducing facility energy intensity, installing and using renewable energy, reducing fleet vehicle petroleum use, increasing fleet alternative fuel vehicle (AFV) use, optimizing vehicles’ use, right-sizing its fleet, and increasing low emission and high fuel economy vehicle use.