

# **GUIDANCE FOR FY 2015 DOE SITE SUSTAINABILITY PLANS**

---

*September 16, 2014*



U.S Department of Energy  
Sustainability Performance Office

# Contents

---

|  |    |
|--|----|
| Contents .....   | 1  |
| Introduction.....  | 2  |
| Site Sustainability Plan Format and Instructions .....           | 5  |
| I. Executive Summary.....  | 5  |
| II. Performance Review and Plan Narrative .....                  | 8  |
| III. Fleet Management Plan.....                                  | 17 |
| Appendix A – Reporting Schedule for FY 2013 and FY 2014.....     | 19 |
| Appendix B – Excluded Buildings Self-Certification Process ..... | 22 |
| Appendix C – Climate Change Resilience.....                      | 27 |
| Appendix D – Policy and Program Status (Optional).....           | 30 |
| Appendix E – Verification Data Request.....                      | 33 |
| Appendix F – DOE Interim Fiscal Year Targets .....               | 34 |
| Appendix G – Sample 2014 SSPs.....                               | 37 |
| Appendix H – Useful References .....                             | 38 |

## Introduction

---

This document provides guidance for DOE sites to complete FY 2015 Site Sustainability Plans (SSP), required by DOE Order 436.1, *Departmental Sustainability*.<sup>1</sup> The SSP provides platform to report on FY 2014 sustainability performance and plan for FY 2015 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* and *DOE Sustainability Dashboard User Guide* provide instructions on how to submit sustainability data. Both the CEDR and DOE Sustainability Dashboard (Dashboard) collect 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 Ten Year Site Plan (TYSP), Integrated Facilities and Infrastructure Budget Crosscut (IFI), and related databases such as Federal Automotive Statistical Tool (FAST) and Facilities Information Management System (FIMS). Sites shall submit their SSP, sustainability data, 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 8, 2014. Feedback on the SSPs will be issued to the Under Secretaries in April 2015.

Data provided in the SSP and other reports may be subject to disclosure under the Freedom of Information Act (FOIA). Also, 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*

1. Presidential Memorandum on *Leadership on Energy Management* provided new interim targets for the renewable energy goal (see Appendix F), established EPA's Energy Star Portfolio Manager as the official Federal benchmarking reporting tool, and added the requirement for water meter installations when cost effective.<sup>2</sup>
2. In December 2013, President Obama challenged Federal agencies to further expand their use of performance based energy contracts through 2016. DOE's 2014 SSPP was updated to include a goal on Energy Performance Contracts (Goal 10). To align with the SSPP, the SSP Guidance moved performance based contracts from a subset of Goal 2 to a standalone Goal 10. Information requested remains largely unchanged.

---

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

<sup>2</sup> Presidential Memorandum, *Leadership on Energy Management*, December 5, 2013, <http://www.whitehouse.gov/the-press-office/2013/12/05/presidential-memorandum-federal-leadership-energy-management>.

3. An optional new table for tracking the status of policy implementation has been added as Appendix D. The objective is to consolidate policy requests made throughout the SSP Guidance.

## *Data Reporting Changes*

### **Process Updates**

The SPO has developed an enterprise-wide database to improve data reporting, enhance accuracy, and streamline reporting processes. The Dashboard is a DOE-specific database with the capability of collecting sustainability data and providing in-depth data analytics. At present, the Dashboard collects data to primarily support DOE's Annual GHG inventory; over time, additional reporting categories will be added to the system.

Sites have two options for completing FY 2014 data reporting:

1. CEDR-only approach: Complete all CEDR tabs using instructions outlined in the *CEDR Technical Support Document*. This approach is consistent with reporting processes used in FY 2013 and prior years.
2. Hybrid approach: Complete all data entry categories available in the Dashboard, as well as the following tabs in the CEDR:
  - a. 2.1 Funds, Metering, Training
  - b. 3.3a Conservations & RE Measures
  - c. 3.4 Bldg Inventory Change
  - d. 4.1 Source Energy Savings
  - e. 5.1 Data Centers
  - f. 11 Covered Facilities

SPO will host training sessions and open calls to familiarize new users with the Dashboard and answer questions on the FY 2014 sustainability data reporting process.

### **Specific Data Updates**

- EPA updated eGRID emission factors for purchased grid electricity.<sup>3</sup> These factors will apply to 2014 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 UN's Intergovernmental Panel on Climate Change. Additionally, EPA has changed several other emission factors as part of its Greenhouse Gas Reporting Program.<sup>4</sup>
- For renewable energy, additional information is requested on renewable energy purchase contracts to ensure compliance with the upcoming new definition of "new" for Renewable Energy Credits. See Section II Goal 8 of this guidance for more information.
- For data centers, sites are being asked to categorize their data centers as CORE or Non-CORE. Definition are provided in the CEDR TSD.

---

<sup>3</sup> For current and past eGrid data, visit: <http://www.epa.gov/cleanenergy/energy-resources/egrid/>.

<sup>4</sup> For a full list of changes, visit: <http://www.epa.gov/climateleadership/inventory/ghg-emissions.html>.

- 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 separate tab as informational only.

## 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 and/or Dashboard. Overarching guidance for the SSP narrative is described in this document. Supplementary information and instructions for completing the CEDR and Dashboard can be found in the *CEDR Technical Support Document* and *DOE Sustainability Dashboard User Guide*, respectively. 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 2014 Performance Status
  - b. Plans and Projected Performance for FY 2015 and beyond
3. Fleet Management Plan

Pre-existing documentation may be referenced in lieu of writing new descriptions. In such cases, please provide documentation as an attachment or link. Additionally, the use of graphs and tables is encouraged.

### 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.
2. *Planning Synopsis*: Describe major planning assumptions, strategies, issues, and obstacles, along with the funding mechanisms used to achieve sustainability goals.
3. *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).
4. *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.
5. 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 and/or Dashboard.
  - 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**

| SSPP Goal #                             | DOE Goal   | Performance Status through FY 2014 | Planned Actions & Contribution | Risk of Non-attainment |
|---|--|------------------------------------|--------------------------------|------------------------|
| <i>Goal 1: Greenhouse Gas Reduction</i> |  |                                    |                                |                        |
| 1.1                                     | 28% Scope 1 & 2 GHG reduction by FY 2020 from a FY 2008 baseline (2014 target: 19%)  |                                    |                                |                        |
| 1.2                                     | 13% Scope 3 GHG reduction by FY 2020 from a FY 2008 baseline (2014 target: 5%)   |                                    |                                |                        |
| <i>Goal 2: Sustainable Buildings</i>    |  |                                    |                                |                        |
| 2.1                                     | 30% energy intensity (Btu per gross square foot) reduction by FY 2015 from a FY 2003 baseline (2014 target: 27%)   |                                    |                                |                        |
| 2.2                                     | EISA Section 432 energy and water evaluations  |                                    |                                |                        |
| 2.3                                     | Individual buildings metering for 90% of electricity (by October 1, 2012); for 90% of steam, natural gas, and chilled water (by October 1, 2015) (2014 target: 90% and 75%, respectively) <sup>5</sup> |                                    |                                |                        |
| 2.4                                     | Cool roofs, unless uneconomical, for roof replacements unless project already has CD-2 approval. New roofs must have thermal resistance of at least R-30.  |                                    |                                |                        |
| 2.5                                     | 15% of existing buildings greater than 5,000 gross square feet (GSF) are compliant with  |                                    |                                |                        |

<sup>5</sup> 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 2014 | Planned Actions & Contribution | Risk of Non-attainment |
|-------------|---|------------------------------------|--------------------------------|------------------------|
|             | the Guiding Principles (GPs) of HPSB by FY 2015 (2014 target: 13%)  |                                    |                                |                        |
| 2.6         | All new construction, major renovations, and alterations of buildings greater than 5,000 GSF must comply with the GPs. <sup>6</sup> |                                    |                                |                        |
| 2.7         | Efforts to increase regional and local planning coordination and involvement  |                                    |                                |                        |

**Goal 3: Fleet Management**

|     |   |  |  |  |
|-----|---|--|--|--|
| 3.1 | 10% annual increase in fleet alternative fuel consumption by FY 2015 relative to a FY 2005 baseline (2014 target: 136% cumulative since 2005) |  |  |  |
| 3.2 | 2% annual reduction in fleet petroleum consumption by FY 2020 relative to a FY 2005 baseline (2014 target: 18% cumulative since 2005)         |  |  |  |
| 3.3 | 100% of light duty vehicle purchases must consist of alternative fuel vehicles (AFV) by FY 2015 and thereafter (75% FY 2000 – 2015)           |  |  |  |

**Goal 4: Water Use Efficiency and Management**

|     |   |  |  |  |
|-----|---|--|--|--|
| 4.1 | 26% potable water intensity (Gal per gross square foot) reduction by FY 2020 from a FY 2007 baseline (2014 target: 14%)                             |  |  |  |
| 4.2 | 20% water consumption (Gal) reduction of industrial, landscaping, and agricultural (ILA) water by FY 2020 from a FY 2010 baseline (2014 target: 8%) |  |  |  |

**Goal 5: Pollution Prevention and Waste Reduction**

|     |  |  |  |  |
|-----|--|--|--|--|
| 5.1 | Divert at least 50% of non-hazardous solid waste, excluding construction and demolition debris, by FY 2015 |  |  |  |
| 5.2 | Divert at least 50% of construction and demolition materials and debris by FY 2015                         |  |  |  |

<sup>6</sup> DOE considers buildings meeting the following criteria as complying with GPs: Any building that achieves LEED-EB Silver or higher or LEED-NC Gold or higher; Any building that achieves a Green Globes-NC rating of four or a Green Globes CIEB rating of three; Any building that has been occupied for more than one year that achieves Living Status designation by the Living Building Challenge (although included as policy in the 2012 SSPP, these equivalencies are contingent upon OMB and CEQ approval).

| SSPP Goal #  | DOE Goal   | Performance Status through FY 2014 | Planned Actions & Contribution | Risk of Non-attainment |
|--|--|------------------------------------|--------------------------------|------------------------|
| <b>Goal 6: Sustainable Acquisition</b>                 |  |                                    |                                |                        |
| 6.1  | Procurements meet requirements by including necessary provisions and clauses in 95% of applicable contracts                      |                                    |                                |                        |
| <b>Goal 7: Electronic Stewardship and Data Centers</b> |  |                                    |                                |                        |
| 7.1  | All core data centers are metered to measure a monthly Power Usage Effectiveness (PUE) of 100% by FY 2015 (2014 target: 90%)     |                                    |                                |                        |
| 7.2  | Core data centers maximum annual weighted average PUE of 1.4 by FY 2015 (2014 target: 1.5)                                       |                                    |                                |                        |
| 7.3  | Power management – 100% of eligible PCs, laptops, and monitors with power management actively implemented and in use by FY 2012. |                                    |                                |                        |
| 7.4  | Electronic Stewardship – 95% of eligible electronics acquisitions meet EPEAT standards.  |                                    |                                |                        |
| <b>Goal 8: Renewable Energy</b>                        |  |                                    |                                |                        |
| 8.1  | 20% of annual electricity consumption from renewable sources by FY 2020 (2014 target: 7.5%)                                      |                                    |                                |                        |
| <b>Goal 9: Climate Change Resilience</b>               |  |                                    |                                |                        |
| 9.1  | Address DOE Climate Change Adaptation Plan goals (See Appendix C)  |                                    |                                |                        |
| <b>Goal 10: Energy Performance Contracts</b>           |  |                                    |                                |                        |
| 10.1   | Utilization of Energy Performance Contracts  |                                    |                                |                        |

## 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 2014 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 2015 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 28% Scope 1 & 2 GHG reduction by FY 2020 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 (SF<sub>6</sub>) 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 SF<sub>6</sub> 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 13% Scope 3 GHG reduction by FY 2020 from a FY 2008 baseline**

- a. Describe policies and/or programs that promote carpooling, vanpooling, use of public transit, telework, hoteling, and/or alternative work schedules.
- b. Discuss policies and/or programs to increase teleconferencing/video conferencing and reduce travel.
- c. For employee commuting, provide a description of the methodology used for gathering information and a copy of the survey, if applicable.
- d. If known, provide local utility Transmission and Distribution (T&D) loss factor.

- e. In regards to both contracted (off-site) waste water treatment and municipal waste disposal, discuss programs such as composting and recycling to reduce waste.
- f. 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 voluntarily report associated emissions as Scope 3. This remains voluntary, but may be considered mandatory in future years for facilities of 10,000 gross square feet or greater. Sites are encouraged but not required to report emissions for leases of fewer than 10,000 gross square feet.<sup>7</sup>

## ***Goal 2: Sustainable Buildings***

### **2.1 30% energy intensity (Btu per gross square foot) reduction by FY 2015 from a FY 2003 baseline**

- a. Discuss best management practices such as setbacks, lighting, metering, building management systems.
- b. 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.<sup>8,9,10, 11</sup>
- c. If excluding buildings from the goal, see Appendix B for completing the Excluded Buildings Self-Certification.
- d. Describe plans to reduce deferred maintenance while at the same time increasing energy efficiency.
- e. Discuss strategies for design in regards to EISA Section 433 fossil fuel reduction in new buildings.
- f. 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).<sup>12</sup>

### **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 4-year energy and water audits, including mechanisms and procedures (e.g. combining audits with condition assessment surveys) along with re-/retro-commissioning.
- b. Describe benchmarking of metered buildings with ENERGY STAR Portfolio Manager (Portfolio Manager) by providing current status and future efforts. Keep in mind, the

<sup>7</sup> Revised Federal Greenhouse Gas Accounting and Reporting Guidance, June 2012, [http://www.whitehouse.gov/sites/default/files/microsites/ceq/revised\\_federal\\_greenhouse\\_gas\\_accounting\\_and\\_reporting\\_guidance\\_060412.pdf](http://www.whitehouse.gov/sites/default/files/microsites/ceq/revised_federal_greenhouse_gas_accounting_and_reporting_guidance_060412.pdf).

<sup>8</sup> 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](http://www.whitehouse.gov/sites/default/files/microsites/ceq/recommendations_on_sustainable_landscaping_practices.pdf?CFID=1129164&CFTOKEN=71705061).

<sup>9</sup> Technical 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](http://www.epa.gov/owow/NPS/lid/section438/pdf/final_sec438_eisa.pdf).

<sup>10</sup> Recommendations on Sustainable Siting for Federal Facilities, [http://www.fedcenter.gov/kd/Items/actions.cfm?action=ShowItem\\_id=15263&destination=ShowItem](http://www.fedcenter.gov/kd/Items/actions.cfm?action=ShowItem_id=15263&destination=ShowItem).

<sup>11</sup> Federal Buildings Personnel Training Act of 2010, <http://www.gpo.gov/fdsys/pkg/BILLS-111s3250enr/pdf/BILLS-111s3250enr.pdf>.

<sup>12</sup> 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>.

new Presidential Memorandum on *Federal Leadership on Energy Management* makes Portfolio Manager the official Federal benchmarking reporting tool.

- c. DOE encourages measurement and verification (M&V) of implemented measures and projects. However, it is understood that it may not be cost-effective to perform continuous M&V on all measures. As such, sites should update their CEDR tab 3.3 to identify projects where continuous M&V is cost-effective and will be performed as part of their EISA evaluations. Only projects that are financed under an ESPC have a statutory requirement to conduct M&V.
- d. Should time permit, 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.
- e. 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 2014 Compliance Tracking System (CTS) upload.
- f. Describe covered facilities selection along with plans to address inventory changes to ensure meeting the minimum requirement of having 75% of the sites 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 Individual buildings metering for 90% of electricity (by October 1, 2012); for 90% of steam, natural gas, and chilled water (by October 1, 2015)**

- a. The measurement of 90% of utility metered is based on both purchased and on-site generated. Additionally, per NECPA (42 U.S.C Section 8253) the term “buildings” includes industrial, process, or laboratory facilities. As such explain utility metered and generation source, along with types of buildings prioritized for metering.
- b. Describe use of metering data (e.g. benchmarking, verifying utility bills, measurement and verification of savings, education and behavior change, energy system diagnostics and maintenance, time-of-use and demand response, cost allocation).
- c. Describe use of advanced meters and information systems for meter readings.

### **2.4 Cool roofs with thermal resistance of at least R-30**

- a. Describe efforts to maximize cool roofs in new facilities and when replacing or repairing roofs. Note unless uneconomical or project already has CD-2 approval, cool roofs with thermal resistance of at least R-30 should be considered.

### **2.5 15% of the number of existing buildings greater than 5,000 gross square feet (GSF) to be compliant with the five guiding principles of HPSB by FY 2015, with progress to 100% thereafter**

- a. Summarize the site’s plans to achieve 15% GP by FY 2015 – 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).<sup>13</sup> 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.

## **2.6 All new construction, major renovations, and alterations of buildings greater than 5,000 GSF must comply with the GPs<sup>14</sup>**

- a. Discuss mechanisms by which the site does or plans to design all new Federal buildings to achieve net-zero energy by FY 2030 beginning in FY 2020 (per EISA Section 323).
- b. 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 9, 2013, the current version in effect is ASHRAE 90.1 2010.<sup>15</sup>

## **2.7 Regional and local planning**

- 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.<sup>16</sup>
- c. 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, and accessible to public transit, and emphasize existing central cities and, in rural communities, existing or planned town centers.
- d. Identify and analyze impacts from energy usage and alternative energy sources in all Environmental Impact Statements and Environmental Assessments for proposals for new or expanded Federal facilities under the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 et seq.).
- e. Describe coordination efforts with regional programs for Federal, state, tribal, and local organizations for ecosystem, watershed, and environmental management.
- f. 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 and siting of renewable energy infrastructure.

---

<sup>13</sup> 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](http://www.gsa.gov/portal/mediaId/192315/fileName/FY_2014_FRPP_Data_Dictionary.action).

<sup>14</sup> Note: DOE considers buildings meeting the following criteria as complying with GPs: any building that achieves LEED-EB Silver or higher, LEED-NC Gold or higher; Green Globes-NC rating of four or a Green Globes CIEB rating of three; any building occupied for more than one year that achieves Living Status designation by the Living Building Challenge.

<sup>15</sup> 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>.

<sup>16</sup> 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](http://www.whitehouse.gov/sites/default/files/microsites/ceq/implementing_instructions_-_sustainable_locations_for_federal_facilities_9152011.pdf).

### ***Goal 3: Fleet Management***

#### **3.1 10% annual increase in fleet alternative fuel consumption by FY 2015 relative to a FY 2005 baseline**

- a. Describe plans for ensuring alternative fuel stations are nearby or on-site. If none exist presently, discuss plans for improvement.
- b. Provide a detailed description of electric vehicles and known amount of electricity used, if available and applicable. If captured as part of utility bill, please note. Include any relevant information regarding on-site charging stations and/or policies for employee use.

#### **3.2 2% annual reduction in fleet petroleum consumption by FY 2020 relative to a FY 2005 baseline**

- a. Describe fleet optimization strategies, including right-sizing or changes to fleet size and composition.
- b. Describe site policies for replacing inefficient vehicles.
- c. Describe site effectiveness in reducing the amount of vehicles miles travelled through the use of teleconferencing, trip consolidation, use of mass transportation, etc.
- d. Discuss efforts to reduce excessive idling of fleet vehicles through awareness programs, trainings, and official site policies.

#### **3.3 100% of light duty vehicle purchases must consist of alternative fuel vehicles (AFV) by FY 2015 and thereafter (75% FY 2000 – 2015)**

- a. Describe plans to meet 100% 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.

### ***Goal 4: Water Use Efficiency and Management***

#### **4.1 26% potable water intensity (gallons per gross square foot) reduction by FY 2020 from a FY 2007 baseline**

- a. Provide a description of best practices such as metering and leak detection. Note Presidential Memorandum on *Federal Leadership on Energy Management* elevates the use of water meters from a best practice to a requirement where cost-effective and appropriate.
- b. Summarize site efforts in identifying, promoting, and implementing water reuse and recycling efforts. These efforts would include activities such as the use of gray water and/or storm water runoff for cooling along with rainwater capture.
- c. Discuss the installation of high water efficiency fixtures such as WaterSense or FEMP-designated products.
- d. Note status of or provide latest water management plan. The 2010 and 2011 SSPPs require sites to have an updated water management plan, as necessary to sufficiently address all the water use efficiency and management goals.
- e. Describe progress toward achieving objectives established by EPA in the storm water guidance for Federal facilities issued under EISA Section 438.

- 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 if a credit can be received or not and progress will be adjusted accordingly. Water that is returned to a water source at the same quality as the water source is considered none consumptive.
- g. Sites with locations in California, discuss efforts to reduce water consumption as it pertains to the President's California Drought Response.<sup>17</sup> Other sites with locations in drought areas are also encouraged to discuss water reduction efforts.

#### **4.2 20% consumption reduction of industrial, landscaping, and agricultural (ILA) water by FY 2020 from a FY 2010 baseline**

- a. Summarize site efforts to reduce and measure ILA usage. Note CEQ guidance defines ILA water as all non-potable water used for ILA purposes plus potable water used for ILA that is not already included in the 2007 water intensity baseline. 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.

### ***Goal 5: Pollution Prevention and Waste Reduction***

#### **5.1 & 5.2 MSW and C&D recycling and waste diversion (50% by FY 2015)**

- a. Summarize the site's progress toward pollution prevention, waste reduction efforts, and recycling programs.
- b. Discuss efforts for non-hazardous solid waste diversion by 50% by FY 2015, construction and demolition waste diversion by 50% by FY 2015, as well as municipal waste reduction.
- 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. Describe policies for utilizing duplex printing along with paper containing at least 30% post-consumer fiber.
- g. 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.
- h. Elaborate on the integration of pest management and landscape management practices.
- i. 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.

---

<sup>17</sup> President's Drought Response on February 2, 2014. <http://www.whitehouse.gov/the-press-office/2014/02/14/fact-sheet-president-obama-leading-administration-wide-drought-response>

## *Goal 6: Sustainable Acquisition*

### **6.1 Procurements meet requirements by including necessary provisions and clauses (Sustainable Procurements / Biobased Procurements)**

- a. Describe efforts to maximize acquisition of sustainable products. Sustainable acquisition includes procurement of energy efficient (ENERGY STAR or FEMP-designated), water efficient (Water Sense), biobased (USDA BioPreferred), environmentally preferable (including EPEAT-registered products), non-ozone depleting, contain recycled content, and non-toxic or less toxic alternatives products.<sup>18</sup>
- b. Detail efforts to include provisions or clauses in eligible contract actions, striving toward a goal of 95% for sustainable products, per EO 13514. In addition, describe efforts to reach 100% compliance for biobased and construction contract compliance by FY 2020, per 2014 DOE SSPP.

## *Goal 7: Electronic Stewardship and Data Centers*

### **7.1 Data Centers**

- a. Identify core data center(s). In general, each site should have no more than one core data center.
- b. Provide a summary of efforts to optimize core data center(s). If applicable, discuss the installation of dedicated meters to monitor or report energy efficiency metrics.
- c. Describe and document the following key performance indicators for each core data center(s):
  1. Power usage effectiveness (PUE)
  2. Percentage of virtualized operating system(s)
  3. Percentage of virtual host(s)
  4. Percentage facility utilization
  5. Percentage of storage utilization
  6. Ratio of server to full time employees (FTE)
- d. Describe efforts and plans to close 40% of non-core data centers.
- e. Describe implemented best management practices such as power management, server virtualization, private/public cloud computing, virtual desktops, spot cooling on equipment racks, outside air for cooling, assignment of a certified Data Center Energy Practitioner, etc.
- f. Identify data centers that have had a DOEGRIT (<https://doegrit.energy.gov>) Energy Profiler Software Tool assessment and discuss plans for assessing additional data centers.

### **7.2 Maximum annual weighted average Power Usage Effectiveness (PUE) of 1.4 by FY 2015**

- a. Describe efforts and plans to improve the PUE (e.g. cooling systems, lighting, IT equipment, virtualization, heat recovery) of core data center(s).

---

<sup>18</sup> 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>.

### **7.3 Power management - 100% of eligible desktops, laptops, and monitors with power management actively implemented and in use by FY 2012 and continually thereafter**

- a. Describe the establishment and implementation of policies, guidance, and tools to ensure the use of power management, duplex printing, and other energy efficient or environmentally preferred options and features on all eligible electronic products. As defined by EPA, 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.
- c. If power management has not been fully implemented, discuss plans on how the requirement will be met along with estimated data of compliance.

### **7.4 Electronic Stewardship**

- a. Provide detail that explains how the site has ensured 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 standards were further expanded to include imaging equipment. Furthermore, the Federal Acquisition Regulation (FAR) has been updated to reflect this change.<sup>19</sup>
- b. Explain if there has been any increase in the quantity of electronic assets disposed through sound disposition practices such as disposal through GSA Xcess, recycling through Unicor or USPS Blue Earth, donation through GSA's Computer for Learning (CFL) or other non-profit organization, and/or recycling through a private recycler certified under the Responsible Recycler (R2) guidance or equivalent certification.

## ***Goal 8: Renewable Energy***

### **8.1 20% of annual electricity consumption from renewable sources by FY 2020 and thereafter (7.5% FY 2013)**

- a. Summarize the site's strategy to increase and prioritize on-site renewable energy generation. Keep in mind Presidential Memorandum on *Federal Leadership on Energy Management* requires RECs to be from sources of renewable energy placed into service within 10 years prior to the start of the fiscal year, but final guidance and exceptions based on contract term have not yet been finalized.
- b. If RECs from on-site renewable systems are sold, note if replacement RECs are purchased or not and provide REC contract details. EAct 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 energy assessment and outcomes, if applicable.
- d. Chronicle the utilization of third party suppliers to purchase RECs.

---

<sup>19</sup> 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](http://www.afm.ars.usda.gov/acquisitions/pdffiles/EPEAT_FAR2014-14376.pdf)

- 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.<sup>20</sup>
- 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).

## ***Goal 9: Climate Change Resilience***

### **9.1 Climate Change Resilience**

- 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.

## ***Goal 10: Energy Performance Contracts***

### **10.1 Energy Performance Contracts**

- a. Characterize and provide examples of efforts to leverage alternative financing such as ENABLE, ESPC, UESC, and PPA. Progress on the President's performance contracting challenge should be reported to the SPO on a monthly basis.<sup>21</sup>
- b. Describe challenges to use of alternative finance vehicles and provide recommended solutions.

## **III. Fleet Management Plan**

To address recommendations in a recent DOE Inspector General audit report it is important that sites provide summaries of site-level policies and procedures for the management of fleet inventory, to include fuel and vehicle acquisition and fleet inventory optimization.<sup>22</sup> The IG's report, "*The Department's Fleet Vehicle Sustainability Initiatives*," found that DOE fleet policies were not being implemented at all levels of management. In addition, the IG found that DOE sites were procuring alternative fuel vehicles without appropriate infrastructure to fuel these vehicles with alternative fuels. As a result, incremental procurement costs were unnecessarily incurred.

Please provide a brief 1-2 page overview of the structure of your fleet management program and policies in place that govern procurement, utilization, and disposition. This may include:

---

<sup>20</sup> DOE 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](http://energy.gov/sites/prod/files/PDF_FINAL%20DOE%20Indian%20Energy%20purchase%20preference%20policy%20guidance.pdf).

<sup>21</sup> *Presidential Memorandum -- Implementation of Energy Savings Projects and Performance-Based Contracting for energy savings*, December 2, 2011, <http://www.whitehouse.gov/the-press-office/2011/12/02/presidential-memorandum-implementation-energy-savings-projects-and-perfo>.

<sup>22</sup> Audit Report: IG-0896, *The Department's Fleet Vehicle Sustainability Initiatives at Selected Locations*, <http://energy.gov/ig/downloads/audit-report-ig-0896>.

- 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?
- Vehicle Use Policies
  - Are there employee check-out standards?
  - Does the site have an anti-idling policy?
  - Are drivers provided education on proper driving behavior and fueling requirements?
- Additional fuel reduction, alternative fuel use, and vehicle reduction activities and policies

If your site already has a site-level fleet plan that address these issues, please include with the SSP 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 for FY 2013 and FY 2014

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: 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   |
|--------------------|--|
| August 1, 2014     | Begin input of FY 2014 Deferred Maintenance (DM). Previous DM values will be blanked out at 6 am.  |
| September 30, 2014 | FY 2014 Deferred Maintenance due in FIMS.<br><br>FIMS data entry will be locked for the following fields: <ol style="list-style-type: none"> <li>1. Deferred Maintenance</li> <li>2. Energy Consuming Bldg/Facilities</li> <li>3. Energy Consuming Metered Process (Excluded) Facilities, including square footage, Exclusion Part, and Justification Comments</li> </ol> <i>Recommendation: Assets should not be added or removed until after the snapshot date of November 10</i><br><br>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 |

| 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, 2014 to November 7, 2014 | SPO and Program Offices to review designation of Excluded Buildings in FIMS.<br>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, 2014                     | Begin input of FY 2014 Actual Maintenance and operating cost. Previous Actual Maintenance and operating cost values will be blanked out at 6am.   |
| October 2, 2014                     | FY 2014 Deferred Maintenance HQ Snapshot.   |
| November 7, 2014                    | FRPC data element population due in FIMS. This includes FY 2014 Actual Maintenance. Ensure that the Estimated Disposition Year has been updated and FY 2014 Actual Maintenance is 100% populated.   |
| November 10, 2014                   | FY 2014 FRPC HQ Snapshot. This will serve as the Excess Elimination and Actual/Required Maintenance snapshot. Additionally, this will serve as the fiscal year square footage data for intensity calculations.  |
| December 15, 2014                   | FRPP Reporting Deadline.  |

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

| Tentative Date(s)*                    | Action/Event  |
|---------------------------------------|---|
| June 2, 2014 – July 11, 2014          | Enter EPACT Section 701 waivers and EISA Section 246 fueling center data information.   |
| June 30, 2014 – August 22, 2014       | Enter OMB Annual Motor Vehicle Fleet Report (AMVFR) budget reporting information. Note, this may change, however, guidance has not yet been provided. |
| October 1, 2014                       | FAST opens for FY 2014 consumption, cost, and acquisition data entry.   |
| November 20, 2014                     | FAST closes for FY 2014 data entry.   |
| November 24, 2014 – December 12, 2014 | FAST FY 2014 data is reviewed for inconsistencies by NNSA and DOE's Federal Fleet Managers.   |
| December 15, 2014                     | FAST snapshot.  |

\*Listed FAST deadlines are tentative and based on previous year's deadlines. Official deadlines for FAST will not be released until September 2014.

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

| Date(s)           | Action/Event                             |
|-------------------|--|
| October 1, 2014   | FedCenter opens for FY 2014 data entry.  |
| November 26, 2014 | FedCenter closes for FY 2014 data entry. |

**Table A.4 - Data Center profiling tool (DC Pro)/ DOE Green IT (DOEGRIT)**

| Date(s)           | Action/Event  |
|-------------------|---|
| January 1, 2014   | DC Pro / DOEGRIT opens for data reporting.              |
| November 26, 2014 | DC Pro / DOEGRIT snapshot for sustainability reporting. |

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

| Date(s)        | Action/Event   |
|----------------|--|
| Monthly        | On a monthly basis:<br><ol style="list-style-type: none"> <li>1. Benchmark with EPA Energy Star Portfolio Manager and upload to CTS.</li> <li>2. Upload implemented projects.</li> </ol> |
| March 13, 2015 | SPO uploads “covered” facility characteristic – square footage, energy usage, water usage.   |
| June 12, 2015  | All required EISA Section 432 information due to the SPO for review.   |
| June 30, 2015  | 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 <sup>th</sup> of Each Month | Participating programs/sites provide status update with milestones via email to SPO ( <a href="mailto:Emily.Stoddart@hq.doe.gov">Emily.Stoddart@hq.doe.gov</a> ). |
| 15 <sup>th</sup> 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 2014 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 2014 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 2014 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 2013

**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 2014 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](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](mailto: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.*<sup>23</sup>
- *IPCC: Initiatives and measures to reduce the vulnerability of natural and human systems against actual or expected climate change effects.*<sup>24</sup>

### 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.

With the update to the DOE Climate Change Adaptation Plan occurring in 2014, corresponding changes have been made to this guidance document. In 2014 DOE reaffirmed its commitment to making the Department more resilient to climate change.

### *Risks to Missions, Operations and People*

#### **Objective 1: DOE Climate Change Adaptation Screening Assessment**

Complete the voluntary screening assessment survey no later than December 8, 2014. Survey information will be used, in consultation with site and program staff, to identify sites that will need further assessment and assistance. The survey can be found at:

[https://umdsurvey.umd.edu/SE/?SID=SV\\_ekQn9XAIW3eYqA5](https://umdsurvey.umd.edu/SE/?SID=SV_ekQn9XAIW3eYqA5).

---

<sup>23</sup> 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>

<sup>24</sup> Intergovernmental Panel on Climate Change (IPCC) *Synthesis Assessment Report*(2007): [http://www.ipcc.ch/publications\\_and\\_data/ar4/syr/en/contents.html](http://www.ipcc.ch/publications_and_data/ar4/syr/en/contents.html)

## **Objective 2: 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 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.<sup>25</sup> 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 3: 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 4: 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.

---

<sup>25</sup> 2014 National Climate Assessment, <http://nca2014.globalchange.gov/>

### **Objective 5: 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 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; 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 6: 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 7: 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. 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>  |                |                     |                        |
| <b>Program:</b> Sulfur hexafluoride (SF <sub>6</sub> ) capture                       |                |                     |                        |
| <b>Plan:</b> Commuter reduction  |                |                     |                        |
| <b>Policy:</b> Teleworking and/or alternative work schedule                          |                |                     |                        |
|  |                |                     |                        |
| <i>Goal 2: Sustainable Buildings</i>   |                |                     |                        |
| <b>Policy:</b> Space management  |                |                     |                        |
| <b>Policy:</b> Cool roof installation  |                |                     |                        |
| <b>Policy:</b> Design new Federal buildings to achieve net-zero energy by FY 2030    |                |                     |                        |
| <b>Program:</b> Participation in critical local and regional efforts and initiatives |                |                     |                        |
| <b>Plan:</b> Update agency/site policy and guidance (EIS's and EA's)                 |                |                     |                        |
| <b>Policy:</b> Dispose and consolidate excess and underutilized property             |                |                     |                        |
| <b>Policy:</b> Reduce need for new building and field office space                   |                |                     |                        |
| <b>Policy:</b> Conserve, rehabilitate, and reuse historic Federal properties         |                |                     |                        |
| <b>Policy:</b> Incorporate sustainable practices into new/renew leases               |                |                     |                        |
| <b>Plan:</b> Green buildings roadmap   |                |                     |                        |
| <b>Program:</b> Sustainable landscape  |                |                     |                        |
| <b>Plan:</b> Metering  |                |                     |                        |
|  |                |                     |                        |
| <i>Goal 3: Fleet Management</i>  |                |                     |                        |
| <b>Program:</b> Fleet Optimization/Vehicle Allocation Methodology (VAM)              |                |                     |                        |
| <b>Program:</b> Sustainable transportation options                                   |                |                     |                        |
| <b>Program:</b> Vehicle sharing/pooling  |                |                     |                        |
|  |                |                     |                        |
| <i>Goal 4: Water Use Efficiency and Management</i>                                   |                |                     |                        |
| <b>Policy:</b> Storm water management  |                |                     |                        |
| <b>Policy:</b> Water reuse   |                |                     |                        |
| <b>Plan:</b> Water   |                |                     |                        |
|  |                |                     |                        |

| SSPP Goal – Policy/Program   | In Place (Y/N) | Last Update (MM/YY) | Additional Information |
|--|----------------|---------------------|------------------------|
| <i>Goal 5: Pollution Prevention and Waste Reduction</i>                                    |                |                     |                        |
| <b>Program:</b> Reduce and minimize hazardous chemicals and materials                      |                |                     |                        |
| <b>Policy:</b> Integrated pest management and landscape management                         |                |                     |                        |
| <b>Policy:</b> Increase use of acceptable alternative chemicals and processes              |                |                     |                        |
| <b>Policy:</b> Report per Sections (301-313) of EPCRA of 1986                              |                |                     |                        |
| <b>Policy:</b> Duplex printing and paper containing at least 30% post-consumer fiber       |                |                     |                        |
| <b>Program:</b> Composting   |                |                     |                        |
| <i>Goal 6: Sustainable Acquisition</i>   |                |                     |                        |
| <b>Policy:</b> Inclusion of FAR sustainability clause                                      |                |                     |                        |
| <b>Policy:</b> Inclusion of biobased products  |                |                     |                        |
| <b>Policy:</b> Inclusion of energy efficient products (e.g. Energy Star, FEMP-designated)  |                |                     |                        |
| <b>Policy:</b> Inclusion of recycled content products                                      |                |                     |                        |
| <b>Policy:</b> Inclusion of water efficient products (e.g. WaterSense)                     |                |                     |                        |
| <b>Policy:</b> Inclusion of environmentally preferable products/services (excluding EPEAT) |                |                     |                        |
| <b>Plan:</b> Environmentally preferable purchasing   |                |                     |                        |
| <i>Goal 7: Electronic Stewardship and Data Centers</i>                                     |                |                     |                        |
| <b>Policy:</b> Power management  |                |                     |                        |
| <b>Policy:</b> Data center consolidation   |                |                     |                        |
| <i>Goal 8: Renewable Energy</i>  |                |                     |                        |
| <b>Policy:</b> Prioritization of on-site renewable   |                |                     |                        |
| <b>Policy:</b> Purchase renewable energy from sources on tribal land                       |                |                     |                        |
| <i>Goal 9: Climate Change Resilience</i>   |                |                     |                        |
| <b>Plan:</b> Update all appropriate plans to address climate change resiliency             |                |                     |                        |
| <b>Program:</b> Identify or establish and participate in regional climate                  |                |                     |                        |
| <i>Goal 10: Energy Performance Contracts</i>   |                |                     |                        |
| <b>Policy:</b> Utilize performance contracts   |                |                     |                        |

| SSPP Goal – Policy/Program                | In Place<br>(Y/N) | Last Update<br>(MM/YY) | Additional<br>Information |
|---|-------------------|------------------------|---------------------------|
| <i>Other</i>                              |                   |                        |                           |
| <b>Program:</b> Cost savings reinvestment |                   |                        |                           |
|   |                   |                        |                           |
|   |                   |                        |                           |

## Appendix E – Verification Data Request

---

DOE's greenhouse gas (GHG) inventory must be certified by the agency Senior Sustainability Officer prior to submission to OMB/CEQ. To accomplish this certification, a team will be assembled by the SPO to conduct second-party verification.

Site-specific documents requested for verification consist of invoices, inventory records, or other documentation for natural gas, coal, fuel oil, diesel, auto gas, LPG, LNG, CNG, E85, B20, jet fuel, SF<sub>6</sub>, HFC, PFC, N<sub>2</sub>O, CH<sub>4</sub>, NF<sub>3</sub>, electricity, steam, chilled water, miles traveled by mode, renewable energy, miles traveled by mode, and miles commuted by mode, as applicable. Note that all requested records should be accompanied by documented assumptions, calculations (including material balances associated with fugitive emissions), and data tabulation resulting in reported data. These records are associated with inputs into the FAST and CEDR collection mechanisms.

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

If your site is selected, please ensure the requested data is submitted to the SPO along with your SSP narrative by December 8, 2014. Selected sites will be notified in early October.

## 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  | Energy Intensity                                      | Renewables  | Water Intensity                      | ILA Water               |
|-----------------------|--|--|---|---|--------------------------------------|-------------------------|
| <b>Law/Regulation</b> | EISA Sec 527; EO 13423 Sec 2(a)(i); EO 13514 Sec 2(a); DOE O 436.1 | EISA Sec 527; EO 13423 Sec 2(a)(i); EO 13514 Sec 2(b); DOE O 436.1 | EISA Sec 431; EO 13423 Sec 2(a); EO 13514 Sec 2(a)(i) | EPAct 2005 Section 203; EO 13423 Sec 2(b); EO 13514 Sec 2(a)(iii) | EISA Sec 432; EO 13514 Sec. 2.(d)(i) | EO 13514 Sec. 2.(d)(ii) |
| Interim FY Target     | Scope 1&2 GHG  | Scope 3 GHG  | Energy Intensity                                      | Renewables  | Water Intensity                      | ILA Water               |
| 2003                  | --   | --   | Baseline  | --  | --                                   | --                      |
| 2004                  | --   | --   | 0%  | --  | --                                   | --                      |
| 2005                  | --   | --   | 0%  | Baseline  | --                                   | --                      |
| 2006                  | --   | --   | -2%   | 0.0%  | --                                   | --                      |
| 2007                  | --   | --   | -4%   | 3.0%  | Baseline                             | --                      |
| 2008                  | Baseline   | Baseline   | -9%   | 3.0%  | -2%                                  | --                      |
| 2009                  | 0%   | 0%   | -12%  | 3.0%  | -4%                                  | --                      |
| 2010                  | -13%   | -1%  | -15%  | 5.0%  | -6%                                  | Baseline                |
| 2011                  | -14%   | -2%  | -18%  | 5.0%  | -8%                                  | -2%                     |
| 2012                  | -15%   | -3%  | -21%  | 5.0%  | -10%                                 | -4%                     |
| 2013                  | -17%   | -4%  | -24%  | 7.5%  | -12%                                 | -6%                     |
| 2014                  | -19%   | -5%  | -27%  | 7.5%  | -14%                                 | -8%                     |
| 2015                  | -19%   | -6%  | -30%  | 10.0%   | -16%                                 | -10%                    |
| 2016                  | -21%   | -7%  | TBD   | 15.0%   | -18%                                 | -12%                    |
| 2017                  | -23%   | -8%  | TBD   | 15.0%   | -20%                                 | -14%                    |
| 2018                  | -25%   | -9%  | TBD   | 17.5%   | -22%                                 | -16%                    |
| 2019                  | -27%   | -11%   | TBD   | 17.5%   | -24%                                 | -18%                    |
| 2020                  | -28%   | -13%   | TBD   | 20.0%   | -26%                                 | -20%                    |
| ↓                     | --   | --   | --  | --  | --                                   | --                      |
| 2030                  | --   | --   | --  | --  | --                                   | --                      |
| <b>Goal --&gt;</b>    | <b>-28%</b>  | <b>-13%</b>  | <b>-30%</b>   | <b>20%</b>  | <b>-26%</b>                          | <b>-20%</b>             |

| Goal               | HPSB, Existing Buildings   | New Fed bldg fossil fuel reduction | Electric Meters                 | Natural Gas, Steam, Chilled Water Meters | Core Data Centers Meters                | Core Data Center PUE |
|--------------------|--|------------------------------------|---------------------------------|--|---|----------------------|
| Law/Regulation     | EISA Sec 434; EISA Sec 432; EO 13423 Sec 2(f); EO 13514 Sec 2(g)(iii); DOE O 436.1 | EISA Sec 433; EO 13514 Sec 2(g)(i) | EPAct 2005 Sec 103; DOE O 436.1 | EISA Sec 434; EISA Sec 432; DOE O 436.1  | EISA Sec 434; EISA Sec 432; DOE O 436.1 | DOE O 436.1          |
| Interim FY Target  | HPSB, Existing Buildings   | New Fed bldg fossil fuel reduction | Electric Meters                 | Natural Gas, Steam, Chilled Water Meters | Core Data Centers Meters                | Core Data Center PUE |
| 2003               | --   | Baseline                           | --                              | --                                       | --                                      | --                   |
| 2004               | --   | --                                 | --                              | --                                       | --                                      | --                   |
| 2005               | --   | --                                 | --                              | --                                       | --                                      | --                   |
| 2006               | --   | --                                 | --                              | --                                       | --                                      | --                   |
| 2007               | --   | --                                 | --                              | --                                       | --                                      | --                   |
| 2008               | --   | --                                 | --                              | --                                       | --                                      | --                   |
| 2009               | 3%   | --                                 | --                              | --                                       | --                                      | --                   |
| 2010               | 5%   | 55%                                | 20%                             | 5%                                       | 18%                                     | 1.82                 |
| 2011               | 7%   | 55%                                | 75%                             | 10%                                      | 40%                                     | 1.80                 |
| 2012               | 9%   | 55%                                | 90%                             | 25%                                      | 60%                                     | 1.70                 |
| 2013               | 11%  | 55%                                | 90%                             | 50%                                      | 80%                                     | 1.60                 |
| 2014               | 13%  | 55%                                | 90%                             | 75%                                      | 90%                                     | 1.50                 |
| 2015               | 15%  | 65%                                | 90%                             | 90%                                      | 100%                                    | 1.40                 |
| 2016               | progress toward 100%   | 65%                                | 90%                             | 90%                                      | --                                      | 1.40                 |
| 2017               | progress toward 100%   | 65%                                | 90%                             | 90%                                      | --                                      | 1.40                 |
| 2018               | progress toward 100%   | 65%                                | 90%                             | 90%                                      | --                                      | 1.40                 |
| 2019               | progress toward 100%   | 65%                                | 90%                             | 90%                                      | --                                      | 1.40                 |
| 2020               | progress toward 100%   | 80% (2020 – 2024)                  | 90%                             | 90%                                      | --                                      | 1.40                 |
| ↓                  | progress toward 100%   | 90% (2025 – 2029)                  | --                              | --                                       | --                                      | --                   |
| 2030               | progress toward 100%   | 100%                               | --                              | --                                       | --                                      | --                   |
| <b>Goal --&gt;</b> | <b>100%</b>  | <b>100%</b>                        | <b>90%</b>                      | <b>90%</b>                               | <b>100%</b>                             | <b>-50%</b>          |

| <b>Goal</b>              | <b>Fugitives</b>                | <b>Energy &amp; Water Evaluations</b> | <b>Petroleum</b>                              | <b>Alt. Fuel</b>                          | <b>AFV</b>             |
|--------------------------|---------------------------------|---------------------------------------|---|---|------------------------|
| <b>Law/ Regulation</b>   | EISA Sec 527; EO 13514 Sec 2(a) | EISA Sec 432                          | EISA Section 142; EO 13514 Sec. 2.(a)(iii)(C) | EISA Section 142; EO 13423 Sec. 2.(g)(ii) | EPAct 1992 Section 303 |
| <b>Interim FY Target</b> | <b>Fugitives</b>                | <b>Energy &amp; Water Evaluations</b> | <b>Petroleum</b>                              | <b>Alt. Fuel</b>                          | <b>AFV</b>             |
| 2003                     | --                              | --                                    | --  | --  | 75%                    |
| 2004                     | --                              | --                                    | --  | --  | 75%                    |
| 2005                     | --                              | --                                    | Baseline                                      | Baseline                                  | 75%                    |
| 2006                     | --                              | --                                    | -2%   | 10%                                       | 75%                    |
| 2007                     | --                              | --                                    | -4%   | 21%                                       | 75%                    |
| 2008                     | --                              | --                                    | -6%   | 33%                                       | 75%                    |
| 2009                     | --                              | --                                    | -8%   | 46%                                       | 75%                    |
| 2010                     | -42%                            | Site specific 4-year cycle.           | -10%  | 61%                                       | 75%                    |
| 2011                     | -45%                            | Site specific 4-year cycle.           | -12%  | 77%                                       | 75%                    |
| 2012                     | -50%                            | Site specific 4-year cycle.           | -14%  | 95%                                       | 75%                    |
| 2013                     | -50%                            | Site specific 4-year cycle.           | -16%  | 114%                                      | 75%                    |
| 2014                     | -50%                            | Site specific 4-year cycle.           | -18%  | 136%                                      | 75%                    |
| 2015                     | -50%                            | Site specific 4-year cycle.           | -20%  | 159%                                      | 75%                    |
| 2016                     | -50%                            | Site specific 4-year cycle.           | -22%  | 159%                                      | 100%                   |
| 2017                     | -50%                            | Site specific 4-year cycle.           | -24%  | 159%                                      | 100%                   |
| 2018                     | -50%                            | Site specific 4-year cycle.           | -26%  | 159%                                      | 100%                   |
| 2019                     | -50%                            | Site specific 4-year cycle.           | -28%  | 159%                                      | 100%                   |
| 2020                     | -50%                            | Site specific 4-year cycle.           | -30%  | 159%                                      | 100%                   |
| ↓                        | --                              | --                                    | --  | --  | 100%                   |
| 2030                     | --                              | --                                    | --  | --  | 100%                   |
| <b>Goal --&gt;</b>       | <b>-50%</b>                     | <b>100%</b>                           | <b>-30%</b>                                   | <b>159%</b>                               | <b>75%</b>             |

## **Appendix G – Sample 2014 SSPs**

---

This appendix provides last year's SSPs for the Y-12 National Security Complex, Idaho National Laboratory, and Pacific Northwest National Laboratory as samples for reference.

1. Idaho National Laboratory (76 pages)
2. Pacific Northwest National Laboratory (42 pages)
3. Y-12 National Security Complex (70 pages)

## Appendix H – Useful References

---

### *Requirements*

#### **Laws**

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](http://www1.eere.energy.gov/femp/pdfs/necpa_amended.pdf)

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

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](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](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>

#### **Executive Orders**

Executive Order 13423, *Strengthening Federal Environmental, Energy, and Transportation Management*. January 26, 2007. <http://edocket.access.gpo.gov/2007/pdf/07-374.pdf>

Executive Order 13514, *Federal Leadership in Environmental, Energy, and Economic Performance*. October 8, 2009. <http://www1.eere.energy.gov/femp/pdfs/eo13514.pdf>

Executive Order 13653, *Preparing the United States for the Impact of Climate Change*. November 1, 2013. <http://www.whitehouse.gov/the-press-office/2013/11/01/executive-order-preparing-united-states-impacts-climate-change>

#### **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>

Presidential Memorandum, *Federal Fleet Performance*. May 24, 2011. <http://www.whitehouse.gov/the-press-office/2011/05/24/presidential-memorandum-federal-fleet-performance>

Presidential Memorandum, *Driving Innovation and Creating Jobs in Rural America through Biobased and Sustainable Product Procurement*. February 21, 2012. <http://www.whitehouse.gov/the-press-office/2012/02/21/presidential-memorandum-driving-innovation-and-creating-jobs-rural-ameri>

Presidential Memorandum, *Implementation of Energy Savings Projects and Performance-Based Contracting for energy savings*. December 2, 2012. <http://www.whitehouse.gov/the-press-office/2011/12/02/presidential-memorandum-implementation-energy-savings-projects-and-perfo>

Presidential Memorandum, *Federal Leadership on Energy Management*. December 5, 2013.  
<http://www.whitehouse.gov/the-press-office/2013/12/05/presidential-memorandum-federal-leadership-energy-management>

## Secretarial Memorandums

Secretary of Energy Dr. Steven Chu, *Installation of Cool Roofs on Department of Energy Buildings*, Memorandum for Heads of Departmental Elements. June 1, 2010.  
[http://www.eere.energy.gov/pdfs/chu\\_memo\\_installation\\_cool\\_roofs\\_doe\\_buildings.pdf](http://www.eere.energy.gov/pdfs/chu_memo_installation_cool_roofs_doe_buildings.pdf)

Secretary of Energy Dr. Steven Chu, *Management of Fleet Inventory*, Memorandum for Under Secretaries, Office of Management (Headquarters Fleet), PMAs and Headquarters Fleet Managers, Sustainability Performance Office. January 27, 2011. <http://sustainability-ornl.org/Documents/ChuMemo2-11-2011.pdf>

## Orders

DOE O 436.1 – *Departmental Sustainability*. May 2, 2011.  
<https://www.directives.doe.gov/directives-documents/400-series/0436.1-BOrder>

DOE Strategic Sustainability Performance Plan. Updated Annually.  
<http://energy.gov/eere/spo/sustainability-performance-office>

## Guidance

### Goal 1: Greenhouse Gas

*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](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](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](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](http://energy.gov/sites/prod/files/2014/08/f18/benchmarking_guidance08-2014_0.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](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](http://energy.gov/sites/prod/files/2013/10/f3/omguide_complete.pdf)

*Guidance on Electric Metering in Federal Buildings*. February 3, 2006.  
[http://energy.gov/sites/prod/files/2013/10/f3/adv\\_metering.pdf](http://energy.gov/sites/prod/files/2013/10/f3/adv_metering.pdf) (note: new guidance is currently being drafted)

*Metering Best Practices: A Guide to Achieving Utility Resource Efficiency*. August 2011.  
<http://energy.gov/sites/prod/files/2013/10/f3/mbpg.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](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 and New Federal Low-Rise Residential Buildings*. August 10, 2011.  
<http://www.gpo.gov/fdsys/pkg/FR-2011-08-10/pdf/2011-20024.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](http://www1.eere.energy.gov/femp/pdfs/sec502e_%20guidance.pdf)

Memorandum of Understanding, *Federal Leadership in High Performance and Sustainable Buildings*. 2006. <http://energy.gov/sites/prod/files/2013/10/f3/mouhighperfsustainfedfac.pdf>

*High Performance and Sustainable Buildings Guidance*. December 1, 2008.  
[http://energy.gov/sites/prod/files/2013/10/f3/guidance\\_hpsb.pdf](http://energy.gov/sites/prod/files/2013/10/f3/guidance_hpsb.pdf)

Whole Building Design Guide, *Guiding Principles for Existing Buildings*.  
[http://www.wbdg.org/references/fhpsb\\_existing.php](http://www.wbdg.org/references/fhpsb_existing.php)

Whole Building Design Guide. *Guiding Principles for Sustainable New Construction and Major Renovations*. [http://www.wbdg.org/references/fhpsb\\_new.php](http://www.wbdg.org/references/fhpsb_new.php)

*Guidelines for Selecting Cool Roofs*. July 2010.  
<http://www1.eere.energy.gov/femp/pdfs/coolroofguide.pdf>

*Federal Buildings Personnel Training Act, Core Competencies*. June 2012.  
[http://energy2014.org/docs/FBPTA\\_Core\\_Competencies.pdf](http://energy2014.org/docs/FBPTA_Core_Competencies.pdf)

*Recommendations on Sustainable Siting for Federal Facilities*. April 5, 2010.  
[http://www.fedcenter.gov/kd/Items/actions.cfm?action=ShowItem\\_id=15263&destination=ShowItem](http://www.fedcenter.gov/kd/Items/actions.cfm?action=ShowItem_id=15263&destination=ShowItem)

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: Freeze the Footprint*. March 14, 2013.

<http://www.whitehouse.gov/sites/default/files/omb/financial/memos/implementation-of-freeze-the-footprint-guidance.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](http://www.gsa.gov/portal/mediaId/192315/fileName/FY_2014_FRPP_Data_Dictionary.action)

### **Goal 3: Fleet Management**

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

### **Goal 4: Water Management**

*Implementing Instructions: Federal Agency Implementation of Water Efficiency and Management Provisions of EO 13514*. July 10, 2013.

[http://www.whitehouse.gov/sites/default/files/water\\_implementing\\_instructions.pdf](http://www.whitehouse.gov/sites/default/files/water_implementing_instructions.pdf)

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](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](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](http://www.whitehouse.gov/sites/default/files/microsites/ceq/recommendations_on_sustainable_landscaping_practices.pdf?CFID=1129164&CFTOKEN=71705061)

### **Goal 5: Pollution Prevention and Waste Reduction**

Environmental Protection Agency. *Pollution Prevention (P2) Tools*.

<http://www.epa.gov/p2/tools/p2tools.htm>

### **Goal 6: Sustainable Acquisition**

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

### **Goal 7: Electronic Stewardship and Data Centers**

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](http://www.afm.ars.usda.gov/acquisitions/pdffiles/EPEAT_FAR2014-14376.pdf)

### **Goal 8: 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](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](http://energy.gov/sites/prod/files/PDF_FINAL%20DOE%20Indian%20Energy%20purchase%20preference%20policy%20guidance.pdf)

### **Goal 9: Climate Change Resilience**

*Instructions for Implementing Climate Change Adaptation Planning in Accordance with Executive Order 13514*. March 4, 2011. [http://www.whitehouse.gov/sites/default/files/microsites/ceq/adaptation\\_final\\_implementing\\_instructions\\_3\\_3.pdf](http://www.whitehouse.gov/sites/default/files/microsites/ceq/adaptation_final_implementing_instructions_3_3.pdf)

*Supporting Documents for Implementing Climate Change Adaptation Planning in Accordance with Executive Order 13514*. March 4, 2011. [http://www.whitehouse.gov/sites/default/files/microsites/ceq/adaptation\\_support\\_document\\_3\\_3.pdf](http://www.whitehouse.gov/sites/default/files/microsites/ceq/adaptation_support_document_3_3.pdf)

### **Goal 10: 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>