

**WHITEPAPER**

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# Climate change – the biggest risk multiplier for the insurance industry

## Introduction

There can be little argument with the scale of the challenge that the world faces from climate change, and insurers are no different. In fact, insurers face a complex challenge because climate change risk affects both sides of the balance sheet, namely assets and liabilities. With Net Zero commitments now a reality, from a corporate perspective, insurers need to define their own Net Zero strategy, sustainability policies, and the steps they are taking to achieve it.

In this paper, we examine the challenges climate risk presents to insurers and introduce the concept of an integrated ESG-C Risk Assessment Framework. It provides insurers with a model to think about and address the challenges arising from Climate Risk.

This paper is the first of a series that focus on climate risk topics for insurers:

- » Climate change – the biggest risk multiplier for the insurance industry
- » [Constructing Climate Pathway Scenarios to Assess the Financial Impact of Climate Risk](#)
- » [Incorporating ESG into P&C underwriting](#)
- » [Climate aware Own Risk Solvency Assessment](#)
- » [Incorporating Climate Risk into Strategic Asset Allocation](#)
- » [Exploring the Impacts of IFRS Sustainability Disclosure Standards on Insurers](#)

## Factors driving an insurer's Board agenda

Regulation, Risk Management, Reputation Risk, and Revenue Opportunities, are four main factors driving the agenda of many insurance company boards.

Risk challenges are often underpinned by regulation and climate change risk is no different. For example, In October 2021 the Bank of England released its updated Climate Change Adaptation Report 2021<sup>1</sup> which included the UK's Prudential Regulation Authority's (PRA) planned move in 2022 from assessing the implementation of its climate-related supervisory expectations to actively supervising against them. Some countries started mandating climate risk disclosures, for example France with Article 173-VI in 2016, pressure has been growing for voluntary disclosure of the impact of climate change risk on an Insurers business. The Task Force on Climate-related Financial Disclosures (TCFD) recommendations, aim to provide data that enables better investment, credit, and underwriting decisions. There is now a move towards mandatory disclosure in many jurisdictions including the UK, New Zealand, Japan, Hong Kong, Australia, Brazil, EU, Singapore, Switzerland. In the US, the Securities and Exchange Commission (SEC) has recently proposed rule changes to enhance and standardize climate-related disclosures for investors.

An insurer's Risk Management strategy must evolve to address emerging physical and transition risks. Insurers need to be able to translate climate risk into financial metrics to measure the financial impact across market, credit, liquidity, and insurance risk. Reputation Risk, with a range of stakeholders, is becoming a key issue for insurers as they and their competitors commit to net zero strategies. Insurers who rise to these challenges can thrive and even access new revenue streams.

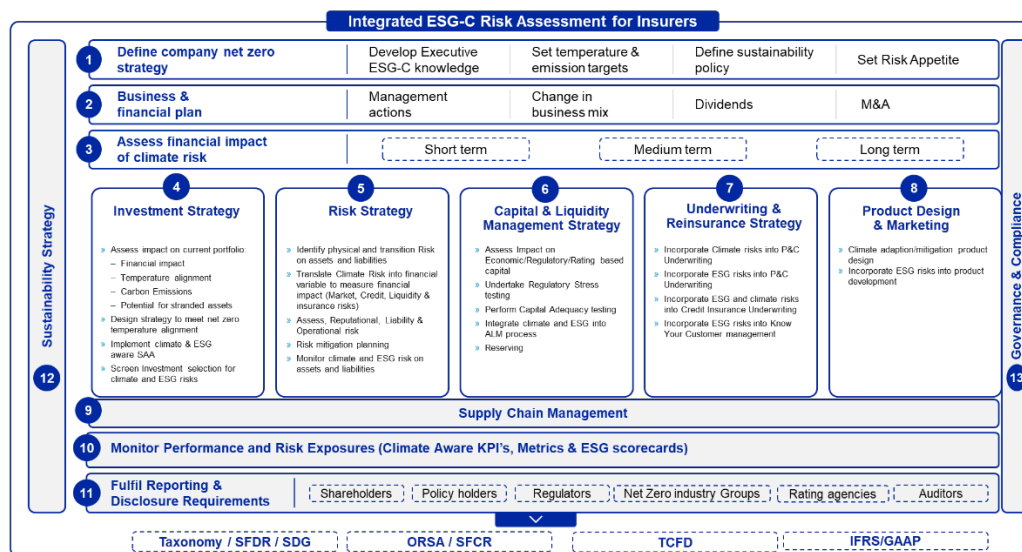
To address climate risk in a comprehensive way, insurers need to adopt an integrated approach to managing a range of emerging direct and indirect risks across the entire business, considering both sides of the balance sheet.

### Integrated ESG-C Risk Assessment Framework for Insurers

Climate and ESG touch every part of an insurer: from its impact on the business itself, to the entities it either invests in or insures, through to the total value chain making up its operations. Many of these elements are inter-related, and this adds to the overall complexity when it comes to identifying, measuring, managing, and reporting on total ESG-C.

To help insurers meet this challenge, and based on extensive customer engagement across the globe, Moody's has developed an integrated ESG-C framework for insurers. Rather than presenting Moody's capabilities in the ESG-C space, this is intended to provide a clear picture of the different elements, either individually or collectively, that insurers need to address in a comprehensive, integrated plan of action to achieve net zero.

Figure 1 The integrated ESG-C Risk Assessment Framework



<sup>1</sup> <https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/publication/2021/october/climate-change-adaptation-report-2021.pdf?la=en&hash=FF4A0C618471462E10BC704D4AA58727EC8F8720>

## Starting at the top

A truly integrated approach starts with the Board defining the Net Zero strategy. Insurers will need to ensure that these senior leaders have the requisite knowledge and understanding around ESG and climate risk to make such decisions. This includes signing off the commitments to meet specific temperature and emission targets that contribute to a low carbon economy and defining their sustainability policy and risk appetite. As part of this process, the executive management team will need to set out interim milestones, the timeline for meeting these targets, and determine how the business will operate to fulfill the stated commitments. There is clear reputational risk at play here once a firm commits to and is transparent about its Net Zero goal and strategy. But there is also potential for a positive impact on reputation with a wide group of stakeholders.

To meet the newly adopted ESG-C corporate objectives, insurers need to develop climate-aware business and financial plans, including:

- » Setting out management actions over short, medium, and long-term time horizons allowing for potential transition paths and physical risk exposures.
- » Assessing how the business mix might change given different climate risk exposures.
- » For listed insurers, considering the possible effect on dividend policy.
- » Looking at implications for corporate mergers, acquisitions and divestitures.

Implementing and maintaining a business plan capable of evolving with real-world developments depends on the availability of flexible forward-looking scenarios. These are crucial to enable the financial planning and analysis teams to project the balance sheet and P&L under a range of climate narratives and time horizons.

## Understanding the financial impact of Climate and ESG Risk

For insurers, understanding the financial impact of climate risk over different time horizons on both sides of the balance sheet is critical. In the short term, the impact from physical risk exposures and market re-pricing dynamics on the asset portfolio is key but over the medium to long term, firms also need to understand the impact of different transition paths and physical damage models.

Sophisticated scenario analysis is needed to understand the financial impact of climate risk which empowers executives' decision-making and provides insight for business and financial planning. It also informs the priorities of the core operating units' strategies, including investment, risk, capital and liquidity, underwriting and reinsurance, as well as the product design and marketing. This enables the business has a consistent view of the financial impact required to achieve the firm's Net Zero and sustainability targets.

This understanding is vital for all areas of an insurer's risk management strategy, its reputational risk management, and regulatory compliance as well as providing the opportunity to develop new revenue streams.

Read [Constructing Climate Pathway Scenarios to Assess the Financial Impact of Climate Risk](#) to find out more.

## Investment Strategy

Insurers have been incorporating ESG factors into their investment strategy and portfolio management for some time. This can be enhanced for climate risk by taking several steps including:

- » Assessing current portfolios in terms of financial impact, current temperature and carbon footprint, ESG-C risk exposures and whether they hold any stranded assets.
- » Considering how the business mix might change given different climate risk exposures.
- » Determining the required investment glidepath in terms of the organization's Net Zero timeline, temperature, and emission targets and screen available assets against the appropriate ESG criteria.
- » Considering portfolio construction and how best to implement climate-aware strategic asset allocation.

However, sourcing reliable and consistent data to support ESG risk assessment for both public and private assets is a challenge and incorporating carbon emission and temperature targets, together with different climate narratives into the optimization process of the portfolio construction is complex.

Insurers who have committed to the Institutional Investors Group on Climate Change (IIGCC) goal of driving significant and real progress towards a Net Zero and resilient future by 2030 will need to ensure their investment strategy aligns with the IIGCC principles.

Read [Incorporating Climate Risk into Strategic Asset Allocation](#) to find out more

## Risk Strategy

Insurers need to understand climate risk in terms of physical and transition risk exposures and the climate risks on their assets and liabilities. Once these risks are identified, they can be measured by translating the impact onto existing risk exposures and relationships (such as, market, credit, liquidity, insurance, reputational, liability, and operational risk). The organization's risk strategy can then evolve to include mitigation plans given the new exposures, new interactions and ongoing monitoring for emerging risks identified as well as potential new threats on the horizon.

Read [Climate aware Own Risk Solvency Assessment](#) to find out more

## Capital and Liquidity Strategy

Insurers need to consider potential impacts of climate risk on their existing:

- » Economic, regulatory, and rating-based capital
- » Capital position as part of regulatory stress tests
- » Capital adequacy and reserving under a range of physical and transition paths.

A select group of UK insurers have recently gained experience of regulatory stress tests through the Bank of England CBES exercise. The objective of this exercise was two-fold: first to quantify the risks to the firms' current balance sheets under three climate scenarios capturing physical, transition and litigation risk, and second to assess how the firms would change their business models in response to the risks presented in each scenario.

## Underwriting Strategy

ESG is fast becoming a key factor in delivering positive underwriting results and a source of competitive advantage, particularly for the corporate P&C industry. The growing number of insurers who are signatories to the Net Zero Insurance Alliance will also need to set independent underwriting criteria and guidelines aligned with a 1.5pc Net Zero transition pathway

These strategies are all important parts of an insurers overall risk strategy as well as crucial for addressing regulatory challenges.

Read [Incorporating ESG into P&C underwriting](#) to find out more

## Product Design and Marketing

Opportunity exists for product innovation, and therefore new revenues, for insurers placing climate risk management at the heart of their business. This could take the form of products which include the impact of climate change as well as new pricing strategies. Marketing can boost an insurer's reputation with a multitude of its stakeholders.

## Supply Chain Management

Insurers and their customers need to consider the impact of climate risk throughout their value chain. This includes assessing the ESG performance of their suppliers to form a comprehensive view of their exposure to ESG risk. Furthermore, the ability to extend this view to the network of suppliers (i.e. fourth party relationships or their suppliers) insurers and their customers are exposed to indirectly can help manage business interruptions risks that might arise.

## Monitoring performance and risk exposure

Effective monitoring is critical to building a robust business plan and strategy. Insurers need to ensure they have appropriate KPIs, metrics, and scorecards in place to achieve this, as well as the capability to act on the results.

## Governance & Compliance

Underpinning each component of the integrated risk assessment framework is the need for the appropriate level of governance and compliance. These are vital to support the implementation and validation of core modeling processes required for identifying, quantifying, and monitoring ESG and climate risks and their impact across key business functions.

The volume of data and complexity of metrics involved presents operational challenges. A streamlined approach to collation and aggregation is required not only to meet disclosure deadlines but also provide drill down capability for auditing and valuation. Among other things, at stake is the reputational risk of the business if it is found to be falling short of its stated Net Zero goals.

## Fulfill reporting and disclosure requirements

Reporting is the final, vital piece of the puzzle. Insurers' reporting requirements will only grow with reports for shareholders, policy holders, industry groups, ratings agencies, and regulators becoming standard. Insurers need to be able to convert their climate risk strategy and framework into these outputs consistently and with ease and confidence.

## Building a sustainable business and future

Climate risk remains a top priority for insurers today, but a practical and forward-thinking approach based on a comprehensive risk assessment framework shows that it is possible to incorporate climate risk management into the heart of the business. Models, data, and tools will continue to evolve but insurers should not delay making a start. A flexible, iterative approach can tackle an organization's key priorities first and ensure consistency across each element of the framework. This is vital for complying with regulatory requirements and protecting against reputation risk, particularly after public commitments to net zero. Climate risk is arguably the biggest challenge for insurers today but those that seize the initiative and embrace this challenge can build a sustainable and resilient but also thriving business model for 2022 and beyond.

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