



United States Senate
Committee on Homeland Security and Governmental Affairs
Chairman Joseph I. Lieberman, ID-Conn.

Statement of Chairman Joseph Lieberman
Dangerous Exposure:
The Impact of Global Warming on Private and Federal Insurance
A Hearing of the U.S. Senate Committee on
Homeland Security and Governmental Affairs
April 19, 2007
9:00 a.m.

Good morning and welcome to this hearing where we will examine the human and economic consequences of global warming through the eyes of the private and federal programs that insure tens of millions of American property owners, including farmers, against weather-related losses that already result in claims totaling billions of dollars a year.

On April 6, the United Nations Intergovernmental Panel on Climate Change, or IPCC, issued a report on the impacts that world scientists projected would result in unchecked global warming.

Here are some of the impacts that the IPCC finds the United States will experience by mid-century unless we dramatically reduce our greenhouse gas emissions:

- Warming in western mountains will decrease the snowpack, causing winter flooding, reduced summer flows and increased competition for already strained water resources.
- Droughts and new invasions of insects will kill crops as well as forests, leaving forests even more prone to fires.
- Coastal communities and habitats will be battered by intensified storms, with the damage compounded by more erosion.

In sum, we're looking at more intensified floods, droughts, pestilence, fires, and storms – all carrying dire economic consequences.

In the United States, a significant portion of the economic losses from such disasters is covered by private insurance and by two taxpayer funded programs – the National Flood Insurance Program and the Federal Crop Insurance Corporation.

It is natural to ask: How are the private insurance industry and the federal government insurance programs responding to predictions of the sharp increase in financial liability they face as a result of climate changes they may not have anticipated a decade or two ago? How are they responding to the scientific consensus that the increase in weather-related loss will accelerate in the decades ahead if global warming remains uncontrolled? What effect will this response, or lack of one, have on the tens of millions of Americans who rely upon insurance to protect them from weather-related loss?

In 2005, Senator Collins and I asked the Government Accountability Office to answer these questions. That report is now complete, and Mr. John Stephenson will describe GAO's findings in this hearing. But I would like to highlight three specific conclusions that are important for all of us to understand.

First, storm-related economic losses do not increase on a one-to-one ratio as storm strength increases. Rather, the losses increase at an exponential rate. Category IV storms tend to cause 100 times more economic damage, not just four times as much as Category I storms. In light of the mounting evidence that unchecked global warming will increase the intensity of hurricanes and other storms, this conclusion has serious economic consequences.

Second, one-half to two-thirds of the structures in U.S. floodplains do not have any flood insurance at all, and nearly 60 percent of U.S. homeowners carry insurance amounting to less than the value of their property. As we discuss potential losses to insured property, we should keep in mind that those losses represent just a portion of the direct, weather-related economic harm that global warming, if unchecked, threatens to inflict on our country.

Third, the federal government has grown markedly more exposed to weather-related losses since 1980. In that time, for example, the number of policies in the National Flood Insurance Program has more than doubled, and the total value covered by the program has increased fourfold.

GAO believes that the two federal insurance programs it examined could see their losses grow by many billions of dollars in the coming decades as a result of climate change. In the absence of careful planning and mitigation, the impact of global warming on these two programs alone could substantially increase the annual budget imbalance and the overall deficit.

In addition to GAO, we are privileged to hear from Mr. Eldon Gould, Administrator of the Department of Agriculture's Risk Management Agency, which administers the Federal Crop Insurance Corporation, and from Mr. Michael Buckley, Deputy Assistant Administrator for Mitigation at the Federal Emergency Management Agency, which oversees the National Flood Insurance Program.

These are the two federal insurance programs that GAO examined. Together, they paid one quarter of the \$320 billion that public and private insurers together paid on weather-related claims in the U.S. in the last 25 years.

In 1999, the Agriculture Department's Risk Management Agency declared: "The risks of climate change, such as higher temperatures, changes in precipitation, increased climate variability, and extreme weather events can result in significant impacts on agriculture, forestry, and rural areas.

The risks posed by climate change and the substantial challenge presented by mitigation and adaptation strategies require a strong USDA commitment to global change issues."

A year later, FEMA's director said, "There is no doubt that the human and financial costs of weather related disasters have been increasing in recent years. It is time to increase our efforts in applying prevention strategies to reduce the impacts of the changes in weather climates."

In light of those statements that were made seven and eight years ago, I will ask our witnesses today what USDA's Risk Management Agency and FEMA's mitigation office have done to prepare for and overcome the increasing weather-related risks attributable to global warming.

Finally, I look forward to hearing today from Andrew Castaldi, head of Catastrophe and Perils in the Americas Division of the Swiss Re America Corporation, the world's largest private re-insurer, about what they estimate unchecked global warming will cost them.

I look forward to hearing from Mr. Castaldi about his private insurance company's estimate of the cost of global warming.

I thank you all for coming today.

Senator Collins.