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Article

Property risk in the new energy order

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The fruits of energy democratisation[1] are emerging like new species – each bringing promise, but also new vulnerabilities.

This emerges from a world where energy production is becoming increasingly democratised – creating an energy ecosystem that is no longer a top-down system.

Energy independence has become a strategic priority, driving investment in new builds that can withstand grid instability and climate extremes. Businesses are increasingly aware of their exposure, especially in regions vulnerable to outages. The Texas freeze of 2021[2] was a wake-up call, revealing the fragility of a power grid disconnected from the national network. In response, many have taken proactive steps – installing backup generators, solar panels, and battery storage systems – to reduce reliance on centralised grids and protect critical operations.

However, property risk, once tethered to predictable grids and centralised infrastructure, now finds itself in unfamiliar terrain.

Journeying through complexities of energy innovation

Battery storage facilities, though not new, are fast growing in popularity – a strategic escape hatch for companies from fragile, overburdened grids. Yet they come with significant risks. Claims linked to battery storage[3] facility fires are already surfacing, including a major incident[4] in California in January 2025. These facilities present a volatile mix of risk: the chemical nature of these fires necessitates both property and environmental coverage.

Wind farms face their own pressures – they're buffeted by erratic weather patterns, strained by brittle supply chains, and exposed to the unpredictable gusts of geopolitics. Such pressures manifest in

everything from delayed turbine deliveries, environmental concerns[5], rising maintenance costs, andshifting regulatory landscapes that can alter project viability overnight. The result is a risk profile that's as dynamic as the winds themselves, demanding more agile, anticipatory approaches to property protection.

Meanwhile, fusion energy[6] – long considered the holy grail of clean power – is inching closer to commercial viability. Pilot plants are being planned with the promise of near-limitless, low-carbon energy. But fusion introduces its own set of unknowns: novel materials, extreme operating conditions, and untested regulatory frameworks. For insurers and risk managers, this means preparing for a new frontier of property exposures that don't yet have historical precedent.

Nuclear energy is edging back to the table, but stigma still stands in the way. Decades of fear and fallout have left nuclear with a PR problem, despite the arrival of safer, small modular reactors[7]. But in a decentralised energy landscape where resilience is everything, nuclear offers rare advantages: stable, low-carbon power that doesn't depend on sun, wind, or fragile supply chains. For insurers and risk managers, the challenge lies in balancing legacy fears with emerging realities.

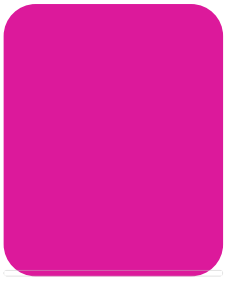
This all is the reality of operating in a decentralised, high-stakes energy landscape – where innovation outpaces regulation, and risk is no longer confined to the physical footprint of a single site.

From risk transfer to risk partnership

Despite these risks, forward-thinking organisations are embracing bold strategies to fund and deploy new energy solutions. They're working with insurers to redefine coverage models, integrate environmental liability into core property offerings and support clients in building resilient, sustainable operations. They embrace the opportunity in such collaboration, seeing it as crucial in helping them shape a new energy future.

Resilient property portfolios for energy innovators

The decentralisation of energy is reshaping property risk in ways that demand fresh thinking. While the vulnerabilities are real, so is the momentum. As businesses invest in their own energy sources, from battery storage to microgrids, they must also recognise that energy infrastructure is becoming a prime target for cyber threats, with the potential to cause physical damage and operational disruption. Organisations that engage early with their brokers and insurers will be better positioned to navigate complexity, protect assets, and accelerate innovation. The shift from risk transfer to risk partnership is how the energy transition will move from fragile to future-ready.



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[1] What is meant by the democratisation of energy?

[2] The Texas Freeze: Timeline of events

[3] 'We are playing with fire': Fears persist over battery storage - BBC News

[4] What a major battery fire means for the future of energy storage | MIT Technology Review

[5] Offshore wind farms could cause significant ecosystem, economic and human health risks | University of Portsmouth

[6] Fusion in brief | UKAEA Fusion Energy

[7] What are Small Modular Reactors (SMRs)? | IAEA

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