

U.S. Environmental Protection Agency

Sustainability Report and Implementation Plan
2020

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U.S. Environmental Protection Agency
2020 Sustainability Report and Implementation Plan

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Executive Summary

As part of its mission to protect human health and the environment, the Environmental Protection Agency (EPA) integrates sustainability in its buildings and operations as a model for other agencies and to fulfill the requirements and goals from the Energy Policy Act of 2005 (EPA 2005), the Energy Independence and Security Act (EISA) of 2007 and Executive Order (EO) 13834, Efficient Federal Operations. The agency made good progress in meeting or exceeding its EO 13834 goals in fiscal year (FY) 2019 and will continue to strive to meet these goals through the coordinated strategies described below.

The EPA focuses on several priorities to reduce energy, water and greenhouse gas emissions, which are the cornerstone of its Sustainability Report and Implementation Plan:

- Where possible, **consolidate** operations and facilities to reduce the overall footprint and utility use.
- Conduct facility **master planning** to identify cost-effective infrastructure and system improvements that maximize efficiency, optimize existing resources and reduce utility usage, all resulting in a more effective facility portfolio.
- Where feasible, consider **energy savings performance contracts (ESPCs)** to invest in energy projects.

Energy Efficiency

The EPA's more than 14,300 employees work in 31 reporting facilities, where the EPA controls the utilities, and in about 110 non-reporting offices and other buildings, in 10 regions across the country. Most of the EPA's reporting facilities are energy-intensive laboratories, due to the need for single-pass air for research integrity and employee safety. In FY 2019, the agency's energy intensity was 249,956 British thermal units (Btu) per gross square foot (GSF), which is 3.9 percent lower than FY 2018 and 37.5 percent lower than the FY 2003 baseline. The EPA achieved reductions in energy intensity by focusing on three main strategies—facility consolidation, master planning and ESPCs.

As consolidations require construction and relocation of employees, the EPA recognizes that its laboratory operations may not be consistent over the next several years. While energy intensity may be reduced due to relocations and COVID-19 telework requirements, it is also expected to increase when employees return to consolidated facilities and work schedules return to normal conditions. Ventilation requirements in the EPA's laboratories are likely to change over time, as more is learned about the spread of COVID-19. Therefore, the EPA will continue to strive to reduce energy intensity in its facilities as it adjusts to changing operational needs.

Performance Contracting

The EPA's ESPC efforts in FY 2019 focused on energy-intensive facilities in two locations—Research Triangle Park (RTP), North Carolina, and Ann Arbor, Michigan. The selected RTP energy services company (ESCO) began initial construction efforts for its ESPC in FY 2019; the EPA recently issued a Notice of Opportunity to replace its existing ESPC in Ann Arbor. In FY 2020 and 2021, ESPC work will focus on construction in RTP and a preliminary assessment in Ann Arbor.

Renewable Energy

The agency procured a blanket purchase agreement (BPA) of more than 15 million kilowatt-hours (kWh) of renewable energy certificates (RECs) in FY 2019. In combination with additional green power contracts, the EPA purchased over 15.8 million kWh of delivered green power and RECs in FY 2019. These purchases, combined with onsite renewable energy production, accounted for 16.2 percent of the agency's FY 2019 electricity use and far exceeded the renewable energy requirements under EPA 2005 that 7.5 percent of agencies' electricity use be from renewable sources.

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Water Efficiency

The EPA reduced its water intensity by 8.9 percent in FY 2019 compared to FY 2018 and 43.3 percent compared to FY 2007. In FY 2019, the EPA reduced its industrial, landscape and agricultural (ILA) water consumption by 96.7 percent compared to FY 2010. The EPA's water efficiency strategy mirrors its energy efficiency strategy and focuses on consolidation, master planning and ESPCs.

As described above, the EPA recognizes that its laboratory operations—and therefore water use—may be affected due to relocations and COVID-19 requirements, and that water use will increase when employees return to consolidated facilities and work schedules return to normal conditions. Returning to full capacity at laboratories may require additional water to flush systems to ensure employee safety. Therefore, the EPA will continue to strive to reduce water intensity in its facilities as it adjusts to changing operational needs.

High Performance Sustainable Buildings

While the EPA did not certify any additional buildings as meeting the *Guiding Principles for Sustainable Federal Buildings* in FY 2019, it currently meets the Guiding Principles in more than 25 percent of its applicable facilities on a GSF basis. The agency is focused on meeting the *Guiding Principles* in facilities where it has major renovations underway, which are anticipated to be completed over the next several years.

Waste Management and Diversion

In FY 2019, the EPA diverted 64.5 percent of non-hazardous waste from treatment and disposal facilities. In addition to traditional waste reduction and recycling activities, more than 83 percent of EPA locations supported composting efforts, and 10 locations recycled, reused or salvaged over 82 percent of construction and demolition debris produced at these sites. The EPA will continue to develop new waste reduction strategies as it generates less waste from stay-at-home requirements in FY 2020 due to the COVID-19 pandemic.

Transportation/Fleet Management

In FY 2019, the EPA achieved a 2 percent reduction in total fleet vehicle inventory, from 948 vehicles in FY 2018 to 933 vehicles in FY 2019. The EPA requires vehicles to perform various agency functions such as field sampling, environmental monitoring, superfund management, criminal investigation, environmental emergency response management and administrative functions. In FY 2019, the EPA reported a 44.7 percent reduction in petroleum fuel consumption and a 52.1 percent reduction in alternative fuel consumption, compared to FY 2005. The agency's coordinated approach to improve fuel efficiency relies on data collection, data analysis, fleet efficiency and right-sizing, and a revised vehicle allocation methodology. To increase fleet data granularity and accuracy, the EPA is focusing on implementing its fleet management information system and has incorporated about two-thirds of its fleet into the system. The EPA continues to shift vehicle procurement to low greenhouse gas petroleum-dedicated vehicles and hybrid/electric vehicles; in FY 2019, 62.4 percent of agency vehicles, or 583 vehicles, were alternative fuel vehicles (AFVs) or AFV equivalents.

Sustainable Acquisition

In FY 2019, the EPA had a total of \$446.8 million in contract actions that included at least one applicable statutory sustainable procurement requirement. That represented 38.96 percent of the agency's FY 2019 contract actions and 38.48 percent of obligations (in dollars). The EPA has restructured its Office of Acquisition Solutions (OAS) to better align with Category Management principles and provide commodity- and service-based acquisition management support agency-wide. Realigning OAS in this fashion allows the agency to: continually increase sustainable acquisition compliance via building industry-specific expertise; streamline acquisition processes; and better monitor and track EPA efforts to leverage greater sustainable, effective, and efficient methods for fulfilling agency requirements for goods and services.

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Electronics Stewardship

The EPA acquires electronics using the Electronic Product Environmental Assessment Tool (EPEAT) registry as part of its locations' environmental management systems. In FY 2019, 92 percent of the agency's eligible acquisitions were EPEAT-registered, which was a one percent increase from the previous year. The EPA will focus on acquiring more items listed on the registry by enhancing outreach efforts to purchasing agents. The agency also is working to decommission, consolidate, virtualize and optimize data centers to improve electronic equipment energy efficiency.

Greenhouse Gas Emissions

In FY 2019, the EPA reduced its Scope 1 and Scope 2 greenhouse gas (GHG) emissions by 4.5 percent compared to FY 2018 and by 46.7 percent compared to FY 2008. The EPA's GHG emissions reduction strategy relies on the facility energy efficiency strategies, fleet efficiency efforts and renewable energy purchases described above.

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Implementation Summary: Facility Management

1. FACILITY ENERGY EFFICIENCY

FY 2019 Energy Intensity Progress (Btu/GSF):

37.5% reduction from FY03

3.9% reduction from FY18

FY 2020-FY 2021 Plan:

2.0% reduction in FY20 from FY19

2.0% reduction in FY21 from FY20

The EPA continues to achieve reductions in energy intensity far above those required by EISA and EO 13834. The agency has prioritized necessary infrastructure and upgrade projects in line with the President's budget. To continue to reduce the agency's energy intensity over the long-term, the EPA has adopted the following three strategies:

- Where possible, **consolidate** operations and facilities to reduce the overall footprint and utility use.
- Conduct facility **master planning** to identify cost-effective infrastructure and system improvements that maximize efficiency, optimize existing resources and reduce utility usage, all resulting in a more effective facility portfolio.
- Where feasible, consider **ESPCs** to invest in energy projects.

Implementation Status

In FY 2019, the EPA consolidated operations from its Region 8 Laboratory in Golden, Colorado, into its National Enforcement Investigations Center in Denver. As part of its master planning efforts, the EPA awarded a contract to modernize a lab chemistry wing and renovate the heating, ventilation and air conditioning (HVAC) system in Narragansett, Rhode Island. ESPC construction also started at the EPA's RTP, North Carolina, campus in FY 2019. Additionally, the EPA continued holding calls with facility energy managers to discuss strategies to reduce energy and water intensity, federal reporting requirements, and best practices for master planning and commissioning efforts.

Priority Strategies & Planned Actions

In FY 2020, the EPA will focus on ensuring the health and safety of employees during the COVID-19 pandemic first and foremost. The EPA recognizes the importance of energy-intensive single-pass air in its laboratories for employee safety during this time and will continue to focus on maintaining safe working environments. The agency will also continue implementing the three strategies of consolidation, master planning and ESPCs in FY 2020 and FY 2021:

- **Consolidation:** Although the timeline could be affected by COVID-19 pandemic restrictions, the EPA plans to select a contractor by December 2020 to renovate its Main Laboratory Building in Athens, Georgia, to absorb the functions of a second lab. By spring 2021, renovation of the EPA's Main Building in Corvallis, Oregon, should be completed; and the EPA's Region 9 Laboratory operations in Richmond, California, will begin to relocate there by August 2021. The EPA also anticipates that the laboratory it closed in Grosse Ile, Michigan, will be fully excessed by June 2021.
- **Master Planning:** In FY 2020, the EPA plans to focus on completing initial master plans for its larger laboratories to achieve the efficiency goals described above; in FY 2021, it plans to transition to a review and update of its previously completed master plans. Master planning efforts at the EPA's Cincinnati, Ohio, campus will be completed by June 2020, and at its laboratory in Edison, New Jersey, by September 2020. As part of the master plan for its laboratory in Fort Meade, Maryland, the EPA will begin the process to select a contractor for roofing and HVAC upgrades in 2021 and plans to award the contract by June 2022. The EPA will release the architecture and engineering (A&E) procurement for design as part of the master plan for its Ada, Oklahoma, laboratory by

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August 2020; the design should be under contract by December 2020 and the renovation will begin by September 2021. Additionally, renovations at the EPA's laboratory in Narragansett, Rhode Island, will be completed by December 2021.

- **ESPCs:** The following section outlines the EPA's plans to implement ESPCs at two key laboratories.

2. EFFICIENCY MEASURES, INVESTMENT, AND PERFORMANCE CONTRACTING

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

\$ 0 M/ 0 projects in FY19

FY 2020-FY 2021 Plan:

\$ 0 M/ 0 projects in FY20

\$ 0 M/ 0 projects in FY21

The EPA continues to utilize ESPCs in its energy-intensive laboratories as a cost-effective approach to improve facility efficiency, upgrade systems and reduce water use. For the purposes of this SRIP, the EPA is reporting zero projects each year because they have either already been awarded or are in development but the EPA does not anticipate them being awarded prior to the end of FY 2021.

Implementation Status

Construction for an ESPC at the agency's RTP, North Carolina, campus began in FY 2019. Improvements will include high-temperature hot water pipe installation; laboratory ventilation and controls replacement and upgrades; steam optimization in Building A; and lighting upgrades.

The EPA also continued the process to succeed the original ESPC at its laboratory in Ann Arbor, Michigan. Following a recent Notice of Opportunity for ESCOs, the agency made an award in May/June 2020 to conduct the preliminary assessment. The EPA also initiated measurement and verification and is trying to finalize the contract in FY 2020 for the solar array procured through a power purchase agreement at its laboratory in Edison, New Jersey.

Priority Strategies & Planned Actions

The EPA's future ESPC efforts will include the following milestones:

- **RTP, North Carolina:** The ESCO plans to complete its construction phase by March 31, 2021, and will begin measurement and verification by June 30, 2021.
- **Ann Arbor, Michigan:** Following completion of its preliminary assessment, the awarded ESCO will provide the EPA with an initial proposal by June 30, 2021. Future investments in this contract will be determined based on the results of the investment-grade audit.
- **Edison, New Jersey:** The EPA will conduct the ongoing measurement and verification for the solar array through June 2021.

3. RENEWABLE ENERGY

FY 2019 Renewable Electricity Use:

16.2% of total electricity in FY19

FY 2020-FY 2021 Plan:

7.5% of total electricity in FY20

7.5% of total electricity in FY21

The EPA procures renewable energy through RECs and green power contracts and produces onsite renewable energy.

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Implementation Status

In August 2019, the EPA procured a BPA through the Defense Logistics Agency for a total of more than 15 million kWh of RECs that supported renewable energy generation in Kansas. Combined with two additional green power contracts, the EPA purchased about 15.8 million kWh of delivered green power and RECs for FY 2019.

In recent years, the EPA has reduced its green power and REC purchases to a level that is more economically advantageous to the agency. These purchases are more than double the 7.5 percent required under EPAct.

Priority Strategies & Planned Actions

The EPA plans to complete another BPA of RECs for FY 2020. With other small green power contracts and onsite renewable energy generation, the EPA will ensure that at least 7.5 percent of annual agency-wide electricity use be from renewables. By the end of FY 2021, the EPA will identify a potential new BPA contractor for its REC purchase, if necessary due to changes at the Defense Logistics Agency.

In FY 2020, the EPA's National Computer Center in RTP, North Carolina, initiated a roof replacement that includes replacing its 100-kilowatt roof-mounted solar array. The project is expected to be completed by June 30, 2021.

Given the location and acreage of most of the EPA's facilities, the agency has determined that most additional onsite renewable energy projects would require significant investment without a high rate of return. The agency is focusing on energy efficiency improvements to reduce its overall energy requirements; however, the agency will continue to explore options to cost-effectively implement site renewable energy projects at its facilities.

4. WATER EFFICIENCY

FY 2019 Water Intensity Progress (Gal/GSF):

43.3% reduction from FY07

8.9% reduction from FY18

FY 2020-FY 2021 Plan:

2.0% reduction in FY20 from FY19

2.0% reduction in FY21 from FY20

Because the EPA has already addressed most of the "low-hanging fruit" when it comes to reducing potable and non-potable/ILA water use in its laboratories, the agency uses the same approach to its energy efficiency reductions to tap into additional water conservation opportunities:

- Where possible, **consolidate** operations and facilities to reduce its overall footprint and utility use.
- Conduct facility **master planning** to identify cost-effective infrastructure and system improvements.
- Where feasible, consider **ESPCs and/or UESCs** to invest in energy- and water-saving projects.

Implementation Status

In FY 2019, the EPA reduced its water intensity 8.9 percent from FY 2018 (and achieved a 43.3 percent reduction from FY 2007), due in part to one lab consolidation, reduced research efforts at another lab, recommissioning of a cooling tower and an air handler replacement. In FY 2019, non-potable/ILA water consumption increased by 62.7 percent from the FY 2018, however since FY 2010 the agency has reduced its non-potable/ILA water consumption by 96.7 percent. The agency has also continued to meet its target of assessing EISA-covered facilities every four years for potential water conservation measures and updating its facility Water Management Plans accordingly.

Priority Strategies & Planned Actions

In FY 2020 and FY 2021, the EPA will continue reviewing the facility Water Management Plans it updates after each EISA water assessment or desk audits for potential projects to reduce water intensity on an annual basis.

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Consolidation, master planning and ESPCs will also contribute to reduced potable and non-potable/ILA water at EPA facilities. See the timelines for two key projects in the Energy Efficiency section.

5. HIGH PERFORMANCE SUSTAINABLE BUILDINGS

FY 2019 Sustainable Buildings Progress:

- 7 sustainable Federal buildings
- 20.6% of buildings / 25.5% of gross square footage (GSF)

FY 2020-FY 2021 Plan:

- 25.5% of GSF in FY20
- 27.4% of GSF in FY21

The EPA's strategy to advance high performance sustainable buildings is focused on implementing the *Guiding Principles for Sustainable Federal Buildings* and the GreenCheck process into renovation projects.

Implementation Status

The EPA continues to exceed the federal sustainable buildings performance threshold by meeting the *Guiding Principles* in more than 25 percent of its applicable GSF. To achieve the *Guiding Principles* in the agency's new construction and renovation/alteration projects, the EPA developed the GreenCheck process to evaluate projects' compliance throughout project planning, design and construction. In FY 2019, the agency piloted the use of Microsoft SharePoint to implement the GreenCheck process, promote collaboration and improve tracking of project sustainability performance.

Priority Strategies & Planned Actions

The EPA will continue to focus on meeting the *Guiding Principles* in facilities where it has major renovations underway, including laboratories in these four locations:

- **Corvallis, Oregon:** Under construction
- **Athens, Georgia:** Design complete
- **Duluth, Minnesota:** Design complete
- **Narragansett, Rhode Island:** In design phase

Each of these renovations requires significant investment of the agency's financial and staff resources. The Corvallis, Oregon, renovation is scheduled to be completed in FY 2021 and will increase the percentage of square footage meeting the *Guiding Principles* to 27.4 percent. The EPA is planning to award a construction contract for the Athens, Georgia, laboratory renovation by the end of FY 2020.

The *Guiding Principles* will be incorporated into these projects to the maximum extent practicable; however, these projects will not be completed before the end of FY 2020. Due to that fact, the agency's rate of high-performance sustainable buildings will remain steady in FY 2020 but will increase in FY 2021 upon completion of the Corvallis, Oregon, renovation. The EPA will update its GreenCheck process and associated SharePoint site to address lessons learned from recent projects.

6. WASTE MANAGEMENT AND DIVERSION

FY 2019 Non-hazardous Waste Management and Diversion:

- 1,419 metric tons of non-hazardous solid waste generated*
- 64.5% diverted and 35.5% sent to treatment and disposal facilities

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FY 2020-FY 2021 Plan:

1.5% reduction in non-hazardous solid waste generated in FY20 from FY19
65.5% diverted and 34.5% sent to treatment and disposal facilities in FY20

0% reduction in non-hazardous solid waste generated in FY21 from FY20
66.5% diverted and 33.5% sent to treatment and disposal facilities in FY21

**not including construction and demolition waste*

The EPA encourages each of its locations to follow the agency's waste management hierarchy, which advises: implementing source reduction and reuse practices to reduce overall waste generation; supporting recycling and composting programs to divert materials from landfills; and identifying energy recovery facilities to process non-recyclable and non-compostable items if possible. Landfills are the last option.

Implementation Status

In FY 2019, the EPA continued to implement a variety of strategies in its various locations to reduce the amount of waste generated, including shifting to paperless best practices, donating unwanted supplies, proactively preventing junk mail delivery and conducting internal employee exchanges to reuse excess supplies. For example, one EPA laboratory was able to save the agency \$6,140 over the course of the year by making sure that unwanted supplies and equipment slated for disposal were redirected to EPA researchers who could use them. EPA laboratories also continued to identify new analytical methods that use less chemicals and generate less waste. A number of EPA locations raised awareness about their recycling programs and expanded the type of materials they recycle; for example, 83 percent of locations supported composting efforts to keep food, yard waste and other organic materials out of landfills in FY 2019.

Fifteen locations generated construction and demolition debris in FY 2019. Five did not provide quantitative data; the other 10 did. Collectively, they generated 3,094 tons of construction and demolition debris and recycled, reused, or salvaged 82 percent of that material.

Priority Strategies & Planned Actions

Working through their environmental management systems (EMSs), EPA locations will continue building on the waste reduction strategies mentioned above, expanding the type of materials they recycle and compost, and collecting ideas and lessons learned to replicate waste reduction and diversion best practices across the agency. Using FY 2019 as a baseline, the EPA expects to reduce the amount of total non-hazardous solid waste generated by 1.5 percent, in part due to COVID-19 related shutdowns. Further reductions are not anticipated in FY 2021, because the agency assumes that operations will be restored, which will translate to a higher level of waste than the previous year. Regardless of how the total amount of waste fluctuates, the EPA expects that it will reduce the amount going to landfills by 1 percent in both FY 2020 and FY 2021.

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Implementation Summary: Fleet Management

1. TRANSPORTATION / FLEET MANAGEMENT

FY 2019 Petroleum Reduction Progress (Gal):

44.7% reduction in petroleum fuel since 2005
6.0% reduction in petroleum fuel since FY18

FY 2019 Alternative Fuel Use Progress (Gal):

52.1% reduction in alt fuel since 2005
4.4% reduction in alt fuel since FY18

FY 2020-FY 2021 Plan:

1.5% reduction in FY20 from FY19
1.5% reduction in FY21 from FY20

FY 2020-FY 2021 Plan:

0.0% reduction in FY20 from FY19
0.0% reduction in FY21 from FY20

The EPA's overarching strategy for fleet efficiency includes improved data collection; ongoing data analysis; fleet efficiency and right sizing; and revising its Vehicle Allocation Methodology (VAM).

Implementation Status

During FY 2019, the EPA continued to implement its new fleet management implementation system (FMIS) in locations covering about two-thirds of its agency-wide fleet, resulting in greater fleet data accuracy and granularity. From FY 2005 to FY 2019, the EPA made steady long-term reductions in covered petroleum consumption. Over the same time period, the EPA reduced alternative fuel use by shifting to procurement of low greenhouse-gas petroleum-dedicated vehicles (LGVs) and hybrid/electric vehicles (H/EVs) in lieu of AFVs. The shift was due to changes in manufacturer supply, fuel scarcity and the limited gains in efficiency of AFVs. The EPA increased its use of alternative fuel from FY 2018 to FY 2019 by 0.11 percent; alternative fuel was 7.006 percent of total covered fuel consumption in FY 2019, and it was 6.893 percent in FY 2018.

Due to consistent year-over-year fleet right-sizing, the EPA reduced its total fleet vehicle size from 948 vehicles in FY 2018 to 933 vehicles in FY 2019. Due largely to reduced vehicle utilizations in early FY 2019, vehicle miles traveled dropped by 265,845 miles (from 8,441,822 miles in FY 2018 to 8,175,977 in FY 2019), resulting in a corresponding 6 percent reduction in petroleum fuel use. Currently the makeup of the agency's fleet is 37.6 percent normal-to-low efficiency petroleum-dedicated vehicles, 10.0 percent high-efficiency petroleum-dedicated LGVs, 36.7 percent alternative fuel vehicles (ethanol-85 flex fuel vehicles) and 15.9 percent H/EVs. Between FY 2019 and FY 2020, the EPA also developed a series of quick-reference guides for fleet managers to complement the EPA Fleet Management Manual.

Priority Strategies & Planned Actions

The EPA has developed a coordinated approach to fleet data collection and analysis to improve the fuel efficiency of its vehicles and right-size its fleet:

- **Data Collection:** The agency plans to fully implement the FMIS in all fleet locations by June 30, 2021. COVID-19 has restricted domestic travel and, consequently, the agency's ability to complete implementation of the FMIS in FY 2020 as originally planned.
- **Data Analysis:** In FY 2020 and FY 2021, as the FMIS implementation continues, the EPA plans to continue the incorporation of FMIS data into the EPA's Qlik Sense data visualization tool through December 31, 2021.
- **Fleet Efficiency and Right-Sizing:** In FY 2020, the EPA will continue to replace decommissioned vehicles with lighter and more fuel-efficient LGVs and H/EVs from the General Services Administration (GSA) schedule where possible. The agency will analyze FMIS data to inform fleets of opportunities to consolidate vehicles where utilization is low by December 31, 2021.
- **VAM:** In FY 2020, the EPA will initiate planning for the VAM study of FY 2021, which fleets are required to conduct every five years. The last EPA VAM was conducted in FY 2016, and the EPA plans to complete its latest VAM by December 31, 2021.

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Implementation Summary: Cross-Cutting Operations

1. SUSTAINABLE ACQUISITION / PROCUREMENT

FY 2019 Sustainable Acquisition Progress:

38.96% of contract actions and 37.48% of obligations (in dollars), for a total of \$446.8M in contract actions with statutory environmental requirements

FY 2020-FY 2021 Plan:

39.96% of contract actions and 38.48% of obligations (in dollars)

40.96% of contract actions and 39.48% of obligations (in dollars)

The EPA has restructured its Office of Acquisition Solutions (OAS) to better align with Category Management principles and provide commodity- and service-based acquisition management support agency-wide. Realigning OAS in this fashion allows the agency to: continually increase sustainable acquisition compliance via building industry-specific expertise; streamline acquisition processes; and better monitor and track EPA efforts to leverage greater sustainable, effective, and efficient methods for fulfilling agency requirements for goods and services.

Implementation Status

The EPA follows the FAR Clause 52.216-18 Ordering (b), which makes all terms and conditions of the parent contract applicable to delivery/task orders issued, including FAR Part 23 sustainability acquisition clauses. Specifically, 52.216-18(b) states: "All delivery orders and task orders are subject to the terms and conditions of this contract. In the event of conflict between a delivery order or task order and this contract, the contract shall control."

The EPA orders issued against any GSA Contract or Common Contract Solutions (CCS) should be included in the aggregate number of EPA contract actions and obligations contributing to the achievements of EPA sustainability targets. CCS incorporates high quality, technically sound green language in the Statement of Work and/or FAR sustainable acquisition clause(s) in the EPA's contract writing system to ensure compliance with EO 13834 requirements for procurement. However, EPA recognizes OMB's methodology for determining sustainability targets. In the future, the EPA will require that sustainable acquisition clauses be included at the order level via the EPA's Contract Writing System, the EPA Acquisition System (EAS). This action will help ensure continual increase in both the reportable percentage point difference in sustainable contract actions and obligations in dollars for each year.

Priority Strategies & Planned Actions

By FY 2020 and FY 2021, the EPA anticipates that full implementation of Category Management strategies to provide commodity- and service-based acquisition support that incorporate energy-efficient, recycled content, biobased and environmentally preferable products, when applicable. This will significantly contribute to increased compliance with statutory requirements for procurement preference. The EPA's target number of biobased-only contracts to be awarded in FY 2021 is 520, with an estimated dollar value of \$11.5 million. In addition, efforts are underway to augment FPDS reporting that does not currently provide credit for contract actions and obligations in dollars that have been awarded against parent contracts that contain applicable sustainable acquisition clauses. The EPA will require that sustainable acquisition clauses also be included at the contract/order level via EAS, to help ensure continual increase in both the percentage of sustainable contract actions and dollar obligations with sustainable acquisition requirements from the prior year. The EPA will work with contracting officers to ensure that sustainable acquisitions clauses are appropriately selected via the EPA's contract writing system for applicable contract actions, including awards made via parent contracts common contract solutions, in addition to sustainable acquisition clauses being included at the parent/base contract.

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2. ELECTRONICS STEWARDSHIP

FY 2019 Electronics Stewardship Progress:

92% 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.*

To promote electronics stewardship, the EPA acquires products that are on the EPEAT registry, enables power management settings, and supports reuse and environmentally sound disposal practices for equipment that is no longer needed.

Moreover, to foster energy and cost efficiency, the EPA has worked to decommission, consolidate, virtualize and optimize its data centers.

Implementation Status

When acquiring electronics, the EPA's purchasing agents are instructed to comply with the Federal Energy Management Program's low-standby power requirements (one Watt or less) for federal agencies and to acquire items that are EPEAT-registered, a designation given to products that meet specific energy efficiency requirements and other environmentally preferable attributes. In FY 2019, 92 percent of the agency's eligible acquisitions were EPEAT-registered. This is slightly higher than the previous year's performance (91 percent). Nevertheless, over their lifetime, compared to products that do not meet EPEAT criteria, the computers, displays and cell phones that the EPA purchased in FY 2019 will result in reductions to the agency's environmental footprint, energy-related savings (400,579 kilowatt-hour equivalents) and \$15,178 in lifetime cost savings. The EPA also closed three non-tiered data centers in FY 2019.

The EPA's agencywide EMS Objectives, Targets and Metrics (OTMs) indicate that power management settings must be enabled on 100 percent of new electronics acquisitions. The OTMs also encourage the agency to find ways to reuse unwanted electronics equipment whenever possible and maintain contracts with vendors that are certified recyclers using Responsible Recycling (R2) or e-Stewards standards.

Priority Strategies & Planned Actions

Working through their EMSs, EPA locations will continue building on the electronics stewardship strategies mentioned above. The agency will focus on acquiring more items listed on the EPEAT registry, with the goal of ensuring that at least 95 percent meet that designation. To do so, it will enhance outreach efforts and remind purchasing agents that they must recheck a product's status each time they purchase it to make sure it has not been removed from the EPEAT registry prior to June 30, 2021.

Additionally, the EPA will continue working to optimize its data centers by supporting a Virtual-First strategy, exploring the potential for expanding advanced energy metering at its remaining tiered data centers, and working to expand the use of its ScienceLogic (EM7) tool.

3. GREENHOUSE GAS EMISSIONS

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

46.7% reduction from FY 2008

4.5% reduction from FY 2018

The strategies described in previous sections have resulted in—and will continue to support—a continued decrease in GHG emissions from the agency's FY 2008 baseline.

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Implementation Status

The EPA's Scope 1 and 2 GHG emissions decreased in FY 2019 compared to FY 2018 due to the agency's commitment to reduce energy intensity and usage across its facilities and fleet. The agency's successful strategies to reduce energy intensity in facilities, improve fleet efficiency, and maintain renewable energy purchases and onsite renewable energy projects have contributed to the reduction in GHG emissions.

The EPA tracks many sources of direct and indirect emissions such as facility energy consumption, mobile emissions from the EPA fleet and research process emissions. Because the EPA reduced both its energy use in laboratories and its petroleum consumption by its fleet, it realized a corresponding reduction in GHG emissions.

Priority Strategies & Planned Actions

The strategies discussed in previous sections to reduce facility energy intensity, maintain renewable energy purchases and improve fleet performance will contribute to a continued reduction the EPA's Scope 1 and 2 emissions over the next two years.