

**AON**

# **Introduction to parametric insurance**

Prepared for Wij Advocaten

January 16<sup>th</sup>, 2025  
Amsterdam



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# Introduction - About Aon

- 1. How do I protect against risk and volatility?
- 2. How do I grow my organization and realize the potential of my workforce?

Through our global expertise across two key areas of need — Risk Capital and Human Capital — our clients are better advised within, and across, their risk and people strategies. Some highlights of our recent financial performance include:



**>50,000**  
colleagues around  
the world



**120+**  
countries and  
sovereignities with  
Aon clients



**USD 15B**  
2024 annual  
revenue



**USD 300B**  
Worldwide premium  
placements



**USD 76,2B**  
market capitalization  
(as of January 2025)



**AON**  
Worldwide premium  
placements

# Introduction - Aon Strategy and Technology

Consulting-Led Solutions, Driven by Advanced Analytics and Powered by Technology

## Actuarial Consulting

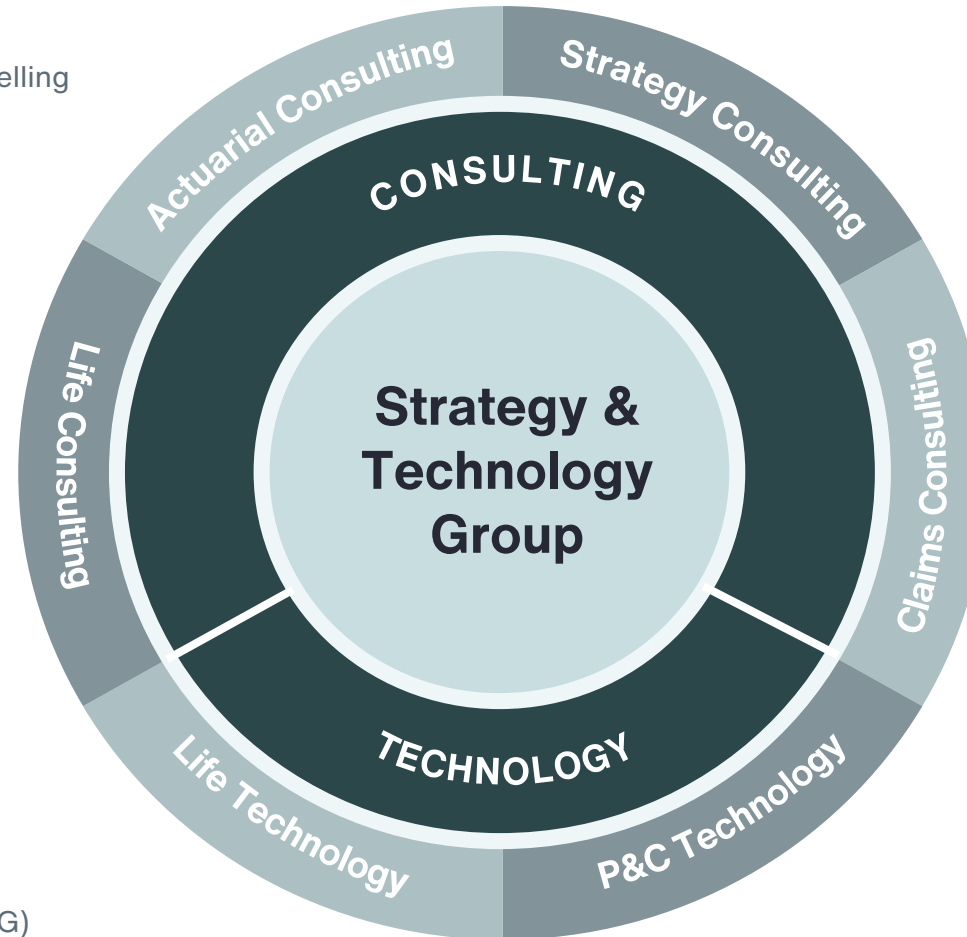
- Reserving, Pricing and Capital Modelling
- Risk Management
- Portfolio Optimisation
- ILS Valuation
- Regulatory Support
- Due Diligence

## Life Consulting

- Captive Support
- Finance Transformation
- Capital Management
- M&A
- Risk Management
- Product & Pricing

## Life Technology

- Capital & Economic Forecasting
- Risk Management
- Risk Modelling
- IFRS17 Compliance
- Economic Scenario Generation (ESG)



## Strategy Consulting

- Growth Strategy
- Talent Strategy
- Operational Strategy
- M&A Advisory & Due Diligence
- Benchmarking

## Claims Consulting

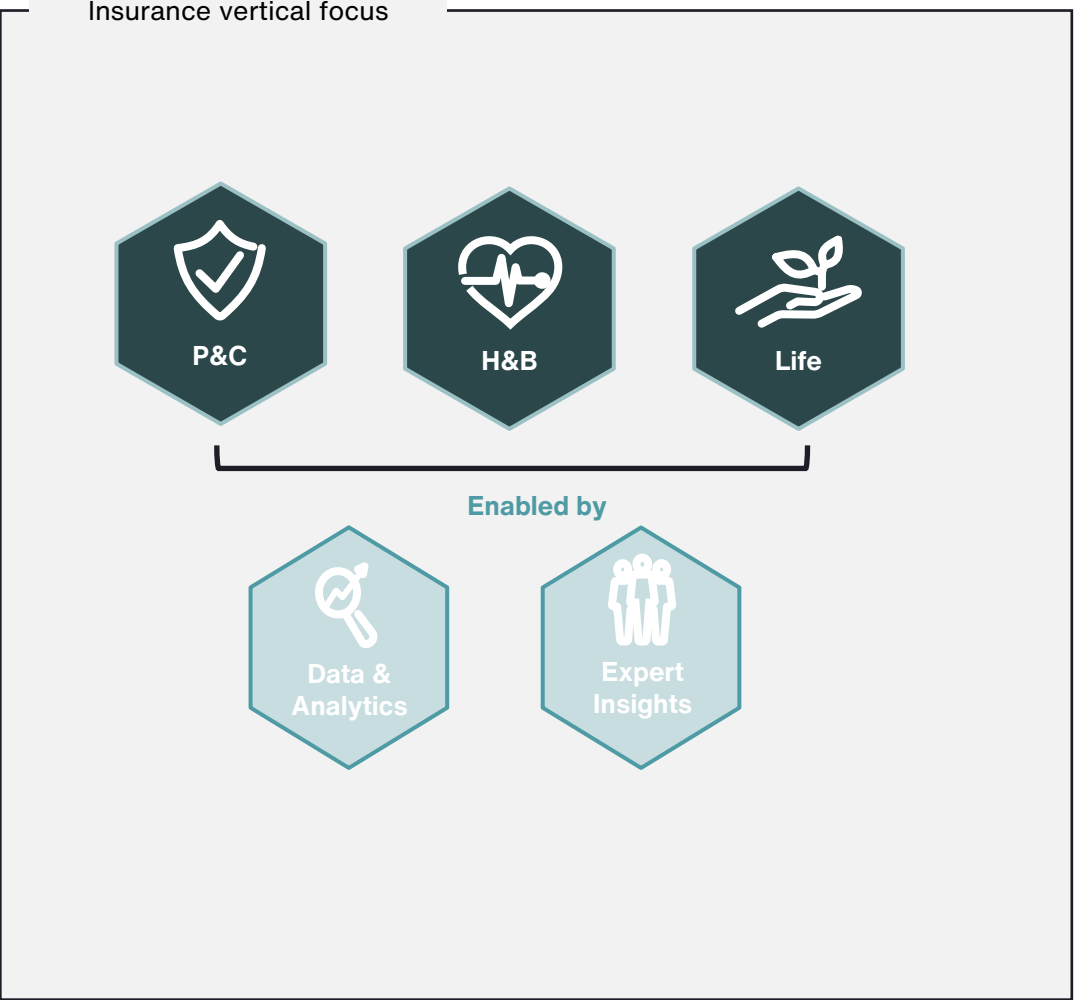
- Operational assessment
- Operating model & growth consulting
- InsurTech Strategy
- Litigation, Vendor & CAT Management
- Quality Management Consulting / Outsourcing

## P&C Technology

- (Re)Insurance Pricing Software
- Capital Modelling Software
- Claims Operations Assessment Software

# Introduction - Aon Strategy and Technology

Supporting the global (re)insurers with better decision-making



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# What is Parametric Insurance? - The basic concept

## Building Blocks

?

### Definition

Fundamentally, parametric (or index based) solutions are a type of insurance that covers the probability (or likelihood) of a loss-causing event happening (like an earthquake) instead of indemnifying the actual loss incurred from the event.

1

### An index

- Relevant and reliable index
- Historical data available for modelling
- Independent trusted third-party\*



2

### A Threshold

Claim is triggered when the index cross a pre-agreed threshold, upward or downward.



3

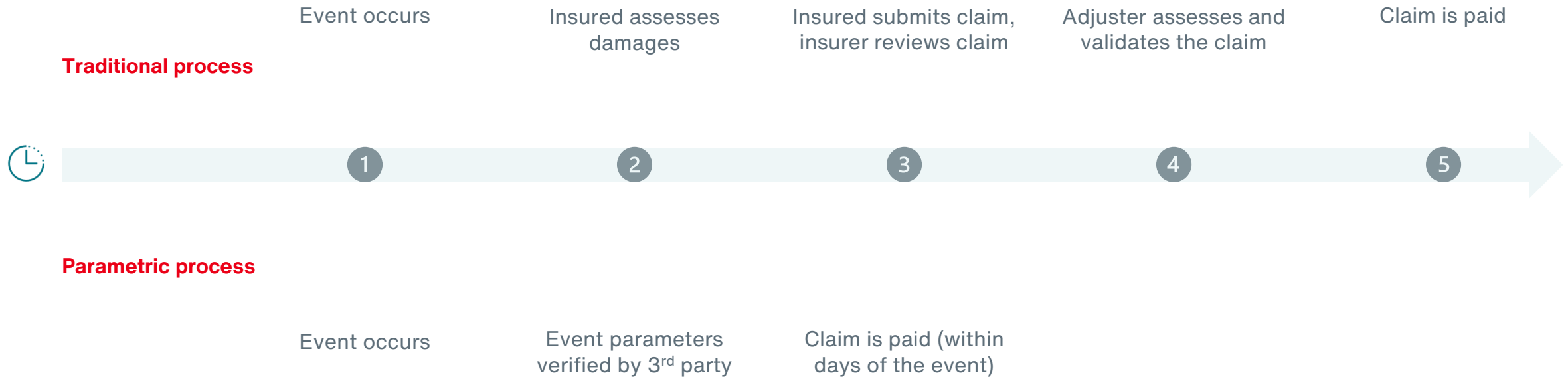
### A Payout Table

- Pre-agreed formula
- No loss adjuster
- No negotiation



# What is Parametric Insurance? – Quicker from event to payout

The inherent design of a parametric solution is built around speed and simplicity, providing funding to address cash flow in a crisis and accelerating the recovery via the flexibility of the proceeds



# Parametric Insurance

## Client Motivations & Example Applications

Parametric coverage is well suited for risks where independent data is available that correlates to the economic exposures expected to be experienced by the insured.

Immediate use cases focus on direct impacts from natural disasters, secondary perils, and climate events, but solutions are available for a range of indirect exposures and other emerging perils.

### Summary Motivations:

- Supplement traditional insurance with fast-paying alternative solution
- Address “protection gap” exposures or risks where no insurance exists
- Catalyst to risk transfer innovation



### Natural Disasters

- Hurricanes
- Earthquakes



### Climate

- Extreme Temperatures
- Drought
- Snowfall
- River Height



### Secondary Perils

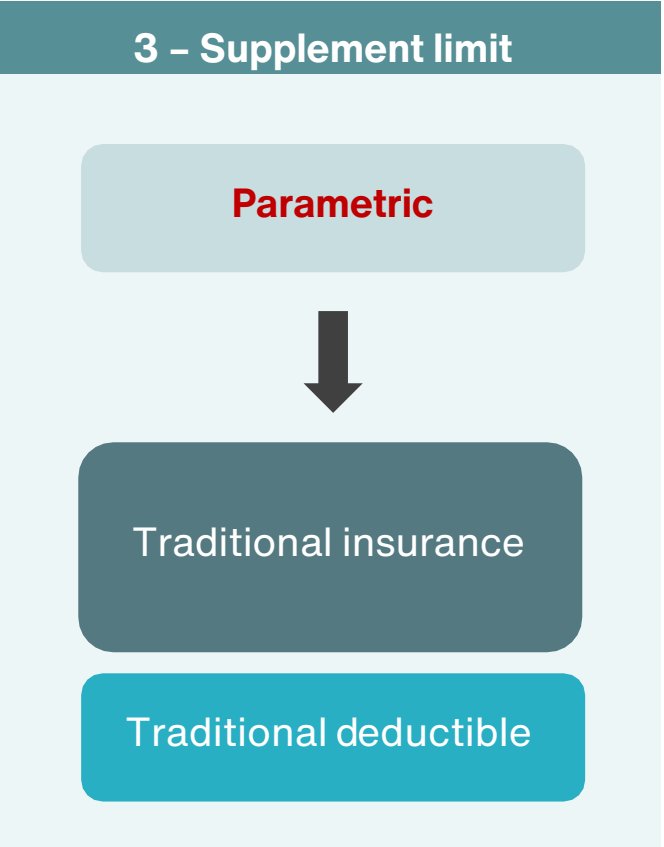
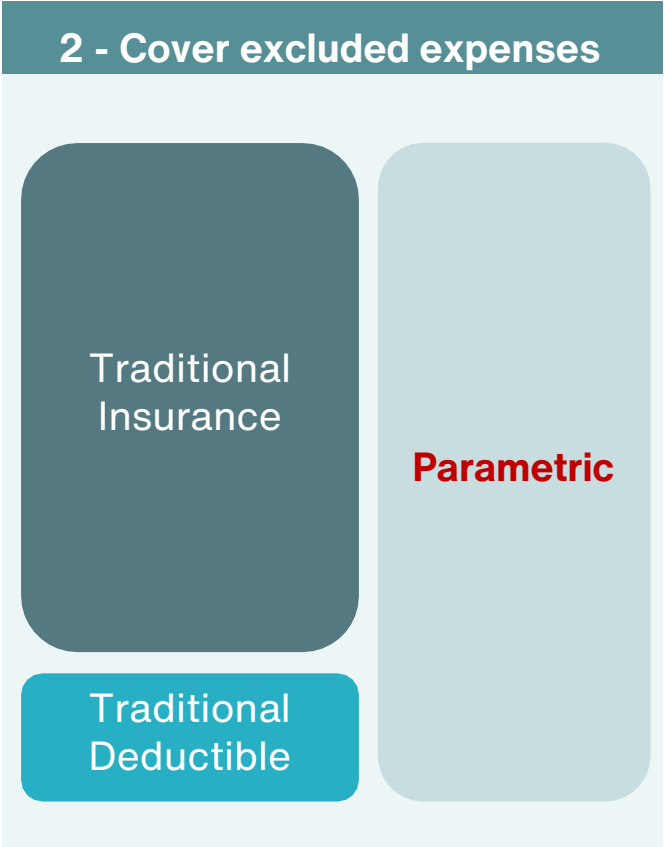
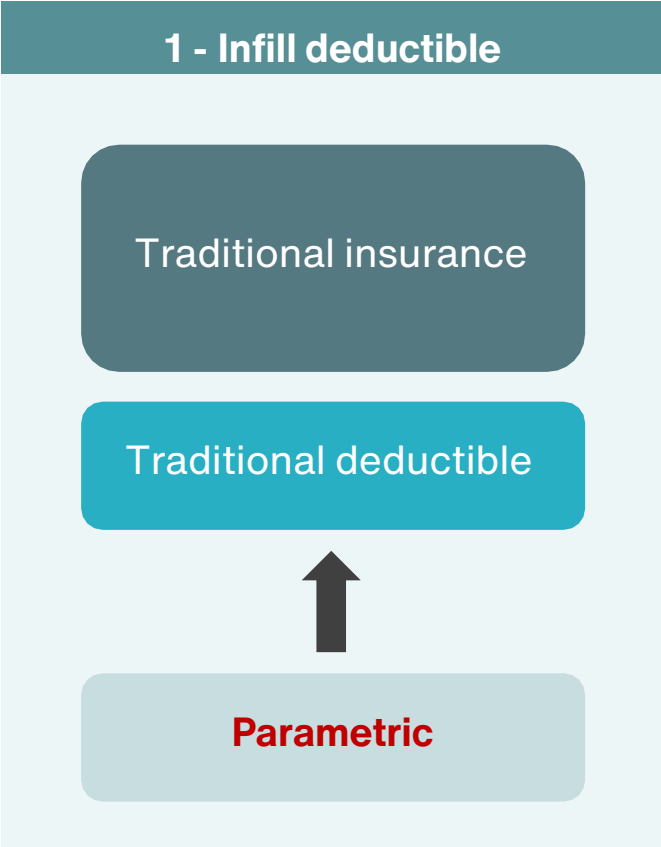
- Hail
- Tornado
- Flood
- Wildfire



### Other Risks & Use Cases

- Agriculture yield risks
- Cyber / cloud service outages
- Supply chain & contingent risks
- Non-physical damage business interruption

# Use of parametric insurance as a supplement to traditional insurance



# Parametric insurance solves various issues

## Examples

### A. Lack of capacity

- Parametric insurance can bring a **diversified source of capacity**, but it is not so different than facultative reinsurance.

### B. High CAT deductibles

- Number of CAT deductibles are written as a **percentage of the total insured value (TIV)**. 5% of 100m EUR TIV gives a 5m EUR deductible. 5% of 1bn EUR TIV gives 50mEUR deductible! Parametric insurance can partially replace this.
- There is not always a maximum deductible in the policy wording.

### C. Uninsurable Risks

- Non-Damage Business Interruption (NDBI)
- A clear argument when addressing **Contingent Business Interruption**, Client Loss of Attraction, Loss of Utilities

### D. Increased CAT pricing

- Parametric insurance can be used to carve out a specific peril for a specific location
- Parametric pricing will be **easier to adjust to client risk appetite and budget**



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# Facing the hardening market - Providing hurricane related coverage



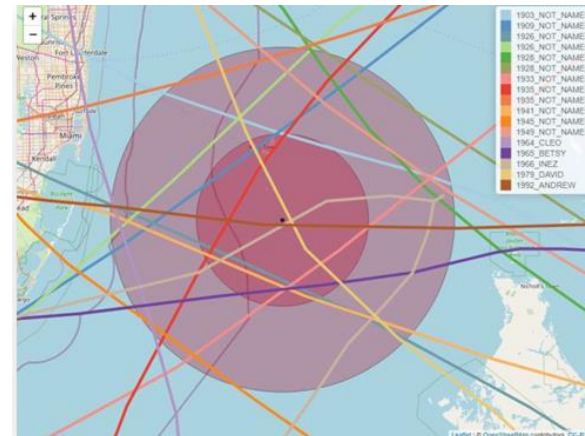
## The challenge

A company at a location in the Caribbean saw its natural disaster coverage conditions deteriorate as the insurance market tightened. The goal was to find capacity to carve out the Hurricane capacity from the traditional property policy.



## How parametric insurance helped

- A parametric cover for Hurricanes
- 2 Circles of 25 mile and 50 mile of radius
- CAT 3 to CAT 5 cover, Payout table based on historical losses
- 1 location



## The benefits to the client

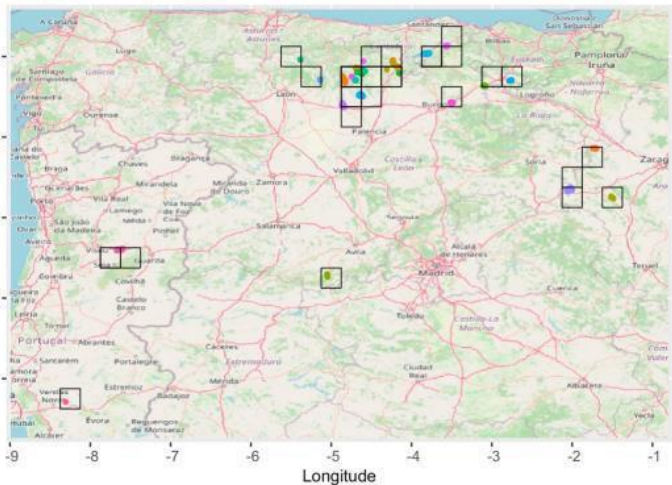
- Cover is broader than the previous Property Damage & Business Interruption PDBI cover (includes Non-damage business interruption insurance NDBI)
- Simple, easy to explain
- Fast settlement, 10 days after the index publication
- No claim handling process

# Wildfire cover using satellite data, protecting CO2 offset forests



## The challenge

This client is planting trees to capture CO2 emissions in order to support its clients to become carbon neutral.



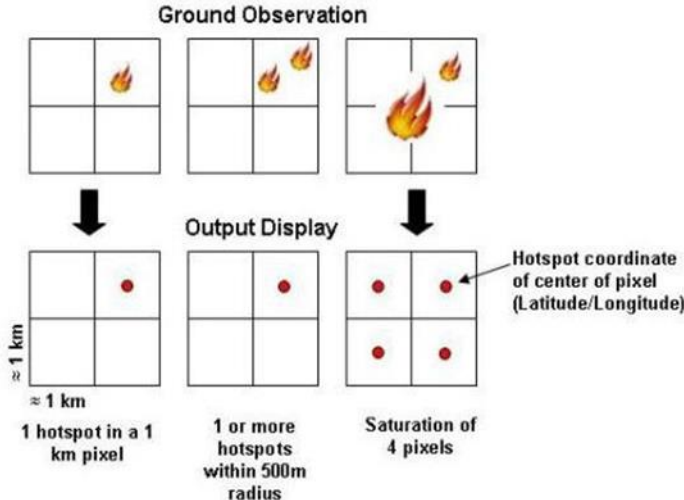
## How parametric insurance helped

- The parametric insurer offers them a Burned Area Index solution based on satellite data
- The centre of the hotspot on the ground detected by the satellite is converted to a pixel with coordinates
- When the sum of pixels in a zone exceeds a predefined number the policy triggers
- Payout table: A lump sum per pixel calibrated based on the asset value



## The benefits to the client

- The index correlation exceeded >99% accuracy with client historical losses
- Simple, easy to explain
- Fast settlement ; No claim handling process



# Supply chain cover, securing business continuity



## The challenge

A high-tech company has key suppliers in Taiwan for semi-conductors. After a Business Continuity Plan review, the client identified a gap of 30M€ in the cover between their assessment and the PDBI policy “Named suppliers” sub-limit. The risk manager require to find a solution to close this gap.



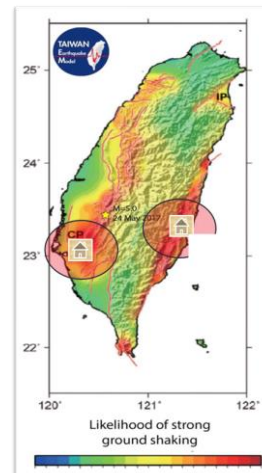
## How parametric insurance helped

- A parametric cover for Earthquake (EQ)
- 2 Circles of 50km of radius
- A payout table designed according to construction standards on EQ resilience
- Payout proportional to the Magnitude and the distance of the epicentre



## The benefits to the client

- Provides cover when the traditional market was not available
- Cover third party locations
- Simple, easy to explain
- Fast settlement, 10 days after index publication
- No claim handling process



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# Thank You



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