Global warming is making things increasingly uncomfortable for the insurance industry.

Some of the world's largest insurance companies and brokerages, including giants such as AIG, Novato-based Fireman's Fund Insurance Co., and the international brokerage Marsh & McLennan, are concluding that climate change is not just a scientific fact. It's a business reality that must be faced, dealt with, mitigated -- and perhaps even profited from.

That's the main message of a report released this week by Boston-based Ceres, an investor and environmental coalition that includes large institutional investors and other organizations, including Pacific Gas & Electric Co., Bank of America, the Sierra Club, Catholic Healthcare West and Berkeley nutrition bar maker Clif Bar.

The insurance industry, which as recently as two years ago paid scant attention to climate change, was jolted into action by catastrophic insured losses in 2004 and 2005, according to the report. It said those losses totaled a record $75 billion, including $45 billion from Hurricane Katrina.

The report -- co-written by Lawrence Berkeley National Laboratory scientist Evan Mills, and industry veteran Eugene Lecomte -- said climate change ultimately threatens to bankrupt even the largest insurers and government-run insurance programs unless steps are taken to reduce warming trends believed to be linked to carbon-based emissions or greenhouse gases.

On the positive front, the report -- "From Risk to Opportunity: How Insurers Can Proactively and Profitably Manage Climate Change" -- said the insurance industry "is uniquely positioned to further society's understanding of climate change and advance forward-thinking solutions to minimize its impacts."

The report said nearly 200 products or services are offered by insurers or brokers globally, more than half of them in the United States, that attempt to reduce emissions and energy use. They include:

- Fireman's Fund's planned introduction this fall of "green" coverage for commercial buildings that are certified as environmentally friendly and structurally sound or that are rebuilt to those standards after being damaged.
- Hurricane loss prevention efforts, Steps taken by insurer FM Global helped policyholders avoid an estimated $500 million in damages from Katrina, after 500 commercial locations spent just $2.5 million on pre-hurricane protective measures.
- Carbon emission credit guarantees and other renewable energy-related products from Marsh, AIG and other major industry players.

For its part, Fireman's Fund has asked regulators to approve its new "green" coverage, including discounted premiums or rate credits for commercial building owners whose buildings are certified as environmentally appropriate and discounts for green rebuilds or retrofits of damaged structures.

"A building like that is simply better for us to insure," CEO Charles Kavitsky said.

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