

# Insurance Innovation: New Products & Services, Proactive Investments

## The Greening of Insurance

*Presented at the symposium Insuring California in a Changing Climate  
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# Creative tension

- World is changing in response to climate change
- Customers want insurers to do more
- Regulators want insurers to do more
- Risk management has drifted from physical loss prevention to the financing of loss costs



# Speakers



**Overview**  
**Evan Mills**



**Green buildings insurance**  
**Steve Bushnell**



**Mileage-based car insurance**  
**Claudia Polsky**

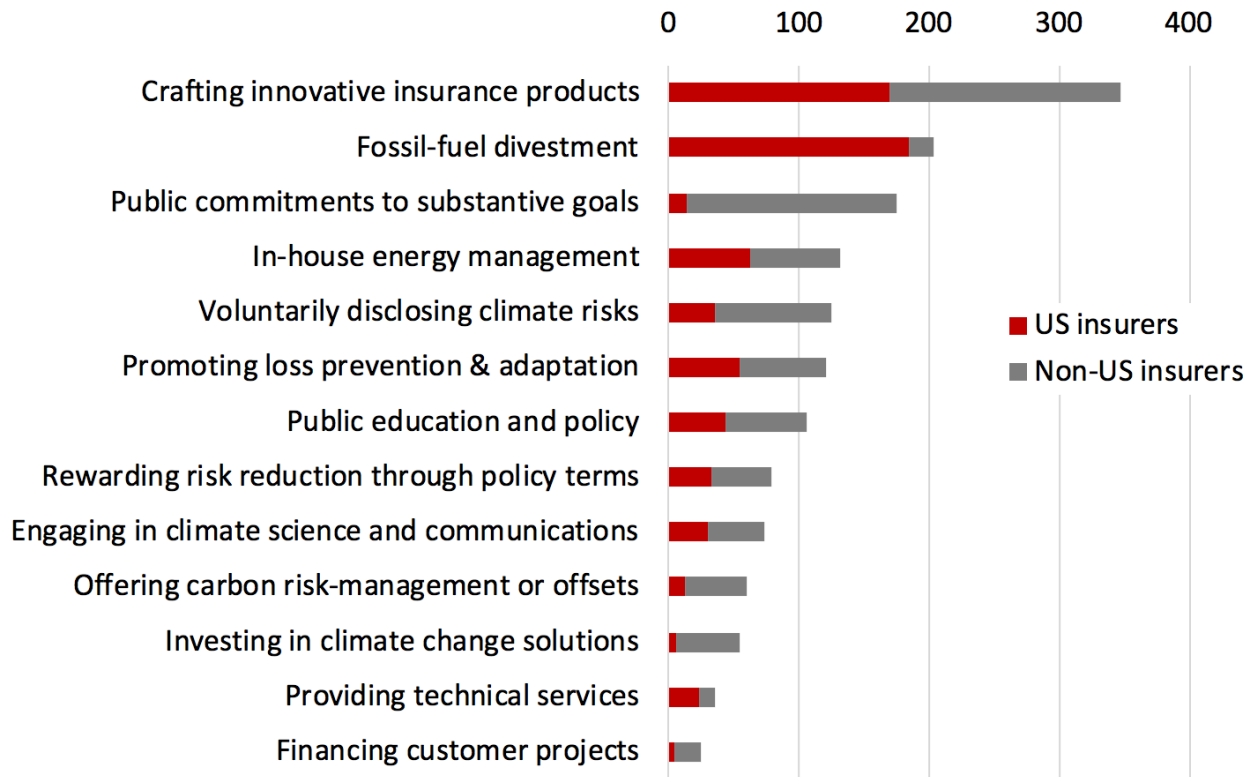


**Energy Performance Insurance**  
**Rick Jones (HSB)**

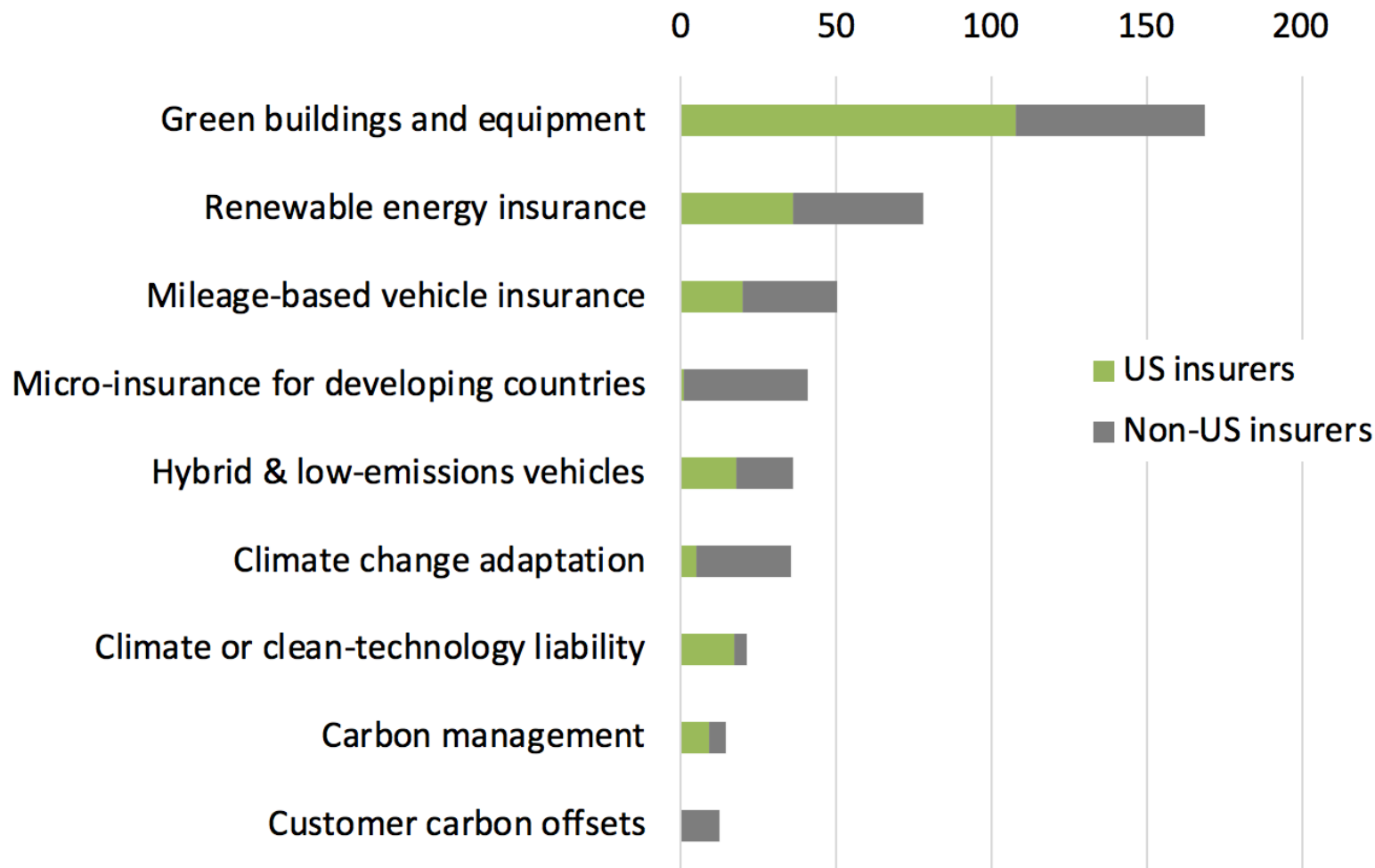
## Climate-focused insurer activities (number)

### 1500 activities

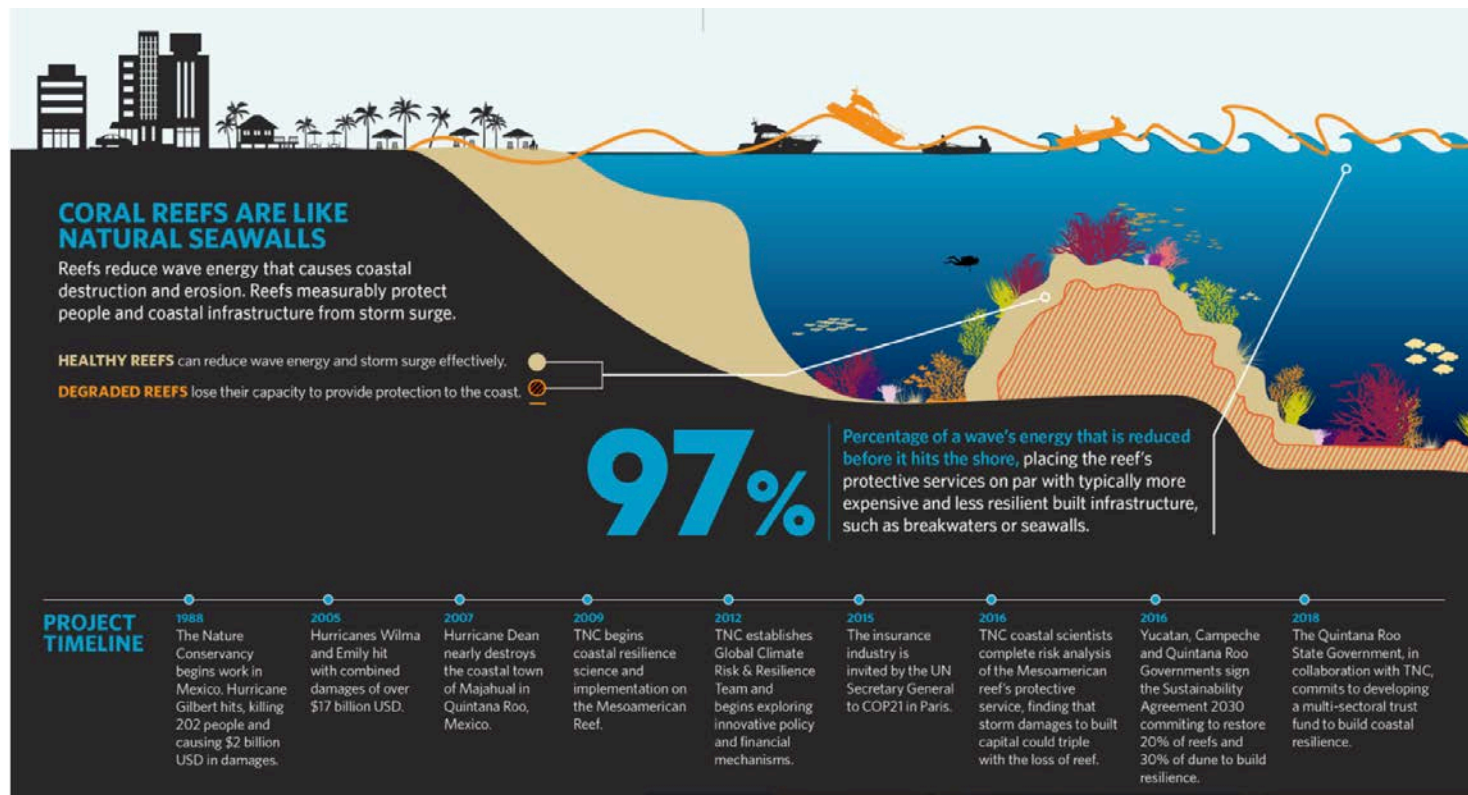
- 600 entities, of which:
  - 504 insurers
  - 10 reinsurers
  - 20 brokers
  - 18 insurance organizations
  - 37 non-industry entities
- 51 countries



# Innovative products and services (number)



# Resilience: Parametric insurance for coral reef protection and restoration following hurricanes



# Market uptake?

- No reporting standard or requirement: disclosure focuses mostly on ‘bad stuff’
- Some examples can be found
  - Allianz reports its 151 “Green Solutions” in 29 countries are generating \$1.4 billion per year as of 2015
  - Munich Re’s Green Tech Solutions group reported \$100 million in premiums from green-oriented products in 2015
  - Telematics-based insurance
    - 8.5% of US consumers as of 2014
    - Progressive usage-based car insurance: 2 million policies (\$2B premium)



# Barriers

- Catch-22: Rate filings usually must include statistical data that supports proposed new rating structures.
- Surveys of brokers/agents: mixed results on perceived demand and uptake
  - Agent/Consumer awareness
  - Pricing
  - Perceived greenwashing





# Services

- **Analysis**

- Home energy calculator (Allstate)
- Green buildings certification, carbon footprint calculation (ACE)
- Energy benchmarking (HSB/Solomon)

- **Inspection**

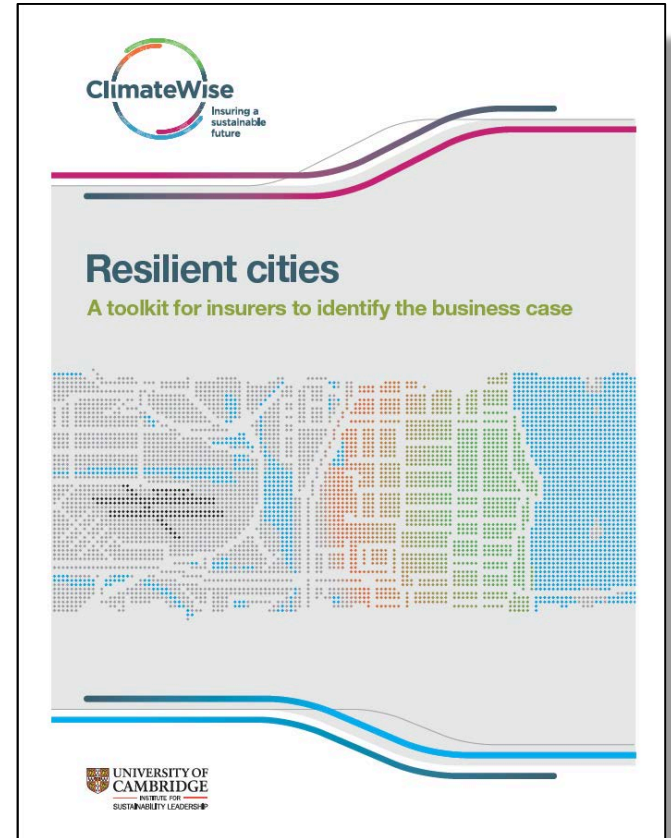
- Infrared camera scans to find energy loss and fire hazards (Chubb)

- **Risk advising**

- Geothermal exploration risk advisory (Marsh)
- Biofuel project risk assessment (Gcube)
- Wind turbine loss-prevention (Chartis)

- **Large-scale planning**

- ClimateWise Resilient Cities Toolkit  
(28 insurers)



# Tokio Marine Nichido Mangrove Reforestation

- 100-year program
- 25,000 acres (9 countries) since 1999
- 160,000 metric tons of CO<sub>2</sub> sequestered

## Indian Ocean tsunami following earthquake off the island of Sumatra in December 2004



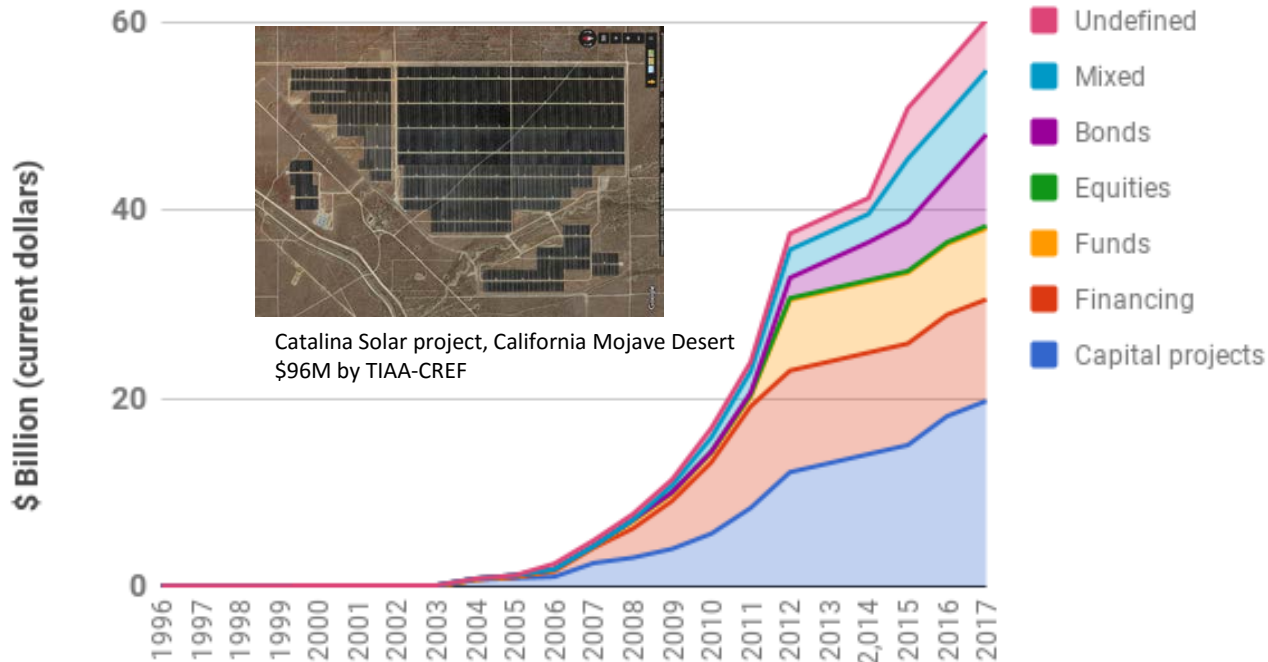
Mangroves in Ranong  
Thailand (low damage)



Tale Nok (near Ranong), no  
mangroves (high damage)

# Over \$60 billion in clean energy investment by global insurers

## Cumulative Insurance Industry Investment in Sustainability



Approximately 85% are direct investment; balance in mixed social & environmental funds.

Excludes investment in owned real estate, e.g. Prudential has 35 million square feet of LEED-certified office buildings, valued at \$17B

Insurers have also played leadership roles in establishing socially responsible investment *frameworks*, e.g. Ceres' Investor Network on Climate Risk and Sustainability (INCRS)

# Take aways

- Innovation in this space is vibrant
- Marketing is minimal; consumer awareness is very low
- Tracking of uptake needed
- Regulators should be attentive to obstacles and the potential for greenwashing