



### The Sustainable Insurance Forum

# Question Bank on Climate Change Risks to the Insurance Sector

**Public Version** 

Final for Release

#### **About this Document**

This document is the Public Version of the Sustainable Insurance Forum (SIF) Question Bank on Climate Change Risks to the insurance sector. It is organized as follows:

- **Section One** provides information about the Question Bank, including its development process, objectives, structure, and question typologies.
- **Section Two** provides guidance on how the questions can be used in different aspects of supervisory practice.
- **Section Three** is the Question Bank itself, in tabular format, with 70+ questions organized by category, theme, and level of complexity.

A Supervisory Version of this document is available for <u>supervisors and regulators only</u>, on request to the SIF Secretariat. Please contact Sarah Zaidi (<u>Sarah.Zaidi@un.org</u>) to receive an electronic copy, or if you have questions about the document.





#### 1. About the Question Bank

#### 1.1 Context

The Sustainable Insurance Forum (SIF) is a leadership group of insurance supervisors and regulators working together to strengthen their understanding of and responses to sustainability issues facing the insurance sector, including climate change<sub>1</sub>. During 2017 and 2018 the SIF focused its efforts on exploring climate-related issues, culminating with the release of a joint Issues Paper on Climate Change Risks to the Insurance Sector by the SIF and the International Association of Insurance Supervisors (IAIS)<sub>2</sub>. This Issues Paper (IP) concluded that it was "evident that climate risks warrant ongoing and intensifying scrutiny by supervisors." The paper recommended that supervisors "should seek to increase their understanding of climate risks, and develop supervisory capabilities to be able to accurately evaluate the insurance sector's actions to achieve climate resilience, across underwriting and investment activities," recognizing that additional supporting material on best practices for addressing climate risk issues may be helpful for supervisors.

Parallel to the completion of the 2018 Issues Paper, and following from its recommendations, the SIF developed a set of practical tools to support supervisors' efforts to integrate climate change risks into mainstream supervisory practices and engagement strategies. This included the development of a set of questions for supervisors to use in engagements with firms<sub>3</sub>.

#### 1.2 Objectives

This Question Bank is intended to help supervisors develop engagement tools to better understand exposures and strategic responses of regulated entities to climate change risks and opportunities. The objective is to provide a framework, and example questions, which supervisors can adapt for use in their own jurisdictions – depending on local market contexts, objectives, areas of interest, and levels of sophistication with climate change issues.

## 1.3 Structure

The Question Bank is designed to be comprehensive in addressing the full range of impacts that climate change may have on the core business of insurance firms. It is intended to be applicable to the range of physical, transition, and liability risks arising from climate change, and how they may manifest across the suite of risks facing insurance companies as underwriters and investors. The Bank contains 70+ questions, organized in nine categories:

- i. Overall familiarity
- ii. Governance & Strategy
- iii. Underwriting Practices

<sup>&</sup>lt;sup>1</sup> See Annex 1 for further information about the SIF.

https://www.iaisweb.org/page/supervisory-material/issues-papers//file/76026/sif-iais-issues-paper-on-climate-changes-risk

 $<sup>{\</sup>scriptstyle 3\> https://www.sustainableinsurance forum.org/insurance supervisors to develop}$ 





- iv. Investment Practices
- v. Liability Risks
- vi. Scenario Analysis & Stress Test
- vii. Disclosure & Information
- viii. Skills, Capacities, & Culture
- ix. Role of the supervisor

The questions are structured in order of increasing complexity, designed to elicit information on how firms consider climate change risks. Specifically, questions sets are designed to gather the following information on:

- **Perception:** How firms perceive or consider climate change factors as risks.
- Identification: How firms identify climate-related risks within business practices.
- Assessment: How firms assess climate-related risks within core business activities, focusing on analytical approaches, methods, and techniques.
- Management: Ways firms may seek to mitigate, transfer, or otherwise reduce risks.
- **Governance**: Systems implemented within firms to control for climate-related risks, and raise climate-related risks as strategic priorities relevant to core business.
- **Reporting and Disclosure:** How climate risks are reported internally to various decision-makers within the organization, and how firms communicate information relating to climate risks to shareholders, supervisors, and the general public.
- **Supervisory engagement:** If interventions may be helpful or necessary to ensure adequate and accurate consideration of climate-related risks by insurers.

The Question Bank has been constructed on the basis of existing materials used by SIF member supervisors, including the Australian Prudential Regulation Authority (APRA), the De Nederlandsche Bank (DNB), and the Bank of England Prudential Regulation Authority (PRA). It also includes questions relating to the guidance and recommendations of the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD)<sub>4</sub> which are relevant to insurance companies as underwriters and investors.

#### 1.4 Question typologies

Supervisors can use a range of different types of questions to explore climate change issues:

• 'Close-ended' questions can be used to gather a broad range of information (or perspectives) in a consistent manner, but at a comparatively low level of detail or granularity. Due to their structure, responses to close-ended questions are easily comparable, and therefore useful for supervisors seeking to develop a quantitative view on the perspectives, strategies, actions, and performance of firms with respect to a specific issue. Examples include binary questions (e.g. "Yes / No"), preference questions (e.g. agreement with a proposition), multiple choice, or ranking order.





 'Open-ended' questions allow for respondents to express their views, in reaction to specific prompts. These questions are designed to elicit more qualitative responses, which may or may not be immediately comparable.

Questions in the Bank are primarily structured as binary questions (i.e. "Yes / No"), with open-ended elaboration (i.e. "If yes, please explain"). The intention of this structure is to simultaneously gather information to be represented in a quantitative format (i.e. % of insurance firms seeking to implement TCFD Recommendations), as well as more complex information relevant for forming supervisory opinions on the strength of a firm's responses to climate change risks. On the basis of response guidance (available in the Supervisory Version of this document) the questions could be easily adapted to Likert-scale or multiple-choice questions if supervisors wish to explore specific actions or issues in detail, or develop a more quantitative view.

### 2. Using the Question bank

The Question Bank is intended to be suitable for a wide range of supervisory applications, responding to levels of awareness, understanding, and levels of sophistication of firm's activities relating to climate risks. On the basis of inputs from SIF members, Table 1 (below) describes how the Question Bank could be applied in ongoing supervision, periodic engagements, supervisory coordination, and non-standard activities.

The SIF encourages all interested supervisors to apply this Question Bank across supervisory activities, in ways that can effectively support their efforts to strengthen understanding of and responses to climate-related risks. Within the SIF, members are applying the Question Bank and sharing experiences.





Table 1: Applying the Question Bank

| Action Area            | Supervisory Activity   | Question Bank (QB) Application  |
|------------------------|--|---|
| Ongoing<br>Supervision | Setting supervisory plans and strategies   | The QB can help supervisory teams consider the range of climate-related risks which may be relevant for a firm, and help integrate these risks into supervisory plans and strategies for high risk/impact firms.  |
| Ongoing<br>Supervision | Risk assessments and analysis  | The QB (and supporting information from the IAIS, including relevant Issues Papers) can provide a framework for supervisors to consider climate-related risks as part of formal quantitative risk assessments and qualitative risk checklists, as a new and emerging risk relevant to core business activities. |
| Ongoing<br>Supervision | Analysis of reported information (i.e. risk positions, significant events, annual reports, etc.) | The QB can help supervisors clarify what climate-<br>related aspects should be reflected in regular<br>reporting of information, i.e. specifying what<br>constitutes a "significant event" relevant to climate<br>change risks, which should be reported and<br>commented on.                                   |
| Ongoing<br>Supervision | Business Model Analysis  | The QB can serve as a reference tool for supervisors to challenge firms on the strength of their business model under climate-related risk constraints, and how this might impact their future strategy.  |
| Ongoing<br>Supervision | Review of standardized<br>supervisory reporting<br>from firms (e.g. ORSA<br>filings)             | The QB can serve as a reference tool for supervisors to query and challenge firms' reporting on the consideration of climate risks in their responses to standardized supervisory tools (e.g. Own-Risk and Solvency Assessments).   |
| Ongoing<br>Supervision | Review of Auditor's reporting  | The QB (and supporting information) can serve as a reference for appropriate treatment of climate risks when reviewing auditor's reports.   |
| Ongoing<br>Supervision | Review of reports by key functions   | The QB can help supervisors target their analysis of reports by key functions, as a way to ensure that there is consistency across different inputs from firms relating to climate risks.   |
| Ongoing<br>Supervision | Review of technical provisions guidelines and other related materials                            | The QB (and supporting information) can provide an analytical basis to query and challenge firms on climate-related developments, and technical approaches.   |
| Ongoing<br>Supervision | Review of investment-<br>specific reporting and<br>information                                   | Where relevant, the QB (and supporting information) can provide a basis to query and challenge firms on climate-related risks with respect to investment activities.  |





| -                                    |  |   |
|--------------------------------------|--|---|
| Periodic<br>Engagements<br>(On-site) | Regular On-site<br>Supervisory Meetings        | Questions in the QB can be directly applied in on-site supervision, including meetings targeting different stakeholder groups, including board of directors, senior management, business heads, compliance, internal auditors and risk managers.  |
| Periodic<br>Engagements<br>(On-site) | Annual On-site<br>Supervisory Meeting          | The QB can help structure dialogue during annual meetings on climate-related issues, including developing question sets that could be applied for assessment of responses to recent events.   |
| Periodic<br>Engagements<br>(On-site) | Fit and Proper Testing                         | Questions in the QB can be adapted for use in Fit and Proper Testing, and provide an analytical basis for supervisors to integrate climate-related priorities into Fit and Proper assessment frameworks. Questions can be adapted to an appropriate level of complexity for such activities, where appropriate.   |
| Supervisory coordination             | Coordination with other supervisors/regulators | In integrated supervisory institutions, the QB can provide the basis for other supervisors (i.e. for Banking) to begin integrating climate-related risks into supervisory activities. In coordinated supervisory activities, the QB can be helpful in examination of dependencies between bank operations and insurance operations within the group.                                |
| Supervisory<br>coordination          | Supervisory college activities                 | The QB can be helpful to empower supervisors to raise the profile of climate-related risks in supervisory college activities, propose specific engagement items related to climate risks, and more broadly, help improve knowledge of climate risk factors within the college. The QB could also be extended to explore climate-related risks relevant for cross-border activities. |
| Non-standard<br>Activities           | Research activities                            | The QB can help structure ad-hoc research and analysis by supervisors on climate-related issues, and provide an analytical basis for tracking progress within the market on climate-related issues (i.e. TCFD implementation).  |
| Non-standard<br>Activities           | Surveys and other engagement tools             | Questions in the QB can be adapted for use in ad-hoc surveys, or where appropriate, within design and implementation of new reporting requirements relating to climate risks.   |
| Non-standard<br>Activities           | Engagement with other public authorities       | The QB can be used as a reference tool by supervisors in their engagement with other public authorities, to help orient and assess levels of awareness of climate-related risks.  |





### 3. Question Tables

The Question Bank is set out in the following section, in a series of tables including:

- Question Number (Q #): Code representing Category, Theme, Question (e.g. 1.1.1).
- Category: The category in the Question Bank (i.e. Underwriting Practices).
- Theme: The sub-category area (i.e. Risk Management).
- Question: Question text, and extension questions.
- **Complexity**: high-level rating of the complexity/sophistication of the question (Low, Medium, High), to help aide supervisors in deciding application strategies.
- Issues Paper (IP) Section: Relevant Sections (i.e. 3.2.1), Tables (i.e T.1), Annexes (i.e A.1.1), or Figures (i.e F.1) in the 2018 SIF/IAIS Issues Paper on Climate Change Risks to the Insurance Sector, which may provide context on the question and the response.





| Q#    | Category               | Theme                       | Question  | Complexity | IP Section |
|-------|------------------------|-----------------------------|---|------------|------------|
| 1.1.1 | Overall<br>Familiarity | Basics                      | What is your general understanding of climate change?   | Low        | 2.1        |
| 1.1.2 | Overall<br>Familiarity | Basics                      | Does your organization expect that climate change might affect the insurance sector?  (Y/N) If yes, please explain.   | Low        | 3.1        |
| 1.1.3 | Overall<br>Familiarity | Basics                      | Does your organization expect<br>that climate change will affect<br>your business? (Y/N) If yes,<br>please explain.   | Low        | 3.1        |
| 1.2.1 | Overall<br>Familiarity | Materiality &<br>Perception | What are the key issues (e.g. physical, economic, social, political, technological, or reputational) related to climate change that are relevant for your business?   | Med        | 3.1, 3.2   |
| 1.2.2 | Overall<br>Familiarity | Materiality &<br>Perception | Does your organization consider climate change as a risk? (Y/N) <sub>5</sub> If yes, in what ways might climate change pose risks to your business in economic or financial terms? If no, please explain.           | Med        | 3.2        |
| 1.2.3 | Overall<br>Familiarity | Materiality &<br>Perception | Does your organization consider climate change as an opportunity? (Y/N) If yes, in what ways might climate change create opportunities for your business? If no, please explain.                                    | Med        | 4.1        |
| 1.2.4 | Overall<br>Familiarity | Materiality &<br>Perception | Have there been any recent policy developments at the national or international level that have influenced your perspective on the materiality of climate change for your business? (Y/N) If yes, please elaborate. | Low        | 1.1        |

<sup>5</sup> This question, and others focusing on perceptions of the materiality of climate risk, could also be asked in a Likert-scale format for comparison purposes.





|       |                            | _          |   | 1        | 1   |
|-------|----------------------------|------------|---|----------|-----|
| 2.1.1 | Governance<br>and Strategy | Governance | Are there governance structures in place in your organization through which board members and senior management may have oversight over climate-related risks? (Y/N) If yes, what process are in place to inform the board (and relevant committees) about climate related risks? What is the frequency of such inputs? | Low      | 4.2 |
| 2.1.2 | Governance<br>and Strategy | Governance | Are there management structures in place to consider climate related issues organized across underwriting and investment business functions? (Y/N) If yes, please describe how they are organized.  | Med      | 4.2 |
| 2.1.3 | Governance<br>and Strategy | Governance | Has your organization implemented systems for coordination on climate change issues between actuarial and investment functions? (Y/N) If yes, please describe them.   | High     | 4.1 |
| 2.2.1 | Governance<br>and Strategy | Strategy   | Has your organization implemented or planned any substantive changes to its business strategy in response to current and potential future climate change impacts? (Y/N) If yes, what are the key climate change drivers that you would consider relevant to your strategy? If no, please explain.                       | Low/Med  | 3.2 |
| 2.2.2 | Governance<br>and Strategy | Strategy   | Has your organization incorporated climate-related risks within your risk appetite framework (Y/N)? If yes, please describe.  | Low/Med  | 3.2 |
| 2.2.3 | Governance<br>and Strategy | Strategy   | Is your organization concerned about "second-order," indirect impacts of climate change (i.e. activities of other financial sector actors) on its overall strategy?  (Y/N) If yes, please explain.  | Med/High | F.4 |





|       |              | 1             | T                                 |          | ı        |
|-------|--------------|---------------|-----------------------------------|----------|----------|
| 2.2.4 | Governance   | Strategy      | What is the view of your          | Med/High | 2.1, F.2 |
|       | and Strategy |               | organization on longer-term       |          |          |
|       |              |               | (e.g. beyond 1-2 years) impact    |          |          |
|       |              |               | of climate change on your         |          |          |
|       |              |               | business strategy? In what        |          |          |
|       |              |               | ways might your organization      |          |          |
|       |              |               | seek to improve this view?        |          |          |
| 2.2.5 | Governance   | Strategy      | Has your organization             | High     | N/A      |
|       | and Strategy |               | determined risk thresholds or     |          |          |
|       |              |               | indicators (e.g. frequency or     |          |          |
|       |              |               | severity of major weather         |          |          |
|       |              |               | events) which signal threats to   |          |          |
|       |              |               | the achievement of                |          |          |
|       |              |               | underwriting business plans,      |          |          |
|       |              |               | investment strategies, capital    |          |          |
|       |              |               | adequacy, or the viability of     |          |          |
|       |              |               | your business model (Y/N) If      |          |          |
|       |              |               | yes, how have these               |          |          |
|       |              |               | thresholds been applied (e.g.     |          |          |
|       |              |               | across business lines), and       |          |          |
|       |              |               | how did your organization         |          |          |
|       |              |               | define the scope and              |          |          |
|       |              |               | parameters?                       |          |          |
| 2.2.6 | Governance   | Strategy      | Envisioning looking back from     | High     | 2.1, F.2 |
|       | and Strategy | , o,          | 2030, what success factors        | C        | ,        |
|       |              |               | would you see as critical for     |          |          |
|       |              |               | the strength and viability of     |          |          |
|       |              |               | your business during a period     |          |          |
|       |              |               | of rapid and volatile transition? |          |          |
|       |              |               | Or, during the same period, an    |          |          |
|       |              |               | absence of drastic policies to    |          |          |
|       |              |               | fight climate change?             |          |          |
| 2.2.7 | Governance   | Strategy      | Does the head office/parent       | Med      | N/A      |
|       | and Strategy | - 1. 2.1-6)   | group have internal policies      |          | ,        |
|       | and strategy |               | relating to climate-related       |          |          |
|       |              |               | risks? (Y/N) If yes, please       |          |          |
|       |              |               | describe how your                 |          |          |
|       |              |               | organization has adapted the      |          |          |
|       |              |               | group's policy to suit the local  |          |          |
|       |              |               | operation environment.            |          |          |
| 3.1.1 | Underwriting | Market Risk - | Does your organization expect     | Low/Med  | 3.2.1    |
|       | Practices    | Physical      | that physical risks – including   |          | ).2      |
|       | . ractices   | . Try Sicul   | an increasing frequency and       |          |          |
|       |              |               | severity of extreme weather       |          |          |
|       |              |               | events – will affect              |          |          |
|       |              |               | underwriting business             |          |          |
|       |              |               | performance, in terms of          |          |          |
|       |              |               | market demand, claims             |          |          |
|       |              |               | burden, or other factors? (Y/N)   |          |          |
|       |              |               | 1                                 |          |          |
|       |              |               | If yes, please explain how, and   |          |          |





|       |                           |                             | over what timeframes. If no, please explain why not.   |          |                        |
|-------|---------------------------|-----------------------------|--|----------|------------------------|
| 3.1.2 | Underwriting<br>Practices | Market Risk -<br>Physical   | How might physical risk factors affect underwriting business performance across different business lines?  | Med      | 3.2.1                  |
| 3.1.3 | Underwriting<br>Practices | Market Risk -<br>Physical   | What are the key physical risk factors that you consider as most impactful on underwriting markets in the geographies where you operate?   | Med      | N/A                    |
| 3.2.1 | Underwriting<br>Practices | Market Risk -<br>Transition | Does your organization expect that transition risks – including economic, social, technological, regulatory or policy factors stemming from climate change – will affect underwriting business performance, in terms of market demand, claims burden, or other factors? (Y/N) If yes, please explain how, and over what timeframes. If no, please explain why not. | Low/Med  | 3.2.1                  |
| 3.2.2 | Underwriting<br>Practices | Market Risk -<br>Transition | How might transition risk factors affect underwriting business across different business lines?  | Med      | 3.2.1                  |
| 3.2.3 | Underwriting<br>Practices | Market Risk -<br>Transition | What are the key transition risk factors that you foresee as having the greatest impact on underwriting markets in the geographies where you operate?  | Med      | N/A                    |
| 3.3.1 | Underwriting<br>Practices | Risk<br>Management          | Does your organization consider climate change risks in the context of mainstream underwriting risk management processes and functions? (Y/N) If yes, please explain.  | Low      | 6.1 (ICP 8,<br>ICP 16) |
| 3.3.2 | Underwriting<br>Practices | Risk<br>Management          | Is your organization seeking to reduce, mitigate, or transfer climate-related risks with respect to its underwriting liabilities? (Y/N) If yes, please explain in what ways.   | Med      | 4.1, 4.2,<br>B.3       |
| 3.3.3 | Underwriting<br>Practices | Risk<br>Management          | Is your organization assessing the potential for climate change to have impacts on capital adequacy and  | Med/High | 6.1 (ICP 8,<br>ICP 16) |





|       |                           |                | solvency? (Y/N) If yes, how is                              |           |               |
|-------|---------------------------|----------------|---|-----------|---------------|
|       |                           |                | this undertaken?  |           |               |
| 224   | Underwriting              | Risk           | What gaps or barriers remain                                | Low/Med   | N/A           |
| 3.3.4 | Practices                 | Management     | in your efforts to consider                                 | Low/ivied | IN/A          |
|       | Tractices                 | Management     | climate risks in your                                       |           |               |
|       |                           |                | organization's risk   |           |               |
|       |                           |                | _   |           |               |
| 225   | I lo dom unitio a         | Risk           | management processes?                                       | Love      | 22464         |
| 3.3.5 | Underwriting<br>Practices |                | What methods does your                                      | Low       | 3.2.1, 6.1    |
|       | Practices                 | Management     | organization apply to model the impacts of climate risks on |           | (ICP 16),     |
|       |                           |                | insurance liabilities?                                      |           | 7.2.4         |
| 2.4.4 | I lo dom unitio a         | Risk Modelling | Does your organization utilize                              | Low/High  | 22464         |
| 3.4.1 | Underwriting              | RISK Modelling | , ,   | LOW/HIGH  | 3.2.1, 6.1    |
|       | Practices                 |                | catastrophe modelling (either                               |           | (ICP 16),     |
|       |                           |                | proprietary models or third-                                |           | 7.2.4         |
|       |                           |                | party service providers) in any                             |           |               |
|       |                           |                | of your underwriting  |           |               |
|       |                           |                | processes? (Y/N) If yes, please                             |           |               |
|       |                           |                | describe if and how these                                   |           |               |
|       |                           |                | models consider climate                                     |           |               |
|       |                           |                | change factors, and the                                     |           |               |
|       |                           |                | sources of data used to model                               |           |               |
|       |                           |                | climate change impacts.                                     |           |               |
| 3.4.2 | Underwriting              | Risk Modelling | How does your organization                                  | Med       | 3.2.1, 6.1    |
|       | Practices                 |                | evaluate whether risk models                                |           | (ICP 16),     |
|       |                           |                | are providing a robust view of                              |           | 7.2.4         |
|       |                           |                | physical climate risk profiles in                           |           |               |
|       |                           |                | the jurisdictions in which you                              |           |               |
|       |                           |                | operate?  |           |               |
| 3.4.3 | Underwriting              | Risk Modelling | How confident is your                                       | Med       | 3.2.1, 6.1    |
|       | Practices                 |                | organization in the robustness                              |           | (ICP 16),     |
|       |                           |                | of projections for physical                                 |           | 7.2.4         |
|       |                           |                | climate risks in the near term                              |           |               |
|       |                           |                | (next 3-5 years)? What about                                |           |               |
|       |                           |                | the longer term (5-10 years)?                               |           |               |
| 3.4.5 | Underwriting              | Risk Modelling | Beyond catastrophe models,                                  | High      | N/A           |
|       | Practices                 |                | does your organization use                                  |           |               |
|       |                           |                | other types of quantitative                                 |           |               |
|       |                           |                | analytics or data to inform                                 |           |               |
|       |                           |                | your analysis of climate-                                   |           |               |
|       |                           |                | related risks? (Y/N) If yes,                                |           |               |
|       |                           |                | please elaborate.   |           |               |
| 3.4.6 | Underwriting              | Risk Modelling | How are you seeking to                                      | High      | 6.1 (ICP 8,   |
|       | Practices                 |                | explore potential long-term                                 |           | ICP 16),      |
|       |                           |                | impacts of climate change (i.e.                             |           | 7.2.5         |
|       |                           |                | 10-20 years) on your  |           |               |
|       |                           |                | underwriting business?                                      |           |               |
| 3.5.1 | Underwriting              | Products -     | Has your organization directly                              | Low/High  | 3.1, T.1, 3.2 |
|       | Practices                 | Pricing        | or indirectly incorporated                                  |           |               |
|       |                           |                | climate-related factors into                                |           |               |
|       |                           |                | the pricing of insurance                                    |           |               |
|       |                           |                | products? (Y/N) If yes, please                              |           |               |





|       |                           |                           | explain on what basis were these decisions made. If no, explain under what circumstances this could be done.   |          |  |
|-------|---------------------------|---------------------------|--|----------|--|
| 3.5.2 | Underwriting<br>Practices | Products -<br>Pricing     | (For Property Insurers only): Does your organization expect that homeowners and small business that your organization insures, will be subject to higher risk premiums in future years due to physical climate impacts?        | Med/High | 3.2, 6.1<br>(ICP 19),<br>8.5.2.1,<br>8.5.3.1 |
| 3.5.3 | Underwriting<br>Practices | Products -<br>Pricing     | Has your organization implemented exclusion policies to stop underwriting certain assets which may be affected by climate change? (Y/N) If yes, on what basis were these decisions made?                                       | Med      | 3.2  |
| 3.6.1 | Underwriting<br>Practices | Products -<br>Development | Is your organization seeking to develop new types of insurance products to underwrite risks stemming from physical or transition-related climate change factors? If so, please provide some examples of the types of products. | Med      | 6.1 (ICP<br>19)                              |
| 3.6.2 | Underwriting<br>Practices | Products -<br>Development | What types of issues do you foresee for the insurance sector in its efforts to respond to the impacts of physical and transition factors on insurance markets?   | Med      | 6.1 (ICP<br>19)                              |
| 3.6.3 | Underwriting<br>Practices | Products -<br>Development | Have current and/or future climate-related impacts had any influence on client, cedent, or broker selection in your organization? (Y/N) If yes, how?   | Med      | 6.1 (ICP<br>19)                              |
| 3.7.1 | Underwriting<br>Practices | Client<br>Engagement      | Does your organization engage with insured clients to help them better understand their vulnerabilities to climaterelated risks? (Y/N) If yes, how?  | Med      | 4.1, 4.2,<br>6.1 (ICP<br>19)                 |





|       | 1., ,        | cu.             | - " " · ·                         |          |            |
|-------|--------------|-----------------|-----------------------------------|----------|------------|
| 3.7.2 | Underwriting | Client          | Do you offer discounts or         | Med/High | N/A        |
|       | Practices    | Engagement      | other incentives to those         |          |            |
|       |              |                 | insured clients who undertake     |          |            |
|       |              |                 | measures to enhance the           |          |            |
|       |              |                 | climate risk resilience of        |          |            |
|       |              |                 | insurance assets (i.e. domestic   |          |            |
|       |              |                 | property?) (Y/N) If yes, what is  |          |            |
|       |              |                 | your experience with the risk     |          |            |
|       |              |                 | profiles of these clients? If no, |          |            |
|       |              |                 | would you consider to?            |          |            |
| 3.8.1 | Underwriting | Claims          | Does your organization have       | Low      | N/A        |
|       | Practices    | Management      | specific response plans for       |          |            |
|       |              |                 | managing additional claims'       |          |            |
|       |              |                 | burden associated with higher     |          |            |
|       |              |                 | frequency, higher severity        |          |            |
|       |              |                 | natural peril events? (Y/N) If    |          |            |
|       |              |                 | yes, please describe them.        |          |            |
| 3.8.2 | Underwriting | Claims          | How did your organization         | Low      | N/A        |
|       | Practices    | Management      | respond to (major catastrophe     |          |            |
|       |              |                 | or extreme weather event in       |          |            |
|       |              |                 | the local jurisdiction)? What     |          |            |
|       |              |                 | lessons arose from this           |          |            |
|       |              |                 | experience?                       |          |            |
| 4.1.1 | Investment   | Investment      | Does your organization have a     | Low      | 3.2.2      |
|       | Practices    | Policy          | policy in place with respect to   |          |            |
|       |              |                 | consideration of                  |          |            |
|       |              |                 | Environmental, Social, and        |          |            |
|       |              |                 | Governance Issues in              |          |            |
|       |              |                 | investment decision-making?       |          |            |
|       |              |                 | (Y/N) If yes, please describe. If |          |            |
|       |              |                 | no, please explain.               |          |            |
| 4.1.2 | Investment   | Investment      | Does your organization's          | Low      | 3.2.2      |
|       | Practices    | Policy          | investment policy explicitly      |          |            |
|       |              |                 | consider climate change           |          |            |
|       |              |                 | factors? (Y/N) If yes, please     |          |            |
|       |              |                 | describe. If no, please explain.  |          |            |
| 4.2.1 | Investment   | Investment      | Does your organization expect     | Med/High | 3.2.2, 6.1 |
| •     | Practices    | Risk - Physical | that physical risks will affect   |          | (ICP 15)   |
|       |              | <u> </u>        | the valuation of financial        |          | `          |
|       |              |                 | assets in your investment         |          |            |
|       |              |                 | portfolios? (Y/N) If yes, how do  |          |            |
|       |              |                 | you expect these risks to         |          |            |
|       |              |                 | materialize over the short,       |          |            |
|       |              |                 | medium, and long term? If no,     |          |            |
|       |              |                 | please explain.                   |          |            |
| 4.2.2 | Investment   | Investment      | How might physical risk           | High     | 3.2.2, 6.1 |
| 7.2.2 | Practices    | Risk - Physical | factors affect different types    | b        | (ICP 15)   |
|       | Tactices     | Task Thysical   | of assets within your             |          | (15)       |
|       |              |                 | investment portfolios? What       |          |            |
|       |              |                 | differences might you expect      |          |            |
|       |              |                 | across geographies?               |          |            |
| i     | 1            | 1               | acioss geographiles:              |          |            |





| 4.3.1 | Investment<br>Practices | Investment<br>Risk -<br>Transition | Does your organization expect that transition risks will affect the valuation of financial assets in your investment portfolios? (Y/N) If yes, how do you expect these risks to materialize over the short, medium, and long term? If no, please explain.   | Low  | 3.2.2, 6.1<br>(ICP 15) |
|-------|-------------------------|------------------------------------|---|------|------------------------|
| 4.3.2 | Investment<br>Practices | Investment<br>Risk -<br>Transition | How might transition risk factors affect different types of assets within your investment portfolios? What differences might you expect across geographies?   | Med  | 3.2.2, 6.1<br>(ICP 15) |
| 4.4.1 | Investment<br>Practices | Risk<br>Management                 | Does your organization believe that climate risks are appropriately priced into the valuation of equities, bonds, and loans? (Y/N) If no, please explain why not.   | Med  | N/A                    |
| 4.4.2 | Investment<br>Practices | Risk<br>Management                 | On the whole, is your organization more concerned about physical or transition risks from an investment perspective?  | Med  | N/A                    |
| 4.4.3 | Investment<br>Practices | Risk<br>Management                 | Has your organization undertaken quantitative analysis to assess exposure of investment portfolios to potential disruptions from climate-related trends or events, such as a rapid and uncoordinated policy response? (Y/N) If yes, please explain this work, and any impacts on decision-making. | High | 6.1 (ICP<br>16), 7.2.4 |
| 4.4.4 | Investment<br>Practices | Risk<br>Management                 | Has your organization examined the potential impacts of physical events or transition risk factors on liquidity, capital adequacy, or regulatory capital requirements? (Y/N) If yes, has your organization communicated this information through supervisory tools?                               | High | 6.1 (ICP<br>16), 7.2.4 |





|       | 1                       | Τ                  |   | T        |     |
|-------|-------------------------|--------------------|---|----------|-----|
| 4.4.5 | Investment<br>Practices | Risk<br>Management | What are the top-three major risk drivers (i.e. policy, | Med/High | N/A |
|       |                         |                    | technology change, social                               |          |     |
|       |                         |                    | movements) most relevant for                            |          |     |
|       |                         |                    | your investment portfolio                               |          |     |
|       |                         |                    | allocations? Do you expect                              |          |     |
|       |                         |                    | these risks to be affected by                           |          |     |
|       |                         |                    | climate change?   |          |     |
| 4.4.6 | Investment              | Risk               | How does your organization                              | Med/High | N/A |
|       | Practices               | Management         | perceive the potential for                              |          |     |
|       |                         |                    | reputational risks arising from                         |          |     |
|       |                         |                    | its investment decisions in                             |          |     |
|       |                         |                    | climate-related sectors (i.e.                           |          |     |
|       |                         |                    | high carbon assets)?                                    |          |     |
| 4.5.1 | Investment              | Capital            | Is your organization seeking to                         | Low/Med  | N/A |
|       | Practices               | Allocation         | allocate capital to investment                          |          |     |
|       |                         |                    | opportunities associated with                           |          |     |
|       |                         |                    | the low-carbon transition?                              |          |     |
|       |                         |                    | (Y/N) If yes, what are the                              |          |     |
|       |                         |                    | motivations for these                                   |          |     |
|       |                         |                    | investment choices? What                                |          |     |
|       |                         |                    | potential risks may arise?                              |          |     |
| 4.5.2 | Investment              | Capital            | What market, policy, or social                          | Med      | N/A |
|       | Practices               | Allocation         | changes could affect your                               |          |     |
|       |                         |                    | investment strategies relating                          |          |     |
|       |                         |                    | to long-term investments in                             |          |     |
|       |                         |                    | illiquid assets (i.e. sustainable                       |          |     |
|       |                         |                    | infrastructure)?  |          |     |
| 4.5.3 | Investment              | Capital            | How would you describe the                              | Low      | N/A |
|       | Practices               | Allocation         | policy environment relating to                          |          |     |
|       |                         |                    | the low-carbon transition in                            |          |     |
|       |                         |                    | the key jurisdictions where                             |          |     |
|       |                         |                    | you make investments? What                              |          |     |
|       |                         |                    | is the impact of policy                                 |          |     |
|       |                         |                    | conditions on investment                                |          |     |
|       |                         |                    | decisions?  |          |     |
| 5.1.1 | Liability Risks         | Liability Risks    | Has there been a legal                                  | Low      | 3.1 |
|       |                         |                    | judgement awarded in your                               |          |     |
|       |                         |                    | jurisdiction relating to liability                      |          |     |
|       |                         |                    | for climate change damages?                             |          |     |
|       |                         |                    | (Y/N) If yes, do you consider                           |          |     |
|       |                         |                    | this to be relevant for your                            |          |     |
|       |                         |                    | business?   |          |     |
| 5.1.2 | Liability Risks         | Liability Risks    | Does your organization                                  | Low/Med  | 3.1 |
|       |                         |                    | consider that it may be                                 |          |     |
|       |                         |                    | exposed to liability risks                              |          |     |
|       |                         |                    | stemming from climate                                   |          |     |
|       |                         |                    | change, either now or into the                          |          |     |
|       |                         |                    | future? (Y/N) If yes, what steps                        |          |     |
|       |                         |                    | might your firm take to                                 |          |     |
|       |                         |                    | monitor, reduce, or mitigate                            |          |     |





|       |                                       |                                       | these risks? If no, please explain.   |          |                                    |
|-------|---------------------------------------|---------------------------------------|---|----------|------------------------------------|
| 6.1.1 | Scenario<br>Analysis &<br>Stress Test | Scenario<br>Analysis &<br>Stress Test | Is your organization seeking to undertake forward-looking analysis of underwriting liabilities or investment portfolios under different future transition scenarios, including through scenario analysis? (Y/N) If yes, please describe, noting at what stage is this work. | High     | 7.2.5, 8.5,<br>8.7, 8.9            |
| 6.1.2 | Scenario<br>Analysis &<br>Stress Test | Scenario<br>Analysis &<br>Stress Test | (For firms undertaking forward-looking analysis): What types of climate-related factors are your organization seeking to consider in scenario analysis activities, or internal stress tests? What are the data inputs and key assumptions applied?                          | High     | 7.2.5, 8.5,<br>8.7, 8.9            |
| 6.1.3 | Scenario<br>Analysis &<br>Stress Test | Scenario<br>Analysis &<br>Stress Test | What types of gaps and barriers (information, data, scenarios) might complicate your efforts to undertake scenario analysis?  | High     | 7.2.5, 8.5,<br>8.7, 8.9            |
| 7.1.1 | Disclosure &<br>Information           | Frameworks                            | Are you aware of the Recommendations and Supplemental Guidance of the FSB Task Force on Climate Related Disclosures? (Y/N)  | Low      | 4.2, 6.1<br>(ICP 20),<br>T.3, A1.1 |
| 7.1.2 | Disclosure &<br>Information           | Frameworks                            | Has your organization taken steps to implement the TCFD recommendations? (Y/N) If yes, please explain: i) the activities undertaken, and (if an insurance group) the level of this disclosure (e.g. group or legal entity level. If not, please explain why not.            | Low/High | 4.2, 6.1<br>(ICP 20),<br>T.3, A1.1 |
| 7.2.1 | Disclosure &<br>Information           | Data<br>Availability<br>and Quality   | What types of disclosures from corporate entities (i.e. investee companies) are useful for your organization's efforts to conduct analysis of climate-related risks and opportunities, and (if applicable) provide TCFD-compliant disclosures?                              | Low/Med  | 4.2, 6.1<br>(ICP 20),<br>T.3, A1.1 |





| 7.2.2 | Disclosure &                        | Data<br>Availability                | What are the key challenges that your organization has  | Low/Med | 4.2, 6.1<br>(ICP 20),   |
|-------|-------------------------------------|-------------------------------------|---|---------|-------------------------|
|       | Information                         | and Quality                         | faced in its efforts to enhance disclosure of information   |         | T.3, A1.1               |
|       |                                     |                                     | relating to climate-related factors?  |         |                         |
| 8.1.1 | Skills,<br>Capacity, and<br>Culture | Skills,<br>Capacity, and<br>Culture | Does the organization have dedicated team/staff responsible for climate-risk related matters?   | Low     | 4.1, 4.2                |
| 8.1.2 | Skills,<br>Capacity, and<br>Culture | Skills,<br>Capacity, and<br>Culture | Has your organization undertaken activities to build capacity of underwriting and investment professionals with respect to climate change factors? (Y/N) If yes, please explain.                                      | Low     | 4.1, 4.2                |
| 8.1.3 | Skills,<br>Capacity, and<br>Culture | Skills,<br>Capacity, and<br>Culture | Is your organization seeking external inputs to build your skills and capacities with respect to climate change risks? (Y/N) If yes, please explain.  | Low     | 4.1, 4.2                |
| 8.1.4 | Skills,<br>Capacity, and<br>Culture | Skills,<br>Capacity, and<br>Culture | How is climate change considered within guidance materials or other information relating to mission, values, and conduct within your organization?  | Low     | 4.1, 4.2                |
| 9.1.1 | Role of the<br>Supervisor           | Role of the<br>Supervisor           | What guidance from supervisors could be helpful to inform industry practices with respect to the identification, assessment, and management of climate-related risks?   | Low/Med | 5.1, 7.1, 7.2           |
| 9.1.2 | Role of the<br>Supervisor           | Role of the<br>Supervisor           | What guidance from supervisors could be helpful to inform industry practices with respect to disclosure of climate-related risks, and reporting of climate-related information through supervisory tools (e.g. ORSA)? | Low/Med | 5.1, 7.1, 7.2           |
| 9.1.3 | Role of the<br>Supervisor           | Role of the<br>Supervisor           | What guidance from supervisors could be helpful to steer industry practices on forward-looking analysis of climate risks, including through the use of scenario analysis techniques?                                  | Low/Med | 7.2.5, 8.5,<br>8.7, 8.9 |





#### Annex 1: About the SIF

The Sustainable Insurance Forum (SIF) is the global leadership group of insurance supervisors and regulators working together to strengthen their understanding of, and responses to, sustainability issues facing the insurance sector. At its establishment in December 2016, the SIF was the world's first global forum for financial supervisory and regulatory entities focusing on sustainable development issues. The SIF is led by a singly high-level Chairperson, who is an Insurance Commissioner (or equivalent level). The current SIF Chairperson is Mr. Geoff Summerhayes, Executive Board Member of the Australian Prudential Regulatory Authority.

Since its inception, the SIF has evolved into a dynamic forum for developing and advancing a shared agenda to mainstream climate change issues into supervisory and regulatory practices, including through the International Association of Insurance Supervisors (IAIS).

The long-term vision of the SIF is a global insurance system where sustainability factors are effectively integrated into the regulation and supervision of insurance companies. To achieve this, the SIF serves as the platform for insurance supervisors to exchange experience and develop common approaches to shared challenges.

## Supervisor Members (29)

- Argentina: Superintendencia de Seguros de la Nación (SSN)
- Australia: Australian Prudential Regulation Authority (APRA)
- Belgium: National Bank of Belgium (NBB)
- Bermuda: Bermuda Monetary Authority (BMA)
- Brazil: Superintendência de Seguros Privados (SUSEP)
- Canada: Office of the Superintendent of Financial Institutions (OSFI)
- Chinese Taipei: Financial Supervisory Commission (FSC)
- Costa Rica: Superintendencia General de Seguros de Costa Rica (SUGESE)
- Egypt: Financial Regulatory Authority (FRA)
- Finland: Finanssivalvonta (FIN-FSA)
- France: Autorité de Contrôle Prudentiel et de Résolution (ACPR)
- European Union: European Insurance and Occupational Pensions Authority (EIOPA)
- Germany: Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin)
- Ghana: National Insurance Commission (NIC)
- Guernsey: Guernsey Financial Services Commission (GFSC)
- Ireland: Central Bank of Ireland (CBI)
- Italy: Istituto per la Vigilanza Sulle Assicurazioni (IVASS)

<sup>&</sup>lt;sup>6</sup> The Sustainable Banking Network (SBN), established by the IFC in 2012, involves both regulators and market associations (only from developing countries).





- Japan: Financial Services Agency (FSA)
- Morocco: Autorité de Contrôle des Assurances et de la Prévoyance Sociale (ACAPS)
- Netherlands: De Nederlandsche Bank (DNB)
- New Zealand: Reserve Bank of New Zealand (RBNZ)
- Singapore: Monetary Authority of Singapore (MAS)
- South Africa: Prudential Authority (PA)
- Sweden: Finansinspektionen (FI)
- United Kingdom: Bank of England Prudential Regulation Authority (PRA)
- United States California: California Department of Insurance (CDI)
- United States New York State Department of Financial Services (NYDFS)
- United States Washington State: Office of the Insurance Commissioner (OIC)
- United States National Association of Insurance Commissioners (NAIC)

### **Observer Supervisors**

- Malaysia: Bank Negara Malaysia (BNM)
- Mauritius: Financial Services Commission Mauritius (FSCM)
- United Arab Emirates: Insurance Authority (IA)
- United Arab Emirates: Abu Dhabi Global Market (ADGM)
- United Kingdom: Financial Conduct Authority (FCA)

### **Partner Institutions**

- Access to Insurance Initiative (A2ii)
- Financial Stability Institute Bank for International Settlements (FSI)
- International Association of Insurance Supervisors (IAIS)
- International Monetary Fund (IMF)
- Organisation for Economic Cooperation and Development (OECD)