



Public Sector Sustainability: Recent Progress, Tomorrow's Challenges

October 15, 2009

Executive Summary

Defined as the ability to meet the needs of the present without compromising the ability of future generations to meet their own needs, sustainability has been a subject of increasing interest to the current administration, and it is likely only to increase in importance as efforts to achieve goals, such as energy independence and rebuilding the ailing economy, progress. To assess the current state of public sector sustainability efforts in the United States, FedSources analyzed programs at 15¹ federal agencies, four states², and one regional consortium of states³. Through this analysis, a number of important trends and best practices have emerged.

Key Takeaways

- Mission challenges exist
 - In some cases, sustainability goals appear to be at odds with the agency's mandate.
- How the government buys is slowly changing
 - Some agencies are addressing sustainability through their procurement practices.
- Emergence of centers of excellence
 - One trend tied to federal sustainability is the slow emergence of agency centers of excellence. FedSources uncovered a number of agencies, including the Department of Energy (DOE) and the General Services Administration (GSA), which are leading the charge in key areas.
- Centralized leadership is taking shape
 - Those agencies with the most centralized leadership in the area of sustainability programs are more likely to be considered sustainability leaders than those agencies with less centralized leadership.
- Budget constraints at the state level are *even more* of an impediment to effective sustainability initiatives than they are at the federal level.
 - The states and consortia included in FedSources' analysis revealed efforts toward cooperation and standardization.
- Beating the challenge of big goals, limited resources
 - Technology solutions can help relieve the burden on manpower.

Trends and Drivers Supporting Public Sector Sustainability

- A. Regulation (for more detail, refer to page 6 for additional insight)
- Recent and proposed legislation and policy, most notably in the area of energy efficiency, focuses on integrating sustainability into federal operations and the US economy.
 - The release of Executive Order EO 13514—Federal Leadership in Environmental, Energy, and Economic Performance portends great change to the federal sustainability landscape.

B. Cost/Efficiency (page 7)

- Energy and natural resources however, are not the only resource optimization projects related to federal sustainability efforts currently in place; federal agencies have efforts underway to sustainably manage other resources.
- A major portion of the American Reinvestment and Recovery Act of 2009⁴ (ARRA) is based on building a “green” and sustainable US economy; opportunities exist to leverage these projects in support of sustainability goals.

C. Mission (page 9)

- FedSources’ research indicates that federal agencies fall loosely into two camps: those agencies whose core missions align with sustainability goals, such as the Environmental Protection Agency (EPA), DOE and the Department of Agriculture (USDA); and those agencies whose sustainability initiatives are driven more by cost/efficiency and regulatory considerations than by anything inherent in their missions, such as the Department of the Treasury.
- Figure 2 shows where each of the 15 agencies fall along two continua: how centralized each agency’s sustainability leadership is relative to each other; and how related to each agency’s mission their sustainability initiatives are relative to each other.

D. Image (page 10)

- Most of the initiatives FedSources identified contain an element of imaging (public relations), but some are more visible than others and thus include a stronger element of public relations.

E. Environmental/Stewardship (page 10)

- Though many factors influence the creation of each sustainability initiative, environmental stewardship is at least a small portion of many, if not most. For example, GSA is an agency that has embraced the LEED rating system since 2002 for all building design; but “Green IT” is also a major area of focus.

F. Federal Sustainability Structure & Leadership (page 11)

- In recent years, the federal government has taken a cooperative, centralized approach to sustainability.

G. Management & Oversight (page 13)

- Effective oversight of sustainability programs will be necessary to ensure their success. This oversight, coupled with the increasing number of reporting requirements included in sustainability initiatives means that these programs will require significant dedicated resources.

To ensure the success of current sustainability initiatives and set the stage for future progress, it is imperative that key stakeholders manage these programs and available resources effectively. In many cases, this management will involve “spending money to save money.” Though progress has been made, getting to the next level of success will require balancing legislative and regulatory pressures with effective resource management and wise investments in technology solutions. Such action will be essential to achieving long-term sustainability for the US government, the US economy, and the world.

I. Introduction

“The nation that leads in the creation of a clean energy economy will be the nation that leads the 21st century global economy.” President Barack Obama rallied the nation to action in his June 25, 2009 speech, delivered after the House of Representatives approved a landmark energy bill reaffirming the federal government’s commitment to sustainability. To achieve the administration’s ambitious goals, such as lowering energy consumption in federal buildings by 2014, reducing electricity use 15% by 2020, overhauling federal appliance energy standards, and establishing a “smart grid” to transport electricity, the federal government has instituted a surge of sustainability-related programs.

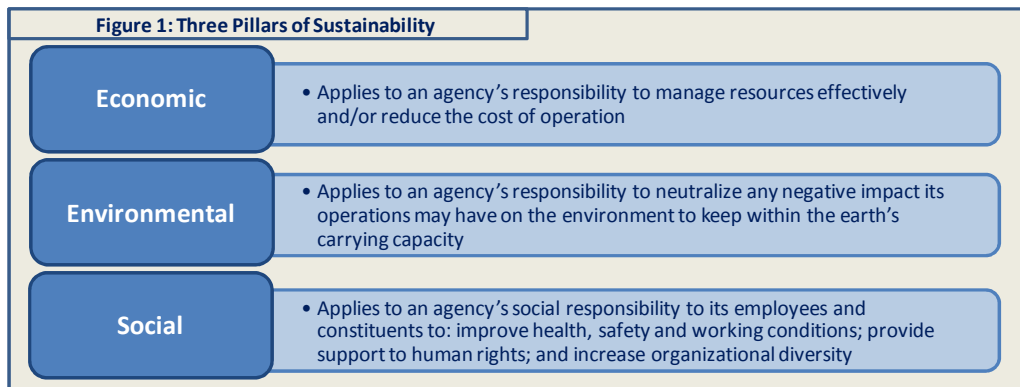
To ensure that these programs are efficiently and effectively managed and that they achieve their intended goals, public officials will be responsible for tracking and analyzing program performance data. Fulfilling these duties and complying with existing and planned reporting requirements will require a massive dedication of resources.

In light of these new challenges, FedSources conducted a study to assess the current role of sustainability in the public sector and to identify emerging trends. Fifteen federal agencies, four states, and one regional consortium were examined using secondary sources as well as interviews with key stakeholders, from which FedSources identified key sustainability initiatives and trends. These trends will help you to understand:

- The current state of sustainability efforts across the federal government and potential policy changes on the horizon
- The best practices agencies are developing for maximizing return on investment in sustainability programs
- How agency officials are thinking about sustainability and how they are overcoming resource limitations and mission challenges

II. Definition of and Framework for Considering Sustainability in the Public Sector

For the purposes of this study, sustainability⁵ is defined as the ability to meet the needs of the present without compromising the ability of future generations to meet their own needs. A number of private sector organizations have identified the three commercial pillars of sustainability as economic, social, and environmental. FedSources found that these pillars also apply to government sustainability initiatives, though the definitions must be altered slightly to suit the unique challenges and missions of the public sector.



FedSources identified over 135 sustainability-related initiatives in the federal government. Many of these programs relate to all three sustainability pillars. For example, one emerging trend across most federal agencies that fits all three sustainability pillars is the drive to increase the number of teleworking federal employees. Increased teleworking serves a number of purposes, including: reducing commuting costs (economic) and reducing pollution (environmental); bringing about work/life balance (social); and enabling employees to work without interruption (social).

Call to Action: In 2007, Lurita Doan, administrator of GSA, issued a challenge to her agency to draw up plans to enable 50% of eligible employees to telework one or more days per week by 2010. Other agencies are planning for increased teleworking as well, but implementing telework goals will take extensive planning and investment. For example, during 2008, the Bureau of Engraving and Printing implemented a secure, information technology solution to facilitate telework.

Another example is the Department of Transportation's (DOT) Intelligent Transportation Systems (ITS) research program, which was designed to research, demonstrate, and facilitate deployment of technology to enhance the safety, efficiency, convenience, and environmental sustainability of surface transportation.

Although ITS includes significant environmental and economic pillar elements, it also applies to the social pillar because of its goal to improve public safety.

III. Trends and Drivers of Public Sector Sustainability

A. Regulation

A mixture of legislation and Executive Orders (EOs), and agency directives are currently driving federal sustainability. Regulations at all levels that focus on the preservation of resources, increases in efficiency, and waste reduction are driving public sector sustainability initiatives.

Recent and proposed legislation, most notably in the area of energy efficiency, focuses on integrating sustainability into federal operations and the US economy. For example, the Energy Independence & Security Act (EISA)⁶ is one of the most sweeping energy bill enacted in over 30 years. Additionally, despite the tough economic climate and legislative challenges, it is likely that the Congress will enact and the President will sign, some form of climate change legislation within the next two years.

Executive orders set policy and requirements for agencies in the area of sustainability. According to an official at the Department of Homeland Security (DHS) in late September 2009, EO 13423⁷ is the main document that most federal agencies would follow in developing and managing their sustainability programs. On October 5, 2009, President Obama signed and the White House released EO 13514—Federal Leadership in Environmental, Energy, and Economic Performance⁸. Prior to its official release, an official at Treasury stated that he did not think the new EO would have a “drastic impact” on his agency, but suggested that the changes under consideration center on “setting higher bars in terms of requirements.” An official at DHS also implied that changes are expected shortly, noting “We have legal requirements and the executive order goals, which will be changing soon here, I imagine.” An official with USDA also stated, “things are changing; things are really in flux right now.” Further validating this executive’s comment, the department’s Sustainable Operations Council, whose mission is “providing executive leadership in implementing EO 13423,” is in the middle of reorganization.

Actual requirements of EO 13514 include:

- Within 30 days the head of each agency must designate a Senior Sustainability Officer (Sec. 7(a)) from among the agency’s senior management; this official will be responsible for the creation and implementation of a multi-year Strategic Sustainability Performance Plan (Sec. 8) and monitoring the agency’s performance and progress in implementing the plan. The Senior Sustainability Officer will report to the Director of OMB and the Council on Economic Quality (CEQ) Chair.

- Within 90 days, agencies must establish and report to the CEQ Chair and the Director of OMB a percentage reduction target for agency-wide greenhouse gas emissions reductions by fiscal year 2020.
- Beginning in 2020, ensure that all new federal buildings are designed to achieve zero net-energy by 2030.
- Advance sustainable acquisition to ensure that 95% of new contract actions for products and services (excepting weapons systems) are energy-efficient, water-efficient, biobased, environmentally preferable, non-ozone depleting, contain recycled content, or are non-toxic or less-toxic alternatives, where such products and services meet agency performance requirements.
- Measurement of agency sustainability performance and regular reporting requirements.

In addition to legislation and EOs, agency-level directives are also shaping sustainability initiatives. Treasury Directive 75-09, Environmental Management and Sustainability Program⁹ was released on July 1, 2008 and “provides policies and assigns responsibilities for establishing and maintaining comprehensive environmental programs with the Department.” Signed September 14, 2009, Department of the Interior (DOI) Secretarial Order 3289¹⁰ addresses the impact of climate change on America’s Water, Land, and Other natural and cultural resources. The order creates a new Climate Change Council that will coordinate DOI’s response to the impacts of climate change. The order also calls for the creation of eight DOI regional Climate Change Response Centers to synthesize existing climate change impact data and management strategies. Finally, a network of Landscape Conservation Cooperatives will engage DOI and other federal agencies, local and state partners, and the public to craft practical strategies for managing climate change impacts within the eight regions.

B. Cost/Efficiency

A second primary driver of sustainability initiatives in the public sector is the effort to reduce costs and increase efficiency of operations. This driver closely corresponds to the “profit” driver described in private sector sustainability initiatives and reflects pressures on public sector entities to maximize available resources/return on investment (taxes) by effectively and efficiently managing operations.

According to DOE, the federal government is the largest consumer of energy in the United States, even though it represents only 1.5% of national energy consumption. As anyone

involved in creating the annual budget will understand, a large portion of any agency's operating budget is comprised of energy costs. FedSources estimates annual federal energy expenditures at over \$20B. The Energy Policy Act of 2005¹¹ (EPAAct2005) requires that federal agencies reduce energy consumption on an annual basis. Federal agencies have indeed reduced consumption; but the decreases achieved have been overshadowed by the rise in energy costs. To help achieve this EPAAct goal, the act requires agencies to measure and account for electricity consumption on a building-by-building basis through electrical metering technologies. Specifically, Section 103 of the EPAAct requires all federal agencies to install metering and advanced metering in buildings, where found to be cost-effective, by 2012. Additional recent legislation, including ARRA, call for investment in more energy-efficient vehicle fleets. EPAAct2005 mandates the use of light duty alternative fuel vehicles in covered federal fleets. EO 13423 also includes requirements for petroleum use reduction through improvements in fleet efficiency and the use of alternative fuel vehicles and alternative fuels.

As previously mentioned, increasing energy costs are driving the government to adjust its spending and increase efficiencies to complete its mission economically and sustainably. Energy and natural resources, however, are not the only resource optimization projects related to federal sustainability efforts currently in place; federal agencies have efforts underway to sustainably manage other resources. For example, EO 13327 – Federal Real Property Asset Management¹², signed February 4, 2004, set up the Federal Real Property Council, which established 24 data elements for real property that must be reported annually at the asset level. In response, USDA's Real Property Asset Management Program was established to provide for the maintenance of a complete and accurate inventory, facilitate the disposal of unneeded federal properties, and create an integrated energy management report for real property assets, among other goals.

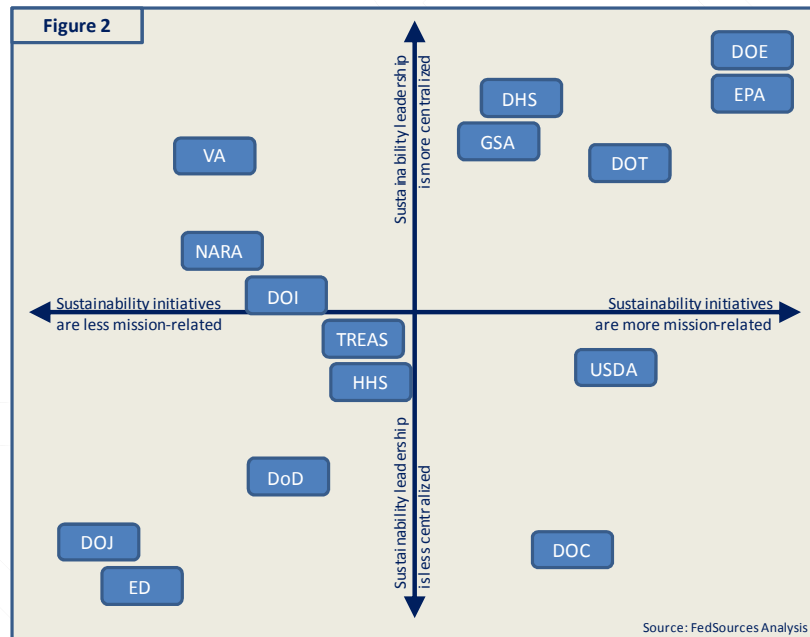
Federal Agencies Making It Work: Before these programs can reduce cost and increase efficiencies, however, they require a not insignificant investment of time and resources. For example, according to an official at GSA, in the early days the Green Buildings initiative, "there was a perception that it would cost more to build green." They found however, that "once you have the will to do it, it becomes part of the proposal. I don't really hear that anymore (that it is too costly and we can't do it). We have a lot of buildings that are LEED Silver and higher."

Other recent sustainability programs are intended to have a wider economic effect outside the operations of the federal government. A major portion of ARRA is based on building a "green" and sustainable US economy. Of the \$787 billion total appropriated under ARRA, approximately \$20 billion has been devoted primarily to energy efficiency programs; this figure includes green

federal buildings, Energy Star appliance rebates, block grants, weatherization programs, tax incentives, and energy-related R&D funding.

C. Mission

FedSources' research indicates that federal agencies fall loosely into two camps: those agencies whose core missions align with sustainability goals, such as EPA, DOE and USDA; and those agencies whose sustainability initiatives are driven more by cost/efficiency and regulatory considerations than by anything inherent in their missions, such as Treasury. Figure 2 ranks the study departments along a continuum of how much each agency's sustainability initiatives are driven by their core mission versus cost/efficiency and regulatory considerations, as well as on a scale of how centralized these efforts are.



A DHS official with whom FedSources spoke stated,

“I’m most focused on meeting the mission needs: security; sustainability ties in with the energy security aspect. For renewable energy or onsite generation we can produce, in many cases, enough energy to meet critical energy needs and reduce reliance on the grid or traditional fossil fuels, reduce our carbon footprint, and boost energy efficiency and reliability, as well. And if we can do that economically, then that’s even better.”

Mission Challenges Exist: In some cases, sustainability goals may even be at odds with the agency's mandate. According to an official FedSources spoke with, "Sometimes mission can come into conflict with sustainability goals." For example, one of USDA's missions is to protect the food supply, and in pursuit of those objectives, they "put a lot of miles on [their] vehicles." This official said this reality makes it difficult for USDA to rate highly when it comes to sustainable operations.

D. Image

Public sector entities have a responsibility to maintain the confidence of their constituents. Consequently, these entities often engage in some form of public relations and image cultivation. This driver is comparable to branding in the private sector. Most of the initiatives FedSources identified contain an element of imaging, but some are more visible than others, and thus, include a stronger element of public relations.

Well into his first year in office, President Obama is working to cultivate that sustainability image. In late September 2009, President Obama released his "Strategy for American Innovation." The plan has three principal elements: catalyze breakthroughs for national priorities including clean energy and advanced vehicle technology; promoting competitive markets that spur productive entrepreneurship; and investing in the building blocks of American innovation. In addition, on October 5, 2009, he issued Executive Order 13514—Federal Leadership in Environmental, Energy, and Economic Performance.

Agencies are using their websites and other electronic media to disseminate information about their sustainability-related programs. For example, USDA is using the social media application Facebook to communicate on its "Know Your Farmer, Know Your Food" initiative. This program, which aims to "create new economic opportunities by better connecting consumers with local producers," builds on provisions of the 2008 Farm Bill. Other anticipated program benefits include supporting local farmers, strengthening rural communities, protecting natural resources, and promoting healthy eating. Deputy Secretary Merrigan described the program as bringing USDA to Americans "every day in every way."¹³

E. Environmental Stewardship

Though many factors influence the creation of each sustainability initiative, environmental stewardship is at least a small portion of many, if not most. GSA is an agency that has embraced the LEED rating system since 2002 for all buildings design. Since 2003, its goal for buildings has been LEED silver. LEED is an internationally recognized green building certification system, providing third-party verification that a building or community was designed and built using

strategies aimed at improving performance within multiple areas, including energy savings, water efficiency, CO2 emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts.

Green IT is also a major area of focus. According to an official at GSA, "we're definitely green in our IT practices as far as embracing the goals of EO 13423 on computers and being sustainable in procuring, recycling, etc. We've increased the life of our computers from three to four years. We are also going to move our hard copy files into e-filing, using electronic project managers; there is an EPM program that [agency officials] are all learning ... reducing the amount of storage space we need for files."

How the Government Buys is Slowly Changing: Some agencies are addressing sustainability through their procurement practices. An official at USDA told FedSources that "there is a provision in the Farm bill that requires USDA to promote bio-based products and so these products receive a procurement preference." He provided examples of bio-based products, such as soy and corn; other end user products include feed stock, lubricants, and cleaners. He said that USDA is "changing the products the government buys to these bio-based products." The benefit, he said, "helps decrease our dependence on foreign oil" and he claims that these efforts are also aiding the "creation of green jobs." Other agencies, such as GSA, also have green purchasing preferences.

F. The Federal Sustainability Structure and Leadership

Agency commitment and "buy-in" will also challenge the long-term viability of federal sustainability initiatives. At the central level, it is clear that sustainability is an important piece of the President's agenda. One official FedSources spoke with described attending a July 2009 meeting at OMB at which updated scorecards were officially released. He said Rahm Emanuel, President Obama's Chief of Staff, sent a deputy to their meeting and this deputy told them "how important sustainability was, how much it means to the President, and how they must help the President come through on his campaign promise." This official further said that Mr. Emanuel's representative also made the simple statement, "the federal government must lead by example." The official said his takeaway from this meeting was "how important this issue is to the President."

According to an official at USDA, CEQ and Office of the Federal Environmental Executive (OFEE) are the two primary leaders at the executive level and the primary drivers for new policies. Within the Executive Office of the President, CEQ, was formed in 1969 and will play an integral role in the execution of the new EO. OFEE, part of CEQ but administered by the EPA, was

created by executive order in 1993 to promoting sustainability and environmental stewardship throughout the federal government's operations. Another federal entity of influence is OMB, according to this USDA official, especially with regard to the issuance of management scorecards. He said OMB and the White House are "leading the charge [and] holding agencies accountable, which is a powerful force."

In recent years, the federal government has taken a cooperative, centralized approach to sustainability. Authorized by the Energy Policy Act of 2005 and led by DOE, the US Climate Change Technology Program is a multi-agency planning and coordination entity, whose mission is to strengthen the federal research and development portfolio across the participating 11 agencies. The US Climate Change Science Program (CCSP) integrates federal research on climate and global change, and is overseen by DOE's Office of Science and Technology Policy, the Council on Environmental Quality, the National Economic Council, and the Office of Management and Budget. Similarly, the White House Task Force on Waste Prevention and Recycling, the EPA, and the USDA assist federal agencies in reducing their impact on the environment, using a variety of means, including promoting the purchase and use of recycled content, environmentally preferable and bio-based products; non-ozone depleting substances; and products containing alternatives to certain priority chemicals and utilizing sustainable practices.

Centers of Excellence Have Emerged: Another similar trend in federal sustainability is the emergence of centers of excellence. An official at USDA also said that there are certain agencies, such as DOE and GSA, which are leading in certain areas. For instance, he said DOE is leading in the area of renewable energy sources, citing that DOE has the Federal Environmental Management Program (FEMP). In terms of sustainable buildings, GSA is leading. At GSA, sustainability has long been a focus. A GSA official FedSources spoke with traces it back to 1998; Bob Peck, buildings commissioner under the Clinton administration and the current head of PBS, worked on Planet GSA, which aimed to "buy, build, drive and save green." His leadership established a number of sustainability goals, such as construction waste management that incorporated sustainability (pre-LEED) and a Build Green Network came about.

One best practice agencies are using to maximize the impact of their sustainability efforts is the creation of centralized offices to coordinate their climate change-related programs. Examples include:

- USDA has allocated significant funding to the Economic Research Service (ERS) and the Agriculture Research Service (ARS) to develop strategies for climate change mitigation, such as carbon offsets, methane capture, and bio-fuel production;

- DOI's Climate Impacts Initiative integrates the activities of its operating divisions to measure and monitor climate-induced change, share information with other managers, and formulate strategies to protect wildlife and habitats through adaptive resource management;
- DOI's Center for Climate Change and Environmental Forecasting is the agency's focal point for information and technical expertise on transportation and climate change; and
- DOI has an Office of Environmental Policy and Compliance and has created the position of Climate Change Coordinator, who will act as the central person on climate change and related issues. The position, however, has not yet been filled.

FedSources found that those agencies with the most centralized leadership in the area of sustainability programs are more likely to be considered sustainability leaders by others.

Partially to show that GSA has embraced the concept of the sustainability, the agency's Office of Governmentwide Policy published "Sustainability Development in Society" in October 2004. This document's stated purpose is "to promote a fuller understanding of sustainable development and how it helps us to make better real property investment decisions." Among other things, the document discusses how to measure the performance of green buildings.

G. Management and Oversight

Effective oversight of sustainability programs will be necessary to ensure their success. This oversight, coupled with the increasing number of reporting requirements included in sustainability initiatives, means that these programs will require significant resource dedication. To meet this challenge, technology solutions are being used government-wide and at the individual agency level.

In order to track how well departments and major agencies are executing target government-wide management initiatives, OMB introduced new scorecards for Energy, Transportation, and Environmental Management in January 2006. Figure 3 shows how each of the 15 study agencies fared on the most recent scorecard release in July 2009. These scorecards track agencies' progress toward achieving sustainability goals as part of a larger color-coded scorecard measuring federal environmental stewardship requirements in the categories of energy, transportation, and environment. Like similar scorecards managed by OMB (President's Management Agenda), the sustainability scorecard employs a simple grading system: green for success; yellow for mixed results; and red for unsatisfactory.

Each agency is individually responsible for providing OMB with the required data and a number of systems are used by multiple agencies to manage this data. For example, according to a

source that did not wish to be named, DHS is working towards developing a baseline consistent reporting system across all departments and is bringing in outside industry to advise them on this process.

July 2009 Scorecard Results						
	Energy		Transportation		Environment	
	Status	Progress	Status	Progress	Status	Progress
USDA	●	●	●	●	●	●
DOC	●	●	●	●	●	●
DoD	●	●	●	●	●	●
ED					●	●
DOE	●	●	●	●	●	●
EPA	●	●	●	●	●	●
HHS	●	●	●	●	●	●
DOI	●	●	●	●	●	●
DOJ	●	●	●	●	●	●
DOT	●	●	●	●	●	●
TREAS	●	●	●	●	●	●
VA	●	●	●	●	●	●
GSA	●	●	●	●	●	●
NARA	●	●			●	●
DHS	●	●	●	●	●	●

Source: http://www.fedcenter.gov/Documents/index.cfm?id=13191&page_id=1606

To simplify annual data reporting and regular monitoring of GSA fleet vehicles, DOT and GSA created the Federal Automotive Statistical Tool (FAST). The FAST Data Center generates reports on vehicle inventory, acquisition and disposal expenses, vehicle cost, miles driven, and fuel consumption. OMB relies on FAST data to inform its transportation scorecard evaluations. Obtaining data from the agencies for the environmental category is “a mish-mash process” to get consistent and accurate data. According to a government official who did not wish to be named, the metrics are not always cut-and-dry. Additionally, agencies are trusted to report accurate data. FedSources was told that access to the metrics used to arrive at the three ratings will be posted at www.fedcenter.gov “soon.”

In 2008, DOE developed and deployed a spreadsheet-based assessment tool to help project teams assess their facilities and identify what steps should be taken to meet sustainability goals. The tool is available online for all departments to use.

According to an official at USDA, when OMB unveiled the scorecard in 2006, “it was a major force” and had a “drastic impact on USDA because it forced us to pay more attention to the

Executive Orders.” This official appeared to find the scorecards helpful, stating that they act like a “stop-light system” so that an agency, “at a glance, can know if we’re doing well, not so well, or failing.” Building on this, USDA is currently working to expand the scorecard system and will issue separate scoring at the sub-agency level to “help motivate certain agencies to change and be accountable.” He said the nature of USDA is “not like DOD with a command and control presence,” as USDA is “a corporate shell” that is “real loose.” He said some agencies within USDA are “so independent, it is difficult to hold them accountable to the sustainability reporting requirements.” So, he said “our plan is to ... give them grades.”

Tough Mission Challenges Exist: While the scorecard system has been helpful to some, there are some who doubt whether it will be effective in some cases, simply due to mission pressures. A White House official anonymously stated that they doubted very much whether DoD will ever be compliant.

Executive Order 13423 also requires multiple agencies to reduce energy consumption at their facilities. In order to comply, the Department of Health and Human Services (HHS) created the Office of Facilities Management and Policy (OFMP), which among other things is responsible for reducing energy consumption. HHS policy states that its operating divisions must implement electric metering by 2012 in all facilities where cost effective. To determine life-cycle cost effectiveness, HHS developed a framework based on a ten-year simple payback that assumes at least a 2% annual savings. Additionally, HHS policy requires that operating divisions report on their progress. The following is an excerpt from HHS guidance on agency energy efficiency:

“One critical detail to address early in the metering specification phase is the method of data analysis and thus, the extent of data required to complete the analysis. Data, by itself, isn’t of much use without some analysis to determine what it means. This is a central and critical point in developing any successful metering program. There are many tried and true methods of trend analysis, for example, and many commercially available software tools that help to make sense out of enormous amounts of data. Often the analysis methodologies chosen and extent of the data requirements dictate what types of metering/monitoring equipment and hardware/software tools are necessary.”

USDA has an existing Management Initiated Tracking System (MITS) that it uses to track sustainability-related data. According to an official FedSources spoke to, the department “created a Sustainability module” to track its “progress internally” using metrics identical to

those tracked by OMB. He said they built a new piece on to an existing system because it was the most efficient and cost-effective option at the time. MITS thus serves two functions:

- 1) Help the department keep track of its progress by showing the milestones it is and is not meeting; and
- 2) Keep track of data required by OMB

Although OMB's reporting requirements are for USDA as a whole, the "new Sustainability module of MITS will allow USDA to issue scorecards to all agencies within USDA that own land."

IV. The Challenge: Big Goals, Limited Resources

Resource limitations will be the number one impediment to the ambitious sustainability goals set by the current and previous administrations. In the words of an official at DOI, "We've been trying to do something about sustainability for the past couple years, but we have limited staff." Similarly, an official at USDA also stated, "We face similar challenges as other federal agencies in terms of funding and resource issues."

Regarding resource issues, one source, speaking prior to the official signing of EO 13514 said that it "is unlikely, as a practical matter, that when the new EO is signed they will step forward with lots of new money." The official added, however, that, "you have to be realistic about any real change in funding allocation." He said that in terms of reducing energy and water usage and costs, "it's an easy thing to pick the low hanging fruit; but now that all the lowest hanging fruit have been picked, we need more resources to go after the more difficult ones."

DOC is implementing a department wide Environmental Management System. They currently have EMS in various parts of the department but have decided to implement it across the department. DOC will use its website as a portal for its EMS and are looking at a compliance tracking systems. According to a department official, "the problem is that nobody has any money to do any of this and environmental protection specialists are working themselves to death, so they have to use pen and paper."

Another challenge is the reality that, in the words of the USDA official, "there is only so much energy and water usage fat you can cut until you can't cut anymore." Energy reduction goals are evaluated annually, but as the years pass, it will become increasingly difficult to improve upon the previous year's progress. The official provided the following analogy: "Let's say you carry a few extra pounds and you set a goal of 2 percent reduction of body fat every six months. Meeting the goal in the first six months is relatively easy; however, each successive 6 month mark is more difficult, and more difficult, until you reach equilibrium. Then, possibly, you've

reached an unhealthy state.” He further said, “Some say the thing to do is to cut out the fat in terms of energy and water usage, but when the fat’s all gone, you can’t cut anymore.” The source said USDA struggles with this issue, and said it will be a challenge to meet the ongoing requirements of various executive orders and statutes.

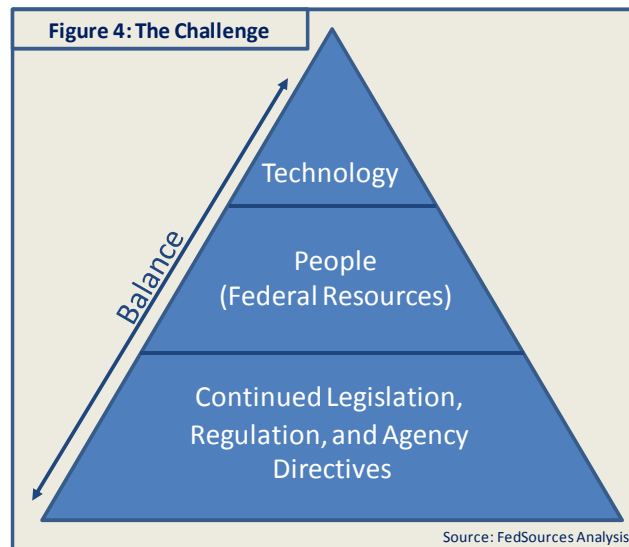
V. State-level Sustainability Initiatives

While resource limitations at the federal level are problematic, budget constraints at the state level are even more of an impediment to effective sustainability initiatives. According to a New York State official, “It’s a very bad time, fiscally... and we have no extra resources or staff.” Despite resource constraints, however, state governments are managing to implement sustainability initiatives. In the words of this New York official, “The number of agencies implementing sustainability policies has grown and they’re realizing that doing so saves money during these tough fiscal times.” FedSources analysis of programs in New York, Michigan, Florida, and Texas yielded several common strategies used to mitigate the cost of sustainability programs. First, academic and public/private partnerships have help distribute the cost of achieving sustainability goals. The Educational Alliance for Sustainable Florida encourages schools to incorporate the concept of sustainable development into their programs and increase the emphasis on sustainability in MBA curricula and associated activities. Similarly, regional consortia, such as the Western Climate Initiative, are helping create cooperation and standardization across individual states.

VI. Summary

Initial steps toward sustainability in the public sector have been taken and the desire to improve further is clear. Additionally, current sustainability initiatives have buy-in at the highest levels of government.

Speaking at a government services industry conference on October 6, 2009, a senior OMB official reported that agencies face four main barriers to performance. First, senior administration officials are often more focused on establishing new policies than on the operation of their agencies. Second, resource limitations lead employees to turn to IT solutions, but existing IT solutions often fail to meet expectations. Third, an insufficiently staffed acquisition system often means that while government employees seeking to augment their IT infrastructures with new and enhanced solutions, they often do not have the means to do so effectively. Finally, a sluggish federal hiring process presents a barrier to hiring required expertise. While agencies are working to set, measure and report on sustainability goals, they often do not have the resources to effectively overcome the barriers to fulfilling these requirements.



Agency officials responsible for sustainability must therefore prepare for the future by effectively managing their limited resources today. In many cases, preparing for the future is a matter of “spending money to save money,” through early investment in programs and in technology tools to help manage program data. Centralization within and cooperation among agencies are already helping the federal government better manage its sustainability resources, but challenges remain. Getting to the next level of success will require more than just commitment and interagency cooperation.

It will depend on a balance of continued legislative and regulatory pressure, access to adequate resources (such as manpower at the agency level), and technology to manage these initiatives.

Although this study uncovered a multitude of initiatives, directives and executive orders, the end-goal is clear: to secure a level of sustainability to the very best of the government’s ability. The challenge is to achieve this goal as quickly and efficiently as possible, utilizing both existing government and commercial best practices. With the GFY10 federal budget request hovering at \$5 trillion, and a federal workforce of approximately 1.8 million civilian employees, future generations of Americans and the planet are relying on it.

¹ The 15 study agencies are: Department of Energy (DOE); Environmental Protection Agency (EPA); Department of Transportation (DOT); Department of Homeland Security (DHS); General Services Administration (GSA); Department of Agriculture (USDA); Department of Veterans Affairs (VA); National Archives and Records Administration (NARA); Department of the Interior (DOI); Department of the Treasury (TREAS); Department of Health and Human Services (HHS); Department of Defense (DoD); Department of Commerce (DOC); Department of Justice (DOJ); and Department of Education (ED).

² The four study states are New York, Texas, Florida, and Michigan.

³ The Western Climate Initiative membership is comprised of Arizona, British Columbia, California, Manitoba, Montana, New Mexico, Ontario, Oregon, Quebec, Utah, and Washington.

⁴ http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_bills&docid=f:h1enr.pdf

⁵ For example, Executive Order 13514 Sec. 19 (l) defines sustainability as follows: "sustainability; and 'sustainable' mean to create and maintain conditions, under which humans and nature can exist in productive harmony, that permit fulfilling the social, economic, and other requirements of present and future generations."

⁶ http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110_cong_public_laws&docid=f:publ140.110

⁷ <http://www.fedcenter.gov/programs/eo13423/>

⁸ <http://www.fedcenter.gov/admin/itemattachment.cfm?attachmentid=245>

⁹ <http://www.ustreas.gov/regs/td75-09.htm>

¹⁰ http://www.blm.gov/pgdata/etc/medialib/blm/wy/programs/science.Par.90488.File.dat/SO_3289.pdf

¹¹ http://www.epa.gov/oust/fedlaws/publ_109-058.pdf

¹² http://www.gsa.gov/Portal/gsa/ep/contentView.do?contentType=GSA_BASIC&contentId=16911

¹³ http://www.usda.gov/wps/portal/knowyourfarmer?navtype=KYF&navid=KYF_MISSION