

New Jersey Law Journal

VOL. CXC—NO.7—INDEX 608

NOVEMBER 12, 2007

ESTABLISHED 1878

Environmental Law

Pressure To Cool Down Is Heating Up

New Jersey's growing green-building renaissance

By Steven L. Humphreys

No matter where one falls on the spectrum of public attitudes toward legislation aimed at addressing the problem of climate change, one thing is certain — New Jersey is likely to play an increasingly aggressive role in fashioning new legislative and regulatory programs aimed at reducing emissions of so-called greenhouse gases. For the development and construction industries, the question on everyone's mind is whether they will be among the sectors targeted for mandatory reductions in energy usage and/or use of renewable energy sources. Nonetheless, whether mandated through changes to the state building code or incentivized through governmental economic assistance programs, or both, it is clear that the pressure to cool down is likely to heat up in the next two to five years.

The use of so-called green building design standards, which, among other things, incorporate energy saving and use of renewable energy mechanisms into building design, is fast becoming a focus of attention among federal and state policymakers looking for ways to reduce the United States' rate of energy consumption. Currently, energy usage in the United States comprises 22.8 percent of the world's energy output, even though its residents account for only 5



Humphreys is a special counsel with Kelley, Drye & Warren of Parsippany, where he specializes in environmental aspects of real estate and mergers and acquisitions transactions.

percent of the world's population. The vast majority of this energy comes from burning fossil fuels like petroleum and coal, which generate carbon dioxide — the primary target of governmental efforts to reduce greenhouse gas emissions. Inasmuch as buildings generally consume 36 percent of total energy usage and are responsible for 30 percent of all greenhouse gas emissions, it is easy to see why buildings are likely to become objects of regulatory interest for policymakers concerned about climate change.

Green building design covers a wide array of “sustainability” practices, from more energy efficient appliances to structural building design that maximizes the use of radiant energy from the sun, harvesting rainfall for on-site use, and “cool” or high-performance design features such as roof-top gardens, and energy efficient windows with sunshades that automatically close or open to maximize use of sunlight for heating and lighting. Light-colored roofing and paving, high-performance building envelope design, natural usage of sunlight for indoor lighting, and under-floor air distribution and evaporative cooling systems, are but a few of the many construction techniques now available for green building. Another component of green-building design involves construction using recycled metal, debris and other materials, thereby reducing reliance on fossil fuels need for manufacture of new materials.

The leading standard used by builders and construction firms for certification of green-building design is known as Leadership in Energy and Environmental Design (LEED), developed by the United States Green Building Council (USGBC). LEED standards emphasize five components in building design and construction: (1) sustainable site planning; (2) efficient use of water; (3) energy efficiency and renewable energy; (4) recycling and conservation of building materials; and (5) indoor environmental quality.

According to the USGBC, a structure built to LEED standards is generally estimated to cost 5-10 percent more than a non-LEED building. However, LEED buildings are estimated to save 25-50 percent in energy costs, with a concomitant impact on reducing CO₂ emissions associated with powering and heating them.

Buoyed by the U.S. Supreme Court's April ruling in *Massachusetts v. EPA*, which affirmed the right of states to regulate greenhouse gas emissions even though their effects are global in nature, New Jersey already has thrust itself into the climate change regulatory arena in a big way. Greenhouse-gas legislation signed into law by Governor Jon Corzine in June will require a reduction of greenhouse gas emissions to 1990 levels by 2020, approximately a 20 percent reduction, and an additional reduction to 80 percent below 2006 levels will be required by 2050. These aggressive goals are the most stringent in the nation, surpassing those recently enacted into law in California, which together with New Jersey has long been recognized as a leader in the development of environmental law. New Jersey's law is also an integral part of a 10-state regional compact, known as the Regional Greenhouse Gas Initiative (RGGI), which seeks to establish the first mandatory cap-and-trade program in the country for carbon dioxide (CO₂) emissions.

Pointing to a lack of action by the federal government on climate change, New Jersey, California, Hawaii and other states have enacted or adopted initiatives collectively seeking to reduce energy consumption through conservation measures while increasing use of renewable sources of energy like solar, wind and geothermal power. Although New Jersey's efforts to achieve the goals for CO₂ reduction are expected to focus primarily on the development of renewable energy to supplant fossil fuels, industry observers say it is likely that some form of additional legislation will be enacted to encourage or require reductions in CO₂ emissions generated to heat and power buildings.

"By 2012, I would be shocked if some form of mandatory green building design or sustainability standards is not enacted in New Jersey," said Walter Kanzler, a Morristown architect who specializes in sustainable building design. "There is a lot of room for optimization and we have the technology to do it."

Kanzler sees a green revolution beginning to take hold nationally, with states like New Jersey leading the way. Already, national organizations like the National Association of Home Builders, the American Society of Heating, Refrigerating and Air-Conditioning Engineers, and the American National Standards Institute have teamed up to develop national standards for incorporating green design into home construction. Moreover, numerous government agencies — like New Jersey's Economic Development Authority and the federal government's General Services Administration — have been leading the way by incorporating green design into their own buildings, proving that "going green" pays off handsomely in the long run in the form of substantially decreased utility costs — generally in the range of 20 to 50 percent.

While actual mandatory standards for all new building construction may as yet be an unattainable goal for proponents of more stringent regulatory efforts to combat climate change, some industry leaders have lined up behind legislation (*S-843*) pending in the New Jersey General Assembly that would impose mandatory green-building standards on the construction of all buildings over 15,000 square-feet used for state governmental purposes. Although not supported by the USGBC because it would allow compliance with another standard — the Green Globes system adopted by the Green Building Initiative — in lieu of actual LEED certification, the measure has garnered the support of business groups like the New Jersey Chamber of Commerce. In addition, under an executive order signed almost five years ago by Governor James McGreevy, green building design is

already required for all new school-construction projects.

In California, the Legislature recently passed a measure to impose green-building requirements on all state and private-owned commercial and residential building construction. However, the legislation was vetoed by Gov. Arnold Schwarzenegger, citing concerns about the cost and the appropriateness of writing building standards into law instead of leaving the task to the California Building Standards Commission. Nonetheless, California already has adopted one of the first mandatory requirements for energy efficiency into its building code.

New Jersey's municipalities also have begun to adopt specific measures to encourage the use of green-building design by builders in their communities. These efforts in municipal building construction have included, for example, the adoption of redevelopment plans, green master plans, environmental requirements for the use of geothermal heating and cooling and the use of solar technology. One example is Kearny, which recently adopted an ordinance encouraging builders to employ green-construction standards by offering "density bonuses" for qualifying projects, allowing them to build slightly larger projects than would otherwise be the case.

Judging from the escalating number of voluntary green building projects in the state in the absence of mandatory requirements, it is becoming increasingly apparent that a trend is also taking root through market forces alone. While it remains to be seen exactly how far or how fast the emerging trend toward voluntary green-building design will go, by one measure, just a couple of years ago, there were only a handful of buildings in New Jersey that were LEED certified. By comparison, there are now 22 LEED-certified buildings in New Jersey — and 153 such projects have been registered for future certification.

The impetus for this as-yet voluntary adoption of eco-friendly building design appears to be that some view it as

a competitive tool, whether to attract buyers or tenants of constructed units or customers to a business. One firm, Pittsburg-based PNC Financial Services Group, has constructed more than 13 bank branches in New Jersey using green building design techniques, and plans to build another 20-30 more green design branches in the next three years. Other examples include Janssen LE, which constructed its new headquarters in Titusville using green energy design, and Goldman Sachs, which constructed its new corporate headquarters building in Jersey City using green design. Affordable-housing developments using green-building design also have been constructed in Newark, East Orange and East Ampton.

What, then, are the potential legal ramifications to green building design? From the perspective of legal challenges to the adoption of mandatory green design requirements, at least at the state level, there is not a great likelihood of success. Based on experience with prior environmental legislative enactments, few, if any, judicial limits are likely to be imposed on New Jersey's drive to reduce greenhouse gas emissions, including the use of mandatory green-building standards. See, e.g., *In the Matter of*

Storm Water Management Rules, 387 NJ super 451, 456 (app div), cert. denied, 188 N.J. 489 (2006) (recognizing wide latitude given to the New Jersey Department of Environmental Protection in regulating land use.)

The use of green building design is not without potential legal and liability risks, which should be carefully considered when preparing contract documents associated with building projects. For example, there is the question of who bears the risk that the promised offsets in lowered energy consumption do not bear fruit. While a building owner under these circumstances may have a valid claim against the construction engineer for breach of a contractual or implied warranty of merchantability or fitness for a particular purpose, the construction engineer may insist on a contractual waiver of such claims after a relatively short period, so as to reduce the risk of being sued for what may be a failure to properly maintain the building.

Another question that may arise is the duration of time that the builder or construction firm should remain legally responsible for design and/or construction failures, the risk of which may be greater with the use of innovative construction methods and materials. One solution that has been used in some

green building design construction projects is third-party design and performance verification, which involves a systems operations test period by a third-party engineer to verify that all building systems are functioning properly and meeting the design specifications for energy efficiency and renewable energy output. Taking this concept a step further, another level of protection that may be available for larger construction projects is the use of a "guaranteed performance contract." This type of agreement entails the complete transfer of legal responsibility for systems failure to the construction engineer.

Liability for the failure of a green-design building system to meet its design specifications is also a potential concern for builders, construction firms and owners because of the potential ramifications in loss of government financial incentives, loss of business prestige, penalties for government projects or breach of lease agreements under which tenants may expect certain cost savings in return for the payment of higher rent. Consequently, it is important for all parties concerned to carefully spell out in their contracts how these liability risks will be allocated among them. ■