# PROPERTY CATASTROPHE & CLIMATE GOVERNANCE REPORT

BRIDGING THE PROTECTION GAP THROUGH INSURANCE INNOVATION

NOVEMBER 2025



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# **FOREWORD**

In recent years, the global property market and its insurers have faced a profound transformation. This report brings together the expertise and insights of our Global Insurance Law Connect network, reporting from 23 jurisdictions on the evolving landscape of natural catastrophe (nat cat) risk on the property insurance landscape.

Nat cats are increasing in frequency and intensity with the first half of 2025 alone seeing insured losses reach USD84 billion, with the year on track to surpass USD100 billion. These figures represent the growing vulnerability of communities, businesses, and entire economies to extreme weather and natural disasters. Even in mature markets like London and Zurich, the protection gap remains alarmingly high, with up to 75% of climate-related catastrophe losses uninsured.

This report highlights the urgent need for collaboration between insurers, governments, regulators, and property owners. As traditional insurance models are tested by new and intensifying perils, we see insurers tightening policy wordings, raising premiums and, in some cases, withdrawing from high-risk regions. The risk that certain areas may become uninsurable is no longer theoretical, it is already reality in places like Florida, where insurer insolvencies have left significant gaps in coverage.

Yet, the report also points to innovation and hope. Parametric insurance solutions and catastrophe risk pools are emerging as vital tools to close the protection gap, offering faster claims settlement and coverage for previously uninsurable events. Government schemes, public-private partnerships, and regulatory reforms are being developed worldwide to support resilience and ensure that insurance remains accessible and effective.

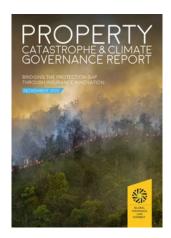
Our findings make clear that building resilience goes beyond a technical challenge for policyholders, and is instead a communal, societal imperative. By incentivising risk mitigation, improving policy clarity, and fostering collaboration, we can help communities withstand and recover from catastrophe. The insurance industry has a critical role to play in the shaping of a sustainable and resilient future.

I hope this report serves as a catalyst for dialogue and action, and I look forward to engaging with you as we work together to address the challenges and opportunities ahead.

### **Gillian Davidson**

Global Insurance Law Connect - Chair

If you would like to get in touch regarding the content of this report, please contact Michaela Hickson at michaela.hickson@globalinsurancelaw.com



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# INTRODUCTION



As the frequency and severity of natural catastrophe (nat cat) events increases, so too does their impact on the global property (re)insurance market. According to Gallagher's H1 2025 Natural Catastrophe and Climate Report, the first half of 2025 saw global insured losses hit USD84 billion, stating then that "2025 is on a clear path to surpassing USD100 billion in insurance losses for the 12 months".1

This increasing impact has been driven by the combined impacts of climate change, affecting the nature and pattern of weather-related cat events, and changes in land use – whether for deforestation and intensive agriculture or increased urbanisation and property development. As nat cats continue to cause more destruction, potential economic losses are expected to continue to grow.

At the same time, a persistent insurance gap in many countries means a significant proportion of the economic losses from nat cats are not covered by any form of risk financing. Even in Europe, boasting sophisticated financial and insurance markets like those of London and Zurich, the European Insurance and Occupational Pensions Authority (EIOPA) estimated in 2024 that the protection gap for climate-related catastrophe losses was as high as 75%.

Against a backdrop of increasing insurance claims and rising economic costs, the insurance sector is acutely aware of the threat posed by these evolving perils. This has prompted some carriers to amend policy wordings for certain geographic regions, industry sectors and occupancies.

Policy amendments range from exclusions for particular perils, such as riverine or flash flooding, to higher premiums to boost reserves against loss creep and future claims. In some cases, insurers have withdrawn from providing cover to the worst-affected territories and insureds.

The ongoing uncertainty around coverage for coastal properties in the US state of Florida is a case in point, with public conversations mulling the threat of 'uninsurability' since a wave of property insurer insolvencies hit the state in 2021 and 2022, depriving the market of much-needed capacity.

The risk that certain regions will become uninsurable for many local households and businesses is increasing as climate change drives more extreme weather patterns. There is already a tangible risk gap for secondary perils: coastal flooding due to storm surge, urban flooding from flash floods or riverine overflow, or wildfire damage to agricultural land and developments in the wildland-urban interface (WUI).

Those risk gaps are only likely to increase in the absence of a concerted and collaborative effort by national and regional governments, developers, and property owners and the risk and insurance industry to improve the resilience of new and existing properties, and to provide effective risk management and financing solutions to property owners and relevant stakeholders.

There is a pressing need for insurers to incentivise and support policyholders in building resilience to evolving nat cat risks, agreed a majority of the 23 members of Global Insurance Law Connect who

1. Gallagher Re H1 2025 Natural Catastrophe and Climate Report

participated in this, our inaugural Property Catastrophe and Climate Governance report.

A stronger collaboration between insurer and insured would help to proactively minimise weather-related property damage, reduce likely economic losses, improve response and recovery times following a loss event, and ensure effective indemnification against any financial loss incurred.

It would also contribute to a stronger and more sustainable property catastrophe (re)insurance market, which is better able to manage accumulation risks, pay claims, and continue to deploy capacity at successive renewals.

As GILC members have noted, some countries already have a significant protection gap due to low insurance penetration, driven by a combination of limited public understanding of the benefits of insurance and concerns around cover affordability. This limited reach hinders the potential for insurers in these markets to help drive change and build resilience.

Among global insurance industry strategies to tackle under-insurance, parametric solutions received almost universal approval as an alternative to traditional underwriting solutions. The ability of parametric insurance to reduce claims uncertainty and settlement times, expand coverage for events that have hitherto been considered difficult to insure, and to improve the predictability of cat events by linking to real-time weather data, were cited as evidence of its increasing appeal.

Catastrophe risk pools are also a significant and growing part of the solution to closing the protection gap for many countries. China and Switzerland both offer leading examples of how pooling risk capital can offer a robust defence against the huge costs associated with rebuilding infrastructure, economies and communities after natural disasters.

"2025 IS ON A CLEAR PATH TO SURPASSING USD100 BILLION IN INSURANCE LOSSES FOR THE 12 MONTHS."

GALLAGHER H1 2025 NATURAL CATASTROPHE AND CLIMATE REPORT



2.https://www.climateforesight.eu/articles/climate-change-insurance-protection-gap/



# SECTION 1

# A CHANGING WORLD

Catastrophe risks have been a mainstay of the insurance industry since its inception, beginning with fire insurance in the 17th century, and nat cats have been a major component of property risks ever since. However, the way nat cat risks impact both insurer and insured has changed materially in the past 20 years, driven predominantly by two factors: climate change and changing land use.

Both the frequency and intensity of extreme weather events have been increasing. In its 2021 Assessment Report, the Intergovernmental Panel on Climate Change (IPCC) sets out that "the scale of recent changes across the climate system... are unprecedented over many centuries", and that the role of humans in driving this change is "unequivocal". This impacts nat cat-prone regions more heavily but also affects regions that historically have had little or no cat exposures. These extreme weather incidents are less predictable and therefore harder to model than established weather cycles, such as the Atlantic hurricane season.

# URBANISATION INTENSIFIES CLIMATE CHANGE IMPACT

Alongside this, increased urbanisation, deforestation for agricultural and development purposes, and more intensive land use to support agricultural needs for a growing population, are all contributing to a larger land surface area that is both vulnerable to and impacted by nat cats.

Continuing urban sprawl, with cities expanding further into the wildland-urban interface, increases the scope for economic losses from commercial and residential property damage due to perils such as flood and wildfire.

The Aon 2025 Climate and Catastrophe Insight report points to urban sprawl as a driver of higher economic losses in the wake of catastrophes, highlighting the southern states of the US as a prime example. In 2024, a hailstorm hit Denver, Colorado. Because of the huge expansion in sprawling, low-density suburban land use, the urban area hit by the largest hailstones had "expanded from 24 to approximately 65 square miles since 1990", resulting in a concept known as the "expanding bull's eye".4

Even nat cat perils that are not demonstrably linked to climate change, such as earthquakes, have potential to become more costly as urban sprawl expands into quake zones. One country where this has had a noticeable impact is in New Zealand. The country is no stranger to these events – experiencing everything from earthquakes and volcanic activity to erosion, landslides and other catastrophes – however the longer-term impacts are growing.

- 3. https://www.ipcc.ch/report/ar6/wg1/chapter/summary-for-policymakers/
- 4. https://www.aon.com/en/insights/reports/climate-and-catastrophe-report

"CLIMATE CHANGE IS INCREASING THE SEVERITY AND FREQUENCY OF SOME NATURAL HAZARDS. FOURTEEN OF NEW ZEALAND'S 20 MOST EXPENSIVE WEATHER EVENTS HAVE OCCURRED IN THE PAST 10 YEARS. HISTORICAL EVENTS ARE NO LONGER A RELIABLE GUIDE."

AARON SHERRIFF, PARTNER, DUNCAN COTTERILL



Across the Tasman Sea, in Australia, extreme weather has caused an average \$4.5 billion in economic losses over the past five years. This is on top of a 67% increase on the preceding five years, according to analysis from the Insurance Council of Australia.

Looking to Eastern Europe, Ukraine, while heavily burdened with defending itself against Russia, is also suffering from frequent and prolonged droughts. This has resulted in loss of crops across 386,000 hectares of land, and a reduction in agricultural yields of 30–50% on a further 1.2 million hectares.

# CLIMATE RISKS FROM FROST TO FLOOD TO FIRE...

In the UK, where wildfires are historically relatively rare, the annual total of wildfire events has more than tripled to 856 as of mid-August 2025. At the same time, the cyclical issue of subsidence has increased in frequency as extreme temperatures cause more rapid shrinking of clay soils, destabilising building foundations.

This phenomenon is also fast becoming a major nat cat hazard in Greece, where climate attribution studies indicate that wildfire events are 10 times more likely, with heightened intensity fuelled by record heat and drought conditions. In contrast, warmer winters in Finland have contributed to wetter and heavier snow loads, increasing the risk of roof and tree damage.



In Chile, where earthquakes have historically been the most significant nat cat risk, the population is also adapting to the growing challenge of drought, which has increased substantially during the past 10 to 15 years.

Climate change in Brazil, conversely, has caused atypical frost events, which heavily impact agricultural regions – in particular, areas producing coffee and sugar cane.

# ...BUT STORM-RELATED FLOODING REMAINS THE BIGGEST THREAT

Flooding is a growing problem across multiple regions, both in terms of increased frequency and severity of seasonal and unseasonal flash flooding, in countries including the UK, Norway, Italy, India, Ukraine and Spain.

Spain has had a particularly disastrous couple of years, with catastrophic flooding in Valencia in 2024 and almost 400,000 hectares of land burned in multiple forest fires in 2025 alone.

"THE SPANISH GOVERNMENT HAS NOT ALLOCATED SUFFICIENT RESOURCES AND INVESTMENT IN INFRASTRUCTURE TO MITIGATE THESE DISASTERS. WHICH HAS AGGRAVATED THEIR CONSEQUENCES."

FERNANDO BLANCO GAMELLA, PARTNER, BLANCO & ASOCIADOS ABOGADOS

While the Netherlands has centuries-old expertise in flood defences, the low-lying country is facing an increased risk of coastal flooding from rising sea levels as well as riverine and localised flooding due to extreme rainfall. Most households and businesses in the Netherlands are only insured for the last of these.

And it's far from just Europe experiencing the burden of climate change. Argentina has endured extreme rainfall and flooding this year, as evidenced by the catastrophes in Bahía Blanca, and, in addition, the country's agricultural sector has been heavily impacted by drought.

"TYPHOONS REMAIN A CRITICAL THREAT ALONG CHINA'S COASTAL PROVINCES, WITH STORM SURGES AND HIGH WINDS CAUSING WIDESPREAD PROPERTY DAMAGE. THEIR TRACKS HAVE BECOME LESS PREDICTABLE IN RECENT YEARS."

JAN HOLTHUIS, PARTNER, BUREN



Increased flood and hurricane risks in Mexico are affecting business development, with the intensity of extreme weather events making it increasingly difficult to recover from one event and prepare for the next.

Floods are the most significant peril in China, accounting for the largest share of economic and insured losses. Urban flash flooding is a growing problem due to rapid urbanisation and insufficient drainage.

Flooding is likewise the most frequent and destructive weather hazard in India and Bangladesh, due to flash flood in both urban and rural areas and monsoon season riverine flooding in rural regions.

The nature of our world's risk is changing due to climate change, and many countries are struggling to increase their resilience to shifting weather patterns. It is imperative for governments, insurers, businesses and the insured to work together to build resilience and share the responsibility to provide peace of mind, support and protect communities, and ensure financial stability and viability.

# SECTION 2

# HIGHER PREMIUMS. MORE RESTRICTED COVERAGE



In response to the growing number of climate change-driven property claims and larger loss totals, insurers in some regions have started to adopt risk-averse strategies like restricting coverage and increasing premiums. While this is not universal, the trend is broad enough to have driven regulators in some countries to limit insurers' ability to restrict cover or differentiate pricing based on risk profile.

The position of property cat insurance in the US provides a clear summary of movements in the global market:

- · claims increasing in volume and complexity
- · increasing disputes over causation
- · more frequent litigation over policy interpretation, and
- a growing number of claims denials based on alleged exclusions or scope challenges.

"THERE IS A TREND TOWARDS IMPROVING CLARITY AND TIGHTENING EXCLUSIONS.
THE UPDATED WORDINGS DO NOT NECESSARILY CHANGE THE SCOPE OF COVER BUT SET IT OUT MORE CLEARLY IN THE POLICY TO MANAGE EXPECTATIONS."

ROSS BAKER, PARTNER, BEALE & CO

Alongside reduced coverage limits and exclusions for specific risks and/or territories, some insurers have introduced tighter definitions for loss events. In the UK, for example, the Financial Conduct Authority reported that only 32% of storm claims on home insurance policies were being paid, with denials typically due to unclear language or narrow definitions of "storm".

Many insurers have increased premiums for loss-prone regions and even withdrawn from providing coverage for high-risk zones. Not only is this contributing to growing concerns about the affordability of cover for many insureds and the uninsurability of properties in high-risk areas, but in markets where insurance penetration is lower, it also makes the task of narrowing the protection gap ever more challenging.

In France, for example, while insurers cannot deny coverage offered under the mandatory Cat Nat regime, they may still contest claims on the basis of causation.

The Australian Financial Complaints Authority has seen a dramatic increase in insurance complaints, particularly in relation to slow claims handling and denial of claims, while capacity constraints, high deductibles and sub-limits are increasing in high-risk areas.

"CONTRACTS MUST NOW CLEARLY SPECIFY
THE TERRITORIAL SCOPE, DEFINITIONS OF
TERMS, AND THE PROCEDURE FOR ENTRY
INTO FORCE. GENERALLY, POLICY TERMS ARE
WRITTEN ON A NAMED-PERIL BASIS, WITH
EACH COVERED HAZARD EXPLICITLY LISTED."

OLGA VOROZHBYT, PARTNER, SAYENKO KHARENKO

While insurers have not necessarily responded en masse to increased claims submissions with a refusal to pay out on losses, some countries' regulators have been re-assessing how insurers cover hazard zones and respond to claims.

In Austria, for example, regulations require insurers to justify denials of coverage in individual cases, while Ukrainian regulators have sought to reduce the risks of coverage or claims denials by introducing statutory requirements for insurance contracts.

That evolution towards more precise policy wordings can also be seen in Finland, alongside stronger incentives for policyholders to implement resilience measures.

In India, where water damage exclusions were common, courts have re-categorised flood into three types – pluvial (rainfall), fluvial (river overflow) and coastal – to encourage insurers to provide broader coverage with specific event definitions. The Indian insurance regulator, IRDAI, has also issued guidelines for expediting flood claims.

"INDIAN INSURERS HAVE INCREASINGLY FACED SCRUTINY FOR CONTESTING, REFUSING, OR LIMITING PAYOUTS ON CLIMATE-RELATED PROPERTY CLAIMS, AND AMBIGUOUS POLICY WORDING THAT CAN EXCLUDE LOSSES LINKED TO CLIMATE CHANGE."

SAKATE KHAITAN, SENIOR PARTNER, KHAITAN LEGAL ASSOCIATES





However, it would be unfair to characterise the overall response from insurers as limiting the scope and availability of coverage to insureds in loss-affected regions.

Insurers in Brazil have moved towards the provision of more affirmative cover for climate-related risks in traditional property policies – albeit for increased premiums in loss-affected regions.

In Argentina, the industry has taken a more structural approach, reviewing rates and terms and conditions to better reflect the level of catastrophe risk being assumed, while ceding more of the risk to reinsurers and strengthening technical reserves.

That said, exclusions are now more common, and the potential of uninsurability for certain risks is driving a greater need for coinsurance schemes, state-backed reinsurance, or parametric insurance products to address the protection gap.

# SECTION 3

# CHALLENGING MARKETS

Despite the willingness of some national governments to fill the gap left by commercial insurance markets and reduce the economic impact of nat cat events, there are still many territories that lack government backstops and where insurance penetration may also be low. While priorities may vary from one country to the next, creating resilience through partnerships is key to building a cohesive and supportive response to climate change nat cat events.

### LATIN AMERICA

Latin America can be a challenging market for businesses and communities seeking catastrophe protection. Despite significant nat cat exposures, neither Mexico nor Chile currently maintains any state-run compensation schemes for natural disasters, although Mexico retains a substantial cat bond.

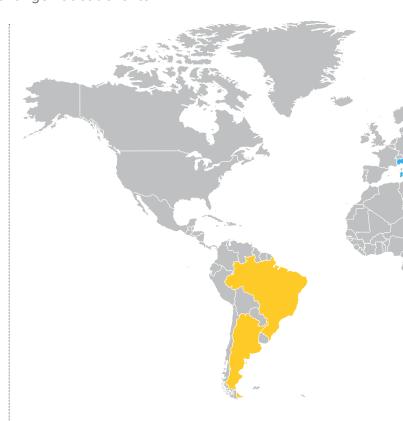
### **BRAZIL**

The Brazilian Guarantees and Fund Management Agency (ABGF) can provide coverage insurance in specific cases, for example, through the government's Rural Insurance Stability Fund.

"SINCE IRB RE'S MONOPOLY OF THE BRAZILIAN REINSURANCE MARKET ENDED IN 2007, BRAZIL HAS HAD NO STATE-RUN INSTITUTIONS OR PUBLIC-PRIVATE PARTNERSHIPS SPECIFICALLY MANAGING CATASTROPHE RISKS."

JOÃO MARCELO MÁXIMO RICARDO DOS SANTOS, FOUNDING PARTNER, SANTOS BEVILAQUA





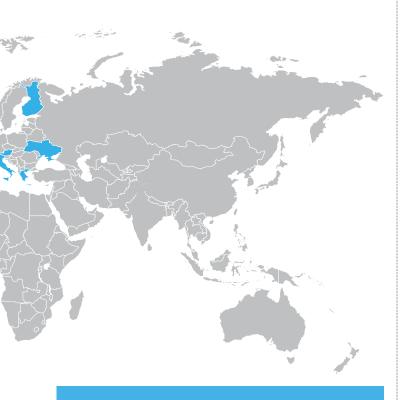
### **ARGENTINA**

While Argentina's insurance regulator actively promotes sustainability and resilience frameworks to tackle climate change risks, risk transfer for cat exposures is largely the preserve of commercial co-insurance and reinsurance arrangements. The country's huge agricultural sector is increasingly looking to parametric solutions for multi-peril cover.



### **EUROPE**

Europe is a patchwork in terms of state backing for catastrophe exposures. In Austria, where insured losses from natural disasters rose by around 80% from 2013 to 2023, there is a state disaster fund that provides post-event relief, but no state-backed (re)insurance pool.



### **FINLAND**

Finland has seen a rising proportion of claims due to heavy rainfall, local flooding and hail damage in recent years. However, the Finnish state ceased compensating flood losses in 2014 and currently has no government-backed (re)insurance pool for natural catastrophe risks.

Finnish insurers have predictably tightened policy terms around flood and water damage, but this has been balanced by more precise coverage wording and stronger incentives for policyholders to take preventive measures.



### **GREECE**

Greece, which has been suffering from escalating wildfire events, doesn't have a state-backed nat cat insurance scheme, with the government instead mandating compulsory cat cover for large businesses and private vehicles.

While the Hellenic Association of Insurance Companies has proposed a co-insurance mechanism, where the state could assume up to 40% of the risk for businesses unable to obtain commercial insurance cover the proposal is still under discussion.



### **AUSTRIA**

Austria has a competitive insurance market, coverage is becoming more restrictive, with natural hazards subject to sub-limits, deductibles and endorsements.

"THERE IS A RISK THAT INDIVIDUAL RISK CATEGORIES, ESPECIALLY IN HIGH-RISK AREAS, COULD BE CLASSIFIED AS UNINSURABLE IN THE FUTURE UNLESS GOVERNMENT REINSURANCE MODELS OR POOL SOLUTIONS ARE CREATED."

DR CLEMENS VÖLKL, PARTNER, VÖLKL RECHTANSWÄLTE

### **ITALY**

In Italy, compensation for damage from nat cat events has traditionally been made using public funds, but with the rising frequency and intensity of such events, this has become more challenging for the Italian government.

This has led to the introduction of a law mandating compulsory insurance for Italian companies against certain catastrophic events, while enabling insurers to reinsure their risks with the government-owned insurance group SACE.

# SECTION 4

# **GOVERNMENT SCHEMES**



As home and business owners in high-risk areas face the prospect of unaffordable insurance premiums or even denial of cover, governments have come under growing pressure to help address the protection gap. The solutions developed to improve resilience to climate-driven nat cat events vary, encompassing a range of programmes and risk management approaches.

Broadly speaking, in countries where there is political stability and where property values, insurance penetration and insurance literacy are high, there is some form of government scheme for coordinating improvements in catastrophe resilience, capital or risk pooling to support commercial market solutions, and better claims handling in the wake of loss events.

In countries where property values are lower, or there has been political instability, there is often no centralised government programme to support either resilience against or recovery from natural disasters.

Mandatory insurance and risk pooling schemes have historically been formed to address risks whose scope was deemed to be in excess of what the domestic insurance market could cover, such as nuclear power accidents, terrorism incidents, and major windstorm and flood events.

Increasingly, the firms surveyed note that risks historically excluded from property coverage or cases where the appetite of insurers has receded require some form of government-funded backstop or industry initiative to provide an insurer of last resort.

Approaches differ, with some countries creating reinsurance pools designed to encourage insurers to commit capital to more challenging areas of nat cats, and others developing mutuals and state-run entities that provide cover to policyholders who have been refused cover in the commercial market.

However, there appears to be a two-speed approach across the globe with respect to government-backed or mandated schemes. Some countries are pushing to create new entities to fill a yawning insurance gap, while others with existing programmes are seeing some reticence from the insurance market to engage with them as climate-driven cat risks increase.

### **REGIONAL VIEW**

For a country-by-country view, please read the appendix on page 16.



### **AMERICAS**

Across the Americas, governments have adopted varying approaches to closing the nat cat insurance gap. In the US, federally backed schemes such as the National Flood Insurance Program, alongside state-level plans like California's FAIR Plan and Florida's Citizens Insurance, signal strong public involvement, though concerns remain over solvency and scalability.

Elsewhere, Chile has introduced a regulatory framework to promote parametric insurance solutions, while Mexico maintains a significant catastrophe bond despite dismantling earlier disaster funds. In Argentina, regulators are advancing sustainability frameworks and public-private insurance models, highlighting the potential of parametric solutions to improve coverage and reduce settlement times.

Together, these developments reveal a clear regional trend toward risk-sharing mechanisms that blend public oversight with market innovation.

### **EUROPE**

In Europe, governments are linking risk mitigation with affordable coverage. Austria has extended protection to secondary perils, while Scandinavian countries emphasise land use planning and flood mapping. Norway's Natural Perils Insurance Act underpins a central compensation fund, while the UK's Flood Re scheme offers reinsurance for older homes, though it faces criticism for limited scope.

France's Cat Nat (Catastrophe Naturelle) scheme mandates coverage within property policies and has recently raised surcharges to meet growing climate threats. Germany and Switzerland rely on mandatory inclusion of perils and pooling mechanisms, while Italy has introduced compulsory cat insurance alongside infrastructure resilience measures, though coverage gaps persist for certain risks.

The ongoing evolution of these programs underscores the importance of coordinated European strategies to ensure both insurability and financial stability in a changing climate.

### **ASIA-PACIFIC**

Across Asia-Pacific, efforts focus on narrowing wide protection gaps. China has expanded its Residential Earthquake Insurance Pool and invested in early warning systems, while Australia has established the Hazards Insurance Partnership, a cyclone reinsurance pool, and proposed large-scale flood defence funding. New Zealand combines a longstanding earthquake insurance scheme with forward-looking measures such as land buybacks to prevent rebuilding in high-risk zones.

Asia-Pacific nations are advancing diverse models of public-private insurance and disaster resilience. Yet balancing affordability, uptake and financial sustainability remains a challenge.

### SCHEMES ON THE BRINK

The Netherlands, Denmark, Spain and Norway all have natural disaster funds or schemes that provide a safety net for under-insured or uninsurable property risks, but these are being tested to the limit by changing weather patterns.

The Norwegian Natural Perils Pool has seen an increase in both the number of natural damage claims and total compensation disbursed over the past 10 years.

"PRESSURE ON THE POOL IS INCREASING.
AND INSURANCE COMPANIES ARE CALLING
FOR ENHANCED CLIMATE ADAPTATION."

YNGVE SKOGRAND, PARTNER, ADVOKATFIRMAET RIISA

Ocean or riverine flooding in Denmark is covered under a nat cat fund, funded by a mandatory levy from insureds.

"CLAIMS HANDLING FOR THE FUND IS DONE BY INSURERS, WHICH HAS MASSIVELY INCREASED THE WORKLOAD OF SOME COMPANIES IN RECENT YEARS."

JESPER RAVN, MANAGING PARTNER, ARK

In the Netherlands, the Disaster Compensation Act (Wts) was evaluated by researchers after the floods in 2021 and was judged to not be future proof.

"RESEARCHERS CONCLUDED THAT THE SAFETY NET FUNCTION OF THE WTS IS BEING TESTED TOO OFTEN."

SUZANNE BORDEWIJK, PARTNER, WIJ ADVOCATEN

Meanwhile, in Spain, policyholders are heavily dependent on the state Consorcio de Compensación de Seguros (Insurance Compensation Consortium) for cat cover.

"THE VAST MAJORITY OF PROPERTY CATS, SUCH AS WILDFIRES AND DANAS (FLASH FLOODING) ARE COVERED BY THE CONSORTIUM. THERE ARE VERY FEW PRIVATE INSURANCE PRODUCTS SPECIFICALLY DESIGNED TO REACT TO CLIMATE CHANGE."

FERNANDO BLANCO GAMELLA, PARTNER, BLANCO & ASOCIADOS ABOGADOS

Parametric products, which have been gaining traction across a spectrum of insurance classes, provide innovation and offer hope as they are fast becoming a popular solution for climate-driven extreme weather risks, with several countries reporting growth in parametric development.

New Zealand's insurance sector already markets parametric insurance for quake risks, paying out a specified sum to insureds upon occurrence of a pre-set ground movement. Neighbouring Australia is seeing a growing market for parametric solutions to cover the widening protection gap for extreme weather events, driven by the specialist managing general agents (MGA) market.

Parametric insurance is also increasingly used in Argentina for general property cat coverage and agricultural insurance.

"CUSTOMER GUIDANCE CAN INCLUDE ADVICE ON DRAINAGE. BACKFLOW VALVES OR ROOF MAINTENANCE AND. IN SOME CASES. PREMIUM INCENTIVES FOR MEASURES THAT REDUCE EXPOSURE."

JUSTUS KÖNKKÖLÄ, PARTNER, SOCRATES



India is another pioneer in the innovative use of parametric products, with one notable solution developed through a collaboration between a trade union, the Self-Employed Women's Association (SEWA), the NGO Climate Resilience for All and reinsurer Swiss Re. The product is designed to cover lost income for women workers in both rural and urban areas who are unable to work due to the health threat from extreme temperatures.

Switzerland is also embracing parametric insurance, with products being piloted for Swiss corporates and municipalities, particularly in sectors sensitive to weather extremes.

While Luxembourg only has a modest domestic insurance market, the jurisdiction also acts as a hub for reinsurance and captives. "That positioning can foster innovation in risk transfer – including parametric structures and resilience-linked incentives," says Michel Molitor, managing partner, Molitor Avocats à la Cour.

In China, the expansion of catastrophe insurance schemes is being backed up with exploration of catastrophe bonds and other insurance-linked securities to diversify risk and attract capital to the Chinese market. Parametric solutions are rapidly proliferating, driven by regulatory support and technological integration, with the China Insurance Association registering 165 catastrophe insurance products in the period from 2017–2024.

"PARAMETRIC PRODUCTS ILLUSTRATE HOW INSURERS CAN EXPAND THE BOUNDARIES OF INSURABILITY IN RESPONSE TO CLIMATE VOLATILITY. WHILE STILL OPERATING WITHIN THE HIGHLY STANDARDISED SWISS NATURAL PERILS REGIME."

DOMINIK SKROBALA, PARTNER, GBF RECHTSANWÄLTE



Climate change risks are similarly driving an increase in parametric policies in the French market, where insurers are also exploring catastrophe bonds for transferring the risks of large-scale natural disasters to the capital markets.

On a smaller scale, French insurers are offering customers free access to climate risk assessment tools for evaluating their properties, giving homeowners and businesses a clearer picture of which exposures they need to insure against.

In the US, where the annual threat of quakes, hurricanes and tornadoes has been expanding to encompass more coastal flooding from storm surge, ice storms, flash flooding and both seasonal and

unseasonal wildfires, parametric insurance and weather index-based triggers are growing in popularity.

Embedding of resilience incentives for energy efficiency upgrades, flood proofing and wildfire mitigation is also becoming more widespread.

A number of territories are also reporting a widespread increase in the use of technology, such as georeferencing/geocoding for risk mapping and pricing, satellite remote sensing for damage assessment, and the use of big data and artificial intelligence (AI) to drive risk modelling, predictive analytics and claims efficiency.

### INDIA: A CASE STUDY IN INNOVATIVE SUCCESS

Despite relatively low insurance penetration in India, the government has not intervened to create of a centralised government insurance fund for nat cat risks. However, the economic costs of nat cats are becoming more significant, and with a widening exposure base, there are likely to be higher aggregate losses and upward pressure on premiums.

Interestingly, however, parametric solutions are already widely used in India, not least because they preclude the need to file and substantiate a claim, reducing demand pressure for loss adjusters following a major cat event.

One such example is Bajaj Allianz's ClimateSafe parametric insurance, which provides prompt financial relief for weather-related disruptions, such as soaring energy bills, income loss for daily wage earners, supply chain delays, and damage to household items during extreme weather. Such policies can be purchased multiple times during the year, and claim settlements are completed within seven days with minimal documentation and no active claim-filing required by the customer.

Many insurers are adapting to use newer risk assessment methods like telematics monitoring and geolocationsensitive underwriting, which are seen as major advances towards the integration of technology in assessing claims. Government involvement in structuring new solutions remains limited, however, while the insurance regulator is focused more on timely investigation and settlement of claims.





The overriding message from different countries' experience of tackling the impacts of climate change is that building resilience into businesses and communities is essential to reduce the impact of nat cats and bridge the insurance gap.

The crucial combination of government mandates for improving construction and development plans and incentivising commercial and consumer policyholders to introduce mitigations on their properties will help to make the built environment more resilient. By simultaneously making properties more insurable and policies more affordable, insurers – in collaboration with government, regulators and other stakeholders – can help to bring down the economic cost of nat cats while also plugging the substantial insurance gap present in many countries.

As Justus Könkkölä, partner at Finnish firm Socrates, notes, ESG expectations and stronger ESG reporting "are increasingly shaping underwriting and investment strategies" and creating "pressure for insurers to support resilience through pricing incentives, prevention requirements and engagement with policyholders".

However, insurers are also rising to the challenge of developing catastrophe products that are more effective and sustainable. By making coverage conditions clearer, with more rigorous wordings around what perils are covered and the conditions under which cover can be triggered, insurance buyers have a better idea of the protection afforded to them.

This is especially true where coverage gaps are large, as in China, or where public literacy around insurance is low, such as in Greece. Konstantinos Issaias, partner at Kyriakides Georgopoulos Law Firm, expects insurance penetration to improve in the next decade, "driven by greater climate risk awareness, recent catastrophic losses, and regulatory measures such as mandatory nat cat cover for businesses and motor vehicles".

With an estimated 70–90% of climate-induced economic losses in India still uninsured, says Sakate Khaitan, senior partner, Khaitan Legal Associates, one possible solution could be to make property insurance compulsory for private owners. "Such a mandate would not only expand insurance penetration but also ensure that homeowners are financially protected against catastrophic climate-related losses."

However, schemes such as these require government intervention, and cooperation between regulators and the insurance industry to structure appropriate solutions.

Countries that don't have existing government backstops may need to support mandatory insurance schemes with catastrophe funds or pooling arrangements to ensure policyholders receive the protection they would be obliged to pay for.

But while many countries are already heavily reliant on government schemes or public-private partnerships to cover the economic losses and recovery efforts following natural disasters, the growing demands on these mechanisms mean additional solutions are needed.

In Spain, the Insurance Compensation Consortium provides a safety net for large-scale property cat losses, but the increasing frequency and severity of events, coupled with a lack of commercial-available alternatives are putting the scheme under intolerable pressure, while the government has been criticised for not investing enough in more resilient infrastructure. Fernando Blanco Gamella, partner, Blanco & Asociados Abogados adds that "payments to affected people can take a long time, which reduces its effectiveness as a safety net".

Increasingly, in countries where limited or over-subscribed government support and low insurance penetration or unaffordable traditional policies are coupled with a lack of investment in resilience, parametric insurance is proving to be a useful tool.

Parametric solutions are succeeding in providing greater certainty of coverage and much faster settlement of claims, for both rural and urban property damage. This success is visible in both challenging markets such as Brazil and China, and in more mature markets such as Australia and the US, where they are helping to address the risk gap created by climate-driven perils such as flash flood and wildfire.

With members in a number of territories also anticipating the increasing use of innovative technologies, particularly AI, to assist in mapping, modelling, pricing and claims management for natural disasters, the future of the property cat insurance market is likely to involve further investment in satellite imaging, weather sensors and the use of big data to drive both product development and resilience measures.

"WE EXPECT TO SEE MORE PARAMETRIC INSURANCE OFFERINGS, RISK-BASED PRICING MODELS INFORMED BY AI AND PREDICTIVE ANALYTICS, AND AN EXPANSION OF GOVERNMENT-BACKED INSURANCE SCHEMES TO FILL GAPS."

SEAN RAVENEL, SHAREHOLDER, FORAN GLENNON

The growing collaboration between insurers, governments, regulators and property owners worldwide offers hope that we can proactively manage natural disaster risk while maintaining the financial stability of communities and markets.



# **APPFNDIX**

### **AMERICAS**

### US

In the US, programmes like the National Flood Insurance Program (NFIP) and, at the state level, California's FAIR Plan and Florida's Citizens Insurance indicate a significant public sector commitment to cat protection. However, says Sean Ravenel, shareholder, Foran Glennon: "Their solvency and scalability remain areas of concern, especially under increasing cat frequency." This concern is well founded: the data in the 2025 Aon Climate Catastrophe Insight Report puts insured losses in the US in 2024 at USD113 billion, with an estimated uninsured value of a further USD571 billion.

The US also faces a wider challenge in terms of national sentiment about climate change and ESG more generally, with positions diverging between states implementing climate-focused policies that promote a more holistic approach to climate risks, and those that are rowing back on climate initiatives.

In countries in the Americas without any state-backed initiatives to plug the nat cat insurance gap, governments are reliant on the commercial market stepping up to meet climate risks.

### **ARGENTINA**

In Argentina, despite a lack of publicly funded programmes, the insurance regulator is actively promoting sustainability and resilience frameworks, in partnership with government and the insurance industry.

Key areas of focus are public-private insurance models to improve access to insurance products tailored to the needs of high-risk areas, educational campaigns around climate-related risks and the importance of insurance coverage, and more widespread adoption of parametric solutions.

"PARAMETRIC INSURANCE IS EMERGING AS A KEY TOOL IN RESPONSE TO HIGH-SEVERITY EVENTS, REDUCING UNCERTAINTY AND SETTLEMENT TIMES AND EXTENDING COVERAGE TO EVENTS THAT MAY BE UNINSURABLE UNDER CONVENTIONAL POLICIES."

MATÍAS PONFERRADA, PARTNER, ABELEDO GOTTHEIL



### BRAZIL

Brazil has no government-run institutions or public-private partnerships that directly underwrite insurance risks since the state-owned reinsurer IRB Re cease to have a monopoly in the reinsurance market in 2007

However, the Brazilian Guarantees and Fund Managements Agency (ABGF) does operate some insurance solutions and manages funds, via the Central Bank of Brazil, to cover specific areas. For example, trade credit risks can be covered under the Export Guarantee Fund and agricultural risks via the Rural Insurance Stability Fund. Climate risks that fall under the remit of these public funds may also benefit from coverage provided by the ABGF.

At the time of writing, a public hearing organised by the Brazilian Insurance Supervisor was due to conclude, with stakeholders discussing how to improve the provision and penetration of insurance solutions to cover flood risks in Brazil.

### **CHILE & MEXICO**

In Chile, the insurance regulator has issued new regulations governing the creation of parametric solutions, which will enable the industry to better tackle climate-related exposures. And while Mexico previously cancelled a number of quasi-autonomous government disaster trust funds, it has maintained a USD485 million cat bond.

### **EUROPE**

Europe has seen a flurry of activity by governments and the insurance industry to address growing climate risks and the resilience of businesses and communities to extreme weather events. Drawing a line between investment in risk mitigation and more effective and affordable insurance solutions for policyholders in high-risk areas is an emerging theme in many territories.

### **AUSTRIA**

The Austrian government has amended insurance laws in order to promote coverage for secondary perils such as drought, heavy/prolonged rainfall and landslides. The insurance industry has responded with parametric solutions aimed at both commercial and consumer insurance buyers. At the same time, insurers are obliged to incentivise businesses which utilise more sustainable and resilient construction methods.

### DENMARK

Flood damage from the sea or rivers is covered in Denmark under a national catastrophe fund, underwritten by mandatory contributions from property insurance policyholders. Claims on the fund are handled by commercial insurers, which has contributed significantly to their workload in recent years.

Danish insurers are also increasingly concerned about the commercial market's ability to cover flooding due to heavy rainfall and in low-lying coastal areas, especially given a lack of government funding for dikes in flood-exposed areas.

"INSURERS HAVE PLEADED FOR AWARENESS
OF THE MASSIVE UPTICK IN CLAIMS DUE
TO HEAVY RAINFALL. AND WARNED
THAT IT MUST BE A POLITICAL DUTY
TO MINIMISE THE RISK OF FLOOD
DAMAGE. BEFORE SOME AREAS SIMPLY
BECOME UNINSURABLE."

JESPER RAVN, MANAGING PARTNER, ARK

### **FINLAND & NORWAY**

In Scandinavian countries there appears to be a focus on more strategic planning, with the Finnish government and regulator guiding municipalities on land use, flood mapping and drainage improvements and assessing exposure to flooding, storm surge and heavy snow loads.

Norway also stresses the importance of mapping and efficient spatial planning to identify areas vulnerable to nat cats to prevent likely property damage. The introduction of amendments to the Natural Perils Insurance Act this year also governs allocation of insurance capital into a central fund, which can be disbursed to insurers when nat cat payouts exceed collected premiums.

### FRANCE

France has its Cat Nat (Catastrophe Naturelle) scheme, which makes natural disaster cover mandatory under all property insurance contracts, bringing together private insurance capacity with stated-funded reinsurance provided by the Caisse Centrale de Réassurance. This year, the surcharge under the scheme has been increased from 12% of premiums to 20%, to address new climate threats.

However, catastrophe cover is only triggered by ministerial decree of a state of natural disaster, and above certain thresholds.

The French government has been working with commercial (re) insurers and reinsurers to update and expand coverage under the scheme to meet the evolving climate change threat, approving a law focusing on strengthening nat cat protections. It is also introducing preventive measures obligations for policyholders in high-risk areas. At the same time, the insurance sector has been promoting greater awareness of climate risks and effective mitigations to insureds.

While this appears at first glance to be placing more of the burden on insurance buyers, according to Robert Byrd, partner, Byrd & Associates: "The new law also will provide for zero percentage loans to allow individuals to put into place preventive measures in their main residence."

### **GERMANY & SWITZERLAND**

While nat cat funds are common across Europe, there are some notable exceptions. In Germany and Switzerland, home to some of the world's leading reinsurance companies, the emphasis is on encouraging best practice amongst commercial carriers, with political mandates for inclusion of key nat cat perils in policies.

In Switzerland, fire insurance policies must also cover nine defined natural perils, and private insurers in the country participate in the Elemental Perils Pool, which redistributes catastrophic losses across the market

In Germany, while some federal states have responded to EU directives on the assessment and management of flood risks with regulations limiting soil sealing, insurers are keen to see more structural protective measures being taken, such as the construction of sluices.

The German insurance regulator BaFin is also concerned with climate change issues, and has been consulting with industry groups, including industrial insurers whose customers may be affected by droughts that have rendered key waterways unnavigable due to low water levels.

### **GREECE**

Greece doesn't have any form of state-backed insurance for nat cat risk. Instead, the government introduced compulsory natural disaster insurance this year, requiring large and medium-sized businesses to insure at least 70% of their physical assets against quake, flood and wildfire risks, and for all private motor vehicles to be covered for flood and wildfire risks.

While the Hellenic Association of Insurance Companies has put forward a proposal for a co-insurance mechanism, where the state could assume up to 40% of the risk for businesses unable to obtain commercial insurance cover, the scheme is still under discussion.



# **APPENDIX**

## CONTINUED

### **ITALY**

In Italy there have been a number of national programmes to improve the resilience of infrastructure and emergency responses to catastrophes that have included structural measures such as strengthening dams and flood barriers and non-structural measures including planning, education, improved governance and coordination and risk financing tools.

However, following the introduction of compulsory catastrophe insurance, concerns remain about some risk categories, such as avalanches, becoming uninsurable because of insurers pulling capacity.

"THERE HAS BEEN A GREAT DEAL OF TURMOIL IN THE ITALIAN INSURANCE MARKET, WITH ATTEMPTS TO CREATE PRODUCTS THAT CAN GUARANTEE THE MINIMUM COVERAGE REQUIRED BY LAW BUT ALSO OPTIONAL COVERAGE, SUCH AS BUSINESS INTERRUPTION."

GIORGIO GRASSO, SENIOR PARTNER, BTG LEGAL

### **LUXEMBOURG**

The Grandy Duchy is proactive on its climate risk response, having recently launched the LU-Alert public warning system via cell phone networks, adopted a consolidated government crisis-management plan for extreme weather and floods, and implemented the RESC-LU civil protection unit to support the emergency response to disasters.

Luxembourg has not, however, created a permanent public nat cat insurance body analogous to Flood Re or Cat Nat, having historically disbursed government funds for emergency support post-event, such as after the July 2021 floods.

### NETHERLANDS

The Disaster Compensation Act (Wts) in the Netherlands provides a financial safety net, offering assistance for nat cat losses that are not insurable. However, following evaluation of the Act, in the wake of the 2021 floods, researchers working for the University of Utrecht concluded that the safety net function of the Wts is being tested too often and is not future proof. At the same time, while the fund is taxpayer-funded, coverage for properties in some regions is incomplete.

The researchers suggested revising the event definitions in the Act and expanding the categories of damage but also went further to suggest the possibility of repealing the Wts in favour of compulsory disaster insurance, like France's Cat Nat scheme.

### SPAIN

In the absence of widespread affirmative cover for climate change risks in Spain's commercial insurance market, policyholders are heavily dependent on the state Insurance Compensation Consortium (CCS) for nat cat cover, including quake, volcanic eruptions, storm surge, flood, and windstorm risks.

The CCS is funded by a mandatory surcharge on commercial property policies, but its capacity to fill the protection gap following major events is limited.

At the same time, critics say the Spanish government has not allocated sufficient investment in infrastructure and resources to mitigate increasing wildfire and flood risks, which is aggravating the consequences of nat cat events in terms of loss of life and property damage.

"THE VAST MAJORITY OF PROPERTY
CATS, SUCH AS WILDFIRES AND DANAS
IFLASH FLOODINGJ ARE COVERED BY THE
CONSORTIUM. THERE ARE VERY FEW PRIVATE
INSURANCE PRODUCTS SPECIFICALLY
DESIGNED TO REACT TO CLIMATE CHANGE."

FERNANDO BLANCO GAMELLA, PARTNER, BLANCO & ASOCIADOS ABOGADOS

### **UKRAINE**

In Ukraine, nat cat coverage is typically included in property insurance policies. But there is generally a low uptake of domestic property insurance and no state body dedicated to managing nat cat risks and compensation.

While the country has several initiatives underway to establish new insurance institutions they are not typically focused on natural disasters, with war-related risks higher up the government agenda.

"AT THIS STAGE, WE SEE NO SIGNS IN UKRAINE OF PLANS TO ESTABLISH A UNIVERSAL STATE INSTITUTION SPECIFICALLY MANDATED TO COVER NAT CAT RISKS AND COMPENSATION. ALTHOUGH FUTURE REFORMS LINKED TO UKRAINE'S EUROPEAN INTEGRATION PROCESS MAY DRIVE FURTHER DEVELOPMENT IN THIS AREA."

OLGA VOROZHBYT, PARTNER, SAYENKO KHARENKO

### UK

The UK's Flood Re scheme provides reinsurance for homes built before 2009 but excludes post-2009 properties, which are often deemed uninsurable.

However, with more properties likely to become susceptible to flooding, increasing the risk of higher premiums, more restrictive coverage, and reduced or no availability in high-risk areas, the scheme is viewed by some as not going far enough and being too reactive in approach.

### ASIA-PACIFIC

### **CHINA**

With insured losses still only comprising 10% of the total economic cost of natural disasters in China, compared with 40–60% in mature insurance markets, the country has a vast protection gap.

Yongmei Cai, partner at Buren Legal, suggests that "climate governance policies are becoming central to narrowing the protection gap", with government investment in early warning systems and flood defences, and greater coordination between various stakeholders on catastrophe risk models and national risk databases essential to strengthen insurers' ability to price and manage risks.

Following the 2008 Sichuan earthquake, China established a public-private partnership – the China Residential Earthquake Insurance Pool – which was expanded in 2024 to encompass a wider array of cat perils and greater coverage limits.

However, government officials have conceded that, despite regional schemes to expand insurance penetration, the country continues to have a significant protection gap for nat cat risks.

### **INDIA**

Overall insurance penetration for property risks in India remains low, with an estimated 70–90% of climate-related economic losses in India going uninsured. However, no dedicated public insurance pool or body exists yet for nat cat risks, largely because commercial insurance losses remain relatively modest.

The approach taken by the Indian government is more one of coordinating insurance market activity during nat cat events, in order to expedite claims. While the Indian insurance regulator IRDAI has issued directives and guidelines for the insurance industry response to specific catastrophic events and the government has promoted disaster-resilient infrastructure and climate adaptation plans at the state level, there is no immediate prospect of a state-backed solution for climate risks.

### AUSTRALIA

In Australia, building resilience to nat cats and improving the affordability of property insurance are being addressed by the Hazards Insurance Partnership (HIP), which has brought together the government and the insurance industry, under the management of the National Emergency Management Agency. The Insurance Council of Australia has also advocated for a A\$30bn Flood Defence Fund to strengthen flood mitigation infrastructure.

The rising economic cost of cyclones in the country has also led the government to intervene in the reinsurance market with an expanded mandate for the government-run Australian Reinsurance Pool Commission, to include a Cyclone Reinsurance Pool.

Mandatory participation in the pool by primary insurers is designed to ultimately lower the cost of insurance for households and small and medium-sized businesses.

"ENSURING THE RESILIENCE OF COMMUNITIES IMPACTED BY EXTREME WEATHER REQUIRES A MULTI-FACETED APPROACH. ENHANCEMENTS TO BUILDING STANDARDS AND REQUIREMENT TO 'BUILD BACK BETTER' ARE IMPORTANT, AS IS THE CONVERSATION ABOUT LAND USE PLANNING."

KILEY HODGES, PARTNER, COMMERCIAL INSURANCE, SPARKE HELMORE LAWYERS



### **NEW ZEALAND**

New Zealand, with its major earthquake exposures, has long had government involvement in covering nat cat risks, with a scheme offering primary layer insurance for damage to residential dwellings. The Insurance Council of New Zealand has been pushing for a government-led, collective approach to reducing climate change risks by avoiding development in high-risk areas and investing in resilient infrastructure like embankments and stopbanks along rivers where flooding is likely.

The New Zealand government has also called for innovative solutions to nat cat risks. Following the Canterbury Earthquakes and successive flood events, this approach has included buying back land impacted by cat events, to prevent re-building in hazard zones.

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