



MARSH UTILITIES

Parametrics: A Tool to Help Manage Climate Risks for the Utilities Sector

Parametric policies are innovative risk solutions provided by insurance and reinsurance companies.

They enable organisations to finance or transfer risk in a non-traditional way, and they are becoming more effective in providing a solution to organisations as they manage increasing risks from our changing climate in the UK.

This is particularly relevant to Utility companies who have seen flooding to operations via winter storms Ciara, and, Dennis early in 2020, or when the “Beast from the East” struck in 2018. This disruption caused issues with frozen pipes, and subsequent burst water mains, bringing operational challenges to the fore.

The solutions available revolve around a measurable index being a proxy for revenue loss or cost increase, and are based on predefined triggers or pay out mechanisms – without necessarily needing physical damage to occur, which can be attractive to companies in the changing world of risk and insurance. The index-based nature of these insurances also ensure a fast payout – once the selected index hits the trigger, a claim is paid and there is little or no loss adjustment. Unlike more conventional policies, losses can be settled in days, rather than weeks, months, or, even years.

Why Parametrics?

As climate-related risks become increasingly complex and unpredictable, requests for such innovative parametric insurance structures have been increasing. At Marsh, we have seen the number of enquiries regarding parametric solutions triple since 2018.

Prior to COVID-19, the World Economic Forum Survey launched in January 2020 had environmental risks in the top five for the first time ever. So, as awareness of climate risk increases, so has their standing within the risk registers of businesses.

There are a number of risks, which may not be addressed by traditional insurance, but where a parametric policy could provide risk transfer:

- Freeze/thaw causing pipes to burst.
- Drought, with cost increases in transportation, chemicals and marketing.
- Pollution risk, which can accompany drought and flood episodes and lead to similar increased costs.
- Flood. Although conventional insurance can cover damage and increased costs resulting from sudden flood events, parametric insurance may be better targeted, faster to pay out, and, be a more cost effective form of insurance.
- Wind. In the event of excess or lack of wind to generate power from turbines

Recent trends

Parametric insurance is gaining traction, especially for weather-related events, and, there are a number of specialist insurers able to offer coverage. Hazard modelling continues to improve, while weather stations and satellites capture more accurately weather-related parameters. Improved data and models enable parametric cover as an increasingly efficient, affordable, and, viable option in the market.

Globally, capital markets have successfully structured a number of placements for weather-related indemnity where such risks are not insured or underinsured. In many respects, index-based insurances such as these more closely resemble other financial contracts that provide hedging and risk transfer, and can form a valuable part of an insured risk portfolio.

How are parametric products structured?

The key to success in structuring a solution is to ensure a close match between the selected trigger index and a real financial loss. It is therefore worth spending time pre-placement in qualifying the exposure in detail and constructing this index.

Data is required – both historic weather data from the location(s) in question and also ideally historic financial reports. This enables back-testing of any structure to ensure it will pay out what it is meant to pay.

As brokers and advisors, a key part of Marsh's role is to support our clients in constructing and testing these insurances, as well as the marketing and placement process.

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How does parametric insurance work?

1. Based on the use of a parameter (typical rainfall amount or temperature or wind speed) that is correlated to the client's loss (e.g. decrease in revenues).
2. Claims payment amount is fixed in advance in the insurance contract and is triggered upon exceeding the threshold conditions.



ASSESSMENT

Analysis of available and measurable data (i.e. amount of precipitation, duration) to create a reliable and credible index on which to trigger the policy.



POLICY COVER

Design of an insurance adapted to the needs of the client and mutually structuring a bespoke policy (inc. wordings, definitions, payout, and price).



RECOVERY

Pre-agreed payment structure triggered based on event parameter (i.e. amount of precipitation and duration) exceeding threshold.

Conclusion

Parametric insurances are designed to provide clear protection with fast payouts. They offer risk transfer where traditional insurance cannot, and can form a valuable part of a risk-financing programme for companies and investors alike who are concerned regarding the impact climate related risks have on their operations.

For more information about Parametrics and other solutions from Marsh, visit [marsh.com](#), or contact your local Marsh representative.

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