

## Antitrust Notice

- The Casualty Actuarial Society is committed to adhering strictly to the letter and spirit of the antitrust laws. Seminars conducted under the auspices of the CAS are designed solely to provide a forum for the expression of various points of view on topics described in the programs or agendas for such meetings.
- Under no circumstances shall CAS seminars be used as a means for competing companies or firms to reach any understanding – expressed or implied – that restricts competition or in any way impairs the ability of members to exercise independent business judgment regarding matters affecting competition.
- It is the responsibility of all seminar participants to be aware of antitrust regulations, to prevent any written or verbal discussions that appear to violate these laws, and to adhere in every respect to the CAS antitrust compliance policy.




---

---

---

---

---

---

---

---

## The Role of Private Insurance In Promoting Sustainability

James Jones, Executive Director of the Katie School of Insurance and Financial Services, Illinois State University, Normal, Illinois, U.S.A.




---

---

---

---

---

---

---

---

## What is Sustainability?

"The capacity to maintain a certain process or state indefinitely"

- "Sustainable development" meets the needs of the present without compromising the ability of future generations to meet their own needs"

"Being fit for the future"  
"Triple Bottom Line: People, Planet, Profits"




---

---

---

---

---

---

---

---

### What Are the Causes of Unsustainable Practices?

- Failure to account for externalities
  - Leading to under accounting of costs and underpricing risks
- Inadequate feedback loop
- Lack of transparency
- Overly discounting future (and tail risks)
  - Leading to inaction regarding future risks
- Irrational risk taking because gains are privatized and losses are socialized
- Agency factors within firms (The risk manager gets trumped by business unit heads)

KATIE SCHOOL OF INSURANCE AND FINANCIAL SERVICES OHIO STATE UNIVERSITY

---

---

---

---

---

---

---

---

### Role of Private Insurance

- Address Causes of Unsustainable Practices
  - More accurate risk assessment
  - More timely and accurate risk pricing
- Provide Incentives to Undertake Rational Risk Taking Behavior
- Promote Sustainability Through Investment Strategy
- Promote Public-Private Partnerships

KATIE SCHOOL OF INSURANCE AND FINANCIAL SERVICES OHIO STATE UNIVERSITY

---

---

---

---

---

---

---

---

### Insurance Addresses “Sustainability Risks” (the only business whose purpose is to increase rational risk taking)

- Facilitates sustainable behaviors and rational risk-taking through Insurance underwriting, pricing, surcharges, and discounts
- Insurers have conservative accounting requirement for liabilities including those that remote and far into the future
- The tax benefits of insurance change the value for firms (M&M Theorem)
- Can act on sustainability risk that individual businesses may not because of “agency factors” and lack of actuarial capacity
- Have many financial interests aligned with future risks related to unsustainable practices
- Supports new products that promote sustainability
- Support public-private sustainability initiatives
- Can “vote for sustainability” through their investments

KATIE SCHOOL OF INSURANCE AND FINANCIAL SERVICES OHIO STATE UNIVERSITY

---

---

---

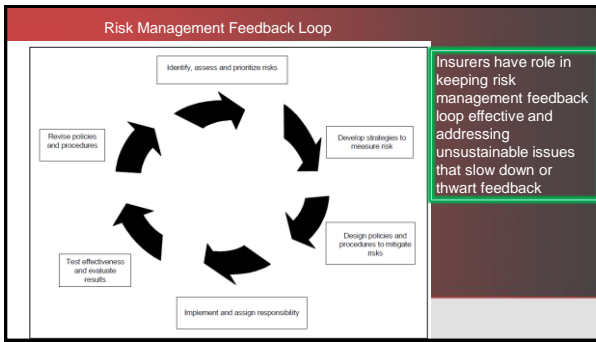
---

---

---

---

---




---

---

---

---

---

---

---

---




---

---

---

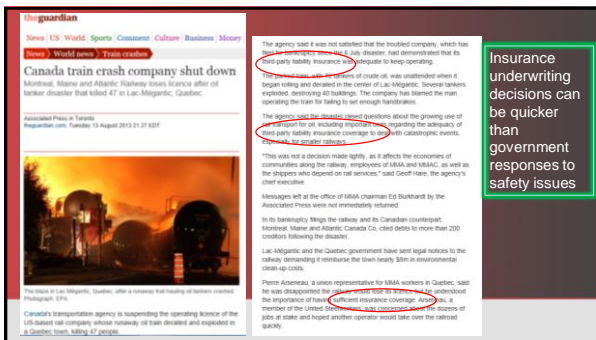
---

---

---

---

---




---

---

---

---

---

---

---

---

**fuel fix** **WANTED THE LOWEST PRICES IN TOWN** **GULFGATE** **TRUCK SALE-AD**  
FINANCED BY FORD CREDIT  
 FREE HOT ODOGS & SM  
 VIEW INVENTORY **877.454.4233** **SUMMER CLEARANCE**

---

**Transocean report BP didn't assess risks properly before blowout 'update'**  
Posted on June 22, 2011 at 3:11 am by Tom Foster in Accidents, Gulf of spiti

**Comments** | Email | Print

BP failed to properly assess, manage and communicate risks, didn't adequately test cement and misinterpreted a low pressure test prior to the deadly blowout on the Deepwater Horizon rig, according to a report released by string contractor Transocean this morning.

The accident was a "result of a succession of interconnected well design, construction, and temporary abandonment decisions," mostly made by BP in the weeks before the spill, the report concludes, but the immediate cause of the accident was the failure of the float cement pipe at the well.

BP's well design led to a cement job design that was thin in key areas and the failure to adequately test the integrity of the cement was not communicated properly to the rig crew on site by BP. Transocean said.

The final well completion and abandonment plan also wasn't approved by regulators, the report notes, because of the constant stream of last-minute changes.

The report also faults contract contractor Mobilization for not adequately testing the cement or communicating the risks of the well.

**KATIE SCHOOL** BP INSURANCE AND FINANCIAL SERVICES ALABAMA STATE UNIVERSITY

Information Pooling by insurers provides stronger risk identification than individual firms have

---

---

---

---

---

---

---

---

---

---

**National Commissions Report to President Obama**

**"Agency Factor" affected BP risk management decision-making**

**Report's Findings On Causes of Poor Risk Assessment:**

- Most significant failure at Macondo and clearly the root cause of the blowout was a failure of industry management. ( p. 123 )
- BP's management process did not adequately identify or address risks created by late changes to well design and procedures. ( p.123 )
- Decision making process at Macondo did not adequately ensure that personnel fully considered the risks created by time and money saving decisions. ( p.125 )

**KATIE SCHOOL** Report to the President

---

---

---

---

---

---

---

---

---

---

**Insurers Interest Aligned Well With Sustainability**

**Insurance Promotes General Sustainability**

- The only business that accounts for future uncertain costs today

**Insurers Affected By Sustainability Risks Like:**

- Property Damage from Climate Change Due to Hurricanes, Tornadoes, Floods, Droughts, Hail
- Changes in Mortality and Morbidity Risks Due to Climate Change
- Insurer Investments Affected by Climate Change
- Energy Risks Underwriting Changes
- Pension System Sustainability

**KATIE SCHOOL** BP INSURANCE AND FINANCIAL SERVICES ALABAMA STATE UNIVERSITY

---

---

---

---

---

---

---

---

---


---

**NATIONAL GEOGRAPHIC Daily News**

Home Animals Ancient Energy Environment Travel/Culture Space/Tech Water/Weather

### American West Becoming Increasingly Dusty

The number of dust storms is rising. What does that mean?



A massive cloud of dust looms over Phoenix, Arizona during a dust storm in July 2013.

#### Reduced Visibility

In northern Nevada this week, a **72-year-old** that killed one person was blamed on a dust storm that created "whiteout conditions."

#### Spike in Respiratory Problems

In addition to the particles, dust storms can also transport toxic pesticides and fertilizers, and heavy metals—all of which can cause respiratory problems if inhaled. The U.S. Centers for Disease Control and Prevention (CDC) also recently about an alarming rise in the southwestern states of valley fever, a respiratory infection that is caused by a dust-borne fungus.

---

---

---

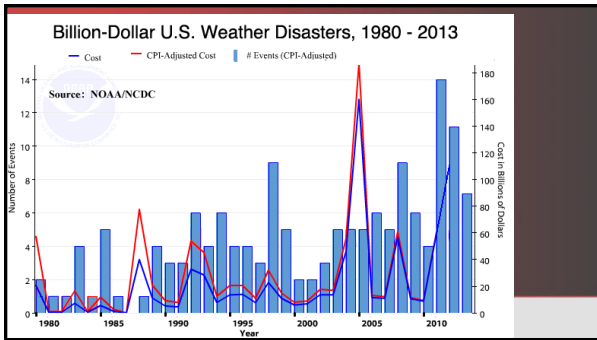
---

---

---

---

---



---

---

---

---

---

---

---

---

Where and When Carbon Emissions Occurs.  
Carbon IS related to Industrialization!

<https://www.youtube.com/watch?v=x1SgmFa0r04&spfreload=10>

KATIE SCHOOL OF INSURANCE AND FINANCIAL SERVICES ALABAMA STATE UNIVERSITY

---

---

---

---

---

---

---

---

### Business Insurance

#### Three U.S. states to require insurer disclosure on climate

<http://www.businessinsurance.com/news/2012/02/02/climate-change-disclosure-020212/> February 2, 2012 - 9:45am



[Read more in the Brokers & Insurers Channel](#) [What's This?](#)

**FEATURED SOLUTION ARC:** [Solvency II compliance and business challenges for insurers](#)

**BOSTON (Reuters)—**California, New York and Washington will require insurers to disclose how climate change may affect their businesses, a first step by government of the industry to address the issue, California Insurance Commissioner said on Wednesday.

The three states will require insurers that do business in their states to make climate change disclosures on a form developed by the National Assn. of Insurance Commissioners.

"Between the three states, our hope is to survey all companies in the United States with premiums in excess of \$500 million," California Insurance Commissioner Dave Jones said in an interview.

The NAIC has adopted the climate change survey in March 2009, although states were allowed to make voluntary and insurers were only required to file in the state where they were previously licensed.

Compliance has been limited, and Mr. Jones said he believed the three states were the only ones administering the survey this year.

A coalition of public interest groups, Ceres, said last September that just one in eight insurers had a formal policy to manage climate risk, even though most acknowledge the potential problems climate change posed.

KAT SCHOOL

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

Chapter 4

**THE RIPPLE EFFECT: WATER RISK IN THE MUNICIPAL DEBT MARKET**



### CASE STUDIES: ASSESSING WATER RISK IN EIGHT UTILITIES

State and local bonds represent 35 % of total invested assets of insurers in the U.S.A.

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---


---

---

---

---

### Linear Model is NOT Sustainable



As this linear material system for production of physical goods changes to one that is cyclical, and more efficient at every point it will:

- 1) Introduce New Risks for Insurers
- 2) Introduce New Opportunities for Insurers

KATIE SCHOOL OF INSURANCE AND FINANCIAL SERVICES ALBION STATE UNIVERSITY

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

# Private Insurers Can Facilitate Sustainability

- Loss Control Requirements for Insurability
- New Products
- Discounts and Incentives

KATIE SCHOOL OF INSURANCE AND FINANCIAL SERVICES  
ILLINOIS STATE UNIVERSITY

---

---

---

---

---

---

---

---

---

---

### Consumer Alert

**Wildfire: Insurance companies protecting customers by inspecting properties in wildfire-prone areas**

Wildfire: The frequency and scope of wildfires in Colorado and Arizona are a grim reminder for homeowners and business owners to take action to protect your property and make sure you have adequate insurance.

Property and business owners in Eastern Washington and Idaho have good reason to be concerned about wildfires. Wildfire risk in 2013 is above normal for the region and last year wildfires torched nearly 200,000 acres in Washington and 1.7 million acres in Idaho, according to the [National Interagency Fire Center \(NIFC\)](#). Firefighters are currently battling active fires in Idaho, which have burned more than 20,000 acres.

To help save lives and property, insurance companies are inspecting homes and recommending appropriate actions customers can take to reduce fire risk. Some customers may face premium increases or coverage cancellations if adequate measures are not taken.

Supervisors paired with constructive safety recommendations are a huge benefit to property owners," said Karl Norstrom, NV Insurance Council president. "Failure to take action could result in loss of life or completely destroyed homes and businesses. Insurance experts are taking time to warn their customers of serious risks to their properties so they can act in safety ahead of time."

Nationally, catastrophic wildfires scorched more than 9 million acres and caused \$191 million in insured losses in 2012. Also, more than 4,800 structures burned in those wildfires, according to the [Insurance Information Institute](#).

NV Insurance Council offers tips to help residents protect their families and businesses.

- **Defensible Spacing** - Clear brush 30 to 100 feet from your home. Keep your yard well groomed and watered and remove old stumps and weak or diseased trees from your property. Create a buffer zone by landscaping with fire-resistant plants. Contact your local utility company if you notice tree branches touching power lines.
- **Review your insurance policy** - Contact a representative from your insurance company or your insurance agent to be sure you have the right coverage to meet your needs. Make sure you have the appropriate amount of insurance, especially if you've recently made additions to your home.
- **Fireproof your roofing** - The roof is the most vulnerable part of your home when it comes to fire. Replace wood-shake roofs with less flammable material, when possible. Keep roofs and gutters clear of needles and leaves.
- **Home exterior protection** - Install screens on chimneys, awnings and attic openings. Trim trees that overhang the house to prevent fire in trees from easily spreading to the roof of the house. Keep flammable materials like fuel tanks at least 30 feet away from the house.

Insurers have role in providing incentives for policyholders to make risk mitigation and better decisions on where they live

---

---

---

---

---

---

---

---

---

---

### BUSINESS INSURANCE

#### Desire for wild spaces ignites U.S. fire insurance hazard

August 14, 2013 - 2:30 pm ET

Insurers - The summer of 2013 has been another season the season for the United States, a trend that has insurance companies looking for more ways to protect property owners from the damage done by fire in more areas in more greater numbers. The death of 19 firefighters in a deadly fire last fall in a case, the biggest such loss since 1910, showed the nation and how the need to build evidence to date of a general level of safety threats to both as well as property.

The insurance industry has seen a dramatic upward trend in fire-related property losses in recent decades, according to data from the insurance information institute.

Losses in the United States accounted for \$13.7 billion in total economic losses and \$7.9 billion in insured losses from 2002 through 2011. That is a spike from the prior decade, which saw \$6.9 billion in economic losses and \$1.7 billion in insured losses.

State Farm, the largest home insurer in the country, has started reevaluating high-risk properties in specific Western states as they come up for policy renewal and making recommendations for defensible spaces to reduce risk, according to the company. **More than 1% of people decide to modify their property and discontinue their insurance policy.**

"Most people don't care much for their property," said State Farm spokesman Angie Thorne. "They're interested in mitigating their fire risk." Ms. Thorne said the Arizona insurance industry has always been conscious of high risk, but could not do the two policies only have changed recently but state decided to be higher risk were likely to see higher rates.

Carrie Walker, executive director of the **Center for Business and Enterprise Resiliency**, said people are more aware of wildfire risk and high and dry.

"If people are moving into a Class-10 (high-risk area)... they're basically in no man's land," Ms. Walker said. "It may be difficult for you to find insurance."

KATIE SCHOOL OF INSURANCE AND FINANCIAL SERVICES  
ILLINOIS STATE UNIVERSITY

Insurers have role in providing incentives for policyholders to make risk mitigation and better decisions on where they live

---

---

---

---

---

---

---

---

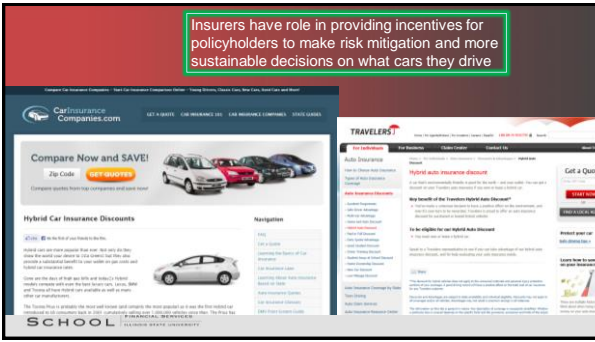
---

---





Insurers have role in providing incentives for policyholders to make risk mitigation and more sustainable decisions on what cars they drive




---

---

---

---

---

---

---

---

---

---

Energy and carbon emissions

Energy policy and technology lead to a slow-down in the growth of CO2 emissions from energy use — but not fast enough to put the world on a safe carbon trajectory.

- Global emissions growth decelerates from 1.9% p.a. in 1990-2010 to 1.2% p.a. for 2010-30; OECD emissions are lower in 2030 than 2010, but this decline is more than offset by the growth in non-OECD emissions.
- More aggressive policies could see CO2 emissions from energy use starting to fall after 2020, with richer countries cutting emissions and developing countries more likely to reduce carbon intensity.
- Globally, the greatest scope for emission reduction remains in power generation.

Excerpted from BP Energy Outlook Presentation, London, 2011

Energy Outlook 2030

78

© BP 2011

KATIE SCHOOL OF INSURANCE AND FINANCIAL SERVICES CALIFORNIA STATE UNIVERSITY

---

---

---

---

---

---

---

---

---

---

BUSINESS INSURANCE

Home & Events Career Center CE Center Classifieds Conferences & Groups Global Focus Photos



Anna Gaynor

Insurance covers invalidation of Calif. carbon offset credits

Insurers have role in facilitating sustainable markets by reducing risks to participants

**Solvency III**  
Incorporating Risk Management into the Investment Process  
REGISTER TO WATCH THIS FREE WEBINAR  
Sponsored by IBM

Parthenon Underwriting Ltd. has partnered with the *California* Action Reserve, which is the Los Angeles based carbon offset registry for North America, to offer insurance products for California's Cap and Trade program for greenhouse gas emissions.  
The product provides coverage against invalidation of compliance offset credits that were transferred from credits issued by the *California* Action Reserve, London-based.

---

---

---

---

---

---

---

---

---

---



**Sustainable Business Strategies**

*"Simply put, no business will survive unless it takes into consideration the community in which it operates, delivers consistent value to customers, maintains the highest standards of governance and ethics, and mitigates its overall impact on the environment."* **James Strong, Chairman Insurance Australia Group**



**KATIE SCHOOL** OF INSURANCE AND FINANCIAL SERVICES  
CALLED YOUR COURSE

---

---

---

---

---

---

---

---