

Summary of Climate Risk Management Survey Results

1. Background

- 1.1 The impact of climate change is posing threats to economies and societies. With the multiple roles of insurance companies as investors, risk underwriters and corporate citizens, there is a growing need for insurance companies to understand how climate change could affect their business and to devise the strategy to manage the climate risks identified.
- 1.2 Acknowledging that climate risk management is an evolving area, on 30 June 2023, the Insurance Authority (“IA”) invited authorized insurers to participate on a voluntary basis in the Climate Risk Management Survey (“Survey”)¹ with the objective to better understand the industry’s readiness, progress, practices, and challenges in managing climate risks.
- 1.3 The IA received 81 survey responses, representing 60% response rate from authorized insurers subject to the Guideline on Enterprise Risk Management (“GL21”). These survey respondents also represented 52% of the general business market by gross premium and 90% of the long-term business market by in-force premium.

2. Survey Results Highlights

Overall score of climate readiness

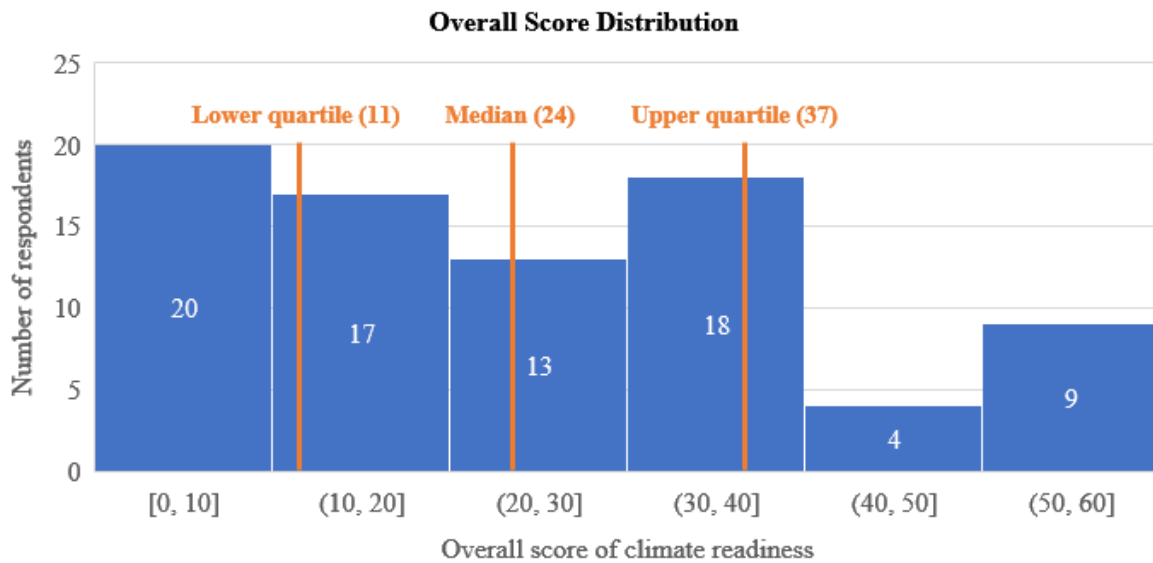
- 2.1 The survey was designed as a self-assessment for insurers. Respondents were asked to assign a score of 0, 1, 2 or 3 to indicate the stage of development on 20 components of climate risk management. These scores were then added up together to give the overall score of an insurer’s climate readiness. The meaning of each scale is described below.

0	Not yet started to plan
1	Having a concrete plan with timeline
2	Implemented as planned
3	Monitoring and/or enhancing the implementation

¹ https://www.ia.org.hk/en/legislative_framework/circulars/reg_matters/files/Cir_dd_30.06.2023_Eng.pdf

2.2 Figure 1 shows the overall score distribution and statistics of the respondents.

Figure 1: Overall score distribution



Min	Lower quartile	Median	Upper quartile	Max
0	11	24	37	60

2.3 Overall, there is a wide range of readiness among respondents in climate risk management, skewing towards the earlier stages of implementing or planning to implement climate risk management. Nevertheless, there were about 10% of respondents with the overall score between 51 to 60, indicating that they were in the advanced stage of monitoring and enhancing their climate risk management for most of the components.

Score distribution by components

2.4 The survey questions mainly fall under three categories, namely “Strategy”, “Governance” and “Risk Management”. Figure 2 shows the distribution of self-assessed scoring of each of the 20 components of climate risk management. Overall, majority of respondents have kick-started their journey to develop climate risk management practices despite the stage of development in each component varies.

2.5 For components in the Strategy part, it was observed that about one-third of respondents were already at the rather advanced stage of monitoring or enhancing the implementation of climate considerations as part of the investment plan (38%) and operational plan (32%). However, respondents appeared to accord a lower priority to financial planning as it was observed that 63% of respondents have not yet started to plan for climate risk management in this area.

- 2.6 For components in the Governance part, majority of respondents (70%) indicated that they have established or had a concrete plan to establish a governance structure to exercise oversight on climate risks. Most of them indicated in responding to follow-up questions that their Board members would be informed of and discuss climate risks in Board meetings on a regular basis. It was also observed that around 70% of respondents have planned or implemented plans to define roles and responsibilities of senior management in climate risk management with capacity building support provided, though such practices for the Board or Board committees were relatively less well developed. Besides, aligning climate-related performance with remuneration plans was not a common practice among respondents while some pioneering peers indicated in responding to the follow-up question that staff remuneration or incentive plans would be aligned with broader ESG (environment, social and governance) metrics.
- 2.7 For components in the Risk Management part, around 60% of respondents have planned or taken actions in managing climate risks exposures in various parts of the risk management cycle. On the other hand, a significant portion of respondents were lagging behind particularly in setting climate risk appetite and climate risks reporting to the Board and/or senior management.
- 2.8 In addition to the above three major categories, readiness for conducting climate scenario analysis and stress testing and making climate-related disclosures was also ascertained. It is noted that respondents generally remained in an incipient stage of development, whereby about 40% of respondents indicated that they have not yet started to plan in these two areas.

Figure 2: Score distribution by components of climate risk management

		0 Not yet started to plan	1 Having a concrete plan with timeline	2 Implemented as planned	3 Monitoring and/or enhancing the implementation	
Strategy	Strategic targets and objectives setting	38.2%	19.8%	21%	21%	
	Underwriting and/or product development plans	39.5%	23.5%	18.5%	18.5%	
	Investment plan	34.6%	6.2%	21%	38.3%	
	Financial plan	63%	8.6%	19.8%	8.6%	
	Operational plan	27.1%	17.3%	23.5%	32.1%	
Governance	Oversight on climate risks	29.6%	18.5%	29.6%	22.2%	
	Roles and responsibilities	Board and/or board committee	43.2%	9.9%	29.6%	17.3%
		Senior management	34.6%	14.8%	37%	13.6%
	Capacity building	Board and/or board committee	49.4%	18.5%	23.5%	8.6%
		Senior management	30.9%	17.3%	33.3%	18.5%
		Other staff	30.9%	14.8%	35.8%	18.5%
	Remuneration / incentive plan	66.7%	4.9%	19.8%	8.6%	
Risk Management	Formulation of climate risk appetite	48.1%	18.5%	23.5%	9.9%	
	Identification of material climate risk exposures	33.3%	17.3%	27.2%	22.2%	
	Measurement of climate risk exposures	39.5%	13.6%	22.2%	24.7%	
	Monitoring of climate risk exposures	38.3%	21%	18.5%	22.2%	
	Control and mitigate the impacts of climate risks	37%	16%	18.5%	28.4%	
	Climate risk reporting to the board and/or senior management	48.1%	18.5%	16%	17.3%	
Scenario analysis or stress testing	Climate-related scenario analysis or stress testing	39.5%	9.9%	29.6%	21%	
Disclosures	Public disclose of approaches to climate risk management	45.7%	12.3%	21%	21%	

3. Climate risk management practices observed

3.1 This section provides some common climate risk management practices observed based on the respondents' answers to the corresponding follow-up questions. These are by no means exhaustive nor prescriptive, but would serve as useful references for insurers to improve their climate risk management practices where relevant and appropriate.

Strategy

3.2 In the survey, respondents were asked to select one or more choices from a list of climate-related strategies for each of the following areas. The strategies with the highest vote in each area are listed below:

Components of strategic planning	Top choice selected (%)
Operational	Reducing carbon footprint at operational level such as embracing digitalization, adopting energy efficient technologies and moving operations into green buildings (95%)
Investment	Adopting the investment strategies of negative screening (83%)
Strategic targets and objectives setting	Setting decarbonization targets such as phasing out carbon-intensive sectors in underwriting and investment portfolios (70%)
Underwriting	Imposing restrictions on underwriting exposures (55%)
Product development	Developing climate-related general insurance products (41%)

Governance

3.3 On senior management's role in managing climate risks, some respondents shared as supplementary information that a dedicated climate-related working group or committee was set up and led by CEO or CRO with representatives from relevant departments participating as members.

3.4 Common practices regarding the roles and responsibilities of senior management in climate risk management, as revealed in the survey, included an annual review on the effectiveness of the climate-related framework and implementation progress of relevant risk policies, timely escalation on material climate-related issues to the Board, developing metrics to monitor climate risk exposures, as well as ensuring suitable and sufficient resources allocated and trainings provided to staff involved in managing climate risks.

3.5 Respondents generally indicated that provision of climate risk training was focused on staff in independent risk management functions and front-line business teams. Some

respondents indicated that they provided climate risks training to all staff through online learning platforms to build internal capacity.

Risk Management

- 3.6 Setting climate risk appetite is an essential step of the risk management cycle. Among the respondents who have integrated climate risks into the existing risk appetite framework, some of them provided examples of relevant descriptions such as “underwriting limitation on coal infrastructure” and “percentage of investment that fail to deliver on net-zero commitment”.
- 3.7 Respondents generally performed materiality assessment on climate risk exposures at portfolio level for investment and underwriting. In addition to regular review, some insurers would also review the materiality assessment where there are significant changes in climate risk exposures.
- 3.8 Among those implemented climate risk control and mitigation measures, respondents would set exposure limits on carbon-intensive sectors for investment/underwriting portfolios and set feasible plans to reduce such exposures. It was also common for respondents to set exposure limits on geographical areas with higher risk of natural hazards in underwriting portfolios.

Scenario Analysis / Stress Testing

- 3.9 Among respondents who considered themselves in the planning or implementation stage, the scope of climate scenario analysis or stress testing typically covered the impact of physical risks on the liability side and transition risks on the asset side of the balance sheet. About half of them have considered the time horizon until year 2050 which was beyond the usual business planning cycle of 3 to 5 years. The extreme weather events considered were mainly tropical cyclones and flooding.
- 3.10 In terms of selection of climate scenarios, it was common among respondents to consider the Network for Greening the Financial System (“NGFS”) scenarios framework², in particular the “current policies”³, “delayed transition”⁴ and “below 2°C”⁵ scenarios.

² <https://www.ngfs.net/ngfs-scenarios-portal/>

³ “Current policies” assumes only currently implemented policies are preserved which is insufficient to halt significant global warming (i.e. failed to limit global warming to below 2°C by 2050 and would reach 2.8 °C by the end of century). This will lead to high physical risks including irreversible impacts like sea-level rise.

⁴ “Delayed transition” assumes climate policy efforts are uncoordinated or delayed which will lead to high transition risks but still be able to achieve the 2°C target by 2050.

⁵ “Below 2°C” assumes climate policies are introduced with gradual increase in stringency giving a 67% chance of limiting global warming to below 2°C, which will keep both physical and transition risks at bay.

Disclosures

- 3.11 Respondents who have made public climate-related disclosures generally included them as part of their annual reports or in a separate sustainability or ESG reports. The Task Force on Climate-related Financial Disclosures (TCFD) Recommendations was the most commonly adopted framework.

4. Acknowledgment and Way Forward

- 4.1 It is acknowledged that climate risk management is an evolving area. Regardless of an insurer's stage of implementing climate risk management, it should continue to monitor the rapid development in data quality and availability, climate risk modelling, talent development, climate-related policies, regulations and disclosure standards at international, regional and local levels, as well as how stakeholders of the insurance market would be responding to climate change. Insurers should also continue seeking to improve their capabilities in climate risk management over time and keep abreast of the latest development.
- 4.2 The IA once again extends its gratitude to industry participants for their valuable contribution to the survey. While the survey was conducted on a voluntary and self-assessment basis, it does provide useful information to help better understand the overall industry readiness in climate risk management. On areas that the industry may require further guidance and support as revealed by the survey, the IA would develop some guidance and reference materials to facilitate insurers in stepping up their climate risk management capability.