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# THE ISCM NEWSLETTER

Edited by Randy Law

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## It is Not Easy Being Green

*Contributed by:*

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Well before the BP Oil Spill, energy prices, supply uncertainties, and environmental concerns began driving the United States to rethink its energy mix and develop sources of clean, renewable energy. These concerns have led to fundamental change in how we will look at energy development, use, and conservation in the future. The efforts taken represent many things to many people. They represent a means to protect the environment from the effects of long term use of fossil fuel energy, provide a way to protect our national security by reducing our dependence on foreign oil, and a possible means to create jobs and stimulate the economy. The current administration's Recovery and Reinvestment Act earmarked more than \$80B for further development of renewable energy sources as well as expanding manufacturing capacity for clean energy technology. In addition, the federal government has updated the appliance efficiency standards, and has committed itself to reduce greenhouse gas emissions by 28% by 2020. At the same time a number of states have committed to increasing their reliance on renewable energy sources including wind, solar and geothermal to 20% or more within the next 20 years.

In 2008, 14 states enacted some sort of legislation requiring green building codes with more states following in 2009 with increased discussions of a possible national green building code. Many of these building codes require new and rehabbed buildings to meet some measure of Leadership in Energy and Environment Design (LEED) standards, which focus on the 5 key areas of: sustainable site development; water savings; energy efficiency; building material selection; and indoor environmental quality. While this green initiative is recognized for a number of positives, it also represents new exposures and uncertainties for the insurance industry for First and Third Party exposures due to new manufacturing and

construction processes, use of recycled building materials, and economic demands.

While most people want a cleaner, healthier environment, the driving force behind this push will inevitably be dollars and cents. Currently, there are considerable economic incentives for private sector developers and investors to tap into this "green wave". The biggest component of these incentives offered by a number of states and municipalities is real estate tax credits for new or rehabbed construction. These incentives can be significant. For example, Nevada currently provides real estate tax credits of 25% to 35% for new commercial construction that is LEED certified. Perhaps the poster child of Nevada's tax abatement is the newly constructed 18M square foot City Center gaming resort and hotel complex in Las Vegas. Another example is New York City, which is offering tax incentives for building owners to install "green roofs" on existing and new structures. Under the New York City law, a property owner who installs a green roof on at least 50% of available rooftop space can apply for a one-year property tax credit of up to \$100,000 depending on the total size of the roof area.

There are other economic incentives to commercial building owners as well. According to a study conducted by the University of San Diego and a commercial real estate broker in California, tenants in "green" buildings are more productive, based on the average number of sick days in their current "green" office. Respondents reported an average of 2.88 fewer sick days in their current "green" office. In addition, the study showed that "green" buildings have 3.5% lower vacancy rates and 13% higher rental rates than the market.

At the present time, there is also a considerable amount of proposed changes to the energy production infrastructure and national grid. Perhaps some of the most aggressive proposals on the table are the construction of offshore wind farms off the coasts of Massachusetts, Rhode Island, New York, New Jersey, Delaware, and Maryland. In Massachusetts, the current proposal calls for the installation of approximately 130 wind turbines, 5 to 10 miles from shore in Nantucket Sound. The site is projected to be able provide almost three quarters of Cape Cod's, Nantucket's, and Martha Vineyard's annual electrical power needs, while eliminating approximately 734K tons of emissions annually. In Rhode Island, the focus of the proposed project is Block Island, whose electrical power needs are met primarily through diesel generators on the island. Block Island presently has the highest electrical costs within the continental United States. The current proposals call for the installation of approximately 100 turbines. In Delaware, NRG Blue Water Wind, LLC, has signed a contract with Delaware Power to sell up to 200 mega watts of electricity generated from a wind farm to be built approximately 15 miles off of Rehoboth Beach. In New York, New Jersey, and Maryland discussions continue with potential developers for construction of offshore farms.

While the potential advantages to developers, contractors, property owners, and the environment are obvious, there are considerable challenges as well. Green roofs for example have higher maintenance costs, more complex drainage systems, a need for

stronger roof beams, and more costly and difficult repairs. The use of recycled building materials opens a plethora of potential issues. In the world of commercial real estate development, the attraction of real estate tax incentives comes with tight building schedules and completion dates, and tighter budgets and margins. Updated building codes expose property owners to potential unforeseen additional reconstruction costs in the event of even a relatively minor loss. In addition, the new manufacturing and construction processes associated with these new products and projects may bring new exposures as well. The answer to the question of who will be picking up the cost of most of these exposures is clear, it is the insurance industry.

With respect to First Party insurance coverages, the following represent a few of the potential new or increased loss exposures resulting from the green initiative:

ISO and a number of standard and non-standard lines companies have already introduced property coverage forms tailored for the new First Party exposures. The ISO Green Building Upgrade Endorsement for Commercial Properties offers extended coverage solutions for many of the green issues. Replacement Cost coverage is enhanced by providing additional limit in order to address loss settlement of damaged property using preferred materials and products recognized by LEEDs. It also provides increased limits for the recycling costs and reuse or salvage of building materials. Additional coverage is also provided for the expenses associated with the design and engineering of green upgrades. There is also an available coverage option for business interruption resulting from an extended period of restoration, due to a longer than customary reconstruction period because of green processes.

Another First Party exposure that specifically emanates from the recent building code changes is from Ordinance of Law coverage. Under the coverage part, following a property loss, an insurer is responsible for updating the damaged and undamaged portions of the building to current building codes, subject to a stated limit of liability. Underwriters need to be cognizant of the revised building codes in applicable cities as well as understand the possible consequences of larger than necessary sublimits.

As new green buildings are constructed, the challenge to establish an appropriate replacement cost becomes more of an issue. As a result of the additional expense associated with increased material costs and construction expenses associated with green, the potential for an underinsured scheduled and an underpriced exposure is real. Even though Marshall & Swift has incorporated green construction costs and expenses in its products, the question that remains is whether insured's and underwriters fully accept the increased costs and expenses in the estimates and understand the implications?

The potential impact to the insured's and reinsured's portfolios becomes more real in light of the fact that today's natural catastrophe models do not, as of yet, recognize the unique qualities of green buildings. This is largely due to the fact that there have not been sufficient claims data to adjust the models. Items such as solar panels are not directly reflected in the model, but are said to be somewhat accounted for through the use of secondary modifiers.

Not to be outdone, these green initiatives also bring new and unique exposures to Third Party insurance coverages.

As a result of increased use of recycled building materials and new building processes and environmental systems, there are potential increased products and completed operations exposures.

New manufacturing and construction processes will impact worker's compensation and employee liability exposures.

In addition, architects, engineers and contractors may not be LEED trained or certified, and be unfamiliar with green building techniques or systems requirements. This could contribute to substandard building or system performance, resulting in the loss of tax savings, thus increasing the exposures for Professional Liability and General Liability coverage. In 2006, a complex suit and counter suit pitted a Maryland real estate developer and its builder against each other in court of law. The center of the counter suit brought by the developer was based on the fact that the building that was being constructed was not completed in accordance with the contracted LEED designation. The inability to achieve the desired designation resulted in the developer not receiving the state tax incentive that it sought. Although the suits were later settled out of court, *Shaw Development vs. Southern Builders* marked, perhaps the first US law suit resulting from a failure to meet desired LEED certification. It also highlighted a need of insurers to be cognizant of a possible exposure

### Conclusion

The US and other countries of the world are potentially looking at the beginning of a tremendous shift in energy policies based on the technology currently available and in development. Current social, economic, and environmental conditions have made these projects more viable and attractive. In July of 2010, Google signed a 20 year agreement to buy wind energy from a wind farm in Iowa. This follows a \$38.8M investment in May by Google in two North Dakota wind farms. The next 5 to 10 years may bring a substantial change in how we as a society look at energy production and use, as well as its overall impact to our environment. Imbedded in these developing technologies are new risks and exposures. The one fact remains is that there will always be a need for financial protection for engineers, contractors, and manufacturers against accidental loss. This protection will undoubtedly continue to be provided by the insurance industry.

*[The views expressed in this article are those of the writer and do not necessarily reflect the views of Partner Re Ltd.]*

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