



Building a Disaster Risk Insurance Programme and the role of Public Private Partnerships

Overview – Sid Miller OBE

Table-Top 1 – Risk Understanding and Analysis

Table-Top 2 – Insurance Options

Table-Top 3 – Claims Management



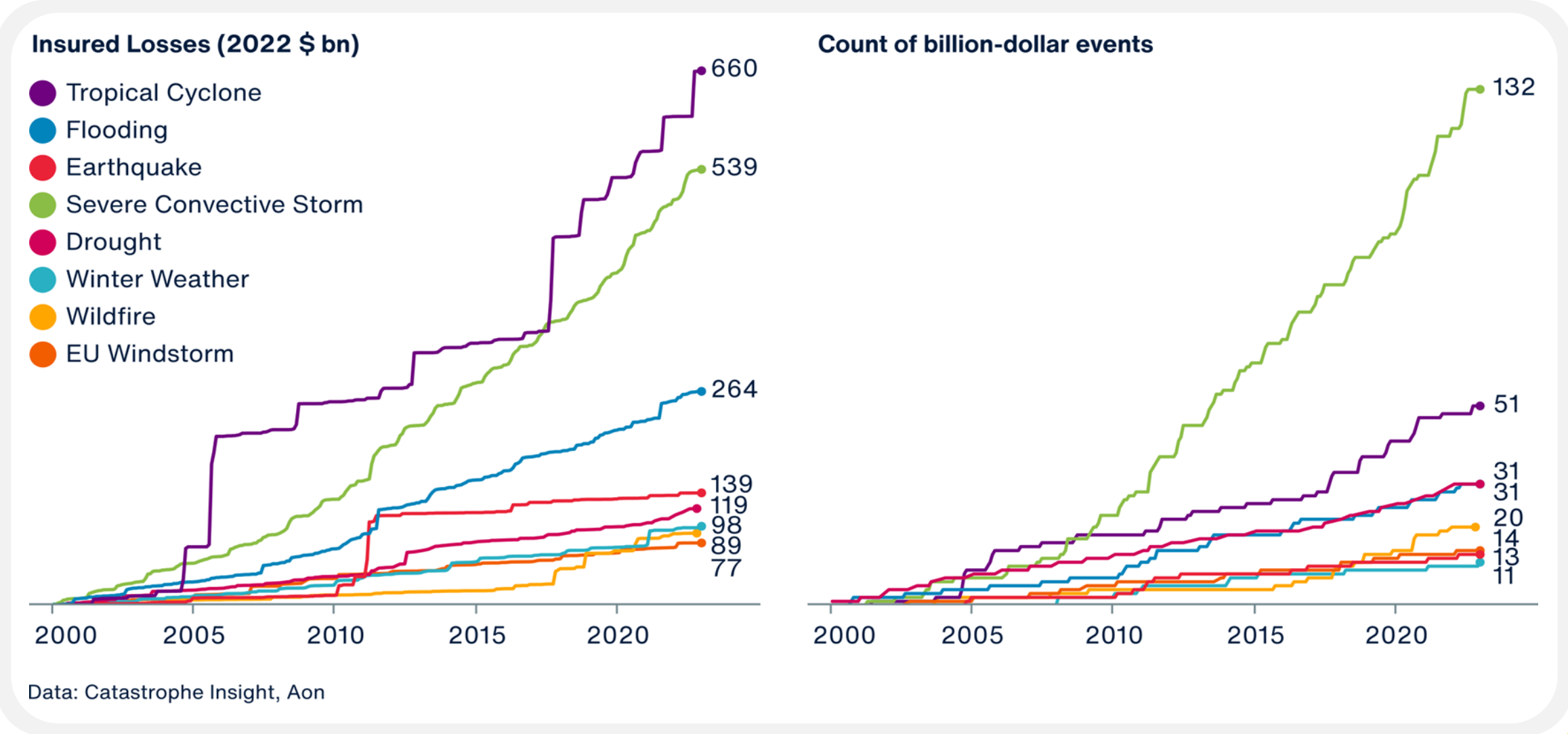
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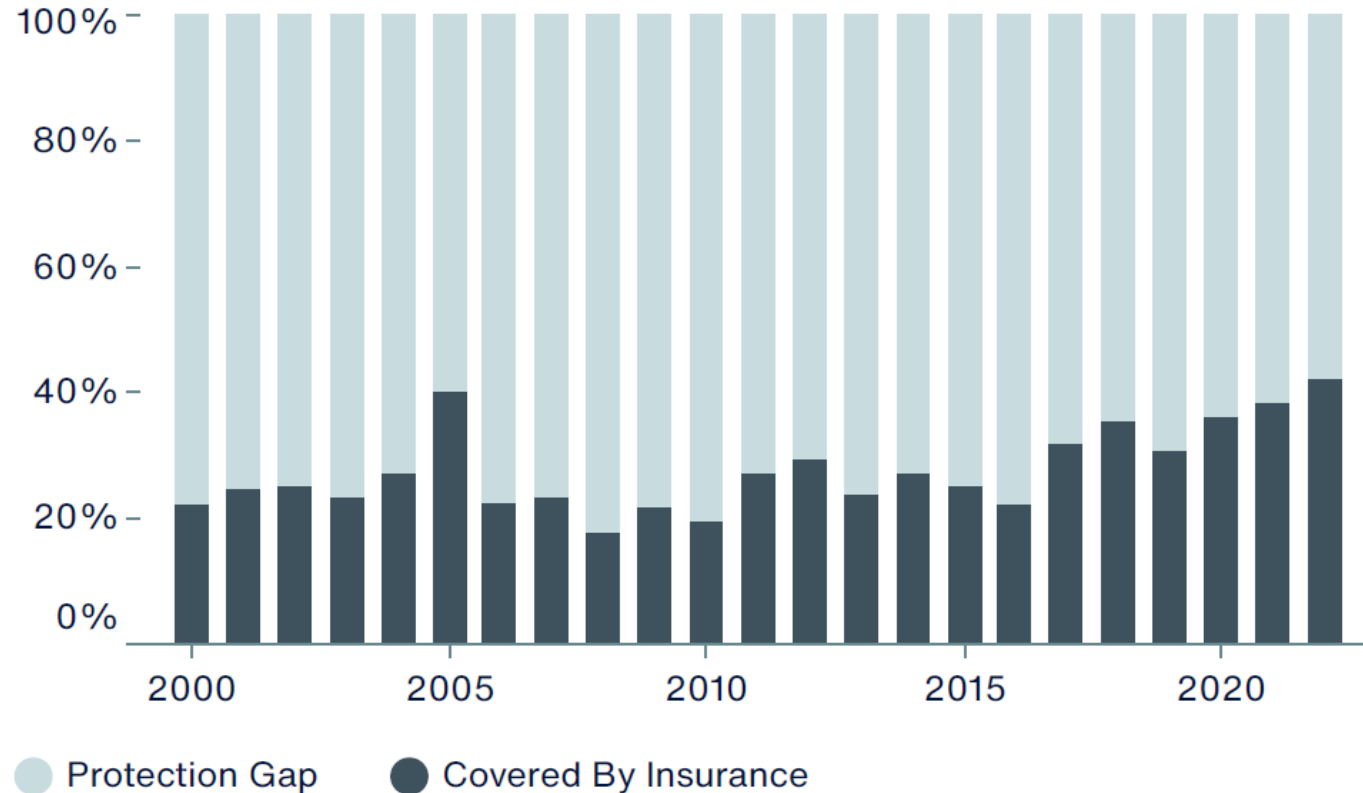
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Why Disaster Risk Insurance – The frequency of losses are increasing



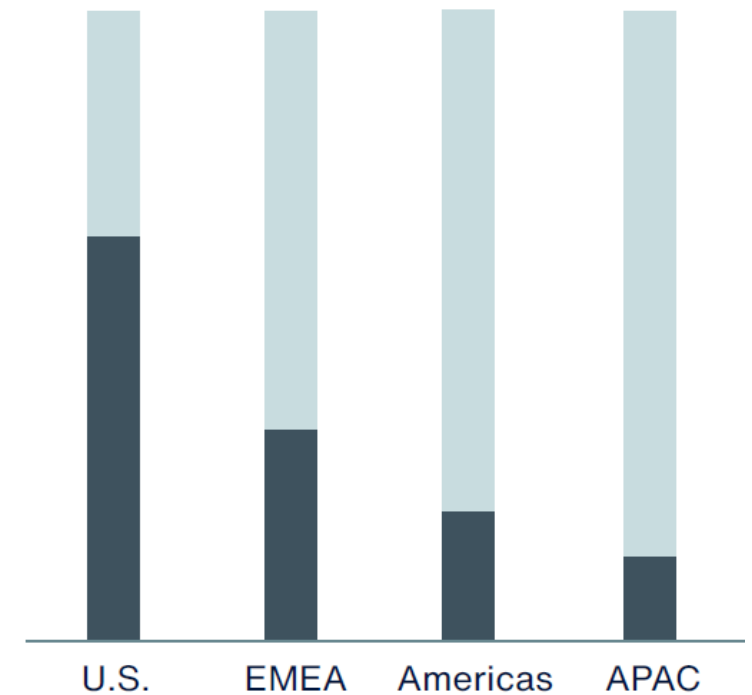
The Global Protection Gap is Wide and not Narrowing

Global Protection Gap



Data: Catastrophe Insight, Aon

2022 Protection Gap by Region



Losses and impact are often concentrated among residential housing

Damage and Uninhabitable Properties:

Widespread Damage: The Canterbury earthquake sequence in 2010 and 2011 earthquakes, caused extensive damage to residential properties, with nearly three-quarters of the housing stock in the region affected.

Uninhabitable Homes: Approximately 9,100 homes were assessed as uninhabitable.

Significant Damage Costs: About one-fifth of the 150,000 damaged homes exceeded NZ\$100,000 in damage.

Red Zone Designation: Over 5,000 properties were classified as being in the "red zone," meaning the land was not suitable for rebuilding on.

Demolition and Rebuild: Over 10,000 homes needed to be demolished and rebuilt.



Land and Infrastructure Issues:

Liquefaction: Liquefaction, where soil loses its strength and behaves like a liquid, was a major issue, causing ground deformation and damage to foundations.

Land Movement: Mass land movements in the Port Hills delayed recovery efforts, with parts of the city sinking between 50 and 100 centimetres.

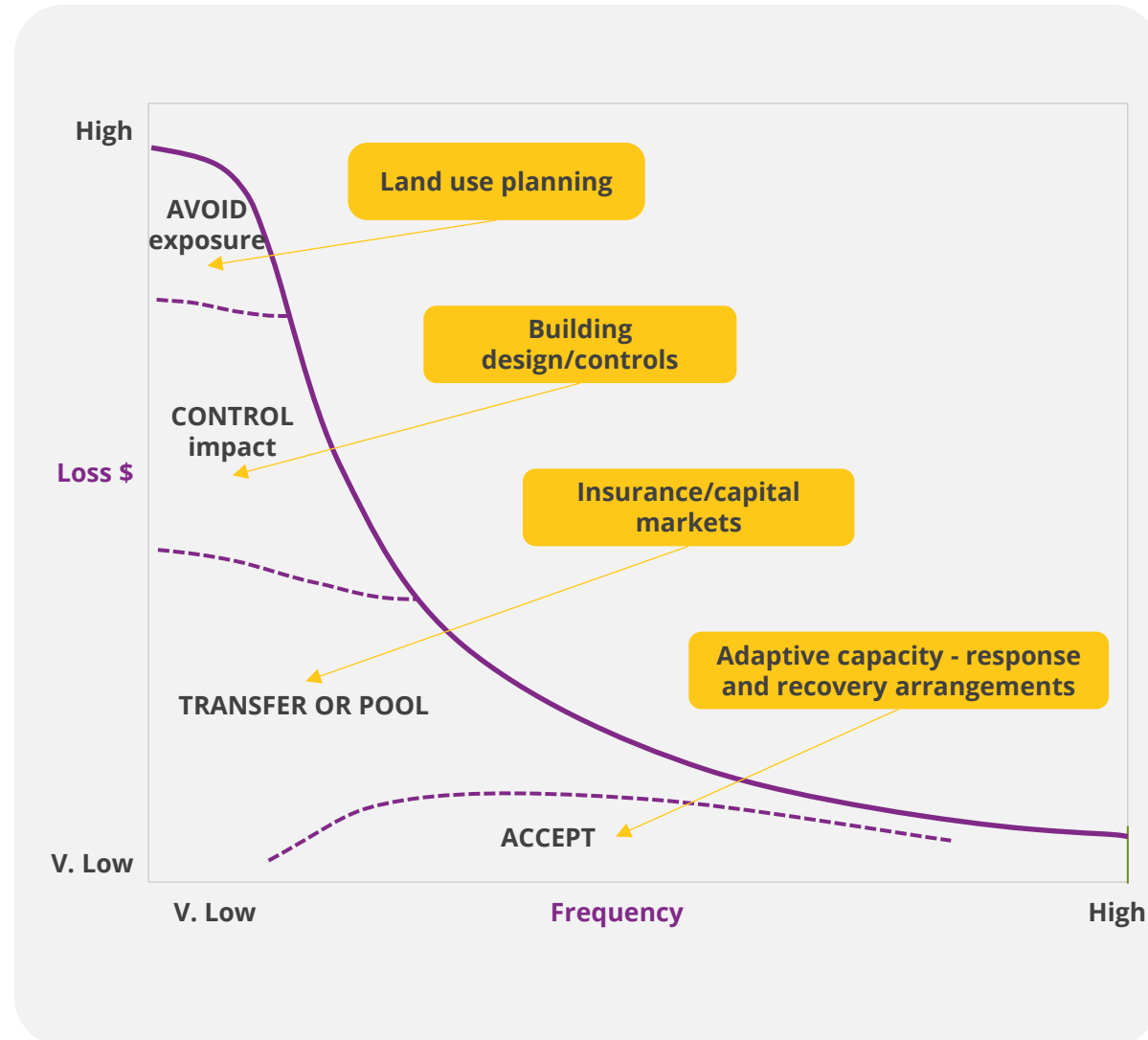
Vulnerability to Future Hazards: Some areas became more vulnerable to liquefaction and flooding, requiring new building guidelines.

Infrastructure Damage: Damage to infrastructure like roads, sewerage, plumbing, and power lines further complicated recovery efforts.

Geotechnical Assessments: Thousands of sites needed geotechnical assessments to determine the safety of the land for rebuilding and potential boundary movement..

Necessitates government response: can be costly and slow. Adverse economic impact. Vulnerable will be the most affected.

A reminder: Insurance is one part of a Risk Management Ecosystem



Avoid the Risk

Consider where to build to avoid the risk exposure. I.e avoid flood plains.



Control the Risk

Through Public Policy reduce the risk by incorporation of risk reduction measures through controls such as building standards and compliance checking.



Transfer the Risk

Mitigate the fiscal risk the Government's Balance Sheet by transferring the risk to the International and Local Insurance Markets.



Accept the Risk

Build disaster recovery strategies, internal finance mechanisms and capabilities to enable timely access to capital and resources to support National, Regional and community recovery.

The lifecycle of a Disaster Risk Insurance Programme



Understanding Risk

Questions?

What should we insure and why?

E.g., how frequent and severe are the risks

How much will it cost?

E.g., premium setting

How to optimize risk management?

E.g., making risk retention vs transfer cost-effective

Tools

Risk modelling

Historical data

Technical expertise

Who can help?

Government

E.g., Disaster management agency, hydromet agencies and other government experts

Domestic and international insurance sector

International technical agencies and firms

E.g. risk modellers

Development partners

Design and Development

Policy and Product

What will the program offer?

Beneficiaries, risks, premium, how will funds reach beneficiaries, audit and services

Operating Model

How will the program work?

Premium collection, claims model, public relations and education, data collection, investment and risk management

Policy and Institutions

How will the Program be structured and what policies are needed?

Mandatory vs voluntary, governance and legal frameworks, day-to-day management of the program, risk management and government role

Underwriting and Claims Management

Underwriting

Can the risk be Underwritten?

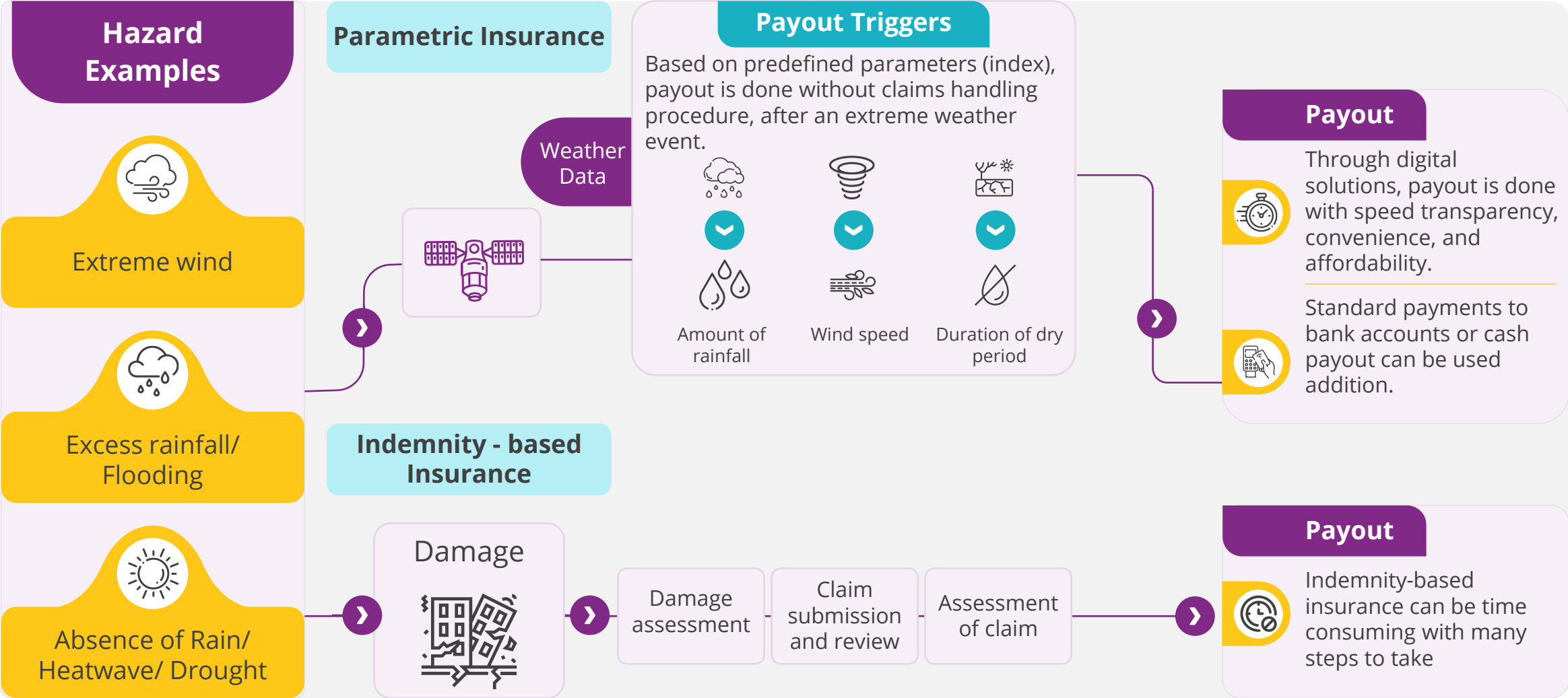
Risk analysis, contract negotiation, decision making and contract execution

Claims Management

How will claims be paid?

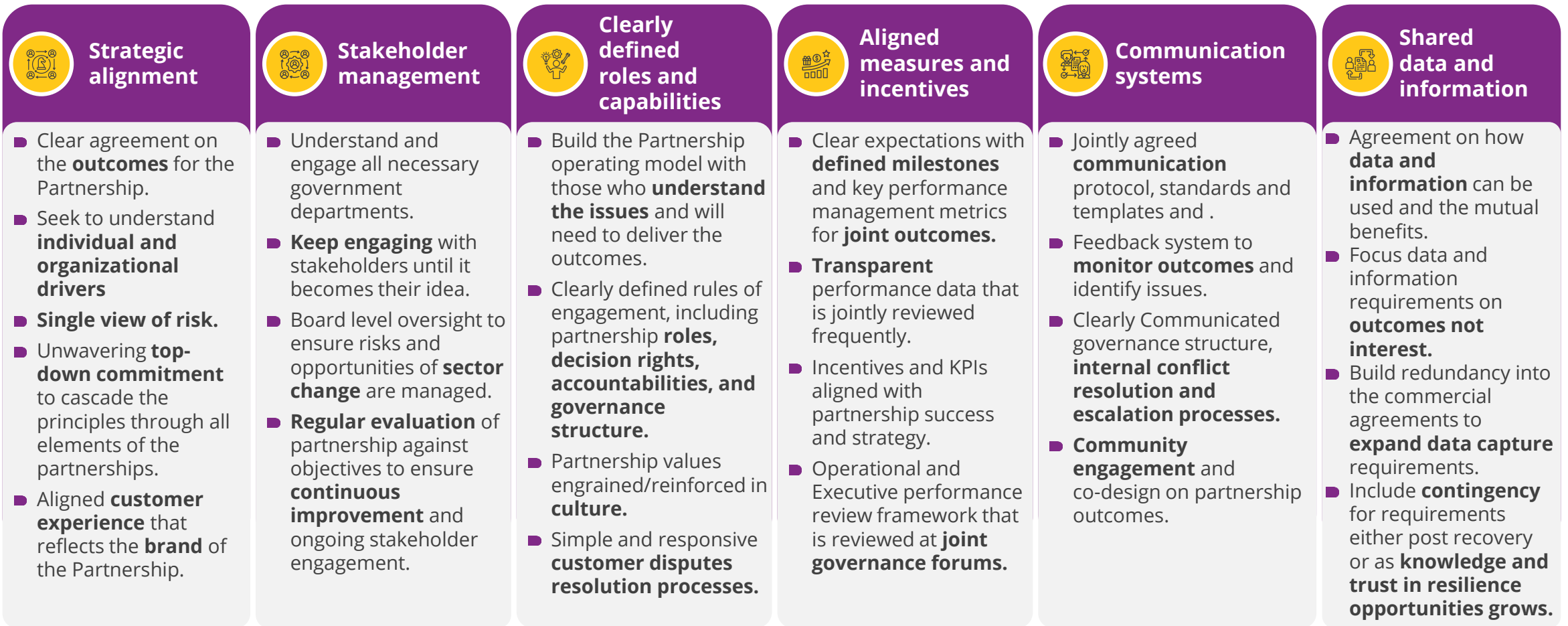
General principles, claims administration, claims handling, Claims settlement and claims management.,

Operational - Parametric vs. Indemnity Insurance



*MCII illustration (2023)

Public Private Partnerships



Supporting Processes and Systems

Co-design the Operating Model then build the Partnership Agreement

Government has a key role in PPIPs



Relationship with Government

To fund the establishment and initial capital and operating costs of the scheme.

To act as reinsurer of last resort (Guarantee), to meet any financial obligations that the scheme is unable to meet by topping up the scheme's funds.

Ongoing adequacy of the Regulatory and Public Policy Framework within which the PPIP operates.

To monitor the use and implementation of payout proceeds by individual, corporate and local and national government beneficiaries



Governance and Oversight of the Scheme, and how the Scheme can evolve over time

Schemes can have a variety of governance structures with a combination of directors/commissioners appointed from government officials and the private sector. What is important is clear independence in the governance of the scheme.

The governing board or commissioners of a scheme would work with stakeholders such as the lead government department and its Minister as well as the regulator that monitors the insurance industry.

The legal enactments that establishes the scheme would set out the fundamentals features of the scheme and the governance of the scheme would be required to comply with these laws.

Continuing to refine the rules for distribution of payouts.

Continuing to achieve deeper insurance penetration

Continuing to refine and adapt local laws and practices to accommodate risk financing measures, including reinsurance.

Exploring and using more sophisticated risk financing mechanisms, to manage increasing levels of risk or to achieve significant savings.

Using public-private partnerships to advance the operation of the scheme.



Global Disaster Risk Insurance Schemes

	Ownership	Voluntary / mandatory purchase	Coverage	Government Guarantee	Premium
TCIP (Turkey)	Government owned enterprise	Compulsory purchase	Earthquake, earthquake fire	yes	Risk-based
Morocco	Private and Public Solidarity Fund (FSEC)	Compulsory addition and cover for poor and vulnerable households	Earthquake, flood, landslide	yes	Solidarity
EQC (New Zealand)	Government agency	Linked to Home Fire Insurance.	Earthquake, volcanic eruption, hydrothermal activity, landslide, tsunami	yes	Solidarity, has one flat rate
		Home Fire Insurance compulsory to obtain a mortgage			
CEA	State managed, privately financed	Voluntary	Earthquake	no	Risk-based
NFIP	Government administered plan	Voluntary, but required for mortgage	Flood, tsunami	yes	Risk-based
NATCAT (French)	Government scheme	Compulsory addition	Flood, mudslide, earthquake, landslide, avalanche, etc. - As declared by ministerial decree	yes	Solidarity, charges a percentage of the policy premium
Spanish Cat Scheme	Government owned enterprise	Compulsory addition	All natural disasters, and meteorite, terrorism	yes	Solidarity, sets rates by type of property insured