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Report Highlights Growing Focus on Risk Resilience and Insurance in Renewable Energy Sector

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As the global transition towards renewable energy accelerates, new research and market analysis underscore the increasing importance of risk resilience and insurance dynamics for stakeholders across the project lifecycle.

A recent study by commercial property insurer FM Global, coupled with a market review from WTW's Willis unit, reveals a growing complexity in insuring and financing renewable energy infrastructure amidst evolving hazards and shifting market conditions.

Strong Investment Momentum Tempered by Capital Constraints and Resilience Concerns

FM Global's survey of 650 executives and investors in the renewable energy sector indicates significant expansion plans, with nearly all solar developers (97%) and onshore wind operators (95%) anticipating increased energy output within the next three years. Furthermore, 73% of financial stakeholders reported intentions to increase infrastructure investments.

However, the report identifies potential bottlenecks in capital access, with 64% of lenders and 58% of investors noting that current demand for funding outstrips supply. Project resilience, defined as the ability to withstand operational and natural disruptions, is emerging as a critical factor influencing investment decisions. A majority of financiers (66%) stated that a project's risk management capabilities impact their willingness to invest, while also affecting valuations (69%) and contractual terms (72%).

Key Project Concerns and Knowledge Gaps Identified

The FM Global study highlights key concerns throughout the project lifecycle. During construction, increasing equipment costs (44%), regulatory hurdles (41%), and logistical delays (40%) are cited as top challenges. In the operational phase, extreme weather events (54%), mechanical failures (50%), and supply issues with replacement parts (48%) pose ongoing risks.

Despite 59% of energy providers expressing confidence in their projects' resilience, the survey also reveals significant knowledge gaps. These include limited transparency from equipment manufacturers (57%), an incomplete understanding of local environmental exposures (53%), and the rapid pace of technological evolution (47%). These uncertainties are translating into financial impacts, with respondents citing higher construction expenses (52%), increased insurance premiums (47%), and difficulties in obtaining full insurance coverage (44%).

Doug Patterson, FM's Senior Vice President for Forest Products and FM Renewable Energy, emphasized the need for greater insight and early integration of risk expertise. "Providers are doing the best they can with the information they have, but they need more insight into the technology they are buying and the environmental factors that threaten it," he stated.

Energy Insurance Market Sees Softening Prices Amid Capacity Competition

Concurrently, Willis' Energy Market Review indicates a continued softening in energy insurance pricing, driven by strong competition among underwriters in a capacity-rich environment. Record levels of available capital are creating favorable conditions for insurance buyers, although recent loss activity could potentially influence this trend.

The downstream energy sector experienced limited major losses in 2024, encouraging insurers to reduce rates. However, potential losses in the first quarter of 2025 have already reached $1.5 billion, exceeding the previous year's total and introducing potential volatility into the market.

In the upstream market, a 5% expansion in underwriting capacity is contributing to further rate declines, with underwriters actively seeking to increase their market share. Notably, many carriers have already allocated a significant portion of their 2025 capacity to construction risk, a sector historically challenging for profitability.

These reports collectively highlight the evolving landscape of the renewable energy sector, where robust risk management strategies and comprehensive insurance coverage are becoming increasingly critical for securing investment and ensuring the long-term viability of projects.