

# Alert

## CLIMATE CHANGE

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### Academy Outlines Climate Change's Impact on Insurance, Actuarial Work

Wildfires, severe storms, floods, and droughts are increasingly gripping parts of the U.S. and impacting areas across the globe. Their effects can be devastating to homeowners and businesses in localized areas, but their impact is also felt by insurance consumers and professionals nationwide.

The most direct harms from the effects of climate change have been on display for years. Stronger hurricanes and severe rainstorms have increased flooding across much of the Eastern U.S. The number of hurricanes causing more than \$1 billion in damages (in 2022 dollars) has tripled over the past 40 years, while deaths from such storms have increased more than 17 times.

Meanwhile, sustained droughts have led to more prevalent wildfires, mostly in the Western states. The number of billion-dollar fires has quadrupled over the past 40 years, with the overall costs of such disasters rising nearly 11 times.

The Academy recognizes climate change as a key and ongoing public policy focus for actuaries. To that end, we will continue to educate, inform, and engage our members and the broader professional communities about the ongoing implications and costs of climate change.

Earlier this year, the Academy's Climate Change Joint Committee (CCJC) released a [report](#), *Climate Risks Pose Broad Impacts on Financial Security Systems*, and hosted a [webinar](#) spotlighting the potential effects the changing global climate may have on the work actuaries do. Both highlighted the potential wide-ranging negative outcomes that could affect industries and individuals if more is not done to mitigate the causes of these global changes.

Recent issues of *Contingencies* magazine also delved into the topic with several pieces:

- Academy Managing Editor for Member Content Michael G. Malloy's feature [article](#) "Extreme Outcomes—A warming climate and stronger storms, floods, and wildfires are causing insurability concerns."

- Author Srivathsan Karanai Margan’s [commentary](#) “Hacking the Planet—Part 2,” looking at carbon dioxide removal.
- Karanai Margan’s [discussion](#) on climate engineering in “Hacking the Planet—Part 1,” the initial commentary in a series looking at possible climate-related solutions.

Meanwhile, the Academy, in partnership with the National Oceanic and Atmospheric Administration (NOAA) and the National Science Foundation (NSF), recently hosted a series of webinars with members of the insurance and reinsurance industries, and with members of the catastrophe modeling and climate modeling communities. On-demand recordings are available for Academy members:

- “Connecting the Insurance Industry and Academia on Catastrophe and Climate Modeling: Webinar Series—Introduction” (March 20, 2023) [On-demand recording](#) | [Slides for Download](#)
- “Connecting the Insurance Industry and Academia on Catastrophe and Climate Modeling: Webinar Series—Second Session” (April 17, 2023) [On-demand recording](#)
- “Connecting the Insurance Industry and Academia on Catastrophe and Climate Modeling: Webinar Series—Third Session” (May 15, 2023) [On-demand recording](#)

Other resources include:

- [Actuaries Climate Index](#)
- [Glossary of Climate Change Terms and Definitions](#)
- [Climate Risk webpage](#)
- [Comment letter sent to the International Sustainability Standards Board](#)
- [Comment letter sent to the SEC on climate disclosures](#)

### **Coming Soon!**

The CCJC will unveil two additional documents in the coming months, one focused on an environment, social, governance (ESG) glossary paper, while the other focuses on financial security and equity issues through mortality, illness, catastrophes, equity, and retirement (MICER).

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