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Climate change: No longer an emerging risk

Central Bank of Ireland publishes Guidance for (Re)Insurance Undertakings on Climate Change Risk

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Introduction

On 27 March 2023, the Central Bank of Ireland (CBI) published its Guidance for (Re)Insurance Undertakings on Climate Change Risk. The publication of the guidance follows a consultation process with industry over the second half of 2022 following the publication of Consultation Paper 151: Guidance for (Re)Insurance undertakings on Climate Change Risk in August 2022. The consultation was generally well received from industry and most of the updates to the final guidelines provide further clarity or emphasis on the CBI's expectations rather than a full overhaul of the guidelines proposed in the consultation.

This briefing note summarises the CBI's guidance and details how (re)insurers can meet the CBI's expectations in this area. We have looked at various functions within a (re)insurance company to highlight areas of focus for each function. This is the first briefing note in our climate risk series, and we will publish another note next month outlining how companies can meet the CBI's expectations for the assessment of material exposures and scenario analysis.

A key outcome from the guidance is that the CBI has specifically stated that climate change is no longer an "emerging risk". The more frequent and severe weather events resulting from climate change are already impacting the global insurance sector, leading to financial losses as a result of higher-than-expected claims. As such companies are expected to embed climate change risk within their risk management frameworks.

The statement that climate change risk is to move from being classified as an emerging risk to a key risk is clear – as an industry we can no longer procrastinate on climate change risk management. Instead, we must plan for climate change and incorporate it into strategic plans and risk management frameworks, including taking actions to identify any potential opportunities for the insurance industry arising from climate change.

Overarching principles

The CBI's proposed guidelines set out a number of overarching principles that the CBI expects (re)insurers to follow. The overarching principles provide insurers with a framework for managing climate change risk and updating internal risk management processes. The following table summarises these principles.

Table 1: Overarching principles

Iterative approach	The CBI expects insurers will adapt and improve their understanding of climate change risk over time, and as such simplified or qualitative approaches will be accepted initially.
Move from emerging risk register	The CBI expects climate risk to be managed as a key risk within the risk management framework going forward.
Double materiality	Insurers need to consider both the impact of climate change on the (re)insurers' activities ("outside in") and the impact that (re)insurers' activities have on the climate ("inside out"). Most (re)insurers have started by considering an "outside in" perspective.
Role of the ORSA	The ORSA will be central to developing an integrated approach to climate change risk. This is as expected given that this is in line with EIOPAs publications in relation to climate change risk.
Time horizons	(Re)insurers should consider the impact of climate change over the short (5 -10 years), medium (30 years) and long-term (80 years), with long-term analysis being more exploratory and qualitative in nature. Actions identified to assess the financial impact and manage any material exposures should be built in to the (re)insurers shorter term strategic and business planning horizons.
Group engagement	(Re)insurers can leverage Group policies and activities so long as these are adapted appropriately for the local entity.

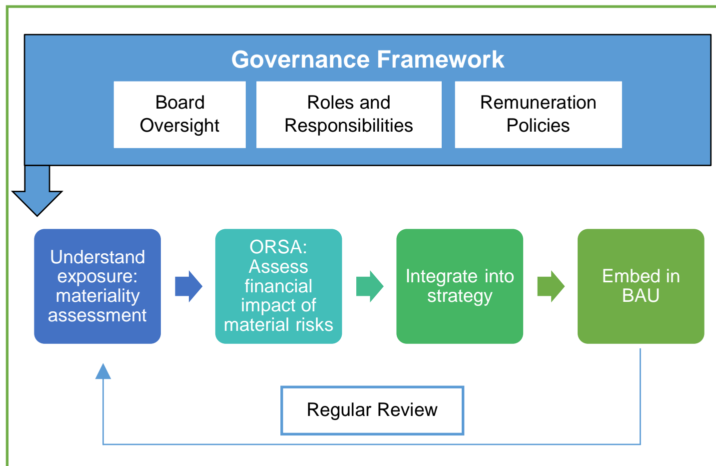
Guidance

The paper also includes more detailed and specific guidance on key areas including governance, materiality assessment, scenario analysis and ORSA, strategy and business model, risk appetite statement and embedding climate change considerations across the business. The aim of the guidance is to provide more detail on how (re)insurers can meet EIOPAs requirements in this area, rather than placing any additional

requirements on Irish (re)insurers.

The guidance also includes a useful infographic that sets out a roadmap for how organisations can embed climate change risk management across the organisation in a proportionate way, depending on the outcome of the company's materiality assessment. In summary the inforgraphic sets out the following roadmap:

Figure 1: Overview of roadmap (see inforgraphic for more detail)



The CBI's main expectation is that (re)insurers will get an in-depth understanding of how climate change risk may impact their business model over the short, medium and longer term and use this to inform decision making and future strategy. They are less concerned about specific scenario analyses at this point, although this will be important for companies that have identified material climate risk exposures.

Some specific examples of this mentioned by the CBI at recent meetings and events include:

- Have motor insurers thought about the impact of a higher take up of electric vehicles on their business model? How are claims in respect of electric vehicles expected to differ from petrol or diesel vehicles? What are the implications of this from a pricing, reserving, capital or strategic perspective?
- Have unit linked providers (or pension providers) thought about the potential reputational risks associated with unit linked products and changing customer preferences with regard to green investments? What are the investment returns expected to be on this asset category and how will this impact customer expectations with regard to expected returns?
- Have health insurers considered the potential impact of increased spread of disease caused by a warmer climate? What price increases can the market bear to reflect potential higher claims experience?

These are the types of questions the CBI wants companies to consider in assessing their exposure to climate change risk. The EIOPA paper "Opinion on the supervision of the use of climate change risk scenarios in ORSA" published in April 2021 provides a very good resource in linking climate change risk to other more familiar risk exposures and provides a useful resource for companies starting this assessment.

The following sections of this note set out the main aspects of the guidance relating to different functions or activities within a (re)insurance company.

CRO and Risk Function

The Chief Risk Officer ("CRO") and Risk Function will be key to embedding climate change risk across the organisation. One of the requirements of the guidelines is to ensure that the responsibility for identifying and managing financial and operational risks arising from climate change is allocated to relevant senior managers. In some organisations the CRO may be given responsibility for this, or it may sit with a Chief Sustainability Officer ("CSO"), or be divided across a number of senior managers.

Materiality Assessment

Regardless, it is expected that the CRO and risk team will be involved in conducting the materiality assessment to identify exposures to climate change risk.

The materiality assessment should be carried out in the context of a baseline scenario i.e. the (re)insurers' "best guess" of the future climate trajectory. The CBI states that this will likely include a long-term outcome and a pathway to that outcome and the related actions to achieve that outcome (e.g., emissions pathways, technology developments, policy changes and socio-economic impacts). Companies can define their own baseline scenario or use publicly available climate scenarios.

The CBI calls out the Intergovernmental Panel on Climate Change (IPCC) Representative Concentration Pathways (RCPs) and the Network for Greening the Financial System (NGFS) scenarios as publicly available scenarios that could be used for the baseline scenario. A good starting point for Irish insurers for the baseline scenario could be the NGFS Net Zero 2050, Delayed Transition and Current Policies scenarios[1] – this is what the Bank of England used as a starting point in Climate Biennial Exploratory Scenario (CBES) in 2021[2]. The CBES scenario specifications provide further detail of the assumptions

[1] NGFS Scenarios for central banks and supervisors

[2] Guidance for participants of the 2021 Biennial Exploratory Scenario: Financial risks from climate change

regarding the development of transition and physical risks under this scenario, and the macroeconomic impacts which can provide more information for insurers in terms of considering their risk exposure under this climate pathway. The baseline scenario chosen is likely to influence the outcome of the assessment and therefore insurers should be careful in choosing an appropriate baseline and interpreting results in the context of that baseline scenario. The CBI notes that (re)insurers may want to consider alternative scenarios if they do not have material exposure under the base line scenario e.g. to gain insights into the circumstance in which a material exposure may arise.

(Re)insurers will need to consider their current strategy and business model in the context of the baseline scenario and identify any potential risks. Both physical and transitional risks should be considered as part of this assessment. Expertise from various functions across the organisation will be required for this analysis and it is likely to be facilitated initially through risk workshops or interviews with key senior managers from across the organisation. The materiality of the risk exposures may vary over time as the baseline scenario evolves and as climate pathways develop over time.

The feasibility of risk mitigating actions should also be considered, including changes to the company's strategy or business model. The materiality assessment should be documented in sufficient detail to justify the conclusion of materiality, even if the assessment is that there are no material exposures. Large or complex (re)insurers that do not identify material exposures in the baseline scenario may wish to consider alternative scenarios.

(Re)insurers should consider referring to the EIOPA paper "Application guidance on running climate change materiality assessment and using climate change scenarios in the ORSA" for fully worked examples of the link between climate related risks and prudential risks to help with this assessment.

The materiality assessment should become part of the regular activities of the risk function over time.

Scenario Analysis and ORSA

Where material exposures have been identified, this will need to be considered as part of the ORSA process. The risk function is likely to be involved in this also. An appropriate range of climate risk scenarios will need to be considered based on the nature, scale and complexity of the business. Scenario analysis will be key to understand the potential financial impact of material risks and how they are expected to evolve over the short, medium and long-term business planning horizons.

It is important to remember that climate change can be a risk accelerator, so the ORSA should consider this in a holistic manner to understand how climate change can also interact with other scenarios, rather than as a standalone event.

Risk Appetite Statement

The risk function is also likely to be involved in any updates to the company's risk framework relating to climate change risk. In order to do this the Company will first need to define its overall strategy in respect of climate change risks. This will need to be considered in the context of the company's (or Group's) overall plans with regard to climate change, including any net zero targets, to ensure consistency. This is not a simple task and will require input from across the organisation, including the Board of Directors and senior management.

Once a high-level climate risk strategy has been identified the Risk Appetite Statements ("RAS") can be updated to include specific climate change risk limits and thresholds. The CBI also notes that the RAS should be updated to integrate any metrics used to track progress against public commitments to meet climate related targets such as net zero targets.

Ongoing Risk Management

On an ongoing basis, the risk team will need to identify, measure, monitor, manage and report on climate change risks through the existing risk management framework. The CBI expects that the risk management function appropriately communicates the exposure to material climate change risks to the Board and advise the board on its strategy and approach to manage and mitigate these risks.

Risk policies can then be aligned to the RAS and risk reporting can be updated to track alignment of the actual risk profile to the company's risk appetite. It is important to note that these may not be aligned initially, and actions may need to be taken over time to reach alignment.

Following updates to the Solvency II Delegated Regulations in August 2022, some companies have already updated underwriting, reserving, investment and remuneration policies to allow for sustainability factors, including climate change risk. While this has been done as an initial step, it will be difficult to update policies and procedures to integrate sustainability factors, without first defining an overall risk strategy with respect to climate change risk.

Reserving and Capital

Climate change risk needs to be appropriately considered in the company's capital measurement, including internal models used in calculating the Solvency Capital Requirement ("SCR").

The risk and/or actuarial function is likely to be involved in this consideration. The CBI expects that (re)insurers will consider the impact of climate change risk with respect to the market, credit and liquidity risk associated with their investments. (Re)insurers also need to have an understanding of the extent to which climate change is allowed for in the models used in the business, particularly external models (e.g. Natural Catastrophe models). It is important to understand any limitations associated with the

models used and develop a plan to address these limitations, particularly for material risk exposures.

Reinsurance

The risk function is also tasked with understanding the appropriateness of risk mitigating actions going forward. This includes the requirement to assess the ongoing availability, structure and pricing of reinsurance, and the potential for reinsurers to have systemic risk exposure. This assessment should also be considered in the context of any intra-group reinsurance.

HoAF and Actuarial Function

Along with the risk function, the CBI expects that the actuarial function, and specifically the Head of Actuarial Function ("HoAF"), appropriately communicates the exposure to material climate change risks to the Board and advises the board on its strategy and approach to manage and mitigate these risks.

Depending on the organisational structure, the actuarial team may have involvement in supporting the risk function in some of the tasks set out above. In particular, the actuarial function may support on carrying out the materiality assessment of climate change risk, defining the baseline scenario, defining and running scenarios for consideration in the ORSA, amongst other things.

Reserving and Capital

Specifically relating to reserving and capital, the CBI state that climate change should be appropriately allowed for in the measurement of the (re)insurer's technical provisions.

The actuarial function should understand any limitations in the cashflow models with regard to modelling climate change risk and develop a plan to address these limitations. The results of the model should be validated and reviewed appropriately.

The actuarial function will need to also consider the appropriateness of using past data to make assumptions about the future in the context of potential changes to the economic and operational environment associated with climate change. In particular, past data may no longer be relevant for projecting future claims for material climate risk exposures.

The actuarial function may also be involved in calculating capital requirements for the company and if so will need to consider some of the requirements set out above in respect of capital and reserving for the risk function.

HoAF opinions

Since August 2022 the HoAF is required to consider sustainability risks when providing his or her opinion on the underwriting policy. Although not explicitly stated in the CBI's guidelines, it is expected that over time the HoAF will need to also consider sustainability factors and climate change issues when providing his or her opinions on the technical provisions, reinsurance arrangements and ORSA.

Underwriting and Pricing teams

The CBI notes that climate change poses challenges for underwriting and pricing. The impact of climate change could affect the insurability of risks in the context of a (re)insurer's risk appetite, resulting in a reduction in insurance penetration and challenges for a (re)insurer's future business model.

A common argument of non-life (re)insurers for not considering climate change risks in their pricing methodology is that products can be re-priced on an annual basis, and as such, respond to any increase in climate change risks. The CBI expects that life and non-life (re)insurers consider the potential effects of climate on pricing and underwriting decisions over the short, medium, and long-term. They point out that re-pricing each year to reflect higher claims expectations may lead to insurance coverage becoming unaffordable for the policyholder over the medium to long term and therefore also want insurers to consider the implications that pricing and underwriting decisions may have on the future viability of the (re)insurer.

Senior Management Team

The CBI expects that the senior management team fully understand the risks posed by climate change to the business and manage these risks accordingly. Consideration of these risks should factor into the strategic decision-making process of the company.

The 'tone from the top' should be one that places appropriate emphasis on the management of climate change risk in line with the company's stated climate change risk strategy.

Supporting the risk management function

While a lot of the responsibility for embedding climate change risk into the risk management framework falls to the risk management function, this will not be achieved without support from senior managers across the organisation. The senior management team will be instrumental in identifying and assessing the exposure to financial and operational climate change risks. For example, the operations team will have a keen understanding of the potential impact on the Company's operations, which could include outsourcing various departments to countries that are more exposed to the physical risks associated with climate change. The marketing and sales teams will have an understanding of the potential impact of changes in consumer preferences and reputational risk exposures associated with climate change. Therefore, senior management will need to be involved in risk workshops and/or interviews to get a holistic view of the potential exposure and mitigation actions across the organisation.

Strategy and business model

A key area of concern for the CBI is that (re)insurers are not considering the impact of climate change risks in their strategy and business plans for the future. As a result, opportunities may

be missed, and the industry may fail to react quickly enough to deal with any material risk exposures.

The guidelines state that climate change risks should be integrated into the (re)insurer's business model and factor in any strategic decisions that are made. External factors such as public policy, regulatory changes, technological advancements, and market pressures (e.g. market pressure to take proactive actions to reduce support and reliance for carbon intensive sectors) also have the potential to create prudential and reputational risks for (re)insurers as these may affect the level of exposure to climate change risk and the pace of transition. The company's strategy and business plan should be considered in this context.

If there are material exposures to climate change the senior management team will need to understand what modifications are required to the strategy and business model in the short, medium and long term to address any challenges to the long-term sustainability of the business model. This will require the development of a clear plan, with defined targets, milestones and tools for tracking and reporting progress.

The CBI have also highlighted that data considerations should also form part of the strategic plans that senior management need to consider. The Company will need to understand additional data needs and the level of granularity of that data, alongside any data management tools required to support the climate related components of the strategy.

Where (re)insurers have made public commitments in relation to climate change (e.g. net-zero commitments), these commitments will need to be supported by robust and specific plans. In the UK there is a lot of focus on the potential litigation risk associated with such public commitments if the plans are not transparent or realistic, or if there is evidence to suggest that companies are green-washing with public commitments but no action. The PRA has also started looking specifically at transition plans to understand how feasible they are and if they have been considered appropriately by insurers.

Ongoing Risk Management

Senior management and teams across the organisation will also need to support the ongoing risk management of climate change risks by updating risk reporting packs on a regular basis and ensuring any material changes in risk exposures are identified and flagged quickly.

Compliance

While not specifically stated in the CBI's guidelines, there will also be a role for the compliance function going forward to ensure that the Company complies with the Solvency II requirements with regard to climate change risk and the domestic guidelines set out by the CBI, both of which should be broadly consistent with one another.

Board of Directors

Governance

The CBI states that it is essential that the Board ensures adequate integration of the management of climate change risks in the (re)insurer as the Board has ultimate responsibility for setting risk appetite and identifying, managing and controlling risks. The guidelines note that the Board should collectively possess the necessary competence and capacity to assess long-term risks and opportunities related to climate change.

In addition to senior management, the Board has a role in ensuring that climate risk management is embedded in the Company's culture in line with its risk strategy and that the 'tone from the top' should be one that places appropriate emphasis on the management of climate change risk.

Strategy and business model

The Board will have a role to play in supporting the strategic and business plans in the context of climate change risk and challenging plans as appropriate. The Company's risk strategy and appetite in respect of climate change risk will be important in driving these decisions and the Board will need to approve any updates to the RAS and risk policies in relation to climate change and sustainability factors.

The Central Bank expects that these decisions, discussions and points for further actions are adequately documented in the minutes of the Board, and relevant committee meetings. As such the Board will be responsible for moving the agenda forward with respect to climate change and ensuring that the Company takes actions in line with the CBI's guidelines. Where appropriate, climate change risk should become a standing agenda item at Board / Committee meetings to ensure sufficient and forward-looking consideration of potential risks. This may be more relevant for material risk exposures over the medium to long term.

Ongoing Risk Management

On an ongoing basis the Board will need to review climate risk reporting packs and ensure that they have a full understanding of the risk exposures and how they are expected to change over time. The Board should use risk reporting to track the alignment of the actual risk profile to the approved risk appetites as a way of monitoring and managing the exposure to climate change risk. This may also be used to monitor progress with regard to any publicly stated climate targets. If defined targets and milestones are not being met, the Board will need to provide challenge to address this.

Conclusion

Overall, the guidelines provide clarity to (re)insurers with regard to the CBI's expectations in relation to climate risk management and a framework for meeting the Solvency II requirements in this area.

The CBI has stated that it has produced these guidelines to help smaller organisations that may not have the same support from a Group in relation to climate change risk. Therefore, while proportionality does come into the materiality assessment, the CBI expects all organisations to comply with the guidelines.

The work involved is not immaterial. Up until this point, a lot of companies have been focused on scenarios or updates to risk policies (following changes to the Solvency II Delegated regulations). However, the CBI's emphasis is on a full risk assessment so that companies have a deep understanding of their potential climate risk exposures. It will be difficult to carry out this materiality assessment without having a defined climate strategy to define the overall tone for the organisation with regard to climate and sustainability issues.

Identifying an appropriate baseline scenario will also be key to carrying out this materiality assessment. Companies should review the publicly available scenarios initially to see if they offer a suitable solution before considering a company specific scenario. A holistic view of the business will be required, with input from senior management across the organisation as a whole.

Useful resources

This Guidance is consistent with regulatory expectations in the UK and developments from other European regulators. At Milliman, we have built up a wealth of knowledge and expertise by assisting clients in meeting these expectations in relation to climate change risk management including gap analysis against regulatory requirements and peers, establishing a proper governance framework, scenario analysis, board training and embedding climate change risk into its BAU risk management activities.

We have produced a number of recent papers on how companies can update their risk management frameworks to include consideration of climate-related risk and the same process can be expanded to consider ESG and sustainability issues more broadly. Relevant papers include the following:

- ESG Investments – regulatory requirements and investment strategies in Europe and the United States
- Climate change and the Prudent Person Principle
- Climate risk management and opportunities for life insurers
- Application guidance on running climate change materiality assessment and using climate change scenarios in the ORSA
- Climate change risk stress and scenario testing
- Embedding the financial risks of climate change: Developments and considerations

The papers should provide practical information and guidance to companies on how to update polices and processes in order to comply with the latest amendments.

If you would like to know more about best practice in meeting these expectations or you would like any support in this area, please contact your usual Milliman consultant or the authors of this report.

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