

"LEED and Executive Order 13514

What's the Connection?"

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Summary

Over the past decade, the Federal Government has taken a range of initiatives to implement sustainable design, building, and facility requirements into new and existing Federal buildings. More recently, Presidential Executive Orders are driving specific green building practices and requiring accountability. These Executive orders set far-reaching goals for reducing the environmental footprint of federal agencies' real estate portfolios via "Guiding Principles", or standards, which can be correlated to USGBC's Leadership in Energy and Environmental Design (LEED) Rating System. Across all Federal agencies, facilities staff are now actively involved in implementing these requirements. Going forward, all applicable Federal projects, contracts, leases, buildings, and procurements must apply these Guiding Principles. This is presenting opportunities for green consultants, products, and services.

A Little History

In 2006 a historic step was made during the first White House Summit on Federal Sustainable Buildings. By signing the *Federal Leadership in High Performance and Sustainable Building Memorandum of Understanding (MOU)*, 19 federal agencies, controlling more than 90 percent of the total Federal facility square footage, created a "lynchpin" for guiding Federal buildings towards sustainability. Five Guiding Principles were subsequently incorporated into Executive Order (EO) 13423 of January 24, 2007 and subsequently by EO 13514 of Oct 5, 2009, which expanded on EO 13423. These EOs span two Presidential administrations, one Republican, one Democrat. Clearly, green building is here to stay. In December 2008 the Guiding Principles were updated to include existing buildings and current sustainable design practices (<http://www.wbdg.org/references/fhpsb.php>).

The Interagency Sustainability Working Group (ISWG) is charged with developing technical guidance for implementing the Guiding Principles, updating and expanding the Guiding Principles, and prepared the 2008 update that is currently used by Federal Agencies. The ISWG was established in 2001 and is jointly coordinated by the Department of Energy's (DOE) Office of Federal Energy Management Program (FEMP) and the General Services Administration (GSA). The ISWG is comprised of facility and policy staff from Federal Agencies and is the staff-level coordinating body for sustainability of the built environment in the Federal sector.

What is an Executive Order and where did this one come from?

An Executive Order is a directive, by the President, to Federal agencies, to implement Administration policy. EO 13423 turned the Guiding Principles into a directive for implementing the range of sustainable measures into Federal agency building projects, and 15% of the existing Federal building inventory, among other aspects. EO 13514 incorporates and expands EO 13423 by adding important Greenhouse Gas management,

zero net energy design after 2020, and a sustainable building goal of 100% conformance over time. The implementation of these orders is coordinated by the White House Council on Environmental Quality (CEQ) which oversees the Office of the Federal Environmental Executive (OFEE). The National Environmental Policy Act of 1969 assigns CEQ with the task of ensuring Federal Agencies implement environmental directives. OFEE works with the Office of Management and Budget (OMB), with the guidance of the ISWG, to manage and plan for how the EO is realized. Agencies must now report status and progress in meeting the EO goals to OFEE/OMB. They have deadlines and targets to adhere to and they are scored Red, Yellow, or Green depending on how well they perform based on verifiable metrics. Red is bad, green is good. This mandate is huge, millions of square feet of new and existing Federal properties, projects, and leases.

What does this have to do with LEED? Some more History...

In the mid 90's, the USGBC had produced a definitive manual on how green building can be done (the *Technical Resource Guide*). USGBC then turned its attention on the problem of green washing, verification, and a rating system for green building. The USGBC / LEED committees that formed around the five LEED categories were (and are) national experts and highly informed stakeholders in what would constitute green building standards. These committees, through an exhausting process of dialog, consensus, and public review, were able to identify the "edge" or "zone" of what is possible to what is difficult but achievable in how buildings are designed, built, and verified as green.

This work was seminal, unprecedented, and definitive. By early to mid 2000s LEED had become the de facto comprehensive green building standard in the US. What is measurable in green building became defined by LEED. To a large extent, this system is the only exposure to green building that many design and construction professionals have. It is no surprise, then, that the members of the ISWG looked first to their experience with the LEED rating system to define Federal priorities via the MOU and *Guiding Principles*. Given that LEED includes a menu of options, the environmental performance of LEED buildings varies. The Federal government determined that it wanted a clearer and higher bar than attainable by the flexibility in LEED. Therefore, while the guiding principles build on the metrics of LEED, they also establish a set of "non-negotiable" green building practices, or in LEED-lingo "prerequisites" for Federal projects. That said, both the LEED rating system and the certification process continue to be invaluable tools and ubiquitous in Federal agency policies. Furthermore, with some stipulations, federal agencies have the option of demonstrating compliance with the guiding principles for a building by either obtaining third-party certification (ie., LEED) or doing the verification on their own using the Guiding Principles.

Additionally...

Furthermore, the Department of Energy (DOE) is charged with defining standards for high-performance sustainable buildings per the Energy Policy Act of 2005, and the Energy Independence and Security Act (EISA) of 2007. In the May 28, 2010 *Notice of Proposed Rulemaking* (NPR), which is under DOE review (and subject to change), DOE proposes to adopt the December 2008 version of the Guiding Principles to meet this definition. Also, by directive of EISA, DOE is also to : "*identify a certification system and level for green buildings that the Secretary determines to be the most likely to encourage a comprehensive and environmentally-sound approach to certification of green buildings.*" Citing a GSA study by Pacific Northwest National

Laboratory that evaluated leading green building rating systems, DOE identifies LEED Silver as a certification system and level that fulfills the requirements of the above statute. (There is more in the NOPR involving other rating systems)

A major issue involving LEED and the Guiding Principles is the challenge of *verification* for non-LEED projects. Terms such as “LEED equivalent”, “LEED certifiable”, or “LEED-able” abound but may not necessarily imply rigorous compliance documentation. The power of LEED as a standard is that it is integral with GBCI verification of the green design and construction measures. Absent a LEED certification process, Agencies are free to develop their own protocols for ensuring that the Guiding Principles and LEED standards are met and to record these on their scorecards. This issue of non-LEED verification of sustainable measures will likely be a consideration by the ISWG in the year to come.

As noted above, the revised Guiding Principles also provide the requirements of EO 13514 to upgrade existing buildings to meet stated targets. Again LEED for Green Buildings Operations and Maintenance (LEED EB O+M) standards are partially used. However, that is another article.

This all continues to be a rapidly changing field. Other voluntary industry green building standards are under development, namely ASHRAE 189.1P and the International Green Construction Code, by the International Code Council. How the new and existing tools and standards are used by the Federal government will continue to evolve as standards mature.

Where to Now?

We are in a new era and a massive transition to sustainable technologies, methodologies, and materials is in gear. This Administration is now forging ahead. It is requiring the Federal government to lead by example with critical guidance by DOE & FEMP, EPA, the ISWG, CEQ and OFEE. Conversance, or better, experience, in the methods, metrics and measures used to define and pursue achievement in sustainability is now needed. These standards will continue to be strongly influenced by LEED whether a Federal project is seeking certification or not.

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