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Green Building and the Construction Lawyer: A Practical Guide to Transactional and Litigation Issues: Green Building 101

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“Green building” is many things to many people. It can be described as a movement, encompassing a core set of environmentally conscious principles. It is the practice of transforming and innovating standard design and construction practices to reduce the negative impacts of built environments. It is an effort to improve sustainability and incorporate environmentally friendly construction methods and materials. It is a system of practices aimed at reducing greenhouse gases and the environmental footprint created by building construction, operation, and maintenance. It is also an effort to improve the mental and physical health of building occupants by ensuring cleaner indoor air, reducing harmful chemicals, and improving daylight systems.

According to the Environmental Protection Agency (EPA), green building is the practice of “creating structures and using processes that are environmentally responsible and resource-efficient throughout a building’s life cycle from siting to design, construction, operation, maintenance, renovation and deconstruction.”1 The U.S. Green Building Council (USGBC) defines green building as the practice of design and construction to employ strategies “aimed at improving performance across all the metrics that matter most: energy savings, water efficiency, CO2 emissions reduction, improved indoor sustainability quality, and stewardship of resources and sensitivity to their impacts.”2 The U.S. General Services Administration defines “sustainable” design as that which “seeks to reduce negative impacts on the environment, and the health and comfort of building occupants, thereby improving building performance. The basic objectives of sustainability are to reduce consumption of non-renewable resources, minimize waste, and create healthy, productive environments.”

Green building essentially evolved from the sustainability movement that began in the late 1960s and 1970s as a result of the U.S. energy crisis. At the time, the U.S. government sought to reduce the country’s dependence on foreign oil imports and to mitigate environmental impacts from energy production and usage.4 New federal agencies emerged from this shift in policy, including the Department of Energy and the EPA.

In the 1990s, the American Institute of Architects (AIA) formed the Committee on the Environment, which was in part funded by the EPA and focused on energy efficiency and sustainable design. In addition, the EPA created the Energy Star program, which was “designed to identify and promote energy-efficient products

to reduce greenhouse gas emissions.”5 Federal laws like the National Energy Act of 1978 and the subsequent Energy Policy Act of 1992 established commercial and residential minimum codes for energy efficiency. Numerous other federal, state, and local initiatives and legislation have followed. The USGBC was created in 1993. It focuses on promoting, educating, and advocating for green design and construction practices for buildings and communities. In 2000, the USGBC released the first version of the Leadership in Energy and Environmental Design (LEED) green building certification system. LEED and several other ratings systems described later in this chapter provide guidelines to help make built environments part of a sustainable future.

The term “green building” applies to just about any built structure, such as an office building, a home, an apartment building, a school, an airport, or a courthouse; the list goes on. Further, the term pertains not only to the materials used in the built structure (such as bamboo flooring or recycled pipes) but also to the building’s design, operation, location, energy sources, appliances or utilities, source of materials, and impact on those who occupy it. For these reasons, the environmental impact and sustainability of a building are commonly examined through a “life-cycle assessment” that considers everything that goes into the building and everything that results from its existence.