FISCAL YEAR 2020 SITE SUSTAINABILITY PLAN GUIDANCE

U.S Department of Energy
Sustainability Performance Office

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Major Changes

Section	Page	Previous Guide	Current Guide
Executive Summary	4	Sites were allowed to select whether to include the summary table or not, as it was optional.	Sites must include the summary table
Energy Management	5	Recommended Charts, Graphs, & Tables	Required Charts, Graphs, or Tables
Water Management	7	Recommended Charts, Graphs, & Tables	Required Charts, Graphs, or Tables
Renewable Energy	10	Recommended Charts, Graphs, & Tables	Required Charts, Graphs, or Tables
Acquisition & Procurement	12-14	N/A	Required new FY 2019 Sustainable Acquisition Progress Table.

These changes reflect the efforts by SPO to improve the collection and quality of data for anticipated operational changes as required by the Implementing Instructions for Executive Order 13834, *Efficient Federal Operations*, released in April 2019.

Acronyms

Acronym	Definition	Acronym	Definition
AFV	Alternative Fuel Vehicle	SF$_6$	Sulfur Hexafluoride
BTU	British Thermal Unit	SNAP	Significant New Alternative Policy
C&D	Construction and demolition	SPO	Sustainability Performance Office
CEQ	Council on Environmental Quality	SRIP	Sustainability Report & Implementation Plan
CFL	GSA's Computer for Learning program	SSPP	Strategic Sustainability Performance Plan
CTS	EISA Section432 Compliance Tracking System	SWG	Sustainability Working Group
D&D	Deactivation and decommissioning	UESC	Utility Energy Service Contract
DCOI	Data Center Optimization Initiative	WUI	Water Usage Intensity
DEAR	Department of Energy Acquisition Regulations	YOY	Year-Over-Year
DOE	U.S. Department of Energy		
ECM	Efficiency & Conservation Measures		
EISA	Energy Independence and Security Act of 2007		
E.O.	Executive Order		
EPAct	Energy Policy Act		
ESPC	Energy Savings Performance Contract		
EUI	Energy Usage Intensity		
FAIRS	Federal Aviation Interactive Reporting System		
FAR	Federal Acquisition Regulation		
FAST	Federal Automotive Statistical Tool		
FBPTA	Federal Buildings Personnel Training Act of 2010		
FEMP	Federal Energy Management Program		
FIMS	Facilities Information Management System		
FPDS	Federal Procurement Data System		
FRPP	Federal Real Property Profile		
FY	Fiscal Year		
GHG	Greenhouse Gas		
GP	Guiding Principles		
GPD	Gallons per Day		
GSA	U.S. General Services Administration		
GSF	Gross Square Feet		
HEMSF	High Energy Mission Specific Facility		
HPSB	High Performance Sustainable Building		
HQ	Headquarters		
IDC	Integrated Data Collection		
ILA	Industrial, Landscaping, and Agricultural		
M&V	Measurement & Verification		
OCIO	Office of the Chief Information Officer		
OMB	Office of Management and Budget		
PPA	Power Purchase Agreement		
PSO	Program Secretarial Officers		
R2	Responsible Recycling		
REC	Renewable Energy Credit		
RSF	Rentable Square Feet		

Message from the Director of the Sustainability Performance Office

Program and Site Sustainability Teams,

As the Director of the U.S. Department of Energy's (DOE or Department) Sustainability Performance Office (SPO), I want to thank you in advance for your work toward meeting Federal sustainability requirements and putting together your Site Sustainability Plans (SSPs). Your work is crucial to increasing the efficiency of DOE's facilities and infrastructure, enhancing livability for the scientists and workers at the sites, improving performance for the taxpayer, and supporting the communities in which we live and work.

As the DOE sustainability community, we are responsible for improving the performance and efficiency of energy, water, waste, and other sustainability-related topics. We promote resilience to disturbances from a variety of sources, through the promotion of on-site renewable energy production; use of guiding principles for buildings that demand less from the grid and the community; and a variety of other measures that help ensure that DOE infrastructure continues to sustain the science, energy, defense, and cleanup missions in the coming decades.

At SPO, we seek to assist DOE programs in sustaining their missions, freeing up resources by reducing waste, avoiding excess expenditure on utilities, maximizing productivity, and improving the efficiency of facilities and processes. We believe that by focusing on mission needs, we can assist the programs in finding ways to help the Department meet its sustainability goals, as outlined in Federal statutory and regulatory requirements.

We introduced the DOE Sustainability Dashboard's (Dashboard) SSP narrative module in 2017 to streamline reporting for the sites and allow for a compliant SSP to be produced directly from the Dashboard. We continue to upgrade and refine the Dashboard, and welcome your feedback and suggestions. For Fiscal Year (FY) 2020 SSPs, sites will continue to have the option of using the Dashboard's SSP module or uploading a simplified Word or PDF document to the Dashboard's SSP module. Sites may elect to produce a more polished publication for their leadership and stakeholders, but this step is not required. Our goal has been to lower the reporting burden for sites and simultaneously increase and improve the consistency of information available to decision makers, allowing them to better identify projects and potential for increased efficiency, as well as to reduce waste and emissions. In April 2019, Implementing Instructions for Executive Order (E.O.) 13834, *Efficient Federal Operations*, were finalized. The SSP guidance has been updated to reflect E.O. changes, and the Dashboard is in the process of being updated accordingly.

On behalf of SPO, I thank you all for your hard work and look forward to a continued successful partnership in meeting DOE's sustainability goals and the *Sustainability Report and Implementation Plan* (SRIP) targets (see Appendix F).

J. Kevin Carroll
Director, Sustainability Performance Office
U.S. Department of Energy

Introduction

This document provides guidance for DOE sites to complete FY 2020 Site Sustainability Plans (SSPs). As required by DOE Order 436.1, *Departmental Sustainability,*[1] each site must develop and commit to implementing an annual SSP that identifies its contributions toward meeting the Department's sustainability goals. This guidance presumes that sites have undertaken the steps of gathering and analyzing the data required for annual reporting in the DOE Sustainability Dashboard (Dashboard) and to formulate the SSP. The SSP should provide an overview of the site's planned actions as well as an overview of efforts and accomplishments during the reporting period. SPO collects and compiles information reported by each site to develop the Department's annual *Sustainability Report and Implementation Plan* (SRIP) and *Annual Energy Management Report* to Congress.

Since 2011, SPO has issued guidance documents for DOE sites and national laboratories to complete sustainability reporting requirements. The *Sustainability Dashboard User Guide* and this *Site Sustainability Plan Guidance* serve as resources for data reporting and developing narrative plans. These documents are reviewed and revised annually to reflect updated requirements and reporting process improvements.

The Dashboard collects both the data necessary to report DOE's progress on its sustainability requirements and the SSP narrative sections. Sites should ensure consistency between the SSP, reported sustainability data in the Dashboard, and other major documents and initiatives. This includes publications under other requirements, such as the Federal Automotive Statistical Tool (FAST), Facilities Information Management System (FIMS), and budget reports.

For submission of the FY 2020 SSP and supporting documentation, sites may use the SSP narrative module in the Dashboard and approve their plan via the completion process __or__ upload a Word or PDF plan with supporting documents as an attachment to the Dashboard's SSP Module in the Executive Summary category. Due date for sustainability data submission is **November 22, 2019** and SSP narrative is **December 6, 2019**. Feedback on SSPs will be issued through the Dashboard during spring 2020.

Data provided in the SSP and other reports may be subject to disclosure under the Freedom of Information Act (FOIA). Also, with concurrence from Program Offices, active projects and success stories may be selected for inclusion in the Department's *Annual Energy Management Report* to Congress, the SRIP, newsletters, and other documents.

SPO will host training sessions and open help line calls to answer questions on the sustainability data and plan reporting process. A schedule with call-in information will be available on the Dashboard Home page. All resources and reporting schedules can be found on the Dashboard's Resources page.

Please contact the Sustainability Performance Office at sustainability@hq.doe.gov or 202-586-8645 with any questions.

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[1] DOE Order 436.1, *Departmental Sustainability*, May 2, 2011, www.directives.doe.gov/directives-documents/0436.1-BOrder.

E.O. 13834, *Efficient Federal Operations,*[2] which was signed on May 17, 2018, directs Federal agencies to manage their buildings, vehicles, and overall operations to optimize energy and environmental performance, reduce waste, and cut costs. Please reference Appendix E for a crosswalk of E.O. 13834 with current statutes and requirements. Implementing Instructions for E.O. 13834, *Efficient Federal Operations*[3] were released on April 30, 2019.

E.O. 13783, *Promoting Energy Independence and Promoting Economic Growth,*[4] was issued March 28, 2017. The objective of E.O. 13783 is to continue to promote clean and safe development of energy resources, while reducing burdens that hinder growth.

In addition, E.O. 13806, *Assessing and Strengthening the Manufacturing and Defense Industrial Base and Supply Chain Resiliency of the United States,*[5] while not providing specific guidance, asks the Secretary of Energy to advise the Secretary of Defense on what must be done to maintain "[s]trategic support for a vibrant domestic manufacturing sector, a vibrant defense industrial base, and resilient supply chains", including examining "energy consumption and opportunities to increase resiliency through better energy management."

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[2] Executive Order 13834, *Efficient Federal Operations*, May 17, 2018, https://www.federalregister.gov/documents/2018/05/22/2018-11101/efficient-federal-operations
[3] Implementing instructions for E.O. 13834, *Efficient Federal Operations,* April 2019, https://www.sustainability.gov/pdfs/eo13834_instructions.pdf
[4] Executive Order 13783, *Promoting Energy Independence and Promoting Economic Growth*, March 28, 2017, www.whitehouse.gov/the-press-office/2017/03/28/presidential-executive-order-promoting-energy-independence-and-economi-1
[5] Executive Order 13806, *Assessing and Strengthening the Manufacturing and Defense Industrial Base and Supply Chain Resiliency of the United States*, July 26, 2017, www.gpo.gov/fdsys/pkg/FR-2017-07-26/pdf/2017-15860.pdf

SSP Narrative Guidelines

The SSP is comprised of two main components: the narrative and the data. This section contains overarching guidance to assist with SSP narrative development. The SSP narrative consists of an Executive Summary and Table, Mission Change, and SSP Categories for each sustainability related topic, intended to inform site management, programs, and headquarters of key accomplishments, historical performance, and plans for upcoming activities.

The table below lists the SSP narrative categories, and each category provides a description and lists associated Dashboard data entry pages.

SSP Categories		
• Energy Management • Water Management • Waste Management • Fleet Management	• Clean and Renewable Energy • Sustainable Buildings • Acquisition and Procurement • Measures, Funding, and Training	• Travel and Commute • Fugitives and Refrigerants • Electronic Stewardship • Resilience

For each SSP category, suggested discussion topics have been provided. Sites should address applicable topics as well as include any additional relevant programs or initiatives carried out during FY 2019. The topics are meant to be guidelines to help you prepare your plans, and sites should consider each discussion topic, as applicable, when writing both the "performance status" and "plans and projected performance" sections for each category. Sites may prioritize what is discussed within each category, based on a site's progress during the reported fiscal year and plans for the coming year(s). However, **each category must be addressed**.

In general, for each category, the "performance status" and "plans and projected performance" sections should be addressed as such:

Performance Status – Discuss FY 2019 performance by:

- Describing major initiatives or changes to missions or facilities in FY 2019 that contributed in significant ways to each category area; and
- Sharing success stories and accomplishments from FY 2019, as well as lessons learned and best management practices.
- Quantifying performance towards goals, savings (energy, dollar, etc.) when possible, and include the percent change from the prior year and from the baseline stated in the relevant goal.

Plans and Projected Performance – Discuss plans and expectations for FY 2020 and beyond by:

- Identifying planned activities (i.e. mission changes, conservation measures, renewable energy systems, new construction or deactivation and decommissioning (D&D), policy and procedures updates, training) and expected impact of planned activities; and
- Listing site specific measurable goals, targets, and milestones (3-5 for each category) for FY 2020.

- Estimating annual performance at minimum for the next five years and if possible up to ten years with graphs, charts, and/or tables as much information as possible (see Appendix H for samples). If performance estimates are not available, please explain.

Pre-existing documentation may be referenced, and the use of graphs and/or tables is required as this helps determine whether the sites are meeting Departmental goals. Please provide this documentation as an attachment, link, or upload to the relevant Dashboard Policy table.

Executive Summary

The executive summary should be concise and no more than 2–5 pages, and ideally relate to the DOE *Sustainability Report and Implementation Plan's* (SRIP) effort to understand performance and pursue projects that will continue improvements. Consider including a description of how the SSP relates to overall long term site planning and management vision for the site, and how sustainability is incorporated into that vision. Discuss successes and challenges, including investments that improve mission performance and result in significant efficiency gains in energy and water use, and waste reduction. For sites with High-Energy Mission-Specific Facilities (HEMSFs), separately constructed mission specific facilities with high energy consumption, ensure investments in these facilities and their impact on sustainability metrics are highlighted briefly in this section. Sites must include the summary table, as it allows for an overview of the site's progress and plans (see Dashboard or Appendix E for table). Additionally, the site's performance and plans should be quantified wherever possible.

SPO assesses performance based on the data in the Dashboard and SSP; please ensure the summary table and narrative are consistent with the data entered into the Dashboard. If discrepancies exist with historical data in the Dashboard, please submit a Dashboard change request.

Mission Change

In this section, discuss mission changes for the next five years at a minimum, and if possible, up to ten years depending on the information available. If facilities are coming on line or leaving the inventory, be sure FIMS has been updated to reflect these changes. If there are major initiatives, discuss the site strategic vision and how sustainability goals will be influenced. Briefly describe overall potential impact on sustainability goals in this section, and provide a more in-depth explanation in each SSP category. Ensure the section is concise with additional details in relevant sections of the SSP, and include graphs illustrating anticipated changes over the next five to ten years, depending on availability.

Energy Management

This category focuses on all energy-related topics such as energy intensity, metering and benchmarking, Energy Independence & Security Act (EISA) §432 evaluations, non-fleet fuel use, and greenhouse gas (GHG) emissions. Please ensure that all your Dashboard data is complete and accurate. The following Dashboard pages are relevant to the Energy Management Category:

• Energy • Facility Goal Category • Facility Metering Status • EISA §432 - Benchmarking	• EISA §432 - Evaluations • Efficiency & Conservation Measures • Non-Fleet Vehicles and Equipment Fuel

Please Include the Following: Charts, Graphs, or Tables

a. Show energy usage progress and forecast progress from FY 2003 through FY 2029 for goal subject and excluded, separately. Be certain to examine site plans, program plans, and other relevant information in creating your forecast. In addition, be sure to include changes in facility gross square footage in a separate table. When forecasting, consider:
   - Savings from funded ECMs that are not yet operational;
   - Savings from ECMs likely to be funded based on internal project prioritization and/or urgency for upgrade mission;
   - Ramp up on energy use/demand in existing, and possibly new facilities, due to mission such as HEMSF, High Performance Computing (HPC) data centers, and super computer usage; and
   - Reduction of energy use from facilities set for shutdown or disposal.
b. If applicable, include a chart demonstrating actual vs. projected energy use by type (i.e. electricity, natural gas, etc.), in MMBTU, for any HEMSFs. Show both existing and planned HEMSFs individually as well as the site base energy use. In addition, sites may elect to include a chart to show actual and projected electricity, for any HEMSF.
c. If applicable, include charts, graphs, and/or tables with actual and projected energy (by type) for any existing or planned HPC facilities at your site and efficiency impact of measures performed/planned to reduce energy intensity.

For all graphs or charts, please include values for each year. This can be accomplished either by including the values on the graph/chart or in a table as shown in the example in Appendix H, and labeling axes appropriately. Sites may also use the format shown in the Dashboard QA/QC page as an example. Please note that SPO does not prescribe specific charts/tables, and sites have the ability to design charts/tables that best fit their specific data.

Energy Usage and Intensity

a. Describe any initiatives, projects, or actions used to increase energy savings in FY 2019 and beyond.
b. Discuss any extenuating factors that may be skewing the site's performance regarding the energy intensity reductions/increases reported in FY 2019, or could have a foreseeable impact in the upcoming 10 years.
c. Discuss the use of Energy Management tools such as:
   - Remote building energy performance assessment auditing technology;
   - Demand management programs;
   - Green Button data access system; or
   - Space utilization and optimization practices and policies.
d. If excluding buildings from the goal, see Appendix C and complete the Excluded Buildings Self-Certification.

e. Describe plans to reduce deferred maintenance while at the same time increasing energy efficiency and improving asset condition.
f. Discuss significant planned facility acquisitions/potential excess facility disposition over the next five to ten years, depending on availability, and quantify the potential impact to energy intensity reduction.
g. Describe the Life-Cycle Cost Analysis used to prioritize efficiency measures.
h. Address site implementation of setbacks (i.e. setbacks are the subject of several Inspector General reports).
i. Note if your site explored DOE's Better Buildings Initiative's Smart Labs, ISO 50001, or DOE's 50001 Ready Program. If so, discuss opportunities identified and implemented, the impacts on site or building performance, and any additional benefits realized. Alternatively, if after exploring these options, the site decided not to move forward, explain why. SPO will be setting up a Departmental level 50001 Ready account pre-populated with existing agency efforts. If interest in implementing, reach out to SPO and AU-21.

EISA Section 432 Benchmarking and Evaluations

a. Explain your site's approach to the 4-year energy and water evaluation cycle – including mechanisms, procedures (i.e. combining EISA §432 evaluations with condition assessment surveys), and re-/retro-commissioning or continuous commissioning.
b. Discuss any potential issues with meeting deadlines or efforts to combine EISA §432 evaluations with condition asset surveys. **If a site has an expired comprehensive evaluation, a strategy is required in the SSP to complete the remaining evaluations, including an anticipated timeframe for completion.**
c. DOE encourages measurement and verification (M&V) of implemented measures and projects. However, it is understood that it may not be cost-effective to perform continuous M&V on all measures. Describe your site's approach to M&V for projects funded through funding mechanisms other than Energy Savings Performance Contracts (ESPC). Only projects that are financed under an ESPC have a statutory requirement to conduct M&V. For third party financed projects with M&V in place, please describe how your site witnesses the process and confirms accuracy.
d. Discuss benchmarking efforts and plans to benchmark additional assets. To consider an asset as benchmarked, 12 months of consecutive data must be reported. Only sites with completed benchmarking data by the end of the calendar year can receive weather normalization credit. If using other tools aside from EPA's Portfolio Manager to benchmark assets, please note the tool being used and the reason for its use.

Facility Metering

a. Describe your site's strategy and plans to improve utility metering infrastructure and use of associated data. Topics should include funding, personnel, energy tracking systems, and implementation barriers.
b. Highlight any successes or opportunities identified due to the installation of metering infrastructure and buildings management systems at your site.
c. Describe use of metering data (i.e. benchmarking, verifying utility bills, measurement and verification of savings, education and behavior change, energy system diagnostics and maintenance, time-of-use and demand response, cost allocation) and how it is incorporated into site plans.

d. Identify issues associated with maintenance and/or use of existing meters (consistent with the reported Dashboard status) and plans for resolution.
e. Due to continued Dashboard reporting issues with this module, please provide site specific documents used for tracking metering information.
f. Ensure your latest Metering Plan has been uploaded to the Dashboard Facilities Site-Level Policy Tracker.

Non-Fleet Vehicles and Equipment

a. Discuss and show progress made in reducing non-fleet vehicles and equipment (V&E) fuel use not captured by the FAST reporting system. Note V&E includes fuel used in planes which is not captures in the Federal Aviation Interactive Reporting System (FAIRS).
b. Discuss trends pertaining to this category of fuel use and methods employed to reduce fuel use for non-fleet V&E.

Water Management

Highlight activities undertaken to reduce potable and non-potable water consumption, comply with stormwater management requirements, and improve water efficiency. In addition, summarize any issues or obstacles related to the implementation of reduction strategies or the collection of water consumption data. The following Dashboard pages are relevant to the Water Management Category:

• Water • Facility Goal Category	• EISA §432 Evaluations • Efficiency & Conservation Measures

Please Include the Following: Charts, Graphs, or Tables

a. Show water usage for potable water and non-potable water consumption, separately, and forecast progress from FY 2007 through FY 2029. Be certain to examine site plans, program plans, and other relevant information in creating your forecast. Please include values for any graphs or charts for each year. In addition, be sure to include changes in facility gross square footage in a separate table.
b. If applicable, include a chart (or table) that shows those facilities (buildings/OSF) that have the highest potable water intensity use (gallons per gross square foot), i.e. HEMSF and HPC.
c. If applicable, include a chart (or table) that shows those facilities (buildings/OSF) that account for 75% of the site's potable water usage, i.e. HEMSF and HPC, similar to EISA §432 which is based on energy.

Water Usage and Management

a. Describe any initiatives, projects, or actions used to increase water efficiency in FY 2019. Quantify reductions when possible.
b. Consider excluding facility square footage from the WUI, if the asset uses energy but not water or is undergoing disposal. There are no exclusion for high water usage facilities, however, should you have the information please provide the split in your narrative (usage and associated sqft) to help SPO make the case to allow for high water usage exclusions.

c. Discuss major water consuming end-uses, such as cooling, heating, plumbing, irrigation, and laboratory equipment. If a water balance has been performed within the last five years, provide results. If no water balance has been performed within that timeframe, explain why and indicate whether a future water balance is planned.

d. Summarize the site's efforts in identifying and implementing alternative water sources. Alternative water sources offset the use of fresh surface and groundwater sources and are used in non-potable applications such as cooling tower makeup and irrigation. Types of alternative water include onsite gray water, harvested rainwater, process discharge water, and reclaimed wastewater.

e. Note whether a site is replenishing water supplies (i.e. aquifer recharge) and provide documentation on the quality and quantity. Depending on the quality of water being replenished, it may be possible to receive credit towards water use. Upon review of documentation, SPO will determine whether or not a credit can be received and progress will be adjusted accordingly. Water that is returned to a water source at the same quality as the water source is considered non-consumptive.

f. Discuss water supply arrangement and costs, specifically note if water is provided for free.

g. Summarize the site's water metering strategy.

h. Note whether the site has a water management plan. If the site has a current water management plan, upload to the Dashboard Facilities Site-Level Policy Tracker Module. If the site does not have a water management plan, explain why and indicate when a water management plan will be developed in the future.

i. If applicable, summarize non-potable freshwater used for industrial, landscaping, and agricultural (ILA) and specify the water supply source. Note, onsite alternative water is reported separately of non-potable freshwater use.

j. Provide status of adopting and incorporating various Federal water management practices, such as landscape management, storm water runoff, siting for facilities, and disposition of unneeded property.

Waste Management

Describe your site's approach/vision for addressing waste management, pollution prevention (source reduction) and recycling measures, and construction and demolition (C&D) waste reduction. The following Dashboard pages are relevant to the Waste Management Category:

• Municipal Solid Waste • Waste Diversion	• Wastewater Treatment

Per Implementing Instructions for E.O. 13834, C&D waste no longer has a target, but should continue to be reduced and tracked. DOE will continue to track and monitor current and future waste levels and efforts, please continue to report C&D information in the Dashboard and discuss efforts to divert from landfill.

Waste Management Strategies

a. Summarize the site's actions in FY 2019 on pollution prevention, waste reduction and minimization efforts, recycling, and composting programs. Please ensure these are accurately reported in the Dashboard to quantify the waste diversion from landfill due to these actions.

b. Discuss current and planned efforts to divert both non-hazardous solid waste and construction/demolition waste from disposal in landfills.

c. Explain the anticipated impact of site mission and population changes, construction, demolition and disposition activities, etc. on recycling and waste generation rates and volumes (i.e. will non-hazardous solid waste/C&D increase or decrease in the upcoming five to ten years).

d. If a waste-to-energy system is used, provide amount of waste diverted to the system(s) and ensure the information is reported in the Dashboard.

e. Explain how the site has been able to increase the use of acceptable non-toxic or less-toxic alternative chemicals and processes while minimizing acquisition of hazardous chemicals and materials (such as ozone-depleting substances and fluorinated gases).

f. Discuss the integration of pest management and landscape management practices (as applicable).

g. If the site has encountered any changes in recycling venues or fees, please describe.

Fleet Management

Describe your site's approach and vision for addressing fleet optimization, and strategies used to reduce petroleum use and increase alternative fuel use. The following Dashboard pages are relevant to the Fleet Management Category:

• Fleet Vehicle Fuel • Fleet Vehicle Inventory	• Fleet Vehicle Mileage

SPO understands that FAST data will not be finalized by the deadline for the SSP submission. Please provide qualitative descriptions, strategies, and plans for improving fleet management. Additionally, please ensure that the fleet data is accurately entered into FAST, and note that SPO does not have the ability to edit or correct FAST data.

Fleet Management Strategies

a. Describe strategies for reducing petroleum use, such as fleet optimization, vehicle right-sizing, expanded use of alternative fuel, anti-idling measures, and use of vehicle telematics to assess fleet performance.

b. Describe strategies for increasing alternative fuel use, such as increasing acquisition of alternative fuel vehicles (AFVs), evaluating alternative fueling options through available locator tools, siting vehicles to match available fueling locations, and installing renewable fuel pumps at fleet fueling centers.

c. DOE struggles with the EPAct 2005 Section 701 requirement which requires that agencies use alternative fuel in all dual fueled AFVs except in vehicles for which the agency received a waiver. Discuss the barriers faced by your site to utilize AF in all dual fueled AFVs. How many waivers requested and granted for FY 2019? If AFVs will be acquired that will not have access to alternative fuel, explain why.

d. Describe the site's plan to meet the AFVs acquisition requirement.

e. Describe any major changes in fleet inventory during FY 2019.

f. Describe plans for increasing the use of biodiesel or renewable diesel. Per EPAct 1992, the use of every 450 gallons of neat biodiesel or renewable diesel grants one EPAct Acquisition credit towards the EPAct AFV Acquisition requirement.

g. Discuss installation efforts for on-site vehicle charging and alternative fueling infrastructure.

Renewable Energy

This section should focus on your site's efforts towards utilizing renewable energy resources. The following Dashboard pages are relevant to the Renewable Energy Category:

• On-site Renewable Generation Systems • Purchased Clean & Renewable Energy	• Efficiency & Conservation Measures

Note, due to ongoing issues with the on-site renewable energy data entry module, the purchased and on-site generation modules have been separated. The data entry fields are still the same.

Please Include the Following Charts, Graphs, & Tables

a. Provide a chart showing renewable <u>electric</u> energy consumption in MMBtu relative to total electricity consumption broken out by: on-site generation, on-site consumption (total), purchased green energy, and renewable energy credits (RECs).
b. Provide a chart showing total renewable energy (electric and thermal) consumption in MMBtu relative to total site energy consumption broken out by: on-site and purchased green energy.

Renewable Energy Strategies

a. Summarize the site's strategy to increase and prioritize on-site renewable and alternative energy generation, including storage options. Please note that the Service Year Limits for Purchase of Green Energy & RECs has changed from 10 years to 15 years. Please verify the service year/installation year data in the Dashboard, as this should be the first year of service when energy was generated, not the current fiscal year. If the year is incorrect, submit a change request for Purchased Clean and Renewable Energy; however if a change is needed for Onsite Renewable Energy Generation Systems, please contact SPO.
b. Discuss highlights of major purchases and approaches taken to obtain renewable energy through purchases.
c. Explain the most recent renewable and alternative energy assessments and outcomes, if applicable.
d. Describe the incorporation of [DOE Procurement Policy Guidance on Purchase of Electricity, Energy Products, and Energy By-Products from Indian Tribes](). This policy gives preference to tribes and tribal majority-owned businesses for the purchase of electricity produced by renewable resources, renewable energy products, and renewable energy by-products, as long as it is no more costly than the prevailing market rate.
e. Describe how the installation of renewable energy systems in new buildings is considered and initialized; especially solar hot water heaters per [42 USC 6834(a)(3)(A).]()
f. Discuss potential opportunities or needs for microgrids or energy storage at your site.

Sustainable Buildings

This section should focus on all aspects pertaining to sustainable building initiatives such as HPSB as well as building inventory changes. The following Dashboard pages are relevant to the Sustainable Buildings Category:

• Sustainable Buildings • Facility Goal Category	• Building Inventory Change & Design

SPO recommends focusing on buildings with the greatest cost efficiency gains from meeting the Guiding Principles (GPs) instead of a GSF threshold, as all buildings meeting the GPs will receive credit. Per Implementing Instructions for E.O. 13834, the threshold for calculating sustainable building progress is based on owned buildings of 10,000 GSF or greater with bonus credit towards GSF progress for qualifying buildings below 10,000 GSF.

Recommended Charts, Graphs, & Tables

   a. Include table of GPs compliant buildings to date and planned compliant buildings by count and GSF. Please include the year the building became compliant or is scheduled to be compliant.

Guiding Principles

   a. Provide the number of buildings that qualify as sustainable buildings in FY 2019, identify FY 2020-2021 priorities for advancing sustainable building progress (i.e., targeted sustainable buildings), and if possible, provide a timeline for at least 15% or greater of buildings (by count and associated GSF) meeting the GPs.
   b. Discuss barriers to meeting GPs in remaining facilities, including identifying the GPs most difficult to meet
   c. Ensure FIMS sustainability fields and the Dashboard Sustainable Buildings fields are accurate, consistent, and up to date. **Note:** the Federal definition of "not applicable" is outlined in the 2019 Guidance for Real Property Inventory Reporting as any building that meets the following conditions: unoccupied (< 1 hour/person/day on average), low/no energy use (< 12.7 kBTU/GSF/year), and low/no water use (< 2 gallons per day (GPD)). Ensure that FIMS data reflects this change and discuss the impact.
   d. Describe your site's incorporation of Federal GPs and sustainable practices into institutional documents, procedures, and processes, including site planning documents, policies, specifications, etc.

New Building Design

   a. Identify any new Federal buildings owned, operated, or controlled by the site, for which designs were started in FY 2007, and construction completed in FY 2019 (and asset entered into FIMS in FY 2019). Additionally, please identify any buildings that do not meet or exceed the Federal building efficiency standards, and explain why they did not meet the requirements. Discuss mechanisms by which the site does – or plans to – ensure all new construction is designed at 30% more energy efficient than the baseline established by ANSI/ASHRAE/IESNA Standard 90.1. *As of August 2019, the current version in effect is ASHRAE 90.1 2013 (10 CFR 433.100).*

b. Discuss, if applicable, any provisions in building leases pertaining to energy conservation or sustainable design.
c. Discuss strategies for design in regard to [42 USC 6834](#) fossil fuel reduction in new buildings and major renovations.
d. Describe plans to incorporate climate-resilient design and management elements into the design of new or newly retrofitted buildings.

Acquisition & Procurement

This category should incorporate all relevant sustainable acquisition information as well as efforts to improve your supply chain GHG emissions.

Due to changes in reporting methods for acquisition, for FY 2019, we have disabled the Sustainable Contract Review data entry page in the Dashboard. M&O contractors and all others *without* authority to enter data in the [Federal Procurement Data System – Next Generation](#) (FPDS-NG or FPDS), please see the tables below and fill in the information to include in your SSP. Please note that SPO and AU-21 are working on a solution to collect the information via the Dashboard in the near future.

Required Progress Table

a) Include the FY 2019 Sustainable Acquisition (SA) Progress table in your SSP, and note the total number of eligible contract actions, total number of contract actions with sustainable acquisition clauses, total eligible contract dollars, and total contract dollars with sustainable acquisition clauses. Calculate the percent of actions and percent of obligations ($) with sustainable acquisition clauses. Sites should complete either the table for FAR clauses or DEAR clauses, depending on which is specified in the contracts (see Appendix G for an example). Please note that the rows in dark gray indicate that no data is requested in these cells.

b) Regardless of which table is utilized, sites should specify the number of contract actions for biobased product purchases in FY 2019 and estimate the purchases for FY 2020, if available. Biobased product purchases include any actions where at least one product to be supplied or used is a BioPreferred product.

Per the Department of Energy Acquisition Regulation (DEAR) [970.5223-7](#), all service and construction contract actions are applicable to sustainable acquisition requirements. All service contracts include all types of applicable services such as landscaping, custodial, building maintenance, cafeteria, etc. An EXCEPTION is those with a Claimant Program coded as "Weapons" or Foreign Place of Performance (PoP). Applicable eligible contracts under DEAR 970.5223-7 provisions shall be flowed down only to first tier subcontracts exceeding the simplified acquisition threshold that support operation of the DOE facility and offer significant subcontracting opportunities for energy efficient or environmentally sustainable products or services. Additionally, sites must only report contract actions over the [micro-purchase](#) threshold set by [FPDS](#).

i) **If FAR clauses are specified in your contracts, please fill out the following table:**

FY 2019 Sustainable Acquisition (SA) Progress							
Metric	Recycled	EE	Biobased	Multi-Statutory	EPP	Statutory+	Total
Number of Eligible Contract Actions							
Number of Contract Actions w/ SA Clauses							
Percent of Contract Actions w/ SA Clauses							
Total Eligible Contract Dollars ($)							
Total Contract Dollars ($) w/ SA Clauses							
Percent of Contract Dollars w/ SA Clauses							

ii) **If DEAR clauses are specified in your contracts, please fill out the following table:**

FY 2019 Sustainable Acquisition (SA) Progress	
Metric	Total
Number of Eligible Contract Actions	
Number of Contract Actions w/ SA Clauses	
Percent of Contract Actions w/ SA Clauses	
Total Eligible Contract Dollars ($)	
Total Contract Dollars ($) w/ SA Clauses	
Percent of Contract Dollars w/ SA Clauses	

iii) **Biobased Product Purchase and Targets (# of actions): FY19: _____; FY20: _____**
   If estimated data is available for FY20, please provide the number of actions, as it will assist SPO with setting biobased targets for FY20, which is required by OMB and CEQ.

Category	Definition from FPDS Sustainability Report	Alignment with DEAR Clauses
Recycled	"FAR 52.223-4" + "FAR 52.223.4 & FAR 52.223-9"	DEAR 970.5223-7
Energy Efficient (EE)	"Energy Efficient"	DEAR 970.5223-7
Biobased	"Biobased"	DEAR 970.5223-7
Multi-Statutory	"FAR 52.223-4 & Energy Efficient" + "FAR 52.223-4 & Biobased" + "FAR 52.223-4 & Biobased & Energy Efficient"	DEAR 970.5223-7

Environmentally Preferable (EPP)	"Environmentally Preferable"	DEAR 970.5223-7
Statutory+	"FAR 52.223-4 & Environmentally Preferable" + "FAR 52.223-4 & Biobased & Environmentally Preferable" + "FAR 52.223-4 & Biobased & Energy Efficient & Environmentally Preferable"	DEAR 970.5223-7

For more information, visit the following: Federal Acquisition Regulation Site; DEAR 970.5223-7

The FY 2019 Sustainable Acquisition Progress tables are based on the collection method from FPDS and OMB's scorecard, and the key (above), defines each category with a crosswalk between the Federal Acquisition Regulation (FAR) Clauses and the DOE Acquisition Regulations (DEAR) Clauses.

Sustainable Acquisition Strategies

a. Describe your site's efforts to maximize acquisition of sustainable products. Sustainable acquisition includes procurement of energy efficient (ENERGY STAR or FEMP-designated); water efficient (WaterSense); biobased (USDA BioPreferred); environmentally preferable (supports sustainability goals such as EPEAT-registered products for Electronic Stewardship); non-ozone depleting (Significant New Alternative Policy) chemicals or other alternatives to ozone-depleting substances and high global warming potential hydrofluorocarbons; recycled content, including paper containing 30% post-consumer fiber; non-toxic or less toxic alternatives products (Safer Choice labeled); and fuel efficient products and services (SmartWay Transport partners and SmartWay products).

b. Detail your site's efforts to include BioPreferred and biobased provisions or clauses in eligible contract actions and how you track the procurement of biobased products.

c. Describe your site's plans to review and implement EPA's recommendations for specifications, labels, and standards that designate environmentally preferable products and services.

Measures, Funding, & Training

This category should describe efforts to implement identified Efficiency & Conservation Measures (ECM) through appropriations, performance contracts, or other funding mechanisms, and discuss provided sustainability-related training or education for employees. Moreover, use this section to highlight ECMs and additional funding needed beyond planned activities and typical operation costs for meeting the goal. The following Dashboard pages are relevant to the Measures, Funding, & Training Category:

• Efficiency & Conservation Measures • Appropriations/Direct Obligations	• Training & Education

Efficiency & Conservation Measures

a. Ensure Dashboard data for this section is accurate and up to date. If a measure is no longer viable, please change the status to cancel. The information on measures is used for reporting EISA §432 compliance. OMB and CEQ review EISA§432 compliance ECM data annually and have updated the agency scorecard to include progress on ECM implementation as a progress indicator. Sites and programs integrate this data with their budget process. SPO is having discussions with programs on how best to implement and integrate sustainability related ECMs with the budget process.

b. Describe your site's strategies and tools for prioritizing and implementing measures (i.e. Life-Cycle Cost Analysis).
c. Discuss M&V efforts of implemented measures and be sure to report findings in the Dashboard.
    - DOE encourages M&V of implemented measures and projects. However, it is understood that it may not be cost-effective to perform continuous M&V on all measures.
    - Only projects that are financed under an ESPC have a statutory requirement to conduct M&V, but best practices suggest that cost-effective M&V be considered in any contracting mechanism.
d. Explain obstacles, other than limited budget for implementing projects such as low utility costs or high security costs.
e. Do you have an internal tracking or funding mechanism for using energy saving for financing additional measures?

Performance Contracts

f. Summarize how private financing is integrated and considered as part of site project planning and budget formulation activities.
g. Characterize and provide examples of efforts to leverage alternative financing such as ENABLE, ESPC, Utility Energy Service Contracts (UESC), and Power Purchase Agreements (PPA).
h. Identify specific resources or support needed to increase the implementation of ESPCs, Utility Energy Service Contracts, or ENABLE.
i. Describe the site's approach for evaluating project potential, noting projects that have been evaluated (and either awarded or not awarded) in the past 5 years. Please indicate if no projects have been considered in the past 5 years and if your site is considering them for the future.
j. If applicable, identify the most significant barriers to implementing performance contracting at your site (i.e. cost of providing security, ESCO accessibility of secure areas).
k. If applicable, describe any challenges to using alternative finance vehicles and provide recommended solutions.

Appropriations/Direct Obligations

a. Provide all FY appropriations and direct obligations for facility efficiency improvements, including facility surveys/evaluations. These are obligations for energy and/or water efficiency incurred from appropriated funds, revolving fund accounts including Saving Reinvestment Programs, or other accounts. This data set is included in the FEMP Workbook and the OMB Scorecard and must be updated annually. If you are unable to provide this information, please explain.
b. Characterize and provide examples of efforts to integrate long-term sustainability goals into the budget process. This should include descriptions of the following:
    1. Site's overall funding strategy and prioritization methodology
    2. Savings reinvestment programs (SRP)
    3. Third party financing opportunities

Note: DOE Order 436.1 mandates that sites reinvest verified monetary savings from sustainability projects in new sustainability projects, consistent with federal regulations, 42 USC 8256 (e), and DOE guidance, DOE Financial Management Handbook, Chapter 15. SPO is working on compiling guidance and a case study for SRP implementation to assist sites with creating their methodology for reinvestment.

a. Describe efforts to ensure facility energy managers can demonstrate core competencies for facility managers as identified by the General Services Administration (GSA) per the Federal Buildings Personnel Training Act of 2010 (FBPTA).

Travel & Commute

This category should include all information pertaining to your site's business travel and commute data, including participation in regional and local planning. The following Dashboard pages are relevant to the Travel & Commute Category:

• Air Travel • Ground Travel	• Commute

Business Travel Strategies

a. Discuss policies and/or programs to reduce business travel including teleconferencing/video conferencing and outfitting conference rooms with video or collaboration equipment.

Commute Strategies

b. Describe policies and/or programs that promote carpooling, vanpooling, use of public/mass transit, telework, hoteling, electric vehicle use, and/or alternative work schedules
c. Describe any rideshare, campus bike share, transit subsidy programs, park and ride systems, or preferred parking for car/van pools, electric vehicles or hybrids.
d. Discuss existing or plans for new electric vehicle charging stations for fleet and workplace reimbursable charging.
e. Describe any strategies to engage employees through commuter awareness recognition or rewards programs. Describe strategies to increase communication about reducing single occupancy vehicles.
f. For employee commuting, provide a description of the methodology used for gathering information. If a survey was used, provide a copy. If a survey is not used, please describe any barriers to conducting a commuter survey. Include an estimate of commuter/employee contribution to site GHG emissions.
g. Discuss site participation in regional transportation planning, recognition of existing community transportation infrastructure, and incorporation of such efforts into site policy and guidance documents.

Fugitives & Refrigerants

This section should focus on all fugitive emissions or refrigerants used at the site and any efforts (current and/or planned) to reduce or minimize GHG emissions (along with identifying any related challenges or opportunities). The following Dashboard page is relevant to the Fugitives & Refrigerants Category:

• Fugitives and Refrigerants

Fugitives & Refrigerants Strategies

a. Discuss current FY fugitive emissions, plans to reduce emissions, and/or expected increases along with net impact. Please note that all fugitives and refrigerants are required to be reported regardless of usage amount.
b. Specifically for sulfur hexafluoride (SF_6), discuss inventory management, monitoring, and control techniques, capture systems and storage equipment, leak detection and repair, preventive maintenance programs used to minimize releases, and any site plans/efforts to further reduce SF_6 use or emissions.
c. Identify alternatives that are being considered/tested to replace SF6.
d. Identify new program requirements that may increase the use of SF6.

Electronics Stewardship

This category should focus on the acquisition, operations and management, and disposal techniques of all electronics reported on in the Dashboard. It is also suggested that sites with data centers include details on their efforts to consolidate and optimize their data centers. The following Dashboard pages are relevant to the Electronic Stewardship Category:

• Electronics Acquisition • Electronics Operations	• Electronics End-of-Life

Acquisition Strategies

a. Discuss fiscal year's electronics purchases and break down of EPEAT-registered and ENERGY STAR certified acquisitions.
b. Describe policies and procedures that require and ensure acquisition of EPEAT-registered and ENERGY STAR certified electronic office products when procuring electronics in eligible product categories.
c. Describe barriers your site faces in procuring EPEAT registered electronics.

Note: Sites should continue to report their EPEAT-registered and ENERGY STAR certified acquisitions in the Dashboard.

Operations Strategies

a. Describe policies and procedures that require and ensure the enabling of ENERGY STAR power management features (i.e. sleep, standby, hibernate) on all eligible electronic products (i.e. computer desktops, laptops, and displays).
   • Individual electronics can be exempt from the power management goal if they are used for mission critical functions, such as site security or uninterruptable laboratory experiments. Describe policies and procedures for granting and tracking exemptions to power management.
   • If power management has not been fully implemented, discuss plans on how the requirement will be met along with estimated date of compliance.
b. Describe policies and procedures that require and ensure the enabling of automatic duplexing (print jobs double-sided by default) is enabled on all eligible electronic products (i.e. computers, printers, scanners multifunction/all-in-one devices, fax machines).

- End users may be given the option to manually select single-sided printing for individual jobs, either on their computers or on individual imaging equipment.
- Individual electronics can be exempt from automatic duplexing if they are incapable of automatic double-sided printing, or the equipment is primarily used for print and copy jobs which are required to be single-sided. Describe policies and procedures for granting and tracking exemptions to automatic duplexing.
- If automatic duplexing has not been fully implemented, discuss plans on how the requirement will be met along with estimated data of compliance.

End of Life Strategies

a. Describe policies and procedures that require and ensure used electronic assets are disposed through required environmentally sound disposition practices: reuse and donation through GSAXcess; donation through GSA's Computer for Learning (CFL) program or to other eligible State and non-profit organizations; recycling through Federal operations such as UNICOR or USPS BlueEarth; and/or recycling through a private recycler certified under the Responsible Recycling (R2) program or the e-Stewards® program.

Data Center Strategies

a. Describe your site's strategy for data center consolidation and optimization.
- Consolidation activities may include work migration and closure of large, inefficient data centers; migration of work to cloud service providers; and work migration and closure of server rooms and closets. Your strategy may include shared service by working with other data centers on space and power.
- Optimization activities may include meter installation; data center infrastructure management systems (DCIM); efforts to improve energy and water efficiency of data centers equipment and supporting infrastructure; improving server utilization and utilizing virtualization; and elimination of underutilized servers. Also leveraging application rationalization could reduce or eliminate duplicate applications.
b. If applicable, describe your site's strategy for ensuring energy and water efficiency in HPC data centers and exascale operations.

SPO is partnering with OCIO, AU-21, and FEMP to improve data center efficiency. Data center energy use and savings will be reported in accordance with OMB guidance and instructions to agency CIOs. The Update to Data Center Optimization Initiative (DCOI) Memo, M-19-19, released in June 2019, establishes a new DCOI, which replaces the previous DCOI articulated in OMB Memorandum M-16-19, Data Center Optimization Initiative Memorandum (August 1, 2016). This memo "establishes consolidation and optimization targets and metrics for Federal agencies, as well as requirements for reporting on their progress."

Resilience

Per the Implementing Instructions for Executive Order (E.O.) 13834, agencies shall "enhance the resilience of Federal infrastructure and operations, and enable more effective accomplishment of its mission",[6] when implementing the policies to improve energy performance and consider environmental factors in resilience planning. This category should focus on all resilience-related topics as described below. Resilience is the ability of an agency to adapt to changing conditions, and withstand or recover from disruption. Resilience efforts help sites manage risks to DOE assets, infrastructure, and operations. The following Dashboard page is relevant to the Resilience Category:

- Resilience Questionnaire

Resilience Strategies

a. Discuss plans to conduct a detailed, site-specific risk/vulnerability assessment to identify threats and hazards that could adversely affect mission, programs, plans, operations, and personnel. If an assessment has been conducted within 5 years, sites are only required to provide an update in the dashboard if any changes are made to the plan.
b. Describe resiliency plans for infrastructure and systems that would provide adequate energy and water supplies, facility operations, information and communication technology capability, and transportation availability when needed. For instance, sites should maintain mobile assets that can adapt to changing conditions and assist with mobilizing resources to meet their mission. Include interdependencies when appropriate (i.e. black start capability).
c. Describe proactive measures during the previous fiscal year that revised, enhanced, or modernized emergency response procedures. Discuss the integration of emergency response procedures with resilience measures at the site.

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[6] Implementing instructions for E.O. 13834, *Efficient Federal Operations,* April 2019, https://www.sustainability.gov/pdfs/eo13834_instructions.pdf

Appendix A – Reporting Schedule

The schedule for DOE databases and reports pertinent to DOE sustainability goals is presented below. These databases and reports are considered to be the official, exclusive sources of DOE sustainability data. Moreover, as this information is used for Congressional and Office of Management and Budget (OMB) reporting, it is important to ensure the accuracy of database entries. The timely data input and closing of these reports and databases is important in meeting Departmental reporting requirements. For each database or report, the closing or reporting deadline is highlighted.

- FIMS: Collects real property attributes and use. The database also stores data on buildings that have been assessed or are planned to be assessed against the HPSB goals. *Please note that information on facility status in regard to the energy intensity reduction goal is collected in the Dashboard.*
- FAST: Collects Federal fleet fuel use, vehicle inventory, and vehicle acquisitions data and projections.
- Environmental Management System (EMS) Status Reporting (on FedCenter): Collects information on status of EMSs.
- Integrated Data Collection (IDC) process: DCOI reporting is conducted through the IDC. Coordinate with site and headquarters Office of the Chief Information Officer (OCIO) points of contact.
- CTS: Collects evaluation progress on covered facilities, implemented measures, project savings, and cost information, measurement and verification results of implemented measures and projects, and benchmarking results.

Table A.1 – Sustainability Dashboard

Date(s)	Action/Event
March 4, 2019	Dashboard opened for FY 2019 data entry.
September 30, 2019 to December 5, 2019	SPO to QA/QC data and work with sites to finalize FY 2019 data for December 6th data entry closing of Dashboard.
October 7, 2019	End of year Dashboard facility basic FIMS information update.
October 25, 2019	Sustainable Building page locked for data entry until February/March 2020. All updates must be completed before this date.
November 15, 2019	Final FY 2019 Federal employee travel data uploaded to Dashboard.
November 20, 2019	Preliminary FY 2019 fleet data uploaded to Dashboard.
November 22, 2019	FY 2019 Dashboard data and Excluded Buildings Self-Certification are due with appropriate level(s) of approval. If not using the Dashboard approval process be sure to upload a completed Dashboard Data Accuracy Self-Certification.
December 6, 2019	FY 2020 SSP narrative and optional Plan Signature Document are due with appropriate level(s) of approval. Dashboard closes for FY 2020 SSP entry.
December 27, 2019	Dashboard snapshot for OMB/CEQ/FEMP annual reporting.
February 21, 2020	Final FY 2019 fleet data uploaded to Dashboard.

Table A.2 - Facilities Information Management System (FIMS)

Date(s)	Action/Event
August 1, 2019	Begin input of FY 2019 Repair Needs, Deferred Maintenance, Modernization Cost, and Uniformat II Repair Needs values. If necessary also update the following: 1. Inspection Date 2. Statue 3. Size 4. Excess Indicator 5. Excess Date 6. Overall Asset Condition 7. Functionality Assessment Date 8. Sustainability 9. Replacement Plant Value 10. RPV Factor 11. RPV Model
September 23, 2019 to November 4, 2019	FIMS data entry will be locked for the following fields: 1. Repair Needs 2. Deferred Maintenance 3. Modernization Cost 4. Uniformat II Repair Needs 5. Excess Indicator 6. Excess Date 7. Size 8. Replacement Plant Value 9. RPV Factor 10. RPV Model 11. Sustainability (will not be unlocked until mid-January 2020)
September 23, 2019	Begin input of FY 2019 Actual Maintenance and Operating Cost.
November 4, 2019	Conclusion of all FY 2019 data element updates. FY 2019 year-end HQ Snapshot.
December 15, 2019	Federal Real Property Profile (FRPP) Reporting Deadline.

Table A.3 - Federal Automotive Statistical Tool (FAST)

Date(s)	Action/Event
June 1, 2019 to June 30, 2019	Enter EPACT Section 701 waivers and EISA Section 246 fueling center data information.
August 1, 2019 to August 31, 2019	OMB Circular A-11 data call for fleet budget submission.
October 1, 2019	FAST opens for FY 2019 data entry of actual inventory, disposal, cost, fuel, and mileage along with future acquisition, disposal, and cost projections.
January 17, 2020	FAST closes for FY 2019 data entry.
January 20, 2020 to February 7, 2020	FAST FY 2019 data is reviewed for inconsistencies by NNSA and DOE's Federal Fleet Managers.
February 14, 2020	FAST FY 2019 Snapshot.

Table A.4 - Environmental Management System Reporting (EMS)

Date(s)	Action/Event
December 2019	FedCenter opens for FY 2019 data entry.
January 2020	FedCenter closes for FY 2019 data entry.

Table A.5 - EISA Section 432 Compliance Tracking System (CTS)

Date(s)	Action/Event
Monthly	On a monthly basis: 1. Benchmark with EPA Energy Star Portfolio Manager and upload to CTS. 2. Upload implemented projects.
December 27, 2019	SPO export shared Portfolio Manager benchmarking to CTS for weather adjustment EUI credit.
March 16, 2020	SPO uploads "covered" facility characteristic – square footage, energy usage, water usage. SPO export shared Portfolio Manager benchmarking to CTS.
June 22, 2020	All required EISA Section 432 information due to SPO for review.
June 29, 2020	Deadline for EISA Section 432 evaluation, implemented project, M&V findings, and benchmarking reporting for mid-year OMB Scorecard snapshot.

Appendix B – Dashboard Data Accuracy Self-Certification

This appendix provides a template for self-certifying the FY 2019 data entered in the Dashboard.

The Dashboard has an approval process built into the system, allowing site managers and headquarters (HQ) program officials to certify the accuracy and completeness of the data submission. If certifying the data though the Dashboard approval process is a burden based on site characteristics, Dashboard familiarity, or other challenges, sites or programs may verify Dashboard data submission with this self-certification letter. The self-certification letter is meant to confirm the integrity of the data submitted. The signed self-certification letter can be downloaded from the Dashboard's Completion Status Module, signed, uploaded to the Dashboard. A sample copy is also provided below.

DOE SUSTAINBILITY DASHBOARD DATA
SELF-CERTIFICATION FORM
FY 2019

FROM: Name of DOE Site, Lead Program Office

TO: Sustainability Performance Office

DATE: MM/DD/YYYY

SUBJECT: SELF-CERTIFICATION FORM FOR DASHBOARD DATA ACCURACY VERIFICATION

The Department of Energy (DOE) annually reports the agency's compliance with sustainability requirements including greenhouse gas emissions, energy and water use, fleet optimization, sustainable buildings, and renewable energy as mandated by EISA §527 (42 USC 17143) and DOE Order 436.1, *Departmental Sustainability* Directive.

I certify that the data submitted for FY 2019 through the Dashboard as of (Insert Date) for (Name of DOE Site) has been accurately entered and completed to the best of my knowledge and expertise.

_____
DOE Site Office Official – Printed Name

_____
DOE Site Office Official – Signature

_____
Date

Contact Information:
First, Last Name
Title
Phone: (000) 000-0000
Email: abc@de.fgh

Appendix C – Excluded Buildings Self-Certification Process

This appendix provides guidance and a template for self-certification of the FY 2019 Excluded Buildings List, which is included in the *Annual Energy Report* to Congress.

Background: FEMP provides general guidance for identifying buildings that are to be excluded from the calculation of energy intensity for meeting the energy intensity reductions goals established by the Energy Independence and Security Act of 2007. Sites identify such buildings in the Dashboard by assigning the square footage portion of such buildings as excluded in the Facility Goal Category module. Sites are to classify such buildings in the Dashboard by November 22nd, 2019.

Self-Certification: Once adjustments to exclusions have been completed in the Dashboard's Facility Goal Category module, each site manager should download a copy of their EUI Excluded Facilities report from the Standard Report module and upload the report along with a signed Self-Certification letter to the Completion Status module by November 22nd, 2019.

The Self-Certification by the DOE Site Office serves as documentation to DOE that the site management agrees that the buildings listed on the EUI Excluded Facilities report meet the qualifications to be excluded from the calculation of energy intensity for the fiscal year. Please note this excluded data should still be reported under Target Excluded Buildings as total energy consumption (MMBtu).

The following pages provide definition for the various exclusion parts, a sample self-certification statement, and answers to some frequently asked questions.

Definitions of Exclusions Allowed Under the Energy Intensity Reduction Goal
PART B through PART H

PART B

   __   Building or group of buildings is privately owned and privately occupied but happen to be co-located on Federal lands or military installations. (Privately owned buildings listed in FIMS will not be excluded in this Part.)

PART C

   __   Building or group of buildings that have Fully-Serviced Leases.

PART D

   __   Building or group of buildings is/are structures such as outside parking garages which consume essentially only lighting energy, yet are classified or categorized as buildings.

PART E

   __   Building or group of buildings [that] have energy usage that is skewed significantly due to reasons such as: buildings entering or leaving the inventory during the year, buildings down-scaled operationally to prepare for decontamination, decommissioning and disposal, and buildings undergoing major renovation and/or major asbestos removal.

PART F

   __   Building or group of buildings is/are leased space(s) where the Government may pay for some energy but not all, the space comprises only part of a building, or the expiration date of the lease limits the ability to undertake energy conservation measures.

PART G   (BOTH statements in this part must be met for exclusion G)

   __   Building or group of buildings is/are separately-metered energy-intensive loads that are driven by mission and operational requirements, not necessarily buildings, and not influenced by conventional building energy conservation measures.

         AND

   __   Building or group of buildings is/are metered for energy consumption and their consumption will be reported annually.

PART H   (BOTH statements in this part must be met for exclusion H)

   __   Building or group of buildings can demonstrate four critical findings at the excluded building(s): 1) Energy requirements are impracticable; 2) All Federally required energy management reports have been completed and submitted; 3) Achieved compliance with all energy efficiency requirements; *and* 4) Implementation of all practicable, life cycle cost-effective projects.

         AND

   __   Building or group of buildings is/are metered for energy consumption and their consumption will be reported annually.

DOE BUILDING EXCLUSION
SELF-CERTIFICATION FORM
FY 2019

FROM: Name of DOE Site, Program Office Landlord

TO: Sustainability Performance Office

DATE: MM/DD/YYYY

SUBJECT: SELF-CERTIFICATION FORM FOR THE ENERGY INTENSITY GOAL OF EISA 2007

Each buildings or group of buildings excluded under the criteria for a Part G or Part H exclusion is/are metered for energy consumption and their consumption is reported annually.

If any building has been excluded under the criteria for Part H for impracticability then all practicable energy and water conservation measures with a payback of less than 10 years have been installed. A justification statement that explains why process-dedicated energy in the facility may impact the ability to meet the goal has been provided in the Dashboard's EUI Excluded Facilities report.

I certify that the buildings listed on the EUI Excluded Facilities report produced by the Dashboard as dated (Insert Date) for (Insert Name of DOE Site) meet the exclusion criteria in *Guidelines Establishing Criteria for Excluding Buildings* published by FEMP on January 27, 2006.

_____
DOE Site Office Official – Printed Name

_____
DOE Site Office Official – Signature

_____
Date

Contact Information:
First, Last Name
Title
Phone: (000) 000-0000
Email: abc@de.fgh

Frequently Asked Questions for PART G and PART H

The following section lists frequently asked questions regarding the use of Parts G and H for excluding facilities. It is assumed that the reader is already familiar with *Guidelines Establishing Criteria for Excluding Buildings from the Energy Performance Requirements of Section 543 of the National Energy Conservation Policy Act as Amended by the Energy Policy Act of 2005*[7].

PART G

Part G applies to exclusions for separately metered loads within a building or a group of buildings. These process loads should be driven by mission and operational requirements. Such loads should not be influenced by conventional building energy conservation measures.

Q. I have a meter that exclusively measures energy use of a process load driven by mission and operational requirements. However, there are other spaces in the process load vicinity that are not metered. How should I account for the energy use of these spaces?

A. If a mission and operational driven process load is metered exclusively, this energy usage may be excluded. However, if there are areas in the process load vicinity that are not metered and have a non-process load, neither the load nor the related square footage can be excluded. Federal mandates from which Part G is derived only allow for process loads to be excluded if they are separately metered. Loads not metered may not be excluded under Part G.

Q. My meter collects data for an entire building, within which there is a process load driven by mission and operational requirements. The area of the process is less than the area of the entire building. Can I exclude the entire building?

A. No. If the area of a building supporting the process loads is less than that of the entire building, while the energy metering is for the entire building, then the building may not be excluded under Part G because the load is not separately metered. If there are parts of the building used for general administration, warehousing, or some other purpose not directly associated with the load (and not separately metered) then the Part G exclusion does not apply. Only when the process load is separately metered can it be excluded. Part H should be considered for justification for exclusion instead.

Q. I have a meter that measures a process load, such as a particle accelerator, but also includes a nominal amount of conventional but process-related loads, such as the lighting and space conditioning of the particle accelerator building. Can I exclude both the process load and the nominal load?

A. Yes. If the separately metered load includes both the process load and a nominal amount of process-related lighting and space conditioning energy, then both the metered energy and square footage may be excluded.

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[7] https://energy.gov/sites/prod/files/2013/10/f3/exclusion_criteria.pdf

PART H

The four critical findings are based on the Guidelines above.

Q. Do the four critical findings in Part H apply to the exclusion of separately metered process loads under Part G or the other parts?

A. No. The four critical findings necessary under Part H do not apply to exclusions of separately-metered process loads under Part G or any of the other parts.

Q. How should I justify an exclusion under the "impracticable" critical finding?

A. In applying the exclusion of impracticability based on energy intensiveness, the site must demonstrate using standard energy engineering techniques that an overwhelming proportion of the building energy usage is process dedicated energy and that efficiency measures are not practicable because they would significantly impact mission requirements or would not be life-cycle cost effective. If a building is excluded under Part H Exclusion the justification must describe how the load is mission related and how it meets operations requirements. If process loads are not separately metered, sites can exclude the entire building. However, building level metering is required. Allocation algorithms and modeling should not be used to determine the amount of energy being used by the building.

Q. How do audits needed for Part H differ from the audits required under the Energy Independence and Security Act (EISA) of 2007?

A. The requirements come from different statutes. EISA requires that facilities amounting to 75% of a site's energy use be audited every four years. Part H is derived from Sections 543 and 548(a) of the National Energy Conservation Policy Act (NECPA) as amended by the Energy Policy Act of 2005. To qualify for the fourth critical finding, a site may include an energy audit conducted within the last five years per NECPA identifying no potential cost-effective energy efficiency measures or a list of energy efficiency measures implemented in cases where an energy audit does identify potential measures. Accordingly, if a building continuously uses Part H exclusions, it should be audited at least every five years. In addition, sites may use the audits required in EISA to also fulfill audit requirements for Part H.

NOTE: Definition of Metered Data. Metered data means that energy is directly or indirectly measured at least annually and that estimations to determine energy usage are not used. (If only part of the process load is measured, then only that part of the energy usage can be excluded.)

Appendix D – Verification Data Request

DOE's greenhouse gas (GHG) inventory must be verified and subsequently certified by the agency Chief Sustainability Officer prior to submission to OMB/CEQ. To aid in certifying the data, a second-party verification team will be assembled to conduct an audit that compares reported data with source records while evaluating overall data collection methodologies.

Site-specific documentation may consist of invoices, inventory records, or other records that correlate to totals reported through site Dashboard submissions. All requested documentation should be traceable to reported totals with a clearly documented crosswalk and may be accompanied by documented assumptions, calculations (including material balances associated with fugitive emissions), and data tabulation resulting in reported data.

Additionally, the following items are also requested:
- Documented policies and procedures addressing data gathering and reporting, and associated Quality Assurance/Quality Control.
- Documentation of the site's Environmental Management System (EMS), if elements of GHG inventory related procedures are already incorporated.

Selected sites will be notified in early October. If your site is selected, please ensure the requested data is submitted to SPO along with Dashboard data by November 22nd, 2019.

Appendix E – Executive Summary Table

The following is a template for the executive summary table should you elect to not report in the Dashboard. Complete the blank fields in the table below using previous plans for anticipated performance towards DOE targets as a guide. Please note, performance and plans should be quantified when possible, and there is a 100 word limit per blank field.

Prior DOE Goal	Current Performance Status	2 Year Performance & Plans	5 Year Performance & Plans	10 Year Performance & Plans
Energy Management				
30% energy intensity (Btu per gross square foot) reduction in goal-subject buildings by FY 2015 from a FY 2003 baseline and 1.0% YOY thereafter.				
EISA Section 432 continuous (4-year cycle) energy and water evaluations.				
Meter all individual buildings for electricity, natural gas, steam and water, where cost-effective and appropriate.				
Water Management				
20% potable water intensity (Gal per gross square foot) reduction by FY 2015 from a FY 2007 baseline and 0.5% YOY thereafter.				
Non-potable freshwater consumption (Gal) reduction of industrial, landscaping, and agricultural (ILA). YOY reduction; no set target.				
Waste Management				
Reduce at least 50% of non-hazardous solid waste, excluding construction and demolition debris, sent to treatment and disposal facilities.				
Reduce construction and demolition materials and debris sent to treatment and disposal facilities. YOY reduction; no set target.				
Fleet Management				
20% reduction in annual petroleum consumption by FY 2015 relative to a FY 2005				

Prior DOE Goal	Current Performance Status	2 Year Performance & Plans	5 Year Performance & Plans	10 Year Performance & Plans
baseline and 2.0 % YOY thereafter.				
10% increase in annual alternative fuel consumption by FY 2015 relative to a FY 2005 baseline; maintain 10% increase thereafter.				
75% of light duty vehicle acquisitions must consist of alternative fuel vehicles (AFV).				
Clean & Renewable Energy				
"Renewable Electric Energy" requires that renewable electric energy account for not less than 7.5% of a total agency electric consumption by FY 2013 and each year thereafter.				
Continue to increase non-electric thermal usage. YOY increase; no set target but an indicator in the OMB scorecard.				
Green Buildings				
At least 15% (by count) of owned existing buildings to be compliant with the *revised* Guiding Principles for HPSB by FY 2020, with annual progress thereafter.				
Net Zero Buildings: All new buildings (>5,000 GSF) entering the planning process designed to achieve energy net-zero beginning in FY 2020.				
Increase regional and local planning coordination and involvement.				
Acquisition & Procurement				
Promote sustainable acquisition and procurement to the maximum extent practicable, ensuring BioPreferred and biobased provisions and clauses are included in all applicable contracts.				
Measures, Funding, & Training				
Annual targets for sustainability investment with appropriated funds and/or financed contracts to				

Prior DOE Goal	Current Performance Status	2 Year Performance & Plans	5 Year Performance & Plans	10 Year Performance & Plans
be implemented in FY 2019 and annually thereafter.				
Electronic Stewardship				
Purchases: 95% of eligible acquisitions each year are EPEAT-registered products.				
Power management: 100% of eligible PCs, laptops, and monitors have power management enabled.				
Automatic duplexing: 100% of eligible computers and imaging equipment have automatic duplexing enabled.				
End of Life: 100% of used electronics are reused or recycled using environmentally sound disposition options each year.				
Data Center Efficiency: Establish a power usage effectiveness target for new and existing data centers; discuss efforts to meet targets.				
Organizational Resilience				
Discuss overall integration of climate resilience in emergency response, workforce, and operations procedures and protocols.				
Multiple Categories				
YOY scope 1 & 2 GHG emissions reduction from a FY 2008 baseline.				
YOY scope 3 GHG emissions reduction from a FY 2008 baseline.				

Appendix F – E.O. 13834 and Statutory Crosswalk

The following provides a crosswalk of the changes related to sustainability for E.O. 13834, and sites should strive to achieve or maintain the SRIP Targets (*shown below*).

Goal Category	E.O. 13834	Changes from Old EO 13693	SRIP Targets	Statute(s)
All Categories	Sec. 1. Policy. The Congress has enacted a wide range of statutory requirements related to energy and environmental performance of executive departments and agencies (agencies), including with respect to facilities, vehicles, and overall operations. It is the policy of the United States that agencies shall meet such statutory requirements in a manner that increases efficiency, optimizes performance, eliminates unnecessary use of resources, and protects the environment. In implementing this policy, each agency shall prioritize actions that reduce waste, cut costs, enhance the resilience of Federal infrastructure and operations, and enable more effective accomplishment of its mission.	Agencies will set annual targets for all goal categories, unless otherwise specified. *See the Sustainability Dashboard's Resources page to view the EO 13834 crosswalk presentation.*	N/A	Find a list of statutes and more detailed crosswalk on the Dashboard Resources page.
Energy Management	Sec. 2. (a) Achieve and maintain annual reductions in building energy use and implement energy efficiency measures that reduce costs;	Reverts back to statute: 25% by FY 2025 from FY 2015 reverts back to achieving 30% from FY 2003 baseline and annual reductions. Statute still has zero fossil fuel requirement for new and major renovations. Agencies to set annual targets through FY 2025.	FY 18: -38.2% from FY 03; -1.2% from FY 17 FY 19: -1.0% from FY 18 FY 20: -1.0% from FY 19	*30% reduction in energy consumption per gross square foot in goal-subject buildings by FY 2015 from a FY 2003 baseline (42 USC §8253). §8253(b)(1) "each agency shall, to the maximum extent practicable, install in Federal buildings owned by the United States all energy and water conservation measures with payback periods of less than 10 years."*
Renewable Energy	Sec. 2. (b) Meet statutory requirements relating to the consumption of renewable energy and electricity;	Reverts back to statute: 7.5% of total agency electric consumption from renewable sources. No thermal energy target but still receive credit towards EUI and GHG reductions AND is an indicator on Scorecard. Service Year Limits for Purchase Of Green Energy & RECs changes from 10 years to 15 years.	FY 18: 19.3% of total electric consumption from on-site RE with bonus credits (30.5% with RECs) FY 19: 7.5% FY 20: 7.5%	*By FY 2013 and each year thereafter, use 7.5% renewable electricity as a percentage of overall facility electricity use (42 USC §15852).*
Water Management	Sec. 2. (c) Reduce potable and non-potable water consumption, and comply with stormwater management requirements;	36% potable water reduction by FY 2025 reverts to 20% reduction relative to FY 2007, as set in E.O. 13423, and demonstrates annual progress for	FY 18: -32.4% from FY 07; -2.9% from FY 17 FY 19: -0.5% from FY 18 FY 20: -0.5% from FY 19	*Statute encourages water conservation (42 USC §6834 and 42 USC §8253) and establishes stormwater runoff*

		each fiscal year. Clarifies exclusion with more information forthcoming in updated guidance. Non-potable, mainly ILA water, consumption to be reduced but no set targets. Net-zero water should be considered a strategy for water reduction.		*requirements (42 USC §17094).*
Performance Contracting	Sec. 2. (d) Utilize performance contracting to achieve energy, water, building modernization, and infrastructure goals;	Agencies set annual targets for number of awarded contracts and the investment value each fiscal year.	FY 18: $44.8 M / 1 project awarded FY 19: $0 / 0 projects anticipated FY 20: 1 project anticipated	*Statute provides authority to enter into contracts (42 USC §8287).*
EISA S432	Sec. 2. (h) Track and, as required by section 7(b) of this order, report on energy management activities, performance improvements, cost reductions, greenhouse gas emissions, energy and water savings, and other appropriate performance measures. *Objective: Continuous improvement of assets by ensuring DOE is complaint with statutory requirements;*	EISA S432 evaluations compliance now measured on Scorecard Flexibility in benchmarking tools.	N/A	*The statute states, "all sectors of our Nation's economy must begin immediately to significantly reduce the demand for nonrenewable energy resources such as oil and natural gas by implementing and maintaining effective conservation measures for the efficient use of these and other energy sources" (42 USC §8253).*
Sustainable Buildings	Sec. 2. (e) Ensure that new construction and major renovations conform to applicable building energy efficiency requirements and sustainable design principles; consider building efficiency when renewing or entering into leases; implement space utilization and optimization practices; and annually assess and report on building conformance to sustainability metrics;	At least 15 % of buildings or GSF qualifying as sustainable; and annual progress (either buildings or GSF). Threshold for buildings applicable to the goal increased from 5,000 GSF to 10,000 GSF with credit provided for compliant buildings below 10,000 GSF.	FY 18: 214 sustainable Federal buildings, 12.8% of buildings / 10.5% of gross square footage (GSF) FY 19: 15% of (GSF or buildings) FY 20: 15% of (GSF or buildings)	*High-performance sustainable federal buildings are based on 42 USC §6834, 42 USC §8253, 42 USC 8254, and 42 USC §17091 to §17094.*
Waste Management	Sec. 2. (f) Implement waste prevention and recycling measures and comply with all Federal requirements with regard to solid, hazardous, and toxic waste management and disposal;	Metrics changed to: Tons of non-hazardous solid waste generated; and % of non-hazardous solid waste sent to treatment and disposal facilities. Non-hazardous construction and demolition waste to be tracked and reported in SRIP. Net-zero waste should be considered a strategy for waste reduction.	FY 18: 46,166.6 metric tons of non-hazardous solid waste generated (not including construction & demolition waste); 35.4% sent to treatment and disposal facilities FY 19 & FY 20 – will strive for an annual reduction in waste sent to landfill of at least 0.5 percent per year.	*The statute outlines that, "wherever feasible, the generation of hazardous waste is to be reduced or eliminated as expeditiously as possible," and "waste that is nevertheless generated should be treated, stored, or disposed of so as to minimize the present and future threat to human health and the environment" (42 USC §6902). See also 42 USC§ 6901 to §6992; 42 USC §11001 to §11050; 42 USC §13101.*
Acquisition & Procurement	Sec. 2 (g) Acquire, use, and dispose of products and services, including electronics, in accordance with statutory mandates for purchasing preference, Federal Acquisition Regulation requirements, and other applicable Federal procurement policies;	FPDS now the official reporting system, is no longer performing manual bi-annual contract reviews. Option to propose alternative collection methodology for agencies whose FPDS data is not the full picture (such as DOE).	FY 18: 16.3% of contract actions and 56.4% of obligations (in dollars), for a total of $17.8 billion in contract actions with statutory environmental requirements FY 19 & FY 20 – will continue to track and make improvements.	*Federal procurement of biobased products (7 USC §8102), products with recycled content (42 USC 6962), energy efficient products and products with low standby power (42 USC 8259b, 42 USC 6361), non-*

		Agencies to set targets for number of contract actions/dollars with sustainability clauses AND number of contract actions/dollars with biobased clauses.	Targets: TBD	*ozone depleting (42 USC 7671I.).*
Electronics Stewardship	Sec. 2 (g) Acquire, use, and dispose of products and services, including electronics, in accordance with statutory mandates for purchasing preference, Federal Acquisition Regulation requirements, and other applicable Federal procurement policies;	N/A	FY 18: 94% of newly purchased or leased equipment met energy efficiency requirements; 98% of equipment with power management enabled (excluding exempted equipment); 99% of electronic equipment disposed using environmentally sound methods FY 19 & FY 20 – will continue to track and make improvements	*Procure (A) an Energy Star product or (B) a FEMP designated product (40 USC §8259b) and dispose of excess property as promptly as possible (40 USC §524). See also 40 USC §549; 40 USC §527; 15 USC 3710(i).*
Data Center Efficiency	Sec. 2. (a) Achieve and maintain annual reductions in building energy use and implement energy efficiency measures that reduce costs; *Objective: Implement practices that promote energy efficient management of servers and Federal data centers.*	OMB still collecting data, but no specific PUE targets. Data center energy use and savings will be reported in accordance with OMB guidance and instructions to agency CIOs.	N/A	*The Update to Data Center Optimization Initiative (DCOI) Memo establishes a new DCOI, which replaces the previous DCOI articulated in OMB Memorandum M-16-19, Data Center Optimization Initiative Memorandum (August 1, 2016) (M-16-19). The memo "establishes consolidation and optimization targets and metrics for Federal agencies, as well as requirements for reporting on their progress. " See also 40 USC §11319, 40 USC §11302, 44 USC §3601, 40 USC (FITARA).*
Greenhouse Gas Management	Sec. 2. (h) Track and, as required by section 7(b) of this order, report on energy management activities, performance improvements, cost reductions, *greenhouse gas emissions*, energy and water savings, and other appropriate performance measures.	Scope 1 & 2 GHG emissions continue to be tracked and reported, but no targets. Pending further guidance, Scope 3 will continue to be tracked internally.	FY 18: -47.7% from FY 08; -7.8% from FY 17 FY 19 & FY 20 – will continue to track and reduce GHG emissions	DOE must submit "the status of the implementation by the agency of initiatives to improve energy efficiency, reduce energy cost, and reduce emissions of greenhouse gases" (42 USC 17143).
Fleet Management	Sec. 3. (c) Within 120 days of the date of this order, the Secretary of Energy, in coordination with the Secretary of Defense, the Administrator of General Services, and the heads of other agencies as appropriate, shall *review existing Federal vehicle fleet requirements* and report to the Chairman of CEQ and the Director of OMB regarding opportunities to optimize Federal fleet performance, reduce associated costs, and streamline reporting and compliance requirements.	All fuel goals revert back to statute: 20% petroleum reduction by FY 2015 relative to FY 2005 and demonstrate annual progress each fiscal year thereafter. 10% alternative fuel use increase annually relative to a FY 2005 baseline 75% of light-duty vehicle acquisitions must be alternative fuel vehicles Agencies set annual petroleum reduction targets.	FY 18: -37.3% of petroleum fuel from FY 05; -2.8% from FY 17 FY 19: -2% from FY 18 FY 20: -2% from FY 19	*"By October 1, 2015, and each year thereafter, achieve at least a 20 percent reduction in annual petroleum consumption and a 10 percent increase in annual alternative fuel consumption, as calculated from the FY 2005 baseline" (42 USC §6374e(a)(2)). See also 42 USC §13212.*

Appendix G - FY 2019 Sustainable Acquisition Progress Table (Example)

The following is an example of how to complete the FY 2019 Sustainable Acquisition (SA) Progress table and sites should complete only one table, either the table for FAR clauses or DEAR clauses. *Please note that the rows in dark gray indicate that no data is requested in these cells.*

i) **If FAR clauses are specified in your contracts, please fill out the following table:**

FY 2019 Sustainable Acquisition (SA) Progress							
Metric	**Recycled**	**EE**	**Biobased**	**Multi-Statutory**	**EPP**	**Statutory+**	**Total**
Number of Eligible Contract Actions							**800**
Number of Contract Actions w/ SA Clauses	1		1	698			**700**
Percent of Contract Actions w/ SA Clauses							*87.5%*
Total Eligible Contract Dollars ($)							**$8M**
Total Contract Dollars ($) w/ SA Clauses	$5,000		$5,000	$5,990,000			**$6M**
Percent of Contract Dollars w/ SA Clauses							*75.0%*

ii) **If DEAR clauses are specified in your contracts, please fill out the following table:**

FY 2019 Sustainable Acquisition (SA) Progress	
Metric	**Total**
Number of Eligible Contract Actions	**800**
Number of Contract Actions w/ SA Clauses	**700**
Percent of Contract Actions w/ SA Clauses	*87.5%*
Total Eligible Contract Dollars ($)	**$8M**
Total Contract Dollars ($) w/ SA Clauses	**$6M**
Percent of Contract Dollars w/ SA Clauses	*75.0%*

iii) **Biobased Product Purchase and Targets (# of actions): FY19: _699_; FY20: _720_**
If estimated data is available for FY20, please provide the number of actions, as it will assist SPO with setting biobased targets for FY20, which is required by OMB and CEQ.

Category	Definition from FPDS Sustainability Report	Alignment with DEAR Clauses
Recycled	"FAR 52.223-4" + "FAR 52.223.4 & FAR 52.223-9"	DEAR 970.5223-7
Energy Efficient (EE)	"Energy Efficient"	DEAR 970.5223-7
Biobased	"Biobased"	DEAR 970.5223-7
Multi-Statutory	"FAR 52.223-4 & Energy Efficient" + "FAR 52.223-4 & Biobased" + "FAR 52.223-4 & Biobased & Energy Efficient"	DEAR 970.5223-7
Environmentally Preferable (EPP)	"Environmentally Preferable"	DEAR 970.5223-7
Statutory+	"FAR 52.223-4 & Environmentally Preferable" + "FAR 52.223-4 & Biobased & Environmentally Preferable" + "FAR 52.223-4 & Biobased & Energy Efficient & Environmentally Preferable"	DEAR 970.5223-7

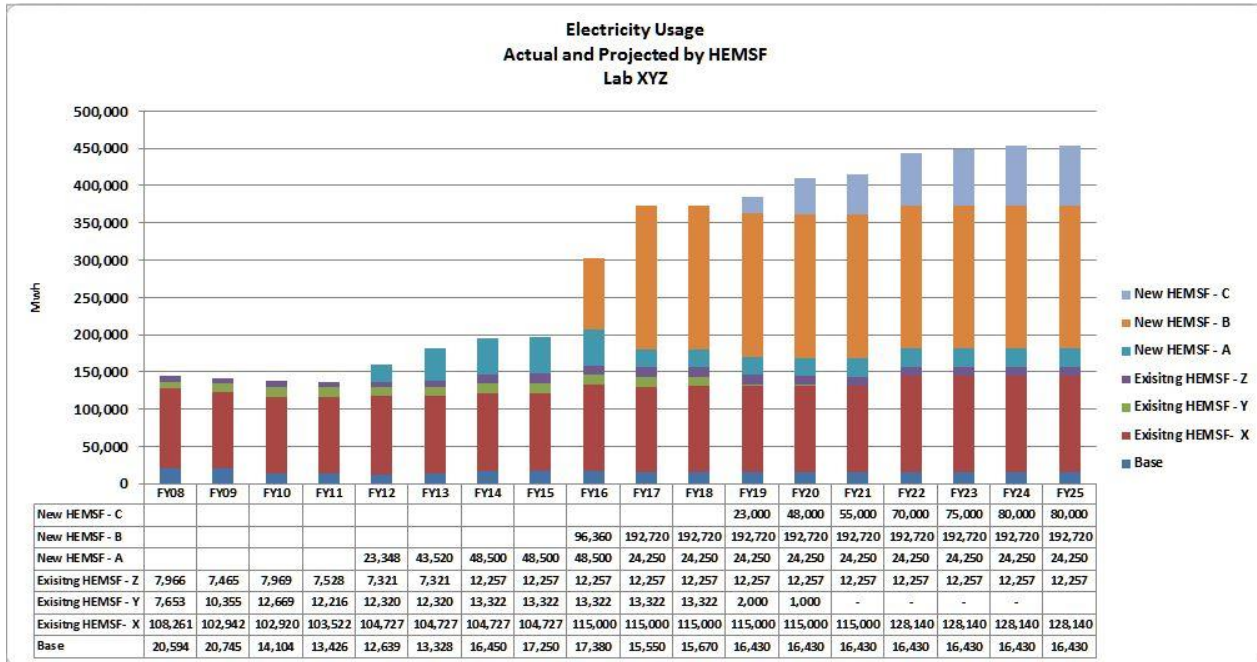*For more information, visit the following: Federal Acquisition Regulation Site; DEAR 970.5223-7*

The FY 2019 Sustainable Acquisition Progress table is based on the collection method from FPDS and OMB's scorecard, and the key (above), defines each category with a crosswalk between the Federal Acquisition Regulation (FAR) Clauses and the DOE Acquisition Regulations (DEAR) Clauses.

Appendix H – Sample Charts, Graphs, and Tables (Samples)

Sites may select to use the following examples, but please note that SPO does not prescribe the type of graph/chart. Sites should display their data in whichever format best showcases their progress/projections.

I. Energy & Water Usage Projections
   a. Show actual and projected energy use per source and water use for the site. Please include a data table and if applicable, show existing/ planned High-Energy Mission-Specific Facility (HEMSF) individually. Please note that HEMSFs include High Performance Computing facilities. For example, the graph below shows actual and projected electricity usage.

Electricity Usage
Actual and Projected by HEMSF
Lab XYZ

	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25
New HEMSF - C												23,000	48,000	55,000	70,000	75,000	80,000	80,000
New HEMSF - B									96,360	192,720	192,720	192,720	192,720	192,720	192,720	192,720	192,720	192,720
New HEMSF - A					23,348	43,520	48,500	48,500	48,500	24,250	24,250	24,250	24,250	24,250	24,250	24,250	24,250	24,250
Exisitng HEMSF - Z	7,966	7,465	7,969	7,528	7,321	7,321	12,257	12,257	12,257	12,257	12,257	12,257	12,257	12,257	12,257	12,257	12,257	12,257
Exisitng HEMSF - Y	7,653	10,355	12,669	12,216	12,320	12,320	13,322	13,322	13,322	13,322	13,322	2,000	1,000	-	-	-	-	-
Exisitng HEMSF- X	108,261	102,942	102,920	103,522	104,727	104,727	104,727	104,727	115,000	115,000	115,000	115,000	115,000	115,000	128,140	128,140	128,140	128,140
Base	20,594	20,745	14,104	13,426	12,639	13,328	16,450	17,250	17,380	15,550	15,670	16,430	16,430	16,430	16,430	16,430	16,430	16,430

II. Load Forecast (Total Energy or By Energy Source) Graph and Table
   a. Prepare a graph showing the site's load forecast through FY 2029 and projected energy efficiencies. Forecasting allows the site to estimate how much energy will be needed to ensure the site's power needs will be met.

Projected Changes in Energy Demand
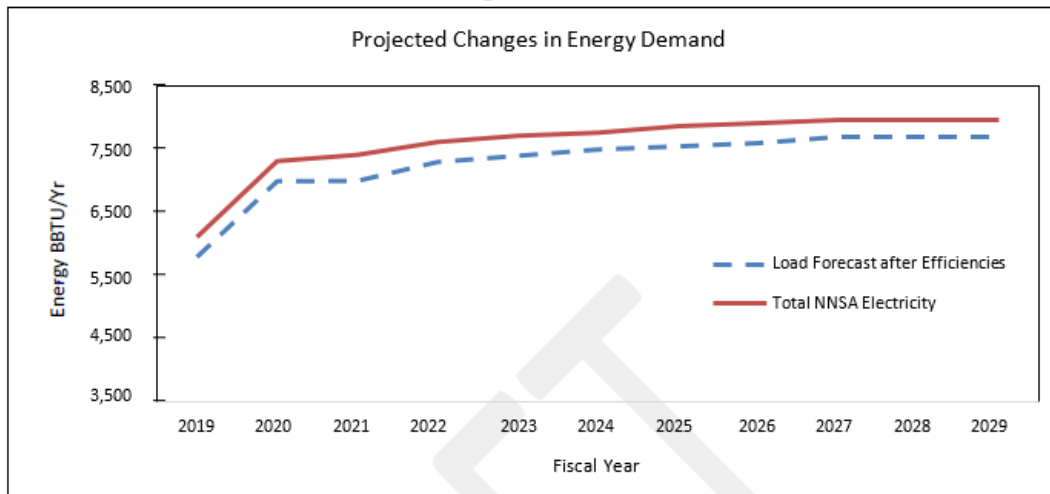
b. Include a demand growth table to show total electricity or energy (MWh or MMBTU) and if applicable show HEMSF.

	FY19 Actual	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29
1. Total Electricity Consumption											
2. HEMSF/Demand Growth Components											
2a. *Facility 1*											
Facility 2											
Facility 3											
3. Energy Efficiencies											

1. Enter the site's <u>total</u> electricity consumption (MWh) for FY 2019 (actual) and projected for FY 2020–FY 2029.
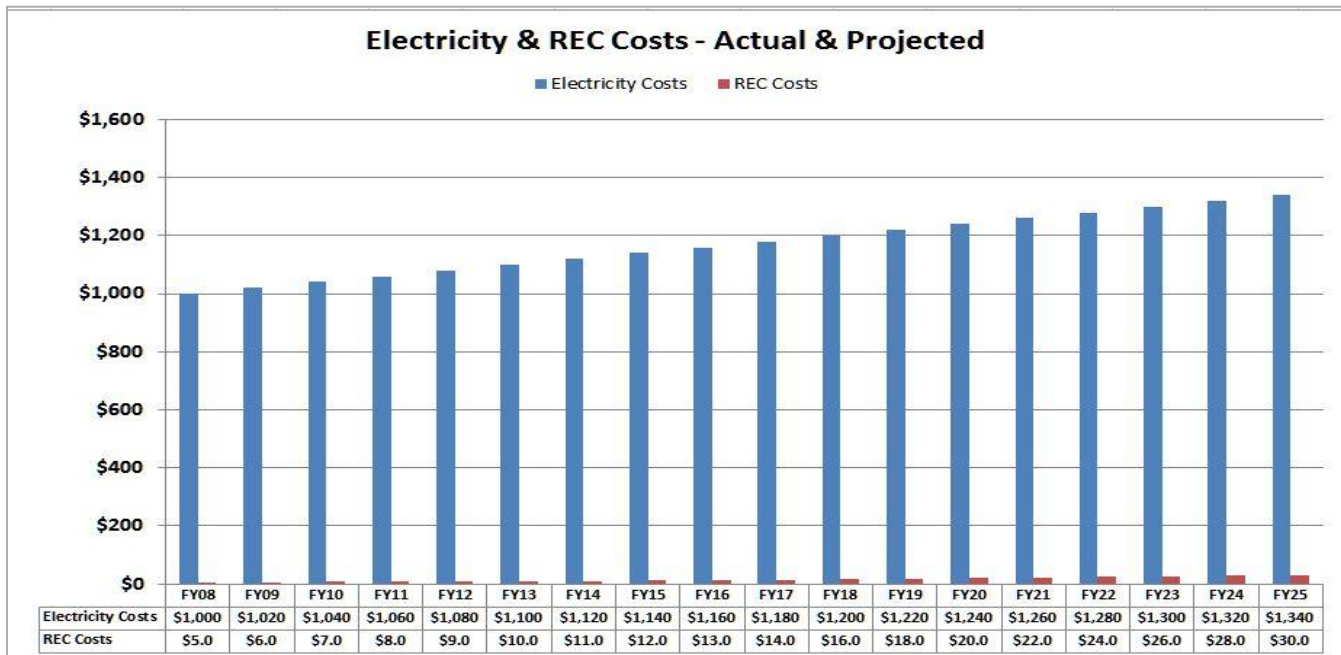
2. HEMSF/Demand Growth Components – Provide the subtotal of the HEMSF consumption (MWh) listed in 2a below.

2a. *Facility 1* – Provide actual/projected usage for <u>each</u> HEMSF (i.e. constructed mission-specific facilities, such as accelerators, reactors, high performance computers, high performance lasers and similar facilities and the closely coupled conventional facilities necessary for their operations).

3. Provide the site actual and projected total electricity consumption (MWh) adjusted for energy efficiencies/savings.

III. *Electricity and REC Cost Projections*

a. Provide a trend chart showing electricity and REC costs history/ projections. Please identify your assumptions in projecting REC costs and include a data table.

Electricity & REC Costs - Actual & Projected

■ Electricity Costs   ■ REC Costs

	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25
Electricity Costs	$1,000	$1,020	$1,040	$1,060	$1,080	$1,100	$1,120	$1,140	$1,160	$1,180	$1,200	$1,220	$1,240	$1,260	$1,280	$1,300	$1,320	$1,340
REC Costs	$5.0	$6.0	$7.0	$8.0	$9.0	$10.0	$11.0	$12.0	$13.0	$14.0	$16.0	$18.0	$20.0	$22.0	$24.0	$26.0	$28.0	$30.0

IV. Energy Intensity by Building

   a. Include a chart on energy intensity by building from FY 2019 with the target efficiency goal to show which buildings are meeting the goal and identify those with the greatest room for improvement. Please focus on goal subject buildings rather than excluded buildings.