

LEGALLY SPEAKING: Green Money and Green Buildings: An Overview of Sustainable Design and Construction

By Matthew J. DeVries and Angela Stephens

Since 1998, owners have made the choice to incorporate sustainable design and construction practices in their buildings by following the LEED® Rating System established by the United States Green Building Council ("USGBC"). Starting in 2003, federal agencies began requiring that new construction achieve a certain level of LEED certification. Twenty-two states have since mandated that public buildings achieve certain levels of LEED certification under the LEED Rating System.

In short, the trend towards sustainability is growing. In fact, state and federal agencies are looking at green building codes as a means of mandating sustainable design and construction practices for all types of construction (both public and private). This is a very good indication that green design and construction is here to stay. An overview of some of the current and future green building codes is set forth below.

ASHRAE 189.1 Takes the Lead

One of the green building codes being considered by state and federal agencies is the American Society of Heating, Refrigerating and Air Conditioning Engineers ("ASHRAE") standard known as ASHRAE 189.1, which became available for public adoption in 2010. ASHRAE 189.1 is similar to LEED in that it includes requirements relating to site sustainability, water use efficiency, energy efficiency, indoor environmental quality, the building's impact on the atmosphere, materials and resources, and construction and plans for operation. This code was designed to apply to all new construction and renovations except for low-rise residential construction.

It was ASHRAE's intent that the 189.1 standard would compliment the LEED Rating System by serving as the baseline for whether the building was sustainable. In theory, a building that meets the ASHRAE 189.1 standard should also be able to achieve a LEED Silver Certification.

IGCC Follows Suit

Similar to ASHRAE 189.1, the International Code Council developed an International

Green Construction Code ("IGCC"), which is also compatible with and similar to the LEED Rating System. The official IGCC was released for public adoption in March 2012, and includes an optional compliance path of following ASHRAE 189.1. Like ASHRAE 189.1, this code was designed to apply to all new construction and renovations except for low-rise residential construction.

Prior to its official release, Rhode Island and Florida adopted the IGCC for public construction and Maryland adopted the IGCC as an optional requirement for all new construction. Many states have already started to consider whether to adopt all or portions of either ASHRAE 189.1 and/or the 2012 IGCC.

Other Green Codes

On January 1, 2011, California created its own green building code called CALGreen which mandates sustainable design and construction for both public and private projects. CALGreen was the first mandatory state-wide building code to be adopted, and applies to residential, commercial, hospital and school construction. This code focuses on planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality.

At the end of March 2012, the United States Department of Defense announced that it is going to create a green building code based

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on ASHRAE 189.1, which will govern all new construction, major renovations, and leased space acquisition. While the DOD plans on using this new green building code, they do not plan on abandoning the requirement that their buildings achieve at least a certification of LEED Silver.

The Economics of Moving Forward

In summary, green building is in the process of going from being a trend to an every day construction practice. This is especially true as states and federal agencies continue to look at mandating sustainable design and construction practices through green building codes. As a cost estimator, here are some questions to ask that may affect your project:

- Are there new materials that will affect the baseline cost? Will substitutes affect an owner's ability to secure a particular LEED credit or other sustainable achievement goal?
- Will the sustainable design, materials, and construction methods affect the overall schedule of the work and the cost of overhead? Is there a component of recycling that will cost you more time or capture you savings for recycled materials? Will there be additional training involved based new construction methods?
- Will the application of a local or state green building code make it easier for a building to achieve LEED certification, or will there be duplicative requirements or barriers for owners who also want to seek LEED Certification?
- Is there a post-construction or commissioning plan in place to help capture and realize energy savings? Are these calculations being reviewed over the useful life the building, as opposed to the construction timeline?

Green building codes are a good step towards a more sustainable future in terms of both economic benefits (energy savings) and environmental benefits (healthier indoor and outdoor environments). However, it will be important that the costs are properly reviewed during any analysis sustainable design and construction.

About the Authors: Matt and Angela are members of the Construction Service Group of Stites & Harbison, PLLC, and both are LEED® Accredited Professionals. Matt lives in Nashville and is the founder of www.bestpracticesconstructionlaw.com. Angela lives in Louisville and is the first attorney in Kentucky to attain the Green Advantage® certification. You can reach the authors at mdevries@stites.com and astephens@stites.com.



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