Review of Liability Insurance Considerations in the Context of Global Climate Change

Presented at Stanford Law School:
Spring 2007 Symposium: Climate Change Liability and the Allocation of Risk
February 24, 2007

Christina Ross, M.S., LaCroix Davis LLC
Evan Mills, Ph.D., Lawrence Berkeley National Laboratory
Sean B. Hecht, J.D., U.C.L.A. School of Law

http://insurance.lbl.gov
Partial funding for this project provided by Ceres
Intersection of Climate Change with Insurance, Liability, and Law

- Liability Insurance
- Property Insurance
- Life/Health Insurance
- Law
Climate Change Liability is a Rapidly Emerging Issue:
New IPCC Report has reduced the uncertainties
Landscape of Climate Change Liability

Business Atmosphere
Legal Atmosphere
Potential Precipitators
Climate Change Litigation

Insurance Sector

Non-Climate Trends
- Distrust in Business
- Rising Class-Actions
- Expanding Liability Boundaries
- Looming Regulation
- Upsurge in Legal Activism

Climate Trends
- Distrust in Business
- Expanding Liability Boundaries
- Looming Regulation
- Upsurge in Legal Activism

Liability Risks
- Liabilities Associated with Potential Responses to Climate Change
- Risk-Management Strategies Can Avoid Claims & Litigation

Impacts on:
- Private Property
- Business Operations
- Human Health
- Natural Resources
Sources of Climate-Change Related Liability & Their Nexus With Insurance

Hurricane Katrina Approaching Southeastern U.S.
Photo: NASA
### Why would insurers care about climate change?

#### Insurance Customer Exposure to Climate Change Litigation
- Burden of liabilities from catastrophic losses, smaller, more diffuse extreme-weather events, sea-level rise
- Corporate director & officer liability for responsible management practices
- Carbon-intensive customers including long-tail losses predating pollution exclusions

#### In-House Liability Exposures to Causes & Consequences of Climate Change
- **Direct**
  - Handling of insurer shareholder & customer interests
  - Underperforming in disclosures to shareholders
- **Indirect** (payers of claims faced by others)
**Business Atmosphere**

- **Disclosure**: Increasing desire for full disclosure of company’s environmental liability
- **Accounting**: Auditors assessing climate change risk
- **Regulation**: Regulation and enforcement of shareholder laws
- **Fiduciary Responsibility**: Ignoring climate-related risks carries potential for breach of fiduciary duty

**Business Value**
- Negative impacts on company value, reputation & brand caused by ignoring climate change

**Shareholder Demand for Action**

**Shifting Regulatory Environment**
- Energy prices
- Carbon caps, etc.
- Compliance cost of “penstroke regulation”

**Note**: non-business entities also have liability insurance, e.g., local governments
Shareholder Resolutions Link Business Atmosphere to Climate Change Liability

2000-2006 Data:
ISS 2007

2007 Data (as of 02.06.07): Ceres 2007
Insurance Sector (Non)-Disclosure

**Insurer Response Rates to Carbon Disclosure Project (CDP) Survey: 2006**

- **Answered Questionnaire**
  - US - N=23
  - Non-US - N=52

- **Declined to Participate**
  - US
  - Non-US

- **Provided Information**
  - US
  - Non-US

- **No Response**
  - US
  - Non-US

United States: 23
Non-United States: 52
## Liability Insurance

<table>
<thead>
<tr>
<th>Liability Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial General Liability</td>
<td>Insures against negligence (where product was known to be hazardous to health), personal injury, business interruption &amp; product liability</td>
</tr>
<tr>
<td>Environmental Liability</td>
<td>Emitters of GHGs: 1. Direct impacts from climate change 2. Indirect consequences associated with toxic releases, mold &amp; other environmental disruptions from the physical impacts of climate change</td>
</tr>
<tr>
<td>Professional Liability</td>
<td>D&amp;O liability for those involved as GHG emitters or arising from obligations to protect shareholder value from the impacts of climate change</td>
</tr>
<tr>
<td>Political Risk</td>
<td>New government policies (e.g., carbon levies, regulatory risks)</td>
</tr>
<tr>
<td>Personal &amp; Commercial Vehicle Liability</td>
<td>Increased roadway accidents related to adverse weather</td>
</tr>
</tbody>
</table>
## Legal Claims of Relief

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nuisance Claims</td>
<td>Air pollution – liability for an unreasonable injury to a right (public, health, life) common to the general public or private interests</td>
</tr>
<tr>
<td>Sarbanes-Oxley Act</td>
<td>D&amp;O liability; potential application by SEC for environmental disclosure enforcement</td>
</tr>
<tr>
<td>Fraud-related Claims</td>
<td>Sources of mis-information on climate change</td>
</tr>
<tr>
<td>Public Int’l Law Claims</td>
<td>Indigenous peoples adversely impacted from climate change; environmental refugees</td>
</tr>
<tr>
<td>Other Avenues</td>
<td>Endangered Species Act; National Environmental Policy Act</td>
</tr>
</tbody>
</table>
Liabilities Associated with Potential Responses to Climate Change

- **Adaptation** – efforts to decrease vulnerability
  - Levees, water-pumping systems
  - Risk of mal-adaptation
    - Water desalinization plants: energy-intensive and vulnerable to coastal hazards

- **Mitigation** – emissions reductions
  - **Supply- and demand-side energy choices**
    - Green Buildings
    - Nuclear energy
    - Hydrogen energy
    - Renewable energy
    - Carbon Capture & Storage
Carbon Capture and Storage (CCS)

- Lake Nyos - 1986 (Cameroon): Natural CO₂ leak killed 1800 people, 3500 farm animals
Potential Roles for Insurers to Proactively Manage Risks - Mitigating the Causes

Risk-Management Strategies

**Mitigating The Causes**

- Reducing Greenhouse Gases
  - Bottom line/cost
- Limiting Exposure
  - Controls
- Disclosing Risks
  - Effectiveness/Risk
- Raising Energy-Efficiency
  - Value Creation

**Strategies**

- Reducing greenhouse gas emissions by establishing a management program
- Decreasing operational exposure to energy price shocks, disruptions, or emissions regulations by minimizing emissions through improved supply or end-use efficiency and distributed generation
- Disclosing risks to investors as precursor to identifying loss-prevention strategies
- Designing energy-efficient, low-emissions products
  - Developing emissions-offset activities
Potential Roles for Insurers to Proactively Manage Risks - Mitigating the Causes 2

Risk-Management Strategies

Mitigating The Causes

- Performing Analyses
  - Bottom line/cost

- Increasing Investments
  - End-use efficiency

- Rebalancing Portfolios
  - “Decarbonizing”

- Developing Products
  - Value Creation

Strategies

- Performing analyses of positive and negative risks associated with nuclear power, carbon capture & storage, hydrogen energy & renewable energy systems
- Examining demand-side responses

- Increasing investments in end-use efficiency or improved land mgmt to sequester carbon to carry far less liability than supply-side investments
- Focusing on investments in adaptation & loss-prevention

- Rebalancing asset portfolios to reduce vulnerability of investments or severe weather losses.

- Developing new insurance products (e.g., Carbon emissions credit guarantees)
- Contingent cap-forward for emissions reduction trades
- Engineering quality assurance
- Mileage-linked vehicle insurance
### Potential Roles for Insurers to Proactively Manage Risks - Adapting to the Impacts

#### Risk-Management Strategies

<table>
<thead>
<tr>
<th>Adapting To The Impacts</th>
<th>Improving Land Management</th>
<th>Managing Hazardous Materials</th>
<th>Ensuring Business Continuity</th>
<th>Fostering Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td>Public Health</td>
<td>Loss Prevention</td>
<td>Good-faith</td>
<td></td>
</tr>
</tbody>
</table>

#### Strategies

- **Improving land management with:**
  - Drought-resistance agricultural practices
  - Curbing development in high-risk areas
  - Flood defenses
  - Advancing land-use planning

- **Improving siting and safeguarding of hazardous materials**
  - More rapid response to damages

- **Developing & establishing business continuity (BCM) plans as a prerequisite for adding on business interruption coverage to a company’s commercial general liability insurance**

- **Fostering scientific responsibility**
  - Peer-review of documents & communications related to climate change hazards
  - Good-faith information disclosure
Customers’ causes of and responses to climate change can be distinguished by their potential for enhancing or reducing liability.

Application of insurers’ expertise in proactive risk management towards helping their customers avoid liabilities.