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We have to abandon the old standard of mere profitability, productivity, or efficiency and realize that—in the terms of the grant to use of the world—we have other standards to meet. . . . We have the right to use—but not use up—the things that we need and are dependent upon.

Jack Jezreel, *Care for the Earth Is a Local Call* (Interview with Wendell Berry), U.S. Catholic (June 1999), available at www.thefreelibrary.com/Care+for+the+earth+is+a+local+call-a054736698

The major environmental problems that the world is facing—global climate change, deforestation, loss of biodiversity, ozone depletion, pollution, and generally unsustainable natural resource consumption rates—directly affect the ability to develop economies while simultaneously sustaining the health of people, plants, and animals. As water and traditional energy sources become scarcer and consequently more expensive, the building industry has been exploring ways to make the built environment as efficient as possible. “Green buildings” are facilities designed, built, operated, renovated, and disposed of using ecological principles for the purpose of promoting occupant health and resource efficiency while minimizing their effect on the natural environment. This article discusses the history of sustainable development and green building in the United States, introduces the major green building certification agencies, and outlines the wide variety of incentives being adopted around the country for green building projects.

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Why Should Lawyers Care About Green Building and Sustainable Development

On a personal level, everyone has to work and live in buildings. Wouldn't it be nice if those buildings had the type of indoor environmental quality (including air and light) that would contribute to health and productivity? It also would be nice if the cost of utilities in such buildings were reduced. Of course, reduced monthly utility bills will make financial sense only if a reasonable payback time offsets the increased capital outlay for the green features. A common misperception is that, although green buildings have

Therefore, it is important when embarking on a green building project to use an experienced design and construction team that will guide the developer in making smart decisions and help keep costs in check, just like any other building project.

On a professional level, demand for green buildings and sustainable development is growing exponentially. This paradigm shift toward sustainable development is driven by consumer demand. As consumer awareness about climate change and energy independence continues to grow along with increasing energy costs, consumer demand for green buildings

and sustainable development will only continue to increase. Clients are acting now to take advantage of the growing demand for energy efficiency by establishing themselves as leaders in sustainable development and green building. In addition to the state initiatives outlined below, many local governments are offering a wide variety of incentives, including reduced permit fees, fast-track permitting of qualified projects, and rebates, to builders and developers who are building green and certifying their projects as sustainable developments. Clients also can capitalize on this paradigm shift through enhanced marketing opportunities for their development products. As clients

move toward building green, it is important that their attorneys are knowledgeable about both the requirements of the national and applicable local green building certifying agencies and the related liability issues that these types of projects may involve, so that they can draft appropriate provisions into construction contracts, leases, development agreements, and development formation documents.

Sustainable Development: An Introduction

Scholars have long recognized the interdependence of economic, environmental, and social factors as a triangular relationship. The first clear

Sustainable Development and the U.S. Green Building Movement Profitable Development Projects Can Be Good for the Planet, Too

By Nicole C. Kibert and Charles J. Kibert

important benefits, they must have significant additional costs. A recent study by Gregory H. Kats on behalf of The Massachusetts Technology Collaborative found that building green costs an additional 2%, or \$3 to \$5 per square foot. Gregory H. Kats et al., *The Costs and Benefits of Green Buildings and Financial Benefits* 15, 18 (2003), available at www.cap-e.com/ewebeditpro/items/O59F3259.pdf. These additional up-front costs, however, can be recouped in a short time frame because of reduced energy and water consumption. A typical green building uses an average of 30% less energy than a conventional building, id. at 19, with a payback of three to seven years depending on its energy efficiency and the cost of energy.

articulation of this interdependence came as the result of a report commissioned by the United Nations Commission on Economic Development known both as the "Brundtland Report" and *Our Common Future*. This report defined the term "sustainable development" as development that "meets the needs of the present without compromising the ability of future generations to meet their needs." World Commission on Environment and Development, *Our Common Future* 8 (1987). From a legal perspective, sustainable development seeks to ensure that future generations are not placed in the impracti-

The green building movement in the United States has a well-deserved reputation for being the most successful component of the modern environmental movement.

cal and likely impossible position of seeking justice from past generations based on prior development choices.

The development choices made today directly affect the quantity and quality of resources remaining for future generations. The responsibility of one generation to future generations and the rights of future generations in relation to those of a contemporary population are the fundamental principles of sustainable development. This concept of obligation that crosses time is referred to as "intergenerational justice." Richard Howarth expresses this concept by stating that, "unless we ensure conditions favourable to the welfare of future generations, we wrong our existing children in the sense that they will be unable to fulfill their obligation to their children while enjoying a

favourable way of life themselves." Richard B. Howarth, *Intergenerational Justice and the Chain of Obligation*, 1 *Envtl. Values* 133 (1992) (The White Horse Press 1992), also available at <http://uf.catalog.fcla.edu/uf.jsp?Ntt=environmental+values&Ntk=JTitle&N=20&Nty=1&S=GJGJ9HFR5T6TN339BP1AYJ84H3S68NVM2S615HTBJ>. Green buildings are a tangible manifestation of sustainable development because these buildings balance economic, environmental, and social factors.

Green Building: Applied Sustainable Development

The green building movement in the United States has a well-deserved reputation for being the most successful component of the modern environmental movement. Although many other environmental gains have been rolled back during this first decade of the 21st century, and other components of the environmental movement are having difficulty getting attention and maintaining traction, the green building movement is growing at an exponential pace. Several hundred million square feet of commercial and institutional buildings have been designed and built to obtain green building certification through a third-party certification such as LEED, Green Globes, or ENERGY STAR. Certifying a project requires the registration of the project with the certifying organization and lining up the appropriate professional to credential the building and ensure that all the required information is collected and retained for the certification. In the residential construction sector, thousands of homes are being built to green specifications and rated and/or certified by a variety of state and local green building organizations. A hallmark of this movement is the centralized nature of the certification programs for larger, commercial, institutional, and high-rise residential buildings and the more local, decentralized certification programs for family housing and land development. One of the reasons for the success of the green building movement has been the buy-

in of industry in both major sectors: commercial and residential.

Green buildings are the sorely needed application of sustainable development in the construction sector because of the tremendous effects buildings have on the environment. For example, buildings account for 65.2% of total U.S. electricity consumption (U.S. Green Building Council, U.S. Green Building Research, available at www.usgbc.org/DisplayPage.aspx?CMSPageID=1718); more than 36% of total U.S. primary energy use, (id.); 30% of total U.S. greenhouse gas emissions (U.S. Department of Energy, Energy Information Administration, *Emissions of Greenhouse Gases in the United States* 1999); and 136 million tons of construction and demolition waste in the United States (approximately 2.8 pounds per person per day) (U.S. EPA, *Characterization of Building-Related Construction and Demolition Debris in the United States* 2-10, 2-11 (1998)). Reducing the energy consumption of U.S. buildings will be a major part of reducing climate effects and reaching energy security.

The U.S. Green Building Council (USGBC) has been particularly successful in collaborating with owners, designers, builders, and the broad materials industry to support this movement. By developing a sound business model that clearly indicates the win-win potential of green building, in which additional design effort and improved construction practices translate to buildings with clear financial advantages, the USGBC has paved the way for other successful collaborations with industry to achieve environmental objectives.

History of Green Building

The green building movement in the United States is generally acknowledged to have become visible in the late 1990s with the advent of the USGBC green building rating system known as Leadership and Environmental Design (LEED). LEED has become the vehicle for popularizing the notion of high-performance green buildings. The roots of the present high-performance green building movement, however, date all the way back to the oil crisis of the 1970s, when the Arab-Israeli conflicts of that era resulted in a flowering of innovation in energy conservation and the development of renew-

able energy systems. Homes and buildings were retrofitted with high levels of insulation, energy-efficient appliances and heating/cooling systems, and solar energy hot water systems. As a result, the federal government began to provide tax credits for investment in solar energy and funded development and testing of innovative technologies, ranging from solar air conditioning to eutectic salt energy storage batteries. By the early 1980s, new efficiency standards were embodied in model energy codes adopted by several states. See, e.g., Cal. Code Regs. tit. 24, part 6, available at www.energy.ca.gov/title24, and Fla. Building Code ch. 13, available at http://ecodes.iccsafe.org/icce/gateway.dll?f=templates&fn=default.htm&vid=iccf:florida_energy. After this burst of activity, however, interest in energy conservation began to wane as energy prices declined.

Although many energy-efficient buildings emerged after the oil crises of the 1970s, the first U.S. buildings that considered a wider range of environmental and resource issues did not emerge until the 1980s. The earliest examples of green buildings were the result of major U.S. environmental organizations using holistic approaches for the design of their office buildings. In 1985, William McDonough was hired by the Environmental Defense Fund to design its New York office. The design featured natural materials, daylighting, and excellent indoor air quality, all part of a "green" solution for then-endemic sick building problems. In 1989, the Croxton Collaborative, an architecture firm founded by Randy Croxton, designed the offices of the Natural Resources Defense Council in the Flatiron district of New York City. In this project, natural lighting and energy-conserving technologies were employed to reduce energy consumption by two-thirds compared to conventional buildings. The 1992 renovation of Audubon House, also in New York City, was a significant early effort in the contemporary green building movement. The National Audubon Society sought to

reflect its values as a leader of the environmental movement and directed the Croxton Collaborative to design the Audubon Society building in the most environmentally friendly and energy-efficient manner possible. In the process of achieving that goal, the extensive collaboration required by the many building team members provided a model of cooperation that has now become a hallmark of the contemporary green building process in the United States. (An excellent detailed overview of the history of the U.S. green building movement can be found in the "White Paper on Sustainability," published by *Building Design & Construction* magazine in November 2003 and available at www.bdcnetwork.com. This white paper also contains other important background information about the green building movement and suggests an action plan to help improve and ensure the quality and outcomes of green building design and construction.)

The early 1990s saw a renewed interest in energy and resource conservation as society began to seriously consider complex global environmental issues such as ozone depletion, climate change, and the destruction of major fisheries, to name a few. Three events in the late 1980s and early 1990s helped to focus attention on problems associated with global environmental impact: the publication in 1987 of *Our Common Future*; the 1989 meeting of the American Institute of Architects (AIA), when it established its Committee on the Environment (COTE); and the United Nations Conference on Sustainable Development in 1992, commonly known as the Rio Conference. The recent American resurgence in sustainable construction was precipitated in 1993 by a joint meeting of the International Union of Architects (UIA) and the AIA, known as "Architecture at the Crossroads." The UIA/AIA World Congress of Architects promulgated the "Declaration of Interdependence for a Sustainable Future," which articulated a code of principles and practices to

facilitate sustainable development.

In the residential sector, the city of Austin, Texas, created a green building program in the early 1990s that marked the start of applying this thinking to homes and land development. Green building efforts in this sector then began to spring up all over the United States, including Kitsap and Clark Counties in Washington State, Denver, Baltimore, and New Mexico. The National Association of Home Builders responded by creating a template for its member organizations around the country to adopt for



the purpose of establishing green building rating systems.

The first highly publicized green building project in the United States, the "Greening of the White House," was initiated in 1993 and included renovation of the Old Executive Office Building, the 600,000-square-foot structure across from the White House. The participation in this project of a wide array of architects, engineers, government officials, and environmentalists drew national attention and produced sizable results, including dramatic energy cost savings (about \$300,000 per year), emissions reductions (845 tons of carbon per year), and significant reductions in water and solid waste associated costs. The success of the White House project spurred the federal government's sustainability efforts and prompted the U.S. Post Office, the Pentagon, the Department of Energy,

and the Government Services Administration to address sustainability concerns within their own organizations. The National Park Service also opened green facilities at several national parks, including the Grand Canyon, Yellowstone, and Denali. The Naval Facilities Engineering Command (NAVFAC), the U.S. Navy's construction arm, began a series of eight pilot projects to address sustainability and energy conservation concerns. The highly visible effort at its 156,000-square-foot, 150-year-old headquarters in the Washington Navy Yard reduced energy consumption by 35% and resulted in annual savings of \$58,000.

In addition, several important guides to green building or sustainable design appeared in the early to mid-1990s. *Environmental Building News*, first published in 1992, remains an independent, dispassionate, and authoritative guide to sustainable construction. (BuildingGreen, Inc. publishes *Environmental Building News* and also produces a range of other useful products, including the *GreenSpec Directory*. Its publications are available online by subscription at www.buildinggreen.com.) In 1994, the AIA first published its *Environmental Resources Guide*, followed by a more detailed version in 1996. (The *Environmental Resource Guide* is a thorough guide to the environmental and resource implications of construction materials. The first version was published by the AIA in 1994; the second, expanded version was published by John Wiley & Sons, Inc., in 1996.) The "Guiding Principles for Sustainable Design," produced by the National Park Service in 1994, available at www.nps.gov/dsc/d_publications/d_1_gpsd.htm, provides one of the first overviews of green building production. Similarly, the *Sustainable Building Technical Manual* was developed and published jointly in 1996 by Public Technology, Inc., and the U.S. Department of Energy. The Rocky Mountain Institute's *A Primer on Sustainable Building*, published in 1995, also contributed to the public understanding of sustainable construction.

Other international efforts and organizations interacted with and influenced the U.S. movement during this period. The British green building rating system, the Building Research Establishment Environmental Assessment Method (BREEAM), was developed in 1992. That same year, the French Conseil International du Batiment (CIB) convened Task Group 8 (Building Assessment) and Task Group 16 (Sustainable Construction), which held influential international conferences in 1994 in both the United Kingdom and Tampa, Florida.

As mentioned previously, the USGBC, which is headquartered in Washington, D.C., was formed in 1993 and held its first major meeting in March 1994. The USGBC's earliest organizers were David Gottfried and Michael Italiano, and its first president was Rick Fedrizzi, who at the time was with Carrier Corporation. The first annual meeting of the USGBC was held in Washington, D.C., in March 1994 and featured as its keynote speakers Paul Hawken, who had just completed the groundbreaking book *Ecology of Commerce*, and William McDonough, recognized as one of the major architectural figures in the U.S. green building movement and the author of *The Hannover Principles*. Early articulations of the organization's LEED standard appeared at this time, along with green building standards developed by the American Society for Testing and Materials (ASTM). The ASTM standards were eventually set aside in favor of the USGBC's LEED assessment standard.

Critics of the green building movement focus on two main issues: cost and liability. Costs can generally be controlled by using an experienced design team and incorporating green features from the onset of a project, in addition to clearly documenting cost expectations in the contract documents. Liability fears emanate from critics who caution design and construction professionals from getting involved in green building projects based on perceived additional liability for emerging technologies and per-

formance promises. For example, a presentation at the 2007 American Institute of Architect's Annual Convention was titled "Don't Let Green Design Cause Red Ink." As with any construction project, as long as expectations and obligations are clearly documented, a green building project does not differ from any other construction project. It is important with all construction projects, and particularly experimental projects, that the project scope and performance standards are clearly documented. Obligations for collecting and submitting the information needed for certification, and the additional costs associated with the certification process, also must be clearly outlined in the construction contract documents. Use of experimental technologies, if properly documented, can be appropriately dealt with in the contract documents so that all parties divide the liability up front. In addition, performance promises for green building certifications should be given with the same standard of care that any other design promise is given and properly documented in the contract documents. It is imperative that attorneys drafting construction and design contracts for green buildings address the special design and performance issues, as well as the certification process.

The USGBC LEED Building Rating System

Development of the USGBC's LEED building rating system took four years and culminated in a 1998 test version known as LEED Version 1.0. It was enormously successful, and the Federal Energy Management Program sponsored a pilot effort to test its assumptions. Eighteen projects consisting of more than 1 million square feet were evaluated in this beta testing. A greatly improved LEED 2.0 was launched in 2000 and provided for a ratings scale on which the highest-performing building could earn 69 credits. It also provided four levels of building certification: platinum, gold, silver, or bronze. A further refined LEED 2.1 was published in 2003, changing the lowest level (bronze) of certification to the designation "Certified." The formal name of LEED 2.1 was modified to include New Construction (NC), distin-

guishing it from LEED rating systems for other applications; currently it is known as LEED-NC 2.2. Other LEED standards in various stages of adoption or development include LEED-EB, for existing buildings; LEED-CI, for commercial interiors; LEED-H, for homes; LEED-ND for neighborhoods; LEED for Schools; LEED for Retail; LEED-CS, for core and shell; and LEED for Health Care.

The USGBC will continue to refine the LEED standards. For example, on June 27, 2007, USGBC began mandating at least two "Optimize Energy Performance" points for all LEED-NC projects registered after June 27, 2007. To achieve the two-point minimum, new buildings must demonstrate a 14% energy cost savings while building renovations must demonstrate a 7% savings. Previously, energy points were not required so that it was possible for a project to achieve LEED certification without demonstrating any energy cost savings. The mandatory "Optimize Energy Performance" points do not extend to projects registered under LEED for Homes or LEED for Neighborhood Development at this time. USGBC is helping projects achieve these newly required points by developing a prescriptive compliance path as an alternative to energy modeling. The USGBC believes that the new mandatory energy points will improve energy performance of new construction by 14% and existing buildings by 7%. These energy reductions are compared to a baseline computer model based on ASHRAE/IESNA Standard 90.1-2004.

The GBI Green Globes Building Rating System

The Green Globes environmental assessment and rating system represents more than nine years of research and refinement by a wide range of prominent international organizations and experts. The genesis of the system was BREEAM, which was brought to Canada in 1996. The Canadian Standards Association published BREEAM Canada for Existing Buildings. In 2004, the Green Building Initiative (GBI) acquired the rights to distribute Green Globes in the United States. The GBI committed to continually refining the system to ensure that it

reflects changing opinions and ongoing advances in research and technology, as well as involving multiple stakeholders in an open and transparent process. In 2005, GBI became the first green building organization to be accredited by the American National Standards Institute (ANSI) as a standards developer and began the process of establishing Green Globes as an official ANSI standard. The GBI ANSI technical committee was formed in early 2006.



State Government Initiatives for High-Performance Green Buildings

The rate of implementation of high-performance green buildings in the United States is increasing, and state governments are playing a major role by mandating that state buildings and state-funded buildings be designed and built to attain green building certification and also by offering incentives such as tax credits and low-cost loans for green building elements. Tax credits are allowable against various business and personal income taxes, providing for tax credits to owners and tenants of eligible buildings and tenant spaces that meet certain "green" standards. Credit is awarded based on the level of LEED certification and, in many cases, the size of the building. The "State Government Initiatives" table on page 26 outlines some of these legislative and administrative efforts to promote energy-effi-

cient and environmentally friendly buildings. Included are requirements that certain buildings, funded entirely, or in part, by the state, comply with the LEED Green Building Rating System or other recognized green building systems.

State Tax Incentives for Buildings Using the LEED Rating System

A number of states have introduced or passed bills establishing a green building tax credit, which specifically uses the LEED rating system, as outlined in the "State Tax Initiatives" table on page 28.

To learn about the local government initiatives on green building, a good place to start is by reviewing the Government Green Building Programs Inventory, which is maintained by the University of Wisconsin-Extension and which can be accessed directly at www4.uwm.edu/shwec/GovtGreenInventory.pdf.

Summary and Conclusions

The high-performance green building movement in the United States is just 15 years old and has already had an enormous effect on how buildings of all types are being designed, built, and operated. The hallmark of this movement has been the multi-sectoral collaboration between the government, building owners, architects, engineers, builders, and the construction materials industry. As a result of the orchestration of this wide-ranging collaboration, the USGBC in particular has emerged as the leader of the effort to produce a new class of buildings that respond to higher energy prices, human health concerns, and global environmental problems. The likelihood is that this movement will continue to strengthen and gain even more influence as an idea whose time has finally arrived. In addition, certification standards will continue to evolve as new technologies emerge. Attorneys practicing in the development arena should continue to seek information about emerging trends in green building and sustainable development. ■

State Government Initiatives for High-Performance Green Buildings

| State | Date | Bill/Law | Summary |
|-------------|--|------------------------|--|
| Arizona | 2003 | H.B. 2324 | Promotes energy conservation in state buildings and universities in Arizona by setting specific energy use reduction goals and requiring these buildings purchase cost-effective ENERGY STAR or Federal Energy Management Program-designated energy-efficient products. The bill also requires that new state buildings to meet energy conservation standards developed by the Arizona Department of Commerce's Energy Office, consistent with the standards used in two widely adopted model energy codes. |
| Arkansas | House 3/29/2005 Senate 4/6/2005 | H.B. 2445 | <p>The bill is entitled, "An Act to Promote the Conservation of Energy and Natural Resources in the Design of State Building Projects Through the Use of Sustainable Building Rating Systems" and states:</p> <p>In recognition of the economic, energy conservation, and environmental benefits of sustainable building design, it is in the best interest of the State of Arkansas to initiate a process to encourage improved building practices, to provide support and information to assist state agencies in carrying out the purposes of this subchapter, and to continue development of best building practices through a legislative task force to evaluate and report to the General Assembly the progress being made under this subchapter. State agencies conducting or funding a public building project or rehabilitation project are encouraged to refer to and should utilize whenever possible and appropriate the Leadership in Energy and Environmental Design or Green Globes rating systems referred to in this subchapter. The bill also establishes a Legislative Task Force on Sustainable Building Design and Practices.</p> |
| California | 2/19/2003 | A.B. 736 | Requires the adoption of regulations to implement design standards for school facilities that conform to guidelines established by the Collaborative for High Performance Schools and with consideration of USGBC Green Building standards. |
| | 2/20/2004 | S.B. 1851 | Requires new public buildings (except publicly funded schools) to exceed minimum building energy efficiency standards as regulated by the state building code and to exceed indoor air quality and green building standards if the measures achieve certain cost savings. |
| Connecticut | 2/11/2004 | H.B. 5115 | Requires the adoption of energy efficiency components of the LEED rating system for new construction or rehabilitation of existing buildings that are state-owned and state-funded. |
| | 4/22/2003 | H.B. 5255 | Requires that any new building constructed using at least 50% state funding shall meet or exceed the LEED Green Building Rating System silver rating. |
| | 4/14/2003 | S.B. 796 | Requires that building projects owned or leased by the state must meet or exceed LEED Green Building Rating System standards and that the state establish standards for life-cycle cost analyses, which shall be used to determine if a project is cost effective on a life-cycle basis. |
| | 2/13/2003 | S.B. 137 | Would require that all state-owned buildings and facilities located in nonattainment areas have roofs constructed with materials and in such a manner that is consistent with ENERGY STAR program standards and with LEED specifications. |
| | 1/27/2003 | H.B. 127 | Requires all buildings that are designed or built with any monies from the state be designed, constructed, and maintained in compliance with LEED Green Building Rating System standards to the extent practicable. |
| | 5/26/2006 | P.A. 06-187 | Requires the adoption of building construction standards that are consistent with or exceed the silver building rating of LEED for new commercial construction and major renovation projects. Before January 1, 2007, the commissioner of public works, the commissioner of environmental protection, and the commissioner of public safety were required to work together to create these regulations. |
| Florida | 7/13/2007 | Order Number 07-126 | Requires that all new state buildings be built in accordance with LEED-NC standards, and LEED-EB must be implemented for all existing state buildings. |
| Louisiana | Prior to the 2007 Legislative Session | H.B. 498 | The House Committee on Commerce was required to produce a report studying the feasibility of imposing green building standards for certain public buildings. This study is a result of House Bill No. 498, which proposed energy and environmental building standards for certain buildings. The Louisiana House of Representatives will analyze the results of the study before acting on H.B. 498. |

State Government Initiatives for High-Performance Green Buildings (continued)

| State | Date | Bill/Law | Summary |
|---------------|-----------------------|---------------------|--|
| Maine | | L.D. 540 | Ensures optimal energy efficiency in state-funded construction. |
| | | L.D. 799 | Improves energy efficiency in new school buildings. |
| Maryland | 1/27/2003 | H.B. 172 | Requires that the design, construction, operations, maintenance, and deconstruction of all new state-owned buildings, leased buildings, and buildings constructed on land leased from the state must meet, or exceed, the LEED Green Building Rating System silver rating. The bill also requires that reasonable efforts be made by units of state government to incorporate green building methodologies into existing state-owned, leased, or operated buildings. |
| | 3/26/2005 4/4/2005 | H.B. 196 S.B. 92 | <p>This legislation requires that state capital projects (state-funded building projects) meet green/high-performance building standards. The bill states that a high-performance building is a building that:</p> <ul style="list-style-type: none"> • achieves at least a silver rating according to the USGBC's LEED green building rating system; • achieves at least a two-globe rating according to the GBI's Green Globes program; • achieves at least a comparable numeric rating according to a nationally recognized, accepted, and appropriate numeric sustainable development rating system, guideline, or standard; OR • meets nationally recognized, consensus-based, and accepted green building guidelines, standards, or systems approved by the state. |
| Massachusetts | 1/1/2003 | H. 529 | Promotes increased energy efficiency in large buildings in the Commonwealth. |
| New Jersey | 2/9/2004 | S. 941 | Would require that any building constructed by or for the state be designed and managed, to the maximum extent practicable and feasible, so that it may be certified at the highest possible level according to standards set forth in the USGBC Green Building Rating System. |
| | 6/6/2002 | A. 2393 | Provides that any building, constructed by or for the state, must be designed and managed, to the maximum extent practicable and feasible, so that it may receive the highest possible LEED rating; the bill also requires the state to conduct a study using the LEED Green Building Rating System to measure and evaluate the energy and environmental performance of each building owned or leased by the state. |
| Nevada | 6/17/2005 | A.B. 3 | Requires each state-sponsored or financed building to be constructed to meet LEED base level or higher. In addition, during each biennium, at least two occupied public buildings whose construction will be sponsored or financed by the state must be designated as demonstration projects and must meet the requirements to be certified at or meet the equivalent of the LEED silver level or higher, or an equivalent standard, as adopted by the director of the office of energy. |
| Ohio | 10/14/2003 | H.B. 298 | Requires any building, owned or operated in whole, or in part, by a state agency, be designed, constructed, renovated, and maintained in compliance with the LEED Green Building Rating System. |
| Washington | 1/20/2003 | H.B. 1171 | Requires the state to adopt a policy to incorporate green building principles into the construction and renovation of major facilities by state agencies, public higher education institutions, and local school districts. |
| | 4/8/2005 | E.S.S.B. 5509 | <p>Requires state-funded projects over 5,000 sq. ft., including school district buildings, to use high-performance green building standards. The findings of the legislature are recited as follows:</p> <p>The legislature finds that public buildings can be built and renovated using green/high-performance methods that save money, improve school performance, and make workers more productive. Green/High-performance public buildings are proven to increase student test scores, reduce worker absenteeism, and cut energy and utility costs.</p> <p>Specifically, all major facility projects (including public agencies and schools) receiving state funding must be designed, constructed, and certified to at least the LEED silver standard. The bill also requires implementation and monitoring of ongoing operating savings resulting from projects designed, constructed, and certified under the requirements of the bill.</p> |

State Tax Initiatives for Buildings Using the LEED Rating System

| State | Date | Bill/Law | Summary |
|---------------|--------------|--------------------|--|
| Maryland | 5/26/2004 | H.B. 804 | Allows the governing body of a county or municipal corporation to grant a property tax credit against county/municipal property tax imposed on a high-performance building that meets or exceeds the LEED silver rating requirements. |
| Massachusetts | 1/1/2003 | S. 1733 | Established a green building income tax credit for buildings that are designed and operated in accordance with standards informed by the LEED rating system. Also introduced on January 1, 2003, H. 1213 provides for business and personal income tax credits for construction, using the LEED rating system as a guide. |
| New Jersey | 2003 2004 | S. 2502 A. 1356 | Perhaps the most innovative and comprehensive plan to address urban design and environment issues. Entitled the "Smart Growth Tax Credit Act," this bill provides tax incentives for developers and owners who design and build residential and mixed-use developments, which meet specific "smart growth" and "green building" criteria. These criteria ensure that participating developments are appropriately located, resource-efficient, pedestrian-friendly, adequately serviced by mass transit, and built using materials and technologies that minimize environmental impacts and provide a healthier built environment. To be a "green building," buildings must comply with either LEED Green Building standards or specific green building standards set forth in the bill. |
| Oregon | 2001 | | In 2001, the Oregon Legislature enacted a law establishing a sustainable building tax credit. The Business Energy Tax Credit (BETC), Or. Rev. Stat. § 469, is offered to businesses that build sustainable commercial buildings in accordance with the LEED Green Building Rating System silver rating. |
| Pennsylvania | 3/26/2003 | H.B. 993 | Requires taxpayers to keep a record of the building's energy consumption. |