

ADAPTING TO CLIMATE CHANGE: ROLE OF INSURANCE

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Confidential

Agenda

- Introduction
- Managing Impacts of Climate Change
- Adaptation and Role of Insurance

INTRODUCTION

Role of Insurance in Society

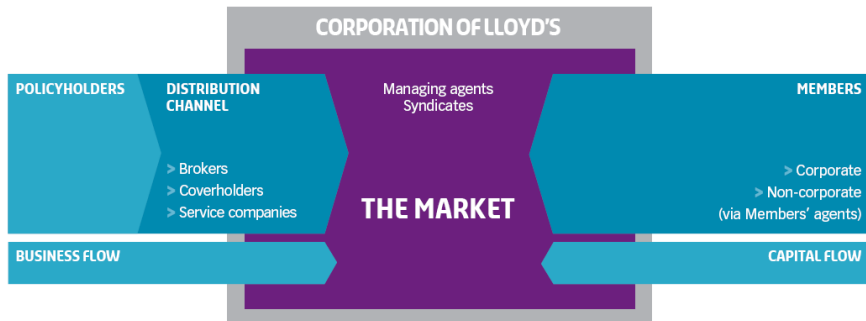
- Protecting businesses and communities and helping them recover from disasters
- Offers financial security and 'peace of mind'
- Concept of pooling of risks
- Some of the natural perils that insurance provides protection from are affected by climate change



The World's
leading
specialist
insurance
market

Lloyd's Market Structure

Lloyd's is not an insurance company. It is a partially mutualised market where members join together to form syndicates that insure risks. Much of Lloyd's business is written on a subscription basis, with more than one syndicate taking a share of the same risk.



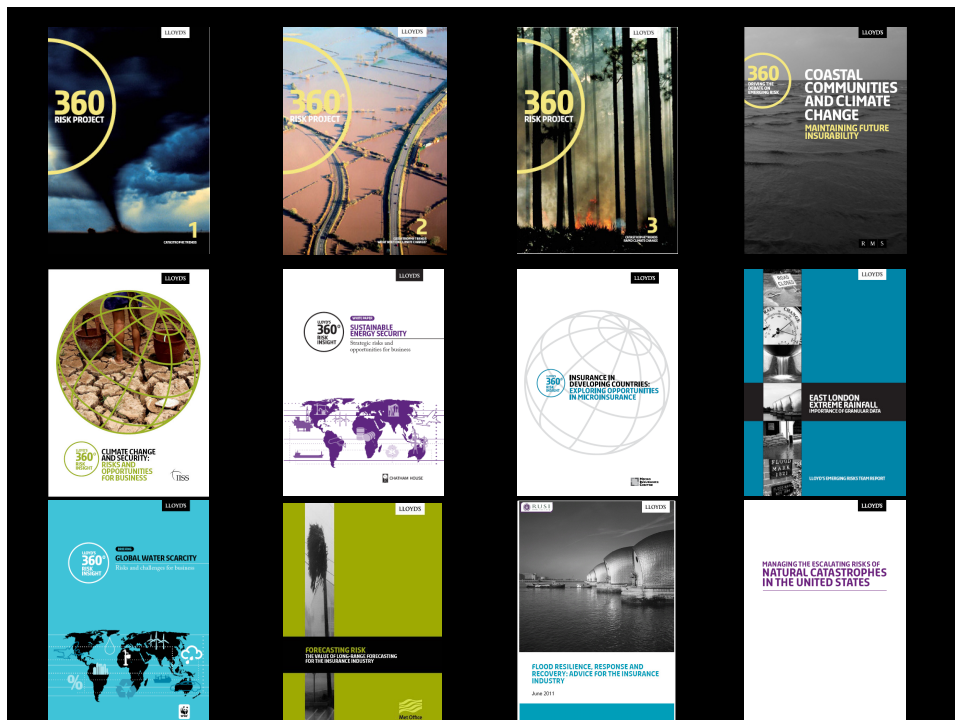
Lloyd's & Climate Change

- Lloyd's active on climate change for many years
- Participate in many cross-industry, UK and international projects and initiatives
- One of the founding members of cross-industry initiative on climate change - ClimateWise
- Produced series of reports on climate change

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ClimateWise

- Global collaboration of leading insurers focused on reducing risks of climate change
- Over 40 member companies worldwide
- Lloyd's very active member of ClimateWise



MANAGING THE IMPACTS OF CLIMATE CHANGE

Natural Catastrophe Trends

- Climate change is leading to more frequent, severe weather events
- 1970-2010 number of natural catastrophes increased by 300%
- Increases in storms, temperature extremes, droughts, wildfires and floods

Natural Catastrophe Trends

- 2011 highest ever loss (economic) year on record - \$265bn
- Prior to this year 2005 was costliest year - \$220bn
- Insured losses have increased nearly 10 times between 1970 and 2010
- Number of factors contributing to increased losses, but climate change important factor

Impacts – Property Damage

- Wind – stronger, longer, more?
- Flood – wetter ground, larger thunderstorms / flash events, changed storm tracks, higher sea levels
- Subsidence
- Fire



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Impacts – Liability

- Climate change litigation
- No comprehensive climate change legislation enacted in US
- US EPA ruled greenhouse gases are pollutants

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Impacts – Geopolitical Risk

- Climate change may lead to geopolitical and security tensions
 - Water scarcity
 - Food security
 - Energy and natural resource scarcity
- Geopolitical tensions



Risk Management

- Climate change is having an impact now
- Important to monitor
 - Current research and analysis
 - Disaster scenarios
 - Capital Modelling
- And to **adapt...**

ADAPTATION AND ROLE OF INSURANCE

Facilitating Adaptation

- Generation of climate change to come
- Change in risk landscape
- Insurers have a key role in helping businesses and society adapt
- **However;**
 - Insurance is not the solution for all adaptation
 - Mitigation still vital

Role of Insurance

- Roles for insurers throughout all stages of adaptation process
- Industry can encourage adaptation via its processes
- Industry expertise in loss reduction and risk management
- Encourage residential and commercial properties to focus on their resilience and resistance to risk

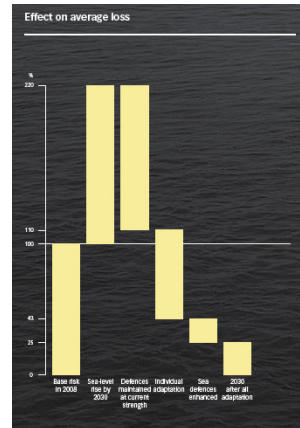
Coastal Communities and Climate Change

- One of significant impacts of climate change is sea level rise
- Coastal property owners rely on insurance to manage risk of flooding
- Climate impacts on insurability



Coastal Communities and Climate Change

- Sea level rise of 30cm may more than double average losses for some exposed properties
- Adaptation can bring losses to below current risk levels
- Adaptation strategies must be tailored to individual locations and circumstances



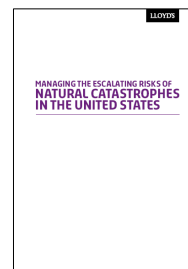
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Risk-based Pricing & Role of Governments

- Risk-based pricing key element of adaptation
- Pricing that does not reflect the risks removes incentive to put in adaptation measures
- Government intervention in private insurance markets should be kept to a minimum
- Government has important role to play in rewarding adaptation to reduce overall costs to economy



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Sustainable Claims Management

- Lloyd's working with ClimateWise
- Alternatives to "new for old"
- "Repair" rather than "replace"
- Communication and collaboration between insurers



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Insurance for the developing world

- Protecting economies and individuals in most vulnerable regions
- Lloyd's supports the development of microinsurance



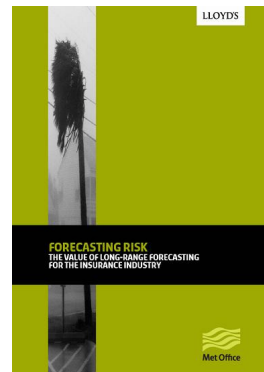
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Value of Forecasting

- Forecasting scientists developing models that can predict weather events over longer timeframes
- Seasonal forecasting becoming a possibility



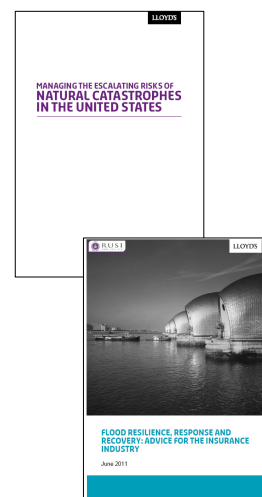
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Collaboration

- Due to scope and long-term nature of climate change problem – co-operation and collaboration essential
- Lloyd's participates in many collaborative activities
- Lloyd's ran a multi-stakeholder flood resilience workshop with RUSI
 - Property holders should introduce resilience measures before a flood happens
 - Risk-based pricing critical in ensuring adaptation to extreme events



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Conclusions

- Risk landscape is changing as a result of climate change
- Insurance can help adaptation process in many ways;
 - Encourage resilience and resistance of properties to risk
 - Risk-based pricing
 - Sustainable claims management
- We cannot insure our way out of climate change – one part of solution

