

ISSUE BRIEF

Insurance For Climate Resilience



KEY MESSAGES

- Throughout the world, the insurance industry plays a unique role in underpinning economies and providing risk coverage.
- Insurance is a financial instrument that allows vulnerable households, businesses, and communities to gain financial protection from unforeseen adverse events, including climate-related natural disasters and shocks such as storms, floods, fires, and droughts.
- Insurance instruments pool risk across many insureds and transfer it to financial actors better able to bear losses. Due to their risk management expertise and risk diversification, insurance providers offer financial protection and enable access to financing and restoration of losses for asset owners large and small.
- However, [more than two-thirds of financial losses from extreme weather events is uninsured](#)¹, with the burden falling disproportionately on the poor and vulnerable. The uninsured portion of losses is known as the 'protection gap', a significant contributor to global poverty and insecurity and a crucial challenge for society to address.
- The costs stemming from extreme weather events driven by climate change are steadily rising, posing challenges to the insurance industry while underscoring its vital role to protect the financially vulnerable from adverse impacts of climate change.
- The private sector plays an important role in providing and expanding access to insurance and in driving the development and adoption of data, analytics, and risk-pricing tools. Both access to insurance as well as better risk pricing and management are essential inputs into efforts to deliver climate resilience.
- Insurance and risk transfer products can be critical components of climate resilience and risk management plans, policies, and investments.

INSURANCE TO ENHANCE RESILIENCE

This past decade was the costliest on record due to natural disasters, [with total global economic losses surpassing \\$2 trillion](#)²; the frequency of costly annual climate-driven extreme events globally has [more than doubled since the 1980s](#).³

Insurance is an effective and proven technique to enhance resilience.

- Insurance can provide financial protection to individuals and entities most exposed to hazards.
- Through market pricing and signaling, insurance can incentivize sustainable behavior and direct capital to lower-risk and risk-reducing investments.
- Through environmentally friendly underwriting, insurers and those in the insurance value chain can contribute to greater climate mitigation and adaptation.
- Insurance can provide support to individuals, communities, firms, and governments to cover and respond to the financial impact of extreme weather events.
- Insurance can also enable and improve accelerated responses to climate shocks and other natural disasters by providing governments, firms, and individuals with reliable coverage and, in some cases, financing to effectively respond to such disasters.

The insurance value chain can ensure resilience to major catastrophic events by spreading insurers' and reinsurers' financial risk exposure through effective risk pooling, risk pricing, and risk diversification.

- Governments, businesses, and private individuals can all participate as the insureds in the insurance value chain, and private insurance firms and public agencies can provide insurance and reinsurance.
- Insurers are capable of pricing and managing climate risks and offering coverage against climate-related risks.

As a conduit for risk transfer from the insured and to the insurer, insurance can be a cost-effective and efficient approach to reduce climate vulnerability, particularly for groups least able to sustain climate-related losses and disruptions.

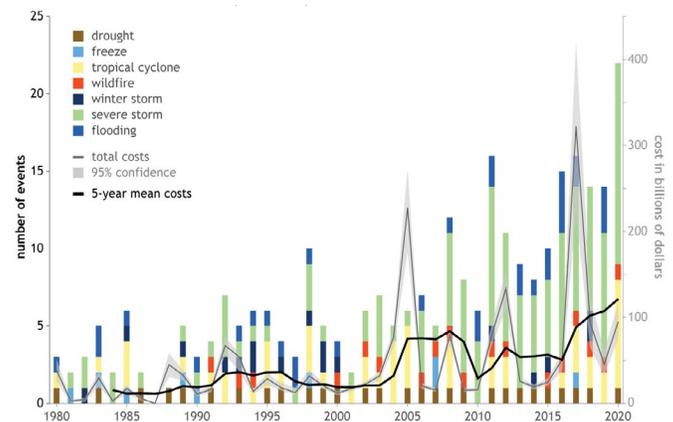
- With this goal in mind, governments sometimes elect to subsidize or directly provide insurance for vulnerable groups.
- While insurance itself does not directly reduce risk, it is an important catalyst for actions to manage risk and to align incentives for investment in risk management.

"Understanding, preventing, and reducing climate risk is of paramount importance, and we need innovative insurance solutions to accelerate the transition to sustainable and resilient communities and economies."

– Ricardo Lara, Insurance Commissioner of California

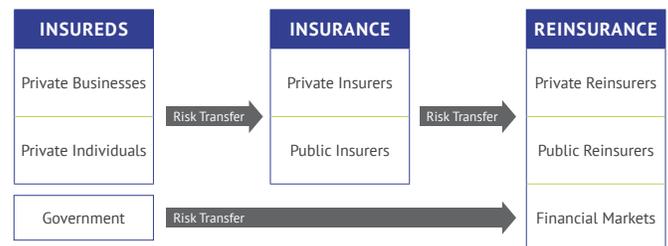
Billion-Dollar Disasters and Costs in the U.S. (1980-2020)

Source: National Oceanic and Atmospheric Administration (2021). 2020 U.S. billion-dollar weather and climate disasters in historical context.



Insurance Value Chain and Risk Transfer

Source: Adapted from Global Commission on Adaptation (2019). Insurance for Climate Adaptation: Opportunities and Limitations.



"As long as the 'systemic risk' of carbon is not correctly embedded into regulatory frameworks... it will always be a story of a few responsible actors doing their best within a broader financial system that is not designed for sustainability."

– Henri de Castries, CEO, Axa

- Through financing mechanisms and market signaling, insurance tools can play a critical role in supporting accelerated climate action throughout the insurance value chain.

Greater data on climate risks, impacts, and costs, as well as the availability of sophisticated forward-looking models of climate impacts have enabled insurers and public agencies to take a proactive stance in expanding resilient insurance coverage.

- Novel thinking and product designs, together with expanding current products being piloted, will be needed for decision-makers and consumers facing new and increasing climate risks.
- New capabilities in geospatial observation and climate data and analytics are enabling better risk pricing and improved parametric and index insurance products (such as industry-specific insurance products or risk-specific products) that may help make insurance more accessible to the global poor.

Climate-related insurance products can help close the 'protection gap' by expanding access to finance, facilitating post-disaster recovery efforts, boosting new and adaptive technologies, and supporting long-term global development.

- As global losses from climate-related disasters rise, the protection gap, or volume of uninsured losses, is spiking as well.
- Swiss Re found that the [global protection gap reached \\$280 billion in 2017 and 2018](#),⁴ with most climate-related extreme events not covered by insurance.
- The costs of responding to climate-related disasters will continue to increase. Quick deployment of recovery loans post-disaster tied to insurance can reduce default and promote economic growth – an efficient way to provide disaster relief and kick-start the recovery.
- Targeting the protection gap and deploying innovative insurance solutions can enable more resilient economic development by allowing resources to shift from reactive crisis management towards investment in prevention, preparedness, early action, and adaptation.

As the dominant underwriter and investor in the global insurance market, the private sector has a key role to play in expanding access to tailored and climate-appropriate insurance products accessible to the global poor.

- Research indicates that climate impacts disproportionately affect the poor and vulnerable in developing countries, which are also the countries with the lowest rates of insurance penetration.

Parametric, or index-based, insurance is a type of innovative insurance product that offers pre-specified payouts to policyholders upon the occurrence of a specific trigger event. Parametric insurance, which is commonly tied to weather events (wind speed, rainfall, prolonged drought), is often based on the magnitude of the trigger event rather than the magnitude of the losses in traditional insurance policies, allowing for more rapid and dependable payouts. While parametric insurance is largely used to support the agriculture sector, new products are being developed to insure infrastructure and protect ecosystems.

- The private sector will be vital to increasing the market penetration for insurance but requires favorable market conditions to enter new markets. The [InsuResilience Global Partnership](#), launched at COP23 in 2017, works in developing countries and aims to enable more timely and reliable disaster response using climate and disaster risk finance and insurance solutions.
- [The InsuResilience Investment Fund \(IIF\)](#), a blended-finance investment fund launched in support of the partnership, is laying the groundwork for these market transformations by investing in companies in the insurance value chain and lending to companies expanding the availability of insurance products to vulnerable communities.

Spain has developed and implemented a unique public model providing mandatory **catastrophic risk insurance** through the [Consorcio de Compensación de Seguros \(CCS: Insurance Compensation Consortium\)](#), a government insurer. In Spain, all insurers are mandated to extend coverage on their insurance policies to classified extreme weather events, along with other extraordinary risks, with a surcharge applied to the premium on the value of all insured properties accordingly. CCS, which is fully capitalized through these surcharges, automatically files claims for policyholders, and compensates them accordingly when covered loss events occur.

As the sole provider of catastrophic risk insurance in Spain, CCS is well-positioned to coordinate its operations with partner government agencies and private insurers to maximize public resilience. CCS has generated considerable robust **data on climate risks that inform public decision-making and policies**, such as identifying high-risk areas, improving cost-benefit analyses, and supporting resilient long-term planning.

Government actors have a diverse and wide-ranging set of approaches at their disposal to promote insurance and integrate it into climate resilience efforts.

- Insurance can be integrated holistically by policymakers and investors to better attain the financial and physical resilience of assets, systems, and communities.
- Policymakers' and public investors' playbook for integrating insurance into climate resilience efforts includes regulation, subsidies, government-sponsored insurance schemes, blended finance, and public-private partnerships.

Government and public institutions can also leverage enhanced public-private collaboration to use insurance mechanisms as a key tool to advance climate adaptation and resilience.

- Insurance-related public-private partnerships for climate resilience can encompass knowledge-sharing, co-investment, and application of data and analytics.
- Innovative investment vehicles and insurance funds may attract private capital for adaptation, such as through catastrophe bonds or the model offered by the [Caribbean Catastrophe Risk Insurance Facility](#).
- In addressing the insurance protection gap, [government-organized pools](#) to purchase privately administered insurance can unlock greater coverage rates and allow for greater insurance penetration in previously hard-to-reach sectors or communities.
- Public agencies can maximize insurance data and knowledge to guide climate resilience policies when developing sustainable zoning, building, and construction regulations to minimize long-term risk.

The **Caribbean Catastrophe Risk Insurance Facility (CCRIF)** was founded in 2007 as the first multi-country risk pool, offering limiting the financial impact of extreme weather events for Caribbean governments by rapidly providing financial liquidity once a policy was triggered. CCRIF was the first insurance instrument to develop and offer parametric insurance policies supported by international capital markets, offering products triggered by natural events such as catastrophic hurricanes, earthquakes, and excess rainfall, and the facility's model has been cited by G7 and the United Nations as a best practice for enhancing climate resilience.

1 Munich Re. Risks Posed by Natural Disasters.

2 Swiss Re (2020). Natural Catastrophes in Times of Economic Accumulation and Climate Change. Sigma No. 2/2020.

3 InsuResilience Investment Fund (2020). Protecting Low-Income Communities Through Climate Insurance: Achievements from the InsuResilience Investment Fund.

4 Swiss Re (2019). Natural Catastrophes and Man-Made Disasters in 2018: "Secondary" Perils on the Frontline. Sigma No. 2/2019

Interested in learning more about this work or Climate Finance Advisors, contact us here: info@climate-fa.com