Sustainability Report and Implementation Plan 2020



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Executive Summary

The Department of the Interior (Department) is committed to meeting its energy and environmental statutory requirements and the performance objectives of Executive Order (EO) 13834 - Efficient Federal Operations. In doing so, the Department continues increasing efficiency, optimizing performance, eliminating unnecessary use of resources, and protecting the environment. The Department continues to make progress in energy and environmental performance. On the FY 2019 Office of Management and Budget (OMB) Scorecard for Efficient Federal Operations/Management, the Department received four green, three yellow, and no red performance metric ratings out of the seven scorecard categories. The four green ratings were for Facility Energy Efficiency, Renewable Energy Use, Water Efficiency, and Transportation/Fleet management; the yellow ratings were for Efficiency Measures/Investment, High Performance Sustainable Buildings, and Sustainable Acquisition. The Department will continue to make progress in these areas of yellow ratings with the efforts outlined in this plan, by increasing energy and water evaluations, sustainable buildings and sustainable acquisitions.

Additionally, in FY 2019 the Department reduced scope 1 & 2 greenhouse gas emissions by 29.2%, relative to 2008.

The Department continues to work towards meeting its statutory requirements and performance objectives and will focus on implementing cost-effective 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 2020 and FY 2021 include Facility Energy Efficiency, Efficiency Measures/Investment, Statutory Environmental Compliance, Sustainable Acquisition, and Transportation/Fleet Management.

The Department's bureaus continue to optimize building energy performance and 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 increased energy and water efficiency.

In 2019, the Department reduced petroleum fuel use in its covered fleet. The Department is in the process of right-sizing the current fleet profile to ensure that we are utilizing vehicles that consume less fuel over time.

Size and Scope of Agency Operations:

The Department currently manages approximately 70,000 employees (~62,400 Full-time Equivalents) and 345,000 volunteers and owns and operates approximately 42,000 buildings, and 30,795 vehicles at approximately 2,000 locations across the United States and insular areas.

The Department manages approximately 300 direct leases and 800 occupancy agreements from the General Services Administration (GSA) for building and special purpose space. Most of these buildings are geographically dispersed and 95% have a size of less than 10,000 gross square feet. The Department's owned building asset inventory includes offices, visitor centers, schools, dormitories, detention centers, laboratories, housing, and warehouses.

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In addition, the Department owns and manages approximately 80,000 structures, which include monuments, dams, utility systems, cultural resources, wastewater treatment systems, pumping facilities, communication systems, bridges, roads, and railroads located throughout the United States and territories.

The Department's motor vehicle fleet includes approximately 30,795 vehicles –21,780 owned by the Department, 9,015 leased, primarily through GSA. Due to the nature of the Department's mission requirements and locations, the fleet consists of light and medium-duty trucks (approximately 80%). Approximately 10% of the fleet are heavy-duty trucks over 16,000 lbs. and less than 10% of the fleet consists of passenger sedans. The Department has approximately 457 passenger buses, used to transport school children and park/refuge/recreation site visitors. The Department also has more than 50 ambulances used for emergency response.

Agency Size and Scope	FY 2019	FY 2020
Total Number of Full Time Equivalents (FTE)	63,071	62,436
Total Acres of Land Managed	480 million Surface Acres	480 million Surface Acres
Total Number of Buildings Owned	42,871	41,933
Total Number of Buildings Leased (GSA and Non-GSA Lease)	1,121	1,153
Total Building Gross Square Feet (GSF)	114,432,494	114,163,446
Number of Locations Throughout U.S.	Approx. 2,000	Approx. 2,000
Total Number of Fleet Vehicles Owned	25,563	21,780
Total Number of Fleet Vehicles Leased	10,756	9,015

Implementation Summary: Facility Management

1. FACILITY ENERGY EFFICIENCY

FY 2019 Energy Intensity Progress (Btu/GSF):

46.3% reduction from FY03

0.21% reduction from FY18

FY 2020-FY 2021 Plan:

1.5% reduction in FY20 from FY19

1.0% reduction in FY21 from FY20

The Department's bureaus make energy efficiency investments in agency buildings through major renovations, new construction, and maintenance upgrades. Facility condition assessments and Energy Independence and Security Act (EISA) energy evaluations identify cost effective, energy efficiency opportunities, which are incorporated in bureau annual planning and construction documents.

Implementation Status

Bureaus continue to implement energy conservation measures (ECM) at their facilities. Typical ECMs that have been implemented in FY 2019 include: upgrade lighting to LED; replace heating, ventilation, and air conditioning (HVAC) systems; installation of lighting controls, programmable thermostats and variable speed motors; improvements to building envelope – windows, doors, roofs, insulation; implementation of building automation systems; boiler replacements; and retro-commissioning. Education and awareness of building occupants also plays a significant role in facility energy conservation. In FY 2019, these measures resulted in annual savings of approximately 42,600 million British Thermal Units (BTU) in energy use and \$875,000 in energy costs.

In FY 2019, the Bureau of Indian Affairs (BIA) completed LED lighting upgrades at numerous schools resulting in an annual energy savings of 1,380 million BTUs. National Park Service (NPS) Shenandoah National Park, Virginia, completed HVAC upgrades, replaced the wastewater treatment plant blower with variable speed motors along with other equipment upgrades, and replaced fluorescent lights with LED throughout the park. Bureau of Land Management (BLM) Roseburg District Office, Oregon, replaced the building HVAC system with a variable refrigerant flow system, which reduced energy use by 70% compared to FY 2015 baseline.

Facility energy consumption and cost data are collected from utility invoices in the Department-wide Financial and Business Management System (FBMS). Data is monitored to detect anomalies in use and cost, and correct issues as needed. Building benchmarking through Energy Star Portfolio Manager helps bureaus track and monitor building energy performance.

Priority Strategies & Planned Actions

Bureaus will continue to optimize building energy performance and implement cost-effective energy efficient technologies through maintenance upgrades, major renovations, and new construction, as appropriate. Projects will be identified through facility condition assessments, EISA Section 432 evaluations, capital improvement plans, and benchmarking data analysis using Energy Star Portfolio Manager. In FY 2020, the Department anticipates saving more than 20 billion BTUs from planned projects.

USGS Upper Midwest Environmental Science Center, Wisconsin, will install a Dedicated Heat Recovery Chiller unit to supply processed hot water for the aquaculture systems. The system will use reject heat from the

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condensing section of the chiller to heat the processed water. Additionally, a glass curtainwall will be replaced with an insulated wall system and 34 laboratory fume hoods will be upgraded. The building automation system and LED lighting upgrade will continue into FY 2020.

BOR's Provo Area Office Building will install solar window film on the south facing windows of the building. This project is expected to save nearly 600 million BTUs and over \$17,000 annually. The film blocks over 99% of harmful ultraviolet light, reduces fade damage, increases thermal comfort, reduces hot-spots, and reduces computer monitor glare and eye strain.

NPS Valley Forge National Historic Park is replacing the entire heating system at the Philander Chase Knox House. Once completed, this project is expected to save approximately 2,600 million BTUs and \$40,000 annually. In FY 2020, Theodore Roosevelt National Park plans to upgrade the HVAC systems and install LED lighting throughout the Visitor Center and Administration Building.

2. EFFICIENCY MEASURES, INVESTMENT, AND PERFORMANCE CONTRACTING

FY 2019 Performance Contracting – Investment value and number of new projects awarded:

\$86.7K / 1 project in FY19

FY 2020-FY 2021 Plan:

\$2.41M / 3 projects in FY20

\$25.0M / 1 project in FY21

The Department's bureaus utilize performance contracting, such as energy savings performance contracts (ESPC), and utility energy service contracts (UESC) to achieve energy and water conservation goals, as well as system modernization and utility infrastructure improvements, where applicable. EISA Covered Facilities comprehensive energy and water evaluations help to identify facility opportunities.

Implementation Status

The NPS Death Valley National Park, California, implemented a multi-phased UESC with Southern California Edison that initiated in FY 2019 with follow-on phases in FY 2020. This project includes the design and installation of rooftop solar photovoltaics on 21 NPS employee housing units, the Cow Creek Maintenance Yard photovoltaic recommissioning, the Furnace Creek microgrid, and LED lighting upgrades at the Administration Building and Visitor Center. This project is expected to save approximately 6,025 million BTUs and \$150,000 annually.

Priority Strategies & Planned Actions

The Department's bureaus will continue to pursue performance contracting to achieve energy and water savings, where practical and cost effective. NPS Glen Canyon National Recreation Area in Arizona and Utah is pursuing an ESPC with anticipated award in FY 2021. This park consists of 7 sites across two states with more than 400 buildings. Five sites are extremely remote with electricity supplied by on-site diesel generators and photovoltaic systems. The ESPC will focus on expansion of the photovoltaic systems and storage capabilities to enhance facility energy resilience, lighting upgrades, HVAC improvements, controls, retro-commissioning, and water conservation measures. This project is estimated to save 55,400 million BTUs of energy, 9 million gallons of water and nearly \$2 million annually.

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3. RENEWABLE ENERGY

FY 2019 Renewable Electricity Use:

13.6% of total electricity in FY19

FY 2020-FY 2021 Plan:

14% of total electricity in FY20

14% of total electricity in FY21

The Department's bureaus install cost-effective on-site renewable energy technologies including stand-alone and grid-connected photovoltaic systems, incremental hydropower, wind projects, solar hot water heaters, ground source heat pumps, and direct geothermal. The use of on-site renewable energy sources is encouraged if the development of the resource is economically, environmentally, and technically feasible.

Implementation Status

In FY 2019, 13.6% of the Department's electricity came from renewable electricity sources. Of this amount, 10.2% came from on-site renewable electricity technologies, with an additional 1.9% from renewable energy certificates and 1.5% from green energy purchases from utility companies. A total of 26,211 million BTUs of non-electric renewable energy was also generated from on-site sources. Renewable energy technologies increase facility resilience and reduce greenhouse gas emissions.

BOR Pleasant Grove Maintenance Building, Utah, added a 32 kilowatt (kW) grid-tied solar photovoltaic system, which is expected to generate 57,600 kilowatt-hours of electricity annually and reduce the building's purchased electricity cost by \$3,800 annually.

BLM Redding California Office completed a 48 kW photovoltaic system in FY 2019. This system is estimated to produce 85,300 kilowatt-hours annually to help offset the building's purchased electricity cost by \$18,000.

The Fish and Wildlife Service (FWS) initiated the installation of three solar photovoltaic systems at the Headquarters Office Complex at Kern National Wildlife Refuge, California. The project will provide an 18 kW array to the Administration Office; an 18 kW array to the Maintenance Shop; and a 12 kW array to the Bunkhouse. Once completed, these systems will offset purchased electricity use by 85,300 kilowatt-hours and save approximately \$18,000 annually. These systems will also reduce annual greenhouse gas emissions by 60.4 metric tons of carbon dioxide equivalent.

Priority Strategies & Planned Actions

The Department's bureaus will continue to assess and implement opportunities to utilize cost-effective renewable energy technology projects, especially at remote locations to enhance facility energy resilience and reduce energy costs.

The FWS Crab Orchard National Wildlife Refuge, Illinois, Headquarters building is currently under construction with anticipated completion in FY 2021. Heating and cooling will be provided by a 19.11-ton ground source heat pump system by generating 36 million BTUs of renewable energy annually. A 20 kW solar photovoltaic array will supplement electrical power requirements by generating over 35 megawatt-hours annually. These systems are expected to save approximately \$5,100 annually.

The NPS Glen Canyon National Recreation Area ESPC is projected to install four new photovoltaic systems totaling 3,045 kW, with a modeled output of 4,600 megawatt-hours annually. A solar thermal hot water system

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will be included to augment domestic hot water needs. These new systems will reduce the use of on-site generators, subsequent fuel use and operations and maintenance. Total annual cost savings for the renewable energy systems is estimated to be \$1.5 million. This project is expected to be awarded in FY 2021 and operational in FY 2023.

4. WATER EFFICIENCY

FY 2019 Water Intensity Progress (Gal/GSF):

24.37% reduction from FY07

0.24% reduction from FY18

FY 2020-FY 2021 Plan:

1.5% reduction in FY20 from FY19

1.5% reduction in FY21 from FY20

The Department's primary strategies to improve water efficiency and reduce both potable and non-potable water use includes, conducting a facility condition assessment and EISA Covered Facility water evaluations, monitoring water use and implementing identified water conservation and re-use measures. These measures are implemented through major renovations, new construction, and maintenance and repair projects. Stormwater management and green infrastructure are implemented at project sites to control and filter surface runoff and recharge groundwater.

Implementation Status

In FY 2019, typical water conservation measures that have been implemented include: detecting and repairing leaks, installing low flow plumbing fixtures, installing water meters, utilizing variable speed pumps, minimizing or eliminating landscape irrigation, and implementing xeriscaping.

Several NPS sites have replaced deteriorated water lines and installed water meters to monitor purchased potable water and on-site well water use, as well as help detect and isolate water main leaks. Cuyahoga Valley National Park, Ohio, continues to install multiple stormwater retention ponds throughout the park - Hines Hill, Station Road parking area, and the Boston Mill Visitors Center. A fourth stormwater retention system is planned at the Wetmore Trailhead parking area. These green infrastructure systems will allow for greater recharge of the groundwater, reduce direct stormwater discharge into the river and improve water quality.

USGS Western Fisheries Research Center, Washington, converted the source of the cooling tower water makeup from city water to lake water. This project saved 398,000 gallons of purchased potable water and \$5,340 annually.

Visitation at the Department's sites increased significantly between FY 2018 and 2019, which increased water use and flattened previous water intensity reductions. However, increased visitors provide more opportunities for water conservation education and awareness. Building and facility water consumption and cost data are collected from utility invoices in the Department-wide FBMS. Data is monitored to detect anomalies in use and cost, and correct issues as needed.

Non-potable water use is primarily for mission related functions and is not tracked by the Department. These water uses include care and feeding of animals and wildlife, including endangered species; establishment and

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propagation of wildlife habitats, agricultural uses, power generation, the distribution of water as a result of water rights, contracts, or Tribal agreements; and wildland firefighting.

Priority Strategies & Planned Actions

The Department's bureaus will continue to assess and monitor water uses and optimize building water performance by implementing cost-effective water efficient technologies, water re-use alternatives, metering and completing water infrastructure improvements, where feasible. Facility condition assessments and EISA Covered Facility evaluations will continue to be used to identify water conservation opportunities.

BOR Elephant Butte, New Mexico, will continue the replacement of deteriorated water lines throughout the Complex into FY 2023. This project will reduce water waste.

The NPS Glen Canyon National Recreation Area ESPC is projected to save over 9 million gallons of water annually, when the project is completed in FY 2023. This savings is generated from the installation of low flow water fixtures throughout the park's seven sites. A detailed water audit will be conducted during the Investment Grade Audit.

5. HIGH PERFORMANCE SUSTAINABLE BUILDINGS

FY 2019 Sustainable Buildings Progress:

151 sustainable Federal buildings9.5% of buildings / 5.0% of gross square footage (GSF)

FY 2020-FY 2021 Plan:

9.75% of buildings in FY20 10.0% of buildings in FY21

The Department requires building projects, regardless of type, to follow all applicable energy and high-performance building requirements within the scope of the project. Additionally, bureaus are encouraged to assess their existing portfolio for compliance with the 2016 Guiding Principles for Federal Sustainable Buildings (Guiding Principles).

Implementation Status

The Department's bureaus are making strides to improve the sustainability of their building inventories.

The BLM Sustainability Inspection Compliance Assessment Safety, Health, and the Environment (SI CASHE) team conducts training and inspections of facilities throughout the bureau. During the inspection of facilities that exceed 10,000 GSF, they analyze each facility for sustainability, identify deficiencies, provide recommendations, and instruct each office on remedies for bringing their facilities into compliance with the Guiding Principles. The BLM conducted seven inspections at three locations (in Colorado and Idaho) in FY 2019 totaling more than 200,000 GSF.

In FY 2019, BIA updated its Design Handbook for School Facilities. New Construction for Replacement School projects are required to be LEED Silver certified and utilize Energy Star products.

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The Department requires all new construction and modernization projects for bureau buildings 10,000 GSF or greater to comply with all applicable 2016 Guiding Principles or utilize a third-party building certification system or standard identified by GSA's Office of High-Performance Buildings. In addition, projects proposed for existing buildings 10,000 GSF or greater that affect systems covered by the 2016 Guiding Principles are required to comply with the applicable GPs or utilize a GSA-approved third-party building certification system/standard.

The Department has a limited amount of new construction relative to the size of its building inventory. Compliance with the Guiding Principles can often be more easily achieved in new buildings than in existing buildings, which may require extensive renovation. Additionally, much of the Department's inventory is unique - with assets as diverse as laboratories, warehouses, schools, detention centers, and historic buildings. Many times, it is not technically feasible or cost-effective to bring these buildings into compliance with the Guiding Principles.

Despite these challenges, the Department had six buildings greater than 10,000 GSF attain sustainability status in FY 2019. Construction was completed at the BOR Pleasant Grove Maintenance Building, Utah. The building and site were designed and constructed to meet the Guiding Principles with a resilient design to accommodate possible future additions of a grid-tied, roof-mounted solar PV system and on-site electric vehicle charging. Furthermore, highlighting the fact that many of the Department's buildings are small (less than 10,000 GSF), the FWS Genoa National Fish Hatchery, Wisconsin, completed its 5,066 square-foot Interpretive Center in FY 2019. This Guiding Principles compliant building features numerous innovative and unique strategies and won the "2019 Federal Energy and Water Management Award" from the Department of Energy Federal Energy Management Program.

As indicated, the Department has a large portfolio of buildings less than 10,000 GSF. The Department reports 85 sustainable buildings between 5,000 and 9,999 GSF in the Federal Real Property Profile (FRPP). The Department tracks bureau compliance through the FRPP.

Priority Strategies & Planned Actions

The Department's annual budget guidance specifies the requirements for compliance with the 2016 Guiding Principles or an approved third-party certification system discussed above. Meanwhile, bureaus are continuing actions in FY 2020 and FY 2021.

The BLM plans to re-inspect two buildings in Las Vegas, Nevada. Additional planned inspections are on hold due to the coronavirus outbreak. The BLM's Campbell Tract Field Office (Alaska) is currently under construction; it will meet the Guiding Principles and is scheduled for completion in October 2021.

In FY 2020, the BOR Glen Canyon Field Division will begin and complete a major renovation of the Glen Canyon Warehouse building (34,000 SF) and site (4.7 acres), Arizona. The building remodel will meet the 2016 Guiding Principles.

The FWS will complete new LEED Silver eligible buildings at Tishomingo National Wildlife Refuge (NWR), Oklahoma, and Willapa NWR, Washington in FY 2020. Ongoing construction on sustainable buildings include the FWS Crab Orchard NWR, Illinois; New Potomac River NWR, Virginia; Theodore Roosevelt NWR, Mississippi; Crystal River NWR, Florida; J.N. Ding Darling NWR, Florida; Ridgefield NWR, Washington; and Canaan Valley NWR, West Virginia.

6. WASTE MANAGEMENT AND DIVERSION

FY 2019 Non-hazardous Waste Management and Diversion:

101682.7 metric tons of non-hazardous solid waste generated*
39.3% diverted and 60.7% sent to treatment and disposal facilities

FY 2020-FY 2021 Plan:

8% reduction in non-hazardous solid waste generated in FY20 from FY19 41% diverted and 58% sent to treatment and disposal facilities in FY20

5% reduction in non-hazardous solid waste generated in FY21 from FY20 **41**% diverted and **58**% sent to treatment and disposal facilities in FY21 *not including construction and demolition waste

The Department is committed to reduce waste generation through cost-effective elimination, source reduction, composting, and recycling. Our agency shares best management practices through our Sustainability Implementation Workgroup and technical subgroups. These groups assist us in meeting our goal in waste reduction through consistence and using effective waste reduction methods.

Implementation Status

The Department continues to focus on waste management best practices. An analysis of our waste streams reflects that from 2018 to 2019 our composting increased by 37%; recycling increased by 9% with waste diversion rising by 16%. Waste sent to landfills decreased by 47% with total non-diverted waste down by 25%. Some of these reductions are due to overall generated waste dropping by 13%. The Department collaborates with local governments and municipalities to find sources and innovative ways to reuse, divert, compost, and recycle waste. Also, in order to track and document our progress, the Department maintains a central, facility level tracking and reporting system, the Solid Waste Management Database (SWMDB) for non-hazardous solid waste. 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.

Construction & Demolition waste decreased by 17% or by 13,138 metric tons from FY18 to FY19.

The Department maintains policy regarding its many different waste management programs and recycling initiatives. The Department also has a waste management guidance policy that directs each bureau and office to develop, implement, and conduct a thorough cost-effective recycling program with a waste diversion rate goal of at least 50%. The guidance document is updated as necessary to reflect federal policy and guidance changes.

Priority Strategies & Planned Actions

The Department will update its Sustainability Council charter to improve how it monitors and shares best practices across bureaus. The Department will also be developing new metrics to help improve waste management efforts and encourage the cost-effective policies and programs that will allow the Department to accomplish a greater than 41% total diversion rate within two years.

The Department will continue to target reduction of solid waste generated through source reduction, composting, and recycling, and to reduce the percentage sent to a landfill through policy, education, and knowledge sharing, as appropriate.

Implementation Summary: Fleet Management

1. TRANSPORTATION / FLEET MANAGEMENT

FY 2019 Petroleum Reduction Progress (Gal):

32.1% reduction in petroleum fuel since 2005 5% reduction in petroleum fuel since FY18

FY 2020-FY 2021 Plan:

3% reduction in FY20 from FY19 3% reduction in FY21 from FY20

FY 2019 Alternative Fuel Use Progress (Gal):

77.2% decrease in alt fuel since 2005 46.9% decrease in alt fuel since FY18

FY 2020-FY 2021 Plan:

5% increase in FY20 from FY19 7% increase in FY21 from FY20

The Department continues to reduce petroleum fuel use in its covered fleet and is very committed to greening its fleet. The Department is in the process of right-sizing the current fleet profile to ensure that we are utilizing the most efficient and environmentally friendly vehicles practical.

Implementation Status

The Department's motor vehicle fleet of 30,795 includes approximately 11,263 alternative fueled vehicles (AFVs) or 37 percent of the entire fleet are AFVs. This fleet mainly consists of light and medium-duty trucks, vans and sport-utility vehicles (approximately 80 percent). In addition, the Department's mission critical vehicles are used to support and transport staff, scientific and mission-related equipment, law enforcement, emergency response (fire and ambulances), maintenance (special purpose), and off-road and on-road collection of scientific data. Larger vehicles are required to transport boats and other miscellaneous trailers required to carry heavy loads of specialized equipment.

In 2018, the Department's Bureau Fleet Managers were required to develop, implement, and update their Bureau-level Fleet Management Plan annually to continually improve efficiencies and effectiveness for their respective programs, ensuring a vehicle mission justification for every vehicle is on file. Fleet Managers were required to apply a one-for-one policy, thus for every acquisition vehicle, there is always one disposal.

In 2019 the Department provided guidance to bureaus to conduct a Vehicle Allocation Methodology Study (VAM) to determine the appropriate size, number, and types of motor vehicles to meet agency mission needs. As VAM's are completed, major reduction in inventory and cost is expected Department-wide.

In August 2019 the Department developed a FAST Reconciliation Plan which serve as agency level-guidance and is part of the Department's comprehensive strategy to improve the overall efficiency of the motor vehicle fleet; reduce costs; improve mission delivery; and comply with increasingly stringent fleet management standards resulting from Executive Orders, Public Laws, and new and updated Federal regulations.

In FY 2019, the Department's alternative fuel use showed a 77.2% decrease from FY 2005 and a 46.9% decrease from FY 2018. Analysis of the data found that in FY 2018, quantities of alternative fuel consumption reported to FAST were overreported. The root cause of the error lies in FBMS and the Business Warehouse data cubes, which are used to transfer data from one system to another. Some fuel transactions were duplicated in the cubes causing the quantities to double in the upload report used to input data to FAST. To prevent future

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incidents, a comparison of the upload report and a fuel transaction report from FBMS will be used prior to inputting the data to FAST in future years.

Priority Strategies & Planned Actions

The Department expects to obtain an optimal fleet using the VAM process and will reduce overall greenhouse gas (GHG) emissions by using a combination of vehicle reductions, vehicle size reductions, mileage reductions and energy efficiency and alternative fuel capability improvements. The Department also will improve data quality and FAST reporting.

USGS will continue to require cost centers to dispose of older less fuel-efficient vehicles by identifying disposals when new vehicles are purchased. Science centers are informed annually of the GHG reduction requirements.

BOR has approximately 1600 vehicles in its fleet, which does not include the reductions that are scheduled to take place in FY 2020. Through the underutilization and acquisition justification requirements, they continue to actively reduce the fleet where feasible. For example, during the FY 2020 acquisition cycle, BOR purchased one new vehicle to replace three aging ones resulting in significant cost savings.

BLM maintains a statewide or regional motor equipment plan to share equipment, including with other Offices and Agencies, to maximize utilization and reduce costs. The plan consists of rotating use of high mileage vehicles so that the replacement objective in years and miles arrive the same time.

BIA will increase its baseline roster of AFVs from 3,977 light duty vehicles in 2019 to 5,977 in 2024, increasing AFVs by approximately 400 vehicles per year. In conjunction with the AFV acquisitions, the baseline roster of conventional fuel light duty vehicles will decrease from 15,951 in 2019 to 2,490 in 2024; a drastic reduction of 13,461 conventional fuel vehicles. The AFVs will replace current light duty conventional fuel vehicles.

Implementation Summary: Cross-Cutting Operations

1. SUSTAINABLE ACQUISITION / PROCUREMENT

FY 2019 Sustainable Acquisition Progress:

1.03% of contract actions and 0.02% of obligations (in dollars), for a total of \$798.1M in contract actions with statutory environmental requirements

FY 2020-FY 2021 Plan:

- 1.00% of contract actions and 0.03% of obligations (in dollars)
- 1.00% of contract actions and 0.02% of obligations (in dollars)

The Department's overall strategy for sustainable acquisition is to purchase products and services as outlined in Executive Order 13834 and process in the most efficient manner while protecting our natural resources and environment.

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Implementation Status

The Department continues to increase the focus on sustainable acquisitions. All sustainable acquisitions guidance and policy are available on the Department's Acquisition, Assistance and Asset Policy (AAAP) site. Contracts are reviewed for sustainable attributes during Market Research and the pre-award phase, and on a quarterly basis in Federal Procurement Data System (FPDS) for all new awards. The Office of Acquisition and Property Management (PAM) is researching and working closely with the General Services Administration (GSA) to review purchase card purchases to ensure energy efficient appliances or items containing green attributes are being met and tracked in accordance with OMB A-123, App B Chapter 10 - Sustainability Environmental Requirements.

When comparing FY 2018 to FY 2019 percentage of contract actions and percentage of dollars obligated with statutory environmental requirements, the data shows there was a 1.03% decrease in percentage of contract actions in FY2019 and a 0.02% decrease in percentage of dollars obligated in FY 2019. The overall Departmental percentage of contract actions and dollars with environmental requirements may have decreased in FY 2019, but bureaus are utilizing a more effective procurement method via Purchase Card to procure requirements containing biobased, recycled content and Energy Star standards. For example, from FY 2018 to FY 2019 the Bureau of Reclamation (BOR) purchase card transitions increased from 1,104 to 2,627. The increase in the micropurchase threshold appears to have contributed to the decrease in number of actions with statutory environmental requirements but was not detrimental to the dollar amount of obligations.

For FY 2019, the Department had established a target of awarding 950 Biobased contracts, with a target dollar value of \$70 million. The Department achieved the target dollar value by exceeding the target goal by \$40 million; but did not achieve the target contract actions of awarding 950 contracts in FY 2019. One of the reasons this goal was not achieved is due to the bureaus strategic procurement strategy to reduce and consolidate several contracts, while saving the bureaus millions of dollars in the long term.

Priority Strategies & Planned Actions

To further increase sustainable acquisition and ensure all Contracting Officers comply with the statutory requirements in FY 2021 the Department will be adding an "Environmental Compliance" to our Quarterly Acquisition Metrics. The purpose of the Environmental Compliance will be to track the Department target goals more efficiently among each bureau.

The Department plans to decrease the targeted contract action goal for FY 2020 and FY 2021 due to the increased value of small dollar biobased products and the consolidation of contracts. The target contract action goals for FY 2020 is 875 and FY 2021 is 850.

Contracting Officers shall continue to take all cost-effective steps to promote sustainable acquisition goals and practices in each procurement; while implementing corrective actions to address barriers to increasing sustainable acquisitions. The Contracting Officers will ensure that contractors submit timely annual reports of their BioPreferred and biobased purchases and hydrofluorocarbon emissions. Additionally, the Department will continue to utilize Category Management initiatives and government-wide acquisition vehicles that already includes sustainable acquisition criteria.

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Lastly, to further ensure all contracting personnel and Contracting Officer's Representatives (COR) are accurately informed on sustainable acquisition, PAM will be launching a new sustainable acquisition page on the Department's Acquisition Toolkit SharePoint site. The sustainable acquisition page will not only show the Department's upcoming sustainability goals, acquisition clauses and training courses, but will also provide access to other Federal resources, such as, GSA Green Procurement Compilation (GPC), Environmentally Preferable Purchasing (EPP), Comprehensive Procurement Guidelines (CPG), ENERGY STAR®, the Green Procurement Program (GPP), and the Federal Energy Management Program (FEMP).

2. ELECTRONICS STEWARDSHIP

FY 2019 Electronics Stewardship Progress:

100% of newly purchased or leased equipment met energy efficiency requirements 100% of electronic equipment disposed using environmentally sound methods*
*Reuse, donation, recycling, transfer, sale, or demanufacturing.

The overall strategy for DOI's Electronics Stewardship Program includes efforts to advance sustainable purchasing, power management and electronic equipment disposal using environmentally sound methods.

Implementation Status

The Mandatory Enterprise Information Technology Hardware Acquisition Strategy for the Department, December 12, 2014, requires the use of a Solutions for Enterprise Wide Procurement, Government-wide Acquisition Contract managed by the National Aeronautics and Space Administration for acquiring IT hardware. The contract specifications include Electronic Product Environmental Assessment Tool (EPEAT) Gold standards. EPEAT-registered products meet strict environmental criteria that address the full product lifecycle, from energy conservation and toxic materials to product longevity and end-of-life management. EPEAT-registered products offer a reduced environmental impact across their lifecycles. The incorporation of this acquisition vehicle makes it feasible for the Department to achieve the metrics. The Department has power management enabled on the laptops that are managed through Active Directory. Additionally, guidance regarding electronic equipment disposal is issued by the Office of Acquisition and Property Management under the Interior Property Management Directives.

Priority Strategies & Planned Actions

The Department will continue to mandate the use of NASA's Solutions for Enterprise-Wide Procurement (SEWP) contract vehicle when acquiring IT hardware to include the Electronic Product Environmental Assessment Tool (EPEAT) Gold standard specifications and enable power management on laptops that are managed through the Active Directory. Continuing our current strategy will allow the Department to meet future Electronic Stewardship progress goals including purchase of energy efficient equipment.

3. GREENHOUSE GAS EMISSIONS

FY 2019 Scope 1&2 Greenhouse Gas (GHG) Emissions:

29.2% reduction from FY 2008

2.3% reduction from FY 2018

2020 Sustainability Report and Implementation Plan

The Department strives to reduce Scope 1 and 2 greenhouse gas (GHG) emissions by implementing cost-effective energy efficient and on-site renewable energy technologies, right-sizing bureau fleet and reducing fuel use in fleet vehicles.

Implementation Status

Scope 1 GHG emissions are produced from sources owned by the Department, such as on-site fuel combustion, fleet vehicles, and fugitive and process emissions produced by on-site operations. Scope 2 GHG emissions are from indirect sources where the agency has some control, primarily purchased electricity and steam. Scope 3 GHG emissions are indirect emissions that the agency doesn't control, but are impacted by agency operations, such as employee commuting, business travel, contracted solid waste disposal and contracted wastewater treatment. The Department of Energy Federal Energy Management Program Annual Energy Data Report is used to determine and monitor agency Scope 1 and 2 GHG emissions.

Purchased electricity is the Department's largest GHG emission category, followed by fuel use in fleet vehicles, on-site fuel combustion at facilities, and process emissions from BLM's Cliffside Helium Plant and USGS' laboratory operations. Overall, Scope 1 and 2 GHG emissions were reduced by 2.3% from FY 2018 and 29.2% from the FY 2008 baseline, primarily due to fleet vehicles emissions and reduced operation of the Cliffside Helium Plant. The Department previously established a FY 2025 GHG reduction goal of 36% relative to FY 2008 and is currently on track to meet this goal.

As mentioned in the above sections, efforts to conduct facility energy evaluations/audits to identify and implement cost effective energy conservation measures and renewable energy technologies, along with reducing petroleum fuel use in fleet vehicles have contributed to the Department's progress in reducing GHG emissions.

Priority Strategies & Planned Actions

The Department's bureaus will continue to implement on-site renewable energy technologies, as cost-effective, and implement energy conservation measures and right-size the fleet to reduce energy and fuel consumption and associated GHG emissions. Planned projects and actions to reduce greenhouse gas emissions are indicated in previous sections.