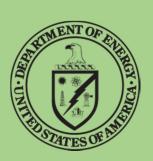
FISCAL YEAR 2021 SITE SUSTAINABILITY PLAN GUIDANCE

August 2020



U.S. Department of Energy
Sustainability Performance Division

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Major Changes

To improve the collection and quality of data for reporting on DOE's progress towards various Federal sustainability requirements, the following changes have been made:

Area	Changes
All SSP Sections	Projections to be collected in the Dashboard's SSP module instead of the Word/PDF version of the SSPs. See Appendix G for design details.
Acquisition & Procurement	Sustainable acquisition contracts and biobased products reporting by contractors to be reported in the Excel workbooks provided by SPD instead of Word/PDF tables in the SSP narrative.
Dashboard	 New field for Sustainable Buildings to collect percent of GSF compliant. Facility Metering Status and Sustainable Contract Review will be locked for data entry, instead use SPD provided Excel workbooks for reporting. Updating of resilience questionnaire. Finalization of benchmarking page and upload of Portfolio Manager data. Update of eGrid emission factors. Projection fields in the SSP module. All cost fields have been changed to whole dollars for consistency.

Acronyms

finition
stem for Award Management
fur Hexafluoride
stainability Performance Division
stainability Report & Implementation Plan
vings Reinvestment Program
e Sustainability Plan
lity Energy Service Contract
ited States Postal Service
hicles and equipment
ter Usage Effectiveness
ter Usage Intensity
ar-Over-Year

Message from the Director, Office of Asset Management

Program and Site Sustainability Teams,

As the Director of the Department of Energy's (DOE or Department) Office of Asset Management, who oversees the Sustainability Performance Division (SPD), I want to thank you in advance for your work towards 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 to demand less from the grid and community; and a variety of other measures that help ensure that DOE's infrastructure continues to sustain the science, energy, defense, and cleanup missions in the coming decades.

At SPD, 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) 2021 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.

On behalf of SPD, 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).

Scott L. Whiteford Director, Office of Asset Management U.S. Department of Energy

Introduction

This document provides guidance for DOE sites to complete their FY 2021 SSPs. As required by DOE Order 436.1, *Departmental Sustainability*, 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 Dashboard and formulating 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. SPD collects and compiles information reported by each site to develop the Department's SRIP and *Annual Energy Management Report* to Congress.

Since 2011, SPD has issued guidance documents for DOE sites and national laboratories to complete sustainability reporting requirements. The <u>Sustainability Dashboard User Guide</u> and this <u>Site Sustainability Plan Guidance</u> serve as resources for data reporting and developing narrative plans. These documents are reviewed regularly and revised as need be to reflect updated requirements and reporting process improvements.

The Dashboard collects both the data and narrative necessary to report DOE's progress on its sustainability requirements. 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), Annual Site Environmental Reports (ASER), and budget reports.

For submission of the FY 2021 SSP and supporting documentation, sites may use the SSP narrative module in the Dashboard and approve their plan via the completion process <u>or</u> 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 20, 2020** and SSP narrative is **December 4, 2020**. Feedback on SSPs will be issued through the Dashboard's Completion Status module during spring 2021.

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

SPD 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 <u>Dashboard Home</u> page. All resources and reporting schedules can be found on the Dashboard's Resources module.

Please contact the Sustainability Performance Division at <u>sustainability@hq.doe.gov</u> or 202-586-8645 with any questions.

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 ManagementWater ManagementWaste ManagementFleet 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 2020. 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 2020 performance by:

- Describing major initiatives, efficiency and conservation measures (ECMs), or changes to missions or facilities in FY 2020 that contributed in significant ways to each category area and quantify impact.
- Sharing success stories and accomplishments from FY 2020, as well as lessons learned and best management practices.
- Quantifying performance towards goals, savings (e.g., energy, dollar, etc.) when possible, and include the percent change from the prior year and from the baseline stated in the relevant goal.
- Discuss the impact of COVID-19 on reported performance, goals, immediate response, and lessons learned for possible future application.

Plans and Projected Performance – Discuss plans and expectations for FY 2021 and beyond by:

• Identifying major planned activities (e.g., mission changes, ECMs, renewable energy systems, new construction or deactivation and decommissioning (D&D), policy and procedures updates, training) and expected impact of planned activities; and

- Estimating and forecasting annual energy, water, and on-site renewable energy usage, compliant sustainable building, and waste generation and diversion. Projection data for all these areas is to be entered in the Dashboard's SSP module. At a minimum provide current FY data and projections for the next five years. If performance estimates are not available and your site is considered to be large, please explain. If otherwise, performance estimates are optional. If unsure of your site's size categorization reach out to SPD. See Appendix G for Dashboard design details.
- Assign a risk of non-attainment for each goal in the executive summary table and discuss the details of the risk within the relevant SSP category. Risk of non-attainment is based on the site's assessment as to whether there is a high, medium, or low risk of not attaining the goal by considering:
 - o Technical Risks: Technology is available/not available in current facilities and/or systems to attain the goal.
 - Management Risks: Management systems, policies, and/or support may require changes to policies or procedures.
 - o Financial Risks: Funds are not identified in current or out year targets to achieve the goal. Please use the following definitions for high, medium, and low risk:
 - o High Risk (H): Risk in at least one of the three categories is so significant that non-attainment of goal is likely or expected. For the goals that have a high risk of non-attainment, please provide a brief description of the gap in the narrative.
 - o Medium Risk (M): Risk in at least one of the categories above is so significant that it is moderately likely you may not attain the goal.
 - o Low Risk (L): Any risks associated with this goal are being satisfactorily mitigated such that attainment of the goal is likely.

Pre-existing documentation may be referenced in lieu of writing new descriptions. In such cases, please provide this documentation as an attachment, link, or upload to the relevant Dashboard Policy table. The use of graphs and/or tables is encouraged as this helps determine whether the sites are meeting Departmental goals. If including graphs or charts please provide as much detail as possible and include a table with the relevant data.

Executive Summary

The executive summary should be concise and no more than 2–5 pages, and ideally aligns with and supports the DOE's <u>SRIP strategies for continued progress and</u> performance improvements. Consider including a description of how the SSP relates to overall long-term site planning and management vision for the site, how sustainability is incorporated into that vision and how the site Environmental Management System (EMS) is used to manage sustainability goals. 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).

SPD 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 online 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 affected. Briefly describe the 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 associated 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

Energy Usage and Intensity

- a. Describe, separately for goal subject and excluded assets, any initiatives, projects, or actions that increase energy savings in FY 2020 and beyond.
- b. Discuss any extenuating factors that may be skewing the site's performance regarding the energy intensity reductions/increases reported in FY 2020, or that 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;
 - Interval meter analytics;
 - Automated fault detection and diagnostics;
 - Utility bill management (e.g., Green Button); or
 - Space utilization and optimization practices and policies.
- d. If excluding buildings from the goal, complete the Excluded Buildings Self-Certification in Appendix C and include a discussion of efficiency efforts along with planned or completed projects and their impact in these buildings.
- e. Describe plans to reduce deferred maintenance and repair 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. Setbacks are the subject of several Inspectors General reports (e.g., DOE-IG-0817 July 2009 and DOE-OIG-16-08 March 2016).
- i. If your site has explored DOE's Better Buildings Initiative's Smart Labs, ISO 50001, or DOE's 50001 Ready Program, please 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. SPD has set up a Departmental level 50001 Ready account pre-populated with existing agency efforts. If your site is interested, reach out to SPD.

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 your anticipated approach and timeframe for completing the remaining required evaluations, if your site has an expired comprehensive evaluation. Comprehensive evaluations delayed due to COVID-19 are not considered expired at this time. Beginning in FY 2021, the EISA §432 compliance snapshot for identified covered facilities, completed evaluations, findings, and benchmarking will be in early March instead of late March for identified covered facilities and benchmarking, and late June for completed evaluations and findings.
- c. DOE encourages measurement and verification (M&V) of implemented measures and projects while recognizing 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. An asset does not qualify as benchmarked until the site reports 12 months of consecutive data. If using benchmarking tools other than EPA's Portfolio Manager, please identify the specific tool and the reason for its use.

Facility Metering

- a. SPD is updating the DOE Metering Plan in 2021. Report on your metering status using the SPD provided Excel workbook and ensure your site's latest metering plan has been uploaded to the Dashboard Facilities Site-Level Policy Tracker.
- b. 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, strategy for advanced metering, and implementation barriers.
- c. Highlight any successes or opportunities identified due to the installation of metering infrastructure and buildings management systems at your site.
- d. Describe use of metering data (e.g., 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.
- e. Identify issues associated with maintenance and/or use of existing meters (consistent with the reported Dashboard status) and plans for resolution.

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 captured in the Federal Aviation Interactive Reporting System (FAIRS).
- b. Discuss trends pertaining to this category of fuel use, type of equipment, 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
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• Facility Goal Category

- EISA §432 Evaluations
- Efficiency & Conservation Measures

Water Usage and Management

- a. SPD is updating the DOE Water Management Plan in 2021. Please ensure your site's latest water management plan and water balance have been uploaded to the Dashboard Facilities Site-Level Policy Tracker. If a water management plan and/or water balance have not been completed, explain why and indicate whether there are plans for either in the future.
- b. Summarize the site's water metering strategy.
- c. Describe any initiatives, projects, or actions used to increase water efficiency in FY 2020. Quantify reductions when possible.
- d. Consider excluding facility square footage from the WUI if the asset uses energy but not water or is undergoing disposal. There are no exclusions for high water usage facilities; however, should you have the information please provide the split in your narrative (usage and associated GSF) to help SPD make the case to CEQ to allow for high water usage exclusions.
- e. Discuss major water consuming end-uses, such as cooling, heating, plumbing, irrigation, and laboratory equipment.
- f. Summarize the site's efforts to identify and implement alternative water sources. Alternative water sources offset the use of fresh surface and groundwater sources. Types of alternative water include on-site gray water, harvested rainwater, process discharge water, and reclaimed wastewater.
- g. Note whether a site is replenishing water supplies (e.g., aquifer recharge) and provide documentation on the quality and quantity. Depending on the quality of replenished water and provided documentation, SPD will determine whether to grant credit towards water use, and will adjust progress accordingly. Water that is returned to a water source at the same quality as the water source is considered nonconsumptive.
- h. If applicable, summarize non-potable freshwater used for industrial, landscaping, and agricultural (ILA) and specify the water supply source. Note, on-site alternative water is reported separately from non-potable freshwater use.

i. 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 2020 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

SPD 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 the appropriate systems (e.g., FAST, FleetDASH, FedFMS). The reporting schedule for fleet data will be shared with fleet managers when finalized, the tentative FAST schedule is in Appendix A. Note SPD does not have the ability to edit or correct fleet data.

Beginning in FY 2020 fleet managers will use the 701 attributes in the year-end FAST vehicle level data report to designate the appropriate Section 701 waiver status. As such, there will no longer be a June Section 701 waiver data call. Additional guidance to be provided by DOE's Fleet Manger to site office fleet managers when finalized.

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, fuel cost, and installing renewable fuel pumps at fleet fueling centers.
- c. Discuss the barriers faced by your site to utilize –alternative fuel in all dual fueled AFVs. 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 and operations during FY 2020.
- 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

The on-site renewable energy and purchased renewable energy have been split into two separate modules to improve data entry. Keep in mind that the main renewable goal is to increase renewable electric energy usage, however, renewable thermal energy does contribute to both the EUI and GHG goals.

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 On-Site Renewable Energy Generation Systems, please contact SPD.

- b. Discuss potential opportunities or needs for microgrids or energy storage at your site.
- c. Discuss highlights of major purchases and approaches taken to obtain renewable energy.
- d. Explain the most recent renewable and alternative energy assessments and outcomes, if applicable.
- e. Describe the incorporation of <u>DOE Procurement Policy Guidance on Purchase of Electricity, Energy Products, and Energy By-Products from Indian Tribes</u>. 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, if it is no more costly than the prevailing market rate.
- f. Describe how the installation of renewable energy systems in new buildings is considered and your sites implementation process; especially solar hot water heaters per 42 USC 6834(a)(3)(A).

Sustainable Buildings

This section should focus on all aspects pertaining to sustainable building initiatives such as Sustainable Buildings, formerly referred to as High Performance Sustainable Buildings, 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

SPD recommends focusing on buildings with the greatest cost efficiency gains from meeting the <u>Guiding Principles</u> (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.

Guiding Principles

- a. Ensure the Dashboard Sustainable Buildings fields are current and accurate.
 - The Federal definition of "not applicable" is outlined in the 2020 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)).
 - A new square footage field has been added to capture whether all or a fraction of an asset is compliant.
- b. Provide the following:
 - Number of buildings that qualify as sustainable buildings in FY 2020;
 - Identify FY 2021-2022 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.
- c. Discuss barriers to meeting the GPs in remaining facilities and identify the GPs most difficult to meet. If available, include cost estimates for compliance.
- 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 or after FY 2007, and construction completed in FY 2020 (and asset entered into FIMS in FY 2020). Note and explain why, if any of them do not meet EPAct 2005 §109 requirement for new buildings to achieve energy consumption levels that are at least 30% below the levels established in ASHRAE or the International Energy Conservation Code, as appropriate, if life-cycle cost-effective. 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 2020, 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 concerning <u>42 USC 6834</u> fossil fuel reduction in new buildings and major renovations.
- d. Describe plans to incorporate resiliency best practices into building design and management elements 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 sustainable acquisition and data inconsistencies, for FY 2020 reporting, please use the Sustainable Acquisition Contracts and Biobased Products Excel workbooks provided by SPD to report all relevant data. The workbooks will be available for download from the Dashboard. Completed workbooks are to be uploaded to the Acquisition & Procurement section of the Dashboard's SSP module. Note, the deadline for Biobased Products workbook is October 23, 2020 and SPD will report this data for DOE.

For reporting FY 2020 data, SPD encourages sites to utilize the Excel workbooks as DOE considers transitioning to a different reporting process. If you have access to the <u>Federal Procurement Data System – Next Generation</u> (FPDS-NG or FPDS) and System for Award Management (<u>SAM</u>), feel free to continue using these systems. Should you elect to enter data into FPDS and SAM, you do not have to complete the workbooks.

Sustainable Acquisition Strategies

a. Per <u>DEAR 970.5223-7</u>, all service and construction contract actions are applicable to sustainable acquisition requirements and must be reported in the SPD distributed Excel workbooks. Exceptions are those with a Claimant Program coded as "Weapons" or Foreign Place of Performance. However, we understand there may be other contracts that do not contain the opportunity for sustainable acquisition.

If this is the case, please specify which types of contracts do not apply and provide the number of contracts without "opportunity" for sustainable acquisition in the Sustainable Acquisition Contracts workbook. This will assist DOE with defining which types of contracts are truly "eligible" to include sustainable acquisition clauses. Please consider that most contracts, regardless of type of work performed, will have the need to use paper and electronic equipment in the performance of the contract. At a minimum, even for contracts that appear to have no opportunity, the clauses requiring use of 30 percent post-consumer recycled content copy paper and energy efficient electronic equipment should be included.

- b. Describe your site's efforts to maximize acquisition of the designated 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).
- c. Detail your site's efforts to include the Federally mandated biobased clauses and product specifications in eligible contract actions. Describe how you track the procurement of biobased products. If available, please provide the number of biobased-only contracts awarded in FY 2020 and an estimate for FY 2021. Biobased-only contracts include any actions where at least one product to be supplied or used is a USDA designated biobased product.
- d. Describe your site's plans to review and implement EPA's recommendations for specifications, labels, and standards that designate environmentally preferable products and services.
- e. Describe your data collection method for sustainable acquisition contracts and biobased products by addressing the following questions:
 - Does your site have a point of contact that tracks and reports on sustainability for procurement? If so, please provide their contact information in the Excel workbooks.
 - Does your site collect sustainable acquisition contracts and/or biobased data in an internal system? If so, please briefly describe the system. If not, would the integration of the Sustainable Acquisition Contracts and Biobased Products Excel workbooks into the Dashboard be useful?
 - If you have faced issue(s) when reporting in FPDS or SAM, please describe the issue(s) and ways that SPD could assist (e.g., more guidance and training).

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

Category	Definition from FPDS Sustainability Report	Alignment with DEAR Clauses
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

This key defines each category with a crosswalk between the Federal Acquisition Regulation (FAR) Clauses and the DOE Acquisition Regulations (DEAR) Clauses. For more information, visit the following: <u>Federal</u> Acquisition Regulation Site; <u>DEAR 970.5223-7</u>.

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. 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.

Measures, Funding, & Training

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

Efficiency & Conservation MeasuresAppropriations/Direct Obligations	Training & Education
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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 should integrate this data with their budget process. If you have already integrated the funding of sustainability related ECMs with the budget process, please provide an overview of the process.

- b. Describe your site's strategies and tools for prioritizing and implementing measures (e.g., 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.

Performance Contracts

- e. Summarize how private financing is integrated and considered as part of site project planning and budget formulation activities.
- f. 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.
- 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. If applicable, identify the most significant barriers to implementing performance contracting at your site (i.e., low utility rates, cost of providing security, contractor accessibility of secure areas).
- i. 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 ECMs, including facility surveys/evaluations. These are obligations for energy and/or water efficiency incurred from appropriated funds, revolving fund accounts including Saving Reinvestment Programs (SRP), 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. Describe how sustainability measures are incorporated into the budget formulation, execution, and accounting process. This should include:
 - The site's overall funding strategy and prioritization methodology.
 - Internal tracking tools and procedures.
 - Challenges and opportunities.
 - Lessons learned.

<u>DOE Order 436.1</u> mandates that sites reinvest verified monetary savings from sustainability projects in new sustainability projects, consistent with Federal regulations, <u>42 USC 8256 (e)</u>, and DOE guidance, <u>DOE Financial Management Handbook, Appendix for Chapter 15 Cost Accounting, Reinvesting Cost Savings from Sustainability Projects</u>. Please discuss initiatives to implement a savings reinvestment program. If interested in implementing, reach out to SPD.

Training & Education

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
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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. All fugitives and refrigerants are required to be reported regardless of usage amount.
- b. Specifically for sulfur hexafluoride (SF₆), 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 SF₆ 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.

Electronic 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 HPCs/data centers include details on their efforts to consolidate and optimize their HPCs/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.

Operations Strategies

- b. Describe policies and procedures that require and ensure the enabling of ENERGY STAR power management features (e.g., sleep, standby, hibernate) on all eligible electronic products (e.g., 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.
- c. 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 (e.g., computers, printers, scanners multifunction/all-in-one devices, fax machines).

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 CFL 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. Define how your site measures energy and water performance (e.g., power usage effectiveness [PUE] energy reuse effectiveness [ERE], water usage effectiveness [WUE]).
- b. Describe your site's strategy for data center consolidation and optimization. Specifically, what efforts has your site achieved or is planning to improve energy and water efficiency or data center equipment and supporting infrastructure (e.g., goals, realized reductions in PUE, ERE, WUE).
 - 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 moving to shared service spaces and/or working with the owners of these spaces to improve efficiency.
 - Optimization activities may include meter installation; installation and use of data center
 infrastructure management (DCIM) systems; 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 to reduce or eliminate duplicate applications.
- c. If applicable, describe your site's strategy for ensuring energy and water efficiency in data centers, HPCs, exascale operations, and infrastructure supporting these machines (e.g., does your site have a multidisciplinary team set-up?). Clearly define your site's goals and include any examples of best practices being shared between the centers. Please note that HPC typically involves the aggregation of computing power, such as scientific computing clusters and supercomputers.

SPD is collaborating 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 <u>Update to Data Center Optimization Initiative (DCOI) Memo</u>, 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." The Center of Expertise for Energy Efficiency in Data Centers' <u>DCOI Fact Sheet</u> highlights these efficiency requirements.

Resilience

The Implementing Instructions for Executive Order (E.O.) 13834 state that agencies shall "enhance the resilience of Federal infrastructure and operations, and enable more effective accomplishment of its mission,"

when implementing policies to improve energy performance and to consider environmental factors in resilience planning. 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, operations, and personnel. The following Dashboard page is relevant to the Resilience Category:

• Resilience Questionnaire

Resilience Strategies

- a. Discuss how the coronavirus pandemic affected site operations, resilience measures, or planning. Include actions taken to ensure continuity of operations and any new resilience policies, plans, tools, or other documents that were developed.
- b. Describe your site's approach and preparation for resilience planning (e.g., coordination across site departments or with surrounding community, integration with emergency planning or continuity of operations, use of internal or external tools and methods).
- c. Discuss plans to use any detailed, resilience-related assessments or tools that identify threats or hazards that could impact mission, programs, plans, operations, or personnel. For instance, if you use FEMP's Technical Resilience Navigator or LEED's RELi 2.0 Rating Guidelines for Resilient Design and Construction, please share your feedback on the effectiveness of these tools or assessments.
- d. Describe resilience plans to provide adequate energy and water supplies, facility operations, information and communication technology capability, and transportation availability when needed. Include interdependencies when appropriate (e.g., black start capability).

Appendix A - Reporting Schedule

The schedule for DOE databases and reports pertinent to DOE sustainability goals is presented below. These databases and reports are 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 Sustainable Building goal. Note, the Dashboard collects more information and both systems must be populated.
- 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.

Table A.1 - Sustainability Dashboard

Date(s)	Action/Event
March 2, 2020	Dashboard opened for FY 2020 data entry.
September 28, 2020 to December 4, 2020	SPD to QA/QC data and work with sites to finalize FY 2020 data for December 4th data entry closing of Dashboard.
October 9, 2020	End of year Dashboard facility basic FIMS information update.
October 23, 2020	Sustainable Building page locked for data entry until February/March 2020. All updates must be completed before this date.
October 23, 2020	FY 2020 Biobased Products workbook uploaded to Dashboard by sites.
November 20, 2020	Final FY 2020 Federal employee travel data uploaded to Dashboard.
November 20, 2020	FY 2020 Dashboard data, including Sustainable Acquisition and Metering workbooks, 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 4, 2020	FY 2021 SSP narrative and optional Plan Signature Document are due with appropriate level(s) of approval. Dashboard closes for FY 2021 SSP entry.
TBD	Final FY 2020 fleet data uploaded to Dashboard.

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

Date(s)	Action/Event
August 3, 2020	Begin input of FY 2020 Repair Needs, Deferred Maintenance, Modernization Cost, and Uniformat II Repair Needs values. If necessary, also update other fields.
September 21, 2020 to November 2, 2020	Populated and updated FIMS data elements.
November 2, 2020	Conclusion of all FY 2020 data element updates. FY 2020 year-end HQ Snapshot.
December 15, 2020	Federal Real Property Profile (FRPP) Reporting Deadline.

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

Tentative Date(s)	Action/Event
August 1, 2020 to August 31, 2020	OMB Circular A-11 data call for fleet budget submission.
October 1, 2020	FAST opens for FY 2020 data entry of actual inventory, disposal, cost, fuel, and mileage along with future acquisition, disposal, waivers, and cost projections.
December 15, 2020	FAST closes for FY 2020 data entry.
December 16, 2020 to	FAST FY 2020 data is reviewed by FEMP for inconsistencies and addressed by NNSA and DOE's
March 31, 2021	Federal Fleet Managers.
TBD	FAST FY 2020 Snapshot for Dashboard.

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

Date(s)	Action/Event
December 2020	FedCenter opens for FY 2020 data entry.
January 2021	FedCenter closes for FY 2020 data entry.

Appendix B – Dashboard Data Accuracy Self-Certification

This appendix provides a template for self-certifying FY 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 on the following page.

DOE SUSTAINBILITY DASHBOARD DATA SELF-CERTIFICATION FORM

FY: YYYY

FROM: Name of DOE Site, Lead Program Office

TO: Sustainability Performance Division

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 (Insert Year) 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	Offic	cial –	Printed	Name
DOE	Site	Office	Offic	 cial –	Signatu	ıre
——— 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 current FY Excluded Buildings List, which is included in the *Annual Energy Report* to Congress.

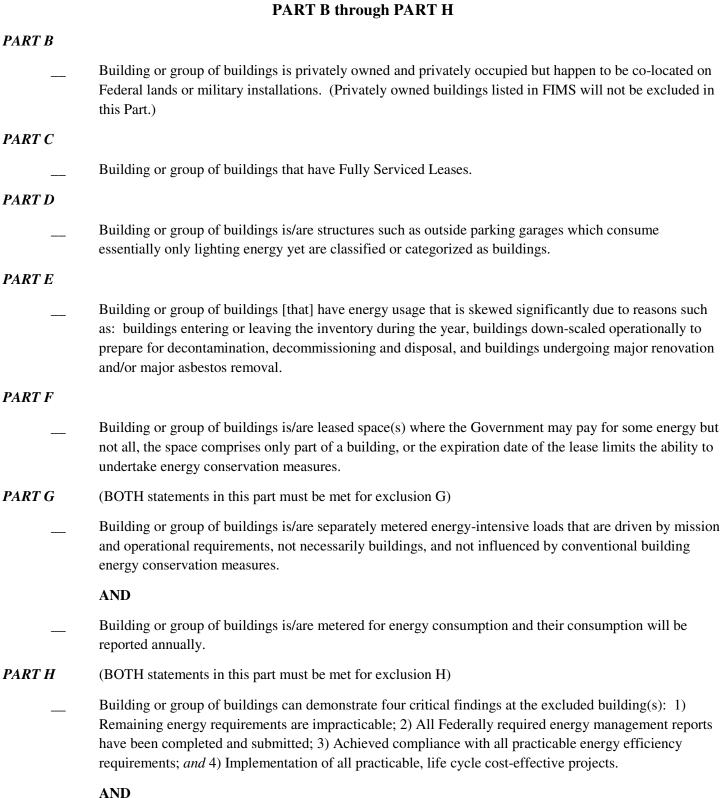
Background: FEMP provides general guidance for identifying buildings that are to be excluded from the calculation of energy intensity for meeting the energy intensity reductions goals established by the Energy Independence and Security Act of 2007. Sites identify such buildings in the Dashboard by assigning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

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 the close of data reporting period.

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



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 YYYY

FROM: Name of DOE Site, Program Office Landlord

TO: Sustainability Performance Division

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 2005¹.

PART G

Part G applies to exclusions for separately metered loads within a building or a group of buildings. Such process loads are a direct result of specific mission operations and/or equipment. Conventional building energy conservation measures would not help reduce such process loads.

- 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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www.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 sustainability data must be verified annually to ensure the accuracy of data submitted to CEQ and OMB. To aid in verification of the data, a second-party verification team (VT) 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 the totals reported through site Dashboard submissions. All documentation should be traceable to reported totals with a clearly documented crosswalk, include clearly labeled units, and must be accompanied by a methodology sheet that documents assumptions, calculations (including material balances associated with fugitive emissions), and data tabulation resulting in reported data.

Site-specific documentation must be in PDF where the text can be copied and pasted. If the PDF is of an image and the values cannot be copied and pasted, it must be accompanied by an Excel sheet or Word document with the values from the image. This will save the VT time and reduce errors from inputting values for the verification analysis. Additional guidance for submitting verification data will be distributed to the sites that are selected.

Selected sites will be notified in August. If your site is selected, please ensure the requested data is submitted to SPD along with Dashboard data by November 20, 2020.

Appendix E – Executive Summary Table

The following is a template for the executive summary table should you elect to not use the Dashboard's SSP module. The current goal/targets are based on the draft 2020 SRIP and are subject to change pending CEQ and OMB's feedback. Current performance and planned actions should be quantified when possible. Each field has a 100-word limit.

Prior DOE Goal	Current Performance Status	Planned Actions & Contribution	Overall Risk of Non-Attainment
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.			

Prior DOE Goal	Current Performance Status	Planned Actions & Contribution	Overall Risk of Non-Attainment
Fleet Management			
20% reduction in annual petroleum consumption by FY 2015 relative to a FY 2005 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 <i>revised</i> Guiding Principles for Sustainable Buildings by FY 2021, with annual progress thereafter.			
Acquisition & Procurement			
Promote sustainable acquisition and procurement to the maximum extent practicable, ensuring BioPreferred and biobased provisions and clauses are included in all applicable			
practicable, ensuring BioPreferred and biobased provisions and clauses are			

Prior DOE Goal	Current Performance Status	Planned Actions & Contribution	Overall Risk of Non-Attainment				
Measures, Funding, & Training	Measures, Funding, & Training						
Site set annual targets for sustainability investment with appropriated funds and/or financed contracts for implementation.							
Electronic Stewardship							
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*). Please note the SRIP targets below are based on the draft 2020 SRIP and are subject to change pending CEQ and OMB's feedback.

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 FY 21: -1.0% from FY 20	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: 30.5% FY 21: 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	FY 18: -32.4% from FY 07; -2.9% from FY 17 FY 19: -0.5% from FY 18	Statute encourages water conservation (42 USC §6834 and 42 USC §8253) and establishes stormwater runoff

Goal Category	E.O. 13834	Changes from Old EO 13693	SRIP Targets	Statute(s)
		demonstrates annual progress for 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.	FY 20: -0.5% from FY 19 FY 21: -0.5% from FY 20	requirements (<u>42 USC</u> <u>§17094</u>).
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: TBD per site reported plans FY 21: TBD per site reported plans	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) FY 21: 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: will strive for an annual reduction in waste sent to landfill of at least 0.5 percent per year. FY 20 & FY 21: 0.3% decrease in non-hazardous	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 §11001 to §11050; 42 USC §13101.

Goal Category	E.O. 13834	Changes from Old EO 13693	SRIP Targets	Statute(s)
			solid waste sent to treatment facilities.	
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). Agencies to set targets for number of contract actions/dollars with sustainability clauses AND number of contract actions/dollars with biobased clauses.	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: will continue to track and make improvements. FY 20 & FY 21: 0.5% increase in number of contract actions and obligations (in dollars) containing statutory environmental requirements from the prior year.	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-ozone depleting (42 USC 76711.).
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 & FY 21: 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, <i>greenhouse gas emissions</i> , energy and water	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 & FY 21: 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).

Goal Category	E.O. 13834 Changes from Old EO 13693		SRIP Targets	Statute(s)
Fleet Management	savings, and other appropriate performance measures. 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	FY 18: -37.3% of petroleum fuel from FY 05; -2.8% from FY 17 FY 19: -2% from FY 18 FY 20 & FY 21: 2% reduction in petroleum (Gal) use from prior year AND 10% increase in alternative fuel use (Gal) from prior year.	"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.
	T T	reduction targets.		

Appendix G – Sample Dashboard Projection Table

This appendix provides an illustration of how projection will be collected in the Dashboard's SSP module. The ETA for buildout of this new capability is late September 2020.

Projected Performance Data

If available, please provide estimated and forecasted annual data at a minimum for the current Fiscal Year (FY) along with the next 5 years. If you like to provide data for a longer period, there is flexibility to do so. Once you select data type, starting fiscal year, and forecast period from the picklists below a table with 15 rows with option to add/remove rows will be built. Enter your data in the table and select "Generate Graph." To include the graph in the body of your SSP category, copy and paste the graph where you'd like it to display in the SSP. Alternatively, you could elect to have the information be part of an auto generated SSP appendix by checking the "Include in Appendix" box.

Data type:	Electricity	Select the data type to enter. Based on the selection, the table will adjust accordingly and include unit type.
Starting Fiscal Year	2019	Select the starting FY. Only the current FY data is needed, however, if you like to include historical years select an earlier FY.
Forecast Period:	5 years	Select the number of years you'd like to provide forecasted data. At a minimum the next 5 years is needed.

Facility Name: Focusing on the major changes at your sites, you can split the information by individual or group of facilities. For example, you can group facilities by focusing on the ones with changes only, large or intensive utility users, or any other group that fits your site. Do not provide information

individually for all buildings. If possible, keep the information consistent with FIMS (property name, property ID, or real property unique ID).

Category Group: Select how the facility or facilities are categories relative to the energy use intensity goal.

☐ Include in Appendix

Generate/Update Graph

Actual Electricity Usage (MWh/Yr)			Forecasted Electricity Usage (MWh/Yr)					
Facility Name	Category Group	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Demo A	Other/Goal Subject	200,289.00	278,879.00	439,685.00	299,784.00	254,804.00	254,804.00	254,804.00
Demo B	Other/Excluded	380,500.00	263,471.00	287,655.00	446,663.00	462,208.00	497,451.36	497,451.36
HPC A	HPC/Excluded	213,216.00	230,914.00	518,360.00	519,306.00	520,260.00	575,927.82	575,927.82
HEMSF B	HEMSF/Excluded	93,339.00	94,333.00	93,361.00	92,388.00	81,416.00	87,623.97	87,623.97
New Construction	HEMSF/Goal Subject					58,884.08	63,373.99	63,373.99
Base (All Bldgs)	Both Goal/Excluded	205,455.00	434,868.00	435,243.00	354,887.00	260,254.00	623,129.00	623,129.00

