Presentation given at the Marine Katoomba meeting

Katoomba XVI:

Building a Blueprint to Harness New Investment for the Protection of Marine and Coastal Ecosystem Services

February 9-10, 2010 Moore Foundation, Palo Alto, CA

Hosted by the Katoomba Group



This workshop was generously supported by the American people through the United States Agency for International Development (USAID), under the terms of the TransLinks Cooperative Agreement No.EPP-A-00-06-00014-00 to the Wildlife Conservation Society (WCS). TransLinks is a partnership of WCS, The Earth Institute, Enterprise Works/VITA, Forest Trends and the Land Tenure Center. The contents are the responsibility of the authors and do not necessarily reflect the views of USAID or the United States Government.



What One Insurer is Doing to Manage the Risks of Climate Change

Stephen G. Bushnell February 10, 2010



A company of **Allianz** (ii)





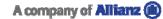
Manifestation of Climate Risk





The impact of global warming in the Blackwater National Wildlife Preserve, rising sea levels are rapidly destroying a precious marsh habitat. Located near the shores of Chesapeake Bay, the preserve is slowly becoming immersed in water. These aerial photos show the Little Blackwater and Blackwater Rivers in 1957 (left) and in the 1980's (right). The EPA says that a two-foot rise in sea levels would eliminate coastal land equivalent to the size of the state of Massachusetts by the end of the century. (Photo: Reuters)





Climate Risk

Climate Impacts







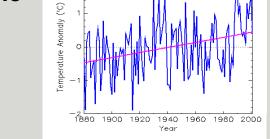
Climate Change – A Real Threat





The Facts

- Human induced climate change is real scientific evidence has never been stronger
 - Emission of greenhouse gases (especially CO₂) are trigger for man-made climate change



Climate change poses major economic risks

- Frequency and cost of global natural disasters (storms, floods, heat waves) are dramatically increasing (e.g. Katrina costs 20bn US\$ for insurance industry and 470mil US\$ for Allianz)
- Munich Re: economic costs of natural catastrophes have risen 7-fold and insured losses 16-fold since the 1960s

Governments react by curbing CO₂ emissions

- Potential US Cap and Trade
- Federal and State support of renewables
- EPA and SEC regulating climate issues

Allianz and Fireman's Fund react to Climate Change



Significant losses as a result of climate change and urbanization

1

Initial Situation and Forecast

- Weather-related natural disasters amount to 40% of total losses¹⁾.
- Within the next 30 years these weather-related losses could grow to fifteen times the amount of now²).
- Reasons: Frequent natural disasters and rising insured value.

2

Solutions offered by Allianz

- Adjustment of risk models and underwriting policy.
- Reduction of company-related CO₂ emissions caused by Allianz.
- Development of new products that help customers mitigate risks.



Allianz and Fireman's Fund Actions



"Climate change is a fundamental strategic issue and a top priority for Allianz," Clem Booth, Allianz board member

- Commitment to reduce its CO₂ emissions by 20 percent by 2012
- FFIC commitment to reduce CO₂ emissions by 25% by 2012
 - Reduced energy use by 36% over last 10 years
 Fireman's Fund Novato HQ LEED EBOM Gold (2009)
 St Louis Service Center LEED C&S Gold (2009)
 - Dallas Service Center LEED CI Silver (2007)
- Reduced the waste per employee by 25.4 percent since 2005
- Investments in Wind Farms (240 megawatts) will grow



Allianz and Fireman's Fund Actions



- Allianz Climate Solutions 2006
- Allianz Climate Change Center of Competency 2007
 - Representatives from Allianz entities in North America, EU, South America and Australia
 - Role is to develop new products and services that cover and incent energy efficiency and address climate change. Cross pollinate throughout organization
 - Allianz Global Corporate Solutions developing Carbon Credit Coverage
 - Allianz UK developing Energy Advisory Services
 - FFIC Green Building Coverage modified for local markets in UK and others
 - FFIC adopting UK Energy Advisory Services
 - Partner with Ceres on Resilient Buildings project
 - Research Energy Efficiency (Efficacy) coverage



Fireman's Fund Green Insurance Products



2006: Green-Gard Commercial Building Coverage Launched

- First green building coverage in the industry
- Certified Green Buildings, Green upgrade of "traditional" buildings and Commissioning Coverage
- Recognized economic value of green practices and energy efficiency impact on CO₂ in built environment

2008: Green Homeowners Product Launched

- First admitted personal lines green coverage
- Parallels commercial coverage

Additional Products and Services

 Green builders risk/ Green historic building/ Green and sustainable manufacturing/ Auto hybrid upgrade/ Risk Services Green Consulting



Impact of Green Buildings on Coastal Environments



LEED rating system considers coastal environments

- Requires erosion and sedimentation control plans for project
- Restrictions of development on
 - Previously undeveloped land whose elevation is lower than 5 feet above the elevation of the 100-year flood
 - Land specifically identified as habitat for any species on federal or state threatened or endangered lists
 - Land within 100 feet of any wetlands as defined by the U.S. Code of Federal Regulations
 - or within setback distances from wetlands prescribed in state or local regulations,
 - Previously undeveloped land that is within 50 feet of a water body, consistent with the terminology of the Clean Water Act
- Requires stormwater management plans that prevent the post-development peak discharge rate and quantity from exceeding the predevelopment peak discharge rate and quantity



Impact of Green Buildings on Coastal Environments



Energy and CO₂

Fact - Buildings use 40% of US energy, including 70% of US electricity. They generate 38% of all US CO₂ emissions.

Fact - Green buildings typically use 30% less energy. With alternative power devices can be close to net zero.

Fact – Significant energy savings can be realized at no or little cost through proactive facility management

Fact – A 30% reduction in energy use results in a 5% increase in NOI (EPA data)

Fact - 120 million existing ""brown" homes, and 5 million "brown" commercial buildings in the U.S - virtually every one is an energy hog

Win/Win/Win

No trade offs, not the typical "environmental cause" that pits business against environmentalists. Reduced risk for business and the environment.





Thank you!

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