

INSIGHT 06

THE ROLE OF EXISTING ENERGY AND POWER INSURANCE COVERAGES IN THE ENERGY TRANSITION: Adapting Coverage for New Technologies

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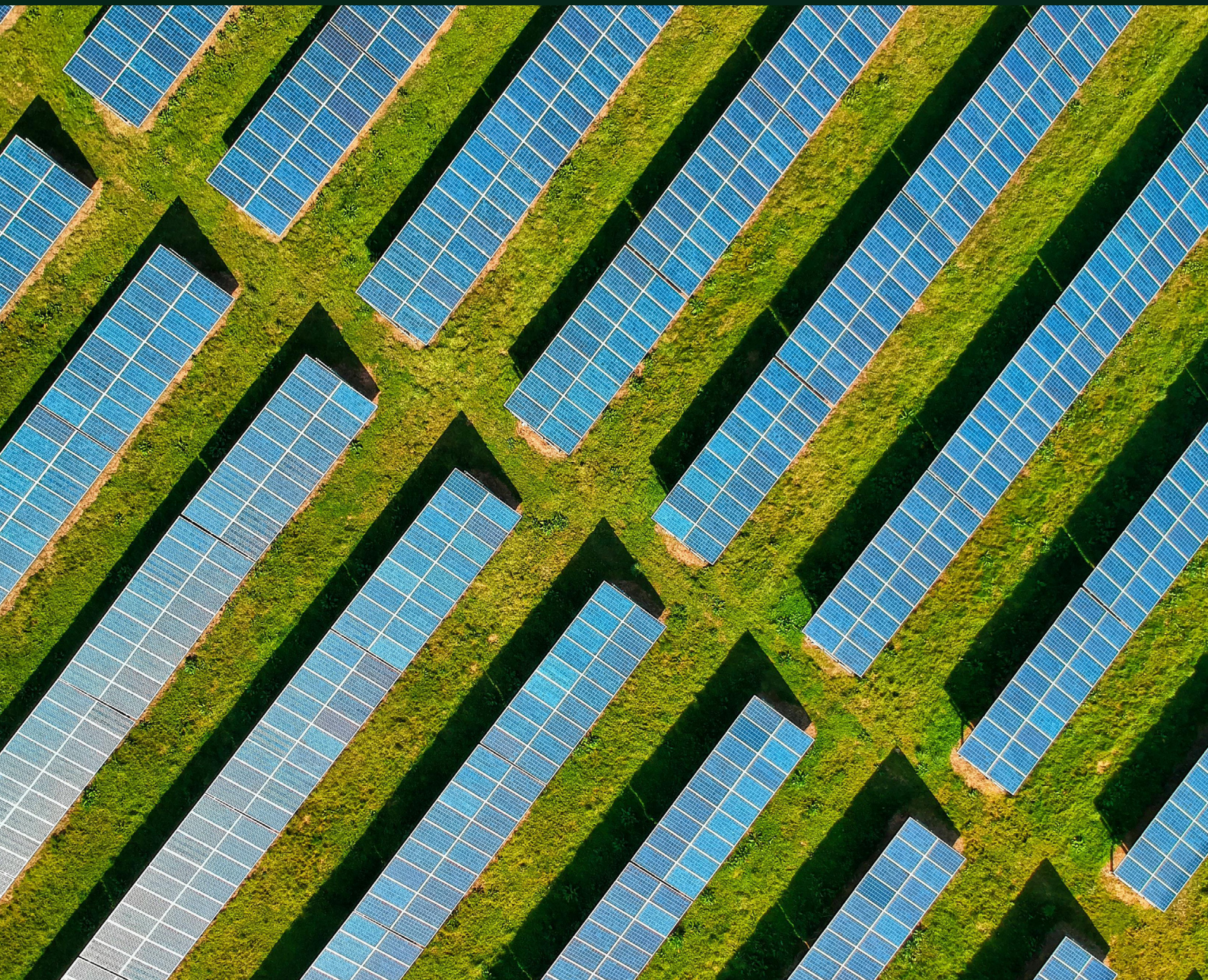
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THE BACKGROUND

As the global energy and power sector undergoes a major transformation towards low carbon and renewable energy sources, the Specialty Insurance Market is stepping into a critical role, not just as a risk transfer mechanism, but as a key enabler of innovation and technological development.

The energy transition has to date introduced technologies such as carbon capture, utilisation, and storage (CCUS), blue and green hydrogen production, enhanced geothermal systems, floating offshore wind technology, interconnectors, battery energy storage systems (BESS), and smart grid infrastructure, which bring novel risks that require both the adaptation of existing specialty insurance products and the creation of new ones.

This Insight explores the existing coverages available in the Specialty Insurance Market and how they can be repurposed and evolved to support emerging cleaner energy and power generation technologies.



The background of the page features a scenic coastal view. In the foreground, there is a blurred green field of tall grass or reeds. Beyond this, a calm blue body of water stretches towards the horizon. On the horizon line, several white wind turbines are visible against a clear, light blue sky. The overall atmosphere is serene and represents a clean energy environment.

EXISTING ENERGY AND POWER INSURANCE COVERAGES AND THEIR ROLE IN THE TRANSITION

The energy and power sector has traditionally depended on a range of specialty insurance coverages to manage construction, operational, financial, legal, and environmental risks. As the industry evolves to embrace cleaner technologies and transition to a low carbon future, these existing coverages are being actively re-examined by Insurers, Insurance Brokers and Insureds to assess their suitability for new energy and power projects and technologies that support the energy transition. These policies are increasingly being tailored, enhanced, and repurposed to address the distinct and evolving risk profiles introduced by new technologies driving the energy transition.

Key existing energy and power insurance coverages include:

1. Property Insurance

Traditionally used to cover physical assets like drilling rigs, offshore oil and gas platforms, oil refineries, petrochemical plants, thermal power stations, and pipelines, this form of insurance is now also covering property used in the energy transition.

For example, operational property insurance policies are now being extended to cover assets such as electrolyser units at green hydrogen facilities, battery energy storage systems (BESS), floating offshore wind farms, interconnectors, and geothermal drilling rigs, all reflecting the shift towards low carbon infrastructure.

2. Business Interruption Insurance

This type of insurance compensates for the loss of income during interruption or interference to the operations of the Insured due to damage or other sudden and accidental unforeseen events. In the context of energy transition projects, this coverage can help mitigate financial losses during the period of interruption arising from property damage, machinery breakdown, geothermal blowouts, or Carbon Dioxide (CO₂) leak incidents that interrupt or interfere with the Insured's operations.

3. Third Party Liability and Environmental Impairment Liability Insurance

These coverages protect energy and power companies against a broad spectrum of third party legal or contractual liability claims, including those arising from bodily injury, property damage, or environmental contamination.

In the context of energy transition projects, CCUS stands out as a key initiative. It involves injecting CO₂ into subsurface formations, which carries risks such as potential leakage or induced seismicity. These risks make third party liability and environmental impairment liability coverage especially relevant and highlight the need for tailored insurance solutions.

4. Construction All Risk (CAR) and Erection All Risk (EAR) Insurance

CAR and EAR policies have long been standard in the construction phase of traditional energy and power infrastructure. Today, these coverages are being repurposed and adapted to meet the evolving demands of energy transition projects.

As emerging technologies such as green hydrogen gain traction, CAR and EAR policies are increasingly being customised to address their unique risk profiles. For instance, in the construction of an electrolyser plant powered by renewable electricity, a CAR policy may be specifically tailored to cover risks associated with high-pressure systems, flammable gas handling, and the integration of advanced control technologies. Additionally, coverage can include the complex testing and commissioning phases essential to the safe operation of such facilities.

5. Operator's Extra Expenses Insurance

Originally designed for oil and gas operations, Operator's Extra Expenses (OEE) Insurance provides control of well coverage in the event of a blowout or loss of well control, with coverage also provided for the cost of redrilling and seepage and pollution, cleanup and contamination arising from insured wells. This coverage is being adapted to geothermal wells, which face risks of high-pressure steam and subsurface instability, whilst also being adapted for CCUS operations to provide cover for the injection of CO₂ into storage complexes such as depleted oil and gas reservoirs and saline aquifers.



ENHANCING ENERGY AND POWER INSURANCE COVERAGES FOR NEW TECHNOLOGIES

In addition to adapting coverage for new technologies, Insurers are exploring ways to support climate resilience and environmental performance through innovative insurance mechanisms. One emerging area is coverage related to emissions trading schemes (ETS). As companies participate in carbon markets by buying or selling allowances based on their emissions, there is potential for insurance solutions that provide recoveries for losses resulting from physical damage that impairs Insured operations, requiring the Insured to purchase replacement credits on the open market or causing them to lose allocated allowances due to reduced emissions tracking or compliance delays during the period of interruption or interference. Coverage related to emissions trading schemes (ETS) will also play a crucial role in carbon capture, utilisation, and storage (CCUS) projects by providing protection in the event of CO₂ being emitted to atmosphere either from a storage location (such as a depleted oil and gas reservoir) or from a transportation network (such as a pipeline).

In addition, some energy and power policies now include “*build back better / build back greener*” clauses within the property and business interruption coverages. With an increasing emphasis on energy efficiency and environmental sustainability, these clauses include an allowance for repairs or replacements following covered physical damage, which enhances energy efficiency, reduces emissions and supports climate resilience such as improved flood or fire resistance, aligning with the Insured’s environmental

and sustainability objectives and contributing to the broader energy transition. Build back better / build back greener clauses incentivise long-term sustainability and resilience in both infrastructure and operations, aligning insurance outcomes with broader climate goals.

A market standard “*build back better / build back greener*” clause is also available in the form of the Lloyd’s Market Association (LMA) Greenhouse Gas Emissions Reduction Endorsement, LMA5609A, which was released by the LMA’s Onshore Energy Panel in March 2023 and stipulates that “*in the event of direct physical loss or damage to insured property indemnifiable under this Insurance, the Insured may elect to repair, replace or rebuild such property (whether at its existing location or another location) in a manner that directly and measurably reduces the Insured’s Scope 1 Greenhouse Gas emissions*”.

The LMA5609A provides a favourable “*additional amount of up to xx% of the repair, replacement or rebuilding cost of the property that the Insurers would have been liable to pay in respect of such physical loss or damage in the absence of this Endorsement*”, with a matching contribution provision which stipulates “*with the Insured contributing at least an equal amount toward such cost as the Insurers*”. The inclusion of a matching contribution encourages a collaborative effort between the Insured and Insurers, jointly supporting the adoption of greener, low-carbon technologies.



CONCLUSION

The energy transition does not mean the abandonment of traditional Specialty Insurance Market coverages, but rather their evolution. Existing energy and power coverages like Property Insurance, Third Party Liability Insurance, Business Interruption Insurance, and Operator's Extra Expenses Insurance are being creatively adapted to fit new risk landscapes.

To fully support the broad deployment of emerging energy transition technologies and projects, innovation is needed in insurance products, insurance policy design, and risk sharing mechanisms. The agility, foresight, and proactive approach of the Specialty Insurance Market will play a critical role in enabling a cleaner, more resilient energy future.





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