

GUIDANCE FOR FY 2016 DOE SITE SUSTAINABILITY PLANS

September 18, 2015



U.S Department of Energy
Sustainability Performance Office

Contents

Contents	1
Introduction.....	2
Site Sustainability Plan Format and Instructions	4
I. Executive Summary.....	4
II. Performance Review and Plan Narrative	9
III. Fleet Management Plan.....	20
Appendix A – Reporting Schedule	21
Appendix B – Excluded Buildings Self-Certification Process	24
Appendix C – Climate Change Resilience.....	29
Appendix D – Policy and Program Status (Optional).....	32
Appendix E – Verification Data Request.....	34
Appendix F – DOE Interim Fiscal Year Targets	35
Appendix G - E.O. 13693 and Previous Requirements Crosswalk	39
Appendix H – Sample 2015 SSPs.....	40
Appendix I – Useful References	41

Introduction

This document provides guidance for DOE sites to complete FY 2016 Site Sustainability Plans (SSP), required by DOE Order 436.1, *Departmental Sustainability*.¹ The SSP provides a platform to report on FY 2015 sustainability performance and plan for FY 2016 and beyond.

This guidance provides informational appendices on key reporting requirements and due dates, while the accompanying *Consolidated Energy Data Report (CEDR) Technical Support Document* provides instructions on how to submit sustainability data. The CEDR collects data needed to report DOE's progress on its sustainability requirements. Sites should ensure consistency between the SSP, reported sustainability data, and other major documents and initiatives. This includes such publications as the Integrated Facilities and Infrastructure Budget Crosscut, and related databases such as the Federal Automotive Statistical Tool (FAST) and Facilities Information Management System (FIMS). Sites shall submit their SSP, CEDR, and supporting documentation, through their DOE Headquarters Program Offices for submission to the DOE Sustainability Performance Office (SPO). Program Offices should send electronic copies of each site's documentation to the SPO by December 7, 2015. Feedback on the SSPs will be issued to the Under Secretaries in April 2016.

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 Report* to Congress, the Strategic Sustainability Performance Plan (SSPP), sustainability scorecards, newsletters, annual Composite Sustainability Plans, and other documents.

Summarized below are major changes to this year's reporting as compared to last year.

SSP Content Changes

Executive Order (E.O.) 13693², *Planning for Federal Sustainability in the Next Decade*, was issued on March 19, 2015. The goal of E.O. 13693 is to maintain Federal leadership in sustainability and greenhouse gas emission reductions. This E.O. revokes the following:

- E.O. 13423 of January 24, 2007
- E.O. 13514 of October 5, 2009
- Presidential Memorandum of December 2, 2011 (Implementation of Energy Savings Projects and Performance-Based Contracting for Energy Savings); and
- Presidential Memorandum of May 24, 2011 (Federal Fleet Performance)

E.O. 13693 builds upon progress made against previous E.O.s and extends many current requirements through FY 2025. Please reference Appendix G for a crosswalk comparing E.O. 13693 with previous E.O.s and requirements.

¹ DOE Order 436.1, *Departmental Sustainability*, May 2, 2011, <https://www.directives.doe.gov/directives-documents/0436.1-BOrder>.

²Executive Order 13693, *Planning for Federal Sustainability in the Next Decade*, March 19, 2015, <https://www.whitehouse.gov/the-press-office/2015/03/19/executive-order-planning-federal-sustainability-next-decade>

Data Reporting Changes

In September 2014, the SPO launched the DOE Sustainability Dashboard (Dashboard) to serve as an enterprise-wide system for sustainability reporting and analysis. For the FY 2014 data reporting cycle, DOE sites were provided two options for reporting: (1) a CEDR only approach similar to reporting in FY 2013 and previous years and (2) a hybrid approach consisting of partial entry through the Dashboard with remaining data entry through the CEDR.

Given the need to modify the Dashboard to account for the new reporting requirements associated with E.O. 13693, for FY 2015 reporting all data be collected through the CEDR. CEDR templates will be provided under separate cover to DOE HQ Program Offices for further dissemination to the field.

Dashboard development will continue with an anticipated rollout in Spring 2016.

SPO will host training sessions and open calls to answer questions on the FY 2015 sustainability data reporting process. A schedule can be found on the SPO website at www.sustainability.energy.gov.

Specific Data Updates

- The Environmental Protection Agency (EPA) updated eGRID emission factors for purchased grid electricity.² These factors will apply to 2015 electricity purchases, while historical eGRID factors continue to apply to historical purchases.
- The global warming potential (GWP) of many gases has been updated based on new estimates from EPA and the United Nation's Intergovernmental Panel on Climate Change. Additionally, EPA has changed several other emission factors as part of its Greenhouse Gas Reporting Program.³
- For renewable energy, additional information is requested on renewable energy purchase contracts to ensure compliance with the revised definition of "new" for Renewable Energy Certificates (RECs). See Section II Goal 3 of this guidance for more information.
- Data Center data will no longer be captured in the CEDR, but the SSP narrative portion will be unchanged from FY 2014 reporting. Data Center data will now be reported through the OCIO's FITARA implementation process. Electronic stewardship category names have been slightly modified to align more closely with the names and definitions used by EPEAT (e.g., laptops are now called notebooks).
- Power management categories have been consolidated into two categories for computers and monitors.
- Cancelled energy conservation measures have been split out to a separate tab for informational purposes only.
- Metering requirement updated and expanded to collect data for the Agency-wide Metering Plan. Sites will create or update metering plans based on the requirements outlined in this guidance and submitted as an appendix to the SSP. An additional CEDR tab, Tab 2.1a "Metering Plan Data" was added to collect facility level prioritization data for facilities that are appropriate for metering, as defined in the updated Federal Building Metering Guidance.

² For current and past eGrid data, visit: <http://www.epa.gov/cleanenergy/energy-resources/egrid/>.

³ For a full list of changes, visit: <http://www.epa.gov/climateleadership/inventory/ghg-emissions.html>.

Site Sustainability Plan Format and Instructions

The SSP is comprised of two main components: 1) the SSP narrative and 2) sustainability data via the CEDR. Overarching guidance for the SSP narrative is described in this document. Supplementary information and instructions for completing the CEDR and can be found in the *CEDR Technical Support Document*. Select sample SSPs from last year are attached as a reference.

The SPP narrative should adhere to the following general format:

1. Executive Summary
2. Performance Review and Plan narrative with subsections for each goal that include:
 - a. FY 2015 Performance Status
 - b. Plans and Projected Performance for FY 2016 and beyond

Pre-existing documentation may be referenced in lieu of writing new descriptions. For example, a current site-level Water Management Plan that addresses the Water Use Efficiency and Management goal (or elements therein) may be appropriate for inclusion or referencing. In such cases, please provide documentation as an attachment or link. Additionally, the use of graphs and tables is encouraged. Please contact the Sustainability Performance Office (sustainability@hq.doe.gov) with questions.

I. Executive Summary

This section provides an opportunity for sites to summarize their SSPs. The executive summary should be concise and no more than 3-5 pages. The content should consist of the following:

1. *Vision Statement*: Describe the site's sustainability aspirations and goals, including management commitment.
2. *Planning Synopsis*: Describe major planning assumptions, strategies, issues, and obstacles, along with the funding mechanisms used to achieve sustainability goals.
3. *People and Process*: Describe the overall sustainability planning and implementation approach, including the management system(s) used to support the site's sustainability program, senior executive engagement, integration of goals into personnel review and contractor performance determinations.
4. *Successes and Challenges*: Provide an overview of main successes and challenges as they pertain to sustainability goals, including traditional Triple Bottom Line activities (Social Responsibility, Economic Prosperity, and Environmental Stewardship). Include a synopsis of climate-related successes and challenges as appropriate.
5. *Funding*: Characterize and provide examples of efforts to integrate long-term sustainability goals into the budget process. This should include descriptions of the site's overall funding strategy, prioritization methodology, cost savings reinvestment programs, and third party financing opportunities.
6. Complete summary table of goal targets (as below):
 - a. *Performance Status*: Baseline, current status, and progress toward the goal. Baseline and current status noted in the table should mirror that reported in the CEDR.
 - b. *Planned Actions*: Main planned actions and projected contribution towards goals.

- c. *Risk of Non-Attainment*: The risk of non-attainment of goals is based on the site’s assessment as to whether there is a *high*, a *medium*, or a *low* risk of not attaining the goal by considering:
- *Technical Risks*: Technology is available/not available in current facilities and/or systems to attain the goal.
 - *Management Risks*: Management systems and/or policies may require changes for which approval authority is outside the Department or requires an internal DOE policy or procedural change.
 - *Financial Risks*: Funds are not identified in current or out year targets to achieve the goal.

Please use the following definitions for high risk, medium risk, and low risk:

- *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.
- *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.
- *Low Risk (L)*: Any risks associated with this goal are being satisfactorily mitigated such that attainment of the goal is likely.

Table 1 - Executive Summary Table of DOE Sustainability Goals based on the SSPP and new Executive Order 13693⁴

SSPP Goal #	DOE Goal	Performance Status through FY 2015	Planned Actions & Contribution	Risk of Non-attainment
<i>Goal 1: Greenhouse Gas Reduction</i>				
1.1	50% Scope 1 & 2 GHG reduction by FY 2025 from a FY 2008 baseline (2015 target: 19%)			
1.2	25% Scope 3 GHG reduction by FY 2025 from a FY 2008 baseline (2015 target: 6%)			
<i>Goal 2: Sustainable Buildings</i>				
2.1	25% energy intensity (Btu per gross square foot) reduction in goal-subject buildings, achieving 2.5% reductions annually, by FY 2025 from a FY 2015 baseline			
2.2	EISA Section 432 energy and water evaluations			
2.3	Meter all individual buildings for electricity, natural gas, steam and water, where cost-effective and appropriate ⁵			
2.4	At least 15% (by building count or gross square feet) of existing			

⁴ See Appendix G - E.O. 13693 Crosswalk for clarification on the relevant regulations that set the targets described in Table 1.

⁵ Per NECPA (42 U.S.C Section 8253) the term “buildings” includes industrial, process, or laboratory facilities.

SSPP Goal #	DOE Goal	Performance Status through FY 2015	Planned Actions & Contribution	Risk of Non-attainment
	buildings greater than 5,000 gross square feet (GSF) to be compliant with the <i>revised</i> Guiding Principles for HPSB by FY 2025, with progress to 100% thereafter ⁶			
2.5	Efforts to increase regional and local planning coordination and involvement			
2.6	Net Zero Buildings: Percentage of the site's existing buildings above 5,000 gross square feet intended to be energy, waste, or water net-zero buildings by FY 2025.			
2.7	Data Center Efficiency. Establish a power usage effectiveness target in the range of 1.2-1.4 for new data centers and less than 1.5 for existing data centers.			
Goal 3: Clean & Renewable Energy				
3.1	"Clean Energy" requires that the percentage of an agency's total electric and thermal energy accounted for by renewable and alternative energy shall be not less than: 10% in FY 2016-2017, working towards 25% by FY 2025.			
3.2	"Renewable Electric Energy" requires that renewable electric energy account for not less than 10% of a total agency <u>electric</u> consumption in FY16-17, working towards 30% of total agency <u>electric</u> consumption by FY 2025.			
Goal 4: Water Use Efficiency and Management				
4.1	36% potable water intensity (Gal per gross square foot) reduction by FY 2025 from a FY 2007 baseline. (2015 target: 16%)			
4.2	30% water consumption (Gal) reduction of industrial, landscaping, and agricultural (ILA) water by FY 2025 from a FY 2010 baseline. (2015 target: 10%)			

⁶ HPSB targets cited in this SSP Guidance correlate with previous Executive Orders. Revised Guiding Principles will be published in the near future that will amend these targets through 2025. Until those updates are completed and distributed, report progress in this goal area using the previously established targets.

SSPP Goal #	DOE Goal	Performance Status through FY 2015	Planned Actions & Contribution	Risk of Non-attainment
Goal 5: Fleet Management				
5.1	20% reduction in annual petroleum consumption by FY 2015 relative to a FY 2005 baseline; maintain 20% reduction thereafter. (2015 target: 20%)			
5.2	10% increase in annual alternative fuel consumption by FY 2015 relative to a FY 2005 baseline; maintain 10% increase thereafter. (2015 target: 10%)			
5.3	30% reduction in fleet-wide per-mile greenhouse gas emissions reduction by FY 2025 from a FY 2014 baseline. (2015 target: N/A; 2017 target: 4%)			
5.4	75% of light duty vehicle acquisitions must consist of alternative fuel vehicles (AFV). (2015 target: 75%)			
5.5	50% of passenger vehicle acquisitions consist of zero emission or plug-in hybrid electric vehicles by FY 2025. (2015 target: N/A)			
Goal 6: Sustainable Acquisition				
6.1	Promote sustainable acquisition and procurement to the maximum extent practicable, ensuring BioPreferred and biobased provisions and clauses are included in 95% of applicable contracts.			
Goal 7: Pollution Prevention & Waste Reduction				
7.1	Divert at least 50% of non-hazardous solid waste, excluding construction and demolition debris.			
7.2	Divert at least 50% of construction and demolition materials and debris.			
Goal 8: Energy Performance Contracts				
8.1	Annual targets for performance contracting to be implemented in FY 2017 and annually thereafter as part of the planning of section 14 of E.O. 13693.			
Goal 9: Electronic Stewardship				
9.1	Purchases – 95% of eligible acquisitions each year are EPEAT-registered products.			

SSPP Goal #	DOE Goal	Performance Status through FY 2015	Planned Actions & Contribution	Risk of Non-attainment
9.2	Power management – 100% of eligible PCs, laptops, and monitors have power management enabled.			
9.3	Automatic duplexing – 100% of eligible computers and imaging equipment have automatic duplexing enabled.			
9.4	End of Life – 100% of used electronics are reused or recycled using environmentally sound disposition options each year.			

Goal 10: Climate Change Resilience

10.1	Update policies to incentivize planning for, and addressing the impacts of climate change.			
10.2	Update emergency response procedures and protocols to account for projected climate change, including extreme weather events.			
10.3	Ensure workforce protocols and policies reflect projected human health and safety impacts of climate change.			
10.4	Ensure site/lab management demonstrate commitment to adaptation efforts through internal communications and policies.			
10.5	Ensure that site/lab climate adaptation and resilience policies and programs reflect best available current climate change science, updated as necessary.			

II. Performance Review and Plan Narrative

For each Department-level goal, sites should write two sections for the SSP narrative:

1. *Performance Status* – Discuss FY 2015 performance by:
 - a. Referencing pertinent databases and/or workbooks associated with the goal for quantitative information;
 - b. Describing major initiatives or changes to missions or facilities that contribute in significant ways to goal performance;
 - c. Sharing success stories, accomplishments, lessons learned, and best management practices;
 - d. Noting baseline changes, impacts, and justifications in the SSP. Identifying, updating and justifying any changes to previously reported data, including the baseline year in the appropriate reporting tool. If you wish to change historical data, please contact your respective DOE HQ program office and SPO prior to finalization of plan. Major changes are subject to approval by DOE HQ program offices and SPO.

2. *Plans and Projected Performance* – Discuss plans and expectations for FY 2016 and beyond by:
 - a. Identifying planned activities (e.g. 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;
 - b. Describing expected site contribution to the DOE goal(s);
 - c. Estimating additional funding needed beyond planned activities and typical operation costs for meeting the goal;
 - d. Listing site specific measurable goals and milestones (3-5) for the next Fiscal Year;
 - e. Requesting technical assistance, if needed; and
 - f. Documenting planned or needed training to increase awareness and encourage behavior change.

In addition to the general areas of discussion noted above, please provide a description of site efforts towards each goal specific areas noted below, as applicable, and update the optional policy status table in Appendix D. Goals should be discussed in the same numerical order as the executive summary table.

Goal 1: Greenhouse Gas Reduction

1.1 50% Scope 1 & 2 GHG reduction by FY 2025 from a FY 2008 baseline

- a. Describe an overall scope 1 & 2 GHG reduction strategy.
- b. Describe approaches to space management and alternative workplace arrangements to optimize office space.
- c. Discuss fugitive emissions, plans to reduce emissions and/or expected increases along with net impact. Specifically for sulfur hexafluoride (SF₆) discuss capture and storage equipment, leak detection and repair, and/or preventative maintenance programs used to minimize releases (note: per DOE 2010 SSPP, sites with SF₆ emissions were required to have a capture program by September 2012).
- d. Explain challenges with efforts to reduce GHG emissions at high energy mission specific facilities (HEMSF), as applicable (for definitions, contact DOE HQ Program Office.)

1.2 25% Scope 3 GHG reduction by FY 2025 from a FY 2008 baseline

- a. Describe an overall scope 3 GHG reduction strategy.
- b. Describe policies and/or programs that promote carpooling, vanpooling, use of public transit, telework, hoteling, and/or alternative work schedules.
- c. Discuss policies and/or programs to reduce business travel including teleconferencing/video conferencing.
- d. For employee commuting, provide a description of the methodology used for gathering information and a copy of the survey, if applicable.
- e. If known, provide local utility Transmission and Distribution (T&D) loss factor.
- f. In regards to both contracted (off-site) waste water treatment and municipal waste disposal, discuss programs such as composting and recycling to reduce waste.
- g. Where a site leases and operates a facility, but does not directly pay the utility bill (i.e., a fully serviced lease), the site may report associated emissions as Scope 3. Section 3(h)(iv)(B) and section 3(h)(v) of E.O. 13693 initiate energy reporting and GHG emissions reporting for fully-serviced building leases. Beginning in FY 2016, all new agency lease solicitations for fully-serviced building leases over 10,000 rentable square feet (RFS) shall include requirements for lessors to disclose energy consumption and carbon emissions data.
- h. Exercising an option within an existing lease to extend the term is not subject to the terms and conditions of E.O. 13693. However, any action that goes beyond simply exercising an option to extend the term of occupancy, or involves substantial changes in the operation conditions or tenant fit out, or requires more than a simple contract amendment document, shall comply with E.O. 13693. See E.O. 13693 Implementing Instructions, Section 2, for additional guidance on these FY 2016 reporting requirements (Appendix I of this guidance).
- i. Summarize site efforts to ensure planning for new Federal facilities or new leases includes consideration of sites that are pedestrian friendly, near existing employment centers, accessible to public transit, emphasize existing central cities and, in rural communities, existing or planned town centers.

Goal 2: Sustainable Buildings

2.1 25% energy intensity (Btu per gross square foot) reduction in goal-subject buildings, achieving 2.5% reductions annually, by FY 2025 from a FY 2015 baseline.

- a. Discuss the use of recommended tools listed in E.O. 13693 Section 3(a)(i).
- b. If excluding buildings from the goal, see Appendix B for completing the Excluded Buildings Self-Certification.
- c. Describe plans to reduce deferred maintenance while at the same time increasing energy efficiency.
- d. Discuss strategies for design in regards to EISA Section 433 fossil fuel reduction in new buildings.
- e. 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).⁷

¹⁰ Federal Buildings Personnel Training Act of 2010, <http://www.gpo.gov/fdsys/pkg/BILLS-111s3250enr/pdf/BILLS-111s3250enr.pdf>.

- f. Discuss mechanisms by which the sites 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 September, 2015, the current version in effect is ASHRAE 90.1 2010.⁸

2.2 EISA Section 432 energy and water evaluations, benchmarking, project implementation, and measures follow up

- a. Describe overall strategy and plans for your site's current 4-year energy and water audit cycle, including mechanisms and procedures (e.g. combining audits with condition assessment surveys) along with re-/retro-commissioning. Discuss any potential issues with meeting deadlines.
- b. Describe your site's strategy for prioritizing and implementing measures identified in the audits.
- c. Describe benchmarking of buildings that are both metered and covered with ENERGY STAR Portfolio Manager (Portfolio Manager) by providing current status and future efforts.⁹
- d. Sites should update their CEDR tab 3.3 to identify projects where continuous measurement and verification (M&V) is cost-effective and will be performed as part of their EISA evaluations. 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.
- e. Provide updated covered building data in CEDR Tab 11 to ensure that building energy and water consumption and number of electrical meters are accurate. It may be necessary to add or remove buildings from the set of covered buildings (e.g. in order to remain above the 75% threshold for covered energy use or if a covered building is outgranted). In general, the set of covered and not covered buildings should not change significantly from year to year, especially during a 4-year cycle.
- f. Update the planned and completed evaluation dates and type/level including re/retro-commissioning and benchmarking status in CEDR Tab 11. Sites will also have an opportunity, to update this data prior to the June 2016 CTS upload.
- g. Describe covered facilities selection along with plans to address inventory changes to ensure meeting the minimum requirement of having 75% of the site's total energy as covered. Note the covered facility requirement of EISA Section 432 is based on total energy usage and is indifferent to exclusions of the energy intensity goal.

2.3 Meter all individual buildings for electricity, natural gas, steam and water, where cost-effective and appropriate.

- a. Sites will update or create site- metering plans as an appendix to the 2016 SSP with a discussion of the following topics areas:
 - o Funding & Personnel- Estimated amount of funding and personnel required to implement the metering plan.

⁸ Federal Register, Tuesday, July 9, 2013, *Energy Efficiency Design Standards for New Federal Commercial and Multi- Family High-Rise Residential Buildings*, <http://www.gpo.gov/fdsys/pkg/FR-2013-07-09/pdf/2013-16297.pdf>.

⁹ Keep in mind, Executive Order 13693 makes Portfolio Manager the official Federal benchmarking reporting tool. The FY 2015 benchmarking data must be entered in Portfolio Manager and released to the Compliance Tracking System (CTS) no later than March 31, 2016.

- Personnel- Identification of titles of personnel who will analyze the meter data and what the responsibilities of the personnel include.
- Available Energy Tracking Systems- Description of Federal energy tracking systems that are made available to Federal facility managers. The cost-effectiveness of metering is dependent on the data that is provided by the meter, therefore it is important to discuss the systems that will provide actionable data from meters (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). Also discuss how any standard meter data will be incorporated into energy tracking systems and, where applicable, benchmarking systems - on a monthly basis
- Green Button Data- Utilization of Green Button data where available and appropriate. More information about the utilities offering Green Button is available at <http://energy.gov/data/green-button>
- Implementation Barriers- Description of implementation barriers and how they are being addressed or additional resources needed.

2.4 At least 15% (by building count or gross square feet) of existing buildings greater than 5,000 gross square feet (GSF) to be compliant with the revised Guiding Principles for HPSB by FY 2025, with progress to 100% thereafter

- a. Summarize the site’s plans to achieve at least 15% GP by FY 2025 – discuss and ensure FIMS sustainability fields are accurate. Note the Federal definition of “not applicable” has been expanded to include unoccupied, low/no energy use (< 20.9 BTU/GSF), and low/no water use (< 2 GPD).¹⁰ Ensure that FIMS data reflects this change and discuss the impact.
- b. Describe approach and analyze progress toward 100% conformance with GP for entire building inventory.
- c. Discuss approach and progress toward evaluating buildings to determine current individual building progress toward GP compliance.
- d. Describe incorporation of Federal Guiding Principles and sustainable practices into institutional documents to include, but not limited to, site planning documents, policies, procedures, processes, and specifications.
- e. Describe plans to incorporate climate-resilient design and management elements into the operation, repair, and renovation of existing agency buildings

2.5 Efforts to increase regional and local planning coordination and involvement

- a. Discuss site participation in regional transportation planning, recognition of existing community transportation infrastructure, and incorporation of such efforts into site policy and guidance documents.
- b. Provide a description of how the *Principles for Sustainable Federal Location Decision* has been incorporated into agency site selection and lease procurement procedures.¹¹
- c. Describe coordination efforts with regional programs for Federal, state, tribal, and local organizations for ecosystem, watershed, and environmental management.

¹⁰ Federal Real Property Council, *2014 Guidance for Real Property Inventory Reporting*, Section B, Subsection 25. Sustainability, May 27, 2014, http://www.gsa.gov/portal/mediaId/192315/fileName/FY_2014_FRPP_Data_Dictionary.action.

¹¹ Implementing Instructions - Sustainable Locations for Federal Facilities, http://www.whitehouse.gov/sites/default/files/microsites/ceq/implementing_instructions_-_sustainable_locations_for_federal_facilities_9152011.pdf.

- d. Identify regional transportation planning, ecosystem, watershed, and environmental management initiatives affecting sites as well as any opportunities to work with local authorities to align energy policies, the siting of renewable energy infrastructure, and climate preparedness.
- e. Summarize site efforts to ensure planning for new Federal facilities or new leases includes consideration of sites that are pedestrian friendly, near existing employment centers, accessible to public transit, emphasize existing central cities and, in rural communities, existing or planned town centers.

2.6 Net Zero Buildings

New Buildings: Energy Net-Zero and Waste or Water Net-Zero

- a. Beginning in FY 2020 and thereafter, all new construction of buildings greater than 5,000 gross square feet that enters the planning process shall be designed to achieve energy net-zero and, where feasible, water or waste net-zero by FY 2030.¹² Discuss any planned new construction beginning in FY 2020 that will achieve net-zero energy by FY 2030. Strategies to move the design, construction, and operation of new buildings toward net-zero energy, waste, or water status should take an integrative, whole building perspective, to identify innovative approaches that will not be apparent from a more step-by-step standpoint or a traditional system by system design process. The PUE targets shall only apply to Data Centers that meet the minimum criteria of the Uptime Institute's Tier (I-IV) classification.

2.7 Data Center Efficiency

- a. In accordance with the Federal Information Technology Acquisition Reform Act (FITARA) and supported by the EO13693 Implementing Instructions, the DOE CIO is responsible for leading the Department's Data Center Optimization Initiative (DCOI) and developing an annual Data Center Strategic Plan which addresses the sustainability requirements of EO 13693.
- b. Site data center inventories and sustainability performance metrics will be reported to the CIO via the Integrated Data Call (IDC) process.
- c. The DOE CIO will provide a summary of performance in the annual SSPP on the Department's efforts to achieve the data center sustainability goals.

Goal 3: Clean & Renewable Energy

3.1 "Clean Energy" requires that the percentage of an agency's total electric and thermal energy accounted for by renewable and alternative energy shall be not less than: 10% in FY 2016-2017, working towards 25% by FY 2025.

- a. Summarize the site's strategy to increase and prioritize on-site renewable and alternative energy generation.
- b. If RECs from on-site renewable systems are sold, note if replacement RECs are purchased or not and provide REC contract details. EPC Act 2005 Section 203 provides for a double bonus if the renewable energy is produced on-site and the RECs are retained.
- c. Explain the most recent renewable and alternative energy assessments and outcomes, if applicable.

¹² EO 13693 Implementing Instructions, https://www.whitehouse.gov/sites/default/files/docs/eo_13693_implementing_instructions_june_10_2015.pdf

- d. Chronicle the utilization of third party suppliers to purchase RECs.
- e. Describe the incorporation of DOE Procurement Policy Guidance on Purchase of Electricity, Energy Products and Energy By-Products from Indian Tribes which 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.¹³
- f. Describe how the installation of renewable energy systems in new buildings is considered and initialized; especially solar hot water heaters (per EISA Section 523).

3.2 “Renewable Electric Energy” requires that renewable electric energy account for not less than 10% of a total agency electric consumption in FY16-17, working towards 30% of total agency electric consumption by FY 2025.

- a. Summarize the site’s strategy to increase and prioritize on-site renewable energy generation
- g. If RECs from on-site renewable systems are sold, note if replacement RECs are purchased or not and provide REC contract details. EPAct 2005 Section 203 provides for a double bonus if the renewable energy is produced on-site and the RECs are retained.
- h. Explain the most recent renewable energy assessment and outcomes, if applicable.
- i. Chronicle the utilization of third party suppliers to purchase RECs.
- j. Describe the incorporation of DOE Procurement Policy Guidance on Purchase of Electricity, Energy Products and Energy By-Products from Indian Tribes which 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.¹⁴
- k. Describe how the installation of renewable energy systems in new buildings and new major renovations is considered and initialized (per EISA Section 523).

Goal 4: Water Use Efficiency and Management

4.1 36% potable water intensity (gallons per gross square foot) reduction by FY 2025 from a FY 2007 baseline.

- a. Provide the following information on current (FY 2015) potable water use:
 - i. Description of potable water supply source at the site. Indicate if water is supplied from an outside municipality or produced onsite.
 - ii. General information on current major water consuming end-uses, such as cooling, heating, plumbing, irrigation, and laboratory equipment.
 - iii. A breakout of water consumption of each end-use if a water balance has been performed within the last three years. Indicate if no water balance has been performed within that timeframe and if a future water balance is planned.
 - iv. Information on operational issues related to water consumption such as system leaks or equipment maintenance problems.

¹³DOE Draft Procurement Policy Guidance on *Purchase of Electricity, Energy Products and Energy By-Products from Indian Tribes*, http://energy.gov/sites/prod/files/PDF_FINAL%20DOE%20Indian%20Energy%20purchase%20preference%20policy%20guidance.pdf.

¹⁴DOE Draft Procurement Policy Guidance on *Purchase of Electricity, Energy Products and Energy By-Products from Indian Tribes*, http://energy.gov/sites/prod/files/PDF_FINAL%20DOE%20Indian%20Energy%20purchase%20preference%20policy%20guidance.pdf.

- b. Provide a description of the site’s potable water reduction strategy including:
 - i. Description of water efficiency projects and best practices for the current reporting year for all water-consuming equipment such as cooling and heating, plumbing, laboratory equipment, and leak detection .
 - ii. Capital cost, water savings, and cost savings of current projects.
 - iii. Information on the installation of FEMP designated products.
 - iv. Future planned implementation of water efficient equipment and best practices with required investments and water savings potential.
- c. Summarize the site’s water metering strategy. Note: EO 13693 Section 3(f)(ii) recommends the implementation of water meters for collecting and utilizing building water use data.
- 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 the site has a water management plan. If the site has a current water management plan, include as an attachment or provide web address.
- f. If replenishing water supplies, provide documentation on 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.
- g. Sites with locations in California should discuss efforts to reduce water consumption as it pertains to the President’s California Drought Response. Other sites with locations in drought-affected areas are also encouraged to discuss water reduction efforts.

4.2 30% consumption reduction of industrial, landscaping, and agricultural (ILA) water by FY 2025 from a FY 2010 baseline.

- a. Summarize current ILA water uses (if applicable to the site) and specify the water supply source. (Note: CEQ guidance defines ILA water as all non-potable freshwater (surface and groundwater sources) used for ILA purposes plus potable water used in ILA applications that is not already included in the 2007 potable water intensity baseline. Onsite alternative water used in industrial, landscaping, and agricultural applications is **not** considered ILA water use. Previous DOE reporting included all potable water under the water intensity goal, based on the CEQ guidance, sites should continue to report in that manner.)
- b. Summarize the site’s efforts to measure and reduce ILA usage including.
 - i. Description of the reporting year’s implementation of water-efficient equipment and best practices.
 - ii. Description of the site’s effort to identify and implement alternative water sources to offset the use of ILA water (non-potable freshwater).
 - iii. Capital cost, water savings, and cost savings of current projects.
 - iv. Future planned implementation of water-efficient equipment and best practices with required investment and water savings potential.

- c. Provide status of adopting and incorporating various Federal management practices, such as landscape management, storm water runoff, siting for facilities, and disposition of unneeded property.^{15,16,17, 18}

Goal 5: Fleet Management

5.1 20% reduction in annual petroleum consumption by FY 2015 relative to a FY 2005 baseline; maintain 20% reduction thereafter

- 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.

5.2 10% increase in annual alternative fuel consumption by FY 2015 relative to a FY 2005 baseline; maintain 10% increase thereafter

- a. Describe strategies for increasing alternative fuel use, such as, increasing acquisition of alternative fuel vehicles, evaluating alternative fueling options through available locator tools, and siting vehicles to match available fueling locations

5.3 30% reduction in fleet-wide per-mile greenhouse gas emissions by FY 2025 from a FY 2014 baseline (2015 target: N/A; FY 2017 target: 4% reduction)

- a. State FY 2014 baseline using CEQ Implementing Instructions (Section III, C) and FEMP Guidance, if available.
- b. Describe approach/vision for addressing fleet-wide greenhouse gas emission goal, considering strategies used to reduce petroleum use and increase alternative fuel use.

5.4 75% of light duty vehicle acquisitions must consist of alternative fuel vehicles (AFV) by 2015 and each year thereafter

- a. Describe plans to meet AFV acquisition requirement.
- b. Describe plans for increasing use of biodiesel fuel. Per EPA Act 1992, the use of every 450 gallons of neat biodiesel fuel grants one biodiesel fuel use credit, which counts as one AFV acquisition for the purposes of this goal.
- c. If AFVs will be acquired that will not have access to alternative fuel, explain why.

5.5 20% of passenger vehicle acquisitions consist of zero emission or plug-in hybrid electric vehicles by 2020, working towards a goal of 50% by 2025

- a. Describe plans to meet zero emission/plug-in hybrid acquisition goal.
- b. Describe efforts to install on-site vehicle charging infrastructure.

¹⁵Guidance for Federal Agencies on Sustainable Practices for Designed Landscapes, http://www.whitehouse.gov/sites/default/files/microsites/ceq/recommendations_on_sustainable_landscaping_practices.pdf?CFID=1129164&CFTOKEN=71705061.

¹⁶Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act, http://www.epa.gov/owow/NPS/lid/section438/pdf/final_sec438_eisa.pdf.

¹⁷ Recommendations on Sustainable Siting for Federal Facilities, http://www.fedcenter.gov/kd/Items/actions.cfm?action=Show&item_id=15263&destination=ShowItem.

¹⁸ Presidential Memorandum, *Disposing of Unneeded Federal Real Estate*, June 10, 2010, <http://www.whitehouse.gov/the-press-office/presidential-memorandum-disposing-unneeded-federal-real-estate>

Goal 6: Sustainable Acquisition

6.1 Promote sustainable acquisition and procurement to the maximum extent practicable, ensuring BioPreferred and biobased provisions and clauses are included in 95% of applicable contracts.

- a. Describe 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 (including EPEAT-registered products); non-ozone depleting (Significant New Alternative Policy (SNAP)) 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 alternative products (Safer Choice labeled); and fuel efficient products and services (SmartWay Transport partners and SmartWay products).¹⁹
- b. Detail efforts to include BioPreferred and biobased provisions or clauses in eligible contract actions, striving toward a goal of 95% for applicable contracts, per E.O. 13693. In addition, describe efforts to reach 100% compliance for biobased and construction contract compliance by FY 2020, per 2014 DOE SSPP.
- c. To support Section 15(b) of EO 13693, describe the site's current efforts, if any, to monitor or improve supply chain GHG emissions management. Discuss contract selection criteria or the inclusion of specific contract language or requirements (e.g., GHG emission disclosure), as applicable. Please reference the E.O. 13693 Implementing Instructions for strategies and tools for selecting procurements and establishing contract requirements.
- d. Describe plans to review and implement EPA's recommendations for specifications, labels, and standards that designate environmentally preferable products and services.

Goal 7: Pollution Prevention and Waste Reduction

7.1 & 7.2 Municipal Solid Waste (MSW) and Construction & Demolition (C&D) recycling and waste diversion (50%)

- a. Summarize the site's pollution prevention, waste reduction efforts, and recycling programs.
- b. Discuss efforts for to meet diversion rate goal of 50% for both non-hazardous solid waste diversion and construction and demolition waste.
- c. Describe the initiation, expansion, or end of composting programs and the expected impact on waste stream.
- d. Explain the anticipated impact of site population change, construction, D&D activities, etc. on recycling and waste generation rates and volumes.
- e. If a waste-to-energy system is used, provide amount of waste diversion associated with the system(s).
- f. 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).

¹⁹ The Farm Security and Rural Investment Act of 2002 established the BioPreferred program to increase the procurement of biobased products, <http://www.whitehouse.gov/the-press-office/2012/02/21/presidential-memorandum-driving-innovation-and-creating-jobs-rural-ameri>.

- g. Discuss the integration of pest management and landscape management practices (as applicable).
- h. Discuss plans to review clearance of property procedures to identify materials that cannot be cleared for unrestricted release along with quantity of materials affected by this review and timeframe for conducting the review.

Goal 8: Energy Performance Contracts

8.1 Energy Performance Contracts

- a. Per Section 3(k)(iii) of EO 13693, agencies will be required to provide targets for energy performance contracts to be implemented in FY 2017 and each year thereafter. To support this effort, characterize and provide examples of efforts to leverage alternative financing such as ENABLE, ESPC, UESC, and PPA. (Note: Progress on the President's Performance Contracting Challenge should be reported to the SPO on a monthly basis.)
- b. 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.
- c. Describe challenges to use of alternative finance vehicles and provide recommended solutions.

Goal 9: Electronic Stewardship

9.1 Purchases – 95% of eligible acquisitions each year are EPEAT-registered products

- a. Describe policies and procedures that require and ensure acquisition of EPEAT registered (95%), ENERGY STAR qualified (100%), and FEMP designated (95%) electronic office products when procuring electronics in eligible product categories. In 2014, EPEAT was expanded to include imaging equipment and televisions. Furthermore, the Federal Acquisition Regulation (FAR) has been updated to reflect this change.²⁰

9.2 Power management - 100% of eligible desktops, laptops, and monitors have power management enabled

- a. Describe the establishment and implementation of policies, guidance, and tools to ensure the use of power management on all eligible electronic products. Electronics are considered to be using power management if ENERGY STAR power management features (e.g. sleep, standby, hibernate) are enabled. Individual electronics can be considered exempt from the power management goal if they are used for mission critical functions, such as site security or uninterruptable laboratory experiments. Please review the *CEDR Technical Support Document* for more information on power management and exemptions.
- b. Discuss how power management is currently being implemented (policies, guidance, etc.), tracked, and reported. Describe methods for exempting equipment.
- c. If power management has not been fully implemented, discuss plans on how the requirement will be met along with estimated data of compliance.

²⁰ FAR Case 2013-016; Item I; Docket 2013-0016, Sequence 1, Federal Acquisition Regulation; EPEAT: <http://www.gpo.gov/fdsys/pkg/FR-2015-09-03/pdf/2015-21748.pdf>
Items

9.3 Automatic duplexing – 100% of eligible computers and imaging equipment have automatic duplexing enabled

- a. Describe policies and procedures that require and ensure automatic duplexing is enabled on all eligible electronic products. Automatic duplexing is enabled if a computer is set to automatically print jobs double-sided by default. Automatic duplexing is enabled if imaging equipment (e.g., copiers, printers, scanners, multifunction/all-in-one devices, and fax machines) are set to automatically print double-sided by default. 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.
- b. If automatic duplexing has not been fully implemented, discuss plans on how the requirement will be met along with estimated data of compliance.
- c. Describe plans to implement best practices of the *DOE Sustainable Print Management Guide*.

9.4 End of Life – 100% of used electronics are reused or recycled using environmentally sound disposition options each year

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

Goal 10: Climate Change Resilience

10.1 Update policies to ensure planning for, and addressing the impacts of, climate change.

- a. Respond to the objectives identified in Appendix C including detailing risk, describing actions to build resilience, and establishing regional and local coordination.
- b. Characterize plans to conduct a site specific detailed risk or vulnerability assessment.
- c. Describe plans to incorporate climate-resilient design and management elements into the design of new agency buildings.

10.2 Update emergency response procedures and protocols to account for projected climate change, including extreme weather events.

- a. Describe measures taken over the course of the previous year that revised, enhanced, or modernized emergency response procedures.

10.3 Ensure workforce protocols and policies reflect projected human health and safety impacts of climate change.

- a. Characterize how site/lab workforce protocols have been adapted to reflect advancements in understanding of climate change impact over the course of the past year.

10.4 Ensure site/lab management demonstrates commitment to adaptation efforts through internal communications and policies.

- a. Provide a synopsis on management communication practices that encourage the adoption of adaptation policies.

10.5 Ensure that site/lab climate adaptation and resilience policies and programs reflect best available current climate change science, updated as necessary.

- a. Discuss how site/lab policies or programs have been changed in the past year to reflect advancements in climate change science or on-site analyses of climate change related risks posed to the site.

III. Fleet Management Plan

Provide a brief overview of your organization’s fleet management program and the related policies that govern fleet procurement, utilization, and disposition. Discussion points may include:

- Fleet Management Organizational Structure
- Fleet Procurement
 - How are vehicles chosen?
 - What approvals are required at the site and from DOE HQ?
- Fuel Infrastructure
 - How does currently available fueling infrastructure dictate vehicle acquisitions?
 - Are there plans to develop on-site alternative fuel infrastructure?
- Vehicle Use Policies
 - Does the site have employee check-out standards?
 - Does the site employ vehicle telematics to track use and performance?
 - Does the site have an anti-idling policy?
 - Are drivers provided education/training on proper driving behavior and fueling requirements?
- Additional fuel reduction, alternative fuel use, and vehicle reduction activities and policies

If your site already prepares a fleet management plan that addresses these issues, please include as an attachment with the SSP in lieu of writing a new section. Site-level fleet plans may be used to inform the DOE Vehicle Allocation Methodology (VAM) and Fleet Management Plan.

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 OMB reporting, it is important to ensure the accuracy of database entries. The timely reporting 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.

- Facilities Information Management System (FIMS): Collects real property attributes and use, including a list of assets excluded from the energy intensity reduction goal. The database also stores data on buildings that have been assessed or are planned to be assessed against the High Performance Sustainable Building goals.
- Federal Automotive Statistical Tool (FAST): Collects Federal fleet fuel use, vehicle inventory, and vehicle acquisitions data and projections.
- EMS Status Reporting (on FedCenter): Collects information on status of Environmental Management Systems.
- Data Center Profiling Tool (DC Pro) / DOE Green IT (DOEGRIT): A web-based self-assessment tool that collects sustainability-related information for both Federal and Government-Owned Contractor-Operator data centers. DOEGRIT is a DOE-specific implementation of the DC Pro tool.
- EISA Section 432 Compliance Tracking System (CTS): Collects evaluation progress on covered facilities, implemented measures and project savings and cost information, measurement and verification results of implemented measures and projects, and benchmarking results.
- Presidential Performance Contracting Challenge: Headquarters Program Offices provide monthly status updates sent via email to the SPO detailing milestones of current potential performance-based energy contracts.

Table A.1 - Facilities Information Management System (FIMS)

Date(s)	Action/Event
September 30, 2015	<p>FY 2015 Deferred Maintenance and Repair Needs due in FIMS.</p> <p>FIMS data entry will be locked for the following fields:</p> <ol style="list-style-type: none"> 1. Deferred Maintenance 2. Energy Consuming Bldg/Facilities 3. Energy Consuming Metered Process (Excluded) Facilities, including square footage, Exclusion Part, and Justification Comments <p><i>Recommendation: Assets should not be added or removed until after the snapshot date of November 10</i></p> <p>The information for the above FIMS data fields must be in FIMS by September 30. Once the system is locked for data entry, request for change to data fields 2 and 3</p>

Date(s)	Action/Event
	should be sent to the site's respective Program Office and SPO who will then ensure the necessary adjustments are made.
October 1, 2015 to November 9, 2015	SPO and Program Offices to review designation of Excluded Buildings in FIMS. Should a site need to change their excluded buildings information, they should contact their respective Program Office and SPO with the requested change. Instructions for Self-Certification are included in Appendix B.
October 1, 2015	Begin input of FY 2015 Actual Maintenance and operating cost. Previous Actual Maintenance and operating cost values will be blanked out at 6am.
October 2, 2015	FY 2015 Deferred Maintenance and Repair Needs HQ Snapshot.
November 9, 2015	All FY15 data element updates are due in FIMS. This includes the FRPC data elements. Please ensure that the Estimated Disposition Year has been updated and the FY15 Actual Maintenance is 100% populated.
November 10, 2015	FY 2015 year-end HQ Snapshot.
December 15, 2015	FRPP Reporting Deadline.

Table A.2 - Federal Automotive Statistical Tool (FAST)

Tentative Date(s)*	Action/Event
June 2, 2015 – July 11, 2015	Enter EPACT Section 701 waivers and EISA Section 246 fueling center data information.
June 30, 2015 – August 22, 2015	Enter OMB Annual Motor Vehicle Fleet Report (AMVFR) budget reporting information. Note, this may change, however, guidance has not yet been provided.
October 1, 2015	FAST opens for FY 2015 consumption, cost, and acquisition data entry.
November 20, 2015	FAST closes for FY 2015 data entry.
November 24, 2015 – December 12, 2015	FAST FY 2015 data is reviewed for inconsistencies by NNSA and DOE's Federal Fleet Managers.
December 15, 2015	FAST snapshot.

*Listed FAST deadlines are tentative and based on previous year's deadlines. Official deadlines for FAST will not be released until September 2015.

Table A.3 - Environmental Management System Reporting (EMS)

Date(s)	Action/Event
December 1, 2015	FedCenter opens for FY 2015 data entry.
January 29, 2015	FedCenter closes for FY 2015 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.
March 13, 2016	SPO uploads “covered” facility characteristic – square footage, energy usage, water usage.
June 12, 2016	All required EISA Section 432 information due to the SPO for review.
June 30, 2016	Deadline for EISA Section 432 evaluation, implemented project, M&V findings, and benchmarking reporting for mid-year OMB Scorecard snapshot.

Table A.6 - Presidential Performance Contracting Challenge (PPCC)

Date(s)	Action/Event
10 th of Each Month	Participating programs/sites provide status update with milestones via email to SPO (Emily.Stoddart@hq.doe.gov).
15 th of Each Month	SPO submits progress report to OMB.

Appendix B – Excluded Buildings Self-Certification Process

This appendix provides guidance and a template for self-certification of the FY 2015 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 FIMS by assigning the square footage portion of such buildings into the Energy Consuming Metered (Excluded) category. Sites are to classify such buildings in FIMS by the end of September. From the end of September until a few days prior to the final FIMS snapshot date (November 10th for FY 2015 reporting) the sites, in coordination with SPO and their respective Program Office, make any needed adjustment.

Self-Certification: On the snapshot date (November 10th for FY 2015 reporting) FIMS produces a final master Excluded Buildings List. Site should download a copy of their Excluded Buildings List, FIMS Report 063 after the FIMS snapshot and include it as part of their SSP narratives along with their Self-Certifications.

The Self-Certification by the DOE Site Office serves as notification to DOE that the site management agrees that the buildings listed on the Excluded Buildings List meet the qualifications to be excluded from the calculation of energy intensity for the fiscal year.

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 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)
— 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)
— 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 2015

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 FIMS Report 063.

I certify that the buildings listed on the Excluded Buildings List produced by FIMS as Report 063 dated 10 November 2015 for Name of DOE Site on pages XX through XX 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* [http://www1.eere.energy.gov/femp/pdfs/exclusion_criteria.pdf].

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.

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. 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 estimated algorithms 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 C – Climate Change Resilience

For any questions or clarifications on this section, please contact SPO (sustainability@hq.doe.gov).

This section of the SSP should focus only on activities/actions/characteristics that promote or affect adaptation to climate change. Mitigation-related activities should be addressed in other sections, where appropriate. Definitions are provided below to help distinguish between climate adaptation and mitigation when deciding what activities/descriptions to highlight in the SSP:

Climate Change Adaptation

- *USGCRP: Measures to improve our ability to cope with or avoid harmful impacts and take advantage of beneficial ones, now and in the future.*²¹
- *IPCC: Initiatives and measures to reduce the vulnerability of natural and human systems against actual or expected climate change effects.*²²

Climate Change Mitigation

- *USGCRP: Measures to reduce climate change by, for example, reducing emissions of heat-trapping gases and particles, or increasing removal of heat-trapping gases from the atmosphere.*
- *IPCC: Technological change and substitution that reduce resource inputs and [GHG] emissions per unit of output. Although several social, economic and technological policies would produce an emission reduction, with respect to Climate Change, mitigation means implementing policies to reduce greenhouse gas emissions and enhance [GHG/carbon] sinks.*

SSPs should be as specific as possible when describing efforts, partnerships, initiatives, plans, and other contributions to climate change adaptation and resilience efforts at DOE and across the Federal government.

Risks to Missions, Operations and People

Objective 1: Determining Risk

Sites should describe climate change related impacts and associated risk that has been determined to affect site mission, operations and personnel. For each identified risk (sea level rise, increased precipitation, extreme temperature, flooding, drought, and extreme storm events) sites should include 1) the impact, associated risks and affected policy, program or operation; and 2) a brief statement of the rationale for the risk determination. Sites should use this element to also establish a framework to continually review and update impact assessments and risk determination as needed. A response may include plans to integrate climate assessments in future site wide planning efforts. This should address both near-term and long-term

²¹ U.S. Global Change Research Program (USGCRP) *Global Climate Change Impacts in the US* (2009): <http://www.globalchange.gov/publications/reports/scientific-assessments/us-impacts>

²² Intergovernmental Panel on Climate Change (IPCC) *Synthesis Assessment Report*(2007): http://www.ipcc.ch/publications_and_data/ar4/syr/en/contents.html

vulnerabilities on an appropriate scale and ensure regional or local vulnerabilities that affect site mission are included.

This section should be used to identify how each site will assess and build needed capacity among site personnel, including education and awareness training, internal working groups on identifying and addressing climate change adaptation, and other related internal communications and education activities.

Sites are not expected to perform a detailed vulnerability analysis to meet this objective. However sites are encouraged to use widely available resources on local climate from the recently published National Climate Assessment to estimate regional climate impacts.²³ For an agency-wide perspective site are encouraged to review the 2014 DOE Climate Change Adaptation Plan for a description of impacts to physical property, mission, and people as a result of climate change.

Building Resilience

Objective 2: Current Activities

Sites should describe ongoing plans designed to address climate impacts to missions, operations and people as well as policies and programs that include consideration of climate risks. When outlining these existing programs, policies, and plans agencies should identify 1) the climate risk that is the driver for the action; 2) the desired outcome of the program, policy, or plan; 3) an indication of the maturity of the effort such as “recently initiated” or “ongoing;” 4) the responsible component/office; and 5) any milestones or timelines used to determine progress and success.

Sites are encouraged to use this exercise to evaluate current activities that may not explicitly call out climate change impacts but nonetheless are an integral part of resilience. These may include emergency planning operations, natural hazard assessments and continuity of operations protocols. Sites should describe how climate change risk will influence these activities, if it has not already.

Objective 3: Future Activities

Sites should describe future plans designed to address climate impacts to missions, operations and people as well as policies and programs that will be modified to include consideration of climate risks. When outlining these future programs, policies, and plans agencies should identify 1) the climate risk that is the driver for the action; 2) the desired outcome of the program, policy, or plan; 3) the responsible component/office; and 4) any milestones or timelines used to determine progress and success.

Objective 4: Real Property and Supply Chain Resilience

Each site should identify any existing or ongoing efforts to include considerations of climate adaptation and resilience into procurement, acquisition, real property or leasing decisions. Examples of such considerations include determining whether new built or leased facilities are at

²³ 2014 National Climate Assessment, <http://nca2014.globalchange.gov/>

risk of current or future flooding (such as a result of sea level rise); critical systems are located within facilities to minimize risk of flooding or damage; infrastructure such as roads are built to withstand projected heat extremes; supply chain greenhouse gas minimization; and facilities have back-up power systems and reliable access to necessary fuels.

Where sites have not yet taken the opportunity to formally determine how climate adaptation and resilience efforts should be included in procurement, acquisition, and real property or leasing decisions, sites should identify any plans for a process to conduct such a determination including identification of any relevant milestones and responsible agency components or offices.

Regional and Local Coordination

Objective 5: Regional and Local Coordination

Sites should describe regional and local partnerships with other Federal agencies, municipalities and local organizations that: improve our understanding of climate change science, share best practices and data, and establish regional coordination in planning and policy.

Modernization of Programs

Objective 6: Removing and Reforming Barriers

The goal of this element is to ensure that sites policies or programs do not unintentionally discourage or disallow investments by external partners or contract recipients that would improve their preparedness for climate impacts. Sites should examine their programs to determine where such barriers may exist and how they are being or could be addressed. Sites should look to identify and reform policies or programs that may unintentionally increase vulnerability. Examples may include systematic use of outdated information to assess climate related risks; policies that require building or rebuilding to outdated standards; or policies based on outdated assumptions of climate vulnerability.

Sites should provide 1) a description of any identified barriers; 2) a brief statement of the rationale for identifying the circumstance as a barrier; 3) the type of action(s) that the site believes are available to address the barrier and whether the action can be addressed exclusively by the site or if others will need to be involved; (4) timing and expected timeframe for addressing the barrier; and (5) identification of any resources necessary to address the barrier.

Appendix D – Policy and Program Status (Optional)

The table below is intended to track policies and programs implemented at the site level and integrated into the site’s environmental management system (EMS). As necessary, potential policies and programs not listed may be added to the list.

SSPP Goal – Policy/Program	In Place (Y/N)	Last Update (MM/YY)	Additional Information
<i>Goal 1: Greenhouse Gas Reduction</i>			
Program: Sulfur hexafluoride (SF ₆) capture			
Plan: Commuter reduction			
Policy: Teleworking and/or alternative work schedule			
<i>Goal 2: Sustainable Buildings</i>			
Policy: Space management			
Policy: Cool roof installation			
Policy: Design new Federal buildings to achieve net-zero energy by FY 2030			
Program: Participation in critical local and regional efforts and initiatives			
Plan: Update agency/site policy and guidance (EIS's and EA's)			
Policy: Dispose and consolidate excess and underutilized property			
Policy: Reduce need for new building and field office space			
Policy: Conserve, rehabilitate, and reuse historic Federal properties			
Policy: Incorporate sustainable practices into new/renew leases			
Plan: Green buildings roadmap			
Program: Sustainable landscape			
Plan: Metering			
Policy: Data center consolidation			
<i>Goal 3: Clean & Renewable Energy</i>			
Policy: Prioritization of on-site renewable			
Policy: Purchase renewable energy from sources on tribal land			
Policy: Prioritization of on-site clean or alternative energy			
<i>Goal 4: Water Use Efficiency & Management</i>			
Policy: Storm water management			
Policy: Water reuse			
Plan: Water			
<i>Goal 5: Fleet Management</i>			

SSPP Goal – Policy/Program	In Place (Y/N)	Last Update (MM/YY)	Additional Information
Program: Fleet Optimization/Vehicle Allocation Methodology (VAM)			
Program: Sustainable transportation options			
Program: Vehicle sharing/pooling			
Policy: Fleet-wide per mile greenhouse gas emissions			
Program: Zero Emission Vehicles			
Goal 6: Sustainable Acquisition			
Policy: Inclusion of FAR sustainability clause			
Policy: Inclusion of biobased products			
Policy: Inclusion of energy efficient products (e.g. Energy Star, FEMP-designated)			
Policy: Inclusion of recycled content products			
Policy: Inclusion of water efficient products (e.g. WaterSense)			
Policy: Inclusion of environmentally preferable products/services (excluding EPEAT)			
Plan: Environmentally preferable purchasing			
Policy: Paper containing at least 30% post-consumer fiber			
Goal 7: Pollution Prevention & Waste Reduction			
Program: Reduce and minimize hazardous chemicals and materials			
Policy: Integrated pest management and landscape management			
Policy: Increase use of acceptable alternative chemicals and processes			
Policy: Report per Sections (301-313) of EPCRA of 1986			
Program: Composting			
Goal 8: Energy Performance Contracts			
Policy: Utilize performance contracts			
Goal 9: Electronic Stewardship			
Policy: Power management			
Policy: Print Management and Duplex Printing			
Goal 10: Climate Change Resilience			
Plan: Update all appropriate plans to address climate change resiliency			
Program: Identify or establish and participate in regional climate			
Other			
Program: Cost savings reinvestment			

Appendix E – 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 CEDR submissions. All requested documentation should be traceable to reported totals through a rough guide 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 the SPO along with CEDR data and SSP narratives by December 7, 2015.

Appendix F – DOE Interim Fiscal Year Targets

This appendix provides tables with the Department’s interim targets for each fiscal year by goal. These interim targets are used in internal scorecard performance and projection assessments.

Goal	Scope 1&2 GHG	Scope 3 GHG	Fugitives	Water Intensity	ILA Water	Energy Intensity
Law/Regulation	EISA Sec 527; E.O. 13693 Sec 2; DOE O 436.1	EISA Sec 527; E.O. 13693 Sec 2; DOE O 436.1	EISA Sec 527	EISA Sec 432; E.O. 13693 Sec. 3(f)(i)	E.O. 13693 Sec. 3.(f)(iii)	EISA Sec 431; E.O. 13693 Sec 3(a)(i)
Interim FY Target	Scope 1&2 GHG	Scope 3 GHG	Fugitives	Water Intensity	ILA Water	Energy Intensity
2003	--	--	--	--	--	--
2004	--	--	--	--	--	--
2005	--	--	--	--	--	--
2006	--	--	--	--	--	--
2007	--	--	--	Baseline	--	--
2008	Baseline	Baseline	--	-2%	--	--
2009	0%	0%	--	-4%	--	--
2010	-13%	-1%	-42%	-6%	Baseline	--
2011	-14%	-2%	-45%	-8%	-2%	--
2012	-15%	-3%	-50%	-10%	-4%	--
2013	-17%	-4%	-50%	-12%	-6%	--
2014	-19%	-5%	-50%	-14%	-8%	--
2015	-19%	-6%	-50%	-16%	-10%	Baseline
2016	-22%	-7%	-50%	-18%	-12%	-2.5%
2017	-25%	-19%	-50%	-20%	-14%	-5.0%
2018	-28%	-11%	-50%	-22%	-16%	-7.5%
2019	-31%	-13%	-50%	-24%	-18%	-10.0%
2020	-34%	-15%	-50%	-26%	-20%	-12.5%
2021	-37%	-17%	-50%	-28%	-22%	-15.0%
2022	-40%	-19%	-50%	-30%	-24%	-17.5%
2023	-43%	-21%	-50%	-32%	-26%	-20%
2024	-46%	-23%	-50%	-34%	-28%	-22.5%
2025	-50%	-25%	-50%	-36%	-30%	-25%
↓	--	--	--	--	--	--
2030	--	--	--	--	--	--
Goal -->	-50%	-25%	-50%	-36%	-30%	-25%

Goal	HPSB, Existing Buildings	New Fed bldg fossil fuel reduction	Natural Gas, Steam, Chilled Water Meters	Electric Meters	Core Data Centers Meters
Law/Regulation	EISA Sec 434; EISA Sec 432; E.O. 13693 Sec 3(h)(ii); DOE O 436.1	EISA Sec 433; E.O. 13693 Sec 3(h)(i)	EISA Sec 434; EISA Sec 432; DOE O 436.1	EPAct 2005 Sec 103; DOE O 436.1	EISA Sec 434; EISA Sec 432; DOE O 436.1
Interim FY Target	HPSB, Existing Buildings	New Fed bldg fossil fuel reduction	Natural Gas, Steam, Chilled Water Meters	Electric Meters	Core Data Centers Meters
2003	--	Baseline	--	--	--
2004	--	--	--	--	--
2005	--	--	--	--	--
2006	--	--	--	--	--
2007	--	--	--	--	--
2008	--	--	--	--	--
2009	--	--	--	--	--
2010	--	55%	5%	20%	18%
2011	--	55%	10%	75%	40%
2012	--	55%	25%	90%	60%
2013	--	55%	50%	90%	80%
2014	--	55%	75%	90%	90%
2015	--	65%	90%	90%	100%
2016	TBD	65%	90%	90%	--
2017	TBD	65%	90%	90%	--
2018	TBD	65%	90%	90%	--
2019	TBD	65%	90%	90%	--
2020	TBD	80%	90%	90%	--
2021	TBD	80%	--	--	--
2022	TBD	80%	--	--	--
2023	TBD	80%	--	--	--
2024	TBD	80%	--	--	--
2025	TBD, at least 15%	90%	--	--	--
↓	progress toward 100%	90%	--	--	--
2030	progress toward 100%	100%	--	--	--
Goal -->	100%	100%	90%	90%	100%

Goal	Energy & Water Evaluations	Fleet Emissions	Petroleum	Alt. Fuel	AFV	Zero Emission Vehicles
Law/Regulation	EISA Sec 432	E.O. 13693 Sec 3(g)(ii)	EISA Section 142	EISA Section 142	EPAct 1992 Section 303	E.O. 13693 3(g)(v)
Interim FY Target	Energy & Water Evaluations	Fleet Emissions	Petroleum	Alt. Fuel	AFV	Zero Emission Vehicles
2003	--	--	--	--	75%	--
2004	--	--	--	--	75%	--
2005	--	--	Baseline	Baseline	75%	--
2006	--	--	--	--	75%	--
2007	--	--	--	--	75%	--
2008	--	--	--	--	75%	--
2009	--	--	--	--	75%	--
2010	Site specific 4-year cycle	--	--	--	75%	--
2011	Site specific 4-year cycle.	--	--	--	75%	--
2012	Site specific 4-year cycle.	--	--	--	75%	--
2013	Site specific 4-year cycle.	--	--	--	75%	--
2014	Site specific 4-year cycle.	Baseline	--	--	75%	--
2015	Site specific 4-year cycle.	-1%	-20%	10%	75%	--
2016	Site specific 4-year cycle.	-3%	-20%	10%	75%	4%
2017	Site specific 4-year cycle.	-4%	-20%	10%	75%	8%
2018	Site specific 4-year cycle.	-7%	-20%	10%	75%	12%
2019	Site specific 4-year cycle.	-10%	-20%	10%	75%	16%
2020	Site specific 4-year cycle.	-13%	-20%	10%	75%	20%
2021	Site specific 4-year cycle.	-15%	-20%	10%	75%	26%
2022	Site specific 4-year cycle.	-19%	-20%	10%	75%	32%
2023	Site specific 4-year cycle.	-23%	-20%	10%	75%	38%
2024	Site specific 4-year cycle.	-27%	-20%	10%	75%	44%
2025	Site specific 4-year cycle.	-30%	-20%	10%	75%	50%
↓	Site specific 4-year cycle.	--	-20%	--	--	--
2030	Site specific 4-year cycle.	--	-20%	--	--	--
Goal -->	100%	-30%	-20%	10%	75%	50%

Goal	Renewable Electricity	Clean Energy
Law/ Regulation	EPAct 2005 Section 203; E.O. 13693 Sec 3(c)	E.O. 13693 Sec 3(b)
Interim FY Target	Renewable Electricity	Clean Energy
2003	--	--
2004	--	--
2005	Baseline	--
2006	0.0%	--
2007	3.0%	--
2008	3.0%	--
2009	3.0%	--
2010	5.0%	--
2011	5.0%	--
2012	5.0%	--
2013	7.5%	--
2014	7.5%	--
2015	7.5%	--
2016	10.0%	10.0%
2017	10.0%	10.0%
2018	15.0%	13.0%
2019	15.0%	13.0%
2020	20.0%	16.0%
2021	20.0%	16.0%
2022	25.0%	20.0%
2023	25.0%	20.0%
2024	27.5%	22.5%
2025	30.0%	25.0%
↓	--	--
2030	--	--
Goal -->	30.0%	25.0%

Appendix G - E.O. 13693 and Previous Requirements Crosswalk

Goal	Existing Goal Details	E.O. 13693 Status
Scope 1&2 GHG	Reduce Scope 1&2 GHG emissions by 28% by FY 2020 compared to FY 2008.	Extended to FY 2025 with same baseline. New goal % and interim targets TBD. E.O. cites opportunity for 40% reduction over next 10 years.
Scope 3 GHG	Reduce Scope 3 GHG emissions by 13% by FY 2020	Extended to FY 2025 with same baseline. New goal % and interim targets TBD. Reporting for newly solicited leases over 10,000 gross square feet now mandatory instead of optional.
Energy Intensity	Reduce energy intensity of goal subject buildings by 30% by 2015 compared to FY 2003.	Extended to FY 2025 and baseline changed. Now -25% by FY 2025 compared to a FY 2015 baseline. Interim target of a 2.5% reduction each year.
Renewable Electric Energy	Utilize 20% renewable electricity by FY 2020	Extended to FY 2025. Now 30% by FY 2025. Interim targets of 10% (FY16-17), 15% (FY18-19), 20% (FY20-21), 25% (FY22-23).
Clean Energy	N/A - New Goal.	Utilize 25% renewable energy (combined electric and thermal) by FY 2025. Interim targets of 10% (FY16-17), 13% (FY18-19), 16% (FY20-21), 20% (FY22-23).
Water Intensity	Reduce water intensity by 16% by FY 2015 compared to FY 2007.	Extended to FY 2025 with same baseline. Now -36% by FY 2025. Interim target of a 2% reduction each year. Install water meters and collect water balance data.
ILA Water	Reduce ILA water use by 10% by FY 2015 compared to FY 2010.	Extended to FY 2025 with same baseline. Now -30% by FY 2025. Interim target of a 2% reduction each year.
HPSB	Ensure 15% of applicable buildings meet all of the Guiding Principles by FY 2015.	Extended to FY 2025. New goal and interim targets % TBD, with guidance that it is 15% at a minimum.
Net zero buildings	By FY 2030, achieve zero-net-energy in buildings entering planning process after FY 2020	Mentioned in EO. Original requirement remains. New requirement of identifying percentage of buildings that will be net-zero energy, water, or waste by FY 2025.
Leases	N/A	All leases should include efficiency criteria as a selection factor, and require lessor to disclose carbon emissions or energy consumption for the portion occupied.
Infrastructure Planning	Regional and Local Planning	Include transportation and transit considerations in new location planning, as well as optimized space utilization. Include appropriate electric vehicle charging infrastructure in new major building projects.
Fleet GHG	N/A - New Goal.	Reduce fleet-wide per-mile GHG emissions from fleet vehicles by 30% by FY 2025 compared to FY 2014. Interim targets of 5% (by FY17) and 20% (by FY21).
Zero Emission Passenger Cars	N/A - New Goal.	50% of new passenger vehicles shall be zero emission vehicles or plug-in hybrid vehicles by FY 2025. A double credit may be available for this goal, with details TBD. Interim target of 20% (FY20).
Petroleum	Reduce fleet petroleum fuel use by 30% by FY 2020 compared to FY 2005.	20% fleet petroleum consumption reduction by FY 2015, and each year thereafter, relative to a FY 2005 baseline (2015 target: 20%)
AFV	100% of passenger vehicles procured must be alternative fuel vehicles	75% of light duty vehicle acquisitions must consist of alternative fuel vehicles (AFV) (2015 target: 75%). 20% of passenger vehicle acquisitions consist of zero emission or plug-in hybrid electric vehicles by 2020 (2015 target: N/A; 2020 target: 20%; 2025 target: 50%)
Other Fleet Items	N/A	Determine optimum fleet inventory with emphasis on eliminating unnecessary vehicles. Include telematics in all new passenger vehicle acquisitions within two years.
Data Centers	100% of data centers must be individually metered by FY 2015, with an average PUE of 1.4	Extended. Install advanced meters in all data centers by FY 2018. New PUE of 1.2-1.4 for new data centers and 1.5 for existing.
Sustainable Acquisition	All requirements of E.O. 13514 & E.O. 13423 carry over into E.O. 136943, except for changes noted in next column.	100% of contract actions must include Sustainable Acquisition requirements (previous requirement was 95%). EPA will issue recommendations for non-Federal specifications, labels, and standards for us to use beginning FY2016. While EO13693 revokes EO13514 and EO13423, the FAR, DEAR, DOE Order 436.1 and your DOE contract are still in effect - Present FAR requirements (including EPEAT) are in effect until new FAR cases denote otherwise

Appendix H – Sample 2015 SSPs

This appendix provides a sampling of SSPs from last year's submission for reference purposes. The documents may be accessed at the SPO's Powerpedia page at https://powerpedia.energy.gov/wiki/Sustainability_Performance_Office.

1. National Renewable Energy Laboratory (70 pages)
2. Pantex Plant (77 pages)
3. Pacific Northwest National Laboratory (99 pages)

Appendix I – Useful References

Requirements

Laws

Energy Efficiency Improvement Act of 2015. <http://www.gpo.gov/fdsys/pkg/BILLS-114s535es/pdf/BILLS-114s535es.pdf>

Energy Policy Act of 1992. <http://thomas.loc.gov/cgi-bin/query/z?c102:H.R.776.ENR:>

Energy Policy Act of 2005. http://www1.eere.energy.gov/buildings/appliance_standards/pdfs/epact2005_appliance_stds.pdf

Energy Independence and Security Act of 2007. http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110_cong_bills&docid=f:h6enr.txt.pdf

Federal Buildings Personnel Training Act of 2010. <http://www.gpo.gov/fdsys/pkg/BILLS-111s3250enr/pdf/BILLS-111s3250enr.pdf>

Federal Information Technology Acquisition Reform Act (FITARA). <http://www.gpo.gov/fdsys/pkg/BILLS-113hr1232ih/pdf/BILLS-113hr1232ih.pdf>.

National Energy Conservation Policy Act, as amended by the Energy Policy Act of 2005 and the Energy Independence and Security Act of 2007. http://www1.eere.energy.gov/femp/pdfs/necpa_amended.pdf

Pollution Prevention Act of 1990. <http://www.epa.gov/p2/pubs/p2policy/act1990.htm>

Resource Conservation and Recovery Act (RCRA). <http://www.gpo.gov/fdsys/pkg/USCODE-2011-title42/pdf/USCODE-2011-title42-chap82.pdf>.

Executive Orders

Executive Order 13653 (*reparing the United States for the Impacts of Climate Change*). <http://www.gpo.gov/fdsys/pkg/FR-2013-11-06/pdf/2013-26785.pdf>.

Executive Order 13693, *Planning for Federal Sustainability in the Next Decade*. March 19, 2015. <http://www.gpo.gov/fdsys/pkg/FR-2015-03-25/pdf/2015-07016.pdf>

Presidential Memorandums

Presidential Memorandum, *Disposing of Unneeded Federal Real Estate*. June 10, 2010. <http://www.whitehouse.gov/the-press-office/presidential-memorandum-disposing-unneeded-federal-real-estate>

Orders

DOE O 436.1, *Departmental Sustainability*. <https://www.directives.doe.gov/directives-documents/400-series/0436.1-BOrder>.

Guidance

Goal 1: Greenhouse Gas Reduction

Federal Greenhouse Gas Accounting and Reporting Guidance. June 4, 2012.

http://www.whitehouse.gov/sites/default/files/microsites/ceq/revised_federal_greenhouse_gas_accounting_and_reporting_guidance_060412.pdf

Federal Greenhouse Gas Accounting and Reporting Guidance Technical Support Document. June 2012.

http://www.whitehouse.gov/sites/default/files/federal_greenhouse_gas_accounting_and_reporting_guidance_technical_support_document.pdf

Goal 2: Sustainable Buildings

Facility Energy Management Guidelines and Criteria for Energy and Water Evaluations in Covered Facilities. November 25, 2008.

http://www1.eere.energy.gov/femp/pdfs/eisa_s432_guidelines.pdf

Federal Building Energy Use Benchmarking Guidance. August 2014

Update. http://energy.gov/sites/prod/files/2014/08/f18/benchmarking_guidance08-2014_0.pdf

Guidance for the Implementation and Follow-up of Identified Energy and Water Efficiency Measures in Covered Facilities. September 2012.

http://energy.gov/sites/prod/files/2013/10/f4/eisa_project_guidance.pdf

Continuous Commissioning Guidebook for Federal Energy Managers. October

2002. <http://eber.ed.ornl.gov/CommercialProducts/FEMP%20Continuous%20Cx%20Guidebook.pdf>

Commissioning for Federal

Facilities. http://energy.gov/sites/prod/files/2014/07/f17/commissioning_fed_facilities.pdf

Operation & Maintenance Best Practices, Revision 3, August

2010, http://energy.gov/sites/prod/files/2013/10/f3/omguide_complete.pdf

Federal Building Metering Guidance, November 2014 Update.

http://www.energy.gov/sites/prod/files/2014/11/f19/metering_guidance.pdf

Metering Best Practices: A Guide to Achieving Utility Resource Efficiency, Release 3.0. March 2015.

<http://www.energy.gov/sites/prod/files/2015/04/f21/mbpg2015.pdf>

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. January 27, 2006. http://www1.eere.energy.gov/femp/pdfs/exclusion_criteria.pdf

Federal Register, *Energy Efficiency Design Standards for New Federal Commercial and Multi-Family High-Rise Residential Buildings*. July 9

, 2013.

<http://www.gpo.gov/fdsys/pkg/FR-2013-07-09/pdf/2013-16297.pdf>

Guidance Providing Credit Toward Energy Efficiency Goals for Cost Effective Projects Where Source Energy Use Declines But Site Energy Use Increases. October 1, 2004. http://www1.eere.energy.gov/femp/pdfs/sec502e_%20guidance.pdf

Federal Buildings Personnel Training Act, Core Competencies. June 2012. http://energy2014.org/docs/FBPTA_Core_Competencies.pdf

Implementing Instructions - Sustainable Locations for Federal Facilities. September 15, 2011. https://www.whitehouse.gov/sites/default/files/microsites/ceq/implementing_instructions_-_sustainable_locations_for_federal_facilities_9152011.pdf

Memorandum to the Heads of Executive Departments and Agencies, *Promoting Efficient Spending to Support Agency Operations.* May 11, 2012. <http://www.whitehouse.gov/sites/default/files/omb/memoranda/2012/m-12-12.pdf>

Memorandum for All Executive Agencies, *Implementation of OMB Memorandum M-12-12 Section 3: Reduce the Footprint.* March 25, 2015. <https://www.whitehouse.gov/sites/default/files/omb/financial/memos/implementation-reduce-the-footprint.pdf>

National Strategy for the Efficient Use of Real Property, 2015 – 2020. <https://www.whitehouse.gov/sites/default/files/omb/financial/national-strategy-efficient-use-real-property.pdf>

Federal Real Property Council, *2014 Guidance for Real Property Inventory Reporting, Section B, Subsection 25.* May 27, 2014. http://www.gsa.gov/portal/mediaId/192315/fileName/FY_2014_FRPP_Data_Dictionary.action

Goal 3: Clean & Renewable Energy

Renewable Energy Requirement Guidance for EPACT 2005 and Executive Order 13423. January 28, 2008. http://www1.eere.energy.gov/femp/pdfs/epact05_fedrenewenergyguid.pdf (note: new guidance is currently being drafted)

Purchase of Electricity, Energy Products and Energy By-Products from Indian Tribes. http://energy.gov/sites/prod/files/PDF_FINAL%20DOE%20Indian%20Energy%20purchase%20preference%20policy%20guidance.pdf

Green Power Network
<http://apps3.eere.energy.gov/greenpower/buying/>

Goal 4: Water Use Efficiency & Management

Federal Energy Management Program. *Federal Water Efficiency Best Management Practices.* <http://energy.gov/eere/femp/federal-water-efficiency-best-management-practices>

EPA 2012 Guidelines for Water Reuse. September 2012. <http://nepis.epa.gov/Adobe/PDF/P100FS7K.pdf>

Guidelines for Estimating Unmetered Industrial Water Use. September 2011. http://energy.gov/sites/prod/files/2013/10/f3/est_unmetered_industrial_wtr.pdf

Guidelines for Estimating Unmetered Landscaping Water Use. July 2010. http://energy.gov/sites/prod/files/2013/10/f3/est_unmetered_landscape_wtr.pdf

Environmental Protection Agency. *Stormwater Management for Federal Facilities under Section 438 of the Energy Independence and Security Act.* <http://www.epa.gov/owow/nps/lid/section438/>

Guidance for Federal Agencies on Sustainable Practices for Designed Landscapes. http://www.whitehouse.gov/sites/default/files/microsites/ceq/recommendations_on_sustainable_landscaping_practices.pdf?CFID=1129164&CFTOKEN=71705061

Goal 5: Fleet Management

Federal Energy Management Program. *Sustainable Federal Fleets.* <https://federalfleets.energy.gov/>

Goal 6: Sustainable Acquisition

Office of Management. *Acquisition Guide.* <http://energy.gov/management/downloads/acquisition-guide-0>

Goal 7: Pollution Prevention and Waste Reduction

Environmental Protection Agency. *Pollution Prevention (P2) Tools.* <http://www.epa.gov/p2/tools/p2tools.htm>

Goal 8: Energy Performance Contracts

Federal Energy Management Program. Project Funding. <http://energy.gov/eere/femp/project-funding>

Federal Energy Management Program. *Life-Cycle Cost Analysis.* <http://www1.eere.energy.gov/femp/program/lifecycle.html>

Federal Use of Energy Savings Performance Contracting. July 25, 1998. <https://www.whitehouse.gov/sites/default/files/omb/assets/omb/memoranda/m98-13.pdf>.

Addendum to OMB Memorandum M-98-13 on Federal use of Performance Contracts (ESPCs) and Utility Energy Service Contracts (UESCs). September 28, 2012. <https://www.whitehouse.gov/sites/default/files/omb/memoranda/2012/m-12-21.pdf>.

Goal 9: Electronic Stewardship

Memorandum for Heads of Executive Departments and Agencies, *Management and Oversight of Federal Information Technology.* June 10, 2015. <https://www.whitehouse.gov/sites/default/files/omb/memoranda/2015/m-15-14.pdf>

Center of Expertise for Energy Efficiency and Data Centers. <http://datacenters.lbl.gov/tools>

Best Practices Guide for Energy-Efficient Data Center Design. March 2011. <http://www1.eere.energy.gov/femp/pdfs/eedatacenterbestpractices.pdf>

Memorandum for Senior Sustainability Officers, *EPEAT Clarification for Federal Purchasers*. February 19, 2014. <https://www.fedcenter.gov/admin/itemattachment.cfm?attachmentid=797>

FAC 2005-75; FAR Case 2013-016; Item I; Docket 2013-0016, Sequence 1, Federal Acquisition Regulation EPEAT Items. <https://www.federalregister.gov/articles/2014/06/24/2014-14376/fac-2005-75-far-case-2013-016-item-i-docket-2013-0016-sequence-1-federal-acquisition-regulation> and http://www.afm.ars.usda.gov/acquisitions/pdffiles/EPEAT_FAR2014-14376.pdf

GSA Bulletin B-34, *Disposal of Federal Electronic Assets*.
http://www.gsa.gov/graphics/ogp/FMR_Bulletin_B-34.pdf

GSA FMR Bulletin B-37, *Federal Print Management Practices*.
http://www.gsa.gov/portal/mediaId/172607/fileName/Bulletin_B-37_Print_Management_Guidance_508

GSA FMR Bulletin B-39, *Federal Sustainable Print Management Policy Template*.
https://www.fedcenter.gov/_kd/go.cfm?destination=ShowItem&Item_ID=27959

Goal 10: Climate Change Resilience

EMA. *Federal Flood Risk Management Standard* January 30, 2015. http://www.fema.gov/media-library-data/1422649643416-c0ff9e51d11442790ab18bae8dc5df4b/Federal_Flood_Risk_Management_Standard.pdf

Implementing Instructions for Executive Order 13693. June 10, 2015. https://www.whitehouse.gov/sites/default/files/docs/eo_13693_implementing_instructions_june_10_2015.pdf

Interagency Climate Change Adaptation Task Force. *Progress Report of the Interagency Climate Change Adaptation Task Force: Recommended Actions in Support of a National Climate Change Adaptation Strategy*. October 5, 2010. <https://www.whitehouse.gov/sites/default/files/microsites/ceq/Interagency-Climate-Change-Adaptation-Progress-Report.pdf>

Water Resources and Climate Change Adaptation Workgroup. *2014 Highlights of Progress and 2015 Implementation Plan for the National Action Plan: Priorities for Managing Freshwater Resources in a Changing Climate*. April 7, 2015.
http://acwi.gov/climate_wkg/nap_fy1415-version9_hw_clean_final508c.pdf