

## Interagency Sustainability Working Group

Update Report: December 2009



Kevin Reals/PIX 16250

Scheduled for completion mid-2010, the National Renewable Energy Laboratory (NREL) Research Support Facility will exceed LEED Platinum certification.

### Introducing the Federal High-Performance Sustainable Buildings Checklist

The new Federal High-Performance Sustainable Buildings Checklist (Guiding Principles Checklist) within the Environmental Protection Agency's (EPA) ENERGY STAR® Portfolio Manager assists Federal agencies with existing building stock assessments against the Guiding Principles for Sustainable Existing Buildings (Guiding Principles). The tool helps Federal agencies report sustainability data elements of the Federal Real Property Profile. Federal agencies can use the checklist to:

- Conduct initial and final building walkthrough assessments.
- Track and easily view progress for each Guiding Principle.

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- Upload compliance documents for record keeping.
- Create an agency-wide building sustainability roll-up report.
- Review up-to-date energy and water metrics generated by the Portfolio Manager.

A basic understanding of the Portfolio Manager interface is needed to use the checklist. After registering and logging in to the Portfolio Manager, users enter general Federal facility information. The checklist can be accessed and filled out once a building is identified as "Federal." Portfolio Manager's full energy and water tracking function can be leveraged at any time by entering space use and metered data. The resulting metrics populate the appropriate Guiding Principle within the checklist.

The Guiding Principles Checklist within Portfolio Manager can be accessed at [www.energystar.gov/benchmark](http://www.energystar.gov/benchmark). Web-based training is available at <https://energystar.webex.com>. Contact Katy Hatcher, EPA ENERGY STAR Public Sector National Manager, with comments or questions at [hatcher.caterina@epa.gov](mailto:hatcher.caterina@epa.gov).

### FEMP Web Site Refresh

FEMP is actively refreshing its Web site to enhance both content and usability. The site provides timely information and tools to design, implement, and measure Federal energy management and sustainability. It serves as the hub

### Executive Order 13514 and the Expansion of Federal Sustainability

On October 5, 2009, President Barack Obama signed Executive Order (E.O.) 13514, *Federal Leadership in Environmental, Energy, and Economic Performance*. The order builds on E.O. 13423 by establishing or expanding numerous goals related to sustainability.

E.O. 13514 represents a transformative shift in Federal Government operations by:

- Establishing greenhouse gases (GHGs) as an integrating metric for tracking Federal sustainability progress.
- Collaborating with neighboring communities and reducing emissions from the Federal supply chain.
- Requiring deliberate, strategic planning linked to agency budgets.

Additional information is available at <http://www.eere.energy.gov/femp/regulations/eo13514.html>.

for FEMP communication and includes information on:

- FEMP services.
- Federal laws, regulations, and executive orders.
- News and events regarding Federal sustainability.

- FEMP informational resources, publications, and reports.
- ISWG and other working group meeting agendas and summaries.

FEMP recently launched a revamped home page to align the Web site with Federal energy manager job responsibilities. In addition, FEMP developed multiple new sections, including Laws and Regulations, Fleet Management, Data Center Energy Efficiency, and Power Purchase Agreements. An overview of E.O. 13514 and a section dedicated to GHG management were also recently added.

The FEMP Web site is available at [www.femp.energy.gov](http://www.femp.energy.gov).

### High-Performance Federal Building Database

The High-Performance Federal Buildings Database, sponsored by the U.S. Department of Energy (DOE), showcases sustainable building projects across the Federal Government. The database improves building performance measurement by collecting performance data surrounding energy, materials, and land use. The database collects information from buildings of all types located across the globe. The database currently includes 48 buildings owned or occupied by 11 Federal agencies.

Five Federal projects were added to the database within the past year.

The U.S. Navy deserves recognition for requiring by contract all new Leadership in Energy and Environmental Design (LEED®) certified buildings to be added to the database.

To learn more or to enter projects, visit <http://femp.buildinggreen.com>. Contact [hpbdata@buildinggreen.com](mailto:hpbdata@buildinggreen.com) with questions.

### General Services Administration Office of High-Performance Green Buildings Update

The General Services Administration (GSA) Office of Federal High-Performance Green Buildings sets standards for high-performance buildings as outlined within the American Recovery and Reinvestment Act Minimum Performance Guidance. The guidance assembles sustainability requirements and specifications of green building legislation and incorporates the latest in technology and efficiency. Examples include planted roofs; cool roofs; photovoltaics; metering; water efficiency; and lighting for office, stairwell, garage, and parking lots. GSA worked closely with DOE and its



Bret Nickels/PIX 16419

The Center for Disease Control and Prevention’s Arlen Specter Headquarters and Operations Center reached LEED Silver rating through sustainable design and operations.

national laboratories to finalize solutions. Additional information is available at [http://www.gsa.gov/Portal/gsa/ep/contentView.do?contentType=GSA\\_BASIC&contentId=28560](http://www.gsa.gov/Portal/gsa/ep/contentView.do?contentType=GSA_BASIC&contentId=28560)

To further validate green design and construction, GSA is expanding its original Assessing Green Building Performance white paper. The expanded report looks at 12 additional buildings to assess energy and water usage, carbon emissions, and customer satisfaction. The original report showed 33 percent lower carbon emissions and required 26 percent less energy than national averages for comparable structures.

GSA continues to measure green buildings through the use of the LEED rating system. The GSA portfolio has 44 LEED ratings across 43 owned and leased buildings. Potomac Yard 1 in Arlington, Virginia, received GSA’s first dual certification for NC and EB. The Federal Bureau of Investigation (FBI) Regional Headquarters in Chicago, Illinois, received GSA’s first LEED Platinum rating. It also received the world’s first LEED Platinum rating using LEED EB: OM.

| Name  | Owner   | Location                   |
|---|---|----------------------------|
| Atlantic Fleet Drill Hall Number 3  | U.S. Department of the Navy   | Great Lakes, IL            |
| Center for Disease Control Building 110                                   | Center for Disease Control and Prevention Division of Laboratory Sciences | Atlanta, GA                |
| Internal Revenue Service Kansas City Campus                               | General Services Administration   | Kansas City, MO            |
| Environmental Protection Agency Research Triangle Park Campus Office Wing | U.S. Environmental Protection Agency                                      | Research Triangle Park, NC |
| William J. Clinton Presidential Center                                    | William J. Clinton Foundation   | Little Rock, AR            |

Listing of new Federal buildings within the High-Performance Federal Buildings Database

| Certification Level | Number of Buildings | Square Footage    | Percent of Total by Sq. Ft. |
|---------------------|---------------------|-------------------|-----------------------------|
| Certified           | 55                  | 9,919,676         | 42%                         |
| Silver              | 55                  | 8,325,685         | 35%                         |
| Gold                | 32                  | 4,429,100         | 19%                         |
| Platinum            | 6                   | 1,041,423         | 4%                          |
| <b>Total</b>        | <b>148</b>          | <b>23,715,884</b> | <b>100%</b>                 |

Overview of LEED certified buildings across the Federal Government as of June 2009



Kevin Realsy/PIX12721

A complete renovation of the Social Security Administration Annex Building avoided \$25 million in new construction costs and used recycled materials for 76 percent of its interior.

## Update on Certified Federal Buildings

An increasing number of Federal agencies are seeking LEED certification in new construction and existing buildings. As of June 2009, 148 non-residential Federal buildings achieved LEED certification. These buildings span 18 Federal agencies, 35 states, three countries, and more than 23 million square feet of building space. Federal LEED certified building types vary from military barracks to national laboratories to regional headquarters to presidential libraries. Regarding residential buildings, the U.S. Air Force is developing 1,028 housing units representing approximately 2 million square feet. Each housing unit will be ENERGY STAR certified and 761 are planned to be LEED Silver certified (565 have already earned certification).

More than 1,800 Federal building projects are LEED registered as of June 2009, which generally signifies intent to gain LEED certification. The establishment of agency-wide green building policies is one key reason for continued increases in certified Federal buildings. The latest LEED policies can be found at <http://www.usgbc.org/DisplayPage.aspx?CMSPageID=1852#federal>

In addition to LEED certification, Federal agencies achieved Green Globes certification for 16 projects. Ten additional projects are in the Green Globes certification process.

Finally, many Federal agencies are pursuing ENERGY STAR building

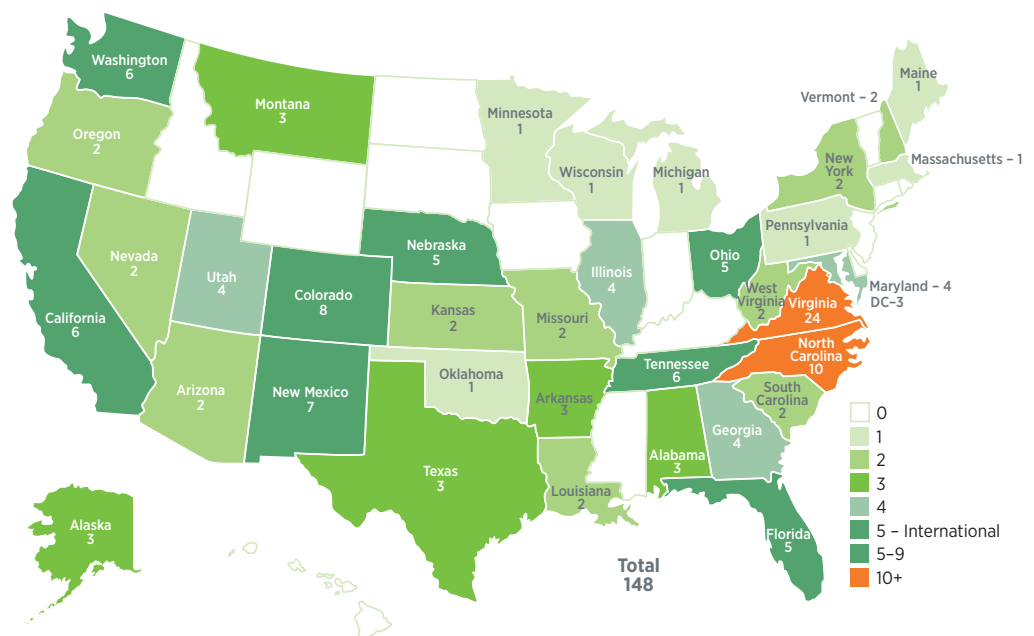
certification, which generally requires buildings to be in the top 25th percentile for energy efficiency. As of November 2009, 320 Federally-owned or leased buildings are ENERGY STAR certified, spanning 46 states and the District of Columbia.

## Department of Defense Sustainable Communities

The U.S. Army, U.S. Navy, and U.S. Air Force face Federal requirements and mandates ranging from the Energy Policy Act (EPA) of 2005 to the Energy Independence and Security Act (EISA) of 2007 to E.O. 13514. The U.S. Department of Defense (DOD) has

a unique perspective regarding these Federal requirements. Because most buildings reside on and are measured as an installation, DOD plans to address sustainability from an installation perspective instead of per building.

While some requirements must maintain integrity at the building level, the majority can be addressed as an installation. More than 70 percent of high-performance and sustainable building requirements can be translated to the installation. Moreover, DOD reinforces an installation level management of sustainability as installations become ISO 14001 compliant with environmental management systems



Overview of Federal buildings awarded LEED certification by state



(EMS) and adopt an asset management business strategy. Each installation will have a fully functioning EMS to identify goals, aspects to achieve those goals, and metrics to show the goal is achieved. Similarly, asset management will address levels of service from an installation perspective rather than by individual buildings.

An installation level approach, which DOD calls *Sustainable Communities*,

is currently under development with guidance pending from EPA, DOE, and the U.S. Green Buildings Council. As the EMS and asset management philosophies are utilized and become more sustainable, DOD will identify and define installment-level sustainability aspects similar to how LEED defines building credits. The end goal is showing compliance and conformance with Federal requirements without undue burden to the installations and

having a viable rating system upon which installations can be scored on a continuous improvement scale.

### Agency-Specific Sustainability Resources

The following Web sites provide resources and examples related to Federal sustainability:

| Agency  | Link  |
|---|---|
| Air Force Center for Engineering and the Environment; Sustainable Development | <a href="http://www.afcee.af.mil/resources/installationplanning/sustainableplanning/index.asp">http://www.afcee.af.mil/resources/installationplanning/sustainableplanning/index.asp</a>                 |
| Army Corps of Engineers Sustainable Design and Development Resource Portal    | <a href="https://eko.usace.army.mil/fa/sdd/">https://eko.usace.army.mil/fa/sdd/</a>   |
| Army Sustainability Program   | <a href="http://www.sustainability.army.mil/">http://www.sustainability.army.mil/</a>   |
| Department of Commerce  | <a href="http://www.osec.doc.gov/oas/eetd.htm">http://www.osec.doc.gov/oas/eetd.htm</a>   |
| Department of Energy High-Performance Sustainable Buildings                   | <a href="http://www.eere.energy.gov/team/hpsb.html">http://www.eere.energy.gov/team/hpsb.html</a>   |
| Department of Interior Green Building Program                                 | <a href="http://www.doi.gov/greening/buildings/">http://www.doi.gov/greening/buildings/</a>   |
| Department of Justice Environmental Programs                                  | <a href="http://www.usdoj.gov/jmd/ep/index.html">http://www.usdoj.gov/jmd/ep/index.html</a>   |
| Environmental Protection Agency Green Building Program                        | <a href="http://www.epa.gov/greeningepa/projects/index.htm">http://www.epa.gov/greeningepa/projects/index.htm</a>   |
| Environmental Protection Agency Green Buildings                               | <a href="http://epa.gov/greenbuilding/">http://epa.gov/greenbuilding/</a>   |
| General Services Administration Sustainable Design Program                    | <a href="http://www.gsa.gov/Portal/gsa/ep/contentView.do?contentId=8154&amp;contentType=GSA_OVERVIEW">http://www.gsa.gov/Portal/gsa/ep/contentView.do?contentId=8154&amp;contentType=GSA_OVERVIEW</a>   |
| General Services Administration Sustainable Development Program               | <a href="http://www.gsa.gov/Portal/gsa/ep/contentView.do?contentType=GSA_OVERVIEW&amp;contentId=23208">http://www.gsa.gov/Portal/gsa/ep/contentView.do?contentType=GSA_OVERVIEW&amp;contentId=23208</a> |
| Department of Health and Human Services Sustainable Buildings Program         | <a href="http://www.hhs.gov/asam/ofmp/index.html">http://www.hhs.gov/asam/ofmp/index.html</a>   |
| Pentagon Sustainable Design and Constructability Program                      | <a href="http://www.whs.mil/PENREN/sustainabledesign.cfm">http://www.whs.mil/PENREN/sustainabledesign.cfm</a>   |
| Department of Agriculture Sustainable High-Performance Buildings              | <a href="http://www.greening.usda.gov/performance.htm">http://www.greening.usda.gov/performance.htm</a>   |
| Department of State Bureau of Overseas Buildings Operations                   | <a href="http://www.state.gov/obo/c29962.htm">http://www.state.gov/obo/c29962.htm</a>   |
| Tennessee Valley Authority  | <a href="http://www.tva.gov/abouttva/energy_management/sustainable.htm">http://www.tva.gov/abouttva/energy_management/sustainable.htm</a>   |
| Veterans Affairs Office of Construction and Facilities Management             | <a href="http://www.cfm.va.gov/">http://www.cfm.va.gov/</a>   |



Energy Efficiency & Renewable Energy

**EERE Information Center**  
 1-877-EERE-INF (1-877-337-3463)  
[www.eere.energy.gov/informationcenter](http://www.eere.energy.gov/informationcenter)  
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