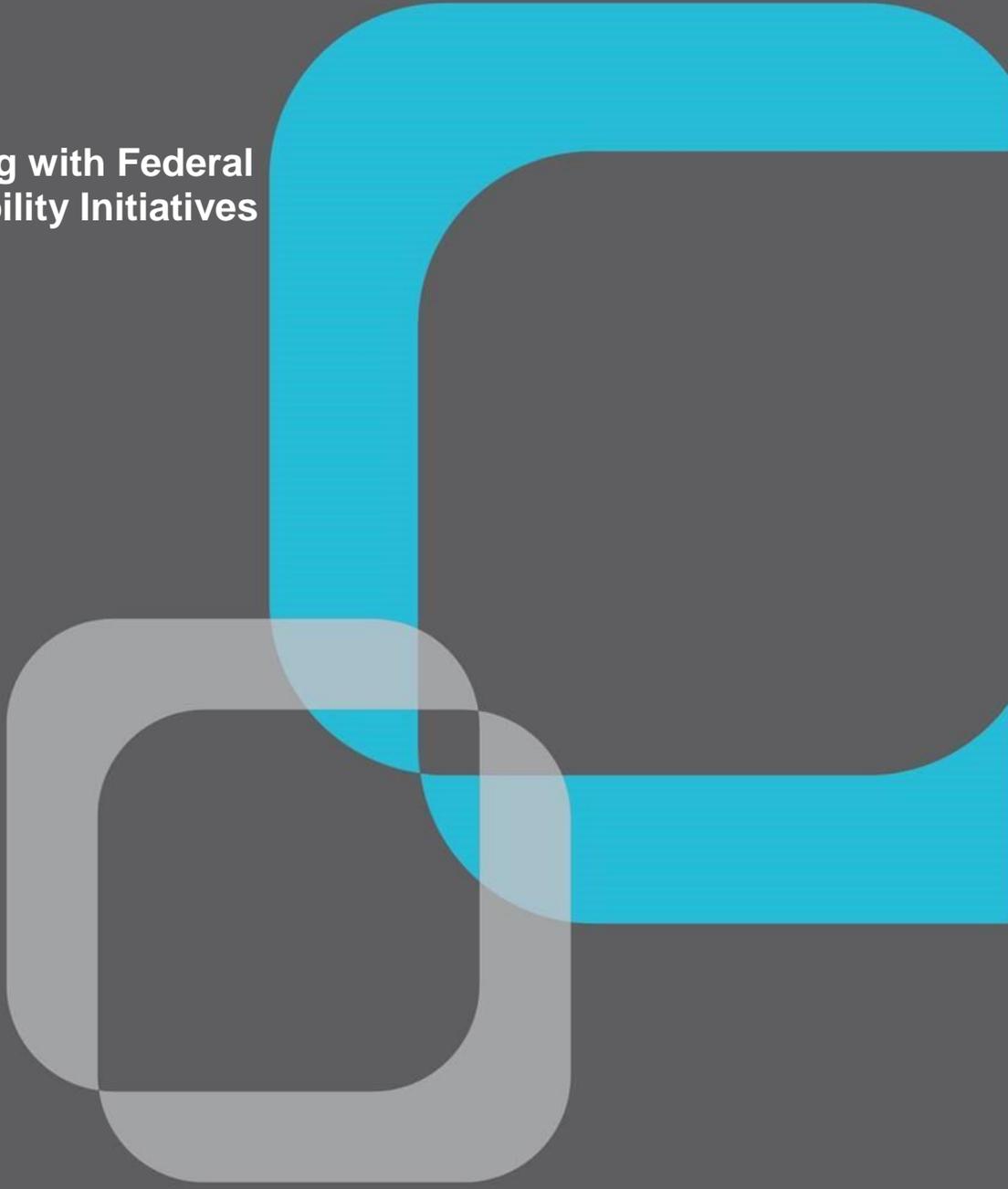
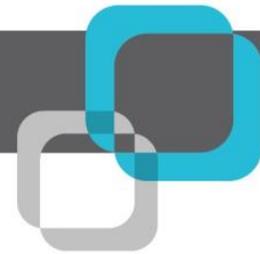


**Complying with Federal
Sustainability Initiatives**



Smart. Focused. Done Right.





INTRODUCTION

Over the past seven years, the U.S. federal government has taken firm steps toward improving the sustainability of its operations. With more than 1.8 million civilian employees, 500,000 buildings, and \$500 billion in annual purchasing power, the federal government has the ability to wield significant influence and create demand for products and services that help reduce its environmental impact.

Recent efforts have been driven by two executive orders—last year’s release of the White House’s Climate Action Plan, and most recently, a December 2013 presidential memorandum to all departments and agencies—all of which call on federal agencies to reduce their energy intensity, water intensity, and petroleum consumption, and to increase their use of renewable energy from newly developed on-site sources. Significant progress is being made in these areas, though recent report cards show many agencies are off track in meeting all these goals.

BACKGROUND

Executive Order (EO) 13423, “Strengthening Federal Environmental, Energy, and Transportation Management,” was signed on January 24, 2007, and sets federal energy and environmental management requirements in several areas, including but not limited to:

- Reducing energy intensity
- Increasing use of renewable energy
- Reducing water intensity
- Managing federal fleets

In 2009, the Obama administration addressed a deficiency in reporting with EO 13423 and expanded on the energy reduction and environmental performance requirements for federal agencies with EO 13514, “Federal Leadership in Environmental, Energy, and Economic Performance.” This order requires federal agencies to develop sustainability plans and report on their progress in meeting certain targets including:

- Reducing petroleum consumption
- Reducing potable water intensity
- Ensuring new contracts require products and services that are energy efficient, water efficient, bio based, environmentally preferable, non-ozone depleting, contain recycled content, and are non-toxic or less-toxic alternatives
- Increasing renewable energy and renewable energy generation on agency property
- Pursuing opportunities with vendors and contractors to reduce GHG emissions (i.e., transportation options and supply chain activities)
- Reducing building energy intensity
- Implementing water management strategies including water-efficient and low-flow fixtures
- Implementing source reduction to minimize waste and pollutant generation
- Decreasing use of chemicals directly associated with GHG emissions

Some of these initiatives include specific numerical targets and due dates, while others are merely encouraged.

COMPLIANCE TO-DATE

Compliance with the objectives set forth in the EOs is monitored by the Office of Management and Budget, which requires that each federal agency completes a scorecard. As shown in Figure 1, the latest scorecards from January 2013 indicated that nearly every federal agency was significantly behind in meeting at least one of the targets. Compliance with the green building goals were most in jeopardy.

Figure 1: Scorecard from January 2013

Federal Agency	GHG - Scope 1 & 2	GHG - Scope 3	Energy Intensity	Use of Renewables	Potable Water Intensity	Fleet Petroleum Use	Green Buildings	Opportunities by Agency
Department of Agriculture	Off Track	On Track	On Track	On Track	On Track	Serious Problems	On Track	1
Department of Commerce	Off Track	On Track	On Track	Serious Problems	On Track	On Track	Serious Problems	2
Department of Defense	On Track	On Track	Serious Problems	Off Track	On Track	On Track	Serious Problems	2
Department of Homeland Security	On Track	On Track	Off Track	On Track	On Track	Serious Problems	Serious Problems	2
Department of Education	Serious Problems	On Track	N/A	N/A	N/A	Serious Problems	N/A	2
Department of Energy	On Track	On Track	On Track	On Track	On Track	Serious Problems	Serious Problems	2
Environmental Protection Agency	On Track	On Track	On Track	On Track	On Track	On Track	On Track	0
General Services Administration	On Track	On Track	On Track	On Track	On Track	On Track	On Track	0
Department of Health and Human Services	On Track	On Track	On Track	On Track	Serious Problems	On Track	Serious Problems	2
Department of Housing and Urban Development	On Track	On Track	On Track	On Track	On Track	On Track	N/A	0
Department of the Treasury	On Track	On Track	Serious Problems	On Track	Off Track	On Track	Off Track	1
Tennessee Valley Authority	On Track	Serious Problems	On Track	On Track	On Track	Serious Problems	Serious Problems	3
United States Postal Service	On Track	On Track	On Track	N/A	On Track	Serious Problems	N/A	1
Department of the Interior	On Track	On Track	On Track	On Track	On Track	On Track	Serious Problems	1
Department of Justice	On Track	On Track	On Track	Serious Problems	Serious Problems	On Track	Serious Problems	3
Department of Labor	On Track	On Track	On Track	On Track	Serious Problems	On Track	Serious Problems	2
National Aeronautics and Space Administration	On Track	On Track	On Track	On Track	On Track	On Track	Off Track	0
National Archives and Records Administration	On Track	On Track	On Track	On Track	On Track	Serious Problems	Serious Problems	2
Office of Personnel Management	On Track	On Track	Serious Problems	On Track	Serious Problems	Serious Problems	N/A	3
Smithsonian Institution	On Track	On Track	Serious Problems	On Track	On Track	On Track	Serious Problems	2
Social Security Administration	On Track	On Track	On Track	On Track	On Track	On Track	N/A	0
Department of State	On Track	On Track	Serious Problems	On Track	On Track	Off Track	On Track	1
Department of Transportation	On Track	On Track	On Track	On Track	Serious Problems	On Track	Serious Problems	2
U.S. Army Corps of Engineers	Off Track	On Track	Serious Problems	On Track	On Track	Serious Problems	Serious Problems	3
Department of Veterans Affairs	Off Track	Serious Problems	On Track	On Track	On Track	Serious Problems	On Track	2
Opportunities by Goal	1	2	6	2	5	10	13	39

Simplified Color Definitions

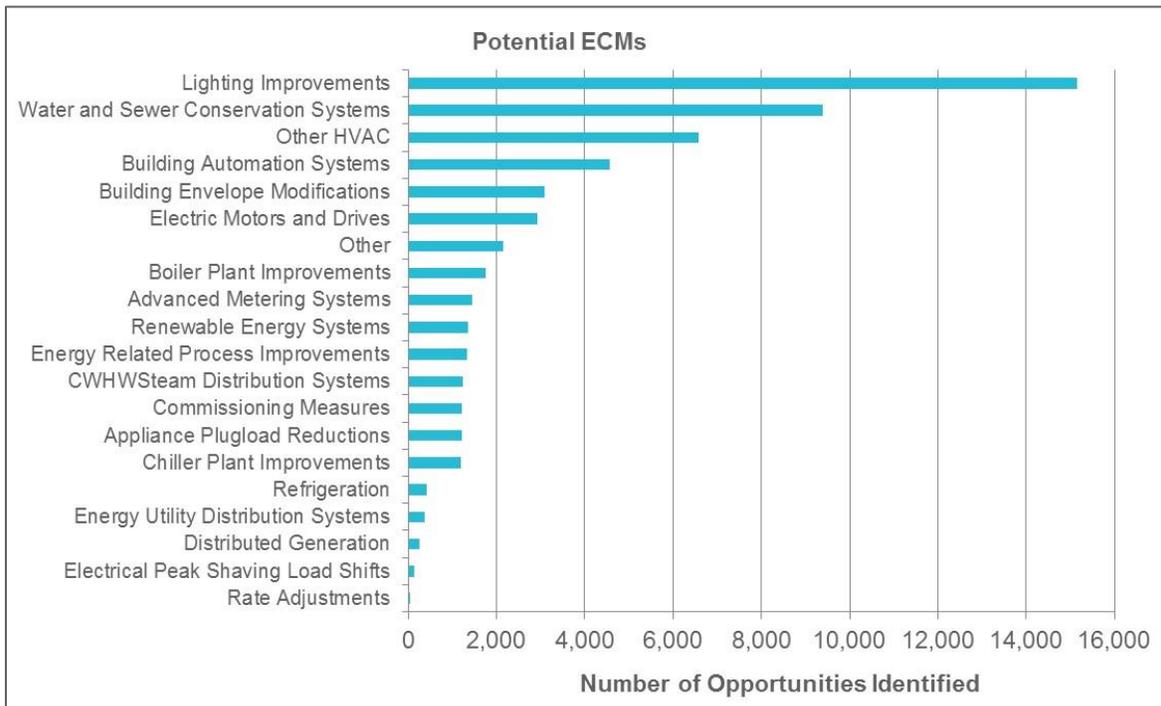
On Track Off Track Serious Problems

Source: <http://sustainability.performance.gov>

OPPORTUNITY TO IMPROVE

In response to the green building deficiencies, the Federal Energy Management Program (FEMP) has identified more than 55,000 potential energy conservation measures (ECMs) across the portfolio of federal government facilities.

Figure 2: FEMP Federal-Wide Potential ECM Report



Source: FEMP Federal-Wide Potential ECM Report, July 2011

Part of the strategy to overcome the challenge of implementing ECMs and other measures is for federal agencies to undertake energy service contracts or energy savings performance contracts (ESPC). These contracts provide the means for a federal agency to acquire facility improvements with long-term financing (up to 25 years) built into the contract and eliminate the need for upfront capital or special congressional appropriations. To facilitate the execution of these contracts, the U.S. Department of Energy (DOE) and the U.S. General Service Administration have established two types of agreements. The first are Utility Energy Service Contracts (UESC) and the second are “umbrella” indefinite-delivery, indefinite-quantity (IDIQ) ESPCs.

UESCs involve a federal agency contracting with their local electric, water, or gas utility for energy and water efficiency services. The General Services Administration has established more than 150 utility area-wide contracts to procure utility services for federal facilities around the country. Area-wide contracts are “umbrella” contracts, which are IDIQ contracts for public utility services. The contract outlines general terms and conditions and authorizes any agency in the utility's service territory to place delivery orders for services offered under the contract. The order describes the details and technical specifications for the energy efficiency project or other services to be delivered.

ESPCs are contracts involving an energy service company (ESCO) that has been awarded a master DOE ESPC contract. ESCOs are set apart from other firms that offer energy-efficiency improvements by performance-based contracting. When an ESCO undertakes a project, the company's compensation is directly linked to the cost savings from energy actually saved.

In December 2011, the president signed a memorandum entitled "Implementation of Energy Savings Projects and Performance-Based Contracting for Energy Savings." This memorandum challenges federal agencies to enter into \$2 billion worth of performance-based contracts within two years. According to the Whitehouse Climate Action Plan, released June 2013, progress is being made toward this objective.

"Federal agencies have committed to a pipeline of nearly \$2.3 billion from over 300 reported projects. In coming months, the Administration will take a number of actions to strengthen efforts to promote energy efficiency, including through performance contracting. For example, in order to increase access to capital markets for investments in energy efficiency, the Administration will initiate a partnership with the private sector to work towards a standardized contract to finance Federal investments in energy efficiency."

IMPLICATIONS

Large organizations, with an interest in improving their efficiency posture, can learn lessons from the approach that has been implemented by the federal government to monitor their energy conservation measures. The identified measures represent real energy conservation potential for most organizations and should be systematically reviewed for opportunities. Organizations need to proactively project manage, track, and report on these scorecards, and best practices must be applied to the implementation and execution of any established performance contracts. For large organizations, this work should be centrally governed to ensure that the objectives and outcomes of the program are accomplished. Centers of excellence can be created, with expertise in measurement and verification, to ensure that savings established in the service level agreements or performance contracts are tracked and realized for the organization.

ABOUT SCOTTMADDEN'S CLEAN TECH & SUSTAINABILITY PRACTICE

Leveraging our energy expertise, the ScottMadden Clean Tech & Sustainability practice helps our clients effectively navigate through the quickly changing energy landscape. We specialize in assisting our clients with sustainable energy strategies and making smart portfolio choices. We work with our clients to understand and effectively utilize cleaner, renewable sources of energy, such as nuclear, wind, solar, biomass, and biofuels. Our experienced team of energy practitioners understands the roles of energy efficiency, demand response, and storage as part of an integrated strategy. We also assist clients with sustainability, bringing an understanding of energy-unique concerns.

ABOUT THE AUTHORS

Bill Hosken (whosken@scottmadden.com) is an associate in ScottMadden's Atlanta office. Chris Vlahoplus (chrisv@scottmadden.com) is a partner and clean tech and sustainability practice area leader in ScottMadden's Raleigh office.