



# Opportunities for the

# Next Decade

WRMA Conference • 1-3 June 2009, Miami FL

## Section Links

[Laurence Gonzales](#)

[Hurricane outlook](#)

[Forecasting](#)

[Derivatives regulation](#)

[Renewables, carbon](#)

[Bright future](#)

[Australia](#)

[Indian and Polish markets](#)

## Opportunities Beckon even as the Weather Market Adjusts to New Economic Realities

The current and near-term opportunities for weather risk management were subjects the panels and presentations at WRMA's 11th Annual Meeting, held June 1-3, 2009 at The Shore Club in Miami, Florida, giving attendees new perspectives on the weather risk industry.

## Author Laurence Gonzales on risk

To kick off the meeting, and to get attendees thinking in a new ways, keynote speaker Laurence Gonzales spoke about the nature of risk and how human beings react to it. Gonzales is the award-winning author of two books on risk and survival -- Deep Survival and Everyday Survival.

As human beings, we have inherited a risk model that says "the future will look like the past," said Gonzales. While we may know that's not always the case in the 21st Century, the concept still influences our behavior. For instance, if we move the location of the wastebasket in our office, it will take time to reorient our automatic action of tossing paper into the wastebasket.

While automatic reactions help humans be more efficient - we don't have think about tying our shoes once we learn the behavior - these reactions also dampen curiosity. If we think the future will follow the past, then we aren't open to change and are surprised when confronted with reality.

In studying how people handle risk, Gonzales has learned that there's something known as risk homeostasis that operates in everyone. It's the level of acceptable risk that a person finds comfortable. As humans, we will do what ever it takes to bring our risk levels up to that comfort zone, he said.

People are also influenced by "groupness" or the tendency for people to want to feel part of the group. That makes it harder for an individual to go against the shared outlook of the group. In business, when a company wants to change the way the organization works, then there needs to be a change in "groupness," he said.

Gonzales pointed out that "we live in a culture that says you can reduce risk to zero - that's just not true. Failure is always an option," he said, noting "you are most vulnerable at your most successful moment."

## Hurricane outlook

The hurricane season for 2009 may be a difficult one if there are several destructive storms. The decline in the economy has affected risk underwriters and hedge funds, reducing the amount of capital available. According to many on the Hurricane Panel, a mild hurricane season would be the best outcome for cat risk right now.

In addition to the tightening capital markets, reinsurance rates have risen 15 to 20%. The cost of weather risk management contracts have also increased, making it more expensive to hedge hurricane risk.

## Innovations in forecasting

Matt Rogers of Commodity Weather Group expects that the current hurricane season will have nine named storms and five hurricanes. The current Atlantic hurricane season is experiencing one of the coolest starts in years, he said.

Bullish on the outlook for this coming winter season, Rogers pointed out that solar irradiance levels have been on the decline, indicating the potential for global cooling.

Larry Heitkemper of MDA Federal noted that there are several innovations in forecasting that will help improve weather forecasts. Two of them stand out. The flow-following finite-volume icosahedral model (FIM) is the "new kid on the block," and uses a soccer ball (icosahedral) grid as a base for the underlying equations. The icosahedral grid allows FIM to give a more accurate forecast based on the globular shape of the earth. FIM could eventually replace the Global Forecasting System currently used in the US, Heitkemper said.

In forecasting, there is a "dead zone" that exists in the period 14 to 28 days ahead, noted Heitkemper. We're pretty good at forecasting the next 14 days and we can forecast 28 days and beyond. But the period between 14 and 28 days is very tricky. Under development is a mesoscale model that may give us the information we need to create accurate forecasts during the 14-28 day period.

## Derivatives regulation could impact weather products

The global economic crisis has spurred governments into action. But, as Claude Brown of Clifford Chance said, governments tend to "legislate first and then find out what went wrong."

In the US and Europe, proposed legislation could affect the trading of derivatives. While much of the legislation is designed to tame credit derivative swaps, the proposals could eventually apply to all derivatives, including weather products. For instance, the plan development at the US Treasury, if adopted, would apply to all over-the-counter (OTC) derivatives. That news "was a real bolt out of the blue," said Brown. In the US, there's a mantra underlying most of the proposals and that is: "Central clearing is good," Brown said.

In Europe, the European Commission (EC) is developing a huge initiative on commodities as the EC is concerned about market manipulation. In Europe, too, central clearing is considered to be an antidote to the current situation. As the central clearing organizations in the US and Europe would be separate entities, there's no indication yet how the two would relate to each other, Brown said.

WRMA will be establishing an oversight committee to monitor developments, said Marty Malinow,

WRMA's president.

## Renewables, carbon offer opportunities

There are two bright spots for weather risk products right now - the carbon and renewables markets, according to the panel on the renewable energy and sustainability panel.

The risk for renewables resides on the supply side, said Michael Grundmeyer of 3TIER Inc. He pointed out that for most renewables, there is about two years worth of historical data but modeling can help fill in the gaps.

Martin Whittaker of MissionPoint Capital Partners said there's real opportunity for weather products in the renewables market if companies craft and offer weather tools. One question to explore is "How CFOs in renewables companies are handling weather risk?"

The carbon market is a natural for weather risk since "carbon is a compliance market and you have to trade it," noted Philippe Chauvancy of BlueNext. Andrew Kruger of Evolution Markets concurred, saying that the impact of weather has a huge trickle down effect in carbon markets.

## Bright future for weather

Although all financial markets are facing challenges right now, "the future isn't grim for weather," said Brad Hoggatt of MSI GuaranteedWeather. But the market needs to grapple with the belief that "weather products are a luxury now." Hoggatt also believes that "renewable energy and emissions should provide manifold opportunities as the world attempts to shift from fossil fuel to green energy sources." Marty Malinow of Galileo Weather says he's "never seen better potential than now" for growth in the weather market.

But there are near-term issues to be handled. "It's a relatively challenging time," said Sandeep Ramachandran of Swiss Re. "We try to make the case that weather risk management is a necessity." Mark Tawney of RenRe Energy Advisors said that "companies seem to be choosing to retain risk rather than put it into the market."

Most members of the State of the Global Weather Market panel agreed that the agribusiness market has a lot of potential, but it's a market that's hard to get a handle on. In order to grow the agribusiness section, we need to educate the market, commented Malinow. South America, where a weather contract was recently done, is important in the weather/ag sectors, noted Tawney.

## Real opportunities in Australia

The weather risk management market is expanding in Australia with "real opportunities" being seen, noted Neil Bird of Risk Solutions International. Currently, the market can choose derivatives, insurance and futures to mitigate risk.

As in other areas, it's difficult to get agribusiness interested in weather products, said Wilson Huynh of MMC Securities. With the construction sector, rain days are an obvious play.

Many of the recent transactions done have been based on extreme weather such as the heat and floods affecting the country recently, said Simon Sarafian of AGL Energy.

Renewables are also a key growth market for Australia. For instance, more wind farms are coming online due to regulation and that encourages weather cover. When it's hot, the wind doesn't blow and that's when demand for electricity peaks. In addition, most of the wind farms are away from the met stations, making data difficult to obtain, said Tim Widmer of TRUenergy. While Australia has a lot of sun, the country hasn't figured out how to encourage solar and make it viable, said Sarafian.

## India and Poland see growth

The Indian weather market continues to see expansion, noted Sandeep Ramachandran of Swiss Re. Currently, insurance is the only product that can be used to mitigate weather risk. WRMA is seeing increased membership from India and the Association is embarking on a survey of the Indian weather market.

In Eastern Europe, Poland is in the forefront of the market with the first weather trade done in 2006. Here, too, education is vital to expand the market. And determining factors such as the correct tick value are also key to moving the market forward, said Juliusz Pres of Consus sp. z.o.o. He also sees mandated emissions protocols as spurring demand for weather risk products.