Banc Ceannais na hÉireann
Central Bank of Ireland

Eurosystem

Guidance for (Re)Insurance Undertakings on Climate Change Risk

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Part A: Introduction

The mission of the Central Bank of Ireland (the Central Bank) is to serve the public interest by safeguarding monetary and financial stability, and by working to ensure that the financial system operates in the best interests of consumers and the wider economy. Identifying and managing the risks arising from the consequences of climate change for the financial system is a strategic priority for the Central Bank.

Background

1. The Central Bank expects to see a step change in the way that (re)insurance undertakings ((re)insurers) are responding to climate change risks. The Central Bank understands that while there is a broad willingness in industry to act, there is uncertainty over how. The Guidance set out herein is designed to clarify the Central Bank's expectations on how (re)insurers might address climate change risk in their business and to assist (re)insurers in developing their governance and risk management frameworks to appropriately consider and address climate change risk.

2. The Central Bank acknowledges that due to the evolving nature of climate change risk, there will be challenges for (re)insurers in certain areas; for example in data availability, or modelling and monitoring capabilities. All (re)insurers, whether large or small, should assess and manage the climate change risks they are exposed to, and consider the impact that they themselves are having on the climate, through the business that they write, or their investments. The Central Bank considers that (re)insurers have a key role to play in the transition to a more sustainable, climate neutral society.

Only 20% of (re)insurers fully integrate climate change risk in their risk management framework, with fewer than half conducting some form of scenario analysis or stress testing.

Source: Central Bank of Ireland: "Future of Insurance: Climate & Emerging Risk Survey May 2021

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Definitions

Physical and Transition Risks

3. The definitions of Physical and Transition Risks are as set out in EIOPA's "*Opinion on the supervision of the use of climate change risk scenarios in ORSA*"[1][2]. EIOPA's definition of Transition Risk includes legal risk.

4. Exposure to Physical Risk can arise through, for example, the investment portfolio, direct underwriting exposure, reinsurance and/or group exposure and exposure through own operations and/or outsourcing parties.

5. The Central Bank considers Transition Risk in its broadest sense. Exposure can arise through general exposure to, for example, policy changes (which may be needed to allow governments to achieve committed targets) and the impact on the global economy of climate change through, for example, increased migration, food and water supply restrictions.

Overarching principles

6. When assessing and managing climate change risks, the Central Bank expects that (re)insurers consider the following overarching principles:

Iterative approach

7. (Re)Insurers need to build capacity and gain experience to integrate climate change risk into their governance and risk management framework. While (re)insurers may use simplified or qualitative methods initially, the Central Bank expects that (re)insurers adapt and improve the scope, depth and sophistication of these methods over time.

Climate change risk moves from emerging risk to key risk

8. While climate change risk has been identified as an emerging risk in many (re)insurers' risk assessments, in light of the impact that climate change is already having on the insurance sector and on the wider global economy, the Central Bank expects it to be

[1] https://www.eiopa.europa.eu/publications/opinion-supervision-use-climate-change-risk-scenarios-orsa_en
[2] Own Risk and Solvency Assessment (ORSA)

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managed in a similar way to other key risks within the risk management framework.

Double materiality

9. Double materiality in a climate change context considers both the effect that climate change has on the activities of the (re)insurer (often referred to as "outside in") and the impact that the (re)insurer's own activities has on the climate (often referred to as "inside out").

Role of the ORSA – central to developing an integrated approach to climate change risk

10. (Re)insurers should consider the impact that climate change risk could have on all aspects of their business, and should take a forward-looking perspective of how they will identify manage, mitigate and respond to material climate change risks as they evolve and materialise. This forward-looking perspective should be integrated into their business model and strategy.

11. The ORSA, and in particular the use of scenarios, is a key tool in bringing all this together. Its role is broader than the assessment of capital for own solvency needs. Where risks are material, (re)insurers should ensure that the scenario analysis is sufficiently comprehensive to enable the setting of strategy, understanding the future business model and understanding the impact on investments, pricing, underwriting, reserving and capital.

Time horizons[3] to be used for assessment of exposure to climate change risk

12. (Re)insurers should consider the impact of climate change over the short, medium, and long term. The Central Bank recognises that the time horizons over which climate change will emerge are longer than (re)insurers' strategic and business planning time horizons. EIOPA articulates this distinction well in its "Application guidance on running climate change materiality

Overarching principles

Iterative

Emerging risk to key risk

Double materiality

Role of the ORSA

Time horizons

Group engagement

[3] The time horizon for the assessment of materiality of a (re)insurer's exposure to climate change risk is longer than the time horizon over which action needs to be taken by (re)insurers, i.e., the business planning horizon.

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assessment and using climate change scenarios in the ORSA"[4] (Application Guidance).

13. In considering the future impact of climate change for the purposes of the materiality assessment, the Central Bank expects (re)insurers to consider climate change scenarios (such as NGFS scenarios) over the short term 0 -10 years, medium term 30 years (mid-century), and long term 80 years (end century), consistent with the climate change horizons set out by EIOPA in its Application Guidance.

14. The Central Bank acknowledges that considering climate change risk over the long-term may be challenging for some (re)insurers. Therefore, the Central Bank accepts that initially, long-term analysis may be more exploratory and qualitative in nature. The scope of analysis and methodologies adopted should develop and mature over time including quantitative approaches where possible, particularly where the risk is material.

15. The Central Bank expects that actions identified by (re)insurers to assess the financial impact and manage any material exposures be incorporated into the (re)insurers' shorter term strategic and business planning horizons, which EIOPA suggests are 0 – 5 years (short), 5 – 10 years (medium) and 10 – 30 years (long).

Group engagement

16. Where (re)insurers leverage group policies and activities, they should ensure that this input is appropriately adapted for the local entity, including an assessment of the appropriateness of a group ORSA for the local entity.

17. (Re)insurers should ensure that any plans or actions are consistent with those of the group, including public commitments (e.g. commitments to net zero investments or underwriting) made by the group.

[4] https://www.eiopa.europa.eu/publications/application-guidance-climate-change-materiality-assessments-and-climate-change-scenarios-orsa_en

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Application of the Guidance and Proportionality

18. This Guidance is addressed to undertakings authorised by the Central Bank as an insurer or reinsurer, within the meaning of those terms in section 1(1) of the Insurance (No. 2) Act, 1983 (No. 29) and which, for the avoidance of doubt, includes captive (re)insurers and branches of third-country insurance undertakings authorised by the Central Bank, together hereinafter referred to as a (re)insurer.

Status

19. The Guidance does not introduce new requirements on (re)insurers in relation to climate change risk. Rather, the Central Bank is seeking to clarify its expectations on compliance with the existing Solvency II prudential requirements relevant to climate change risk, including the updates contained in Commission Delegated Regulation (EU) 2021/1256 of April 2021 amending Delegated Regulation (EU 2015/35 (Amended Solvency II Delegated Regulation), which are applicable from 2 August 2022[5].

20. The Guidance does not purport to address in detail every aspect of a (re)insurer's legal and regulatory obligations and should be read in conjunction with relevant European and Irish legislation, regulations, and guidelines, such as Sustainable Finance Disclosure Regulation (SFDR). In the unlikely event of a discrepancy between the Guidance and relevant legislation, the primacy of the legislation will apply. Where existing legislation, regulations or guidance is less prescriptive or silent on certain matters, it is the Central Bank's expectation that (re)insurers refer to the expectations set out in this document when managing exposures to climate change risk.

21. The Guidance should not be construed as legal advice or legal interpretation. It is a matter for (re)insurers to seek legal advice if they are unsure regarding their obligations as they apply to their particular set of circumstances.

22. Where lists or examples are included in the Guidance, such lists or examples are non-exhaustive and may be illustrative in nature,

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[5] https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32021R1256&from=EN

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i.e., the examples present some, but not the only ways, in which regulated (re)insurers might comply with their obligations.

23. The Central Bank will periodically update elements of this Guidance to reflect changes in Central Bank policy or other developments stemming from, inter alia, changes to EU or Irish law.

Part B: Guidance

Guidance as a framework

24. There are important links between the different elements of the Guidance. As such, the Central Bank expects that (re)insurers consider the Guidance as a holistic approach (framework), not as discrete sections in isolation. For example, the outcome of the materiality assessment is expected to determine the extent of the scenario analysis the (re)insurer will perform. The outcome of the scenario analysis is then expected to feed into the strategy and associated risk appetite statement, which is then expected to be reflected in how the business is run (e.g., through the risk management, investment and underwriting policies).

25. The Guidance sets out one approach that can be taken; (re)insurers may use other approaches to those set out in the Guidance, providing that they produce similar outcomes.

26. The Central Bank expects that all (re)insurers, both those with material and non-material exposure to climate change risks, review and monitor their exposure to climate change risks with an appropriate frequency given the evolving nature of the risks.

27. The Central Bank Guidance has been set out in a proportionate way, with expectations based on the nature, scale and complexity of the (re)insurer.

28. In order to help (re)insurers to visualise the interlinkages between the different elements of the Guidance, the Central Bank has developed an infographic. This is intended to be read alongside the Guidance. The infographic provides a visual overview of the approach to the assessment and ongoing management of a (re)insurer’s exposure to climate change risk set out in detail below. It sets out the steps involved allowing for

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proportionality from understanding the exposure, assessing the financial impact, integrating into strategy and embedding in business as usual. A copy of the infographic can be found here.

Governance

29. A (re)insurer's governance framework should be based on an appropriate and transparent allocation of oversight and management responsibilities for effective decision-making and to ensure adequate and effective management of climate change risk. Good governance is expected to form the foundation upon which (re)insurers respond to and integrate climate change risk into their risk management framework and is crucial to the successful management of climate change risk.

The Central Bank expects (re)insurers to have appropriate governance frameworks to manage climate change risk effectively, with roles and responsibilities related to climate change risk clearly identified, documented, communicated and understood.

The role of the board and senior management

30. The board is ultimately responsible for setting the (re)insurer's risk appetite and making sure that all risks, including climate change risks are effectively identified, managed, and controlled.

31. The Central Bank expects that the board, committees (where relevant) and senior management, understand and appropriately consider the risks that climate change poses to the (re)insurer. The board should collectively possess the necessary competence and capacity to assess long-term risks and opportunities related to climate change.

32. The Central Bank expects that a (re)insurer's approach to climate change risk forms part of its overall culture, is embedded into the business model and overall organisational structure and is adopted through their strategy. The 'tone from the top' is expected to be one that places appropriate emphasis on climate change risk. The board and senior management, through their work on business strategy; risk appetite; underwriting; and operational resilience planning, are expected to consider climate change risks and the outputs of scenario/stress analysis over the short, medium and longer-term horizon. The Central Bank expects that these decisions, discussions and points for further actions are adequately documented in the minutes of the board,

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and relevant committee meetings in line with the Central Bank's Corporate Governance Requirements[6].

Allocation of responsibilities for climate related risk

33. The Central Bank expects that responsibility for identifying and managing financial and operational risks arising from climate change is allocated to relevant senior managers and those duties and responsibilities are clearly documented and understood. In order to ensure the effective management of these risks, the Central Bank expects that the allocation of duties and responsibilities for the identification, measurement, monitoring, management, mitigation, and reporting of climate change risks is embedded throughout the governance structure, establishing clear working procedures, responsibilities, and reporting lines.

34. The Central Bank expects that all key functions (particularly the Risk Management Function and Actuarial Function[7]) appropriately contribute to the board's decision making by communicating the exposure to material climate change risks and advising the board on its strategy and approach to manage and mitigate these risks. The Central Bank expects the allocation of responsibility for identifying and managing climate change risk to the relevant existing key function, to reflect the (re)insurer's structure, risk profile, strategy, and risk appetite. Adequate resources and sufficient skills and expertise should be devoted to managing climate change risks, which may be obtained or improved through appropriate upskilling, advanced analytics, or hiring of specialist staff.

Remuneration

35. The Solvency II framework stipulates that the remuneration policy and remuneration practices shall be in line with the (re)insurer's business and risk management strategy, its risk profile, objectives, risk management practices, and the long-term interests and performance of the (re)insurer. The Amended Solvency II Delegated Regulation[8] stipulates that the

[6] Section 16.3 of the Corporate Governance Requirements for Insurance Undertakings 2015 and Section 14.3 of the Corporate Governance Requirements or Captive Insurance and Captive Reinsurance Undertakings 2015
[7] Principally in relation to the HoAF and their compliance with the Domestic Actuarial Regime Requirements
[8] Article 275(4) as outlined in Commission Delegated Regulation (EU) 2021/1256

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remuneration policy shall include information on how a (re)insurer takes into account the integration of sustainability risks in their risk management system.

36. The Central Bank expects that the remuneration policy is consistent with the objectives of the (re)insurer's business and risk strategy, corporate culture, and values in relation to climate change risk, as appropriate.

Box 1: Central Bank expectations in relation to the governance over climate change risk management

The Central Bank expects (re)insurers to have appropriate governance frameworks to manage climate change risk effectively, with roles and responsibilities related to climate change risk clearly identified, documented, communicated, and understood. The following factors should be considered, where appropriate, based on the materiality of the exposure:

a. The board, committees and senior management understand and appropriately manage the risks that climate change poses to the (re)insurer, including in the strategic decision making of the local entity. The 'tone from the top' is one that places appropriate emphasis on the management of climate change risk.

b. Decisions, discussions, and points for further actions related to climate change risk management should be regularly discussed and adequately documented in the minutes of the board, and relevant committee and management meetings to evidence this understanding and management.

c. Ensure that the remuneration policy is consistent with the objectives of the (re)insurer's business and risk strategy, corporate culture and values in relation to climate change risk.

Materiality assessment

37. An important starting point for (re)insurers in understanding the potential impact of climate change is the assessment of the materiality of their exposure to climate change risk. EIOPA's "Opinion on the supervision of the use of climate change risk

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scenarios in the ORSA (EIOPA Opinion)"[9] states that "*Risks are considered to be material in the context of Solvency II where ignoring the risk could influence the decision-making or the judgement of the users of the information*".

38. When performing a materiality assessment, (re)insurers should consider the items set out in the EIOPA Opinion, and may wish to consider the EIOPA Application Guidance, which provides examples on running climate change materiality assessments and using climate change scenarios, for both dummy life and non-life companies.

39. There are two key components of the materiality assessment:

    a. the (re)insurer's view of the future from a climate change perspective, i.e. Baseline Scenario, and;

    b. the (re)insurer's strategy and business model.

40. The Central Bank expects that (re)insurers establish a baseline climate change scenario. This scenario should describe the (re)insurers' view of the future development of climate change. It will likely include the long-term outcome, the pathway to that outcome, and the related actions to achieve that outcome (e.g., emissions pathways, technology developments, policy changes and socio-economic impacts).

41. (Re)insurers may develop their own climate change baseline scenario or use publicly available climate change scenarios, for example the Intergovernmental Panel on Climate Change (IPCC) Representative Concentration Pathways (RCPs), Network for Greening the Financial System (NGFS) scenarios. EIOPA's Application Guidance provides additional guidance on how these scenarios can be used.

42. The Central Bank expects that (re)insurers consider their current strategy and business model to understand the potential exposure to climate change risk. This consideration should include current exposures to climate change risk based on their investment portfolio, products, and own operations including

[9] https://www.eiopa.europa.eu/publications/opinion-supervision-use-climate-change-risk-scenarios-orsa_en

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outsourced activities. It should also consider how the exposure is likely to change in the future, e.g., based on changes to the strategy including new business or investment plans.

43. The Central Bank expects that (re)insurers consider how the climate change risk exposure could evolve over the short, medium, and long term.

44. The Central Bank expects that (re)insurers consider a broad range of both physical and transition risk drivers to assess the materiality of their exposure to climate change risk. Physical risk drivers may include the geographic location of assets, the impact of natural catastrophes on the underwriting portfolio, future mortality and morbidity. Transition risk drivers may include investments in fossil fuel dependent companies, changing risk profile of business, litigation related claims, and reputational risk.

45. For both physical and transition risks, the Central Bank expects that (re)insurers also consider potential second order impacts of climate change. For example, this may include the impact that natural catastrophes could have on global supply chains, or the impact that government policies to achieve the targets set out in the Paris Agreement10 could have, both of which could lead to inflationary pressures and increases to interest rates.

46. (Re)insurers should combine the baseline scenario with their potential exposure to arrive at an assessment of the materiality of their exposure to climate change risk.

47. (Re)insurers may use qualitative and/or quantitative approaches to the assessment of materiality, depending on the nature scale and complexity of the (re)insurer.

48. Where (re)insurers place reliance on future management actions and other mitigating actions to manage climate change risk, the Central Bank expects the feasibility of the assumptions underlying such management actions to be assessed in the circumstances in which they will be relied upon. Examples of assumptions include: policyholder acceptance of increasing premiums, societal acceptance of greater levels of uninsurable risk, ongoing availability of affordable reinsurance.

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[10] The Paris Agreement is a legally binding international treaty on climate change.

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49. (Re)insurers should document the materiality assessment in sufficient detail to justify any conclusions reached. This documentation should include the rationale for the selection of the baseline climate change scenario. Where the assessment is that there is no material risk, this should be justified with sufficient evidence as to how the (re)insurer came to this conclusion.

50. (Re)insurers who do not have a material exposure to climate change risk in the baseline scenario may wish to consider alternative climate change scenarios, e.g. to gain insights into the circumstance in which a material exposure may arise.

51. The Central Bank expects that all (re)insurers reassess the materiality of their exposure to climate change risk regularly, with the appropriate frequency based on the materiality of the climate change risk exposure, the complexity of the business model, etc. Regular reviews are necessary to incorporate updated methodologies, new data, updated climate change scenarios, or other factors that may affect the materiality assessment.

52. (Re)insurers should undertake a materiality assessment if there is any material change to their business model that could change their climate change risk exposure.

Box 2: Central Bank expectations in relation to the assessment of materiality of exposure to climate change risk

The Central Bank expects (re)insurers to undertake a materiality assessment to identify their risk exposure to climate change. The following factors should be considered:

a. Select an appropriate baseline climate change scenario.

b. Consider the current strategy and business model to understand potential for exposure to climate change risk.

c. Consider how the materiality of the risk exposure changes/evolves over the short, medium and long term based on the baseline climate change scenario selected.

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d. Consider the feasibility of any future management actions and other mitigating factors assumed in the materiality assessment.

e. Document the materiality assessment in sufficient detail to justify the conclusion of materiality, including if the assessment is that there are no material exposures.

f. (Re)insurers should undertake a materiality assessment on a regular basis. (Re)insurers should undertake a materiality assessment if there is a material change to their business model that could change their climate change risk exposure.

g. (Re)insurers who do not have a material exposure to climate change risk in the baseline scenario may wish to consider alternative climate change scenarios.

Scenario Analysis and Own Risks and Solvency Assessment (ORSA)

53. Climate change risks have different characteristics than risks that are currently modelled. While there is certainty of their emergence, the time horizon and pace of that emergence is highly uncertain and dependent on a range of factors including the speed and nature of any political actions. They are complex risks having direct and indirect effects, which are impacted by local and global physical and socio-economic events, and vary from region to region and sector to sector. (Re)insurers will need to adopt a holistic approach in terms of engaging with key areas across the business.

Climate change risks are complex risks having direct and indirect effects, which are impacted by local, global physical and socio-economic events, and vary from region to region and sector to sector.

54. The ORSA is typically the process currently used by (re)insurers to consider the financial impact of material risks through stress and scenario analysis. The resulting insights are then used to identify management action plans, assess own solvency needs, inform strategy, etc. The Central Bank considers the ORSA an appropriate process to include the consideration of the financial impact of a material exposure to climate change risk, but (re)insurers may use other approaches that achieve the same outcome.

55. The Central Bank expects (re)insurers to use an appropriate level of scenario analysis to assess the financial impact of any material

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exposure to climate change risk and to develop their fundamental understanding of their exposure to climate change risk – both their exposure through (re)insurance activities, investments and their own exposure in order to manage operational risk.

56. The Central Bank expects (re)insurers, who have identified a material exposure, to undertake a quantitative assessment of the impact of the baseline climate change scenario over short, medium, and long term business planning horizons.

57. The Central Bank expects (re)insurers to assess the need for additional scenarios as required, for example, to assess a different perspective/objective, to reflect the nature, scale, and complexity of their business. (Re)insurers should assess the financial impact of such additional scenarios which may initially be qualitative in nature.

58. Based on the nature, scale and complexity of the risks inherent in their business, small and less complex (re)insurers may not need to consider additional scenarios as set out in Paragraphs 56 and 57.

59. Scenario analysis should underpin climate change risk strategy and goals, business strategy, underwriting and pricing, investment strategy, risk management, reserving and capital, and operational risk management.

60. (Re)insurers may also reference EIOPA's Application Guidance, which includes worked examples of climate change scenarios for dummy life and non-life undertakings.

Box 3: Central Bank expectations in relation to Scenario Analysis and ORSA

The Central Bank expects that where a material exposure to climate change risk has been identified:

a. (Re)insurers quantify the financial impact of the baseline climate change scenario explored in the materiality assessment over short, medium, and long term business planning horizons.

While non-life (re)insurers typically take a short-term approach to underwriting risk, the Central Bank expects that they consider climate change risks over the longer term, particularly with regard to prolonged, clustered or repeated events.

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b. (Re)insurers choose an appropriate range of climate change scenarios based on the nature, scale, and complexity of their business.

c. For all scenarios, (re)insurers should consider the following factors where appropriate:

- Define the objective of the scenario analysis undertaken.
- Measure how the financial impact of climate change risk changes over the short, medium and long term business planning horizons.
- Use appropriate quantitative and/or qualitative methods, and adapt and improve the scope, depth, and sophistication of the methodology used in the scenarios over time as appropriate.
- Make appropriate allowances for the complexity and inter-connectedness of risks related to climate change.
- Ensure that the output from the analyses, including assumptions made, potential future management actions, expert judgements and the level of uncertainty is clearly communicated to and understood by the board to ensure the board has sufficient information to set the climate change strategy.

Strategy and business model

61. Increased materialisation of climate change risks may challenge existing business models, change risk profiles (e.g., insurability, affordability, availability) and even threaten the solvency of (re)insurers. The significant uncertainty and potential magnitude of climate-related risks increases the importance of adopting a forward-looking strategic approach to climate change risk management. Climate change risks have the potential to affect multiple lines of business, as well as different sectors and jurisdictions.

62. The Central Bank expects that (re)insurers take appropriate actions to fully assess the potential impact of climate change

In integrating climate change risks into the strategy, (re)insurers should consider the impact their own activities may have in contributing to, or mitigating climate change risk.

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risks on their business models and to integrate climate change risk in its overall strategy. Where (re)insurers have made public commitments in relation to climate change, the Central Bank expects these commitments to be supported by robust and specific plans. The Central Bank expects that, where (re)insurers' are part of a group, their plans are consistent with any climate change related commitments made by the group.

63. (Re)insurers should also identify any additional data needs and the level of granularity of that data, alongside any data management tools required to support the climate change risk strategy, e.g., in relation to underwriting and investments.

64. While non-life (re)insurers typically take a short-term approach to underwriting risk, the Central Bank expects that they consider climate change risks over the longer term, particularly with regard to prolonged, clustered, or repeated events, and reflect these in the overall strategy and business model (including in the reinsurance strategy).

65. 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. These inherent uncertainties should be considered when developing the strategy and business model and throughout the risk management process.

66. In integrating climate change risks into the strategy, (re)insurers should consider the impact their own activities may have in contributing to, or mitigating climate change risk. The Central Bank expects that (re)insurers update their strategic planning processes to incorporate climate change mitigation and adaptation strategies where appropriate. (Re)insurers may face reputational risk by, for example, failing to deliver on their own net zero targets or failing to adapt or develop new sustainably focused products in line with shifting consumer behaviours and shareholder sentiment on climate change. (Re)insurers may choose to avoid certain risks as part of their strategy and/or seek suitable sustainable alternatives to meet their climate change

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commitments. Activities related to the "inside out" perspective[11] can create opportunities by helping to support a sustainable business model and to achieve positive consumer outcomes.

Box 4: Central Bank expectations in relation to Strategy and Business Model

The Central Bank expects that (re)insurers consider climate change risks in their ongoing strategic decision-making and that these are appropriately integrated into the business models. The following factors should be considered, as appropriate:

a. Consider how the strategy and business model can be adapted in response to challenges to the long-term sustainability of the business model identified in the climate change scenario analysis. This should include consideration of adaptation and mitigation measures that may need to be taken over the short, medium and long term.

b. Develop and document a clear plan to implement any changes identified with well-defined targets, interim milestones and tools for monitoring and reporting progress.

c. Consider 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.

d. Ensure that any public communications related to climate change, made by the (re)insurer, are supported by robust and specific plans. This should include commitments made by a Group parent, where relevant.

Risk appetite statement (RAS)

67. The Central Bank expects that the board understands the climate change risks to which the (re)insurer is exposed and establishes a documented risk appetite[12] . The outcome of the scenario analysis and any actions identified in the strategy

[11] Inside out perspective describes how an undertaking's activities affect climate change.
[12] As required by the Corporate Governance Requirements for Insurance Undertakings 2015.

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review will identify how the exposure to climate change risk will be measured, managed and monitored.

68. (Re)insurers with a material exposure to climate change should incorporate climate change risk into their RAS. (Re)insurers who have not identified a material exposure should also establish and document their risk appetite in line with their strategy for accepting or mitigating future exposure to climate change risk.

69. (Re)insurers may define their climate change risk appetite in qualitative and/or quantitative terms, although the Central Bank expects (re)insurers to use quantitative measures where possible. The Central Bank expects (re)insurers to establish appropriate risk exposure limits and thresholds relating to climate change risks over the short, medium and long term and to define appropriate Key Risk Indicators (KRIs) to support them.

70. Where (re)insurers, or the Group that they are part of, have made public climate change commitments, the Central Bank expects these to be integrated in the (re)insurer's RAS, by including forward looking interim targets, which track against these commitments.

71. The Central Bank expects the approach to integrating climate change risk in the RAS to develop over time as more advanced analytics and tools become available.

Box 5: Central Bank expectations in relation to the Risk Appetite Statement

The Central Bank expects that (re)insurers align their risk appetite statement with the overall strategy, including specific climate change risk exposure limits and thresholds as well as consideration of the long-term financial interests of the (re)insurer. The following factors should be considered, as appropriate:

a. Establish quantitative metrics, where possible, and/or qualitative metrics, e.g., KRIs and tolerance levels in relation to climate change risks to support ongoing monitoring and management of climate change risk.

b. Define the RAS and related key metrics over short, medium and long-term time business planning horizons.

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c. Be able to demonstrate progress against public commitments to meet climate-related targets, through the use of interim targets and appropriate metrics, which should be integrated into the RAS. This applies both to those commitments made by the (re)insurers directly or those made by the Group of which they are a part.

d. Approaches to climate change risk management are developed and enhanced as more advanced analytics and measurements become available; define risk limits (which should be forward-looking) and thresholds in line with the (re)insurer's overall strategy).

Embedding climate change risk considerations across the business

72. The Central Bank expects that actions set out in the strategy and business model, are operationalised in the business as usual (BAU) activities of the (re)insurer. These BAU activities include ongoing risk management, underwriting and pricing, reserving and capital, and investment decisions.

73. The integration into BAU activities should be proportionate to the nature, scale and complexity of the (re)insurer, including the materiality of the (re)insurers exposure to climate change risk. The BAU integration should cover activities such as updating risk management policies and risk reporting metrics, setting of underwriting criteria and pricing assumptions, reserving and capital assumptions and setting investment strategy.

74. (Re)insurers who have not identified a material exposure to climate change risk, should ensure that their risk management policies and risk reporting metrics can identify and respond to any future exposure to climate change related risk in a timely manner.

Risk management

75. The Central Bank expects (re)insurers to address climate change risks, through their existing risk management frameworks, in line with their board-approved risk appetite and their risk management policies.

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76. The Central Bank expects that all risk policies reflect the stated risk appetite relating to climate change risk, particularly the risk policies related to managing underwriting, pricing, reinsurance and investment activities. In particular, the risk policies should be aligned with any public commitments. These include commitments made by the Group, where relevant.

77. Where a (re)insurer belongs to a group, it is not sufficient for the (re)insurer to rely on group climate change risk policies and analysis without due consideration being given to how these appropriately reflect the (re)insurer's own risk exposures, tolerances and requirements. The Central Bank expects that, where relevant, a (re)insurer adapts the group's climate change risk policy to suit their business model and risks, and ensures that it has the necessary available expertise to avoid an overreliance on group resources, policies and procedures.

78. The Central Bank expects all (re)insurers to align their risk reporting to their risk appetite related to climate change risk, irrespective of the materiality of their exposure. Risk reporting enables the board to track alignment of actual risk profile with the risk appetite to allow ongoing management and monitoring of the exposure to climate change risk.

Box 6: Central Bank expectations in relation to ongoing Risk Management

The Central Bank expects (re)insurers to identify, measure, monitor, manage and report on climate change risks through their existing risk management framework. The following factors should be considered, as appropriate :

a. Risk policies are aligned with the (re)insurer's board approved risk appetite for climate change risk.

b. Risk reporting enables the board to track alignment of actual risk profile with the risk appetite to allow ongoing management and monitoring of the exposure to climate change risk.

Reserving and Capital

79. The requirements for the valuation of technical provisions state that the best estimate shall correspond to the "probability-

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weighted average of future cash flows", and be based on up-to-date and credible information[13]. The calculations of the best estimate should also take account of future developments in the external environment, including environmental developments.[14].

Climate change requires a step change to challenge the ongoing appropriateness of the past as a predictor of the future.

80. Reserving and capital valuation activities typically involve the analysis of past data to project the future. Climate change challenges the ongoing appropriateness of using the past as a predictor of the future. Examples include assumptions related to future mortality and morbidity, increased frequency and severity of claims linked to physical risks, investment returns, inflation, expenses, and policyholder behaviour.

81. The Central Bank expects (re)insurers to consider how both current and potential future changes related to climate change should be reflected in the models and assumptions currently underpinning reserving and capital assessments. In particular, the Central Bank expects that (re)insurers understand the scope and assumptions of any external models used. Limitations in the scope and assumptions used in any model employed should be clearly identified and (re)insurers should establish a plan for addressing these limitations. (Re)insurers should ensure appropriate validation and review of results from their models, for example by comparing to alternative sources, or by using sensitivity analysis.

82. Expectations set out in paragraph 81 also apply to (re)insurers using an internal model for the calculation of their Solvency Capital Requirement (SCR).

Underwriting and Pricing

83. 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.

84. 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

[13] Regulation 84 of S.I. No. 485 of 2015 (Solvency II Regulations)
[14] Recital 13 of COMMISSION DELEGATED REGULATION (EU) 2015/35

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increase in climate change risks. However, as noted by EIOPA, in their report on underwriting and pricing[15], "over the medium-to-long term, this might lead to the risk of insurance coverage becoming unaffordable for the policyholder, as well as the industry crowding itself out of certain risks". Therefore, the Central Bank expects that (re)insurers consider the potential effects of pricing and underwriting decisions over the short, medium, and long-term, and the implications that pricing and underwriting decisions may have on the future viability of the (re)insurer.

The impact of climate change could affect the insurability of risks in the context of a (re)insurer's risk appetite.

85. (Re)insurers are encouraged to consider how they may use their experience to identify potential solutions to ensure the continued protection of policyholders. (Re)insurers are also encouraged to consider how they may influence the activities of those they underwrite, where appropriate, e.g., by incentivising policyholders to mitigate insured risks (e.g., through adaptation measures) via risk-based pricing and contractual terms[16].

86. (Re)insurers should consider that claims ratios based on historic data may not appropriately reflect the true level of risk, particularly for any projections of future new business.

87. Similar to reserving and capital exercises, the Central Bank expects (re)insurers to consider the potential impact of climate change on any models used in pricing and underwriting activities.

88. Where (re)insurers manage their climate change risk through reinsurance, the Central Bank expects (re)insurers to consider the future pricing and availability of these reinsurance contracts. The Central Bank expects (re)insurers to consider any systemic risk exposure when assessing the counterparty's ongoing capacity to pay claims: reinsurers generally take on a range of risks across multiple countries and so may have a systemic risk exposure or concentration to climate change risk.

[15] https://www.eiopa.europa.eu/publications/report-non-life-underwriting-and-pricing-light-climate-change_en

[16] https://www.eiopa.europa.eu/publications/report-non-life-underwriting-and-pricing-light-climate-change_en

Investments

89. The Amended Solvency II Delegated Regulation requires (re)insurers to take sustainability risks into account in the implementation of the prudent person principle. It requires (re)insurers to consider dependencies between assets and liabilities, consistency of investments with the nature of the business and long-term risk exposure, and the requirement to consider short and long-term liquidity.

> The Amended Solvency II Delegated Regulation requires (re)insurers to take sustainability risks into account in the implementation of the prudent person principle

90. The Central Bank expects (re)insurers to assess the potential impact of climate change risk on market, credit, and liquidity risk related to their investments and the potential for climate change to impact the long-term investment returns from their portfolio. (Re)insurers should consider both transitional and physical risk drivers when assessing climate change risk for investments.

91. The Central Bank expects (re)insurers to consider the impact of climate change risk on both the asset and liability profiles in their asset liability management.

92. The Central Bank expects (re)insurers to consider mitigating actions where material accumulations of climate change risk exposure are identified. Where (re)insurers are not able to assess the climate change risk exposure of a certain asset, they should take steps to ensure that the exposure to that asset is prudent.

93. (Re)insurers can play an important stewardship role to influence the firms they invest in to transition to a low-carbon economy. (Re)insurers are encouraged to consider how they may utilise their stewardship role as institutional investors by engaging with clients and firms to achieve climate neutrality, address risks and build climate resilience, e.g., through their use of voting rights and impact investing. Assets in scope should include both those assets where the (re)insurer has direct control of the assets and those in unit-linked funds where appropriate.

Box 7: Central Bank expectations in relation to Reserving and Capital, Underwriting and Pricing and Investments

The Central Bank expects (re)insurers to:

a. Appropriately consider climate change risk in the measurement of their technical provisions and capital, and their underwriting

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and pricing activities, including internal models used for the calculation of the SCR.

b. Consider the impact of climate change in the management of their investments and their assessment of market, credit, and liquidity risk.

c. Understand and ensure appropriateness of the extent to which climate change risk is allowed for within the models they use; particularly external models, such as Natural Catastrophe (NatCat) models. In particular, (re)insurers should:

- Understand the limitations of any models used and establish a plan to address the limitations.
- Ensure appropriate validation and review of the results of the models.
- Consider the impact of climate change on the assumptions underpinning any future cash flow or scenario projections, or risk distributions. In particular, (re)insurers should allow for expected future developments arising from climate change risk and consider the extent to which past data continues to be relevant for projecting into the future.

d. Where (re)insurers manage their exposure to climate change related risks through reinsurance, they should consider the ongoing availability, structure and pricing of reinsurance, and the potential for reinsurers to have systemic risk exposure. This includes intra-group reinsurance.

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