

# Insuring disaster: the insurance industry's support for fossil fuels

January 2025

### Key points:

- Historically, insurance has been a stabilising force in the economy, mitigating risks and absorbing shocks. But insurance companies' continued support for fossil fuel production means insurers now directly contribute to economic and social harm from climate change. In doing so, they are causing insurance premiums to rise, and some activities to become uninsurable, destabilising the economy and jeopardising their own business models.
- Lloyd's of London is a major player in fossil fuel insurance which has backtracked on climate action; over 90 per cent of the underwriting agents it manages fail to meet fundamental environmental and social standards.
- Policy makers should put pressure on the government, Lloyd's and its regulators to develop proper transition plans, integrate sustainability into insurance industry regulation and develop business models based around avoiding environmental and social harm, and developing clean industries and sustainable business.

### Introduction

Over a third of weather related insured losses over the past two decades, totalling \$600 billion, is attributed to climate change.<sup>1</sup> On current trends, insured losses could soon reach over £150 billion a year.<sup>2</sup> Soaring claims from climate-related economic destruction are contributing to rapidly rising insurance premiums. In doing so, they are pushing insurance out of reach for many communities, making some activities and communities uninsurable, and undermining the risk-pooling business models of insurers themselves.

Yet insuring fossil fuel extraction – the activity responsible for climate-related damage - continues to be big business for insurers and reinsurers. Members of the UK insurance industry therefore urgently need to pivot away from enabling fossil fuel expansion and to the clean energy transition.

The critical role played by the insurance industry lies in the decisions it takes over which risks industries and society take and which technologies are supported or deemed to be high risk. Insurance is necessary to de-risk and develop both fossil fuels and renewables and is often a prerequisite for investment. Insurers choose what to support. It is important that incentives, through regulatory pressure, are introduced to steer these choices and end the insurance industry's significant contribution to driving climate change.

The size of the renewable energy insurance market is still under 30 per cent of the extent of the fossil fuel insurance market.<sup>3</sup> This mismatch of priorities threatens to hamper clean energy investments.

However, insurers have escaped the kind of scrutiny directed at fossil fuel companies. This briefing shines a light on the role of insurance in climate change, particularly on the industry's main fossil fuel enablers.

London is the world's largest speciality insurance market – nearly twice as large as its nearest competitor - accounting for a quarter of City of London GDP. Lloyd's of London's market share is over half of this business and it is, collectively, the world's largest insurer of fossil fuels with nine per cent of the global fossil fuel market.

Insurers invest their income from premiums and are thus also major asset owners. Globally, insurance companies have over £27 trillion of assets under management, with UK insurers having £1.8 trillion.<sup>4,5</sup> These funds could, and should, now be supporting a clean energy future for the world, not the exploration of more fossil fuels which, it is universally acknowledged, we cannot afford to burn to keep societies safe and ensure businesses and nations thrive.

## Context

Burning fossil fuels accounts for over 75 per cent of current greenhouse gas emissions.<sup>6</sup> The International Energy Agency (IEA) warns that reaching net zero emissions will require a huge fall in the use of fossil fuels. Under any scenario, to keep within 1.5°C of global heating, this means no new oil and gas fields, coal mines or mine extensions should be permissible.<sup>7</sup>

At the 2023 COP28 international climate summit in the UAE, the final negotiated framework agreement explicitly called for 'transitioning away from fossil fuels' for the first time.<sup>8</sup>

But the oil and gas industry is increasing, not decreasing, its production. The eight largest US and European based producers are on track to increase their combined production by 17 per cent above 2023 levels by 2030. Cumulative oil and gas production between now and 2050 threatens to exhaust more than 30 per cent of the entire world's remaining carbon budget, set to limit global temperature rises to 1.5°C. Global warming is still significant within this limit but considered to be safer than the dangerous consequences of rising above it. Such an increase in fossil fuel production on a global scale

will put the world on a path towards global heating well beyond 2°C.<sup>9</sup> Yet the industry is still able to secure insurance to cover its activities.

The transition to renewable energy sources, in particular wind and solar, is now moving ahead at pace, with costs falling as the scale increases, but this needs to speed up in the race to keep the world within safe climate limits. To rapidly scale up these industries requires both insurance and investment. This presents major challenges and opportunities for the UK insurance sector.<sup>10</sup>

## The economic risks of insuring fossil fuels

### 1. Rising premiums and uninsurable risk

Higher losses from a worsening climate is leading to a repricing of risk by insurers, sparking a significant hike in premiums. Effectively, this is an extra carbon price being paid by consumers.

Research by global reinsurer Aon for its 2024 [Climate and catastrophe insight](#) finds that global economic losses from natural disasters totalled \$380 billion in 2023, 22 per cent above the average this century.<sup>11</sup> Global estimated [insured losses](#) from natural catastrophes (which include natural phenomena like earthquakes, but are dominated by weather-related incidents) in 2023 exceeded \$100 billion for the fourth consecutive year. Global insured losses from natural catastrophes have grown on average five to seven per cent per year since 1994, twice the rate of economic growth.<sup>12</sup>

Reinsurers have [responded](#) by pushing up prices for primary insurers, who have then passed them on to consumers.<sup>13</sup> Bank of England [analysis](#) suggests that insurance premiums could double in the worst affected UK postcodes over the next 30 years.<sup>14</sup>

This is fuelling a growing ‘insurance gap’ of uninsurable risks, leaving people and sectors fully exposed to these risks, with only an estimated 23 per cent of European potential weather-related losses now insured.<sup>15</sup> In California, a string of big home insurers have halted new business in response to a surge in extreme weather losses.<sup>16</sup> Globally, the insurance gap continues to widen. It reached an [all-time high](#) of \$1.8 trillion in 2022, with 60 per cent of the world's crop production unable to find insurance cover.<sup>17</sup>

In other words, insurers which underwrite fossil fuel projects are passing off the financial consequences of the climate damage they cause onto individuals, governments and businesses.

### 2. Faulty risk modelling contributes to complacency

Part of the reason why insurers continue to underwrite fossil fuels may stem from fundamental and unresolved problems in how they model climate risks, presenting solvency concerns within the sector.

The industry relies on outdated and unreliable risk models. Climate change produces cascading and non-linear effects which governments and the actuaries and risk managers working for insurance companies find almost impossible to model using conventional econometric tools.<sup>18</sup> This has, for example, led to the publication of implausible results in the Task Force on Climate-related Financial Disclosures (TCFD), with reporting that shows benign, or even positive, economic outcomes in a hothouse world, starkly at odds with scientific predictions.

Insurers have been relying on historical weather and claims data to price risk and maintain solvency. However, climate change presents a fundamental challenge to that approach, as weather patterns are changing and increasing both the frequency and intensity of damaging weather events. Past patterns are not a safe predictor of future trends.

From 2017 onwards, average annual insured losses from natural catastrophes have been over \$110 billion, more than double the average of \$52 billion over the previous five year period.<sup>19</sup> This doubling of losses was not anticipated by insurance sector models, nor by insurance regulators.

The issue is acknowledged by leading insurers and highlighted in reports by the Institute and Faculty of Actuaries, but underlying issues remain unresolved.<sup>20</sup>

Further attention needs to be given to updating modelling and to stress testing, to avoid the potential for insolvencies that have both significant individual and potential cascading effects.

### **3. Macro-economic instability ('double materiality')**

Insurers' failure to take responsibility for climate damage caused by their clients' fossil fuel activities poses existential risks to the financial system and wider economy, potentially worse than those which seeded the global financial crisis of 2008-10.

The risk of financial contagion arises because insurers are major businesses, critical to the financial services sector, and are of systemic importance generally. They account for more than seven per cent of the global economy, greater than the GDPs of Spain, Italy and France combined.<sup>21</sup>

Insurance companies do much more than just offer insurance, they are major financial players who reinvest the premiums they receive in long term assets. Doing so spreads risk across generations and creates demand for long term assets. As such, they are a major supplier of patient capital to the economy and are key customers for government debt.

The role of the industry in the economy poses a threat unless insurers come to terms with the damage they are causing by enabling fossil fuel extraction. Because of rebounding impacts on the economic and financial system from climate damage, insurers supporting fossil fuel extraction are ultimately undermining their own business models, as well as those of apparently

unrelated sectors. As with the global financial crisis, the result could be more taxpayer-funded bailouts of major financial institutions.

Bank of England analysis suggests the value of insurers' assets could fall by up to 15 per cent, if no action is taken by the industry on climate, compared with losses of 'only' eight per cent if early action is taken.<sup>22</sup> The losses accrue mainly through falls in the value of equity holdings and increases in credit downgrades and defaults in life insurers' corporate bond portfolios.

Some insurers complacently believe that, although a warmer and wilder climate leads to higher payouts, insurance losses from these are sustainable, so long as risks can be pooled globally.<sup>23</sup> But this ignores the fact that climate change is increasingly a co-ordinated global shock, akin to the financial contagion through the excessive housing debt held by global financial institutions which sparked the global financial crisis. The rising frequency, and global co-ordination, of climate shocks fatally undermines the basic economics of insurance, which is that insured risks are independent of each other and random.

Insurance companies also tend to own fossil fuel assets. By investing in corporate bonds and equity, the industry unlocks secondary financing for fossil fuel firms. But insurers also thereby increase their financial exposure to companies whose long term financial viability is threatened by over reliance on stranded assets. The inevitable transition to a decarbonised economy means a shrinking role for fossil fuels, rendering large reserves of fossil fuels, owned by mining and oil and gas companies, effectively valueless in future. For example, keeping global temperature rises to a maximum of 2°C would entail leaving 77 per cent of fossil fuels unexploited, with an estimated value of between \$4 trillion and \$11 trillion.<sup>24</sup>

Climate change also destabilises geopolitics, for example by [fuelling extremism](#) or [causing food shortages](#) and driving immigration.<sup>25,26</sup> Trade and investment in such a fractious and uncertain world will be severely disrupted, which will be extremely damaging for an open economy such as the UK's, as the government's 2021 [Integrated Review](#) of security risks recognised.<sup>27</sup> Rising geopolitical risks will amplify those from nature degradation, introducing further, hard to model, instability.

The insurance's industry's failure to respond to climate risk thus jeopardises economic stability and is already a material cause for concern. For example, real estate prices in some regions in the US are dropping in response to the financial risks of climate impacts. Citizens in these regions are [struggling](#) to secure mortgages because insurance providers are restricting their product offering, increasing premiums or withdrawing coverage.<sup>28</sup>

In March 2023, the US Senate Budget Committee held a hearing on climate risks destabilising the insurance market in which the chair [warned](#) that the knock-on effect on the property market has the potential to cause "systemic economic damage across the whole economy, similar to what we lived

through in 2008”.<sup>29</sup> Lloyd’s of London conducts 50 per cent of its business in the US.

We are still living with the effects of the last global financial crisis. Failure to appreciate the systemic jeopardy the financial system faces from fossil fuel risks sparking the next one is a foretaste of the economic dislocation to come.

## Lloyd’s of London’s support for the fossil fuel economy

Many leading European insurers with UK portfolios, and some leading UK based insurers, are taking significant action to align their insurance and investment activities with climate science, including [Allianz](#), [Aviva](#) and [Swiss Re](#), who have set stringent climate targets matched with action.

The Association of British Insurers has also set out its [targets](#) and appears committed to seriously tackling its members' role in climate change.<sup>30</sup>

However, the UK insurance industry is being undermined and let down by Lloyd’s of London and other members of the London speciality insurance market.

Lloyd’s and many of its members (Lloyd’s stands apart from other insurers in that it is not a company but a corporate body which organises a market for its member agents) stand out among insurers globally for their extremely poor climate record:

- **Lloyd’s barely registers the importance of climate change in its actions.** A particular issue is that Lloyd’s has no solid framework in place that restricts the underwriting actions of its agents. Instead, Lloyd’s only advises its agents against insuring fossil fuel extraction (FFE) projects, meanwhile remaining the world's largest insurer of fossil fuel related activity.
- **Lloyd’s only published its first environmental, social and governance (ESG) report in 2020.** This set out a framework for its managing agents to stop providing insurance cover for new coal fired power plants, coal mines, oil sands and Arctic energy exploration from January 2022.<sup>31</sup> But it has since backpedalled on this commitment. Its May 2023 market oversight plan stated that it would not be mandating or restricting the underwriting decisions of its agents.<sup>32</sup> Citing vulnerability to anti-trust lawsuits, Lloyds quit the Net Zero Insurance Alliance industry umbrella group in 2023.
- **Bottom of the class.** Campaign group ShareAction has [measured](#) the environmental and social policies of 29 of the leading insurers on 30 key standards of performance on climate change, biodiversity and social issues. Those insurers which fail to meet these fundamental standards were awarded grades ‘E’ or ‘F’ (on a scale of ‘A’ to ‘F’; notably no insurer received an ‘A’ score). When compared with other insurers, the performance of Lloyds as a whole was among the worst. It received an ‘F’ grade and ranks 27th out of 29 for its performance.<sup>33</sup>



- **Lloyd’s individual managing agents performed exceptionally badly on this scale.** Of the 13 biggest agents that were surveyed, six received grade ‘F’ and another four received ‘E’. Just one received ‘B’, which was the highest score. Collectively, this means that most Lloyd’s managing agents have policies that do not meet fundamental environmental and social standards.
- **On the question of insuring future projects,** out of the 51 Lloyd’s managing agents, only 15 have committed not to underwrite risks related to new coal mines and new coal plants. Regarding the expansion of the oil and gas sector, 46 managing agents, which represent close to 93 per cent of the market, have yet to commit to stop insuring new oil and gas fields.<sup>34</sup>

Lloyd’s is aware of the risks for its market, [stating](#) in 2021 that: “It is clear that continuing to provide (re)insurance for carbon intensive businesses and projects will become increasingly unsustainable, with climate and transition risks intensifying... it would be detrimental to our overall competitiveness and performance to risk becoming a market of last resort for carbon-intensive industries whose business models and operations will become increasingly unviable and unsupported in the decades ahead.”<sup>35</sup>

Lloyds maintains that it merely provides a marketplace for its managing agents and, therefore, has little jurisdiction. In reality, Lloyd’s has the power to make byelaws regulating the operation of managing agents in relation to the Central Fund, membership, underwriting, insolvency and enforcement.

Lloyd’s says it is waiting for a political steer from the government. Its [2023 Sustainability report](#) claims that: “Our climate-related targets are dependent upon the action of UK and global governments and whether or not they enact policy to transition to lower carbon economies and net zero by 2050.”<sup>36</sup> With the current government having campaigned to force FTSE 100 companies to “develop and implement credible transition plans that align with the 1.5C goal of the Paris agreement”, pressure is mounting on Lloyd’s to change course.

Parliament itself is in a good position to force change due to its historic relationship with Lloyd’s. The Society of Lloyd’s was founded under statute by the Lloyd’s Act 1871, and subsequent updates to the Lloyd’s Act (the last being [in 1982](#)) governing its operation. Lloyd’s has responsibilities for regulating and directing the business of insurance at Lloyd’s under the Lloyd’s Acts.

Lloyd’s is also under the jurisdiction of several important regulators. Under the Financial Services and Markets Act 2000, Lloyd’s is [regulated](#) by the UK Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA). The FCA is an independent public body, accountable to the Treasury and to parliament. Lloyd’s managing agents are regulated by both the FCA and the PRA, while members’ agents and Lloyd’s brokers are regulated by the FCA. In practice, much of the regulation of Lloyd’s market is effectively delegated to Lloyd’s itself.

## **What will encourage Lloyd's, and other leading insurers, to pivot away from fossil fuels?**

### **1. Align insurance coverage with a 1.5°C global warming pathway and mandate Climate Transition Plans for all insurers**

The government was elected with a manifesto pledge to force UK-regulated financial institutions and FTSE 100 companies to “develop and implement credible transition plans that align with the 1.5°C goal of the Paris Agreement”. This should be implemented as soon as possible.

Transition plans should explicitly rule out support for fossil fuel extraction. They should prioritise tangible, real world impacts of insurers' asset and liability portfolios by incorporating all scope 3 emissions (supply chain emissions), including underwriting, and focus on the reduction of greenhouse gas emissions in absolute terms.

To monitor progress, plans should be updated every three years at a minimum and include data on the extent of greenhouse gas emissions arising from both insured activities and insurers' investments. Data transparency should be mandated in general by requiring insurers to disclose comprehensive and accurate data on both physical and transition risks, sectoral composition of investment portfolios, insurance accessibility and fossil fuel expansion underwriting.

It should also become mandatory for any insurer that claims it has 'ESG', 'climate-oriented' or 'net-zero' status to justify this with reference to the transition plans of their clients.

### **2. Integrate sustainability and an appreciation of systemic risks from FFE into financial regulation**

Regulators should take precautionary action by integrating climate risks into the supervisory framework and capital standards for internationally active insurance groups. These are rules and regulations; for example, concerning capital cushions which insurers must follow to access the UK market. They should be designed to recognise that the impact of environmental risks - including climate change and nature decline impacts - are far reaching and non-linear, with uncertain thresholds and are sometimes irreversible.

Access to public reinsurance, or other government-related financial support for large insurers, should be tied to reducing involvement in fossil fuel underwriting and investments.

It is vital that PRA more actively considers the macro-prudential impact of insuring fossil fuels in its regulatory activity. Underwriting FFE poses systemic risks to the entire financial system and, thus, to the global economy, but these risks are chronically underestimated under many current risk frameworks, partly as they extend beyond the time horizons of risk models.



Regulators should consider a requirement for higher capital requirements for fossil fuel exposure, to guarantee insurer's own safety and soundness and to account for the overall financial system risks insurers are creating.

The PRA should be required to take into account the findings of the report *Limitations and assumptions of commonly used climate-change scenarios*, by the Institute and Faculty of Actuaries, in the design of its insurance stress tests.

### **3. Encourage insurers to take the opportunities to develop and scale up green energy business models**

Arguments that tightening climate regulation for insurers will harm a vital UK industry are false as there are many alternative lucrative business models it could support. It is estimated that meeting the UK's 2050 net zero target will raise over £266 billion for the UK economy over the next three decades, according to the UK government.<sup>37</sup>

Development of renewables will provide long term alternatives to FFE for the insurance market (while also cementing the stranding of fossil fuel assets). Some in the industry complain that UK regulators, unlike those in America, are reluctant to push insurers to refocus their business models onto emerging green industries.<sup>38</sup> The government and pensions regulators should correct this and put more pressure on the insurance industry to develop new business models based on clean industries and technologies.

### **4. Make clear that combating climate change is a fiduciary duty**

The government is holding a review of pensions to improve security in retirement and increase productive investment in the UK economy. The review is expected to result in a Pensions Scheme Act, to be debated by spring 2025. As many pension funds invest in insurance companies, this could be a powerful means of influencing their conduct.

Parliamentarians should ensure this review covers the issue of fiduciary duties of directors of pension funds. Fiduciary duties should consider the physical, financial, transition and existential risks presented by climate change and biodiversity loss. Directors should be obliged to ensure that their investments and actions do not add to these risks and take active steps to reduce them.

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## **Endnotes**

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