Executive Summary

The Department of the Interior (Department) is committed to working towards meeting its energy and environmental statutory requirements and the performance objectives of Executive Order (EO) 13834 - Efficient Federal Operations. In doing so, the Department will work to increase efficiency, optimize performance, eliminate unnecessary use of resources, and protect the environment. The Department is proud of its past and current accomplishments in energy and environmental performance. For example, the Department received four green, two yellow, and one red performance metric ratings on the FY 2017 Office of Management and Budget (OMB) Scorecard. The four green ratings were for Facility Energy Efficiency, Renewable Energy Use, Water Efficiency, and Sustainable Acquisition; the two yellow ratings were for Efficiency Measures/Investment and Transportation/Fleet Management; and the red rating was for High Performance Sustainable Buildings. Additionally, the Department has reduced scope 1 & 2 greenhouse gas emissions by 25.9%, relative to 2008.

While continuing to work towards meeting the departmental statutory requirements and performance objectives, the Department will focus on implementing projects and taking actions that reduce waste, cut costs, and enhance the resilience of our infrastructure and operations to enable more effective mission accomplishments. Several of the key strategic energy and environmental performance priorities the Department will focus on in FY 2019 and FY 2020 include Facility Energy Efficiency, Efficiency Measures/Investment, and Transportation/Fleet Management.

The Department's bureaus and offices make energy efficiency investments in agency buildings coincident with major renovations, new construction, and maintenance upgrades. Through comprehensive energy and water evaluations, bureaus will continue to identify cost effective potential energy and water conservation measures. Performance contracting, as well as traditional funding sources and best management practices, will be used to implement cost effective conservation technologies and together move the Department's efforts toward energy and water efficiency.

The Department reduced petroleum fuel use in its covered fleet due to the disposition of underused vehicles and the increased acquisition of Low Greenhouse Gas (LGHG) vehicles. The Department will continue to pursue optimal fleet composition by acquiring the right size and type of vehicles, as well as the appropriate fuel configuration to meet fleet efficiency, with the caveat that we must put the highest priority on matching vehicles to the mission they are intended to perform.

The Department is reviewing its owned fleet to map out responsible ways to acquire alternative vehicles to meet E.O 13834. Mileage reports are reviewed to ensure vehicles are rotated and to identify any that may be suitable for disposition.

Implementation Summary

1. Facility Management:

FACILITY ENERGY EFFICIENCY
FY 2017 Status: -12.8% (Btu/GSF)

Implementation Status	Operational Context	Priority Strategies & Planned Actions
The Department's bureaus and offices make energy efficiency investments in agency buildings through major renovations, new construction, and maintenance upgrades. These efforts have reduced the Department's energy intensity by 12.8% from the FY 2015 baseline and reduced energy costs by 2.4%. The Udall Main Interior Building, Washington, DC, completed the direct digital control (DDC) rollout, lighting improvements, and window improvements. These activities included (1) a demand management program for fan coil unit usage in the Main Interior Building with a schedule, based on rate, hour of the day, and building occupancy; and (2) employing lighting sensitivity in office spaces that depend on sun light and occupancy. They are monitored and assessed via a remote computer tied into the building automation system.	N/A	Bureaus and offices will continue to implement cost-effective energy efficient technologies as appropriate. Additionally, building and facility energy use data will be collected and used to improve building energy management and performance. NPS is developing a Tableau dashboard, BRIDGE, which brings together real property data and energy data for each building within NPS in a user friendly manner. This powerful management tool makes access to key data easy and incorporates building level energy use intensity into the facility improvement decision-making process.

EFFICIENCY MEASURES, INVESTMENT, AND PERFORMANCE CONTRACTING

ESPC and UESC investment / number of projects FY 2017: $2,542,400 / 1 project

Implementation Status	Operational Context	Priority Strategies & Planned Actions
The Department uses performance contracting, where applicable. In FY 2018, OFAS completed the final phase of the ESPC at the Udall Main Interior Building. The total project implementation cost was $39,330,777 with a guaranteed annual source energy savings of 82,485 million Btu (MMBtu) this represents a 41.4% reduction relative to the 2013 baseline, and annual water savings of 7,980 thousand gallons, a 77.1% reduction.	The Department's facilities are widely dispersed and small. The majority of these facilities will not generate enough energy cost savings to pay for investments and are not suitable for energy performance contracts. Additionally, due to bureau organizational and funding structures, bundling of projects across organizational boundaries to share in the savings is not always practical.	The Department's bureaus will continue to pursue performance contracting to achieve energy and water savings. NPS Glen Canyon National Recreation Area is pursuing an ESPC with anticipated award in late FY 2019 or early FY 2020.

RENEWABLE ENERGY

FY 2017 Status: 16.5% renewable electricity

Implementation Status	Operational Context	Priority Strategies & Planned Actions
The Department's bureaus continue to install cost-effective on-site renewable energy projects including stand-alone and grid-connected photovoltaic (PV) systems, incremental hydropower, and wind projects. In FY 2017, 10.8% of the Department's electricity came from on-site renewable energy projects, with an additional 5.7% from purchased renewable energy sources.	The use of on-site renewable energy sources is encouraged if the development of the resource is economically, cost-effective, and environmentally, and technically practical.	The Department's bureaus will continue to utilize cost-effective renewable energy technologies and purchases to meet the statutory goal. NPS Mount Rushmore National Memorial will complete the installation of a 325 kilowatt solar PV carport.

WATER EFFICIENCY

FY 2017 Status: 20.3% reduction in potable water (Gal/GSF)

Implementation Status	Operational Context	Priority Strategies & Planned Actions
The Department is committed to the cost-efficient use of potable and non-potable water through the implementation of water efficient technologies and water re-use alternatives. In FY 2017, the potable water use intensity reduction was 20.3% relative to the FY 2007 baseline. BOR Phoenix Area Office, Arizona, hired a landscaping contractor to conduct a landscaping water usage audit. The audit uncovered leaking water lines, inefficient watering timers, and uncapped drip systems that were no longer used. These were fixed immediately by the contractor, resulting in a 50 percent reduction in annual water use.	The majority of the Department's non-potable water use is for mission related functions. These water uses are not subject to reduction goals and include: care and feeding of animals and wildlife, including endangered species; establishment and propagation of wildlife habitats, agricultural uses associated with BLM's farm program, power generation, the distribution of water as a result of water rights, contracts, or Tribal agreements; and wildland firefighting.	The Department's bureaus will continue to implement cost-effective water efficient technologies and water re-use alternatives, where feasible. BOR Pleasant Grove Maintenance Building, Utah, is currently in design and will have outdoor vegetation that will have rock mulch, native plants, and no grass. The irrigation system is designed to use untreated secondary irrigation water through a drip irrigation system, employing WaterSense® products where available.

HIGH PERFORMANCE SUSTAINABLE BUILDINGS

FY 2017 Status: 4.7% of applicable buildings and 3.9% of GSF in compliance with the Guiding Principles for Sustainable Federal Buildings

Implementation Status	Operational Context	Priority Strategies & Planned Actions
Through FY 2017, the Department had met the Guiding Principles in 4.7% of applicable buildings and 3.9% of applicable gross square feet. BOR had two buildings come into compliance with the Guiding Principles in FY 2017/18: Snake River Area Office - West, Boise, ID, which is jointly occupied by BOR and USGS; and Lake Berryessa Dorm, Napa, CA. BLM began renovations on three buildings in FY 2017 that will meet the Guiding Principles.	Meeting the target for compliance with the Guiding Principles is a challenge for the Department for several reasons. The Department has a limited amount of new construction relative to the size of its building inventory. Compliance with the Guiding Principles can be more easily achieved in new buildings than in existing buildings, which often require extensive renovation. Additionally, much of the Department's existing building inventory is unique, with many historic buildings that cannot be altered to comply with the Guiding Principles.	The Department has incorporated into its budget guidance requirements that new construction and modernization projects (greater than 5,000 gsf) meet the Guiding Principles. The Department is focused on implementing space utilization and optimization practices. The Department's bureaus are reducing their footprint in office and warehouse space through consolidations and co-locations. The Department also recently issued a space utilization design standard for all new office space acquisitions and renovation, significant alteration of office space, lease renewals, and succeeding or superseding leases/occupancy agreements. Finally, the bureaus will conduct sustainable building assessments to determine compliance with the Guiding Principles. Addressing any noncompliance found in those assessments will help the Department to improve performance on the sustainable buildings metric.

WASTE MANAGEMENT AND DIVERSION

FY 2017 Status: 63% waste diverted

Implementation Status	Operational Context	Priority Strategies & Planned Actions
The Department is committed to reduce waste generation through cost-effective elimination, source reduction, and recycling, and achieved a 63% waste diversion rate in FY 2017. The Department also maintains a reporting system for non-hazardous solid waste. The Department maintains policy (515 Departmental Manual (DM) 3) regarding its many different waste management programs and recycling initiatives. It is the Department's policy that each bureau and office shall develop, implement, and conduct a thorough cost-effective recycling program.	Due to the Department's land management mission, amounts and types of waste produced vary widely depending on the activities taking place in any given year. Solid waste data, including construction and demolition debris data, are collected through an online database. Database changes are made annually to reflect and comply with updated solid waste diversion guidance.	The Department will continue to maintain and update a reporting system for non-hazardous solid waste and encourage cost-effective policies and programs that have allowed us to accomplish a greater than 50% diversion rate.

2. Fleet Management:

TRANSPORTATION / FLEET MANAGEMENT

FY 2017 Status: 25.1 % reduction in petroleum, 3.3 % increase in alternative fuel

Implementation Status	Operational Context	Priority Strategies & Planned Actions
The Department reduced petroleum fuel use in its covered fleet by disposing of underused vehicles and increasing acquisition of Low Greenhouse Gas (LGHG).	DOI has difficulty meeting the alternative fuel vehicle (AFV) requirement in areas where alternative fuel is not available or if the vehicle type required to meet the mission is not manufactured by the OEM contracted by GSA.	The Department is working to create optimal fleet composition to meet its mission by acquiring the right vehicles, right size, and appropriate fuel configuration to meet mission requirements and cost-effectively achieve fleet efficiency and reduce the petroleum footprint.
The Department will increase cost-effective fleet efficiency through reducing petroleum use, increasing alternative fuel use, and improving acquisition/fleet composition.	In areas where AFV is not provided, DOI is using LGHG vehicles if available. If alternative fuel is not available in the area of operation and a LGHG vehicle does not exist in the vehicle type, DOI is forced to use Gas Dedicated vehicles and a Functional Needs Exemption is documented.	DOI will continue to Right Size its fleet as mission's change, which in turn may also increase its inventory. The Department is reviewing mileage reports to ensure vehicles are rotated and identify any that are unutilized (idle) for possible disposition. The Department is also reviewing its owned fleet to map out ways to acquire alternative fuel vehicles to meet E.O. 13834.

3. Cross-Cutting:

SUSTAINABLE ACQUISITION / PROCUREMENT

FY 2017 Status: 0.6% increase in # of contracts and a 20.6% increase in contract dollars for contracts with environmental clauses

Implementation Status	Operational Context	Priority Strategies & Planned Actions
The Department will ensure that contractors submit timely annual reports of their BioPreferred and biobased purchases and hydrofluorocarbon emissions.	The Department is establishing standard language to share with all affected contractors to ensure that they understand their requirement to submit annual reports for all applicable contracts per Federal Acquisition Regulation (FAR) Part 23.	The Department will monitor applicable contracts in the System for Award Management (SAM) and will work with vendors who have not submitted their reports. The target is to ensure a contractor reporting rate of at least 70%. Contracting Officers will also be encouraged to take corrective actions with non-compliant contractors.
The Department will use Category Management initiatives and government-wide acquisition vehicles that already include sustainable acquisition criteria.	Category Management is an approach the Federal Government is applying to buy smarter and more like a single enterprise. Category Management enables the government to eliminate redundancies, increase efficiency, and deliver more value and savings from the Government's acquisition programs.	The Department will provide the acquisition community more information regarding the benefits from Category Management, specifically GSA's Acquisition Gateway, and potentially issue policy encouraging its use for certain product/service categories that already include sustainable acquisition criteria.

ELECTRONICS STEWARDSHIP

FY 2017 Status: 100% equipment acquisition meeting EPEAT requirements, 94% equipment with power management, & 100% compliance with disposal guidelines

Implementation Status	Operational Context	Priority Strategies & Planned Actions
The Department has power management enabled on the laptops that are managed through Active Directory.	There are many stakeholders invested in the success of this metric to include acquisition. EPEAT standards are incorporated in IT hardware purchases.	The Department mandated the use of NASA SEWP when acquiring IT hardware. The specifications include EPEAT Gold standards, making it feasible to achieve the metrics

GREENHOUSE GAS EMISSIONS

FY 2017 Status: 25.9% reduction in Scope 1 and 2 emissions

Implementation Status	Operational Context	Priority Strategies & Planned Actions
In FY 2017, the Department reduced scope 1 and 2 GHG emissions by 25.9%, and reduced scope 3 GHG emissions by 26.2% relative to FY 2008. USGS National Center, Reston, Virginia, continued an in-house project of systematically retrofitting lights with LED fixtures, and fine-tuned the demand flow programming for the chillers. The National Center also participates in a demand management program where they receive a quarterly check for reducing electricity usage on high demand days.	Purchased electricity is the Department's largest source of scope 1 and 2 GHG emissions. The Department's bureaus and offices strive to reduce grid-supplied electricity consumption through the implementation of cost-effective energy efficient and renewable electricity technologies.	The Department's bureaus will continue to implement on-site renewable energy technologies, as feasible, and implement energy conservation measures and right-size the fleet to reduce energy and fuel consumption and associated GHG emissions. USGS Northern Prairie Wildlife Research Center, North Dakota, will replace a large HVAC system in FY 2020 if funding is available. As part of the replacement design study, alternative energy approaches will be analyzed.