

# NEW JERSEY LAWYER

## Magazine

June 2011 / No. 270

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# PRESIDENT'S PERSPECTIVE

SUSAN A. FEENEY

## Building a Better Bar



Every bar president hopes to accomplish certain initiatives during his or her term, but there are also issues that we are committed to year to year.

Like those before me, I will continue to work to help lawyers whose ability to earn a living has suffered because of the

prolonged economic downturn. Because of our new relationship with the New Jersey Institute for Continuing Legal Education, the state bar will be even better able to provide affordable, high-quality continuing legal education courses to enrich our members and educate the entire profession. In addition, we will always stand for the integrity and independence of our Judiciary. As president this year, like my predecessors, I will speak out on this critical issue whenever necessary.

In addition, I have three major initiatives planned in areas that are important to me, to the state bar, to our profession and to the public we serve.

First, during my tenure we will launch a task force to examine the justice gap that leaves so many residents and organizations of this state without the legal help they need and deserve, and to identify ways to engage lawyers in *pro bono* service. The *Pro Bono* Task Force: Closing the Justice Gap will spend the next year surveying the legal service provider landscape in New Jersey, working with the Judiciary and various county and specialty bar associations to gather information about where the needs are, who is fulfilling them and where the funding is coming from. A year from now, at our annual *Pro Bono* Conference, the task force will present a series of recommendations with an eye toward better coordinating *pro bono* services in the state to better serve people in need of our help.

While it may be difficult to think about *pro bono* in a struggling economy, please remember funding for legal services is at its lowest in years, yet the need for *pro bono* services is great. We have an obligation to fill this gap. On a personal note, volunteer and *pro bono* work has given me the benefit of devel-

oping business contacts and friendships that have been invaluable in my career. I expect you will have the same experience, and hope you will join the NJSBA in this initiative.

Second among my initiatives this year, as a way to affirm the dedication this profession has to serving the public, the state bar will coordinate a statewide day of service and civic education to recognize the 10-year anniversary of the Sept. 11th terrorist attacks. At no time was our profession's dedication to service more in evidence than in the days and months following Sept. 11, 2001. The NJSBA and its volunteer members responded to advise and represent, on a *pro bono* basis, many victims, family members and others whose lives were forever altered by the tragedy. In the decade since that terrible day, much has changed in the way we go about our daily lives, but at least one thing has remained constant—our profession and this association's dedication to honoring the memory of those who gave their lives.

This fall, the NJSBA will coordinate a day of service not only to honor the victims of Sept. 11th, but also to recognize the many heroes who emerged from that tragedy. In conjunction with the Judiciary and county and specialty bar associations, we hope to hold sessions in courthouses around the state where members of the public can speak with a lawyer. We will also coordinate with schools statewide, so lawyers can spend a day engaging students about civics and the importance of the rule of law in our society. Other volunteer lawyers will give of their time creating wills and other estate documents for first-responders and veterans for free. I hope you will join us and volunteer for this important day of service.

Third, in the next year we will continue making solid strides in opening the doors of leadership in the legal profession to people of diverse backgrounds. When I speak of diversity, I mean making sure there is room at the table for lawyers who are women, African-Americans, Hispanics, Asian-Americans, gay, lesbian, bisexual, transgender, disabled or from any under-represented group. To get this initiative started, earlier this spring I invited the leaders of the diversity and specialty bars to lunch to open the lines of communication. With my

fellow officers and trustees, I will continue to meet with these leaders throughout the year to discuss areas where we can work together to make improvements.

I am proud to report that one-third or more of my standing committee appointments have been made to people of color and diverse backgrounds. While this is a move in the right direction, rest assured we will keep the momentum moving forward as the year progresses.

As the year progresses, I look forward to working together to build a better bar for our members, the profession, and the clients who rely on us. ∆∆

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**New Jersey Lawyer Magazine** (ISSN-0195-0983) is published six times per year. Permit number 380-680. • Subscription is included in dues to members of the New Jersey State Bar Association (\$10.50); those ineligible for NJSBA membership may subscribe at \$60 per year. There is a charge of \$2.50 per copy for providing copies of individual articles • Published by the New Jersey State Bar Association, New Jersey Law Center, One Constitution Square, New Brunswick, New Jersey 08901-1520. • Periodicals postage paid at New Brunswick, New Jersey 08901 and at additional mailing offices. POSTMASTER: Send address changes to *New Jersey Lawyer Magazine*, New Jersey State Bar Association, New Jersey Law Center, One Constitution Square, New Brunswick, New Jersey 08901-1520. • Copyright ©2011 New Jersey State Bar Association. All rights reserved. Any copying of material herein, in whole or in part, and by any means without written permission is prohibited. Requests for such permission should be sent to *New Jersey Lawyer Magazine*, New Jersey State Bar Association, New Jersey Law Center, One Constitution Square, New Brunswick, New Jersey 08901-1520. • *New Jersey Lawyer* invites contributions of articles or other items. Views and opinions expressed herein are not to be taken as official expressions of the New Jersey State Bar Association unless so stated. Publication of any articles herein does not necessarily imply endorsement in any way of the views expressed. • Printed in U.S.A. • Official Headquarters: *New Jersey Lawyer Magazine*, New Jersey State Bar Association, New Jersey Law Center, One Constitution Square, New Brunswick, New Jersey 08901-1520. 732-249-5000 • Advertising Display 732-565-7560.

## MESSAGE FROM THE SPECIAL EDITOR

In light of rising energy costs and concerns about global warming, society's willingness to embrace environmentally friendly approaches toward energy consumption, construction practices and resource conservation will continue to increase. As a state burdened with substantial carbon emissions and some of the highest energy costs in the country, New Jersey is critically dependent upon the adoption of environmentally beneficial means of energy generation and the preservation of natural resources. In this issue of *New Jersey Lawyer Magazine* we bring together various practice areas to address legal issues associated with going green.

Unbeknownst to many, New Jersey has adopted some of the most progressive clean energy, greenhouse gas reduction, and renewable energy laws and policies in the country. Our first article, by James Laskey and Christopher Stevenson, provides a comprehensive overview of New Jersey legislative initiatives intended to keep New Jersey in the forefront of the green revolution.

A number of articles address the development of clean energy generation projects and energy efficiency programs. The benefits of clean, renewable energy sources have been made more apparent by the recent nuclear disaster in Japan and the 2010 Gulf oil spill. Marshall McLean, Henry King and Matthew Thomas discuss wind energy and how recent legislation has positioned New Jersey to be a national leader in the development of off-shore wind electricity generation. Richard D. Martinson provides a comprehensive discussion of the federal tax laws that foster the development of alternative energy projects and energy efficiency initiatives.



HESSER MCBRIDE JR.

For attorneys who represent local government entities, Phyllis J. Kessler discusses procurement issues unique to local governments interested in implementing energy efficiency programs and renewable energy projects.

No discussion of renewable energy in New Jersey would be complete without addressing solar photovoltaic energy. Due to the state's aggressive renewable energy portfolio standards requirements, New Jersey is second to California in the installation of solar energy facilities. Richard M. Hluchan discusses land use issues associated with obtaining approvals for alternative energy-generation facilities, including solar farms. My article provides guidance on negotiating contracts for the installation of solar facilities and the purchase of solar energy pursuant to power purchase agreements.

Building green is also addressed in various articles. Karl Piirimae focuses on policies underlying sustainable development and the practical impact those policies have on real estate development. Harry E. McLellan III discusses the United States Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system, including recent criticisms of LEED certification. Dante J. Romanini pulls sustainable building concepts together in a case study discussion of a sustainable development project on brownfield property in Camden.

Lastly, for litigators, Angela M. Scafuri addresses the unintended consequences of a paperless office and how paper

reduction initiatives may affect discovery.

While some may debate the economic benefits of going green, there is little doubt that any reduction in greenhouse gases, energy consumption or reliance upon fossil fuels will have a favorable impact on our environment. Certainly, green initiatives are here to stay, and the more knowledge legal practitioners have about such initiatives the better we can help our clients achieve their eco-friendly goals. ☺

**Hesser McBride Jr.** is a partner at Wilentz, Goldman & Spitzer and chair of the firm's energy, telecommunications and public utility practice. He has practiced before the New Jersey Board of Public Utilities for over 20 years and regularly represents clients in public and private solar energy projects and transactions. He is a consultant to the New Jersey State Bar Association's Public Utility Law Section and a member of the bar association's Renewable Energy, Clean Tech, and Climate Change Committee.

# New Jersey Legislature Seeks to Encourage Green Technology

by James Laskey and Christopher Stevenson

Beginning with the adoption in 2007 of the New Jersey Global Warming Response Act (GWRA),<sup>1</sup> the New Jersey Legislature has enacted numerous laws intended to reduce energy consumption, increase the use of renewable energy, and reduce greenhouse gas (GHG) emissions. This article reviews some of those laws as well as a number of pending bills intended to keep New Jersey in the forefront of the 'green' revolution.

The GWRA requires a reduction in GHG emissions to 1990 levels by 2020, and a further reduction to 80 percent below 2006 levels by 2050. Achieving the GHG reduction goals of the GWRA will require a statewide transformation in energy generation and in the consumption of energy by the electric power, building (commercial and residential), industrial, and transportation sectors.

Statewide, New Jersey is now second behind California in the total number of solar installations. Since 2001, more than 200 megawatts (MW) of solar capacity have been installed as the number of systems within the state has soared from a handful to well over 6,800 as a result of incentives and development facilitators for renewable energy such as rebates, net metering improvements, standardized interconnections, renewable portfolio standards (RPS)<sup>2</sup> for renewable energy in general and solar energy in particular, and a solar renewable energy certificate (SREC)<sup>3</sup> trading system.

One of the most significant of the recent enactments is the

Solar Energy Advancement and Fair Competition Act,<sup>4</sup> which was sponsored in the Assembly by Assemblyman Upendra Chivukula and in the Senate by Senator Bob Smith, and signed into law by Governor Jon Corzine at the end of his term. The solar act is summarized below in an overview of key renewable energy and related legislation that was either adopted within the past several years or is presently under consideration in Trenton.

The legislation highlighted below has been grouped under the headings of adopted and proposed, and further under the general categories of renewable energy, energy efficiency and conservation, and green building.<sup>5</sup> A host of green bills introduced at the beginning of the 2010-2011 legislative session in January 2010 have not yet advanced, and thus are mentioned here only by number.<sup>6</sup>

## Legislation Adopted (2007–2010)

### *Renewable Energy*

- P.L. 2007, c.156, requires in state-owned buildings the replacement of incandescent light bulbs with compact fluorescent bulbs, and further requires the Board of Public Utilities (BPU) to educate and inform the public on the benefits of compact fluorescent bulbs.
- P.L. 2007, c.300, provides for establishing certain standards for net metering<sup>7</sup> of electricity.
- P.L. 2007, c.340, authorizes New Jersey to participate in the Regional Greenhouse Gas Initiative (RGGI) through the auctioning of GHG allowances and establishment of the Global Warming Solutions Fund.
- P.L. 2008, c.90, exempts from property tax and municipal construction permit fees certain "renewable energy systems."
- P.L. 2009, c.33, requires developers of residential developments of 25 or more units to offer solar energy systems to prospective purchasers of dwellings.

- P.L. 2009, c.34, amends the Electric Discount and Energy Competition Act (EDECA, N.J.S.A. 48:3-49 *et seq.*) to facilitate and promote combined heat and power production, energy conservation and efficiency, and renewable energy.
- P.L. 2009, c.35, provides that solar and wind energy facilities on parcels of land greater than or equal to 20 contiguous acres (under the same ownership) are a permitted use within every industrial district of a municipality.
- P.L. 2009, c.146, provides that under the Municipal Land Use Law (MLUL, N.J.S.A. 40:55D-1 *et seq.*) a solar and wind energy facility or structure is an “inherently beneficial use,” which lessens the burden of proof required to obtain a use variance.
- P.L. 2009, c.213, permits solar, wind, or biomass energy generation on preserved farms in an amount equal to, as per the landowner’s choice, the farm’s electricity use plus 10 percent, or on an area occupying one percent of the farm. Further, it permits on non-preserved farms a renewable energy generation facility of up to 10 acres and two MW (and the ratio of renewable energy facility acreage to agricultural acreage cannot exceed one to five).
- P.L. 2009, c.240, provides that under the EDECA an “on-site generation facility” need not be located on the same or contiguous property in certain circumstances.
- P.L. 2009, c.244, provides for and limits the regulation of small wind energy systems by municipalities.
- P.L. 2009, c.289, provides, most notably, for increasing the BPU’s proposed solar RPS requirements and extending them past 2021 to 2026 and beyond. The presently targeted solar RPS requirement for 2021 will increase by almost 20 percent, and from 2021 to 2026 the solar RPS

requirements will more than double from 2,300 to 4,855 MW.

- P.L. 2010, c.4, exempts solar panels from being considered and calculated as impervious surface or coverage.
- P.L. 2010, c.57, the Offshore Wind Economic Development Act (OWEDA) establishes an offshore wind renewable energy certificate program (OREC) and makes available financial assistance and tax credits from existing programs for businesses that construct manufacturing, assemblage, and water access facilities to support the development of qualified offshore wind projects.
- P.L. 2010, c.101, promotes increased use of biofuels.
- P.L. 2011, c.20, allows construction of wind-dependent energy facilities on piers within 500 feet of mean high-water line of tidal waters.

#### ***Energy Efficiency and Conservation***

- P.L. 2009, c.4, authorizes a public entity to contract with an energy services company for energy conservation measures by way of a lease-purchase agreement of up to 15 years (20 years in certain cases).
- P.L. 2009, c.106, authorizes the amendment of the energy subcode in the Uniform Construction Code to enhance energy-saving construction requirements.

#### ***Green Buildings***

- P.L. 2008, c.54, amends the MLUL to permit a municipality to include in its master plan a green buildings and environmental sustainability element.

#### **Legislation Proposed (2010–2011 Session)**

##### ***Renewable Energy***

- A-915/S-463, provides for electric public utilities to offer non-discriminatory rates to customers belonging to a local renewable energy collaborative (LREC)<sup>8</sup> and authorizes the BPU

to implement pilot programs to evaluate the feasibility of adopting standards for advanced metering infrastructure.

- A-1084/S-2357, requires that solar panels be incorporated in the design and construction of new public schools.
- A-2147/S-461, establishes the Solar Roof Installation Warranty Program in connection with solar photovoltaic installations on commercial, industrial, and institutional buildings.
- A-2502/S-1406, establishes the New Jersey Property Assessment Clean Energy (NJ PACE) Municipal Financing Program within the New Jersey Economic Development Authority (NJEDA) and the BPU, to provide financing for municipalities seeking to facilitate the purchase of renewable energy systems or energy efficiency improvements by individual property owners or groups of property owners.
- A-2529, revises the definitions of Class I and Class II “renewable” energy<sup>9</sup> (in EDECA) to Class I and Class II “alternate” energy, and expands the definition of Class I to include solar thermal technologies, certain energy production technologies approved by the New Jersey Department of Environmental Protection (NJDEP), and certain small-scale hydropower. (*As of early March 2011, this bill had passed both chambers in the Legislature but was the subject of a conditional veto.*)
- A2-574/S-2321, revises the definition of Class I renewable energy (in EDECA) to include geothermal heat pump systems and technologies that either produce or save energy, and to provide that a renewable energy certificate (REC) corresponds to one MWH of energy produced or saved by Class I or II renewables.
- A-3277, amends the OWEDA to include property in certain areas des-

ignated by the Port Authority of New York and New Jersey and the NJEDA as “portfield” sites.

- A-3281/S-2231, amends the OWEDA to tax credits for development of wind energy facilities in the port district of the port authority.
- A-3455, permits an electric public utility and other suppliers of electricity to enter into agreements with building owners for onsite solar energy systems.
- A-3521, excludes the proceeds derived from sales or exchanges of solar renewable energy certificates from taxation under the corporation business tax and the gross income tax.
- ACR-63, proposes a constitutional amendment requiring that land of five or more acres dedicated to solar energy production shall be entitled to farmland assessment treatment.
- S-2006/A-3125, supplements the MLUL to curtail the ability of a municipality to adopt ordinances that limit the installation of solar panels under certain circumstances.
- S-2126, provides for the installation of solar and wind facilities on landfills and resource extraction facilities in certain cases. (*As of early March 2011, this bill had passed both chambers in the Legislature but was the subject of a conditional veto.*)
- S-2196/A-3142, directs the BPU to undertake a local government renewable energy-generation demonstration project.
- S-2332, establishes an NJEDA program to provide financial assistance to qualified commercial building owners to purchase and install solar electric systems greater than 100 kW.
- S-2371/A-3731, directs the BPU to adopt regulations that require contracts by non-utility load-serving entities for the purchase of SRECs to extend for a term of 15 years or longer.

- S-3806, includes as Class I renewable energy the energy produced by certain geothermal heat pumps.
- S-3893, establishes uniform real property taxation for commercial renewable energy systems and eliminates municipal construction permit fees for non-commercial renewable energy systems.

#### ***Energy Efficiency and Conservation***

- A-907/S-1262, directs the BPU to establish programs to assist large commercial and industrial electric power customers in reducing their energy usage.
- A-917/S-1780, requires the state to utilize energy-efficient outdoor lighting.
- A-3771, provides gross income taxpayers with a credit for two years for the cost of an energy audit and installation of energy conservation and efficiency improvements.
- A-3647/A-3648-S-2603/A-3649, requires electric vehicle charging stations at certain facilities.

#### ***Green Buildings***

- S-1765/A-918, requires the NJEDA (in consultation with other agencies) to carry out a “High Performance Green Building Demonstration Project.”
- A-2215/S-2558, provides for low-interest NJEDA loans for construction of a high-performance green building. (*As of early March 2011, this bill had passed both chambers in the Legislature but was vetoed by Governor Chris Christie.*)
- A-3678/A-3679/A-3680/A-3681/A-3682, incentivizes and/or requires green or blue roofs under certain circumstances.

#### **Moving From Legislation to Implementation**

As mentioned, the solar act is the most noteworthy of the renewable energy and related legislation recently

adopted in Trenton. It increases the solar RPS requirement considerably beyond the BPU’s targets, and changes its measurement from a percentage of energy produced to a set requirement in gigawatt hours (GWH). The present solar RPS requirement is 0.3 percent, and prior to the solar act the targeted requirement by 2021 was 2.12 percent. Under the act, the requirement will be approximately three percent by 2021 and seven percent by 2026, which from the present represents a 10-fold increase in the coming decade and a more than 20-fold increase by the middle of the following decade.

The total Class I and Class II RPS requirement, of which solar-generated electricity is a component, is 8.3 percent for 2011 and 22.5 percent by 2020-2021. However, the RPS goal for 2020 that is expressed in New Jersey’s current energy master plan (EMP), released in October 2008,<sup>10</sup> is actually 30 percent.

Wind-generated energy is likely to be an essential component of the increasing total RPS requirement. In New Jersey, the installation of electricity-generating windmills offshore (which the current EMP has targeted to generate 3,000 MW by 2020), moved closer to fruition as a result of two significant developments.

The first was the NJDEP’s June 18, 2010, release of the results of a lengthy study concluding that there would be “negligible impacts to bird, fish and marine mammal life” from proposed offshore windmills.<sup>11</sup>

The second was the approval on Aug. 19, 2010, of S-2036 (OWEDA), which occurred less than three months after the bill was introduced by Senators Stephen Sweeney and Thomas Kean. That legislation, as mentioned in the highlights above, establishes an OREC program similar to the SREC program, as a means of providing for the financial viability of offshore wind installations, which are estimated to have a total price

tag as high as \$7 billion. In addition, the bill amends other legislation to provide financial assistance and tax credits to promote wind energy development in the state. The cost of offshore wind farms, and whether that would result in utility rate hikes, was a concern that nearly prevented the vote to release the bill from committee.

It should be noted that OWEDA does not increase RPS requirements or renewable energy goals; rather, it provides that wind-generated electricity will reduce (offset) the amount of electricity to be provided by other Class I renewable energy sources. The sufficiency of the act's goal of supporting *at least* 1,100 MW of generation from offshore wind projects is being called into question by some, who contend that much higher targets are required to spawn a wind-energy development industry in New Jersey, as the act intends.

Adhering to the act's requirement to establish an offshore wind renewable energy certificate program within 180 days of enactment, the BPU, on Feb. 10, 2011, adopted new rules pertaining to the development of offshore wind projects and establishing the OREC program.

The proposal of S-2006 sponsored by Senators Bob Smith and Christopher Bateman, which curtails a municipality's ability to limit the installation of solar panels, is an attempt to build on the Legislature's important accomplishments with regard to the siting and installation of renewable energy facilities. That bill provides that solar panels and related equipment may be limited by municipal ordinance only if they extend more than 12 inches beyond the edge of the roofline or 12 inches above the highest point of the roof surface or structure. It does permit a municipality to regulate the placement of solar panels if the number of panels exceeds 10 and the proposed location is less than 50 feet from the nearest property boundary line.

Previously adopted legislation facili-

tating the siting and installation of renewable energy facilities include, as mentioned above, laws that: 1) prevent solar panels from being calculated as impervious coverage;<sup>12</sup> 2) provide that solar and wind energy facilities are permissible uses on parcels 20 acres and larger in all districts zoned industrial; and 3) establish that a solar and wind energy facility is an "inherently beneficial use" (and thereby presumptively satisfies zoning variance criteria).

Finally, the past year saw traditional farms and solar farms (as well as wind and biomass energy generation) intersect as a result of the passage of P.L. 2009, c.213, in January 2010. In addition to that legislation's highlights listed above, the law is noteworthy for making solar, wind, and biomass energy facilities protected activities under the Right to Farm Act.<sup>13</sup>

The adoption of that legislation was not without controversy, however, as it raised concerns with regard to jeopardizing the meaning and status of farmland preservation and facilitating non-traditional agricultural development on farms. On the other hand, such development will further the state's ability to meet its renewable energy and GHG reduction goals while potentially enhancing the economic viability of farming.

Promoting renewable energy on farms continued this session with the introduction of a proposed constitutional amendment to extend farmland assessment treatment to land of five or more acres that is devoted to solar energy generation.

The Legislature has put New Jersey earnestly on a path toward meeting the goals of the GWRA, and it continues its efforts to forge a sustainable energy future that is envisioned to ensure energy security, create clean/green energy jobs, maintain economic competitiveness, and help to preserve the quality of life and the environment in the state. Its

accomplishments have made New Jersey a national leader in renewable energy, and its future efforts could potentially continue to be ambitious given the stringent 2050 GHG reduction goals of the GWRA. ♪

## Endnotes

1. P.L. 2007, c. 112.
2. A renewable portfolio standard (RPS) requires electric power suppliers to obtain a percentage of their electricity from renewable energy sources. The existing standards are set forth at N.J.A.C. 14:8-2.3.
3. SRECs, which are issued at the rate of one SREC for each megawatt-hour (MWH) of solar-generated electricity, are purchased by electric power suppliers to meet solar RPS mandates. SRECs can be sold either on a spot market or pursuant to long-term contracts. Their value is capped by a solar alternative compliance payment (SACP) established by the Board of Public Utilities. SRECs contribute to the economic valuation of and return on investment of solar energy systems.
4. P.L. 2009, c. 289. This legislation is often referred to as A-3520, which is the pre-adoption Assembly bill number.
5. Proposed legislation is presented in ascending number order beginning with the Assembly and followed by the Senate.
6. The bills include: 1) Renewable energy – A-206, A-1167/A-1399/A-1483, A-1483/S-855, A-1553/S-460, A-2056, A-2500, A-2527/S-459, S-585, S-886, S-1414/A-1054; 2) Energy efficiency and conservation – A-1095, A-1161, A-2231/S-499; and 3) Green buildings – A-950, A-1540, S-452/A-2222, S-995/A-1166, S-1765/A-918.
7. Net metering enables generators of electricity from renewable energy sources that are interconnected with

the power grid to receive a credit for the energy they generate against the energy they take from the grid.

8. An LREC is a legal entity licensed by the BPU and comprised of a customer group that shares the benefits of a central renewable energy generation.
9. "Class I renewable energy" means electric energy produced from solar technologies, photovoltaic technologies, wind energy, fuel cells, geothermal technologies, wave or tidal action, and methane from landfills or a biomass facility, provided that the biomass is cultivated and harvested in a sustainable manner. "Class II renewable energy" means electric energy produced at a resource recovery facility or hydropower facility, provided the facility is located where retail consumption is permitted, and provided further that the commissioner of environmental protection has determined the facility meets the highest standards and minimizes any impacts to the environment and local communities. N.J.S.A. 48:3-51. See also N.J.A.C. 14:8-2 for Class I and Class II requirements pertaining to the renewable portfolio standard.
10. Public hearings on the draft revisions to the current EMP were scheduled for March 29 and April 7 and April 13, 2011.
11. [www.state.nj.us/dep/news-rel/2010/10\\_0058.htm](http://www.state.nj.us/dep/news-rel/2010/10_0058.htm).
12. Impervious surface/coverage can be an important and restrictive issue in the context of municipal land use regulation and stormwater management rules affecting development throughout the state, as well as in the context of specific rules affecting development in coastal areas, the Pinelands, and the Highlands.
13. N.J.S.A. 4:1C-1 *et seq.*

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# Global to Local

## Sustainable Development and Emerging Issues in Real Estate Practice

by Karl Piirimae

Sustainable development, in the purest sense, is a broad concept that encompasses a progressive transformation of economy and society to meet the needs of the present without compromising the ability of future generations to meet their own needs.<sup>1</sup>

**F**or purposes of this article, “sustainable development” is more narrowly defined as the implementation of means, methods and operating practices to reduce or eliminate the impact of the development, construction and operation of improvements to real property on the human and natural environment. In practice, this includes the implementation of practices that comply with established green building criteria; installation and maintenance of photovoltaic systems and advanced power and heating, ventilation and air conditioning (HVAC) controls; and similar measures intended to conserve energy and reduce a building’s impact on carbon emissions.

Policymakers have now recognized that greenhouse gases, particularly carbon emissions, are causing climate change with potentially dramatic implications for the environment, including sea level rise, extreme heat, more violent storms and potential reduction in the water supply. The potential economic and social cost of these changes is staggering, requiring a massive investment in infrastructure to protect urban centers in flood-prone areas, reducing crop yields, and driving up healthcare costs in segments of the population that are vulnerable to maladies caused by reduced air quality

resulting from global warming.<sup>2</sup>

The harrowing economic and social impacts of global warming have galvanized policymakers and legislators, both globally and locally, to act to impose restrictions on greenhouse gas emissions. The United States is one of 192 signatories to the United Nations Framework Convention on Climate Change (UNFCCC),<sup>3</sup> an international treaty that establishes a global structure for climate change negotiations focused on committing nations to stabilization and reductions of greenhouse gas emissions. It encourages industrialized countries to stabilize greenhouse gas emissions.

Almost every year a conference of parties is held to review implementation of the UNFCCC and to adopt further decisions and resolutions. The Kyoto Protocol<sup>4</sup> is a treaty administered as an addition to the UNFCCC that sets binding limitation on greenhouse gas emissions by signatory industrialized countries that are to be met between 2008 and 2012. The Kyoto Protocol provides for reported and monitored domestic action, and establishes an emissions trading market.

Although the treaty has been signed by 184 countries, the United States is the only industrialized country that is not a signatory to the Kyoto Protocol. The Byrd-Hagel resolution that was passed in anticipation of the Kyoto conference directed the government not to enter into any agreements under the UNFCCC that would mandate new commitments to limit or reduce greenhouse gas emissions for developed countries such as China and India, unless the agreement also mandated new, specific, scheduled commitments to do the same for developing countries during the same period. If the United States had signed the Kyoto Protocol, its target would have been set at seven percent below 1990 levels.

The ultimate objective of the UNFCCC is to stabilize greenhouse gas concentrations in the atmosphere at a level that will prevent dangerous human interference with the climate system. A conference of parties was held in Copenhagen during December 2009 with the expectation that the Kyoto Pro-

tol's targets for greenhouse gas emissions that expire in 2012 would be extended or replaced, but the outcome of the Copenhagen conference was inconclusive, and it is generally regarded as a failure.

The most recent conference of the parties was held in Cancun, Mexico, in December 2010, with more modest expectations than Copenhagen. The principal outcome of the Cancun conference was the establishment of the Green Climate Fund to aid less-developed countries in implementing emissions reductions and adaptations to environmental changes caused by global warming. The Cancun conference also established the technology mechanism to facilitate global sharing of low-carbon technologies and the adaptation committee to coordinate global adaptation strategies.

At this time, a comprehensive federal domestic limit on carbon omissions is not in effect. The American Clean Energy and Security Act of 2009, also known as the Waxman-Markey bill,<sup>5</sup> was approved by the House of Representatives in June 2009. Among other things, it called for a 17 percent reduction in carbon dioxide emissions from 2005 levels by 2020, an 83 percent reduction by 2050, and the creation of a national cap and trade system. The bill, however, died in the Senate in July 2010.

In the absence of comprehensive federal legislation establishing national goals for energy reduction and a comprehensive strategy to address global warming, a patchwork quilt of state and local laws and industry standards fills the void by mandating standards and practices to reduce greenhouse gas emissions. In the drive to reduce these emissions, buildings are widely recognized to be major consumers of energy and producers of greenhouse gases. The built environment accounts for 39 percent of total energy use in the United States and 38 percent of total indirect carbon dioxide emissions.<sup>6</sup> Consequently, this rapid-

ly evolving patchwork and the simultaneous implementation of alternative energy facilities—particularly solar installations—compels those whose practice touches on real estate and construction matters to develop a working understanding of this area of the law.

### **New Jersey's Efforts**

New Jersey has taken a number of legislative steps to reduce greenhouse gas emissions and incentivize the implementation of sustainable development practices. The state has enacted the Global Warming Response Act, which limits statewide greenhouse gas emissions to 1990 levels by 2020 and 80 percent below 2006 levels by 2050.<sup>7</sup> New Jersey's renewable portfolio standard under the Electric Discount and Energy Competition Act requires electricity supplier/providers to use renewable sources for 22.5 percent of the energy it sells by 2021.<sup>8</sup> Among other initiatives, new state-owned buildings of 15,000 square feet or greater must achieve a LEED silver or two Green Globes rating, both of which are discussed below.<sup>9</sup>

New Jersey is also part of the 10-state Regional Greenhouse Gas Initiative (RGGI), a regional initiative to reduce greenhouse gas (GHG) emissions from power generation.<sup>10</sup> Under the RGGI memorandum of understanding, regional emissions from fossil fuel-fired power plants 25 MW or greater are capped beginning in 2009 and lowers them 10 percent from 2009 levels by 2018.<sup>11</sup>

While the bulk of new legislation is focused on reduction of carbon emissions and encouraging the use of alternative energy, buildings are widely regarded as creating the greatest demand for energy,<sup>12</sup> and consequently the greatest opportunity for energy conservation and demand reduction.<sup>13</sup> Furthermore, construction activities themselves—clearing forests, emissions from idling equipment and transport of materials from distant locations and adding waste from con-

struction debris to landfills (that produce methane)—are all seen as contributing to the GHG problem.<sup>14</sup>

In addition to legislation, real estate industry-based initiatives are having a major impact on the way buildings are designed, constructed and operated. The most prominent of these initiatives is Leadership in Energy and Environmental Design (LEED), a green building certification system administered by the U.S. Green Building Council (USGBC).<sup>15</sup> LEED certification programs have been established for various categories of real estate products, such as existing buildings, new construction or commercial interiors. Under the LEED certification programs, points are awarded on a 100-point scale (with 10 bonus points available) among categories that include sustainable sites, water efficiency, energy and atmosphere, materials and resources, and indoor environmental quality. LEED certifications are awarded based on the points allocated to the project from design characteristics that are available in each category and incorporated into the project, such as installation of bike racks and changing rooms or use of daylight-sensitive lighting controls. The certifications above the level of certified are designated by reference to color—platinum, gold or silver. To earn a LEED certification, a project must be registered with the USGBC, and submitted to the USGBC for review and evaluation.

While LEED has emerged as the most prominent voluntary evaluation and certification program for environmentally responsible design, there are other programs available to assess the performance of a building and building systems. Green Globes is a web-based assessment tool and rating system that uses a questionnaire format.<sup>16</sup> Energy Star is a joint program of the Environmental Protection Agency and Department of Energy that rates and certifies a variety of products for lower energy use and environmental impact. The Energy Star program

also has an assessment and certification program for new homes and commercial buildings.<sup>17</sup> The American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) promulgates industry standards for building systems, and has developed and published standards to promote the implementation of energy-efficient systems, including the most notable Standard 189.1.<sup>18</sup> In New Jersey, the pay for performance initiative is a comprehensive energy efficiency program, sponsored by the state and the Board of Public Utilities, that provides incentives toward whole-building energy improvements.<sup>19</sup>

While now it is largely a matter of choice for businesses and developers whether to implement practices and policies that reduce the carbon footprint, it can increasingly be expected that municipalities will adopt more stringent building codes requiring compliance with industry standards that compel energy efficiency and implement sustainable construction practices.<sup>20</sup>

States and municipalities have begun to use LEED certification as a green building standard for public building construction or as part of planning and financial incentives.<sup>21</sup> Furthermore, major investors (*e.g.*, CalPERS) and credit tenants are increasingly implementing portfolio requirements that compel owners to incorporate energy efficiency and sustainable operating standards into their buildings.<sup>22</sup> As such, studies that compare the value of green buildings to generic products are increasingly concluding that green and retrofitted buildings command a price, rental and value premium that will attract owners and developers to green building practices.<sup>23</sup>

Perhaps the most visible characteristic of the greening of the built environment is the proliferation of rooftop and ground-mounted solar energy facilities. Nationally, New Jersey is second only to California in the implementation of installed solar energy generation capaci-

ty.<sup>24</sup> New Jersey's leadership in the installation of solar energy facilities is attributable to the availability and value of state incentives, principally revenue from the sale of solar renewable energy certificates (SRECs). These state-sponsored programs, together with federal incentives,<sup>25</sup> reduce the initial investment costs for the installation of solar facilities and make the installation of solar power facilities attractive business propositions.

The implementation of green sustainable development and building management practices, together with the proliferation of solar energy facilities, has not resulted in a tectonic shift in real estate practice. The greening of the built environment, however, raises practical issues in the areas of leasing and financing.<sup>26</sup>

### Leasing

A traditional triple net office lease does not necessarily incentivize a landlord or tenant to implement sustainable practices. Generally, utility charges and other operating expenses that may be altered by green building measures are passed through to the tenant so the landlord does not receive any direct benefit.

The typical tenant does not have an interest in making an investment in the landlord's building systems or other features. However, the implementation of green building practices is necessarily an owner/landlord-centric process, and, as noted previously, major corporate tenants who have made public shareholder commitments to reducing their carbon footprint have an interest in locating in green buildings, as do the many real estate investment trusts (REITs) and institutional investors that are committed to greening their portfolios.

Market forces, as well as changes in law and policy, are driving changes in leasing practices.

One approach to addressing the split incentive problem in commercial leases was recently suggested by the New York City Mayor's Office of Long-term Plan-

ning and Sustainability. Working with industry in connection with a major lease at 7 World Trade Center, a model clause was developed that may prove to be a breakthrough.

Under this model "energy aligned" lease clause, capital improvements intended to improve energy efficiency are included in operating expenses, but the period for the landlord to recover the initial investment in this category of capital improvements is shortened from the typical useful life of the improvements to a "projected payback period." The projected payback period is determined by dividing the cost of the capital improvements by the projected annual savings and expressing the result in months. The simple payback period is further adjusted by multiplying it by 125 percent, and each year the landlord is permitted to pass through a portion of the aggregate cost of this category of capital improvements equivalent to 80 percent of the projected annual savings during the adjusted payback period. The tenant benefits because it receives all of the energy savings after the landlord is compensated for its initial investment.

This language and the approach could serve as a model in other jurisdictions.

Another potential development in lease documentation as truly green buildings and sustainable management practices emerge is a movement toward gross leases. In a gross lease, the landlord is incentivized to reduce operating costs because they are built into the lease. The landlord would get the benefit of reduced operating costs from lower utility bills or the income from SRECs. From the tenant's perspective, the green building market could see an emphasis on separate metering of utilities so the tenant could achieve the direct benefit of reduced occupancy costs arising from the installation of low-consumption utility or water management features in its leased space.

At this time, truly green leases are probably best considered a separate and

emerging category of documentation that will appropriately incentivize the landlord and tenant to adopt and continuously operate in accordance with established green standards such as LEED for existing buildings operations and maintenance.

For now, the issues arising from implementation of sustainable real estate management practices in net leases centers on avoiding unforeseen initial fit-up or occupancy costs, operating expenses and building rules and regulations.

Whether a building is a newly constructed green building or an existing building that has been retrofitted, a tenant contemplating significant improvements should determine whether the landlord has design or operating criteria that will impose unanticipated costs on the tenant's construction. While low-flow toilets, low-demand lighting fixtures or programmable controls may not result in a 'material' increase in cost of the initial build-out, compliance with the comprehensive ASHRAE 90.1 standard or the incorporation of renewable materials into the space may have a significant and material cost impact.

Similarly, operating expense clauses should be considered carefully, because clauses routinely regarded as standard may become an unintended vehicle for the imposition of a new category of expense. For example, more jurisdictions (notably New York City as of May 1, 2011)<sup>27</sup> are requiring some building owners to benchmark energy and water usage; presumably the landlord would expect to recoup these costs as a category of legal compliance costs.

In addition, certain elements of green building operations may potentially interfere with a tenant's intended use of the premises or increase operating costs. For example, the landlord may implement daytime cleaning and maintenance to reduce after-hours utility costs by its janitorial staff; presumably, this could create security and operational

concerns for the tenant.

Increasingly, full-building tenants are being approached by solar energy providers with proposals for the installation of solar facilities at their leased premises. While the installation of solar may be economically attractive and desirable for marketing purposes, a tenant considering such an installation should carefully review their lease to determine whether it has the right to install solar panels. An alterations clause in a lease typically prohibits the tenant from making changes to building systems or structural features, such as the roof. The installation of a solar power system will require changes to the leased building's electrical system, and the location of solar panels on the roof may require roof penetrations, so the landlord will likely have consent rights over the changes. Furthermore, many solar power purchase agreements treat the space where the facilities are installed, particularly the solar panels, as licensed or subleased by the user. The lease, however, may prohibit further licensing or subleasing without the landlord's consent.

### **Real Estate Acquisitions and Financing**

As green building features and operating practices are implemented more widely, and alternative energy systems, particularly solar, proliferate, additional issues arise for consideration in acquisitions and financing.

If a building has a photovoltaic system installed, or another alternative energy generator such as a wind turbine, a prospective purchaser cannot assume that these facilities belong to the owner of the building. Often these facilities are installed pursuant to a power purchase, energy supply or other agreement pursuant to which the building owner 'hosts' the facility and utilizes the energy generated while the developer receives the revenue from the sale of the SRECs and other environmental attributes.

From the perspective of drafting an acquisition or loan agreement relating to property where a solar or alternative energy system has been installed, it is appropriate to consider the incorporation of representations and warranties analogous to those requested in connection with a lease or agreements relating to the operation of the real estate. For example, representations relating to the ownership of the solar facilities or alternative energy equipment, the terms of the power purchase or other agreement pursuant to which the equipment is installed and maintained, and other matters, are reasonable and appropriate if the new owner or lender succeeding to title in a foreclosure is expected to assume obligations relating to the equipment.

Similarly, a new building owner may be relying on the reduced energy costs from the generation of solar power so that an estoppel certificate from the solar or alternative energy provider may be appropriate to confirm that there are no defaults under the applicable agreement.

If a building is being financed and the property owner is party to a power purchase agreement, the lender may also consider requiring a subordination, non-disturbance and attornment agreement from the power provider, particularly where the agreement grants the power provider a leasehold interest in the property. In the event of a foreclosure, the lender (and future owner) would have the benefit of a clear contractual subordination, and through the non-disturbance and attornment provisions would have the continuing benefit of the operation of the photovoltaic or other alternative energy system and the attendant energy savings.

Representations and warranties with respect to these matters may not be sufficient. Accordingly, due diligence inquiries with respect to a real estate acquisition or mortgage loan should include a request for all documentation relating to the installation and opera-

tion of the alternative energy facilities. To the extent that there is a roof-mounted solar facility, the due diligence investigation of the site should potentially include a review of the manner of installation to confirm that the terms of any roof warranty have not been violated by the installation of the solar facilities.

As more federal, state and local regulations mandate the implementation of sustainable real estate management practices, and the market compels building owners to implement green building standards through voluntary compliance programs such as LEED and Green Globes, a real estate practitioner's checklist may similarly expand with respect to legal due diligence. If a building is being marketed for sale as a green building, the buyer may want to verify the certification with the USGBC or another certifying body. Alternatively, the due diligence investigations may expand beyond the building to the legislation or ordinances applicable in the jurisdiction where the building is located. It could be useful to determine whether any pending legislation would impose any additional operating costs on the owner, such as benchmarking or LEED-influenced building code changes.

## Conclusion

The evolving response global warming has a disproportionate impact on attorneys who advise real estate and construction industry clients. Over the coming years, as carbon emissions mitigation strategies such as the implementation of green building practices and installation of solar and alternative energy systems, and adaptation responses such as perhaps enhanced storm and flood mitigation systems or more efficient building cooling systems expand across the market, new considerations will inform legal practice in this area. ♣

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24. [www.njcleanenergy.com/renewable-energy/programs/solar-renewable-energy-certificates-srec/new-jersey-solar-renewable-energy](http://www.njcleanenergy.com/renewable-energy/programs/solar-renewable-energy-certificates-srec/new-jersey-solar-renewable-energy).
25. A discussion of the various federal programs and tax incentives is generally beyond the scope of this article. The principal federal incentives include the business energy tax credit (IRC § 48), which provides a credit for 30 percent of expenditures on solar, fuel cells and small wind turbines, and 10 percent credit for geo-thermal systems, micro turbines and combined heat and power.
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# Federal Tax Legislation Favors Alternative Energy Development and Energy Efficiency Initiatives

by Richard D. Martinson

Since the 1970s, United States tax policy at the federal level has been directed, at least in part, toward large-scale subsidization of the domestic energy industry, encouraging the development of a broad array of renewable and energy-efficient technologies through targeted legislation in the Internal Revenue Code of 1986, as amended. This trend has continued into the 21st century, and has been given new life by the Obama administration through two separate legislative packages that include energy-directed tax provisions: the American Recovery and Reinvestment Act of 2009 (ARRA)<sup>1</sup> and the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010.<sup>2</sup>

**T**his article will identify certain discrete aspects of both acts that are directed to the encouragement of renewable energy production and energy conservation, and will discuss some of the practical implications of this legislation for the New Jersey business community.

## Business-Related Energy Tax Incentives

ARRA contained a number of changes to the code that are specifically directed at various segments of the U.S. energy industry. Some of the more notable and taxpayer-favorable provisions of the ARRA were manifested in the form of investment tax credits (ITCs), extensions of applicable “placed in service” qualification dates and other tax breaks specifically

targeting businesses promoting certain types of renewable energy sources. Set forth below is a summary of some of the tax changes contained in ARRA that are most likely to be of interest to taxpayers engaged in this segment of the energy production business.

### *Energy Property Credit*

Under Section 48 of the code, an ITC is available with respect to investments in certain types of “energy property.” Energy property for this purpose, and the amount of the ITC “energy percentage” available with respect to such property,<sup>3</sup> includes the following:

- Solar energy property and “qualified fuel cell” power plants (30 percent ITC)
- Small commercial wind energy property (30 percent ITC)
- Geothermal energy property and “qualified stationary microturbine” power plants (10 percent ITC)
- Combined heat and power systems (“co-generation facilities”) that generate thermal energy along with electrical or mechanical power (10 percent ITC)
- Geothermal heat pumps that use ground or groundwater as a thermal energy source to heat or cool buildings (10 percent ITC)

ARRA significantly enhanced the value of the ITC available for “qualified small wind energy property,” which is property using a wind turbine with a nameplate capacity of not more than 100 kilowatts to generate electricity. Under pre-ARRA law, the tax credit otherwise available for such property was

limited to \$4,000, and expired as of Dec. 31, 2008. The ARRA repealed the dollar limitation, as applied to qualified small wind energy property, and the credit is now available for periods through Dec. 31, 2016.

In addition, under pre-ARRA law, where property was financed in whole or in part by subsidized financing or tax-exempt private activity bonds, the amount taken into account as tax basis for purposes of calculating the energy credit was reduced by a formula designed to 'back out' that portion of the basis attributable to such tax-favored financing. This limitation was repealed by the ARRA for periods after Dec. 31, 2008.

#### **Advanced Energy Project Credit**

As part of the ARRA, Congress added a tax credit under Section 48C of the code, for investments in "qualifying advanced energy projects." The new credit, which was enacted as a component of the investment tax credit system, is equal to 30 percent of the qualified investment costs, and is specifically designed to encourage the development of a domestic manufacturing base to support the American renewable energy industry. A qualifying advanced energy project is one that "re-equips, expands or establishes a manufacturing facility" for any of the following:

- Property designed to produce energy from wind, solar, geothermal or other "renewable resources"
- Fuel cells, microturbines, or an energy storage system for use with electric or hybrid-electric motor vehicles
- Electric grids to support the transmission or intermittent sources of renewable energy, including storage of such energy
- Property designed to capture and sequester carbon dioxide
- Property designed to refine or blend renewable fuels

- New qualified plug-in electric drive vehicles or components specifically designed for use in such vehicles
- Any other "advanced energy property designed to reduce greenhouse gas emissions," as determined by the Treasury Department

Unlike the more conventional energy-based ITCs described above, credits for qualifying advanced energy projects under Section 48C are limited in amount, must be applied for by the taxpayer and are specifically allocated by the Treasury Department.

#### **Renewable Resource Electricity Production Credit**

Under Section 45 of the code, a renewable electricity production credit (PTC) is available for certain qualified renewable energy facilities (including wind, biomass, geothermal and solar, among others) engaged in production and sale of electricity to unrelated third-party consumers.<sup>4</sup> The PTC is available over a 10-year period following the placed-in-service date of the qualified facility, and the 2010 rate at which the credit is calculated (annually adjusted for inflation) is 2.2 cents per kilowatt-hour produced and sold by the qualified facility.

The ARRA generally extended the required placed-in-service dates under Section 45 for wind facilities to Dec. 31, 2012, and for other eligible facilities to Dec. 31, 2013.

For a renewable energy facility that is eligible for the PTC, the ARRA provides taxpayers with an irrevocable election to claim a 30 percent ITC under Section 48 of the code, in lieu of taking the otherwise available PTCs. This election is available during the entire period for which the PTCs were extended by the ARRA (*i.e.*, through the end of 2012 for wind facilities and through the end of 2013 for other eligible renewable resource facilities). It is not available for

any facility that has received PTCs in prior tax years.

#### **Cash Grants in Lieu of ITC or Electricity Production Credit**

Section 1603 of the ARRA introduced an entirely new energy-based tax incentive that allows owners of renewable energy projects that qualify for the Section 48 ITC (including projects otherwise eligible for the PTC under Section 45) to forego a tax credit in favor of a direct nontaxable cash payment from the Treasury Department in an amount equal to the corresponding ITC. As originally enacted by the ARRA, the cash grant is available for eligible projects and facilities that were either placed in service during 2009 or 2010, or placed in service after 2010 if construction began on the facility during 2009 or 2010. As amended by the 2010 tax relief act, the permissible placed-in-service date has been extended through the end of 2011.

The cash grant initiative (sometimes referred to among practitioners as the Section 1603 grant program) is somewhat unusual in that it is directly administered by the Treasury Department, and is, therefore, procedurally distinct from the longstanding ITC (and PTC) regime, which falls under the purview of the Internal Revenue Service. The Treasury Department has released guidance on how the program is intended to operate, however,<sup>5</sup> and anecdotal evidence suggests that it has been fairly popular. Approximately \$5.8 billion has been granted under the program thus far. The program has no cap, and grants are not awarded on a competitive basis.

As is true for conventional ITCs, in order to be eligible for the grant program, the specified energy property must be used in a trade or business, or held for the production of income. Residential or non-business properties are not eligible. Eligible applicants under the program receive grants of either 10

or 30 percent of the basis of the specified energy property, depending on the type of property.

The legislative history to the Section 1603 cash grant program indicates that the program is intended to mimic the operation of the Section 48 ITC, including with respect to procedural items such as tax basis adjustment for facilities qualifying for the grant, and applicable recapture rules.<sup>6</sup> Moreover, both the statute and the Treasury Department guidance make clear that certain persons (*e.g.*, tax-exempt organizations, governmental entities) are ineligible to participate in the program, and that any indirect investment by any such person in an otherwise eligible project or facility will disqualify the facility completely.

As a matter of tax policy, the Section 1603 grant program is clearly intended to stimulate economic investment in 'green' businesses, much like the more traditional ITC program. Additionally, however, the cash grant program also offers the potential benefit of being available to businesses that are not currently in a tax-positive position, and thus may be unable to derive economic benefit from a traditional tax credit.

### **Financing Structures**

As suggested above, tax benefits attributable to capital expenditures for energy-related projects have, as a practical matter, typically been limited to institutional investors, primarily because the ability to exploit the economic value of such benefits depended in large part on a sufficiently large tax base against which to apply the available ITCs. Various financing structures have traditionally been utilized to permit project developers—who often are not in a position to directly enjoy such benefits—to effectively monetize those tax attributes by transferring them to passive investors with the economic wherewithal to more effectively use them. Two such financing structures are

the sale-leaseback and the flip partnership.

In a typical sale-leaseback transaction, a developer would construct a qualified energy property (*e.g.*, a solar facility capable of producing electricity) and, under formally approved tax leasing guidelines, sell the facility to an institutional investor (*e.g.*, a bank), while entering into a long-term leaseback of the facility. The developer would then either operate to produce and sell electric power to third-party end users, or on-lease to an independent operator. Such a financing structure would permit access to the accompanying tax benefits in a variety of ways, including:

- Accelerated tax depreciation deductions (including bonus depreciation, which was substantially enhanced by both the ARRA and the 2010 tax relief act), as well as the energy property ITC (but not the PTC) remaining with the institutional investor/lessor of the project.
- Depreciation benefits remaining with the investor/lessor, but an elective pass-through of the ITC benefits to the lessee/operator.
- Depreciation benefits remaining with the investor/lessor, but with the lessee/operator retaining the option to forego ITC tax benefits in favor of annual PTCs, based on the electricity produced over a 10-year period.

As an alternative to the sale-leaseback structure, energy projects have also frequently been financed through partnership/limited liability company arrangements, sometimes known as flip partnerships. Under this structure, an institutional investor contributes capital to a single-purpose LLC (through which the developer usually has developed a qualified facility), and is allocated substantially all of the near-term tax benefits and cash flows produced by the project. After the institutional investor's

capital (and a pre-negotiated return) has been repaid through operating cash flow distributions, the developer is compensated for its time, effort and capital invested in the project through adjusted (or flipped) income and cash flow allocations, later in the project's operating life.

While the above-described financing structures remain available under current law, the changes to tax-energy policy effected by the ARRA were implemented in large part with the recognition that many institutional players have either suffered a significant reduction in taxable income (and therefore have a reduced appetite for tax-sensitive investment benefits), or have simply become more cautious in their capital investment decisions.

The energy-related tax legislation in the ARRA addressed these concerns in three significant ways:

1. by permitting developers to convert PTCs otherwise available with respect to qualified facilities into an ITC, thereby front-loading economically valuable tax attributes;
2. by allowing the elective conversion of otherwise available ITCs or PTCs into a cash grant under the Section 1603 program, thereby obviating the need for a taxable income base sufficient to utilize the tax credits; and
3. by reducing the required tax-basis adjustment for qualified projects to only one-half of the amount of the cash grant (or ITC) received with respect to the facility, thereby expanding the overall economic tax value of the investment.

Accordingly, in addition to the increased absolute value of the tax benefits made available under the ARRA for energy-related projects, the legislation also significantly expanded the pool of taxpayers potentially able to enjoy those benefits on a near-term timetable.

## Non-Business Tax Incentives

### Non-Business Energy Property Tax Credit

Under Section 25C of the code, taxpayers may claim a personal income tax credit (the non-business energy property tax credit) for certain energy-efficient property installed in a dwelling located in the U.S. and owned and used by the taxpayer as a personal residence. Under the ARRA, for property placed in service in 2009 and 2010 the credit is equal to 30 percent (increased from 10 percent under pre-ARRA law) of the sum of: 1) the amount paid during the year for qualified energy efficiency improvements installed during the year, and 2) the amount of residential energy property expenditures paid by the taxpayer during the tax year for the purchase of: a) advanced main air circulating fans, b) qualified natural gas, propane or oil furnace or hot water boilers, and c) energy efficient building property. The aggregate amount of the credit for both years cannot exceed \$1,500.

The 2010 tax relief act reconfigured the non-business energy property tax credit and extended it for one year, through Dec. 31, 2011, at pre-ARRA limitations, so that a taxpayer may claim a credit for qualified energy property placed in service during 2011, but only to the extent any prior credits claimed for 2009 or 2010 do not exceed \$500. Thus, the Section 25C credit available for 2011 is equal to 10 percent of the amount paid for qualified energy efficiency improvements installed during 2011, plus the amount of residential energy property expenditures paid during that year.

Certain limitations apply to expenditures incurred for certain specified types of residential energy property.

### Residential Energy-Efficient Property Credit

Under Section 25D of the code, taxpayers are allowed a nonrefundable personal tax credit known as the residential

energy efficient property (REEP) credit, equal to 30 percent of expenditures incurred for qualified solar electric, solar water heating, fuel cell, small wind energy and geothermal heat pump property placed in service before 2017. The REEP credit for fuel cell property is limited to \$500 for each 0.5 kilowatt of capacity. Prior to 2009, the credit was limited to \$2,000 for solar water heating and geothermal pump property, but the ARRA removed these limitations for taxable years beginning after 2008.

## Conclusion

As the foregoing discussion suggests, much of the tax legislation coming out of Congress in recent years has taken the form of tax expenditures (*i.e.*, programs directed to, and explicitly designed to assist, particular domestic industries and economic activities). While the ARRA (which is sometimes referred to as the stimulus act) was clearly enacted as part of a much broader attempt to stimulate overall economic and business activity in the U.S., the energy-related tax expenditures contained in the act are likely to be of relatively short duration. Accordingly, it behooves taxpayers involved in the energy industry, and their advisers, to carefully consider whether those enhanced tax benefits could tip the scales in turning an otherwise dubious project proposal into a clearly profitable investment return on their much-needed capital. ☺

## Endnotes

1. P.L. 111-5, 2/17/2009.
2. P.L. 111-312, 12/17/2010.
3. An ITC allows a dollar-for-dollar credit against the taxpayer's net income tax liability and, in the case of energy property, is an amount equal to the applicable energy percentage multiplied by the taxpayer's tax basis (generally acquisition cost) in the qualified energy property.

4. Perhaps of particular interest to New Jersey-based businesses, the list of PTC-eligible qualified facilities includes "marine and hydrokinetic renewable energy facilities," which derive energy from waves, tides and currents in oceans, as well as free-flowing water found in estuaries, tidal areas, rivers, lakes and streams and certain man-made systems, such as irrigation systems and canals. The expanded list also includes facilities creating energy through the process of ocean thermal energy conversion.
5. Treasury guidance can be found on the Treasury Department website at <http://www.treasury.gov/initiatives/recovery/Pages/1603.aspx>.
6. Section 50 of the code requires that the tax basis of energy property with respect to which a taxpayer has received an ITC must be reduced by an amount equal to 50 percent of the credit, and an equivalent basis adjustment rule applies to property qualifying for participation in the Section 1603 program. Similarly, to the extent such property subsequently becomes ineligible as qualifying energy property within five years of the cash grant, a portion of the grant monies are subject to recapture.

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# Harnessing the Wind

## Development of Wind Energy Projects in New Jersey

by Marshall McLean, Henry King and Matthew Thomas

Since signing the New Jersey Offshore Wind Economic Development Act<sup>1</sup> into law last August, New Jersey Governor Chris Christie has helped to give the Garden State a prominent seat at the fictional table of states with ‘serious wind potential.’ Once a debate dominated by western states such as California, Texas and Iowa, New Jersey now finds itself as the leading advocate for the development of offshore wind along the Mid-Atlantic corridor.

**E**ven more recently, the Obama administration’s promulgation of a program through the Department of the Interior’s Bureau of Ocean Energy Management to streamline the development of offshore wind along the Atlantic Ocean’s outer continental shelf has caused most to view New Jersey as a state on the forefront of offshore wind development.<sup>2</sup> For a state that is near the bottom of the rankings of installed wind capacity, that is quite an accomplishment.

In describing New Jersey’s sudden emergence as a preeminent player in the race for offshore wind, this article examines onshore wind developments in the state before providing a review of the legislative activities that have helped New Jersey position itself as the state most likely to economically benefit from offshore wind. Before New Jersey can become a serious leader in bringing offshore wind to North America, however, state government, utilities and developers in the state must overcome a number of possible impediments to development.

This article concludes with a discussion of those issues.

### Onshore Wind Development in New Jersey

Historically, utility-scale terrestrial-sited wind generation in New Jersey has been minimal due to the lack of inland wind resources.<sup>3</sup> Simply put, developers are unable to obtain financing for wind farms built in locations where the wind does not blow. The state’s only terrestrial wind project is the 7.5-megawatt (MW) Jersey-Atlantic Wind Farm located in Atlantic City.

However, the lack of utility-scale development has not overwhelmingly curtailed the development of smaller community wind projects around the state. In fact, currently more than seven New Jersey municipalities have passed ordinances addressing the construction of small wind energy systems (generally defined as machines with a nameplate capacity of 100 kilowatts or less).<sup>5</sup> Many of these ordinances have been based upon a model ordinance provided by the New Jersey Wind Working Group.<sup>6</sup> Practitioners whose clients include communities or individuals interested in community wind are encouraged to review the model legislation on the New Jersey Clean Energy Program website.

Additionally, the state Legislature has done its part to encourage community wind development in both industrial- and residential-zoned parcels. On the industrial side, electricity production using a wind energy system on an industrial-zoned parcel of 20 acres or more is considered a permitted use. This permission applies universally in all municipalities in the state.<sup>7</sup>

For residential use, New Jersey enacted legislation designed to prevent municipalities from adopting regulations that either place unreasonable limits on small wind energy systems or hinder their performance.<sup>8</sup> Unreasonable limits or possible hindrances would include:

1. outright prohibition of small wind energy systems in all districts of a municipality;
2. generic height restrictions that do not specifically address the allowable tower height or system height (tower plus the affixed wind generator) of small wind energy systems;
3. property boundary setback requirements greater than 150 percent of the system height;
4. setting maximum noise limits lower than 55 decibels at the property line or not allowing the limit to be exceeded during short-term events such as power outages or wind storms; or
5. setting structural or design standards that exceed the state Uniform Construction Code or technical bulletin(s) to be developed by the Division of Codes and Standards within the New Jersey Department of Community Affairs.

Despite these legislative examples, the legal authority governing small wind turbine construction and operation continues to evolve. Most recently, the New Jersey Department of Community Affairs and the Department of Environmental Protection have been tasked with developing technical guidance on these issues. Practitioners should be mindful of this evolution, as risks in change of law and legislative uncertainty have real, lasting implications. To provide an example, small wind energy systems are costly and, in the case of abandonment (whether due to a government shutdown or otherwise) owners are legally obligated to pay for the removal costs.<sup>9</sup>

### **Building Federal Momentum for Offshore Wind Development**

The Obama administration has set an ambitious goal of generating 80 percent of U.S. electricity from clean sources by 2035. In order to fulfill this goal, the administration, through the joint efforts of the Department of Energy (DOE) and

the Department of Interior (DOI), recently issued a report titled *National Offshore Wind Strategy: Creating an Offshore Wind Industry in the United States*, which serves as the first-ever interagency plan on offshore wind energy and demonstrates a strong federal family commitment to expeditiously develop a sustainable, world-class offshore wind industry in a way that reduces conflict with other ocean uses and protects resources.<sup>10</sup> DOE envisions a scenario that includes deployment of 10 gigawatts of offshore wind-generating capacity by 2020 and 54 gigawatts by 2030. Such a scenario would provide enough power to produce energy sufficient for 15.2 million average American homes by 2030.

Underscoring the administration's commitment, DOE announced offshore wind research and technology grant solicitations totaling \$50 million.

Even more significant, however, are the administration's new initiatives to speed environmental reviews associated with offshore leases. Previously, delays in project-specific environmental reviews have frustrated both industry and policymakers. Under the new approach unveiled in early February, the administration will push ahead with National Environmental Policy Act<sup>11</sup> (NEPA) analyses for newly designated wind energy areas off the coasts of Delaware, Maryland, New Jersey and Virginia.

In New Jersey, the DOE is aiming its wind energy area analysis on an area that begins seven nautical miles from the shore and extends roughly 23 nautical miles seaward. It extends from southwest to northeast approximately 45 nautical miles between Avalon and Barnegat Light. The entire area is approximately 418 square nautical miles.

The administration characterizes this process as opening the door for the lease issuance process and subsequent approval process of site assessment activities.

In order to meet these ambitious goals, the Mid-Atlantic states will take

the lead in the nation's offshore wind development. Right now, there are no operational offshore wind farms in the United States.

### **Using the State's Own Solar Program as Guidance**

New Jersey, in order to meet its renewable portfolio standard of 30 percent of the state's electricity coming from renewable resources by 2020, made a strong push for solar with the promulgation of the Solar Energy Advancement and Fair Competition Act.<sup>12</sup> Among other things, the act establishes a solar renewable energy credit (SREC) for each MW hour of solar energy produced in New Jersey, while simultaneously mandating the state's utilities to purchase a certain percentage of their supply from solar power in order to avoid solar alternative compliance payments (SACP).

Coupled with various federal incentives designed to promote renewable energy development, the solar act has been instrumental in causing New Jersey to become the "East Coast leader" in solar.<sup>13</sup> It is from this legislation that the Legislature has initially modeled the Offshore Wind Economic Development Act. By signing the offshore wind act into law on Aug. 19, 2010, Governor Christie is attempting to replicate solar's success in the Garden State with offshore wind. The offshore wind act is a strong first step.

### **ORECs Defined**

The offshore wind act amends and supplements the Electric Discount and Energy Competition Act by creating an offshore renewable energy certificate program.<sup>14</sup> As with the solar act, the offshore wind act creates an offshore renewable energy credit (OREC) that a qualified offshore wind project can earn for each megawatt-hour of offshore wind produced. The New Jersey Board of Public Utilities (BPU) would require each supplier/provider that sells electricity to retail customers in New Jersey to ensure

that the electricity sold includes at least a minimum percentage of offshore wind energy as set by the BPU following the approval of a qualified offshore wind project. While the statewide OREC target will be determined by the BPU based on projected offshore wind energy production for any given year, the initial goal of the offshore wind act is to support the generation capacity of 1,100 megawatts from offshore wind projects.

### EDA Incentives

The offshore wind act further authorizes New Jersey's Economic Development Authority (EDA), as a supplement to the Urban Transit Hub Tax Credit Act,<sup>15</sup> to provide grants and other forms of financial assistance from New Jersey's Global Warming Solutions Fund to "develop qualified offshore wind projects...and to provide financial assistance to manufacturers of equipment associated with qualified offshore wind projects." In addition to the grants and funding, the EDA can also provide credits equal to 100 percent of a business's investment toward a qualified wind energy facility located within an "eligible wind energy zone."

A qualified wind energy facility means buildings, including port improvements, and machinery and equipment used in the manufacturing, assembly, development or administration of component parts that support the development and operation of a qualified offshore wind project (or other wind energy project determined by the EDA), and that are located in a wind energy zone. The term "wind energy zone" refers to property located in the South Jersey Port District.<sup>16</sup> In particular, a brownfield site in Paulsboro, once used as an oil terminal, is being redeveloped as a deep-water port on 190 acres along the Delaware River. Legislation has been introduced by New Jersey State Senators Stephen M. Sweeney and Thomas H. Kean Jr. that proposes to amend the def-

inition of a wind energy zone to include "the port district of the Port Authority of New York and New Jersey."<sup>17</sup>

### Proposed BPU Rules

On Feb. 9, 2011, the BPU proposed new unofficial rules to codify the new statutory requirements enacted through the offshore wind act. The rules are designed to provide an application process and framework under which the BPU will consider and approve applications for qualified offshore renewable facilities and ORECs. In addition to the application procedures, the rules include the need for an escrow account, the ability for the BPU to designate the application window, and the ability for the BPU to impose appropriate conditions upon any OREC grant.<sup>18</sup>

The rules are largely designed to provide predictability and certainty for what many lenders believe is a highly speculative investment. For example, the rules provide for very detailed application procedures and information requirements, including, but not limited to:

1. detailed financials;
2. descriptions of how the facilities will be constructed;
3. maps, surveys and other visual aids;
4. demonstrative evidence that the wind technology to be employed is viable, cost-competitive and suitable for use in New Jersey's offshore environment under varying and expected meteorological and climate conditions;
5. documentation demonstrating that the developer has applied for all current eligible state and federal grants, rebates, tax credits and programs available to offset the cost of the project;
6. the projected electrical output and anticipated market prices over the anticipated life of the project, including a forecast of electricity revenues from the sale of energy derived from the project and capacity, as well as

revenues anticipated by the sale of any ORECs, RECs, air emission credits or offsets or any tradable environmental attributes created by the project;

7. a detailed cost benefit analysis for the project; and
8. an analysis of the anticipated environmental benefits and environmental impacts of the project.

Applicants must also establish a \$100,000 escrow account with review of the application.<sup>19</sup>

Perhaps the most notable portion of the application is its requirement that the applicant propose an OREC pricing method and schedule for the BPU's consideration. Allowing for developers to set the OREC price for each specific project while simultaneously having the BPU mandate an open-book inspection process in order to prevent excess profits (and thus protect utilities) provides economic certainty to those who both lend to and build these costly offshore projects.

This process makes the application procedures truly unique and perfectly situated to allow developers and lenders to overcome uncertain economics by offering utilities the possibility of a long-term, fixed-price power purchase agreement. Whether such certainty will overcome some of the factors that lead to high upfront costs, substantial risk and permitting uncertainty (described below) only time will tell.

### Impediments to Development

Development of offshore wind faces significant logistical and legal hurdles. Undertaking offshore wind construction on a broad scale requires extensive domestic maritime capabilities, including vessels and infrastructure, which are not fully in place. Wind farm construction requires specialized jack-up construction barges, as well as an array of support and supply craft capable of handling delicate and unwieldy components. Marine and

construction crews must be armed with the necessary training and experience, and shore-side port infrastructure must be readied to support these projects. Securing this construction capacity is no small challenge; in addition to issues of supply and demand (such as competing with European projects for scarce maritime assets), wind farm developers must comply with rigorous nationality restrictions in U.S. maritime laws.

For example, the federal coastwise laws,<sup>20</sup> including the Jones Act<sup>21</sup> and the Passenger Act,<sup>22</sup> restrict the transportation of passengers or 'merchandise' (in practice, nearly all goods) between U.S. points to U.S.-flag vessels that are built in the U.S. and owned and controlled by U.S. citizens.

The coastwise laws cover more than port-to-port shipments. They cover voyages to points in the territorial sea (a three-nautical-mile-wide belt). In addition, the coastwise laws apply to points beyond three miles, on the Outer Continental Shelf, by virtue of the Outer Continental Shelf Lands Act (OCSLA).<sup>23</sup> OCSLA states that U.S. laws "are extended to the subsoil and seabed of the Outer Continental Shelf and to all artificial islands, and all installations and other devices permanently or temporarily attached to the seabed, which may be erected thereon for the purpose of exploring for, developing, or producing resources therefrom...."

The largely unprecedented application of the coastwise laws to offshore wind projects is fraught with legal uncertainty. The coastwise laws apply only to movement of goods and passengers, not to stationary construction activities; however, in the offshore oil and gas industry, drawing the line between those activities has not always proven simple, as even minimal repositioning of materiel can implicate the Jones Act.

In recent years, Customs and Border Protection has grappled with disputes over the type of construction equip-

ment that may be carried aboard work boats without implicating the Jones Act. Indeed, many continue to question whether wind is the type of natural resource Congress intended to be covered by the OCSLA, although the administration appears to strongly believe it is. In addition, such activities likely would be subject to unique Outer Continental Shelf citizenship rules set out in the OCSLA and Coast Guard regulations, which themselves have been a magnet for controversy.

The result has been that many would-be investors remain on the sidelines, unwilling to commit resources to building this critical maritime infrastructure without a greater sense of certainty and security of the long-term regulatory and citizenship landscape.

### Conclusion

To conclude, the Offshore Wind Economic Development Act has helped to place the Garden State at the forefront of the nation's long-term wind-energy solution. While onshore wind has a way to go before New Jersey can be considered a leader in that application, the state's offshore wind legislation provides a level of practical certainty in an otherwise unknown frontier of exorbitant development costs and substantiated risk. Through this legislation, and the BPU's efforts to develop innovative rules and regulations affecting offshore wind development in New Jersey, this emerging area of law is likely to be one to which New Jersey's lawyers will be soon be exposed. ♪

### Endnotes

1. P.L. 2010, c. 57, which amended N.J.S.A. 48:3-49 *et seq.*
2. Department of Energy, *A National Offshore Wind Strategy: Creating an Offshore Wind Energy Industry in the United States*, 2011.
3. American Wind Energy Association, Washington, DC, [4. National Renewable Energy Laboratory for the Department of Energy, \*Wind Resources of the United States\*, Roberts, B., Dec. 12, 2008.
  5. For a complete list, see \[www.njcleanenergy.com/renewable-energy/technologies/wind/small-wind-systems/small-wind-systems\]\(http://www.njcleanenergy.com/renewable-energy/technologies/wind/small-wind-systems/small-wind-systems\).
  6. Copies of the model ordinance can be found on the NJ Clean Energy Program's website at \[www.njcleanenergy.com/renewable-energy/technologies/wind/small-wind-systems/small-wind-systems\]\(http://www.njcleanenergy.com/renewable-energy/technologies/wind/small-wind-systems/small-wind-systems\).
  7. P.L.1975, c.291 \(C.40:55D-1, \*et seq.\*\), eff. March 31, 2009.
  8. A.B. 3740, eff. Jan. 16, 2010.
  9. \*Ibid.\*
  10. Department of Energy, \*A National Offshore Wind Strategy: Creating an Offshore Wind Energy Industry in the United States\*. location; 2011.
  11. The National Environmental Policy Act of 1969, as amended, \(Pub. L. 91-190, 42 U.S.C. 4321-4347, Jan. 1, 1970, as amended by Pub. L. 94-52, July 3, 1975, Pub. L. 94-83, Aug. 9, 1975, and Pub. L. 97-258, § 4\(b\), Sept. 13, 1982\).
  12. P.L. 2009, ch. 289.
  13. National Renewable Energy Laboratory \(October 2010\). 2009 U.S. State Clean Energy Data Book, United States Department of Energy, \[www.nrel.gov/applying\\\_technologies/state\\\_local\\\_activities/pdfs/48212.pdf\]\(http://www.nrel.gov/applying\_technologies/state\_local\_activities/pdfs/48212.pdf\). Retrieved 2011-02-14.
  14. N.J.S.A. 48:3-49 \*et seq.\*
  15. P.L. 2007, c.346 \(C.34:1B-208-209\).
  16. South Jersey Port Corporation Act, N.J.S.A. 12:11A.
  17. S-2231, introduced Sept. 14, 2010, proposes to amend Offshore Wind Economic Development Act, P.L. 2010, c.57.
  18. New Jersey Board of Public Utilities \(February 2011\), NJBPU Offshore Wind Regulations—Unofficial, \[www.state.nj.us/bpu/\]\(http://www.state.nj.us/bpu/\), Retrieved 2011-02-14.](http://www.awea.org/documents/factsheets/Industry</a></li>
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19. N.J.A.C. 14:8-6.
20. 46 U.S.C. §§55102 *et seq.*
21. 46 U.S.C. §30104.
22. 46 U.S.C. §289.
23. 43 U.S.C. §§ 1331-1356.

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# Here Comes the Sun

## Land Use Laws Affecting the Development of Solar Energy Facilities in New Jersey

by Richard M. Hluchan

New Jersey has become a leader in the renewable energy marketplace, especially in producing energy from the sun. As of late 2010, New Jersey had reached 200 megawatts (MW) of solar capacity with more than 6,800 projects statewide. This is enough electricity to power between 160,000 and 200,000 homes. This makes the state number two in the nation in terms of grid-connected solar photovoltaic-installed capacity. By contrast, nine years ago New Jersey had only six solar installations.<sup>1</sup>

**H**ow did the state come so far in such a short time? Through the enactment of forward-thinking legislation and strong regulatory policies favoring the development of alternative energy sources, especially solar. New Jersey's green initiative began in 1999, with legislation that gave rise to the Clean Energy Program, providing financial incentives and rebates to offset the up-front cost of going solar.<sup>2</sup>

It got serious with the Global Warming Response Act,<sup>3</sup> adopted in July 2007, which also gave a boost to alternative energy, and solar in particular. That legislation mandated the statewide reduction of greenhouse gas emissions to 1990 levels by 2020, translating to about a 20 percent reduction. A further reduction of emissions to 80 percent of 2006 levels is required by 2050.

Solar energy is playing a major role in helping to achieve these aggressive goals. New Jersey has established a model program for solar development, the core of which is a strong renewable portfolio standard (RPS),<sup>4</sup> which requires utilities to produce about 1,500 MW of electricity through solar by 2021. Another tool is the solar renewable energy certificate (SREC), which provides energy credits and long-term financing for those who invest in solar.<sup>5</sup>

New Jersey is the first government in the world to adopt the use of SRECs to finance solar projects on a broad scale. The concept is relatively simple; for every 1,000 kilowatts (one MW) of electricity generated by solar, the generator receives one SREC. These SRECs can, in turn, be sold to utilities on the open market, and their value is correlated to the alternative compliance fee the utility would incur for not meeting their RPS to source some of their energy from the sun. SRECs thus provide owners of solar facilities a source of revenue to help offset the cost of installation. SRECs provide New Jersey's utilities with a means to financially support the production of solar energy; if the utilities are not producing solar power themselves, they can satisfy their RPS by buying it in the form of SRECs from someone who is producing it.

Solar facilities in New Jersey range in scale from a few solar panels on a home rooftop, to tens (or hundreds) of panels on industrial or commercial buildings or in parking lots, to solar farms consisting of hundreds (or thousands) of ground-mounted panels spread over tens (or hundreds) of acres of land. Naturally, such projects present challenging land use and environmental permitting issues.

The beauty of solar projects is that if careful consideration is given to siting, few issues are presented. The primary issue is aesthetic; since solar panels are still relatively uncommon, people are simply not fully comfortable viewing them. Some think they are ugly and degrade familiar scenic vistas. While landscape buffering goes a long way toward mitigating perceived

adverse affects, it must be remembered that to effectively produce electricity the panels must be exposed to the sun, and cannot be completely hidden from view.

Solar panels do not produce adverse impacts often associated with other kinds of development. They do not pollute the air, water, or soil; they do not produce radiation or other harmful emissions; they do not require fertilizer, pesticides or herbicides; they generate no traffic or population congestion; they do not generate sewage or stormwater runoff; and they make little, if any, noise. In addition, solar panels do not generate any need for municipal services, such as trash collection, snow removal, or road or sidewalk repairs. Solar facilities generate additional municipal tax revenue, but produce no children who must be educated in local schools. It is hard to imagine a lower-impact use.

This does not mean that solar panels can be sited anywhere. Agencies such as the Department of Environmental Protection, Pinelands Commission, and Highlands Commission would no doubt frown upon clear-cutting of existing forest land to construct a solar farm, especially if wetlands, threatened or endangered species habitat, or other environmentally sensitive land is involved. Large solar farms are best located on existing cleared areas, such as farm fields, former parking lots, or industrial areas. Brownfields and redevelopment sites, and even former landfills or mining areas, are prime candidates for solar projects.

Given the patchwork of laws affecting development in New Jersey, the Legislature has recently made targeted efforts to accommodate and facilitate the development of solar energy facilities through amendments to various environmental and land use laws. Many of the Legislature's efforts have focused on rethinking and overriding certain zoning, agricultural and environmental provisions that would otherwise significantly impede solar panel installations for residential,

commercial and agricultural users.

Recognizing that few municipal zoning codes presently provide for, or even acknowledge, the need for solar facilities, the Legislature has stepped up to fill this vacuum and preempt local ordinances to some extent. Effective as of March 31, 2009, the Municipal Land Use Law (MLUL)<sup>6</sup> was amended to provide that a solar energy generating facility is considered a permitted use within any zoning district classified as industrial within every municipality in the state, as long as the site comprises at least 20 acres that are all owned by the same person or entity.<sup>7</sup> As a result, solar facilities are now allowed as of right in such areas as a matter of state law.

Even in non-industrial areas, where solar facilities are not allowed as of right, the Legislature has facilitated the process of obtaining a use variance to construct such facilities where they might otherwise be prohibited. Effective Nov. 20, 2009, any "solar or photovoltaic energy facility or structure" is now considered to be an "inherently beneficial use."<sup>8</sup> This is so whether the proposed solar energy facility is a principal use, part of a principal use, or an accessory use. In the past, inherently beneficial uses, such as schools, nursing homes, child care centers, and group homes, were recognized by courts as particularly deserving of use variance consideration.<sup>9</sup> Now, for the first time, solar facilities have been recognized as inherently beneficial by statute.<sup>10</sup>

In practical terms, designation as inherently beneficial significantly reduces the developer's burden of proof to obtain a use variance to construct solar facilities where they would not otherwise be allowed; all that must be demonstrated to the zoning board is that the solar facility will not be significantly detrimental to the public good, or to the local zoning plan. No enhanced quality of proof is required.<sup>11</sup> It should not be difficult to make this case if a reasonable site is selected, given the lack of adverse

impacts attributable to solar projects.

In demonstrating to a zoning board that solar facilities benefit the public good, it should be remembered that the focus should not be parochially limited to the immediate neighborhood, or even the municipality. New Jersey courts have long recognized that "what may be the most appropriate use of any particular property depends not only on all conditions...prevailing within the municipality and its needs, present and prospective, but also on the nature of the entire region in which the municipality is located."<sup>12</sup> While local concerns are important, they are not paramount. As the state policies strongly favoring solar projects make clear, there are broader concerns at the statewide, national and, indeed, global levels that must be considered. These include reducing the use of fossil fuels that contribute to global warming and climate change, and energy independence from foreign producers.

The Legislature has also recently acted to encourage development of solar facilities on landfills or closed resource extraction (mining) operations, regardless of local zoning. In January 2011, both the Assembly and the Senate passed legislation providing that solar facilities "shall be a permitted use within every municipality" on landfills or closed resource extraction sites.<sup>13</sup> The bill also directed the Pinelands Commission to permit these facilities on landfills or closed resource extraction sites under certain circumstances. On March 3, 2011, the governor conditionally vetoed the Senate legislation, requiring technical changes to the bill regarding the existing landfill and resource extraction operations within the Pinelands area.<sup>14</sup>

The Legislature has also addressed impediments facing the installation of solar panels in environmentally sensitive areas as they relate to stormwater management issues. In environmentally sensitive areas such as the Pinelands,<sup>15</sup> the Highlands,<sup>16</sup> and the coastal area regulat-

ed under the Coastal Area Facilities Review Act (CAFRA),<sup>17</sup> regulations typically impose strict impervious coverage limits, often limiting impervious cover to no more than three percent.<sup>18</sup> If solar panels are considered impervious (as several agencies previously stated), they would practically be prohibited in many areas.

As of April 22, 2010, solar panels are not to be considered impervious cover<sup>19</sup> pursuant to CAFRA,<sup>20</sup> the Pinelands Protection Act,<sup>21</sup> the Highlands Act,<sup>22</sup> the Waterfront Development Act,<sup>23</sup> the County Planning Act,<sup>24</sup> and the MLUL.<sup>25</sup> While the area of the solar panel, plate or array is not counted as impervious, the base or foundation of each panel may be considered impervious. If the panels are ground-mounted without concrete foundations, however, there is no impervious coverage. This law eliminates a significant barrier to the location of large solar farms.

While solar energy production has often been described as harvesting the sun's power, solar facilities have not legally been considered to be on par with agricultural use under existing land use and farmland conservation laws. Effective as of Jan. 16, 2010, however, amendments to the Right to Farm Act<sup>26</sup> and the Agricultural Retention and Development Act<sup>27</sup> have provided an opportunity for operators of preserved farmland and commercial farms to generate electricity from solar facilities for their own use.<sup>28</sup> In order to take advantage of this opportunity, the following conditions must be met:

1. the solar facilities must not "significantly" interfere with use of the farmland for agricultural or horticultural purposes;
2. the solar facilities must be owned by the farm owner;
3. the electricity produced from the solar facilities must be used to provide power or heat to the farm, or to reduce energy costs on the farm through net metering;
4. the electricity produced is limited to

either 110 percent of the farm's annual energy demand, or the solar facilities may otherwise occupy no more than one percent of the land area of the entire farm; and

5. the electricity produced may only be sold through net metering.

Approval of the Department of Agriculture, and any other approvals required by law, is a prerequisite. The land will still be deemed in agricultural production or horticultural use if solar facilities are installed on preserved farmland or commercial farmland consistent with these conditions. Thus, approved solar facilities will not violate any farmland preservation program requirements or covenants.

Other legislative enactments foster development of individual, smaller-scale residential solar facilities. In the Residential Development Solar Energy Systems Act,<sup>29</sup> which became effective on March 31, 2009, the Legislature found that "installation of even small scale solar energy systems will combat global warming and reduce the nation's dependence on foreign energy sources, resulting in a significant environmental benefit."<sup>30</sup> Under this act, developers of 25 or more new single-family homes must "offer to install, or to provide for the installation of, a solar energy system" where technically feasible.<sup>31</sup> Developers are required to include information on the availability of solar panel installation and the costs and benefits of solar energy in any advertisements for the sale of homes in such a development.

Owners of single-family dwellings and townhouses subject to regulation by a homeowners association have the right to reasonable access to solar facilities as well.<sup>32</sup> Beginning on Aug. 21, 2007, the Legislature provided that homeowners associations may not prohibit the installation of solar panels on roofs. An association may, however, adopt reasonable rules regarding the size, placement, and installation of solar panels. However, the association cannot

enforce any rule that "inhibits the solar collectors from functioning at their intended maximum efficiency."<sup>33</sup>

In sum, New Jersey's lawmakers have not merely made strong policy pronouncements in favor of solar energy, they have enacted laws and policies designed to actually finance and develop both small- and large-scale solar projects. These laws are working, and are having their intended effect. The activity level that has resulted in the actual construction of solar projects, with many more on the drawing board, is exciting and unprecedented. Notwithstanding New Jersey's reputation for onerous regulations and red tape, solar projects are a reality that will guarantee a leadership role for the state in green power and energy independence. ☺

## Endnotes

1. News Release, *New Jersey Continues Its Success in the Solar Market*, NJ Board of Public Utilities (Sept. 29, 2010).
2. Electronic Discount and Energy Competition Act, N.J.S.A. 48:3-49, *et seq.*
3. N.J.S.A. 26:2C-37, *et seq.*
4. N.J.S.A. 52:27D-141.2(f); N.J.A.C. 14:8-2.1.
5. N.J.A.C. 14:8-1, *et seq.*; *see In re Ownership of Renewable Energy Certificates*, 389 N.J. Super. 481 (App. Div. 2007).
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7. L. 2009, c.35, codified as N.J.S.A. 40:55D-66.11.
8. L. 2009, c.146, codified as N.J.S.A. 40:55D-4.
9. *Sica v. Bd. of Adjustment, Tp. of Wall*, 127 N.J.152, 159 (1992).
10. N.J.S.A. 40:55D-4 defines "inherently beneficial use" as "a use which is universally considered of value to the community because it fundamentally serves the public good and promotes the general welfare. Such a use includes, but is not limited to, a...solar or photovoltaic energy facility or structure."
11. *Medici v. BPR Co.*, 107 N.J. 1 (1987).
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13. Senate Bill No. 2126 was passed by the Assembly and Senate on Jan. 10, 2011.
  14. [www.njleg.state.nj.us/2010/Bills/S2500/2126\\_V1.PDF](http://www.njleg.state.nj.us/2010/Bills/S2500/2126_V1.PDF).
  15. N.J.S.A. 13:18A-1, *et seq.*
  16. N.J.S.A. 13:20-1, *et seq.*
  17. N.J.S.A. 13:19-1.
  18. *E.g.* N.J.A.C. 7:7E-5B.4 (table H).
  19. L. 2010, c. 4.
  20. N.J.S.A. 13:19-5.4.
  21. N.J.S.A. 13:18A-5.2.
  22. N.J.S.A. 13:20-29; -32.
  23. N.J.S.A. 12:5-3.
  24. N.J.S.A. 40:27-6.6.
  25. N.J.S.A. 40:55D-38.1;-95.
  26. N.J.S.A. 4:1C-1 *et seq.*
  27. N.J.S.A. 4:1C-11 *et seq.*
  28. L. 2009, c.213 (Jan. 16, 2010).
  29. L. 2009, c. 33, codified as N.J.S.A. 52:27D-141.1, *et seq.*
  30. N.J.S.A. 52:27D-141.2(h).
  31. N.J.S.A. 52:27D-141.4
  32. L. 2007, c. 153, codified as N.J.S.A. 45:22A-48.2.
  33. *Id.*

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## U.S. Green Building Council

# Meeting the Challenges of Building Green with LEED

by Harry E. McLellan III

**I**n the shadow of New York City's second tallest skyscraper at 1 Bryant Park, which was recently awarded the U.S. Green Building Council's (USGBC) highest level of certification under its Leadership in Energy and Environmental Design rating system (LEED), many are questioning just how eco-friendly LEED-certified buildings are. Despite LEED being the nationally accepted benchmark for high-performance green building, some are beginning to argue that LEED certification "could end up putting a shiny green stamp on a generation of unsustainable buildings."<sup>1</sup> In fact, there is pending litigation in federal court alleging that the USGBC fraudulently misrepresents the energy efficiency of LEED buildings, and that LEED certification does not verify actual energy performance.

The USGBC emphatically disagrees with its critics by making its case in favor of LEED through a rapidly expanding list of impressive, environmentally responsible, LEED-certified projects that are statistically proven to be energy efficient and to save money. In addition, the USGBC has implemented revised policies and procedures to ensure the integrity of the LEED certification process to advance its mission toward market transformation and its commitment to the environmental and social benefit of green building.

In 1998, the USGBC, a nonprofit coalition of diverse industry leaders, launched LEED to establish criteria for green projects by evaluating the location, design, construction and operational aspects of buildings. By applying LEED, the USGBC certifies buildings as "green" based on scores that are tallied for efficiency and design in five categories, including site planning, water management, energy, materials, and indoor environmental quality. The goal of LEED is to promote a whole building approach to sustainability that recognizes building performance based on human and environmental health.

The USGBC offers four levels of certification, which

include LEED certified, LEED silver, LEED gold, and LEED platinum. Although originally designed as a voluntary rating system for new construction of commercial office buildings, LEED is an evolving system with a variety of programs for different types of construction.<sup>2</sup>

The steps to LEED certification include registering a project, tracking progress, documenting achievement, and applying for certification. LEED registration initiates contact with the USGBC and provides applicants with access to tools and information. A project must satisfy all LEED requirements and achieve all the necessary points to earn the specific LEED certification sought.

The documentation supporting certification is submitted to the USGBC for LEED technical review. Today, this can be done online at the USGBC website. The documentation submitted for review is subject to credit interpretations by the USGBC, and the actual award of certification typically does not occur until several months after final completion of a project. The determination by the USGBC of the final LEED review is subject to appeal, which must be made within 30 days of receiving the final award.<sup>3</sup>

LEED is now recognized as the foremost program for design, construction and operation of green buildings, with over 40,000 projects currently participating in the commercial and institutional LEED rating systems, comprising over 7.9 billion square feet of construction space in all 50 states and 114 countries. In addition, nearly 10,000 homes have been certified under the LEED for Homes rating system, with nearly 45,000 more registered for certification.<sup>4</sup>

Most recently, the USGBC announced that it reached a milestone of more than 500 buildings certified through its LEED Volume Program. This pilot program streamlines the certification process for high-volume property owners by utilizing a prototype-based approach. With a prototype design certified by the USGBC, large-scale real estate firms and retailers can

now eliminate the time and expense in filing documentation for each building it seeks to certify. In the past, the cost and time involved for individual buildings was a major impediment to those filing for LEED credentials in roll-out portfolios.<sup>5</sup> This program is proving to have an exponential impact on the number of buildings seeking LEED certification.

To meet the growing demand for LEED certification, the USGBC delegated the responsibility of administering the LEED building certification program, under which more than 17,000 commercial projects now await certification, to the Green Building Certification Institute (GBCI). The GBCI is an independent third-party organization that was established in 2008 and charged with ensuring that the certification and verification of buildings under the LEED rating system is of the highest quality and integrity.<sup>6</sup>

Notwithstanding the efforts of the GBCI and the USGBC to safeguard the credibility of LEED, the USGBC has recently come under fire for alleged flaws in the certification process, and for claims that LEED-certified projects are not measuring up to perceived promises of sustainability. Moreover, critics contend that the LEED rating system allows builders to take advantage of the moral high ground without necessarily being required to deliver an environmentally responsible product. Some of the criticism has even come from unexpected sources, including famous architect Frank Gehry, who a few months ago took a shot at LEED, saying that it has become “fetishized,” like “wearing an American flag pin,” and that LEED certification is often awarded for “bogus stuff.”<sup>7</sup>

The most serious attack is an action now pending in the U.S. District Court for the Southern District of New York against the USGBC and its founders.<sup>8</sup> In the lawsuit, the plaintiffs allege that the

USGBC commits false advertising and deceptive trade practices through its marketing of the LEED rating system. The complaint was originally filed on Oct. 8, 2010, and was styled as a class action suit that included many far-reaching causes of action, such as violations of the Sherman Anti-Trust Act<sup>9</sup> and the Racketeer Influenced and Corrupt Organizations Act (RICO).<sup>10</sup> On Feb. 2, 2011, the plaintiffs amended the complaint to no longer proceed as a class action suit, and withdrew some of the more inflammatory contentions and unusual causes of action. Nevertheless, the amended pleading still contends that the USGBC and others have committed “deceptive trade practices” and fraud under federal, state and common law by purportedly fraudulently advertising and promoting the LEED rating system.

In addition to treble damages and exemplary damages, the plaintiffs are seeking to enjoin the USGBC from advertising, marketing or promoting the energy efficiency of LEED, and are asking the court to compel the USGBC “to disclose the actual energy use of LEED properties.”<sup>11</sup> To date, the USGBC has not filed an answer, and it is unclear how it will respond.

Another challenge that implicated the LEED certification process itself, was a formal protest to the award of a LEED gold certification to the Northland Pines High School in Eagle River, Wisconsin. The complaint was filed with the USGBC on Dec. 23, 2008, by five individuals from the community surrounding Northland. The main contention of the challengers was that the USGBC awarded LEED gold certification to a project that did not meet two LEED prerequisites involving energy and indoor environmental quality. The USGBC retained two consultants to evaluate the technical merits of the alleged violations by conducting a comprehensive investigation that included, among

other things, interviews with the project team, a detailed review of the project’s energy model, and an on-site inspection.<sup>12</sup>

In April 2010, the USGBC and its consultants concluded that they have “no reason to believe that the project failed to meet all of the LEED prerequisites and credits it has attempted.” Accordingly, the USGBC did not revoke certification or disallow any credits, thereby preserving Northland’s gold LEED certification designation. Many commentators have questioned the validity of this outcome, including the appellants, who recently published an executive summary response declaring “USGBC and LEED credibility destroyed.”<sup>13</sup>

Based on its experience with the Northland matter, the USGBC revised its certification challenge policy to further support the integrity of LEED certification. Modifications to the challenge policy include, among other things, clarification of the appeal process with a procedure that serves as a quality check on the GBCI staff and reviewers and to assist in identifying instances in which certification has been granted based on the submission of misleading or deceptive documentation. The USGBC believes these revised policies and procedures will reaffirm the USGBC’s credibility in the marketplace.

Despite these measures, in many circles LEED is no longer being accepted at face value. For example, the U.S. Department of Energy (DOE) is joining in the debate by proposing rules regarding energy efficiency and sustainable design standards for new federal buildings and major renovations. Accordingly, the DOE is suggesting that rating systems used by federal agencies (such as LEED, which is a requirement at the silver level for all General Services Administration projects) should “(1) be subject to periodic evaluation and assessment of the environmental and energy benefits that

result under the rating system; and (2) include a verification system for post-occupancy assessment of the rated buildings to periodically demonstrate continued environmental benefits and energy savings.”<sup>14</sup>

Thus, for the DOE a LEED silver designation is not enough, and a movement toward objective performance results appears to be the trend.

An important issue for attorneys who follow these developments, which is not addressed by USGBC policy or in the pending litigation against the USGBC, involves disputes between and among building owners, developers, contractors, architects and engineers concerning the performance of LEED-certified buildings.

A lawsuit filed last year in New York County Supreme Court by owners of a \$4.2 million condominium unit in a 31-story LEED gold-hopeful building known as the Riverhouse in Battery Park City illustrates how this issue is beginning to emerge. The owners are seeking \$1.5 million against the project’s developer and property manager, claiming breach of contract and fraud because the building is purportedly not as green as it had been advertised. The plaintiffs allege that the project was marketed as being at “the cutting edge of green technology,” but after their purchase they consistently experienced cold drafts and insufficient heat in their unit. According to the complaint, an energy audit of the unit indicates that there is a deviation of 49 percent from LEED standards, and that the unit is not energy efficient.<sup>15</sup>

Some green building observers maintain that these types of claims will become more prevalent as a result of LEED not living up to its promises of sustainability. Others argue that the claims are exaggerated and that studies show that many LEED buildings are actually performing as expected or better. According to a report issued by the

Alliance for Environmental Sustainability (AES) at the end of last year, LEED-certified homes were found to have 40 percent less energy use and utility costs annually when compared to conventional homes. The study, which compiled data from 144 LEED-certified homes in the Midwest, found “LEED Homes at each level reduce the total cost of ownership, saving of tens of thousands of dollars through utility savings, during a typical 30-year mortgage period.”<sup>16</sup>

In New Jersey, the Wyndham Worldwide Inc. headquarters in Parsippany, which earned a LEED silver certification, is exceeding American Society for Heating Refrigerating and Air Conditioning Engineers (ASHRAE) requirements with 16 percent energy savings for its lighting and 17 percent energy savings with its heating, ventilating, and air conditioning (HVAC). In addition, Johnson & Johnson’s world headquarters in New Brunswick, which was awarded the first LEED existing buildings gold certification in New Jersey, is experiencing a 25 percent energy reduction.<sup>17</sup>

The jury is still out on the overall effectiveness of LEED. Nevertheless, the USGBC continues to successfully withstand the challenges. ♪

### Endnotes

1. Alec Appelbaum, Don’t LEED Us Astray, *NY Times*, May 19, 2010.
2. *Commercial Real Estate Transactions in New Jersey*, New Jersey Institute for Continuing Education (3rd Ed. 2010), Construction and Development Section, pg 8.61.
3. *Id.* at pg 8.62.
4. *See*, <http://www.usgbc.org>, U.S. Green Building Council website.
5. *Id.*
6. *See*, <http://www.gbci.org>, Green Building Certification Institute website.
7. [www.businessweek.com/innovate/next/archives/2010/04/architect-](http://www.businessweek.com/innovate/next/archives/2010/04/architect-)

- gehry.
8. The action was filed in the United States District Court, South District of New York under Docket No. 10CIV7747.
9. 15 U.S.C. §2.
10. 18 U.S.C. §1962(c).
11. *Id.*
12. The challengers, who include Ronald Ritzer, Roderick McKinnon, Patrick Smith, Kevin Branham, and Curt Hartwig, have made available the submissions and supporting documents, including “LEED Credibility Destroyed,” Complete NPHS Appeal, Horizon Report, Taylor Report, USGBC Letter, Response to Horizon Engineering Report, Response to Taylor Engineering Report and Appellants’ Statement. These documents may be found as links to the website located at [www.greenbuildinglawupdate.com/2010/06/articles/legal-developments/leed-certification-challengers-speak-out/](http://www.greenbuildinglawupdate.com/2010/06/articles/legal-developments/leed-certification-challengers-speak-out/).
13. *Id.*
14. Energy Efficiency and Sustainable Design Standards for New Federal Buildings, *Federal Register*, May 28, 2010 (Vol. 75, No. 103), pg 29938.
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16. “Alliance for Environmental Sustainability Residential Pre-Occupancy Case Study,” Dec. 17, 2010, <http://www.alliancees.org>.
17. *See*, [www.usgbcnj.org](http://www.usgbcnj.org), New Jersey Chapter of the U.S. Green Building Council website.

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# Savings From the Sun

## Guiding Clients Through the Solar Contracting Process

by Hesser G. McBride Jr.

The state of New Jersey is a national leader in the promotion of progressive solar photovoltaic (PV) energy policies and is second only to California for total installed solar photovoltaic capacity.<sup>1</sup> As a result of the state's policies, commercial and public sector entities have been able to realize significant reductions in energy costs through the installation of on-site solar PV systems. This article addresses how to guide clients through the process of obtaining the economic benefits of a solar PV system installed on or adjacent to their premises.<sup>2</sup>

### Preliminary Considerations

A commercial, industrial or governmental entity that owns buildings with large, accessible rooftops or undeveloped land or parking lots adjacent to its buildings is a potential candidate for a solar PV system. Given the rapid development of the solar energy industry in New Jersey, it is likely that anyone owning such property has already been approached by a solar developer offering the promise of energy savings through the installation of a solar facility.

The mere availability of rooftop space, vacant land or parking lot areas is not enough, however, to ensure that such loca-

tions are suitable for the installation of solar PV facilities. Threshold issues that should be addressed prior to deciding whether to install a solar facility include:

1. an analysis of the condition of the rooftop and its remaining expected life—the installation of solar panels on a rooftop that is not in excellent condition may be a recipe for disaster, with consequences that may include roof leaks; difficult roof repairs; the need to remove and reinstall portions of the solar PV system; loss of energy savings and the loss of earnings from solar renewable energy certificates (SRECs);<sup>3</sup>
2. evaluation of the structural integrity of the building and rooftop (*i.e.*, can the structure accommodate the increased load attributable to the solar PV system?);
3. if considering the use of vacant land adjacent to buildings, a determination that there is no anticipated alternative use of that space, such as expansion of the facilities or parking areas;
4. if considering the use of parking lot installations, an analysis of the condition of the parking lot and an inquiry whether the aesthetic impact of installing solar canopies will be acceptable;
5. if considering parking deck installations, what is the structural integrity of the deck given that steel canopies will need to be constructed on the upper tier?;
6. an analysis of the power consumer's electric switch gear to ensure it will work with the solar PV system; and
7. a preliminary determination of whether there are technical constraints in the local electric utility's distribution facilities that could cause the project to be ineligible for interconnection and netmetering.<sup>4</sup>

After evaluating the suitability of the proposed site, the next step is to consider how the acquisition of the solar PV

system will be financed. There are two approaches used for most solar projects: 1) direct ownership pursuant to an engineering, procurement and construction (EPC) contract with a solar developer (*i.e.*, balance sheet financing), or 2) entering into a long-term power purchase agreement (PPA).<sup>5</sup> Under both scenarios, a solar developer designs, builds, and usually maintains the solar facility.

Determining which approach is superior depends on the end user's circumstances, such as its: ability to utilize applicable tax benefits; ability to raise required capital; risk tolerance; interest in operational control of the system, and interest in managing the sale of SRECs. In the ownership model, the project is typically paid for by a combination of a 30 percent cash grant currently available from the Department of Treasury (which can be taken in lieu of an investment tax credit (ITC)),<sup>6</sup> bonus and accelerated depreciation, SREC revenues, and savings resulting from the purchase of less electricity from the local electric utility.

The principal benefits of the ownership model are a greater savings on energy costs, availability of aggressive tax benefits, debt-free ownership usually within five years of the investment, and ownership of the environmental attributes (*i.e.*, SRECs). The risks associated with ownership include capital investment risk, operational risk of the solar PV system, a more complicated procurement and installation oversight process due to the need to be familiar with the proposed solar PV system and system design, risk associated with the credit-worthiness of SREC purchasers and SREC market volatility.

The principal benefits of the PPA structure include the lack of capital expenditures, operational risk borne exclusively by the solar provider, PPA guaranteed energy savings, elimination of exposure to SREC market volatility and SREC sales proceeds. The downside

of a PPA is that, over the term of the PPA, the energy cost savings are likely to be considerably less than the savings realized by ownership. In addition, there are no tax benefits to the host,<sup>7</sup> the solar PV system will be fully depreciated and paid for by the system owner well before the PPA expires, the penalty for default is significant, the host is likely to incur penalties if it is required to temporarily remove or relocate the system for roof repairs and the host's premises are locked into a long-term agreement for a technology that may become obsolescent.

Due to the availability of the 30 percent cash grant for projects started prior to Dec. 31, 2011, it is substantially likely that direct ownership will result in a greater return on investment than a PPA. Also, combining the cash grant with a three- to five-year forward-looking SREC sale/purchase agreement can significantly reduce the investment risk.<sup>8</sup> Indeed, many traditional lenders have embraced the solar market and are willing to finance solar PV systems, particularly where the system owner has secured forward SREC sale/purchase contracts.

Because there are numerous solar developers active in New Jersey, entities interested in solar projects should be encouraged to obtain proposals from multiple vendors. Also, particularly for larger installations, clients should consider securing the service of an experienced energy consultant or engineer to assist in equipment evaluation, vendor selection, evaluation of system design and oversight of the installation.

### **Ownership Model**

Under the ownership approach, it is necessary to negotiate an engineering, procurement, and construction (EPC) agreement. A solar EPC agreement contains many of the terms and requirements in a typical design build construction contract. Typical construction

issues include: pricing requirements (the price is usually based upon the dollar cost per kilowatt of system capacity); change order procedures; responsibility for building permits and land use approvals; development of a construction schedule; procedures for the submission and review of system designs; progress payments; construction lay-down and staging; insurance requirements; indemnification; transfer of warranties; liquidated damages due to unexcused delay; dispute resolution and standards for substantial and final completion.

However, there are several issues unique to solar EPC agreements. For example, to participate in the state's net-metering program it is necessary to interconnect the solar PV system to the electric distribution utility's facilities. The EPC contract should clearly provide that the solar developer will be responsible for promptly submitting an interconnection application and obtaining the utility's approval.

Although electric utilities are generally required to approve interconnection applications, the approval may be time-consuming and costly, and may be conditioned upon an agreement to reimburse the utility for upgrades to its electrical facilities necessary to accommodate the additional load from the solar PV system. In some cases, the utility may require the applicant to pay for a feasibility study to evaluate the viability of the connection. Although interconnection is usually not a problem, an applicant's ability to interconnect successfully could be undermined by prior interconnection applicants that have been given priority to the utility's limited facilities.<sup>9</sup>

Thus, the EPC agreement should establish the parties' responsibilities associated with interconnection, such as who will pay for feasibility studies if required? If the utility requires upgrades to its facilities, who will bear the cost,

and will the party responsible for those costs be able to rescind the contract if the required upgrades exceed a certain dollar threshold? While the costs associated with feasibility studies or utility upgrades are usually borne by the system host, these cost apportionment issues are fair game for negotiation between the parties.

For rooftop-mounted projects, the preservation of the existing roof warranties should also be addressed in the EPC agreement. The solar developer should be required to complete the installation without voiding the existing warranties. This generally requires the solar developer to submit its design plans to the roof warrantor and obtain the warrantor's approval. If the solar developer voids the warranty, the host should attempt to require the solar developer to provide a replacement warranty on terms substantially equivalent to the voided warranty.

For ground-mounted projects, the EPC agreement should address responsibilities associated with site preparation, such as re-grading the property. For parking lot projects, specific design requirements regarding the construction of the canopies that the solar panels will be mounted on should be addressed. These considerations include: the height of the canopies (which is important for snow removal), the responsibility for parking lot lighting, the location of columns (which may affect how cars may be parked), coating of the structures to prevent rusting, whether the canopies will be watertight and how runoff will be directed.

A construction and progress payment schedule must also be negotiated. The most significant cost component of a solar installation is the solar panels. Therefore, the largest progress payment is usually due upon the delivery of the panels. The requirements for substantial and final completion must also be addressed. Substantial completion usu-

ally occurs when the solar PV system is operational and the project is approved and fully permitted. The system host must be assured that the solar developer has complied with all necessary approvals and certifications from the New Jersey Office of Clean Energy for the project to participate in the SREC program.

The EPC agreement should also include a provision for liquidated damages in the event of unexcused construction delays. A delay in the completion of the solar PV system results in two economic losses to the system host: 1) loss of the reduced energy savings; and 2) lost SRECs revenue. The parties must agree upon a reasonable measure of the economic harm for daily construction delay.

Because the 30 percent cash grant is scheduled to expire on Dec. 31, 2011, it is likely there will be a flurry of solar EPC contract negotiations in the fourth quarter of 2011. Solar projects that commence construction in 2011 can still obtain the grant if they satisfy the safe harbor requirements of the grant program.<sup>10</sup> Thus, EPC agreements negotiated late in 2011 should require the solar developer to take steps to ensure that the project qualifies for the grant. The system host should try to include in the EPC agreement an economic penalty if the developer fails to satisfy the requirements, thereby causing the project to be ineligible for the grant. Because the cash grant is available in lieu of the 30 percent investment tax credit, the economic harm of not qualifying for the grant is the time value of money attributable to having to utilize the investment tax credit over time rather than receiving a cash payment within 90 days of the project completion date.

In order to minimize disruption to the system host's operations, the parties should agree upon the hours and locations for permitted construction activity. In addition, the time for the delivery

of materials, the time when cranes may be permitted, and the hours workers will be permitted on rooftops should be established. Similarly, for parking lot installations, in order to ensure that adequate levels of parking remain available during construction, a schedule should be established identifying the specific sections of the parking lot areas that can be worked on simultaneously. The EPC agreement should also require that all of the manufacturers' warranties be transferred to the system owner.

Moreover, the system owner will be required to enter into an operations and maintenance (O & M) agreement. O & M agreements generally require an annual fee based upon the solar PV system's capacity. Some solar developers, through the O & M agreement, will guarantee that the solar PV system will operate at a certain percentage of its system capacity (*e.g.*, 90 percent of capacity less annual system degradation).

### **Power Purchase Agreements**

Although some of the issues associated with negotiating PPAs are similar to issues in EPC agreement negotiations, PPAs give rise to a unique set of requirements. Key elements of a PPA include conditions precedent (*e.g.*, financing, government approvals, etc.); the term (usually 15 to 20 years); kilowatt annual price and price escalators; property access rights; early termination payments; system design requirements; system performance obligations; system purchase options; understanding that the system owner will pledge a security interest in the property; non-disturbance agreements; casualty loss and assignment.

In the traditional PPA model, a special purpose entity is usually formed to own the solar PV system and serve as the power provider. The special purpose entity (*i.e.*, power provider) is responsible for all operation, maintenance and monitoring of the system. The obliga-

tion of the system host (*i.e.*, power purchaser) is to make its premises available for the installation of the solar PV system and purchase all of the power produced by the system. The system host should request that the parent corporation of the special purpose entity provide a guaranty of the special purpose entity's performance.

In a PPA, property access rights are generally conveyed pursuant to a license or lease incorporated into the PPA. Where the property owner is the entity purchasing the power, separate consideration is usually not paid by the power provider for property access. The price for power under a PPA is set on a per kilowatt basis and usually contains some form of price escalator. Like an EPC, a PPA should set forth system design requirements, a construction schedule, and requirements associated with delivery of materials and access for installation.

A significant term in the PPA is the termination payment obligation of the host in the event of default or early termination of the PPA. Due to the significant capital expenditure required for the installation of the solar PV system, the power provider requires assurance that if the system host defaults, or seeks to terminate the PPA without cause, the power provider will be compensated for its investment. As a result, the early termination payment is designed, at a minimum, to permit the power provider to fully recoup its investment. It is important for the system host to understand how the termination payment has been calculated, and to include a provision in the PPA that title to the system will be transferred to the host upon the host's payment of the termination payment.

The PPA should also address the parties' obligations if a portion of the system is temporarily removed for rooftop maintenance or repair. Generally, the host will be required to pay the costs of removal and reinstallation. Moreover, the power provider is likely to require

the host to pay for lost electricity sales and to reimburse the power provider for its lost SRECs revenue. This issue, however, is subject to negotiations, and the power provider may agree to permit a minimal percentage of the solar PV system to be subject to temporary removal during the term of the PPA.

A system purchase option is normally included in a PPA. The option usually can only be exercised after the power provider's recovery of its investment or at the end of the PPA term. Most frequently, the parties agree that the purchase price will be the fair market value of the solar PV system. In some instances, the termination payment schedule may serve as the purchase price value. If the system host does not exercise the purchase option, the power provider should be required to remove the solar PV system at its own cost and restore the property to its prior position, excepting wear and tear.

Another critical component of the PPA is a requirement regarding system performance. A system host should require the power provider to guarantee an annual minimum system output level. If the system output level is not achieved, the power provider should be required to compensate the system host based upon the difference between the PPA price and the price the host was required to pay the electric utility for replacement power. The minimum output guaranteed level should be decreased annually to reflect the anticipated system degradation.

PPAs also require the system host to maintain its property in a condition that does not interfere with the sunlight's access to the PV system. Such requirements may include an agreement with prohibitions on constructing or altering structures, and obligations to trim trees and otherwise control vegetation.

Additionally, PPAs should address the responsibility for casualty losses, responsibilities in the event of condem-

nation, liability for system damage due to vandalism, insurance, indemnification, assignment, cooperation with lenders, and system monitoring requirements by the power provider.

## Conclusion

Given the decline in solar panel prices and New Jersey's progressive solar policies, it is likely that the number of solar installations in New Jersey will continue to increase. Understanding the contracting issues unique to these projects is critical to each project's success. Applying the above principles should assist practitioners in guiding clients through the process of obtaining the economic benefits of solar PV systems. ☺

## Endnotes

1. New Jersey has adopted an aggressive Renewable Portfolio Standards program requiring 22.5 percent of energy consumed in the state to be from renewable energy sources by 2021, with 2.12 percent of that requirement set aside for solar. N.J.A.C. 14:8-2.3; *see also* the Solar Energy Advancement and Fair Competition Act, P.L. 2009, c. 289.
2. There are generally two types of solar PV installations: 1) projects where electricity is consumed on the premises; these projects are often referred to as net-metered projects, and 2) grid supply projects intended to provide wholesale electricity; solar farms generally fall into this category. This article addresses net metered projects. Net-metering enables a company with a solar PV system to receive a credit from the local utility for excess electricity delivered by the solar system to the utility's distribution grid. *See* N.J.A.C. 14:8-4.1 *et seq.*
3. SRECs are certificates issued by the Board of Public Utilities (BPU), or its designee, for each megawatt-hour of solar electric generation produced.

See N.J.A.C. 14:8-1.2. SRECs have a market value and are purchased by New Jersey electric suppliers that are required by the state's Renewable Portfolio Standards program to supply a portion of the electricity they deliver from renewable sources.

4. Although electric distribution companies are required to permit interconnection and net-metering of solar PV projects (see N.J.A.C. 14:8-4.3), circumstances may arise where the interconnection is technically unfeasible (e.g., a 'closed' network design in an urban area) or the electric distribution company's facilities, absent significant capital expenditures, are inadequate to handle the increased load from the solar PV system.
5. A third alternative for a private entity is to enter into a long-term lease.
6. Under Section 1603 of the American Recovery and Reinvestment Tax Act of 2009, a cash grant equal to 30 percent of the cost of the project is available for solar PV projects that begin construction in 2011.
7. Public entities and nonprofit corporations cannot take advantage of the tax benefits associated with renewable energy projects. As a result, public and nonprofit entities often prefer PPAs over system ownership. In a PPA, the system owner retains the tax benefits, and nonprofits and public entities benefit indirectly from the system owner's tax savings through PPA prices that are lower than those that would be offered if the tax benefits did not exist.
8. The level of success of a solar project is influenced by the ability of the system owner to sell SRECs. A forward SREC sale/purchase agreement enables the owner of a solar PV system to enter into a contract to sell the SRECs it will produce in the future at a price(s) agreed upon in

the forward contract. Such contracts provide a more reliable and predictable revenue stream to pay for the project by protecting against SREC market volatility. Certain New Jersey utilities participate in an SREC purchase auction process overseen by the BPU and are willing to enter into SRECs purchase agreements for up to 15 years. See [www.solarrec-auction.com](http://www.solarrec-auction.com). See also [www.blueskynj.com/files/JCPL%20and%20ACE/JCPL%20%20ACE%200002%20SREC%20FAQs%204-20-09.pdf](http://www.blueskynj.com/files/JCPL%20and%20ACE/JCPL%20%20ACE%200002%20SREC%20FAQs%204-20-09.pdf).

9. The need for interconnection feasibility studies sometimes arises in rural public utility service areas where the utility infrastructure is not robust and there are numerous solar projects under development. Indeed, in a recent petition filed by Atlantic City Electric (ACE) with the BPU, ACE explained that because of the proliferation of large-scale solar projects seeking to interconnect "approximately 25% of [ACE's] system is currently deemed to be closed, to other alternative energy projects." *In the Matter of the Petition of Atlantic City Electric Company for a Declaratory Order with Respect to the Definition of "Solar Renewable Energy Certificate" Pursuant to the Provisions of N.J.S.A. 48:3-51*, BPU Docket No. EO10080626V, par. 7, dated Aug. 27, 2010.
10. See U.S. Treasury Department Guidelines, Payments for Specified Energy Property in Lieu of Tax Credits Under the American Recovery and Reinvestment Act, [www.seia.org/galleries/pdf/Grant%20program%20guidance%2007%2009%2009.pdf](http://www.seia.org/galleries/pdf/Grant%20program%20guidance%2007%2009%2009.pdf).

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## Green Initiatives, Paper Reduction and E-Discovery

# Advising Your Clients in the Paperless Era

by Angela M. Scafuri

As Kermit the Frog so aptly concluded years ago, it's not easy being green. In today's world, where risk management and corporate governance are as important as promoting corporate green initiatives, one wonders how to ensure compliance with keeping important emails and papers while still achieving 'green' status and reducing one's carbon footprint.

Over the past decade, terms like global warming, climate change and carbon footprint have become part of our everyday vernacular. Many businesses and, most notoriously, law firms, spew out enormous amounts of paper on a daily basis; in fact, the average lawyer uses 20,000 to 100,000 sheets of paper a year. In addition, electricity use at the office can produce up to six tons of carbon dioxide.<sup>1</sup>

Businesses around the country continue to adopt best practices for office paper management. The goal is to reduce paper usage as well as increase paper recycling. Indeed, paper management requires transitioning paper documents to electronic form, as well as creating electronic files going forward, in order to reduce paper usage. In addition, reducing one's carbon footprint considers a reduction in energy use. Better energy management may include destroying old servers, or deleting emails and other documents after a certain time period in order to make efficient use of current servers.

What happens, however, when in an effort to go green, a business shreds important documents or deletes critical email

communications? Interestingly, most businesses are wholly unaware of their e-discovery obligations, which have continued to expand and develop over the past five years. And while law firms may strive to go green and reduce their carbon footprint, they are still saddled with discovery obligations, which at times can require copying and production of tens of thousands of sheets of paper. The problem has reached such levels that the American Bar Association's Section of Environment, Energy and Resources (SEER) has partnered with the United States Environmental Protection Agency (EPA) to present a climate challenge.<sup>2</sup>

The climate challenge encourages law firms to take certain actions to conserve energy and paper waste, which includes best practices for office paper management, and to adopt energy management plans to reduce electricity. The climate challenge was initiated in March 2007 and is currently scheduled to continue through March 2013.<sup>3</sup>

### The Basics

Both business entities and law practices alike should be cognizant of their e-discovery obligations. For businesses, understanding e-discovery is important in order to avoid risking spoliation pitfalls as paper files are shredded and electronic files are deleted. For law firms, a sound knowledge of e-discovery will help to effectively manage e-discovery costs and protect clients in the setting of complex litigation.

Discovery is the process of identifying, preserving, collecting, reviewing, analyzing and producing information in civil and criminal legal actions. The goal of discovery is to obtain information that will be useful in developing relevant information for pre-trial motions, for the trial itself, and, in most cases, for purposes of settlement negotiations. Information sought during discovery can include documents, testimony and other information that may be deemed necessary by a court.

E-discovery is the extension of the discovery process to

information that is stored electronically, including email; instant messages/texts; word-processing files; spreadsheets; social media content; and any other electronic information that may be stored on desktops, laptops, file servers, mainframes, smartphones (e.g., blackberries or iphones), employee home computers or other platforms. This type of electronically stored information is more commonly referred to as ESI.

E-discovery, therefore, means the discovery request by a litigant that is stored in electronic format and that the litigant intends to use as evidence in a case. ESI can encompass all forms of information kept in an electronic environment, such as data stored on backup tapes or retained in legacy systems, or other data reserved for deletion on hard drives. It is exactly these types of platforms that many businesses look to 'clean up' in an effort to become more environmentally friendly.

Why is e-discovery so important? Because companies that fail to produce emails and other electronic content in a timely or appropriate manner face the risk of paying thousands of dollars in sanctions and fines, not to mention the loss of corporate reputation, lost revenue and embarrassment.

Moreover, several court opinions from this past year have addressed the issues surrounding a party's obligations to preserve and produce documents, and the consequences for failing to meet those obligations. Thus, while companies strive to reduce paper and electronic data, they must also be aware of their obligations to save paper and ESI in certain instances. Notably, many courts have recently determined that sanctions may be appropriate for destruction of evidence (in both paper and ESI form). Intentional misconduct in and of itself is not required for a court to make a determination of spoliation. In fact, inadvertent document destruction stemming from poor document

retention practices, or failure to maintain such practices, may provide for sanctions from a court.<sup>4</sup>

### Advising the Institutional Client

How do you advise a client when they indicate they would like to delete paper and electronic files in an effort to become more environmentally responsible? How do you advise a client when, already in the midst of litigation, you learn for the first time that the client did not retain critical emails?

When providing legal advice to a corporate client on maintaining an environmentally responsible business, remember to advise the client of its obligations under e-discovery rules. While the courts are still in the nascent states of outlining the obligations and rights of parties when it comes to e-discovery, several recent decisions provide clear and unambiguous guidance.<sup>5</sup> In addition, the Federal Rules of Civil Procedure contemplate e-discovery obligations and provide guidance in this evolving area of law.<sup>6</sup>

### The Duty to Preserve Documents

Your client and its employees should know when there is a duty to preserve documents or ESI. The duty to preserve evidence "arises when the party has notice that the evidence is relevant to litigation or when a party should have known that the evidence may be relevant to future litigation."<sup>7</sup> "The touchstone is 'reasonable anticipation.'"<sup>8</sup> This has been the standard for decades, long before e-discovery became fashionable.

After explaining when the duty to preserve documents arises, explain what can happen when those documents are not preserved. One of the seminal cases of 2010, *Pension Committee of the University of Montreal Pension Plan v. Banc of America Securities, LLC*,<sup>9</sup> provides an invaluable resource to corporate litigants so they may be better equipped to meet their e-discovery obligations. The

decision essentially revisits the issues surrounding e-discovery, spoliation and sanctions.

Foremost, advise clients regarding the importance of issuing a written litigation hold. A written litigation hold is the simple task of issuing a written notice to custodians of relevant documents and ESI advising them not to destroy potentially relevant evidence.

Notably, be aware that *Pension Committee* provides that the "failure to issue a written litigation hold constitutes gross negligence because that failure is likely to result in the destruction of relevant information."<sup>10</sup> Relevance and prejudice may be presumed when a spoliating opponent acts in bad faith or in a grossly negligent manner.<sup>11</sup> Therefore, corporate litigants must heed the warnings of *Pension Committee* and know that the failure to issue a written litigation hold may be enough to warrant an adverse inference.

Without a doubt, the *Pension Committee* court reminds us that litigants are expected to take the necessary steps to ensure relevant documents are preserved. Specifically, the opinion addresses issues of preservation and spoliation, and defines what acts are considered negligence, gross negligence and willfulness in the discovery context, as well as what conduct falls into each category. Finally, the opinion discusses appropriate sanctions. Thus, make efforts to guide a corporate client on not only the importance of document retention, but the possible ramifications of failing to properly preserve documents and ESI.

While each case must turn on its own individual facts, corporate litigants should be well advised of how the following acts *may* be defined by a court:

- The intentional destruction of relevant records—either paper or electronic—after the duty to preserve has attached, is considered willful.
- The failure to collect records—either

paper or electronic—from key players constitutes gross negligence or willfulness, as does the destruction of email or certain backup tapes after the duty to preserve has attached.

- The failure to obtain records from all employees, as opposed to the key players, likely constitutes negligence (as opposed to a higher degree of culpability).
- The failure to take all appropriate measures to preserve ESI likely falls into the negligence category.
- The failure to collect information from files of former employees that remain in a party's possession, custody or control after the duty to preserve has attached is considered gross negligence.
- The failure to assess the accuracy and validity of selected search terms is considered negligence.<sup>12</sup>

### Developing Internal Policies

Separate and apart from the case law and court rules, the best piece of advice for an institutional client is to advise them on developing internal policies and training programs to educate employees on document retention policies. Regardless of how sophisticated a client is, explain ESI, e-discovery and spoliation. Many clients are simply unaware of the looming pitfalls in light of the recent developments in e-discovery in civil litigation. Be sure to explain that, at a minimum, the client has an obligation to preserve ESI in anticipation of litigation, and thus, where there is a suspicion of litigation, document retention is essential.

Provide guidance on developing a plan of action. One key component of any such plan is to enlist an individual, or create a department of competent employees within the business, to take on the responsibility of collecting and preserving ESI. Teaming with the information technology (IT) department in this arena makes sound business sense.

Thus, the IT department should similarly be provided instructions on document retention. Remember, they have the servers and legacy systems the client is looking to reduce or otherwise destroy in its efforts to reduce carbon emissions and save electricity. The team should track the steps taken to preserve ESI.

Another key step is to create a document retention or records management policy, and set up a time frame for maintaining ESI. Ensure that the policy is adhered to uniformly. For example, keeping backup tapes for too long can create unforeseen costs and consequences because of the time and expense required to possibly be forced to search them when faced with litigation. Thus, an important reminder for the client is that while preservation of ESI may be essential to comply with laws and regulations, infinite preservation should be avoided.

Again, instruct the institutional client on the litigation hold. Just don't talk about how important it is; make sure the client is issuing the litigation hold, or, if appropriate, the attorney should provide his or her client with a litigation hold. As highlighted in the *Pension Committee* opinion, issuing legal holds is essential.

Upon reasonable anticipation of litigation, counsel should issue written litigation holds and communicate them appropriately to the employees of the organization. This ensures all department heads, IT personnel and pertinent key players and employees are made aware of the hold. The document should include the purpose for the hold, a description of the lawsuit or investigation, and the guidelines for determining what data should be preserved and by whom. Counsel should then work jointly with IT to notify legal opponents and any relevant third parties of their duty to preserve potentially responsive information. Internal automatic destruction must also be suspended, which includes

halting defragmentation software and other forms of automatic or routine drive 'cleanup' activities.

Emphasize that document destruction policies must be suspended once a duty to preserve ESI is recognized, whether it be in the form of an official hold letter or unofficially in the context of foreseeable or anticipated litigation. Not just key officers and the ESI team, but, in addition, the employees of the business, should understand what a litigation hold letter is and the obligations it engenders, as well as the company's ESI retention policies. It is not just the company, but its employees as well that need to understand preservation requirements.<sup>13</sup>

While the above steps may be viewed as costly as opposed to cost-effective, the initiative may save a client millions of dollars if faced with a lawsuit.

### Attorneys Can Also Go Green and Help Prevent E-Discovery Abuses in the Process

You and/or the client sent out a litigation hold letter in anticipation of litigation. Sure enough, a complaint is filed soon thereafter. The company and its employees know that there is a duty to preserve ESI. Now a document request comes in the door from your adversary requesting ESI. What do you do? The client is worried about costs, and your administrative department at the firm is worried about the environment. How can attorneys achieve a balance between responding to a request for documents and the overwhelming amounts of paper documents that are typically responsive to such requests? Moreover, abusive discovery tactics typically request unnecessary information. These aggressive attacks literally force a preservation fire drill. Knowing how to reign in such onerous requests will not only assist the client in keeping costs down, but preventing e-discovery abuses is actually environmentally responsible.

First, talk with the attorneys on the matter and discuss what you believe the scope of the request to be, as well as what information you will need from the client in order to determine the breadth of the project. Figure out what is being asked of the client and whether it is an appropriate request. Discuss whether the request is objectionable and whether the scope should be tailored. Discuss whether narrowing the scope of the request is reasonable, and the proper avenue to achieve your objective (*i.e.*, telephone conference with the adversary, filing a motion, requesting assistance from the arbitration panel). Determine whether the information requested was contemplated by counsel before the request was served. Federal Rule of Procedure 26, for example, requires that counsel “meet and confer” on e-discovery issues.<sup>14</sup>

Also make sure to *speak with the client*. Explain the request to the client to determine if it is reasonable, and if it is not, why it is not. Discuss the costs and burden involved in the collection of the information that is the subject of the request. Find out where the information may be stored, and the issues involved with retrieving it. If the client has their own in-house department, discuss whether they will assist with the collection/retrieval process. Advise the client of all associated issues, and whether or not the scope of the request is appropriate. If this is something that should be outsourced, find out if the client has their own vendors. If the client wants to handle the project, explain why outside counsel oversight is necessary. Do not leave it to the client to just handle it.

Next, speak with IT. You will not be able to counsel the client effectively regarding cost and production without an understanding of the IT issues involved. Speak to IT to determine the costs and burdens involved to produce the information requested in the format requested. Determine if this is a project

that can be completed in house or one that should be outsourced. Determine the time frame for turnaround.

Figure out appropriate search terms. If the scope is reasonable, and you do not need to further define the scope with your adversary or ask for court intervention, the next step is to agree on search terms with the client. In addition, you may consider sharing the search terms with your adversary or agreeing to the search terms in advance, in order to avoid trouble down the road. Make every effort to narrow the search terms as much as possible early on in the process.

Utilizing a common sense approach to discovery will help curb e-discovery abuses as well as save the client money. In addition, determining strategies for efficient production will enable counsel to effectively manage a client’s e-discovery obligations while simultaneously working to promote an environmental-friendly litigation. ☺

## Endnotes

1. Janice Mucalov, Greening Your Law Firm: A Practical Guide to Creating an Environment-Friendly Law Office, [www.cba.org/cba/practice/link/bsky/PrintHTML.aspx?DocId=31993](http://www.cba.org/cba/practice/link/bsky/PrintHTML.aspx?DocId=31993) (last visited March 3, 2011).
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4. See *Mosaid Technologies, Inc. v. Samsung Electronics Co., Ltd.*, 2004 WL 2550306 (D.N.J.), *aff’d*, 348 F. Supp. 2d 332 (D.N.J. 2004).
5. *Nat’l. Day Laborer Organizing Network v. United States Immigration and Customs Enforcement Agency*, 2011

- U.S. Dist. LEXIS 11655 (S.D.N.Y., Feb. 7, 2011) (supplemented on Feb. 14, 2011); *Pension Committee of the University of Montreal Pension Plan v. Banc of America Securities, LLC*, 2010 U.S. Dist. LEXIS 4546 (S.D.N.Y. Jan. 15, 2010), *amended by*, No. 05 Civ. 9016 (S.D.N.Y., May 28, 2010); *Rimkus Consulting Group, Inc. v. Cammarata*, 688 F. Supp. 2d 598 (S.D. Tex. Feb. 19, 2010); *Zubulake v. UBS Warburg*, 229 F.R.D. 422 (S.D.N.Y. 2004) (*Zubulake IV*); *Mosaid Technologies, Inc. v. Samsung Electronics Co., Ltd.*, 2004 WL 2550306 (D.N.J.), *aff’d*, 348 F. Supp. 2d 332 (D.N.J. 2004).
6. Fed. R. Civ. P. 16(b)(3); Fed. R. Civ. P. 26(f)(3); Fed. R. Civ. P. 37(e).
7. *Zubulake v. UBS Warburg*, 229 F.R.D. 422 (S.D.N.Y. 2004) (*Zubulake IV*).
8. *The Sedona Conference Commentary on Legal Holds: The Trigger and the Process* 5 (2007).
9. 2010 U.S. Dist. LEXIS 4546 (S.D.N.Y. Jan. 15, 2010), *amended by*, No. 05 Civ. 9016 (S.D.N.Y., May 28, 2010).
10. *Id.* at \*9.
11. *Id.* at \*19.
12. See generally, *Pension Committee of the University of Montreal Pension Plan v. Banc of America Securities, LLC*, 2010 U.S. Dist. LEXIS 4546 (S.D.N.Y. Jan. 15, 2010), *amended by*, No. 05 Civ. 9016 (S.D.N.Y., May 28, 2010)
13. See *e.g.*, *In re Prudential Insurance Company of America Sales Practice Litigation*, 169 F.R.D. 598 (D.N.J. 1997).
14. See Rule 26, Federal Rules of Civil Procedure (2011).

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# State, Municipal and School District Energy Contracting

## Making the Promise of Energy Efficiency and Renewable Energy Supply Contracts a Reality

by Phyllis J. Kessler

Since the early days of the opening of electricity and gas markets to competition, New Jersey governmental entities have been interested in initiatives that could reduce energy costs.

**R**ecent increased pressure on municipalities and counties to reduce expenditures in the present economic environment has further raised the level of interest in cutting energy expenditures. Two categories of energy contracts have garnered the greatest interest: 1) contracts for the provision of electric supply from renewable generation, especially solar, and 2) energy efficiency contracts that reduce energy demand, reduce total monthly energy consumption or both.

The New Jersey Legislature enacted the Electric Discount and Energy Competition Act (EDECA)<sup>1</sup> on Feb. 9, 1999, to open up competition in the energy arena and stem rising energy costs, allowing governmental entities and others to procure competitively generated energy supply and energy efficiency measures. EDECA required state, municipal and county governments that sought to reduce energy costs in deregulated markets to competitively bid for energy supply and energy efficiency products. Prior to the enactment of the EDECA, electricity was primarily sold by regulated utilities, except for that sold through municipal electric systems or rural electric cooperatives.

The Legislature subsequently amended the public contracts laws to enable municipalities, school boards and public col-

leges to enter into contracts for energy conservation services and equipment in 2000.<sup>2</sup> The Legislature later amended the Local Public Contracts Law, the Public School Contracts Law, and the County College Contracts Law to provide those contracting units with improved procedures for contracting: 1) for energy improvements to public facilities (commonly known as an energy service company or ESCO contracts), and 2) for installation of renewable energy equipment owned by third parties for up to 15 years. These changes were made subject to the issuance of guidelines by the Board of Public Utilities to implement methodologies for computing the energy savings and generation costs.<sup>3</sup> Finally, the Legislature adopted a series of laws in 2009 with the intended purpose of providing additional mechanisms necessary to fulfill the original intention of EDECA.<sup>4</sup>

The intent of the Legislature in adopting these new statutes in 2009 was noble,<sup>5</sup> but the result is a statutory framework that created confusion with respect to the ability to enter into power purchase agreements (PPAs), and created a regulatory structure for financing energy efficiency initiatives that is so complex that governmental entities seem reluctant to utilize it.

### The Legislative Road Map: EDECA

Energy comprises one of the largest components of operating costs after labor expenses in buildings owned and operated by the state of New Jersey, its municipalities and counties, as well as New Jersey school districts and public institutions of higher education (government owners).

EDECA eliminated the state's regulation of the sale of electricity and gas by utilities, opening these sales to market competition<sup>6</sup> and permitting the sale of energy-related products and services to government owners and others. At the time of

EDECA's passage, the Legislature estimated that electric costs for local governmental entities (counties, municipalities and county colleges) were in the range of \$300 to \$500 million per year; for school districts the total was \$100 million; for state buildings it was \$100 million; and for public institutions of higher education the total was \$34 million.<sup>7</sup>

EDECA declared that it was state policy, *inter alia*, to: 1) "(l)ower the high cost of energy, and improve the quality and choices of service...";<sup>8</sup> 2) "(p)lace greater reliance on competitive markets...to deliver energy services to consumers in greater variety and at lower cost than traditional, bundled public utility service;"<sup>9</sup> and 3) "(e)nsure that improved energy efficiency and load management practices, implemented via marketplace mechanisms or State-sponsored programs, remain part of this State's strategy to meet the long-term energy needs of New Jersey customers."<sup>10</sup>

Prior to EDECA, any savings realized due to renewable energy technologies<sup>11</sup> flowed through utilities and could not be obtained by individual end users, since competitive markets did not exist. Similarly, conservation measures were much more limited prior to the opening of competitive markets. Since the opening of competitive energy markets in 1999, energy-efficient and renewable technologies have become more prevalent in New Jersey, although they are still in their relative infancy. The question now is: To what extent will government owners be able to benefit from these technologies, and what can be done to improve the likelihood of success of such owners reducing energy use and, in turn, energy costs?

### Public Contracts

In 2009, the Legislature amended the Local Public Contracts Law,<sup>12</sup> to permit government owners to implement ener-

gy savings improvement programs, as set forth in N.J.S.A. 18A:18A-4.6 and N.J.S.A. 40A:11-4.6.<sup>13</sup> The statute also amended N.J.S.A. 18A:18A-4.1(c) and N.J.S.A. 40A:11-4.1(c) related to competitive contracting, deleting those sections that previously allowed government owners to use competitive contracting for entry into power purchase agreement (PPA) contracts for procuring renewable generation and energy efficiency services. Instead, N.J.S.A. 18A:18A-4.6(b)(1) and N.J.S.A. 40A:11-4.6(b)(1) now authorize government owners to utilize competitive contracting for energy efficiency and renewable energy consulting, and other energy-reduction services and equipment that is not subject to public bidding.<sup>14</sup>

In its plainest terms, Chapter 4 of the laws of 2009 reorganizes previous statutes, while adding confusion about permissible energy contracting methodologies and making financing more complex by limiting it to bonds issued as energy savings obligations, discussed *infra*, or lease-purchase agreements.<sup>15</sup> The result does not appear to have achieved what was intended, because of the apparent elimination of the ability of government owners to enter into PPAs and the complexity of the new financing procedures. Unfortunately, few, if any, municipalities or counties have taken advantage of the opportunity to utilize the new authority to employ lease-purchase agreements or to use the new energy savings obligations to finance the procurement of energy efficiency or renewable energy equipment to reduce energy costs.

### Power Purchase Agreements for Energy Supply from Renewable Generation

EDECA and certain related statutes, all of which were enacted in 1999,<sup>16</sup> permitted government owners to enter into electric and gas commodity contracts and energy efficiency contracts;<sup>17</sup> how-

ever, the framework was not fully developed. It took the Legislature several years to enact complementary statutes to clarify how government owners could utilize the new competitive markets and reduce costs while procuring energy-efficient products and services and utilizing renewable technologies.

Prior to enactment of laws of 1999, Chapter 4, government owners had authority to enter into PPAs through competitive contracting under language authorizing energy savings contracts. This statutory language was eliminated by the foregoing statute, unintentionally eliminating the basis for government owners to enter into PPAs.

While not apparent from review of the authorizing statutes, government owners continue to be permitted to enter into PPAs for purchase of energy generated by renewable resources owned by third parties. The director of the Division of Local Government Services of the Department of Community Affairs (DCA) determined that DCA is authorized to allow competitive contracting under N.J.S.A. 18A:18A-4.1(k) and N.J.S.A. 40A:11-4.1(k) for "the operation, management or administration of other services." In addition, subsection (j) of each of the foregoing statutes allows concessions to be awarded through the competitive contracting process. The director of DCA also found that PPAs could be considered to be service contracts or concessions.<sup>18</sup>

The director of DCA, through Local Finance Notice 2009-10, therefore authorized government owners to enter into PPAs through competitive contracting as long as the contracts are for:

The provision of performance of goods or services for the purpose of producing Class I renewable energy, as that term is defined in section 3 of P.L. 1999, c.23 (C.48:3-51) at, or adjacent to, buildings owned by any <type of contracting unit>, the entire price of

which is to be established as a percentage of the resultant savings in energy costs; provided these contracts shall be entered into only subject to and in accordance with guidelines promulgated by the Board of Public Utilities establishing a methodology for computing energy cost savings and energy generation costs.<sup>19</sup>

The Board of Public Utilities issued an order that sets forth such guidelines on Feb. 24, 2009, in *In the Matter of Comprehensive Energy Efficiency and Renewable Energy Resource Analysis for the 2009-2012: Guidelines for Calculating Energy Savings*, Docket No. EO09020128.

### **Energy Efficiency and Renewable Equipment Procurement Agreements**

N.J.S.A. 40A: 11-4.6 provides for the implementation of energy savings improvement programs (ESIPs) for municipalities, and N.J.S.A. 18A: 18A-4.6<sup>20</sup> for school districts.<sup>21</sup> An ESIP is “an initiative of a (government owner) to implement energy conservation measures in existing facilities, *provided that the value of the energy savings resulting from the program will at a minimum be sufficient to cover the cost of the program’s energy conservation measures.*”<sup>22</sup>

Before a government owner can develop an ESIP, it is required to perform an audit to evaluate the current energy usage of its facilities and the energy efficiency and/or renewable energy sources that would most effectively reduce usage and costs.<sup>23</sup> The Office of Clean Energy (OCE), a part of the Board of Public Utilities (BPU), has established a Local Government Energy Audit Program that will pay for up to 100 percent of the audit cost if the government owner commits to implementing recommended measures totaling at least 25 percent of the audit cost. Otherwise the applicant will be required to refund a portion of the audit incentive payment.<sup>24</sup>

After the audit is complete, the gov-

ernment owner must create an energy savings plan (ESP), which is intended to set out the specific actions necessary to implement the ESIP. The ESP may be developed by an ESCO<sup>25</sup> and/or an independent engineer, but may not be prepared by the same entity or person that performed the required audit.<sup>26</sup>

Once the ESP has been authorized by the governing body, the ESIP can proceed. Contractors that perform ESIP work must be qualified by the state Division of Property Management and Construction (DPMC).<sup>27</sup> ESPs are required to include a number of specific items that are highly complex and will require the government owner to utilize the services of consultants specializing in this area. For example, the ESP must include a description of the energy conservation measures (ECMs) to be undertaken and an estimate of the greenhouse gas reductions expected to be realized from the ECMs.<sup>28</sup>

As previously stated, the statutes enacted in 2009 are closely tied to Titles 40A and 18A, and reiterate that “public works” defined by these statutes are still subject to the public bidding laws, as well as prevailing wage requirements.<sup>29</sup> Other activities, such as hiring ESCOs to provide consulting services, prepare audits or verify savings, may be implemented through requests for proposals (RFPs). Public works include, *inter alia*, construction, renovation, demolition, custom fabrication, repair or maintenance, including painting and decorating, done under contract and paid in whole or in part from the funds of a public body, except for work performed under a rehabilitation program.<sup>30</sup>

One of the key benefits of an ESIP is that energy improvements can be financed through what is known as energy savings obligations, which, in turn, are funded from energy appropriations contained in annual budgets of the government owner. Energy savings obligations can be based upon refinanc-

ing bonds that mature within the same period as the obligations.<sup>31</sup> The type of entity that may issue energy savings obligations will depend upon the type of government owner<sup>32</sup> and its position under the applicable statute.

ESIPs also may be funded through lease-purchase agreements, by which a government owner takes title to the energy savings equipment or improved facilities at the end of the lease term. Lease-purchase agreements are, however, limited by statute to no more than 15-year terms, except for combined heat and power projects where the term may be up to 20 years.<sup>33</sup> Lease-purchase agreements are also likely to be subject to the availability and annual appropriation by the government owner of sufficient funds to meet the lease obligation. In addition, if a lease-purchase agreement is terminated on this basis, the leased equipment may not be replaced with equipment that performs the same or similar functions.<sup>34</sup> This provision is obviously intended as an incentive for the government owner not to terminate, but it is more likely to act as a disincentive for entry into lease purchase agreements in the first place, especially for ESCOs or other equipment providers.

Before a government owner may adopt an ESIP, an independent party must verify the projected energy savings that will result from installation of the equipment.<sup>35</sup> Once adopted, the ESIP is filed with the BPU and is to be posted on the Internet by the BPU.<sup>36</sup> After the ECMs are completed, yet another audit is required to verify that the originally projected savings have been achieved.<sup>37</sup> If the savings are not realized, the government owner may be unable to take advantage of either lease-purchase or any other available means of financing under the statute.<sup>38</sup>

In order to make certain that savings will be realized, an ESCO, after it is awarded an energy savings services contract, must offer the government owner

the option to purchase an energy savings guarantee for a separate fee, similar to an insurance policy. The guarantee is intended to insure that savings from the ESIP will defray all payments required under either the lease-payment agreement or the energy finance obligation.<sup>39</sup> Otherwise, the guarantee will reimburse the difference.<sup>40</sup> If a guarantee is procured by the government owner, the energy savings must also be verified periodically by an independent third party.<sup>41</sup>

An attractive alternative for a government owner for small projects could be entering into a PPA or an energy supply contract (ESA), providing for an ESCO or third party to own the equipment without the government owner having to take title at the end of the lease, and with the proviso that energy savings are required to be achieved in a similar way as under an ESIP. However, this does not appear to be presently possible for energy efficiency equipment either under EDECA<sup>42</sup> or the 2009 statutes providing for ESIPs. There is, however, pending legislation in the Assembly, introduced on Dec. 13, 2010, which may address the current inability for government owners to obtain energy efficiency services by PPA.<sup>43</sup>

Another aspect of the statutes that may dissuade ESCOs or others to enter into lease-purchase agreements is the ability of government owners to terminate leases before the end of the term if they determine not to allocate funds to continue lease payments.

### **Key Contractual Issues Required to Implement an ESIP**

As discussed above, government owners may rely on a variety of contractual options to establish a framework that meets statutory requirements for energy efficiency and renewable projects. The nature and scope of these projects may vary, as long as the basic statutory requirements are met. In particular,

a number of contracts may have to be entered into, and the government owner will, in most cases, also need to prepare RFPs and/or formal bid specifications, as outlined below.

As with all construction projects, the government owner must develop detailed documentation necessary to build the project. This documentation is even more critical with an ESIP, because of the complex statutory requirements. Agreements needed include contracts with auditors, and/or energy supply contracts (ESCs). Other contracts include consulting agreements with the ESCO to develop the ESP and contracts with the ESCO to serve as the general contractor, as well as one or more contracts for the construction and/or maintenance of the project or individual portions of the project. If the ESIP covers work to be performed for one or more government owners, for example both municipally owned and school district buildings, or buildings in different towns in the same county, each government owner should enter into separate contracts, so that, in the event suit must be brought each owner's rights and remedies will be clearly delineated.

An ESIP could, for example, provide for installation of rooftop solar panels on one government owner's building, micro wind on another (or the same) rooftop, and energy efficiency services. An energy contractor might be able to provide all these services, but it is equally likely that separate agreements will be needed.<sup>44</sup> Key provisions will include the scope of services required, a determination of the price and price guarantees where applicable, financing (discussed above), maintenance, use of tax credits to reduce the purchase price of equipment, and ownership of renewable energy credits (RECs) and government-provided incentives.

### **Scope of Services**

The scope of services must be clearly

delineated, particularly because the duties of an ESCO can vary depending on how the ESIP is structured. If more than one ESCO, or an ESCO and a contractor are involved, the duties of each must be clear to avoid overlap, gaps in duties or disclaimer of responsibility by one party to a contract.

### **Price and Price Guarantees**

The price of energy sold to a government owner established by a PPA, an energy services contract or lease payments under a lease-purchase agreement must result in specified savings to the government owner. Prices should be fixed, which will protect the government owner against subsequent increases due to increased costs, changes in regulations, etc. Alternatively, certain price terms could be set to guarantee discounts from the price the utility would have otherwise charged or a guaranteed percentage reduction in energy usage.

Where a fixed price is established, there may be no savings over the course of the term of the contract when compared to the rate charged by the applicable utility or the usage that would have been expected if the government owner had not entered into an ESIP, even when savings were originally projected by one of the mandatory audits. This is why when an ESIP is utilized, the statute provides the option for the government owner to procure an energy savings guarantee.<sup>45</sup> Of course, the cost of the guarantee will be critical.

### **Tax Credits, Energy Incentives and RECs**

Because municipalities and school districts are unable to take advantage of tax credits, an investor that can employ available production tax credits<sup>46</sup> and/or cash grants in lieu of tax credits,<sup>47</sup> or any other tax credits, can be brought in as part of the financing structure, and thus benefit the public entity. Contracts should be negotiated that reflect a pass-

through of some or all of the benefit of those credits to the government owner, reducing the cost of renewable generation or energy savings equipment. Documents need to spell out the role of the investor and the percentage of the value of the tax credits to be passed through to the government owner. Other credits and incentives may be available through the BPU's OCE and/or through the New Jersey Economic Development Authority (EDA). Contracts underlying the ESIP should specify who is entitled to those benefits, as well as the RECs, to the extent they are available to a project.

### Maintenance

Finally, specifying the party responsible for maintenance of the equipment is significant, since if equipment is not properly maintained, the energy savings guarantee, as well as warranties, may be voided. For the same reason, the government owner must make sure its employees or agents are properly trained, to avoid having a party who is otherwise responsible disclaim liability. A government owner should also consider hiring a third party to maintain energy efficiency or renewable energy equipment, and by contract shifting the responsibility for proper functioning and energy savings to that party.

### Conclusion

Because of the scope and complexity of ESIP projects, it is difficult and complicated for government entities to implement large-scope energy efficiency and renewable energy projects under their enabling statute. If an ESIP project is to be undertaken, it will require a great deal of study, organization and assistance from professionals with expertise in diverse areas, including energy, finance, engineering, construction, public contracting, and real estate, among others. It may be possible for a governmental entity to lock in savings

through an energy savings guarantee if its cost is within the budget of the governmental entity. However, use of PPAs carried out through competitive contracting for purchasing renewable energy supply, and for energy efficiency measures if and when approved by pending legislation and the Board of Public Utilities, may be best, as they can be accomplished more easily than through an ESIP. Alternatively, use of public bidding for energy equipment under applicable statutes may also afford a simpler approach. ⚡

### Endnotes

1. N.J.S.A. 48:3-49 *et seq.*
2. N.J.S.A. 18A:18A-4.1(c); N.J.S.A. 40A:11-4.1(c), approved Jan. 18, 2000.
3. P.L. 2008, c.83.
4. N.J.S.A. 18A:18A-4.6 *et seq.*; N.J.S.A. 40A:11-4.6 *et seq.*
5. The sponsor statement accompanying the new statute provided: "As reported, the purpose of this substitute is to protect the environment by reducing the release of greenhouse gases, promote national energy independence by reducing public entities' consumption of energy, and save public funds." Statement to Assembly Committee substitute for Assembly, No. 1185, Dec. 8, 2008.
6. N.J.S.A. 48:4-56 and 58.
7. See Legislative Fiscal Estimate, Assembly No. 16, April 29, 1999.
8. N.J.S.A. 48:3-50(a)(1).
9. N.J.S.A. 48:3-50(a)(2).
10. N.J.S.A. 48:3-50(a)(10).
11. These include wind, solar, and biomass (*e.g.*, garbage to energy).
12. N.J.S.A. 40A:11-1 *et seq.*
13. Laws of 2009, c.4.
14. *Id.*
15. *Id.*
16. *E.g.*, N.J.S.A. 18A:18A-4.1(c); N.J.S.A. 40A:11-4.1(c).
17. Energy efficiency contracts are

agreements government owners and others could use to reduce the overall consumption of energy, thus reducing energy bills.

18. Local Finance Notice 2009-10.
19. *Id.*
20. In each volume and chapter of the statutes referenced above, most of the relevant provisions are found in Section 4.6. For ease of reference, those provisions will hereafter be cited as §4.6()( ).
21. There are related provisions for state buildings and for public institutions of higher education.
22. Section 4.6(g) (Emphasis supplied). Some government owners are utilizing the competitive bidding process to procure renewable generation equipment, and funding projects directly, rather than preparing an ESIP and funding the project from anticipated energy cost savings.
23. Sections 4.6(d)(1) and (d)(2)(a).
24. See [www.njcleanenergy.com/commercial-industrial/programs/local-government-energy-audit/local-government-energy-audit](http://www.njcleanenergy.com/commercial-industrial/programs/local-government-energy-audit/local-government-energy-audit). The programs sponsored by the OCE change frequently, depending on the availability of funding, so it is incumbent on the applicant to check for changes in the program.
25. The services that can be performed by an ESCO include, among others, energy efficiency consulting, sales of energy from renewable sources or otherwise, and acting as the general contractor in the construction of facilities.
26. Section 4.6(d)(1).
27. Section 4.6(b)(2)(b).
28. Section 4.6 (d)(2).
29. Section 4.6(a)(2)(a).
30. N.J.S.A. 34:11-56.26(5).
31. See, *e.g.* N.J.S.A. 18A:24-61.1 *et seq.*
32. Section 4.6(c)(3).
33. Section 4.6(c)(1).
34. Section 4.6(c)(2).
35. Section 4.6(d)(3).

- 36. Section 4.6(d)(4).
- 37. Section 4.6(d)(5).
- 38. Section 4.6(d)(6).
- 39. Section 4.6(f)(1).
- 40. *Id.* Whether the cost of the guarantee is justified is a major issue and will determine whether government owners are encouraged to utilize this entire procedure.
- 41. Section 4.6 (f)(1) and (2).
- 42. At present, EDECA allows a municipality or school board to become a government aggregator, which is permitted to supply electric-related service so long as the ESCO it contracts with is licensed as an electric power or gas provider under EDECA, but requires it to enter into

- the contract under the provisions of the Local Public Contracts Law, P.L.1971, c.198 (C.40A:11-1 *et seq.*).
- 43. See A-3610 introduced in the Assembly on Dec. 13, 2010.
- 44. Alternatively, as discussed above, for renewable generation services, a government owner could rely on a third party to own, install and maintain the equipment, and could enter into a PPA, rather than procuring the equipment itself through an ESIP.
- 45. While the statute does not specify the result if the savings are insufficient to cover lease payments, monthly costs of financing energy savings equipment and consulting

- services, if savings failed to materialize, there could be a negative political impact.
- 46. Internal Revenue Code §48.
- 47. American Recovery & Reinvestment Act §1603.

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# Sustainable Construction in New Jersey's Older Urban Areas

## A Case Study

by Dante J. Romanini

The term “building green,” often used loosely, can be difficult to define, which is why when the Cathedral Soup Kitchen (CSK), a nonprofit organization, was approached about constructing its new facility using green design principles, its board of directors was curious but cautious. Ultimately, CSK was able to coordinate a number of available resources that meshed neatly with sustainable building concepts, resulting in the construction of its first permanent home to serve the disadvantaged. This article outlines how that was accomplished.

### Historical Background

CSK is a nonprofit organization<sup>1</sup> that for more than 30 years has been providing hot meals to the needy residents of Camden, presently feeding dinner to over 350 people each day. Until recently, it lacked a permanent home and had been utilizing borrowed space in a variety of locations to perform its charitable work. Several years ago it was able to purchase an abandoned property in Camden, which it hoped to develop into a permanent facility for its programs.

Unfortunately, the site was subject to a condemnation pro-

ceeding because it was located in a redevelopment area that the city of Camden had designated for the construction of an office park adjacent to the corporate headquarters of its last remaining Fortune 500 company, Campbell's Soup Company. This meant CSK had to look elsewhere to undertake its project. It did so by coordinating a variety of public and private resources unique to urban settings to make the project viable.

The recent recession has inflicted some of its deepest wounds on real estate development. However, before the effects of the recession were felt in full force, a newly emerging movement for development had begun to gain favor in older cities—the redevelopment of brownfields<sup>2</sup> and other older neglected urban sites. This trend took root in cities decimated by decades of residential flight to the suburbs, losses of industrial and manufacturing bases, and otherwise general aging and decline. Nevertheless, developers slowly began to see the benefits of locating their projects in these older areas because of a combination of factors, such as the availability of affordable land in cities, lack of land or difficulty in obtaining approvals in ‘virgin’ or undeveloped areas, and new government incentives for redeveloping urban properties.

It is because of these factors that urban brownfields are often ideal candidates for the construction of projects using green or sustainable principles. Many of the site characteristics upon which the green building movement is premised are found on these urban sites. Examples of these factors are the reuse of previously developed sites rather than virgin land, remediating and reclaiming contaminated properties, and development of sites that minimize environmental concerns related to air and water pollution.

The CSK project is a perfect example of how an urban renewal/redevelopment/ brownfields site was successfully developed in New Jersey's poorest city, using green or sustainable building principles enabled by a variety of existing statutory regimes.<sup>3</sup> It

is suggested that this Camden effort can be used as a rough guide to show how the proper and timely management of a variety of resources can lead to successful urban sustainable redevelopment of other urban sites.

## The Project

CSK's quest began by negotiating with the city for a new site. Site control is obviously paramount in any real estate development, and in this case the negotiation with the city resulted in what was essentially a swap of its existing property for another already owned by the Camden Redevelopment Agency (CRA). This acquisition represented the first piece of the brownfields redevelopment puzzle.

Once the new site was identified, the New Jersey Local Redevelopment and Housing Law (LRHL)<sup>4</sup> was employed to negotiate a redevelopment agreement with the CRA that would allow CSK to obtain its new site and be reimbursed for some of the financial losses it sustained in giving up its original site. This redevelopment negotiation was a key initial step, not only because CSK obtained the new property, but also because it used the LRHL to lay the foundation for garnering other public and private resources.<sup>5</sup> A formal redevelopment agreement under the LRHL opened the door for CSK to take advantage of additional programs that would otherwise not have been available.<sup>6</sup>

As it turns out, the fact that the proposed site was a brownfield also conferred upon it a status that was beneficial in the process CSK sought to undertake in its sustainable building initiative—Leadership in Energy and Environmental Design (LEED) certification.<sup>7</sup> LEED is an internationally recognized green building certification system, providing third-party verification that a building was designed and built using strategies aimed at improving performance across a variety of criteria including energy savings, water efficiency, car-

bon dioxide emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts.<sup>8</sup> Thus, by redeveloping a brownfield, CSK enhanced its LEED credentials.

However, because it was a brownfield, the new site came with its own set of problems. As the location of a former hardware store for almost 100 years, it was laden with environmental issues. In addition, significant demolition work was required to remove the old structure and foundation and prepare the property for the new construction. Fortunately, these factors enhanced the LEED certification process as well. LEED criteria place great importance on the use of 'sustainable' sites.

In this case sustainability was recognized by virtue of the fact that this was not virgin land. It was, in fact, an already developed but neglected urban location that was being reborn, and in the process improved through the remediation of its existing contamination.<sup>9</sup> This factor prompted the second phase of the sustainable development process—cleaning up the site. To do so, the CSK team, in conjunction with CRA, identified a variety of avenues as potential sources of funding to undertake that effort, and was successful in obtaining money from three of those sources to carry out the work.<sup>10</sup>

The first step in the remediation process—identifying the extent of the problem—was accomplished through \$35,000 in funding provided by the New Jersey Hazardous Discharge Site Remediation Fund,<sup>11</sup> which provides investigation and cleanup funding to certain eligible properties. This was followed by site demolition, which turned out to be an expensive undertaking because of the contamination on the property. The demolition, remediation and site preparation were eventually funded through the application of approximately \$200,000 from the State Economic Recovery Board for Camden<sup>12</sup> and

\$100,000 in eligible federal Housing and Urban Development (HUD) Community Development Block Grant<sup>13</sup> funds.

The development team that had been assembled was also instrumental in making this sustainable construction project work. In addition to a team of architects, engineers and construction industry people who were anxious to contribute to this innovative project, CSK also had the services of a LEED-certified architect who volunteered his time to advise the organization on proper procedures for obtaining LEED points.<sup>14</sup> This required CSK to initiate certain procedures, from the very first steps of the initial planning all the way through final construction and occupancy, and to document those procedures.

When the actual construction of the new CSK facility began, it was in part funded by publicly available financing of \$900,000 from the New Jersey Economic Development Authority (EDA)<sup>15</sup> and through private financing through a PNC Bank loan as part of its Community Reinvestment Act<sup>16</sup> obligations. The balance was funded by CSK's private donors and grants from governmental entities that were available because of the nature of the project.<sup>17</sup> Some of these donors were new to the charity but had been impressed with CSK's ability to pull together the disparate resources to gain site control, fund the cleanup and undertake the green initiative. Consequently, CSK was able to tap into a donor base that otherwise might not have been interested in the project.

In reality, many of these financing sources were only available because the economic condition of Camden was such that few 'typical' financial channels likely would have been on the table. In effect, Camden's dire economic straits provided an underlying basis for the generation of many of these sources of revenue.

The sustainable nature of the project also provided incentive for local and state government officials to be less

stringent in their requirements for development approvals, and for some agencies to take advantage of the positive publicity generated by the project. Thus, the LEED certification/brownfield redevelopment process that CSK was undergoing also ended up being attractive for a number of these state and private sources of funding.

The New Jersey Department of Environmental Protection (NJDEP) was involved in the project because of the environmental issues on the site. However, since the project demonstrated that a successful brownfield redevelopment project was achievable in the state's poorest city, NJDEP later used it in promotional materials as an example of how a brownfields project could work successfully. The EDA also had significant interest for similar reasons. Even the private sources of funding were enamored with the idea that a 'green soup kitchen' was being built in such a location.<sup>18</sup>

In addition to the site selection and development aspects that contributed to the LEED scoring, CSK's design also employed a wide variety of sustainable building techniques, such as the use of large amounts of natural light and the inclusion of many green building products like recycled steel and wood-look plank flooring made from recycled tires.<sup>19</sup> Many corporate and private foundations found this to be an enticing charitable cause because of the unique factors that made up the project. As one example of this interest, in June 2010, when the Sustainable Agriculture and Food System Funders ([www.safsf.org](http://www.safsf.org)) held its annual forum in Philadelphia, they offered attendees a tour of the facility led by representatives from the William Penn Foundation and the Geraldine R. Dodge Foundation.

Today, almost two years after construction was completed, the CSK continues to serve its community.<sup>20</sup> All of this was made possible through the successful identification and application of

available public funding sources, coupled with the generosity of private donors. The sustainable aspect played no small part in the project's success, since it was the impetus for many of the contributors to become actively involved.

### **The Lessons Learned**

The success of CSK's project demonstrates several lessons about sustainable development in New Jersey's older urban areas. First, there are many opportunities, although development in distressed cities may not seem attractive at first blush. Additionally, different obstacles exist when developing in urban areas compared to undertaking a project on virgin land. However, unique economic incentives and resources often exist in urban areas. Some of the funding sources for the CSK project simply would not have been available if the project were located in a suburban spot.

Second, there are a variety of resources that can be tapped into to overcome perceived obstacles that may be present when developing (or redeveloping) property in urban or brownfields areas. This fact is not new to many in the development field, since state and local governments have been trying for years to rebuild their decaying cities by attracting new projects. However, these existing resources need to be properly identified and diligently pursued. One must be thorough in searching out those resources and identifying the avenues where funding or other assistance could be obtained. This aspect of the development process is key to any multi-faceted effort to build in urban areas, and is particularly true when sustainability is a goal. Indeed, using sustainability as a marketing tool can lead to more financing opportunities.

Third, it may be unlikely that a sole source of revenue will provide enough support to address a project's entire financial needs in an older urban area. Urban sites typically have more acute

development hurdles that must be addressed, and in order to do so, a developer will likely need to look in more than one place to find a solution. Potential environmental contamination, neglected infrastructure, lender skepticism and political issues are just some of these concerns. Yet at the same time, these factors are the very things that sustainable building practices seek to take advantage of. CSK's experience proved that seeking a number of complementary sources, including grants and/or loans, may work to meet the totality of requirements for a development. The fact is that although development issues on urban sites may seem daunting at times, they are not more numerous than those present on suburban locations. Rather, the issues are simply different.

Finally, while CSK's project was somewhat unique due to its status as a nonprofit, the importance of what it was able to accomplish is rooted in the fact that, through the diligence of its staff and design team professionals, it was able to overcome what initially seemed like insurmountable problems (site control, contamination and funding gaps). A successful coordination of a broad range of funding sources to complete the full puzzle is essential. In doing so, a developer can maximize its resources and in the process build a sustainable project that can be used as an asset to attract more resources.

Creative financing and the ability to tie various sources of funding together were the hallmarks of the CSK project. In the current economy, this is a lesson that should be taken to heart by anyone seeking to build sustainably in older cities where the issues are markedly different than elsewhere.

### **Conclusion**

Although the CSK project may not be typical of most development projects, the process used to reach its eventual goal is a model that could work for any

green-oriented urban construction project. While the project was undergirded by its sustainable nature, the key to the completion of the development was the coordination of numerous sources of funding, governmental resources and construction efforts that meshed to be successful in an otherwise difficult development scenario.

Until significant redevelopment takes place in older urban areas, there will always be similar types of challenges. Yet, at the same time, these locations may provide some of the best opportunities for developers to build sustainably. As we eventually move back to an economic climate that will allow more development in older urban or brownfields areas, the approach that was successful for the Cathedral Soup Kitchen in Camden may be a process worth emulating. ☺

## Endnotes

1. Cathedral Kitchen is a 501(c)(3) entity.
2. The term "brownfields" has various definitions, but can generally be defined as "a former or current commercial or industrial site that is currently vacant or underutilized and on which there has been, or there is suspected to have been, a discharge of a contaminant." See N.J.S.A. 58:10B-1.
3. While the definition of "sustainable building design" is constantly changing, according to the National Institute of Building Sciences six fundamental principles persist: optimization of the site, optimization of energy use, protection and conservation of water, use of environmentally friendly products, enhancement of indoor environmental quality and optimization of operational and maintenance practices.
4. N.J.S.A. 40A:12A-1 *et seq.* The redevelopment agreement can be used as a tool to foster the necessary fac-

tors that help develop a brownfield site using green techniques.

5. The LHRL can be an extremely powerful tool if properly utilized. Among other things, it enables developers to enter into direct agreements with municipalities without public bidding, N.J.S.A. 40A:12A-9; allows towns to offer tax abatements, N.J.S.A. 40A:12A-66, and direct grants to redevelopers, N.J.S.A. 40A:12A-8; and permits project specific zoning under certain circumstances, N.J.S.A. 40A:12A-7.
6. *Id.* See sections 8, 9, 22, 29, 30, 39 and 40 of the LHRL for some provisions of the statute that can be used to foster development in urban areas.
7. LEED is a program sponsored by the U.S. Green Building Council.
8. U.S. Green Building Council; [www.usgbc.org](http://www.usgbc.org).
9. Choosing a building's site and managing that site during construction are important considerations for a project's sustainability under U.S. Green Building Council criteria. Its sustainable sites category discourages development on previously undeveloped land; strives to minimize a building's impact on ecosystems and waterways; encourages regionally appropriate landscaping; rewards smart transportation choices; controls storm water runoff; and reduces erosion, light pollution, heat island effect and construction-related pollution.
10. Given the state's present budget concerns, some of the sources of funding that CSK used three years ago might not be as readily accessible today, but the concept of combining available resources is still key.
11. N.J.S.A. 58:10B-4.
12. N.J.S.A. 52:27BBB-36. (Note: The ERB funds were accessible only because of Camden's peculiar situation at the time, and are no longer available

because of changes in the law and the state budgetary process.).

13. 42 U.S.C. 5301; 24 CFR 570.1 *et seq.*
14. The LEED certification process consists of a system where points are awarded (or denied) for each phase of the construction project from the early planning stage to final occupancy.
15. See N.J.S.A. 34:1B-1 *et seq.* Information on the particular program used by CSK, as well as other EDA programs, can be found at EDA's website: [www.NJEDA.com](http://www.NJEDA.com). EDA is an extremely valuable resource. Its staff is well versed in helping developers identify sources of funding for many types of projects including sustainable ones.
16. 12 U.S.C. 2901 *et seq.* Under this federal statutory regime, financial institutions have an affirmative obligation to serve all facets of their community, including low-income and minority populations, with capital investment and loan availability. See also, *Lee v. Board of Governors of the Federal Reserve System*, C.A.2 1997, 118 F.3d 905.
17. Both individual and institutional sources were identified. These were attracted by the appeal of being involved in a project that was both charitable and also forward-looking because of its sustainability.
18. The sustainable aspects of a project can lead to greater public and private investment interest. It is more attractive to public entities that provide public financing because building green has become a highly valued concept, particularly in urban areas that have undergone severe decay. Private lenders also have interest in these projects for the same reason. The sustainable nature of any urban project enables funding sources to tout their green credentials at a time when the ability to claim them is a valuable public relations or market-

ing asset. Some of the private foundations who provided grants for the project included Connelly Foundation, The Danellie Foundation and Campbell Soup Foundation.

19. The CSK building also took advantage of these other sustainable traits: its location on a major bus route; use of low-flow faucets and toilets with automatic controls; waterless urinals; low VOC paints, carpet, adhesives and sealants; motion-sensitive light fixtures and switches; recycled material in the main flooring; white reflective roofing; use of water runoff for land-

scaping; daylight and outside views with operable windows for less reliance on artificial lighting; use of timers and energy-efficient fixtures to reduce light pollution; use of regional materials in construction; use of recycled glass and educational materials within the building to emphasize the green design.

20. Although CSK has constructed its facility to be eligible to garner the necessary points for LEED certification, and had registered the project for that purpose, the required documentation necessary to obtain the certification with the U.S. Green

Building Council, including the commissioning process, was estimated to cost CSK an additional \$20,000. The lack of funding for this task has prevented the nonprofit from moving forward on it.

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