



Name of Event: [Side Event] Climate Services, Catastrophe Risk and Capital Markets

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Organizers: World Meteorological Organization, Willis Research Network, United Kingdom Met Office, World Climate Research Programme, International Panel on Climate Change, Geneva Association, International Insurance Association

Speakers:

- Mr. Walter Stahel, Vice-Secretary General and Director of Risk Management Research of The Geneva Association (Facilitator)
- Mr. Rowan Douglas, CEO Global Analytics, Willis Re and Chairman, Willis Research Network
- Dr Matt Huddleston, UK Met Office
- Dr. Roger Pulwarty, Chief, Climate and Societal Interactions Division, Director of the National Integrated Drought Information System (NOAA, USA)
- Dr Maryam Golnarahi, Chief, WMO Disaster Risk reduction Programme
- Mr. K. Remco Fischer, UNEP Financials

1) Outline

- How the insurance and reinsurance sectors work? How are these markets impacted and linked to hydro-meteorological hazards and conditions? (P&C, Health, Life, Agriculture and Crop) What is the distribution of these markets in developed and developing countries? What are the challenges in penetrating these markets into developing countries? What is the industry's perception of its risk associated with climate variability and change? To what extent, IPCC and other scientific debates have influenced this sector? From Hurricane Andrew, how this sector has changed the way it does business? (e.g., emergence of risk modeling and portfolio management?)
- What is the impact of regulatory framework in the way the industry works both in the insurance and reinsurance side? What are the trends in changing regulations linked to climate variability and change for this sector? Where are we going from here, trends in regulations, trends in development of (re)insurance

markets and what are the implications of climate variability and change on this sector and related regulations?

- What are the challenges and opportunities to direct climate research and modeling to focus on the (re)insurance issues? How does an insurance and reinsurance company think differently about climate risk (local vs global). WCC-III established Global Framework for Climate Services, how do initiatives in this sector or supported by this sector in development of climate services can be scaled up to benefit the greater disaster risk management community? Why it is important to integrate climate research and modeling information into risk modeling?
- Challenges in developing and least developed countries?

2) Key messages, outcomes, recommendations

- It is evident that patterns of hazards and risk associated with hydro-meteorological hazards and conditions are changing linked to climate variability and change, these are reflected in changing characteristics of the hazards (severity, frequency, location, etc.)
- National regulatory frameworks are critical in driving insurance/reinsurance sectors especially with consideration for increasing financial risks associated with climate variability and change. These could ultimately penetrate much deeper such that rating of companies by the analysts will factor in their climate risk management strategies
- Advancements in climate modeling and forecasting provides unprecedented opportunities to support risk management decision making not only in insurance/reinsurance sectors but also the broader disaster risk management community; however, climate research and modeling need to be directed and focused to address key decision-making priorities
- Informed reporting and decision-making in managing risks associated with hydro-meteorological extreme events in insurance and reinsurance markets as well as other financial sectors can significantly benefit from integration of latest scientific knowledge and information integrated into risk models to provide forward looking risk scenarios.
- Global Framework for Climate Services (GFCS) aims at providing science-based tailored climate services to support decision-making in socio-economic sectors and to achieve this, there is need for: (i) improved capability in climate data

collection and exchange, (ii) continued investment in high-quality scientific research to develop new services, (iii) improved dissemination mechanisms for providing climate service to target users; and, (iv) global-regional-national-local cooperation and coordination.

- There is need for strengthening of public and private partnership to ensure that science-based climate information developed from statistical analysis and climate models is integrated in risk modeling to support development and management of the portfolio of both traditional and new catastrophe and weather-indexed insurance tools.

3) Conclusions

A new wave of regulations in a number of countries is requiring insurance companies to report on climate-related risks. This side event explored the benefits of new public-private partnerships involving the climate research community, national meteorological services, the government and the private sector, with the aim to leverage resources, expertise and information to advance climate modeling and forecasting in risk modeling tools in the finance and (re)insurance sectors. The side event also examined the relevance of climate variability and change to disaster risk reduction and climate adaptation and how the financial sector assess and are impacted by climate related risk. It was concluded that better management of risks of the financial and insurance sector would require science-based tailored climate services that could be achieved through, (i) improved capability in climate data collection and exchange, (ii) continued investment in high-quality scientific research to develop new services, (iii) improved dissemination mechanisms for providing climate service to target users; and, (iv) global-regional-national-local cooperation and coordination, and (v) strengthened public and private partnerships to ensure that science based tailored climate services translates into effective public-private cooperation in managing risks of climate variability and change in the insurance markets.