

## ***Federal Government-wide Green Building Policies***

Although there is no single, comprehensive government-wide green building standard, Federal agencies are required to implement certain aspects of green building, including energy and water efficiency; use of recycled content, biobased, or other environmentally preferable building products; and waste recycling, including construction and demolition debris. In addition, continual improvement in operational performance of Federal buildings is being sought through the implementation of environmental management systems.

The following is a summary of Federal policies that include provisions for green building:

Resource Conservation and Recovery Act. Section 6002 of the Resource Conservation and Recovery Act (RCRA) requires Federal agencies to give preference in their procurement to the purchase of specific U.S. Environmental Protection Agency (EPA)-designated recycled content products. EPA designates products that are or can be made with recycled materials and also recommends recycled materials content ranges for these products. Designated construction products include: building insulation products; carpet; carpet cushion; cement and concrete containing coal fly ash or ground granulated blast furnace slag; consolidated and reprocessed latex paint; floor tiles; flowable fill; laminated paperboard; patio blocks; railroad grade crossing surfaces; shower and restroom dividers/partitions; and structural fiberboard.<sup>27</sup>

The Energy Policy Act (EPAcT) of 1992. EPAcT, along with its amendments to the National Energy Conservation Policy Act, forms the statutory basis for Federal energy and water conservation activities. Subtitle F of the EPAcT orders Federal agencies to reduce their energy consumption per square foot of building, install energy and water conservation features, track energy and water consumption, and institute systems to facilitate the funding of energy efficiency improvements.<sup>28</sup>

Executive Order 13101. E.O. 13101, *Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition*, strengthens and expands the Federal government's commitment to recycling and waste prevention. The Pollution Prevention Act of 1990 established a national policy to prefer pollution prevention, whenever feasible. Pollution that cannot be prevented should be recycled; pollution that cannot be prevented or recycled should be treated in an environmentally responsible manner. Disposal should be employed only as a last resort. E.O. 13101 expanded this perspective of pollution prevention by promoting the increased use of green products, particularly recycled content, environmentally preferable, and biobased products. The Environmentally Preferable Purchasing (EPP) Program<sup>29</sup> promotes Federal government procurement of products and services that have reduced impacts on human health and the

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<sup>27</sup>See EPA's Comprehensive Procurement Guidelines website at <<http://www.epa.gov/cpg>>.

<sup>28</sup>See <<http://www.eere.energy.gov/femp/resources/epacintro.html>>.

<sup>29</sup>See EPA's Environmentally Preferable Purchasing Program website at <<http://www.epa.gov/eppt/ep>>.

environment over their life cycle. The goal of the program is to make environmental performance a factor in Federal government purchasing decisions, along with product performance and cost.

Executive Order 13123. E.O. 13123, *Greening the Government Through Efficient Energy Management*, increased and extended energy efficiency goals by requiring each agency to reduce building energy consumption per square foot by 30 percent by 2005 and 35 percent by 2010 relative to 1985. This E.O. also requires agencies to reduce greenhouse gas emissions related to facility energy use by 30 percent by 2010 (from the 1990 baseline), to meet ENERGY STAR® Building criteria to the maximum extent possible, and to expand the use of renewable energy, among other provisions. DOE's Federal Energy Management Program (FEMP) assists agencies in implementing this Order.<sup>30</sup> E.O. 13123 and subsequent guidance issued pursuant to the E.O. require agencies to:

- Optimize life cycle costs, pollution, and other environmental and energy costs associated with the construction, life cycle operation, and decommissioning of the facility;
- Apply sustainable design principles, as outlined in the WBDG, to the siting, design, and construction of new facilities;
- Incorporate energy-efficient criteria, consistent with ENERGY STAR® and other FEMP- designated energy efficiency levels (i.e., in the top 25<sup>th</sup> percentile of efficiency), into guide specifications and project specifications for new construction and renovation; and
- Consider using Energy Savings Performance Contracts (ESPC) or utility energy-efficiency service contracts (UESC) to aid them in constructing sustainably-designed buildings.

Executive Order 13134 and the 2002 Farm Bill. E.O. 13134, *Developing and Promoting Biobased Products and Energy*, expands Federal procurement activities and requirements related to biobased products and services. Biobased products are made from renewable agricultural, animal, or forestry materials—such as vegetable-based lubricants, biofuels, compost, and biobased construction materials. The E.O. set a goal of tripling the U.S. use of bioenergy and biobased products by 2010.

On May 13, 2002, President Bush signed into law the *Farm Security and Rural Investment Act of 2002*, Public Law 107-171 (commonly referred to as the 2002 Farm Bill). Title IX of the 2002 Farm Bill requires the U.S. Department of Agriculture (USDA) to establish a biobased products designation purchasing program similar to the RCRA buy-recycled requirements. Once USDA designates a biobased product, Federal agencies that purchase the product must give preference to the product containing the highest level of biobased content practicable, considering price, performance, and availability of the product. USDA is also required to develop a voluntary program for labeling “USDA Certified Biobased Products.” Biobased construction products are among those under consideration for designation by USDA.

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<sup>30</sup>DOE/FEMP, Executive Order 13123: Greening the Government Through Efficient Energy Management. See <<http://www.eere.energy.gov/femp/resources/exec13123.html>>.

Executive Order 13148. E.O. 13148, *Greening the Government Through Leadership in Environmental Management*, established a framework for integrating environmental considerations into each Federal agency's mission through a variety of directives and goals, including implementing environmental management systems, reducing releases of toxic chemicals, and eliminating the procurement of ozone depleting substances. The E.O. requires that an EMS be implemented at appropriate Federal facilities by the end of 2005, based on a facility's size, complexity, and environmental aspects. To facilitate awareness and acceptance of the EMS concept at the facility level, agencies were required to initiate EMS pilots at agency facilities in early 2002. In addition, each agency was required to prepare and endorse a written agency environmental management strategy to achieve the requirements and goals of the Order.

Management system accounting concepts, such as life cycle assessment, environmental cost accounting, and return on investment, are also supported by the Order. Additionally, the Order requires Federal agencies to have a program in place to periodically audit facilities' compliance with environmental regulations. Findings from those audits are to be included in the budget and planning activities of the agency—this will be key in achieving continued high performance of facilities, as well as providing a valuable measure of Federal progress.

OMB Circular A-11. In 2002, recognizing that investments in better building design and construction typically return dividends that will save money over the life of the building, OMB revised Circular A-11, Section 55—Energy and Transportation Efficiency Management—to encourage Federal agencies to incorporate ENERGY STAR® or the U.S. Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) Green Building Rating System™<sup>31</sup> into up front design concepts for new construction and/or building renovations. Agencies must report if they incur or anticipate incurring additional costs for incorporating these standards.

OFEE works with Federal agencies to help them comply with these and other mandates in order to increase environmental practices, including green building, within the Federal government.<sup>32</sup>

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<sup>31</sup>See the U.S. Green Building Council LEED website at <[http://www.usgbc.org/LEED/LEED\\_main.asp](http://www.usgbc.org/LEED/LEED_main.asp)>.

<sup>32</sup>See the OFEE website at <<http://www.ofee.gov>>.