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Group Contact:

Barry Trilling, Partner
203.363.7670
btrilling@wiggin.com

About the Climate Change and Sustainable Development Group

Committed to meeting client needs as they are affected by a rapidly changing environment, Wiggin and Dana's Climate Change and Sustainable Development Practice Group advises clients reacting to new mandates for change. In particular, the Practice Group advises with regard to the adoption of environmentally-desirable business practices, emerging business opportunities, and litigation associated with climate change and sustainable development. Another useful seminar on these groundbreaking trends is planned for the autumn.

As a firm, Wiggin and Dana is committed to reducing the environmental impact of its offices. Wiggin and Dana's Green Team is implementing a plan to achieve the firm's goal of creating an environmentally sustainable workplace.

Insurance and Global Climate Change: Assessing, Mitigating, and Responding to the Risks

The reaction of businesses to the vast, cross-cutting challenge of global climate change has spurred the insurance industry to offer an array of new products and services aimed to reduce climate-related losses, facilitate emerging mitigating technologies, and encourage carbon trading markets. This advisory focuses on some of these new products, particularly those supporting the nascent "green" building movement and carbon emission reduction markets. These products stimulate investment in these emerging areas which, in turn, makes possible cutting-edge developments that promise to reduce or mitigate the adverse effects of global warming.

Insurance for Building Green

Recent years have brought an increasing number of insurance products designed to encourage environmentally-sensitive construction, rebuilding, and renovation. For example, in 2006, Fireman's Fund became the first U.S. insurer to offer "green" building insurance to non-residential customers. While traditional building insurance products covered the cost of restoring a building to its original condition, the new green products cover the costs of upgrading (or, in the case of a total loss, of rebuilding) conventional buildings after a loss using green alternatives such as Energy-Star® rated electrical equipment, roof and insulation materials, energy-efficient lighting systems, and water efficient interior plumbing. Fireman's Fund also offers a 5% reduction in premium costs for buildings certified under either the U.S. Green Building Council's Leadership in Energy and Environmental Design ("LEED") program or the Green Building Initiative's Green Globes rating system. In the case of loss to a green-certified building, these insurance products cover the cost of rebuilding to green-certified standards, including the cost of hiring a LEED-certified professional to oversee the repairs.

A number of other insurers have introduced green building (and rebuilding) products. For example, Lexington Insurance Company, a member of American International Group (AIG), now offers similar products for both residential and commercial customers. In recent months, Aon, ACE, Travelers, Zurich, and Liberty Mutual have announced the creation of similar products for commercial property policy holders. Chubb also provides coverage for green-certified commercial property.

"Cap and Trade" Regimes and Technologies to Mitigate Climate Change

Most of the industrialized world is already subject to a "cap and trade" emission reduction program. Effective as of February 16, 2005, the Kyoto Protocol requires participating industrialized nations (which currently number 175 but do not include the United States) to reduce their greenhouse gas (GHG) emissions to approximately ten percent below 1990 levels on a five-year average basis measured between 2008 and 2012. Participants who do not meet their reduction targets, however, can purchase "tradable allowances" from nations whose GHG emissions are within their cap. To meet its Kyoto Protocol

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commitments on an aggregate basis, the European Union in 2003 implemented its Emissions Trading Scheme (ETS) under which each member country sets a cap for each of its covered facilities. Each facility, in turn, can either reduce its GHG emissions to the specified level or purchase allowances in the emissions allowance market which includes non-EU trading systems.

Although the United States has not adopted the Kyoto Protocol, some domestic emission reduction programs are expected to come on-line shortly. Beginning in 2009, the Regional Greenhouse Gas Initiative (RGGI) will cap carbon dioxide emissions from fossil fuel-fired electrical generation plants with a capacity of 25 megawatts or greater within ten northeastern and Mid-Atlantic states. Other regional cap and trade initiatives are on the horizon, including the Western Climate Initiative (covering western U.S. states and Canadian provinces) and the Midwestern Regional Greenhouse Reduction Accord (covering midwestern U.S. states and a Canadian province). California's Air Resources Board is also under a mandate to formulate a market-based system. On the federal level, the Lieberman-Warner Climate Security Act of 2008, which called for a national cap and trade program, was filibustered in the Senate in June.

Participants in the various carbon markets resulting from these "cap and trade" programs face a number of unique risks, and the insurance industry is beginning to develop products and services to help businesses manage these risks. The Kyoto Protocol provides several mechanisms for participants to meet their emissions targets and generate tradable credits. For example, participants may jointly implement or sponsor projects involving emerging technologies such as solar, wind, and geothermal energy production and methodologies to reduce GHG emissions from coal and other fossil fuels. The Protocol also permits the trading of credits between participants in developed nations in order to meet their GHG emissions reduction requirements. Domestic initiatives, including RGGI, call for similar mechanisms.

Carbon market participants thus face a range of risks in the event that their carbon credits are not actually delivered or the technologies on which they rely suffer operational problems, including:

- **Political risk.** Investors in "Clean Development Mechanisms," projects built in developing countries in part to generate tradable credits, face the risk that government action or inaction will impede the project or prevent the delivery of expected credits. These investors may find that delivery is impossible due to civil conflict or other political issues.
- **Performance risk.** Especially in cases of untested technologies such as carbon sequestration (e.g., diverting carbon dioxide gas from dispersion in the atmosphere to underground chambers deep beneath the earth's surface), investors and other participants may need to mitigate the risk that a project will not be able to deliver the expected credits.
- **Price risk.** Participants who have purchased credits may need to mitigate the risk that they will have to incur higher costs for credits bought on the "spot" market if the project fails to deliver.

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- **Credit risk.** Participants face the risk that a project will run out of funding and/or become bankrupt before the credits are delivered.
- **Risk of Third Party Legal Action.** The use or failure of emerging technologies could result in actions for trespass, nuisance, and negligently inflicted injury to the environment, property, and people. (For example, a malfunctioning carbon capture and sequestration system might result in releasing carbon dioxide across property lines or polluting groundwater with potentially dangerous acidification.)

Carbon market participants hope to manage these risks, in part, through insurance, and insurers are rapidly developing products to meet these needs. For example, AIG accepts applications for carbon credit delivery insurance from both U.S. and non-U.S. participants seeking coverage for credit, political, and performance risks of non-delivery. In recent months, Zurich North America and Alliant Insurance Services have both announced the development of insurance programs to mitigate risks for investors in carbon credit projects. The Zurich program addresses political risk, while the program announced by Alliant addresses political, credit, and other counterparty default risks. The Zurich program covers third party legal actions, but is issued only on an annual renewal basis.

Although these programs are designed specifically for Kyoto Protocol projects, similar products will likely become available to participants in projects under other regimes. Indeed, the RGGI model rules specifically contemplate the availability of performance risk insurance for carbon sequestration projects. These model rules apply a 10% discount on the calculation of carbon offsets generated by such projects to account for potential losses of sequestered carbon. This discount does not apply, however, if the project sponsor maintains long-term insurance guaranteeing the replacement of any lost sequestered carbon for which carbon dioxide offset allowances had been given.

Conclusion

Responses to climate change, such as green building codes and regulatory regimes requiring GHG emission reductions, carry with them new risks and opportunities. The insurance industry will play a major role in addressing these risks—by pricing and marketing existing insurance products, developing new products that address market and regulatory changes, educating market-players about these new risks, and advocating for responsive risk mitigation policies. So too, insurers can be expected to continue to manage their own risks to climate change, for example by limiting coverage in coastal areas and in tightening exclusion language in liability policies.

The Wiggin and Dana Sustainable Developments e-Newsletter is a periodic newsletter designed to inform clients and others about recent developments in the field of climate change and sustainable developments law. Nothing in the e-Newsletter constitutes legal advice, which can only be obtained as a result of personal consultation with an attorney. The information published here is believed to be accurate at the time of publication, but is subject to change and does not purport to be a complete statement of all relevant issues. In certain jurisdictions this may constitute attorney advertising.