Catching up on climate change

What insurers in U.S. and worldwide are doing to address the effects of climate change

By Andrea Ortega-Wells

Recent mega-catastrophes such as Hurricane Katrina in the Gulf Coast have brought increased attention to the issue of global climate change and its impact on the insurance industry. Even so, most insurers have just begun exploring the issue of climate change and its effect on insurance risks, according Dr. Evan Mills of the Lawrence Berkeley National Laboratory. Mills has written extensively on climate change's impact on the insurance industry and is considered one of the nation's foremost experts on energy efficiency and its relationship with technology, climate change, and risk management.

"There are some companies that I think are doing a remarkably good job of getting up to speed, appreciating the issue, doing analysis that's important, taking proactive and reactive steps that make sense," Mills said. "But then, of course, there are many others who are just now even beginning to think about it let alone explore it in depth."

Mills added that in the last couple of years insurers have shown a remarkable uptick in interest and engagement in addressing climate change and its risk to the industry, including studies by AIG and Marsh that examine the problem so the companies can begin integrating what they've learned into their business environments.

"So we have the largest insurers and brokers not only in the U.S., but in the world that have been very active," he said.

Nevertheless, the insurance industry could do much more, Mills advised.

"[T]here's vulnerability and there's uncertainty going forward … the future will not be like the past," Mills said. "That's a real challenge." But then there are opportunities, he added. "There are things to do both in the core business and in the investment side." A recent report developed by the Lawrence Berkeley National Laboratory, chronicled about 100 examples of brokers and other trade allies, who have done one or more things to address the issue.

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Best practices

"We kind of organized their behavior into a framework with seven major categories of things that they can do," Mills said. "We have laid out what can be called best practices and what would be a comprehensive strategy and I can't say we have a single company who's doing everything along those lines." Mills noted there are many companies active, but that is the vanguard. "Most companies haven't done anything yet. They're thinking about it at the best. So there's a lot more that needs to be done even for the leading companies but certainly for the industry as a whole."

When it comes to confronting climate change in the insurance industry, a company's home base may make the

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dollars" in costs, "as insured losses from floods and storms cause increases in federal spending and insurance premiums." While Collins praised private insurers for "paying serious attention" to the increased risks presented by climate changes, she chided federal programs for their failure to do so.

Claire Wilkinson, the International Insurance Institute's vice-president-Global, thinks the GAO report will be felt. "The report will increase U.S. attention [on the problems posed by climate change]," and will "have an impact on the current scientific debate," she said in an interview.

She strongly agreed with the GAO's conclusions that a lot more attention should be paid to where and how buildings are constructed in risk-prone areas. "The insurance industry has been involved for many years in strengthening building codes," Wilkinson said, "especially in areas like Florida and Louisiana." She acknowledged, however, that enforcing those codes is equally important.

However, Wilkinson said, "the many variables surrounding climate change make it difficult to relate increased losses directly to the weather, the links are too uncertain." She pointed out that each private insurer is different, and that, while practically all of them are aware of the potential dangers posed by climate change, each would most likely seek its own solutions to deal with the risks.

The federal agencies came in for some harsh comments from the Natural Resources Defense Council (NRDC), an environmental group. "We commend Senators Lieberman and Collins for exposing the inadequacies of federal insurance programs to protect taxpayers from catastrophic losses due to global warming," stated David Tuft, campaign director of the NRDC's Climate Center on the Group's Web site (www.nrdc.org).

"Not only has our federal government thus far failed to take action to prevent the worst consequences of unchecked global warming pollution, but it has failed fundamentally to take reasonable precautions against global warming-induced storms and drought, and the high costs that will be borne by families, businesses and ultimately, taxpayers." He called the government "woefully ill-prepared to protect its citizens against catastrophic losses," and, citing the GAO, said it has "blown the whistle on how ill-prepared we are as a nation for further destruction."

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difference.

"There is a Europe-United States divide," Mills said, although other countries including Asia, Latin American and even Africa where the insurance industry has been looking at the effects more closely. Interest does vary geographically, Mills said, referring to responses to a global survey called the Corporate Disclosure Project.

The annual survey is an eight-question survey mounted by institutional investors who are interested in the exposures to climate change of other companies they invest in. Mills said the Corporate Disclosure Project completed its fourth cycle late last year of surveying Fortune 500 companies and other kinds of top companies worldwide, including such as insurers, banks, textiles, and others.

According to Mills, the response rate among insurers is much lower in the U.S. than everywhere else. "The response rate, let alone what the response is, is about three in 10 insurance companies in the U.S. who are asked. … In the rest of the world, almost about seven in 10 respond." So that in and of itself is a gauge of the lack of awareness and interest or knowledge of the issues, he added.

While there is no one answer that describes why U.S.-based insurers appear to hold a lower level of interest when it comes to climate change risks, Mills assumes one reason might be a much deeper and longer tradition of science in insurance companies from Europe and Japan, than there is in the U.S. and the corporate cultures in those countries may take science more seriously.

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"If you look at the Munich Re example, which is the extreme case, they have 30 people in their geosciences division who work with natural hazards and climate change is probably their number one topic that they work on," he said. "I think Swiss Re … they have 1,000 scientists or something like that on staff."

Politics also play a part, he said.

"I think obviously the political context is different in Europe and Asia," he said. "The governments are encouraging all of their industries to study the climate problem, to engage in it, to help be a part of proactive steps that will help protect the economy. So there's a much clearer set of signals from governments to industry, including insurers."

Modeling risks

Catastrophe modelers have done a good job at continually improving their methods and data at many levels not just for climate change, Mills said.

"They are in a mode of continual improvement," he said. "They've been around for some decades now, and started very modestly in terms of the types of hazards they modeled and how they modeled it, and they've continuously improved their methods, improved their data, taken on a greater variety of types of hazards that they model."

Most recently climate change has come onto the radar screen for them. They are taking steps — at least the big companies — to engage in the issue of climate change, Mills said. "And it's not just climate

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change; it's the other phenomena around natural disasters. We all saw how the models had shortcomings when it came to Katrina and they didn't properly capture the true costs."

Those shortcomings were not just because of the lack of modeling climate change, Mills stressed. "It was other things like the building material cost inflation that comes after the disasters and a lot of the kinds of multiplier effects that happen. So they've been working on many fronts, not just climate, to improve the models."

Like with all these things, there's a lot more that can be done, he added. "For example, we're really just starting cat models that deal with life and health consequences as opposed to property," Mills said. "The models need to become more diverse and more comprehensive, more inclusive, as well as more technically deep."

Going green

Environmentally-friend products and building materials may not seem to have a direct connection to the insurance industry at first glance, but Mills says there's a direct relevance to its core business.

"I don't think anyone would expect the insurance industry to embrace, endorse, promote energy efficiency or renewable energy for the sake of it," he said. "There needs to be a relevance to the core business … we found a lot of relevance."

Certain energy efficiency or green building technologies don't just reduce energy usage and greenhouse emissions, but they also reduce insurance risks, Mills said.

Mills cited recent studies by the Florida Solar Energy Center Laboratory, which has been comparing foam insulation to fiber insulation.

"In flooding, fiber insulation (the traditional insulation) retains a lot of water after a flood and creates more damage to the wall materials and promotes mold formation as well, whereas foam insulation dries out right away, and it's not as vulnerable to being damaged. So using foam insulation instead of fiber makes a building more disaster resilient, but also more energy efficient, because it's a higher insulating value per inch than fiber," he explained.

"There are a remarkable number of these synergisms where the greener energy efficient strategy also makes buildings more resilient," he added.

Aside from the core business rationale of insurers engaging in green initiatives, there's also reason on the investment side.

"On the investment side, on the asset side, there's a lot of buzz now about investing in the clean techs base. There will be billions and billions of dollars going in from the venture capital community and also through the main securities markets into energy efficiency technologies, renewable energy technologies and so on," Mills said.

That spells profit opportunity on the investment side, and that's important to insurers, he added. "And insurers, because they're among the larger actors in the financial markets, will necessarily want to be and need to be part of that movement."

Mills said the key is financial opportunities, not moral opportunities, when evaluating climate change risks and possible solutions.

Evan Mills spoke to Insurance Journal at a recent meeting of the National Association of Insurance Commissioners. To watch the complete video interview with Mills, visit www.insurancejournal.com/broadcasts.