

# Green Construction

## Initiatives and Legal Issues Surrounding the Trend

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By J. R. Steele

In the 1990s, sustainable building initiatives—or “green building” programs—in the United States were largely confined to small municipalities located in the West Coast and Pacific Northwest. This is no longer the case, however, as several major cities have recently started to implement green building standards for both municipal and private construction projects. In addition, momentum is gaining for green building concepts within the federal government as more and more federal agencies implement green construction standards into their projects. This article is designed to acquaint business lawyers with the green building trend so that those who are interested can equip themselves with the skills to operate knowledgeably in the field.

### What Is “Green” Construction?

As background, in 1998, the U.S. Green Building Council (USGBC) developed the Leadership in Energy and Environmental Design (LEED) Green Building Rating System. The LEED rating system evaluates the design, construction, and operation of newly constructed or renovated buildings and serves as the “voluntary national standard” for sustainable buildings. The purpose of the rating system is to promote integrated whole-building design practices and to establish common standards of measurement. The system includes the following four categories of certification and is based on a points system: LEED Certified (26 to 32 points), LEED Silver (33 to 38 points), LEED Gold (39 to 51 points), and LEED Platinum (52 or more points). In simplistic terms, the more points a building is awarded under the LEED system, the more environmentally friendly it is. A building that receives LEED’s highest rating, Platinum, is considered one of the country’s most efficiently performing buildings.

In addition, the USGBC has discrete LEED programs based on the type of construction being built. For example, there are LEED programs for new commercial construction, renovation/rehabilitation of existing buildings, and development of residential neighborhoods.

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Generally, LEED rated buildings are designed, constructed, and managed in accordance with principles that promote maximum resource and energy efficiency, healthy indoor environments, and the use of natural renewable resources. The hallmark of a green building is the efficient use of energy and water, which is usually achieved through the use of energy-efficient materials during the construction of the project and the integration of water and energy conservation systems. In addition, green buildings tend to incorporate environmentally friendly concepts and materials into the use of the surrounding land and landscaping.

### State and Local Initiatives

In the last couple of years, several states and cities have implemented green building programs targeted at “greening” large public—and sometimes private—construction projects. These initiatives often require that new or renovated public buildings meet certain green standards. The green standard of choice appears to be the USGBC’s LEED rating system discussed above.

As an example, Florida’s governor, Charlie Crist, on July 13, 2007, signed three Executive Orders (Orders): Executive Order 07-126, “Leadership by Example: Immediate Actions to Reduce Greenhouse Gas Emissions from Florida State Government”; Executive Order 07-127, “Immediate Actions to Reduce Greenhouse Gas Emissions within Florida”; and Executive Order 07-128, “Florida Governor’s Action Team on Energy and Climate Change.” The common goals of the Orders are to reduce statewide greenhouse gas emissions, advance the use of alternative fuels and power sources, increase state energy efficiency and conservation levels, and promote “green” construction for state projects.

The construction industry, and the lawyers who serve them, should take note of this last goal. Governor Crist’s Orders set aggressive green building standards for Florida state projects. For

example, one of the Orders requires that any new state construction projects comply with the USGBC LEED Green Building Rating System. It also requires that all new state construction projects “strive” to meet LEED Platinum level certification. Currently, the USGBC’s Certified Project List on the Internet does not list any Florida state-owned building as having attained LEED Platinum level certification.

Governor Crist’s green building requirements, though aggressive, are not rare. Several state and local municipalities either have passed similar acts or are in the process of passing such acts. For example, in January 2007, the

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New York City Green City Buildings Act (N.Y. Green Act) took effect, making New York City the largest city in America to adopt green building policies. The act requires that most of New York City’s new municipal buildings achieve standards of sustainability as green buildings. Additions and renovations to existing public buildings also are required to meet these standards. One of the major components of the N.Y. Green Act is its requirement that certain buildings meet the classification system developed by LEED. For example, the N.Y. Green Act requires nonresidential capital projects with estimated construction costs of \$2 million or more to be designed and constructed to achieve a LEED Silver or higher rating, while other buildings such as schools

or hospitals need only achieve a LEED Certified rating.

In December 2006, the Washington, D.C., City Council passed a comprehensive green building bill that is the first bill for a major city that requires public buildings—as well as private—to meet green building standards. The bill requires all commercial development of 50,000 square feet or more to meet LEED standards starting in 2012. The requirements will apply to both new construction and significant renovations of older buildings. All city-owned commercial projects funded in 2008 or later would have to attain certification and funded housing projects would be required to follow similar environmental standards. In recognition of the city’s move toward green building, the new stadium for the Washington Nationals baseball team is being built according to the USGBC’s LEED standards and is expected to be the nation’s first certified “green stadium.”

Other cities, for example, Atlanta and Seattle, have enacted similar ordinances. Atlanta’s ordinance requires that construction of city facilities and buildings comprising more than 5,000 square feet or having a total cost of more than \$2 million must achieve a LEED Silver rating. Seattle’s policy also requires achievement of a LEED Silver rating for all new construction and major remodeling of buildings with more than 5,000 square feet of occupied space.

### Federal Government Green Initiatives

For businesses that have dealt with federal projects in the past, there was no single comprehensive federal green building standard. This is starting to change. Even without a uniform green building standard, however, green building concepts have been commonly implemented into federal acquisition and construction projects, as there are several federal policies that require agencies to use green building concepts and/or materials on their construction projects.

One of these policies is based on

section 6002 of the Resource Conservation and Recovery Act (RCRA), which requires federal agencies to give preference in their procurement to the purchase of specific U.S. Environmental Protection Agency (EPA) designated recycled content products. Designated construction products can include, for example, certain types of building insulation products, carpet, carpet cushion, cement, concrete, latex paint, floor tiles, laminated paperboard, and structural fiberboard.

The Energy Policy Act of 1992 (EPA Act) and its corresponding amendments to the National Energy Conservation Policy Act (NECPA), form the statutory basis for federal energy and water conservation activities and require federal agencies to reduce energy consumption per square foot by mandating installation of energy and water conservation features and systems that facilitate the funding of energy efficiency improvements.

Recently, on January 24, 2007, President George W. Bush signed Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management" (E.O. 13423). The order sets goals in the areas of energy efficiency, acquisition, renewable energy, toxin reductions, recycling, renewable energy, sustainable buildings, electronics stewardship, fleets, and water conservation for federal agencies. The order consolidated several previous Executive Orders, including Executive Order 13123, "Greening the Government Through Efficient Energy Management," and is the culmination of the federal government's recognition of its responsibility and role in establishing sustainable projects.

The federal government owns approximately 445,000 buildings with total floor space of over 3 billion square feet. Additionally, the government leases an additional 57,000 buildings comprising another 374 million square feet of floor space. E.O. 13423 establishes new goals for these federal sites and requires sustainable practices that are at

least as stringent—and, in most cases, go beyond—the prior E.O.'s goals and statutory requirements. For example, E.O. 13423 increases and extends energy efficiency goals by requiring each federal agency to reduce building energy consumption per square foot by 30 percent by 2015 (relative to a 2003 baseline); reduce greenhouse gas emissions related to facility energy use by 30 percent by 2015 (relative to a 2003 baseline); and trim water consumption intensity 2 percent a year through 2015.

Perhaps most importantly from a sustainable development or green building construction prospective, E.O. 13423 requires federal agencies that are undertaking new construction or major renovations to existing structures to construct or renovate buildings in accordance with the 2006 Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings set forth in the Federal Leadership in High Performance and Sus-

tainable Buildings Memorandum of Understanding (Sustainable Buildings MOU). The Sustainable Buildings MOU is the flagship federal effort to develop a single green building standard and provide leadership in the design, construction, operation, and maintenance of high-performance and sustainable federal buildings. The five guiding principles of the Sustainable Buildings MOU include

- Employing integrated design principles;
- Optimizing energy performance;
- Protecting and conserving water resources;
- Enhancing indoor environmental quality; and
- Reducing the environmental impact of materials.

At least 11 federal agencies, including the Department of Veterans Affairs and the General Services Administration, are already well on their way in implementing the Sustainable Buildings MOU requirements. In fact, these agen-

## Green Building Web Sites:

- 🍃 U.S. Green Building Council & Leadership in Energy and Environmental Design (LEED) Rating System Resources: [www.usgbc.org](http://www.usgbc.org)
- 🍃 Office of the Federal Environmental Executive (OFEE): [www.ofee.gov](http://www.ofee.gov)
- 🍃 Whole Building Design Guide: [www.wbdg.org](http://www.wbdg.org)
- 🍃 Environmental Protection Agency (EPA) Green Buildings: [www.epa.gov/greenbuilding](http://www.epa.gov/greenbuilding)
- 🍃 American Institute of Architects—Sustainability: [www.aia.org/susn\\_default](http://www.aia.org/susn_default)
- 🍃 Urban Land Institute—Sustainable Development: [www.uli.org](http://www.uli.org)
- 🍃 International Code Council (ICC)—Green Building: [www.iccsafe.org/news/green](http://www.iccsafe.org/news/green)

cies have been utilizing the LEED rating system in their agency's major construction projects for the last several years. Therefore, many federal projects that have recently been completed, or are in the process of being completed, are already either in compliance with the Sustainable Buildings MOU or close to it. With the signing of E.O. 13423 and the requirement that all federal agencies implement the Sustainable Buildings MOU, construction businesses can expect to see a higher number of federal construction projects implementing

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green building standards, techniques, and materials than ever before. Construction businesses are also likely to see a growth in the use of the USGBC's LEED standards as the "measuring stick" of choice on federal projects as agencies look to an established rating system that they can use to quantify their green building progress and compliance.

### Green Building Legal Issues

Since green construction, and especially large-scale green construction, is a fairly new phenomenon in the United States, there is very little legal analysis regarding green building disputes. Oftentimes, the problem faced by green building contractors, owners, and design professionals—especially those new to green construction—is that they fail to recognize that there are differences between a "normal" construction project and a green building project. Consequently, parties to green building contracts often rely on standard contracts that do not necessarily address the risks unique to green building projects.

Failing to recognize those risks within the contract creates the potential for disputes and litigation down the road. Therefore, one of the keys to a successful green building project is to recognize and deal with the risks of that particular project.

As an example, some of the unique risks parties to green construction projects often fail to address include

- Defining which party is responsible for administrating the LEED certification process, which can be a time-consuming process;
- Defining who is responsible if the project fails to achieve LEED certification and what sort of damages flow from such a failure;
- Confirming that there is adequate insurance coverage, including professional liability insurance for design professionals, that takes into account the green nature of the project;
- Checking warranty and guaranty language to confirm that new green construction procedures or installation materials and/or techniques do not void the warranty or guaranty for a product;
- Dealing with long-term performance goals and length of warranty issues;
- Determining if any intellectual property infringements will result from utilizing new green techniques or equipment and who is responsible for dealing with any infringement that may arise;
- Investigating availability of green construction material and the replacement price for such material; and
- Recognizing the length of time and inspection process associated with LEED certification in the project construction schedule.

As the above examples show, there are a number of issues that parties participating in a green building project need to address. Parties that emphasize open communication, clearly define performance expectations, fully examine the risks of a green project, and deal with these issues in their contract are

likely to have greater success in avoiding costly dispute resolution or litigation than those who choose to ignore them.

### Watch for More Green Requirements

By most estimates, green buildings only accounted for 2 percent of new construction in 2005; but this percentage is expected to increase to 10 percent by 2010. It is also likely that this number will increase as green building appears to be quickly becoming the preferred construction type of state, local, and federal governments. The growth of green building initiatives is significant to the construction industry because the building materials and design techniques utilized are often substantially different than those used in traditional buildings. Moreover, from a legal standpoint, green construction projects can raise different contractual and legal issues that "normal" construction projects do not face that must be addressed from the outset of a green project. In order to overcome the learning curve associated with green building design, construction, and contracting, the construction and design industry—and the lawyers who serve these communities—would be wise to start looking at the growing green building trend and its associated risks.