ICLR’s Paul Kovacs honoured with lifetime achievement award

Paul Kovacs, executive director of the Institute for Catastrophic Loss Reduction (ICLR), has received the Joseph Scanlon Lifetime Achievement Award from the Canadian Risk and Hazards Network (CRHNet).

CRHNet is a not-for-profit organization established in 2003 to share hazards research and promote and strengthen disaster risk reduction and emergency management in Canada.

Kovacs received CRHNet’s highest honour, named after the late T. Joseph Scanlon, a journalist, researcher, and professor. All Canadians are eligible to receive the award, which recognizes individual service to public safety through disaster management practice, research, education, and leadership.

Kovacs heads up the ICLR, which was established by the Canadian property and casualty industry in 1998 as a centre for multi-disciplinary disaster prevention research and communication.

“I’m really, really proud,” Kovacs told Canadian Underwriter, when asked what the award meant to him. “This is an award from my peers. This is from all of those folks in Canada who are working really hard to study storms and severe weather. There are only three people who have received the award and they are all absolute leaders in the field. To be put into the same sort of group [by] colleagues of mine makes me so proud. To be recognized for a lifetime achievement of doing work on disaster research and to promote the importance of science and research is such a wonderful honour.”

For more than 35 years, Kovacs has been a leading authority in the areas of property and casualty insurance, disaster safety, and economic policy. He has written more than 200 publications and articles about insurance, disaster resilience, and adaptation to climate extremes. Since 1996, he has been a contributing author to the Intergovernmental Panel on Climate Change (IPCC), which won the 2007 Nobel Peace Prize for its efforts to communicate greater knowledge about human-made climate change.
Apart from Kovacs, three people have received the award since 2016:

- T. Joseph Scanlon himself, a journalist with the Toronto Star in the late 1950s and early 1960s. He established the Emergency Communications Research Unit (ECRU) at Carleton University in Ottawa, Ont., in the 1970s, going on to study the sociology of disaster.

- Larry Dale Pearce: a former CRHNet executive director who had a career in emergency management with Emergency Preparedness Canada.

- Alain Normand: emergency manager for Brampton, Ont., from 1999 to 2021 (now retired), Normand’s professional background includes directing relief efforts in emergencies such as the Saguenay floods in 1996, the Quebec Ice Storm of 1998, and the repatriation of Canadians from Haiti after the earthquake of 2010.

For Kovacs, his storied career in conducting and communicating the results of disaster research on behalf of the Canadian P&C industry started almost 30 years ago, he told Canadian Underwriter.

“All of this started in 1992, when Hurricane Andrew struck in Florida,” he said. “At the time, I was employed with the Government of Ontario, the department of finance, and I was approached by the Insurance Bureau of Canada. They asked if there was an interest in working on this topic with the insurance industry. The specific concern at that time was that the Americans had had a storm that caught them by surprise, and that cost them a lot of money, and some insurance companies went bankrupt.”

IBC approached Kovacs to start a project in Canada that would solidify the scientific rigour behind research into severe weather, earthquakes, and other extreme perils in our country. The mandate was to use the research to figure out what the actual risks were and how to help the industry and society prepare for them.

For Kovacs, the most gratification in his work comes from seeing how the research can change behaviours for the better. “When the science and the many people involved in doing the [research] work actually take what we know and make ourselves better off – when I see an actual change of behaviour, watching how the industry is managing [disaster risk and prevention] more proactively than it ever did before – that’s really exciting to me.”

The Pacific Northwest is a region that is both blessed with staggering natural beauty and cursed with extreme risk from powerful earthquakes.

But even though Canadians and Americans living in the region share virtually the same risk from a major quake, the 49th parallel that demarcates the boundary between Canada and the United States also marks another line – more than 60 per cent of homeowners in the lower mainland of British Columbia purchase earthquake insurance protection for their homes and belongings, while less than 14 per cent of those in western Washington State do the same.

In insurance lingo, this means there is a “protection gap” in both B.C. and in Washington State, though the gap appears to be more of a gaping chasm for Americans.

What is the ‘protection gap?’

As losses from natural hazards are on an upward trajectory, both globally and in Canada, the protection gap has been a popular topic in the insurance industry in recent years.

This gap is defined as the portion of total losses generated by an event like a hurricane, flood or earthquake that is not covered by insurance. Globally in U.S. dollars, this gap came in at $171 billion in 2020 for all natural disasters, as only $97 billion of the total $268 billion in damage was insured.

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Over the past decade, only $102 billion of $535 billion in losses were covered by insurance for earthquakes alone.

This is problematic because, essentially, the bigger the gap, the greater the disaster-related costs that are borne out-of-pocket by society. According to research, when more people buy insurance, society tends to be more resilient, prompting it to bounce back faster after a catastrophic loss than in places where fewer people buy purchase coverage.

**The risk is there, so why not the coverage?**

Several theories exist as to why the number of people who buy earthquake insurance in earthquake-prone countries tends to be low considering the significant risk.

Our team (including Steven Bowen, head of catastrophic insight at Aon, a global professional services firm) looked at several potential influences on the decision to purchase earthquake insurance, including socioeconomic factors (such as age, education, income), perceptions of seismic risk and expectation of government bailouts via disaster assistance programs, as well as issues pertaining to the cost of the product and the unattractiveness of the policy design.

Our work finds very little difference in most of these factors in the U.S. and Canada, so these small differences don’t explain the significant variance in take-up rates in B.C. and Washington.

The only significant difference found between the two locales is the broader availability of government disaster assistance in Washington over B.C. While there are numerous aid and grant programs to help uninsured or under-insured people in the U.S., the B.C. government has publicly stated that it will not pay assistance for earthquake damage because of the availability of private insurance.

We believe this and issues centering around national culture are two main reasons why earthquake insurance take-up rates are so low in Washington.

The Canadian Constitution heralds Canada’s “peace, order and good government” while the U.S. Declaration of Independence emphasizes “life, liberty and the pursuit of happiness.” Because Americans tend to be individualistic and less likely to trust information provided by authorities, they are more likely to underestimate the potential risk.

This has resulted not only in low take-up rates for earthquake insurance in western Washington, but also in California, where roughly only **10 per cent of households have proper coverage**.

**Narrowing the gap**

Given the worldwide increase in economic losses due to natural catastrophes, it’s essential to narrow the insurance protection gap. When losses are insured, people and institutions don’t need to pay for losses out of pocket. Reducing the protection gap reduces the burden on taxpayers and promotes societal resiliency.

While the protection gap exists for many reasons, potential solutions have been explored worldwide to reduce it. For example, mortgage lenders could require, or governments could mandate, the purchase of insurance.

Changes in product design could also motivate more homeowners to purchase earthquake insurance, from bundling all potential disasters into a basic insurance policy to changing policy duration from the typical one year to multiple years and providing “insurance vouchers” to high-risk but low-income households.

There may also be a role for governments to act as insurers, provide a liquidity or solvency backstop to insurers or offer coverage through property taxes.

Our findings go beyond the issue of earthquake risk and are relevant when considering the impact of climate change, because the phenomenon will increase extreme weather-related risks around the world.

The increased risk will require both insurers and governments to take steps to ensure that adequate protection against catastrophic losses is in place.

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Is California wildfire becoming uninsurable?

By Glenn McGillivray, Managing Director, ICLR

From time to time, the global re/insurance industry experiences a loss or series of losses that forces market participants to re-evaluate what they thought they knew about a given hazard.

Three examples of such shock losses are Hurricane Andrew (1992), the terrorist attack of September 11, 2001 (aka 9/11) and the North Atlantic basin hurricane seasons of 2004 and 2005. In future, it may be necessary to add COVID to this list.

Hurricane Andrew, a Cat 5 storm that struck south Florida causing USD 16 billion (1992) in insured losses (USD 29 billion 2020 dollars) drove numerous changes in the industry, many of which still exist to this day. The storm, the costliest ever insured global cat loss up to that time, bankrupt a number of carriers. Many re/insurers were poised to either drop risks en-masse or flee the Florida market altogether. Legislation was passed to staunch the outflow of capacity, in effect, forcing carriers to remain in the market. Andrew prompted the birth of the Bermuda re/insurance market, the vendor modelling industry, and both a state-run insurer and reinsurer of last resort. More on the impacts of Andrew can be found here.

Generating about USD 40 billion in insured losses, the terrorist attack of September 11, 2001 rattled global property, aviation and liability markets worldwide. Despite robust discussions about the potential threat of terrorism, no one foresaw the potential that numerous passenger aircraft could be hijacked and used as missiles. Virtually overnight, terrorism was excluded from most every policy worldwide and a review/re-underwriting of all policies in force and policy wordings was undertaken. In several markets around the world, governments had to step in to insure aircraft, airport facilities and terrorism risk.

During the active North Atlantic hurricane season of 2004, four major hurricanes struck the U.S. mainland, the first time that had happened in more than 100 years. Of the 16 named storms that year, more than half impacted the U.S. Hurricanes Charlie, Frances, Ivan and Jeanne were particularly nasty, with each impacting Florida in one way or another. Insured damage from the four reached USD 37 billion. Then, in 2005, the U.S. was struck by the now-infamous trio of KRW – Katrina, Rita and Wilma – which together caused more than USD 113.7 billion in insured damage.1 The back-to-back hits of 2004 and 2005 forced carriers to re-evaluate what they thought they knew about North Atlantic hurricane risk. Global cat capacity was reduced and prices increased.

Fast forward to the late 20-teens and the issue is California wildfire.

Twelve wildfires in California between 2017 and 2020 inclusive destroyed almost 37,500 structures. Adding partial losses, smoke damage, vehicles and so on, the fires cost re/insurers a whopping USD 39.9 billion.2 This, for a hazard considered to be “secondary” in the global property cat market.

The one big difference between recent fire experience in California and the three historical shock losses noted above is that Andrew, 9/11 and the 04/05 hurricane seasons were largely about severity. The changes that came about in the industry as a result of the trio occurred, not because re/insurers were concerned about their becoming commonplace (indeed, after KRW, the U.S mainland

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1 Data graciously provided by Steve Bowen, Aon, Chicago. Figures are in 2020 USD, and include private industry and public entity payouts (like NFIP). They include all country impacts, not just U.S.

2 Data from Steve Bowen, Aon, Chicago.
didn’t get hit by another major hurricane until Harvey in 2017, 12 years later), but because of the substantial surprise hit they could make on a balance sheet every so often. A hit big enough to impact capital, possibly impacting carrier solvency.

The California wildfires, on the other hand, are about both frequency and severity: A significant number of large fires with heavy insured losses for four consecutive years and, with climate change and other factors, no end in sight.

Now, severity alone can generally be managed (i.e. while extreme tail risk, like with a very large urban earthquake, may require that a government backstop be put in place; the occasional large tornado outbreak, hailstorm or wildfire is generally manageable via sensible accumulation management, conservative reserving practices, adequate cat reinsurance and so on).

But when something begins to become both severe and frequent, it can start to tear at the very fabric that makes a risk insurable. Indeed, of the seven Elements of Insurable Risk, several (perhaps, to some degree, all) come into play when considering the question of future insurability of wildfire risk in California.

There are already early signs of an insurance crisis brewing in high-risk parts of the state. In a recent study by the Rand Institute, researchers found evidence that insurers in the admitted market in the state are decreasing market share more rapidly in high risk areas than in lower risk areas. They also found that homeowners in higher risk areas are purchasing policies with lower coverage limits relative to structure value and are opting for higher deductibles “creating coverage adequacy issues” – likely due to premium increases and availability issues.

Other areas of concern include the issuance of a one year moratorium on cancellation or non-renewal of homeowner policies within certain zip codes by the state’s Insurance Commissioner. Some 235,250 property policies were discontinued in California in 2019, a 31% increase from 2018, with the bulk being in areas of high wildfire risk.

Further, there was an increase of 36% from the end of 2018 to the end of 2019 in FAIR Plan policies issued. California’s FAIR Plan, the state’s insurer of last resort, is a pool comprised of all insurers authorized to transact basic property insurance in California. It was created in 1968 after the major wildfires and riots of the 1960s to provide basic fire insurance to property owners who are unable to find coverage in the voluntary market.

If we continue to see highly destructive fire seasons in California going forward, the writing could be on the wall for the viability of a private property insurance market in parts of the state.

As they say, only time will tell. But four consecutive years of major fire losses seem to indicate that a trend is gelling and action will need to be taken by regulators and others to provide a long-term sustainable fix for the problem.

Forcing carriers to remain in an unviable market is not such a solution, but merely a flimsy bandage on a bad burn.

Institute for Catastrophic Loss Reduction

Mission
To reduce the loss of life and property caused by severe weather and earthquakes through the identification and support of sustained actions that improve society’s capacity to adapt to, anticipate, mitigate, withstand and recover from natural disasters.

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