



**OFFICE OF  
INSPECTOR GENERAL**  
U.S. DEPARTMENT OF THE INTERIOR

September 8, 2014

Memorandum

To: Rhea Suh  
Assistant Secretary, Policy Management and Budget

From: Christopher Stubbs *Christopher Stubbs*  
Acting Eastern Regional Manager for Audits, Inspections, and Evaluations

Subject: Closeout Memorandum – Evaluation of the U.S. Department of the Interior’s Sustainable-Buildings Initiative  
Assignment No. ER-EV-MOA-0006-2014

We have completed a review of the U.S. Department of the Interior’s (DOI) sustainable-buildings initiative. Our objective was to determine whether DOI has implemented certain principles intended to ensure that new, existing, and leased Federal buildings that are more than 5,000 gross square feet in size are sustainable (see Attachment 1).

During our review, we learned that DOI had implemented a two-phase strategy for assessing its properties and meeting its sustainable-buildings goals. DOI had already begun the first phase when the strategy was rejected by the Office of Management and Budget (OMB), which is working with Federal agencies to help them meet their goals. DOI never launched the second phase of the strategy. We also learned that DOI will be participating in a pilot program that will help agencies meet the goals of the initiative. Based on these circumstances, we have elected to postpone our evaluation until the pilot program’s methodologies are established and we can assess its impact.

**Background**

According to the Office of the Federal Environmental Executive, sustainable building (also known as “green” or “high-performance” building) is “the practice of designing, constructing, operating, maintaining, and removing buildings in ways that conserve natural resources and reduce pollution.” The goal is to create and maintain buildings that are sustainable—that use energy, water, and materials in an environmentally responsible manner and have less of an impact on human health and the environment than conventional construction.

During the first half of 2006, DOI and 20 other Federal agencies signed a memorandum of understanding titled “Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings” (see Attachment 2 for a timeline of events). The parties to the memorandum sought to establish and follow a common set of “Guiding Principles” for integrated design, energy performance, water conservation, indoor environmental quality, and materials.

The five agreed-upon Guiding Principles were to—

1. employ integrated design principles;
2. optimize energy performance;
3. protect and conserve water;
4. enhance indoor environmental quality; and
5. reduce the environmental impact of materials.

In October 2009, the President issued Executive Order 13514, “Federal Leadership in Environmental, Energy, and Economic Performance,” which identifies greenhouse gas reduction as a Federal priority and requires agencies to implement “high performance sustainable Federal building design, construction, operation and management, maintenance, and deconstruction.”<sup>1</sup> To qualify as a sustainable building under the Executive Order, a building must exceed 5,000 gross square feet and meet 100 percent of the Guiding Principles. The Executive Order specifically requires the head of each agency to ensure that at least 15 percent of the agency’s existing buildings that are over 5,000 gross square feet meet 100 percent of the Guiding Principles by fiscal year (FY) 2015. (To date, targets and goals for existing buildings have not been established beyond FY 2015.)

To evaluate Federal agencies’ performance in implementing the Executive Order, OMB prepares and publishes an annual scorecard for each agency (see Attachment 3). The OMB scorecard evaluates the agencies’ performance in seven categories, including one for sustainable buildings.<sup>2</sup> In each category, Federal agencies are rated “green” for successfully meeting their annual goals, “yellow” for mixed results, and “red” for unsatisfactory progress. In FY 2013, DOI received green ratings in all categories except for the sustainable-buildings category, in which it received a red rating.

DOI developed a two-phase strategy to meet its 15 percent goal for FY 2015. The first phase, referred to as “As Sustainable As Possible” (ASAP), sought to assess DOI’s unheated, uncooled, and unoccupied buildings and qualify them as sustainable. DOI issued the ASAP strategy to the heads of its bureaus and offices on July 29, 2013; ASAP was scheduled for completion on November 30, 2013.

DOI was on track for meeting its FY 2014 goal of 11 percent compliance with the Guiding Principles, but on April 30, 2014, OMB rejected ASAP as a viable strategy because it did not capture the “spirit and intent” of Executive Order 13514. Consequently, DOI’s green score of 11.22 percent for 2014 was reduced to a red score of 2 percent. The second phase of DOI’s strategy, which was to have assessed DOI’s historical buildings to make them as sustainable as possible while preserving their historical properties, was never implemented.

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<sup>1</sup> Executive Order 13514 builds on and expands the energy reduction and environmental requirements of Executive Order 13423, “Strengthening Federal Environmental, Energy, and Transportation Management,” issued in January 2007.

<sup>2</sup> The other categories are “Scope 1 and 2 Greenhouse Gas Emission Reduction Target,” “Scope 3 Greenhouse Gas Emission Reduction Target,” “Reductions in Energy Intensity,” “Use of Renewable Energy,” “Reduction in Potable Water Intensity,” and “Reduction in Fleet Petroleum Use.”

On May 14, 2014, DOI advised us that OMB and the White House’s Council on Environmental Quality (CEQ) have selected DOI to participate in a pilot program that will use new methodologies designed to address Federal agencies’ concerns about compliance and enable the agencies to better meet their sustainable-buildings goals. The start date for the pilot program has yet to be determined, and the program’s methodologies are not yet publicly available.

## **Observations**

During the survey phase of our review, we identified two areas that present challenges to DOI in meeting the intent of Executive Order 13514.

### *Costs Associated With Making DOI Buildings Sustainable*

Because its in-house expertise in performing assessments is limited, DOI intends to use contractual help to assess its building inventory and make the upgrades needed to meet the Guiding Principles. Doing so, however, will be expensive; DOI currently has 3,806 buildings above 5,000 gross square feet (see Attachment 2) and has projected costs of approximately \$16,000 to assess each building—an estimated total cost of \$61 million. DOI officials estimate that it would cost an additional \$500 million to make the necessary building upgrades to meet the FY 2015 goal established in Executive Order 13514.<sup>3</sup>

DOI does not receive specific line-item funding to implement these upgrades, so its bureaus and offices must rely on their limited operations and maintenance budgets to meet the Executive Order’s intent. DOI officials have stated that it is “unrealistic” to spend \$561 million to assess facilities and meet the goal of 15 percent compliance by FY 2015 when this investment would not even increase the overall life cycle of DOI’s building assets. Furthermore, officials have said that the sustainable-buildings goals are a lower priority than DOI’s health, life, and safety goals.

### *Compliance Concerns*

DOI was not the only department that was unable to meet its OMB scorecard goal for FY 2013. We compared DOI’s 2013 sustainable-buildings rating to those of 19 other Federal departments and agencies and found that 15 of the 20 did not achieve their goals (see Attachment 3).

A major contributing factor to DOI’s difficulty in meeting its goal appears to be its belief that the Guiding Principles are too stringent and do not truly represent DOI’s sustainable efforts to date. DOI has increased the sustainability of buildings in its inventory—for example, some buildings that were once only 40 percent sustainable are now 80, 90, or even 96 percent sustainable—yet these buildings are not considered part of the percentage of sustainable buildings because they do not meet 100 percent of the Guiding Principles’ requirements. In addition, approximately 23 percent of DOI’s properties (860 of 3,806) are historical and cannot fully comply with the Guiding Principles.

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<sup>3</sup> Examples of upgrades include, but are not limited to, installing water and building level electricity meters to manage water and energy use.

## **Conclusion**

Once the pilot program has been established and its impact can be measured, we will consider evaluating DOI's sustainable-buildings initiative again. We appreciate the cooperation and assistance provided by your staff during our review. If you have any questions, please contact me at 703-487-8041.

Attachments (3)

## Objective, Scope, and Methodology

We conducted our evaluation in accordance with the Quality Standards for Inspection and Evaluation as put forth by the Council of the Inspectors General on Integrity and Efficiency. We believe that the work we performed provides a reasonable basis for our conclusions and recommendations.

Our objective was to determine if the U.S. Department of the Interior (DOI) effectively implemented the “Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings” for new, existing, and leased buildings greater than 5,000 gross square feet in size. We focused our review on the Office of Management and Budget’s (OMB) ratings of agencies’ efforts to meet sustainability goals for fiscal years (FYs) 2012, 2013, and 2014.

To meet our objective, we—

- reviewed Executive Order 13514, “Federal Leadership in Environmental, Energy, and Economic Performance”;
- reviewed the memorandum of understanding titled “Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings”;
- reviewed data from the Federal Real Property Profile;
- reviewed DOI’s FY 2012 and 2013 OMB scorecard ratings for sustainable buildings and compared them with ratings from 19 other departments;
- interviewed OMB personnel;
- reviewed steps that DOI is taking to achieve “green” ratings on the annual OMB scorecard; and
- interviewed key personnel from DOI’s Office of the Secretary and the following bureaus:
  - Bureau of Indian Affairs;
  - Bureau of Land Management;
  - Bureau of Reclamation;
  - Interior Business Center;
  - National Park Service;
  - U.S. Fish and Wildlife Service; and
  - U.S. Geological Survey.

### Sustainable-Buildings Milestones

Milestone	Date
Agencies sign memorandum of understanding establishing Guiding Principles for sustainable buildings	January 23 to May 6, 2006
Executive Order 13514 requires Federal buildings to meet Guiding Principles	October 2009
OMB goal of 7% sustainable buildings	FY 2012
OMB goal of 9%	FY 2013
DOI memo on sustainable-buildings strategy	July 29, 2013
OMB goal of 11%	FY 2014
“As Sustainable As Possible” (Phase 1) of sustainable-buildings strategy scheduled date of completion	November 30, 2013
DOI planned Phase 2 of sustainable-buildings strategy	Never developed
OMB goal of 15%	FY 2015
Initiation of OMB pilot program	To be determined

Milestones and events in the sustainable-buildings initiative. Source: U.S. Department of the Interior (DOI) and the Office of Management and Budget (OMB).

### Building Inventory

Bureau	Number of Buildings
Bureau of Indian Affairs	811
Bureau of Land Management	217
Bureau of Reclamation	190
Interior Business Center	6
National Park Service	1,875
U.S. Fish and Wildlife Service	655
U.S. Geological Survey	52
<b>Total</b>	<b>3,806</b>

DOI's inventory of buildings over 5,000 gross square feet. Source: The Federal Real Property Profile for 2013, issued by the Department of the Interior's Office of the Secretary.

**Office of Management and Budget**  
**January 2013 Scorecard Ratings for Sustainable Buildings by Department**  
**(Annual Goal: 9% Complete)**

<b>Department Name</b>	<b>Rating*</b>	<b>% Complete</b>
Department of State	Green	19.23
Department of Agriculture	Green	11.37
General Services Administration	Green	10.80
Environmental Protection Agency	Green	9.80
Department of Veterans Affairs	Green	9.21
National Aeronautics and Space Administration	Yellow**	12.81
Department of the Treasury	Yellow**	11.02
Department of Commerce	Red	7.65
National Archives and Records Administration	Red	4.17
Department of Justice	Red	3.99
Department of Energy	Red	2.66
Department of Homeland Security	Red	2.34
Department of the Interior	Red	1.85
Tennessee Valley Authority	Red	1.02
Smithsonian Institution	Red	0.87
Department of Health and Human Services	Red	0.73
Department of Transportation	Red	0.65
Department of Defense	Red	0.30
Department of Labor	Red	0.08
U.S. Army Corps of Engineers	Red	0.00
Total Number of Agencies in Green Status	5	25.00
Total Number of Agencies in Yellow Status	2	10.00
Total Number of Agencies in Red Status	13	65.00
<b>Total Departments</b>	<b>20</b>	

Source: Office of Management and Budget. (See next page for table notes.)

**Table Notes:**

\* According to the scorecard, a “green” rating means that the agency “demonstrates implementation of Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings (GP) for new, existing and leased buildings; and is on track to meet 15% goal by 2015 by reporting that at least 9% of buildings >5,000 GSF [gross square feet] meet GP as reported in the Federal Real Property Profile (FRPP).”

A “yellow” rating means that the agency “incorporates [GPs] into all new design contracts for construction, major renovations and leases and at least 9 percent of GSF of its building inventory over 5,000 GSF meets GP as reported in FRPP.”

Finally, a “red” rating indicates that the agency “cannot demonstrate compliance with GP on new construction, major renovations, or leases; and/or less than 9 percent of building inventory, either by number of buildings or GSF, over 5,000 GSF meets GP as reported in FRPP.”

\*\* While the National Aeronautics and Space Administration and the Department of the Treasury exceeded the overall 2013 goal of 9 percent, they received a “yellow” score because they did not apply the Guiding Principles to their existing building inventory and could not demonstrate that they were on track to meet the 15 percent goal for 2015.