

Underwriting the Transition

Report Update

03 March 2026



1 Foreword

For over three centuries, the Lloyd's market has been the global laboratory for risk. From the earliest days of maritime trade to the dawn of the space age and the complexities of cyber and geopolitical risk, our market has specialised in the "complex and emerging." The climate transition is the defining challenge of our era, and as this report demonstrates, Lloyd's Managing Agents are already embedded in this journey. We are not just observing the shift; we are actively supporting our clients across different sectors and industries, as they navigate decarbonization.

In October 2024, we published our inaugural *Underwriting the Transition* report. Its purpose was to establish a common baseline, mapping the decarbonization pathways for critical sectors and identifying the initial levers available to insurers to support a managed transition. It provided a foundational framework for understanding how first-party property coverage would need to evolve in the face of a changing climate.

A little over a year on, the landscape has shifted. The "State of the World" in 2025 presents a sobering reality: global temperatures have now exceeded 1.5°C, and the consensus following COP30 in Belém is that the risk of a "disorderly transition" has significantly heightened. We are navigating a dual challenge: intensifying physical risks—from compound droughts to systemic supply chain shocks—and a rapidly evolving transition risk profile. This includes an evolving climate litigation landscape and the elevated expectations from regulators and policy makers across the globe which mandate that climate risks be fully embedded into our governance and risk appetites.

This second iteration of our report, produced in continued collaboration with **KPMG**, provides an essential 2026 update to our strategic roadmap. We have sharpened our focus on the market and regulatory developments reshaping sectoral pathways, from the scaling of Sustainable Aviation Fuel (SAF) to the infrastructure challenges of grid distribution. By providing an updated view of decarbonization levers and the "abatement gap," we aim to equip underwriters with the insights needed to anticipate changing risk profiles and deploy capital toward the opportunities of a low-carbon economy.

The depth and rigor of this update would not have been possible without the collective expertise of our market. I would like to extend my sincere thanks to the members of the LMA sustainability committee and climate risk working group who supported us through this process. Your technical insights and practical experience ensure that this report remains a grounded, actionable tool for the entire insurance ecosystem.

As we move forward, our members' priority remains to listen to our clients' unique challenges and work collaboratively to find the right opportunities for risk mitigation. By staying close to the evolving needs of the sectors we serve, we can continue to provide the innovative coverage and resilience required to navigate the transition together.

2 Introduction

The purpose of the ‘Underwriting the Transition’ report is to provide an updated overview of the implications of climate change on the insurance sector. Building on last year’s edition, this report focuses on the 2025 market and regulatory developments, and how these are reshaping sectoral transition pathways. The report also presents an updated view of the decarbonisation levers available for the sectors to transition, and outlines the implications for insurers and underwriters in terms of emerging risks, opportunities, and priority actions.

The scope of this report remains limited to first party property damage from a coverage perspective and on the following sectors: Transportation (Aviation, Marine, Road Freight); Energy (Mining, Oil and gas, Power Generation & Distribution); and Construction and Commercial Real Estate. We have not considered geographical considerations, apart from where explicitly mentioned such as in market context section. We have not provided detailed analysis related to climate litigation, except when referenced to illustrate the breadth of potential transition risks. In addition, the ‘Just transition’ defined as a ‘a low-carbon transition that is fair, inclusive, creates decent work opportunities and leaves no one behind’ is not explicitly considered. Lastly, although nature is inextricable linked to the climate transition, we have not considered nature-related issues in this report, aside from highlighting nature agreements as a key outcome from COP30.

State of the World: Current policies lead to a significant risk of disorderly transition

The global energy transition is off track. According to the International Energy Agency’s *World Energy Outlook 2025*, global temperatures have already exceeded 1.5°C, and current policies put the world on a trajectory toward ~2.5°C–3°C of warming by 2100. Even under the most ambitious scenario, Net Zero by 2050, temperatures are modelled to peak at around 1.65°C before declining slowly.¹

This marks a fundamental shift from last year’s assumptions. In 2024, the expectation was that announced pledges could steer the world closer to 1.5°C. Today, the consensus emerging from COP30 in Belém is that incremental policy adjustments will not deliver the structural reforms needed to achieve Paris Agreement-aligned goals. The result is a growing risk of a disorderly transition, characterised by delayed and regionally fragmented policy action with potential abrupt interventions, steeper increases in fossil fuel prices, uncertain pace of technology evolution with breakthroughs outpacing regulatory readiness, and significant impacts on real financial asset valuations.^{2 3}

¹ International Energy Agency, *World Energy Outlook, 2025*, [Link](#)

² World Economic Forum, *What happened at COP30 – and what comes next?*, 2025, [Link](#)

³ Network for Greening the Financial System – Workstream on Scenario Design and Analysis, *NGFS long-term scenarios for central banks and supervisors*, 2024, p. 10, 23, 33, [Link](#)

Climate Risk: A Twin Challenge

For insurers, climate risk is a dual challenge:

- **Physical risk:** Intensifying extreme weather events, floods, wildfires, and heatwaves are already disrupting operations and damaging infrastructure. Rising sea levels, water stress, and compound shocks, such as simultaneous droughts and crop failures, pose systemic threats to supply chains and asset resilience. Extreme weather can cause direct physical damage to insured assets while simultaneously disrupting critical supply chains, leading to prolonged downtime and cascading financial losses across multiple geographies.
- **Transition risk:** The shift to a low-carbon economy brings exposure to stranded assets, abrupt policy changes, and technology adoption risks. Affordability pressures and uneven regional progress increase volatility, while new technologies such as hydrogen, Sustainable Aviation Fuel (SAF), and battery storage introduce unfamiliar perils and performance uncertainties.
 - **Climate Litigation:** In particular, climate litigation is emerging as a major transition risk. This includes lawsuits related to greenwashing, failure to meet decarbonisation targets, and directors' duties. This can create significant liability and reputational risk for insureds, as well as influence appetites and coverages from insurers. The UK Prudential Regulation Authority's (PRA) latest supervisory expectations (PS25/25 and SS5/25, published December 2025) emphasise that climate-related financial risks, including transition risks such as policy disruption, technology shifts and climate-related litigation, must be fully embedded into insurers' governance, risk management, scenario analysis and disclosure processes. The PRA highlights that many firms are still not adequately evaluating or mitigating these risks and stresses that litigation and reputational exposures are credible climate-related transmission channels that must be explicitly assessed within risk appetites and business models.

These dynamics mean underwriters must anticipate changes in risk profiles and adapt coverage strategies to remain relevant and competitive.

Political and Market Context

Affordability has become a defining issue shaping energy policy. High electricity prices and cost-of-living pressures have led some advanced economies to roll back or delay transition investments, while emerging markets call for concessional finance and lower-cost debt to make the transition viable. At COP30, two structural failures dominated discussions: the lack of progress on grid investment pledges and the failure to agree on explicit fossil fuel phase-out language, a gap that continues to suppress investment signals for renewables, storage, and flexibility solutions.

Structure of the 2025 update

- **Market Context:** A brief overview of the current macro, regulatory and policy, and climate landscape, highlighting key developments since the last update.
- **Sector Specific Updates:**
 - **Updated Modelling:** A short summary of the latest emissions and temperature pathway revisions and what has changed in the underlying evidence.
 - **Sector Implications:** A concise review of how the updated pathways affect priority sectors, including emerging risks and opportunity signals.

Scope of analysis

The Sectoral Decarbonisation pathway analysis has been conducted to give an illustrative view of a potential pathway to meet a 1.5°C scenario, in line with the Paris Agreement, relative to a business-as-usual (BAU) counterfactual that aligns to a roughly 4°C pathway by 2100.

Decarbonisation lever analysis and data

This analysis has been conducted to provide a potential view of the transition for each sector in line with a 1.5°C scenario, and associated levers, for the purposes of assessing the associated insurance implications.

This work leveraged KPMG models and analysis, including KPMG in-house climate models, contributions from the industry and sector experts, and published industry pathways and data where relevant, including the International Energy Agency World Energy Outlook 2025. Pathways do not take into account current capacity, investment requirements, or the policy or regulatory environment required to meet the 1.5°C pathway. However, where possible, we have built in the potential outcome based on current views on direction of travel, which may take into consideration some or all of these factors.

Across certain decarbonisation glidepaths, there is an abatement gap based on the necessary 1.5°C pathway and degree of abatement achieved. Any abatement gap must be met through high quality offsets or removals.

This review was conducted based on the currently available information. Where public pathways have been leveraged, these have been referenced. The potential abatement volumes are indicative and based on ranges and assumptions, and are subject to variation based on the evolution of multiple factors, including technology, commercial viability, policy and regulation etc.

The analysis has been conducted at a global level, using global averages, based on multiple variables such as global averages for activity, output, grid intensity among others, and so regional divergences must be taken into account when applying our findings.

All methodological approaches undertaken to produce this report align with those undertaken to produce the previous iteration released on 24 October 2024.

Simple Glossary (see Section 6 for Expanded Glossary)

Key Term	Definition
BET and FCET	Battery-electric trucks and hydrogen fuel-cell trucks.
CCUS	Technologies that capture and store or reuse CO2 emissions.
CORSIA	ICAO's global scheme for monitoring, offsetting, and reducing aviation emissions.
CPS, STEPS, NZE	IEA scenarios based on current policies, announced policies, and a net zero pathway.
Critical minerals	Minerals such as lithium, nickel, cobalt and rare earths needed for clean technologies.
Grid congestion	Network constraints that limit new power connections or higher loads.
HVDC	High-efficiency long-distance electricity transmission used for offshore wind and interconnectors.
OEM	Company that makes components or equipment used in another company's finished product.
Physical risk	Damage or disruption caused by extreme weather and other climate impacts.
Retrofit	Upgrades to buildings that improve energy efficiency and reduce emissions.
SAF	Lower carbon aviation fuel from bio-based or synthetic sources.
Transition risk	Risks from policy change, technology shifts, market disruption, and litigation.

Reliances and limitations

This report has been prepared solely in connection with, and for use in accordance with, the terms of our engagement letter dated 11 November 2025 addressed to the Lloyd's Market Association (the "LMA"). Our report is for the benefit and information only of those parties who have accepted the terms and conditions of our Engagement Letter and should not be copied, referred to or disclosed, in whole or in part, without our prior written consent, except as specifically permitted in our Engagement Letter. To the fullest extent permitted by law, we will not accept responsibility or liability to any other party (including those parties' legal and other professional advisers) in respect of our work or the report.

In preparing this document, under the terms of our engagement letter dated 11 November 2025, we have made use of information, where applicable, provided to us by the LMA which we have not independently verified. If any information upon which we have relied is incomplete or inaccurate or further information subsequently becomes available, our views could change; however, in this event we are not obliged to update our document to reflect this.

This document makes various assumptions and which together with any applicable information provided by the LMA, provides the basis of our views. Our views shall not amount to any form of guarantee that we have determined or predicted events, whether present or future. Accordingly, the information in this document is provided by KPMG LLP on the basis that no liability is accepted for any errors of facts, assumptions and representations.

The information contained in this report is based on prevailing conditions and KPMG's view as at 24 February 2026. KPMG has not undertaken to, nor shall KPMG be under any obligation to, update the report or revise the information contained in the report for events or circumstances arising after the 24 February 2026 and the report or any information contained in the report shall not amount to any form of guarantee that KPMG have determined or predicted future events or circumstances.

KPMG's findings shall not in any way constitute advice or recommendations regarding whether or not the LMA should proceed with any proposed actions and/or commercial decisions associated with this report. All relevant issues may not have been identified, and only those issues that have been identified as part of our review are included in this report.

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