

Managing Risk to Unlock Capital for Wind Projects in Asia Pacific



Key Takeaways

- Wind energy development in Asia Pacific is experiencing rapid growth, but projects face several challenges and risks.
- Due to different legal frameworks, financing capacity and market maturity in the region, flexible solutions that can be adapted to each country's context are required.
- Credit, political risk and surety solutions can help enable projects to become more attractive to lenders and investors, reach capital-raising targets, protect stakeholder interests, and limit obstacles and delays.

Wind energy development across Asia Pacific (APAC) is entering a phase of rapid growth¹. China and India are leading the trend, with India targeting 500GW of non-fossil fuel capacity by 2030² and China seeking to secure at least 25 percent of primary energy from non-fossil fuel within this period³. Other markets in the region are seeking to increase supply from renewables in their energy mix. Vietnam is aiming for renewables to account for nearly one third of installed capacity by 2030⁴, while Malaysia is targeting 40 percent by 2035⁵.

Each country is at a different stage of maturity, but all share a common challenge, That challenge is aligning their energy ambitions with the right mix of capital, expertise and protection so projects are bankable and viable for their entire lifecycle."

Ankit Tambe

Regional Director, Credit Solutions Aon, Asia

¹ Youwind, Record APAC Offshore Wind Activity Drives Acceleration of Development Processes, 13 February 2025

² Reuters, India hits 50% non-fossil power milestone ahead of 2030 clean energy target, 15 July 2025

³ S&P Global, China's new 2030 climate commitments: Beyond peak emissions, 15 December 2020

⁴ World Economic Forum, Vietnam's \$135 billion power plan for 2030, 23 May 2023

⁵ Energy Tracker Asia, Malaysia Nears Its 40% Renewable Energy Target by 2035, 5 August 2024

Critical Shifts in Technology and Supply

To meet this growing demand for wind energy infrastructure and capacity, Chinese turbine manufacturers now have a dominant position and are expected to supply two-thirds of new installations worldwide.⁶ At the same time, turbine sizes are scaling up dramatically, with 6MW models and above now the norm for developers.⁷ This combination of new suppliers and larger turbines brings both opportunity and risk, as stakeholders adapt to unfamiliar equipment with limited operational history.

⁷ ScienceDirect, Impacts of turbine and plant upsizing on the levelized cost of energy for offshore wind, 15 September 2021



⁶ BloombergNEF, Chinese Manufacturers Lead Global Wind Turbine Installations, Bloomberg, NEF Report Shows, 17 March 2025

Construction and Supply Chain Risks

Wind projects in APAC are exposed to a range of risks during the construction and commissioning phase. "Engineering, procurement and construction (EPC) contractors often need to commit significant resources upfront," says Tambe. As Richard Nunny, Renewable Energy Leader for Aon in APAC, observes, "With the speed at which technology is evolving in the renewables sector, the risk landscape is shifting rapidly. We are seeing a transition in the supply chain from traditional Western Original Equipment Manufacturers (OEMs) to a growing presence of Chinese suppliers, and with that comes new challenges for project developers and insurers alike."

Nunny explains that the expansion of Chinese OEMs and large-scale technological advancements can heighten uncertainty. "Many of the latest turbine models, particularly those introduced by Chinese OEMs, do not yet have the extensive operating history (outside of China) that lenders and insurers typically look for,"

he notes. "It's common for insurers to require turbines to have achieved an international type certification and a minimum of 8,000 of hours of proven, trouble-free operation before considering them as bankable technologies."

"This evolving scenario may lead to stricter financing terms and increased risk-transfer costs for projects adopting these unproven models," says Nunny. "Information and data are key to ensure the best possible risk transfer solutions can be structured."

Broader disruption of global supply chain dynamics adds another layer of complexity.

In this environment, credit and surety solutions that protect advance payments, performance obligations and trade receivables could be critical. "They could help to convince international contractors and equipment suppliers to commit expertise and resources to a project," says Tambe.

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Even if a project site is far from geopolitical flashpoints, global events can affect shipping lanes, component availability and delivery schedules. Stakeholders have to factor these wider risks into financing discussions."

Richard Nunny

Head of Renewable Energy Practice Aon, Asia Pacific

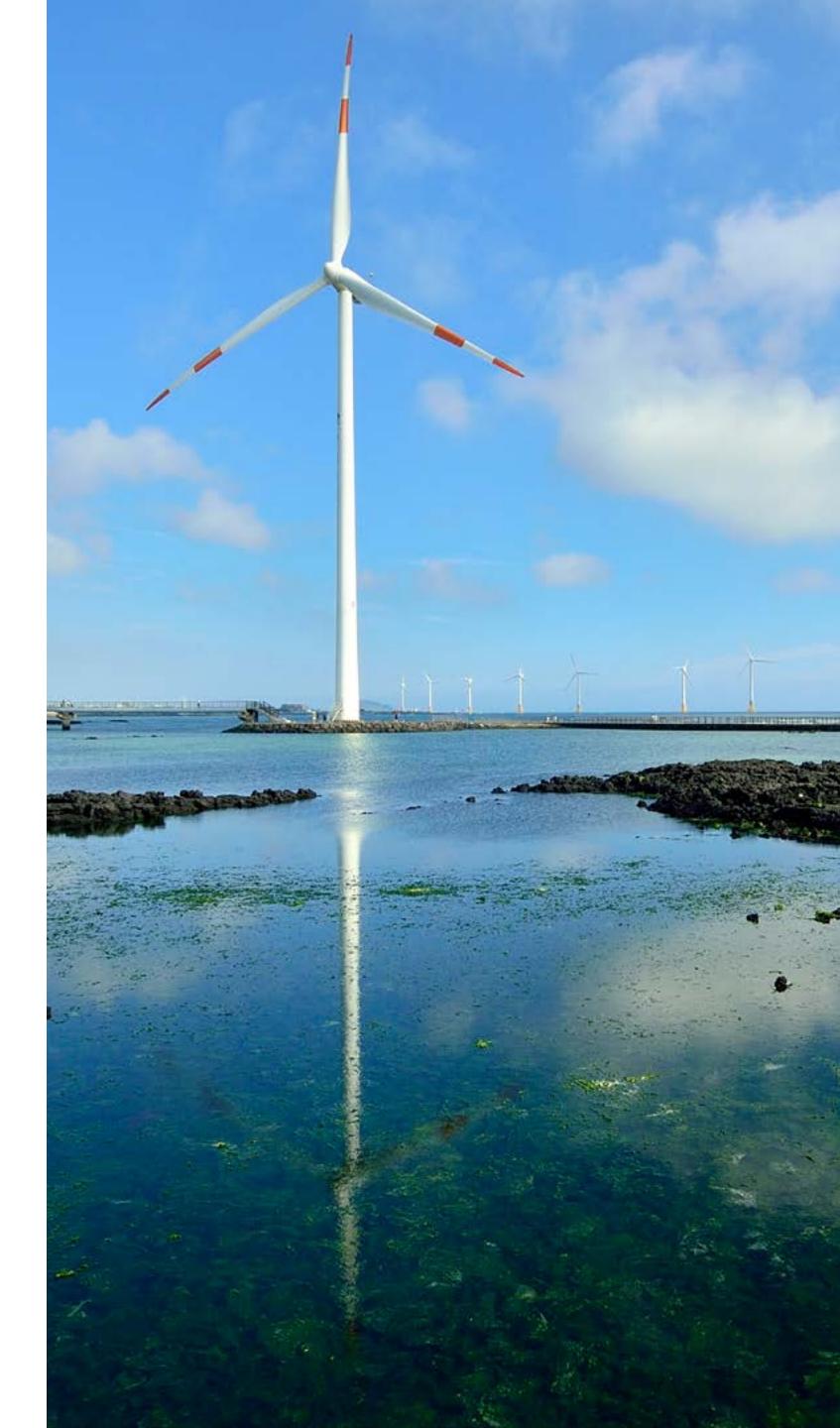
Other Risks Influencing Project Viability

Beyond construction and supply chain issues, other categories of risk are shaping the financing landscape for wind projects in APAC and have the potential to put long-term viability at risk:

- Counterparty credit risk if lenders or suppliers have concerns about the financial strength of the project company, energy off taker or other key parties, they may seek additional protection to commit or finance a larger portion of capital.
- Political and country risk this can be a significant issue in emerging markets, where policy changes, licence cancellations or restrictions on moving currency can disrupt projects.

- Contract and offtake risk in situations where power purchase agreements (PPAs) or other revenue contracts depend on a single buyer or governmentbacked utility they may be perceived as less bankable or carry heightened risk from a financier's perspective.
- Natural catastrophe risk earthquakes are common in APAC and typhoons and floods in the region are becoming more frequent and intense. These weather events can have a direct impact on project sites, and lenders increasingly expect detailed catastrophe modelling to be part of the due diligence process.

Together and separately, these risks can prevent both lenders and international contractors from taking part in projects, limiting competition and making capital more expensive and less accessible.





How Credit Solutions Unlock Capital and Capability

There are a wide range of risk transfer tools available to overcome these challenges and make projects more attractive to both lenders and contractors. Credit insurance, political risk insurance (PRI) and surety are not only defensive measures — they may help improve funding terms and open the door to new sources of funding and project expertise.

For example, credit insurance could give banks more confidence to increase their lending capacity by protecting against non-payment, allowing them to take on larger portions of a project without breaching internal limits. PRI could help address country-specific concerns for investors and contractors, enabling cross-border participation.

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In APAC, every market has its own risk profile and regulatory environment. Credit and political risk solutions let you tailor the protection to those local realities, which expands the pool of potential financiers, customers and suppliers."

Ankit Tambe

Regional Director, Credit Solutions Aon, Asia

Risk Solutions for Every Stakeholder

There are a number of established solutions available to help mitigate the risks associated with wind energy developments:

- Credit insurance can provide protection against non-payment risks for a range of stakeholders including lenders, EPC contractors, and equipment suppliers. It could allow lenders to commit more capital by sharing risk with insurers. For contractors and suppliers, credit insurance may help safeguard against payment defaults or contract termination, supporting recovery of costs and stabilising cash flows throughout the project lifecycle.
- Political risk insurance (PRI) helps to protect
 against government actions or instability that could
 impact a project, such as expropriation, political
 violence, non-compliance with contract terms or
 restrictions on currency transfer. In markets where
 legal frameworks are evolving, this can help unlock
 long-term investment.

- Surety bonds such as performance bonds or advance payment guarantees offer project owners and contractors an alternative to traditional bank guarantees, while also preserving valuable bank credit lines. This approach not only enhances financial flexibility but also broadens access to capital, supporting the successful delivery of complex infrastructure projects.
- Trade credit insurance for turbine and component suppliers could help ensure that payment will be received even if a buyer defaults. This may help stabilise supply chains and working capital, which is especially important when equipment is sourced internationally.





Putting Risk Solutions to Work for Wind Energy in APAC

Many countries in APAC are still building experience with large-scale wind energy projects. This means their legal, financial and supply chain frameworks are still evolving which can hamper the efforts developers are making to attract large amounts of capital.

Credit solutions can help to bridge the gap by giving lenders, investors and contractors more confidence to participate despite these uncertainties. For governments and project owners, this can cut the time it takes to stand up projects and open the door to a wider choice of contractors and more competitive financing terms.

How Aon Can Help

Aon works with wind project stakeholders across APAC to:

- Identify specific funding, contract and country risks in their market
- Help design credit, political risk and surety structures, with the option to tailor these to match project objectives and financing terms
- Match these solutions to insurers who understand the sector and can commit underwriting capacity for the life of the project

By combining technical understanding of wind energy projects with extensive insurance market knowledge, Aon can help clients deliver complex projects more quickly and with greater resilience to risk.



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