



BERMUDA MONETARY AUTHORITY

DISCUSSION PAPER

DISCLOSURE OF CLIMATE CHANGE RISKS FOR COMMERCIAL
INSURERS

SEPTEMBER 2023

TABLE OF CONTENTS

I.	INTRODUCTION.....	3
II.	APPLICATION OF THIS DISCUSSION PAPER.....	6
III.	DEFINITIONS	8
IV.	FRAMEWORK.....	9
	TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES	9
	RECOMMENDATIONS (TCFD) RECOMMENDATIONS.....	9
	REQUIREMENTS	9
	GOVERNANCE	10
	STRATEGY	11
	SCENARIO ANALYSIS	12
	RISK MANAGEMENT.....	13
	METRICS AND TARGETS	14
V.	CLIMATE RISK METRICS.....	15
	Core Investment Metrics	15
	Core Underwriting Metrics	16
VI.	TRANSITION PLANS	18
VII.	FUTURE OUTLOOK.....	19
	Appendix A: Landscape of Climate Reporting Background.....	21
	Appendix B: Formulas for calculating certain core metrics.....	22
	Appendix C: Response Form	23

The views of our industry partners and other interested persons on the proposals set out in this Discussion Paper (DP) are invited. Responses to the questions raised and any other comments are to be provided in the required format as per the **Appendix C** Excel spreadsheet that is enclosed with this DP. All responses should be forwarded to climaterisk@bma.bm prior to 15 December 2023 (response deadline). Please include the Company name followed by “Discussion Paper – Disclosure of Climate Change” in the subject line of the e-mail.

I. INTRODUCTION

1. The Authority has been examining the impact of climate change in the Bermuda insurance industry, with the aim of appropriately integrating climate and wider Environmental Social Governance (ESG) risks into our regulatory frameworks. In 2020, the BMA designed a climate change survey to understand how insurers are assessing the impacts of climate change and how they are responding to climate change risks and opportunities. Subsequently, in 2021, a climate risk exposure survey was launched and published to build upon the initial survey. The focus of the 2021 survey was to gain insights into the industry's long-term climate change risk exposures through a simplified physical risk scenario analysis exercise and to quantify the industry's investment portfolio allocation of climate-relevant assets (transition risk).
2. The insights gained into the industry's climate change exposures, risk management practices, challenges and strategic direction helped the BMA to establish standards for the industry. The first such step took the form of updating the Insurance Code of Conduct (Code)¹ in August 2022. Following the Code updates, the BMA released a Guidance Note, "*Management of Climate Risks for Commercial Insurers*"² (Climate Risk Guidance Note) in March 2023, with provisions for insurers to embed climate change into their corporate governance framework and their Commercial Insurer's Solvency Self-Assessment (CISSA). This Discussion Paper (DP) builds upon earlier work and focuses on the area of climate risk disclosure.
3. Climate change is a global issue, relevant for all companies and is likely to be a material financial risk for most insurers. Heightened risk exposures arising from climate change can impact insurers in a variety of ways, including the risks and opportunities attached to their underwriting activities, the impact on insurers' investment portfolios and the impact on their operations. Climate change is already having an impact on insurers through these transmission channels. However, medium and longer-term impacts have yet to crystallise. This has led to stakeholders – regulators, investors, policyholders, and wider society – wanting to better understand the climate risks insurers are exposed to and how they are being mitigated through disclosure. The BMA is of the view that climate disclosure information is pivotal to addressing climate risk, acknowledging both the transversal and long-term nature of this risk. Disclosure aims to protect the policyholder and ensure the viability and soundness of the insurance sector over the longer term, which is at the heart of the BMA's work. More transparent, high-quality disclosure from all companies on how they are managing climate-related financial risks and opportunities will allow them to provide external stakeholders with the information they require as well as helping

¹ [The Code](#) sets out the Authority's expectations for how insurers are set up and execute their business on a day-to-day basis across Corporate Governance, the Risk Management Framework, relevant Governance Mechanisms, outsourcing relationships with third parties and the insurer's Conduct of Business with its clients. The Code was recently updated, and insurers are expected to be compliant with the new expectations by 1 September 2023, with Conduct of Business expectations already applicable from 1 March 2023.

² [Management of Climate Risks for Commercial Insurers published in March 2023.](#)

them to make more informed decisions internally. Disclosures also help to ensure that a greater level of scrutiny will be applied in an effort to ensure that companies do not make misleading sustainability-related claims (greenwashing) and to enable greater stakeholder trust in the market.

4. The BMA notes that the nature of climate risks and the respective measurement methods are constantly evolving and that the methodology for insurers to calculate it is likely still being developed. An example of this would be insurers' financed emissions exposures from their underwriting activities. Despite this, it is the view of the BMA that sufficient expertise exists in the main risk areas, such as physical risk and climate risk impacts for both investments and operations, to allow insurers to start addressing the impacts of climate on their businesses and embedding climate change risks across their functions.
5. Physical risks arise through the impacts of the changing climate and can be broadly categorised as either chronic or acute risks. Physical risks can impact all categories of insurers in the scope of this DP, including commercial property and casualty (re) insurers) as well as long-term (re-) insurance entities (i.e., morbidity and mortality impacts) and groups. Transition risks arise from changing business, political, regulatory, technological, and societal landscapes as the impacts of moving towards a net zero global economy become more defined. These risks will be more pronounced and potentially have a more significant impact on an insurer's business activities, for example, in the case of investments or underwriting, where there is a disorderly transition to a low-carbon economy. Litigation risks arise from the scrutiny of insurers' climate activities by various stakeholders and any resulting legal challenges or the threat thereof, which is a growing area of concern.
6. While climate change impacts the entire insurance market, this DP discusses the Authority's view of climate risk disclosure for both commercial insurers and insurance groups (both referred to hereafter as 'insurers'). It is the BMA's proposal to align disclosure requirements initially with the Task Force on Climate-Related Financial Disclosures (TCFD) recommendations based on a landscape review that was completed on regulatory developments in this area, and noting it is recognised as an internationally widely adopted baseline framework for disclosures according to the Network for Greening the Financial System (NGFS).
7. In this DP, the BMA discusses the introduction of a framework for climate disclosure focusing on the four pillars of TCFD's recommendations, including governance, strategy, risk management and metrics and targets. This approach closely aligns with the BMA's latest Climate Risk Guidance Note. It also builds on the work and conclusions of past surveys, especially in the areas of governance and risk management.
8. This DP further seeks input on the industry's views on the BMA's considerations and proposals on how insurers can publicly disclose their climate risk exposure, mitigation and monitoring activities on an annual basis. This is set out in more detail in the

‘Framework’ section (Section IV) of this DP. In line with the proposed standards for climate disclosure, the focus of the disclosure is primarily on the financial impact of climate risks on insurers. However, as these standards are evolving, the BMA expects insurers to consider the impact that their own business and operational activities have on the climate (the ‘double materiality’ concept), by focusing initially on reputational and strategic aspects along with the respective financial impact.

9. From a disclosure perspective, in instances where insurers conclude that climate is not a material risk, they should expressly state this and provide support on how that conclusion was reached.
10. While it is the BMA’s goal to introduce climate-related financial disclosures that cover a large part of the Bermuda insurance sector, there are a number of possible ways to achieve this. All stakeholders are thus invited to provide answers to and feedback on the questions outlined in this DP regarding the disclosure approach. A subsequent consultation paper on disclosures will follow the completion of the discussion phase and will determine the final approach and regulatory implementation. The consultation paper may include further ISSB-related references as these were still under development at the time of issuing this DP.
11. The Authority also welcomes the International Sustainability Standards Board (ISSB) releasing in June 2023 its first two IFRS Sustainability Disclosure Standards, IFRS S1 *General Requirements for Disclosure of Sustainability-related Financial Information*³ and IFRS S2 *Climate-related Disclosures*⁴, which culminated in the development of a comprehensive global baseline of sustainability disclosures. The Authority sees this as a welcome evolution in further strengthening international disclosure standards.
12. The ISSB standards are assessed to fully incorporate TCFD recommendations⁵ and are structured similarly, with both IFRS S1 and IFRS S2 adopting the same four-pillar core content framework. However, ISSB standards might require some additional and more detailed information under the various pillars. It should be noted that not all of the core metrics as outlined in this DP exist in their proposed format in the ISSB’s IFRS S2 standard and further materials may be developed by the ISSB in all areas, but especially in the area of metrics specific to the insurance industry.
13. Considering the significant overlap of TCFD and ISSB standards, and the fact that a broad range of benchmarking material and more general understanding is available for TCFD, BMA has decided at this stage to continue supporting alignment with TCFD recommendations. However, depending on further developments in this area over the coming months, incorporating elements from the ISSB standards may be sought at the forthcoming consultation paper stage, especially given that in 2024 ISSB will take over the monitoring of companies’ progress on climate-related disclosures from

³ IFRS S1 [General Requirements for Disclosure of Sustainability-related Financial Information](#)

⁴ IFRS S2 [Climate-related Disclosures](#)

⁵ [Comparison IFRS S2 Climate-related Disclosures with the TCFD Recommendations](#)

TCFD. Considering this, the BMA is choosing a gradual and market-specific alignment of the disclosure requirements with ISSB standards at a later stage.

II. APPLICATION OF THIS DISCUSSION PAPER

14. The Authority proposes that the disclosure framework apply to all commercial insurers and insurance groups regulated by the BMA.
15. The BMA recognises that the insurance industry in Bermuda plays an important role in developing the understanding of climate risk and enhancing resilience against these risks both through offering risk transfer solutions and as an investor. As such, across the classes of insurers in the scope of this DP, the Authority expects climate-related financial disclosure to cover all material portions of a (re)insurer's activities (underwriting, investments and operations). Insurers should therefore take the necessary steps to ensure that their disclosures on how climate change has impacted governance structures and business strategy are sufficiently detailed. The approach taken in developing the proposals set out in this DP is designed to support better decision-making capabilities for all stakeholders in the insurance value chain.
16. While this DP introduces minimum expectations for reporting, the detail and length of disclosures should be reflective of the size, complexity, and risk profile of each insurer's individual business (i.e., the proportionality principle).
17. Globally a number of jurisdictions have disclosure requirements that apply to the market as a whole, requiring reporting within a short time frame (e.g., within one year of the released guidance). However, the BMA proposes a phased implementation of the requirements given the complexity of setting up the internal systems and processes to support the reporting requirements. A phased-in approach was also taken with the roll-out of the Climate Risk Guidance Note expectations. This approach was assessed to be appropriate for the purposes of the DP, given the varying degree of advancements in climate change risk management made by the various classes of companies operating in Bermuda, as demonstrated by the results of past surveys.
18. If feedback on the regulatory implementation path allows, it is proposed that Groups publish their first disclosure report using the requirements for financial reporting periods starting with year-end 2024. Class 4 and Class E Commercial Insurers will then start reporting at year-end 2025 and all other Commercial Insurers (i.e., all Classes 3A, 3B, C and D insurers) will have an additional year to prepare for the requirements for financial reporting periods with reporting starting at year-end 2026. This approach is assessed to capture the proportionality principle within the Bermuda market adequately; however, feedback is encouraged. The phased-in approach also takes into consideration a market stock-take, which demonstrated that a meaningful portion of Groups and Large Commercial insurers operating in Bermuda are already making voluntary TCFD disclosures.

19. The BMA will look to revise the requirements and scope of the proposals introduced in this DP, which will inform a Consultation Paper, should any new relevant information arise, or should it become apparent that other classes of insurers should be included.

Question 1: Do you agree with the proposed scope of this DP, including a phased-in implementation? Implementation includes year-end 2024 reporting for Groups, year-end 2025 for Commercial Classes 4 and E, and then year-end 2026 reporting for the remaining Commercial insurers (Class 3A, 3B, C and D).

Question 2: Should the BMA consider implementing thresholds for certain small commercial classes (Classes 3A and C), such as for total assets above \$5 billion for required reporting?

Question 3: Should Class 4 and E insurers be required to report against disclosure requirements at the same time as Groups?

Question 4: What obstacles exist in being able to provide these disclosures within the proposed timelines?

III. DEFINITIONS

‘Act’ - means the Insurance Act 1978.

‘CISSA’ – refers to the Commercial Insurer’s Solvency Self-Assessment required of commercial entities operating in Bermuda. This term is also used in this DP to reference the Group Solvency Self-Assessment (GSSA) that is required of groups. The CISSA and GSSA are both well-known together as Own Risk and Solvency Assessment (ORSA).

‘Climate change risk, climate-related risk and climate risk’ – are used interchangeably, having typically two (main) drivers of risk: transition risks and physical risks. In addition, litigation risk can be considered.

‘Insurance Code of Conduct’ – means the Insurance Code of Conduct issued by the Authority.

‘Insurer’ – for the purposes of this DP means commercial insurers, namely classes 3A, 3B, 4, C, D and E, as such classes are defined in the Act and insurance groups.

‘Insurance group’ – has the meaning given under Section 1 of the Act.

‘Legal/litigation risk’ – includes direct claims or lawsuits made against insurers for failing to manage climate risks, such as the management and boards of insurers that are not fully considering or responding to climate change impacts or appropriately disclosing current and future climate-related risks.

‘Long-term insurer’ – has the meaning given in Section 1 of the Act.

‘Physical risks’ – mean risks which arise from the physical impacts of climate change. They may arise as acute physical risks such as weather-related events manifesting in, for example, increasing property damage or through subsequent events such as disruption of global supply chains or resource scarcity. They may also arise as chronic physical risks from longer-term changes in the climate, such as temperature changes and rising sea levels, biodiversity loss and changes in agricultural productivity, which can also result in increasing ill effects on human health and affect morbidity and mortality patterns.

‘Transition risks’ – mean risks that may arise from the transition to a low-carbon economy, which may, for example, lead to a reassessment of asset values in climate-sensitive sectors. Transition risks may be driven by policy changes, market dynamics, technological innovation or reputational factors and may be amplified through an unorderly process.

IV. FRAMEWORK

20. When considering where to position disclosure reporting within the Bermuda supervision framework, the Financial Condition Report (FCR) has been assessed as a natural fit under existing regulations such as the Insurance Public Disclosure Rules and Insurance Code of Conduct (Code) due to the public nature of disclosure reporting. This is further explored under the ‘Requirements’ section of this DP.

TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES RECOMMENDATIONS (TCFD) RECOMMENDATIONS

21. The landscape for reporting on climate risk has evolved significantly over the past few years. The TCFD published its stance in the *Recommendations of the Task Force on Climate-related Financial Disclosures*³, which sets the baseline for how firms, including insurers, should look at assessing, analysing, mitigating and ultimately reporting climate risk. Additional information on the reporting landscape can be found in Appendix A.
22. The TCFD recommendations set out expectations under four core pillars: governance, strategy, risk management and metrics and targets. These pillars are designed to support companies with how they consider, integrate and report on climate risks and opportunities. The four pillars are underpinned by eleven recommended disclosures that set out more granular disclosure requirements.
23. These recommendations are supported by a more detailed implementation annex that provides general and sector-specific guidance on embedding the TCFD framework, inclusive of insurers. An updated annex was published in 2021, reflecting the progress firms had made and the urgent need to take action on climate change. The TCFD also published several guidance documents to help companies integrate the framework into their operations and reporting framework⁴. While the TCFD is a voluntary framework, numerous policymakers and regulators globally have introduced mandatory reporting requirements that are aligned with the framework.

REQUIREMENTS

24. Given the growing adoption of the TCFD framework into local regulatory requirements in many jurisdictions and the significant market input received in developing the framework and regulatory oversight through the Financial Stability Board (FSB) of the TCFD Secretariat itself, the BMA recommends aligning with climate reporting requirements of TCFD at this stage.

³ TCFD [Recommendations of the Task Force on Climate-related Financial Disclosures](#) published June 2017.

⁴ TCFD [Guidance on Risk Management Integration and Disclosure](#) published in October 2020 and TCFD [Guidance on Metrics, Targets and Transition Plans](#) published in October 2021.

25. The BMA has assessed public disclosure requirements specific to the FCR against the TCFD recommendations and determined that there are natural overlaps between them. The BMA, therefore, proposes that insurers report their TCFD-aligned disclosure requirements directly within the existing FCR report in its own dedicated section. Disclosure information in the FCR report can equally be supported by a publicly available, clearly referenced, and linked TCFD report, especially for those insurers that are already publishing their disclosure reports.
26. In addition to reporting against the TCFD recommendations and recommended disclosures, the BMA suggests that insurers undertake a detailed assessment against the implementation annex (both the sector-agnostic and insurance-specific elements) and consider the additional guidance published by the TCFD to support the disclosures in the FCR.
27. In the following sections of this DP, the BMA provides additional detail on what insurers may need to consider as they work through their reporting requirements.
28. The BMA suggests that the TCFD framework-aligned disclosures provided in the FCR report should be proportionate to the nature, size, complexity, and impact of climate risk to the insurer.

Question 5: Do you agree that aligning the disclosure requirement with the TCFD framework provides enough flexibility for insurers to make their disclosure specific to their organisational activities? If not, what framework would you propose as an alternative?

Question 6: Do you agree that disclosures should be fully captured in the FCR and that, in case there is a separate public TCFD report, disclosures should just be highlighted/summarised in the FCR? Alternatively, should the BMA consider requiring a public, stand-alone TCFD report for all insurers?

Question 7: Are there any other frameworks you would like the BMA to consider (i.e., the Taskforce on Nature-related Financial Disclosures (TNFD))?

GOVERNANCE

29. The BMA already sets general governance framework expectations, among others, in the Insurance Code of Conduct. The FCR also requires clarification of the role of the board and management teams in executing responsibilities across the business. Further information on governance related to climate risk management is provided in the Climate Risk Guidance Note, including the following primary areas: the role of the board, knowledge level, inclusions of climate risk in processes, frameworks, and reporting.

30. The Authority expects that insurers will reference the existing BMA framework and guidance as well as TCFD requirements when considering their approach to governance. The BMA assesses its governance requirements in the Insurance Code of Conduct (and the Climate Risk Guidance Note) as relevant for disclosure reporting and largely aligned with TCFD.
31. The TCFD governance requirements expect a description of the board's oversight role and management's role in assessing and managing climate risk and opportunities. Regarding the specific reporting under the governance pillar of the TCFD, the BMA expects that insurers' boards and management teams are able to understand, assess and manage the financial risks of climate change. Moreover, they should also be able to show how these risks have been considered in other elements of operations, such as strategic and financial planning.
32. The reporting should clearly indicate how responsibility for climate risk has been assigned at the board and management level, including individual roles and functions, where appropriate. In addition, the board should have access to appropriate skills, expertise and resources to monitor climate risks across the insurer's operations. The approach insurers take to embedding climate risk across their governance framework should take into account the different implications that can arise from climate risks and consider a sufficiently long-term view of this transversal risk.
33. Insurers should effectively integrate climate risk across their governance framework. Where this is not the case, they should have a clear action plan to achieve this within a reasonable timeframe. The Authority considers the integration of climate risk into an insurer's governance to be a priority.

STRATEGY

34. The Climate Risk Guidance Note highlights the importance of strategy setting and its link to corporate governance. It also clearly delineates expectations on strategic risk, especially when considering the transversal and long-term nature of climate change risk. TCFD recommendations align closely with those expectations. They both require greater detail on how companies view and assess climate-related risks and opportunities, the impacts on the organisation and overall resilience across a variety of time horizons.
35. There is a high likelihood that climate risk will have a significant impact on the insurer's business in the short, medium, and long term. Ultimately, insurers should consider the impact of climate change on the business they underwrite, as well as how their investment portfolios react to both physical and transition risks. Insurers, thus, should clearly identify how they measure and manage the impact of climate risk on their business strategy from the short to the long term.

36. Understanding the impact that climate risk can have on an insurer's business, strategy and financial planning means insurers need to be able to take action as climate-related risks and opportunities arise. Climate considerations should be embedded into their corporate strategy and financial plans, enabling insurers to be more resilient to future disruptions caused by climate change. The BMA notes that many insurers are already re-assessing their core business activities in the face of enhanced climate risk exposure, and many are already embedding climate-related financial considerations into their underwriting and investment strategies.
37. The BMA will continue to assess how the Bermuda insurance sector is adapting to climate risk. For example, understanding the financial implications of individual assets or entire sectors of an economy becoming stranded (i.e., no longer yielding positive business results) through the changing public policy landscape. Similarly, with more frequent and severe climate-related catastrophe events, the insurance sector will need to address the growing natural catastrophe protection gap to ensure the most vulnerable communities are able to access the risk transfer solutions they require. The Bermuda insurance sector's role as a provider of risk solutions will be crucial in mitigating climate risk globally. This includes the sector's (re)insurance and catastrophe risk modelling expertise held locally and applied globally. Equally, the BMA acknowledges that with the heightened focus on decarbonisation efforts globally, there will be new risks and business opportunities with strategic impact that arise for the insurance sector.

SCENARIO ANALYSIS

38. As part of the strategy disclosures under the TCFD framework, insurers will need to consider disclosing the resilience of their strategy against a range of climate change scenarios. This is considered one of the most challenging aspects of the TCFD framework as it consistently ranks among the lowest reported recommendations in the TCFD's annual status report.
39. The BMA has already introduced provisions for insurers to embed climate risk into their stress testing/scenario exercises for CISSA through the Climate Risk Guidance Note. In that context, the BMA expects insurers to embed climate risk scenarios into their risk management and strategic processes in order to assess their material exposures qualitatively and quantitatively. Understanding these exposures will help management effectively manage the potential impact of climate change on the business.
40. The BMA acknowledges that the information disclosed in the CISSA scenario analysis will be more granular for the quantitative analysis and insurers are encouraged to disclose all relevant climate-related financial information publicly, where material, including information on the scenario analysis procedures performed and the results. The BMA notes that there is an element of commercial sensitivity built into the granularity of the CISSA scenario analysis methodology and, as such, would not

expect the CISSA and public TCFD disclosures, as they relate to scenario analysis, to contain the same level of detail.

41. The BMA acknowledges that insurers, particularly smaller insurers, will face challenges in developing their approach to scenario analysis as data and analytics capabilities differ and methodologies continue to improve. While these factors will have an impact on the nature of the disclosure, the BMA expects that insurers' scenario analysis procedures will become more robust over time. This view considers the complexities of sourcing data and reflects a landscape in which methodologies are continually evolving as scenario analysis is further embedded within insurers' strategic decision-making. The BMA notes that there are challenges to making detailed quantitative scenario analysis disclosures and, therefore, where insurers are unable to make quantitative disclosures, the BMA recommends their inclusion over time.
42. Independently, the BMA highlights that for disclosure purposes, as for CISSA purposes, only material risks, pending a materiality assessment, should be considered in the scenario analysis exercises, taking the proportionality principle under consideration.

Question 8: Do you foresee challenges with publicly disclosing scenario analysis information in disclosure reporting? What level of granularity of information do you foresee bearing a risk to companies? Please advise on any further distinctions between CISSA and disclosure reporting requirements that you would like to see the BMA make, if applicable.

RISK MANAGEMENT

43. The BMA has set specific provisions that insurers need to implement in their risk framework in the Climate Risk Guidance Note. The guidance note sets out how insurers should integrate climate risk from early risk identification and assessment to management and monitoring to escalation and reporting processes, as well as expectations for relevant control functions. Similar requirements exist within TCFD's framework that seek to gain insight into the processes of assessing, identifying and managing climate-related risks and the way they are integrated into the overall risk management processes.
44. The BMA would not expect the level of granularity for the reporting between the Climate Risk Guidance Note (i.e., as reported in the CISSA) and public disclosure to be the same. However, the Authority would expect to see consistency in the

information being reported. Where this is not the case, the BMA would engage through the regular supervisory processes to understand the drivers of any differences.

45. As a result of the detail set out in the Climate Risk Guidance Note, the BMA is not looking to provide enhanced expectations in this DP on the role of risk management.
46. The BMA, however, would expect insurers' risk management disclosures to include how the risk function has evolved to embed climate risk from a governance perspective, including any specific role(s) that focus on the topic.

Question 9: Do you have any comments or concerns on the expectations of the Climate Risk Guidance Note versus the TCFD requirements?

METRICS AND TARGETS

47. While the Climate Risk Guidance Note describes risk metrics as a more general provision, a detailed set of proposed metrics and targets are an essential part of TCFD requirements. They aim to allow various stakeholders to gain insight into how insurers measure and manage climate-related risks and opportunities. In reviewing the TCFD reporting completed by insurers on a voluntary basis, it was determined that companies tend to refrain from disclosing specific metrics and targets, leading the BMA to conclude that these should be given specific emphasis due to the important role they fulfil. Metrics and targets are seen as a vital step in showing a consistent view of insurers' climate-related risks and their management and evolution.
48. The TCFD framework requires firms to disclose their Scope 1, 2 and 3 Greenhouse Gas (GHG) emissions. Under the TCFD's recently updated implementation guidance, firms should report Scope 1 and 2 GHG emissions disclosures regardless of a materiality assessment. The BMA would expect insurers to follow the same approach. For Scope 3 GHG emissions, the TCFD framework requires this only where material to the business. Given the nature of an insurer's business and their related emissions profile, the BMA would consider that Scope 3 reporting is material to all insurers. At a minimum, insurers should undertake a materiality assessment (climate risk) to prove if this is not the case. The BMA will provide more clarity on its expectations around Scope 3 for both the investment book and underwriting activities in the below section V. 'Climate Risk Metrics'.
49. Where insurers set targets for their decarbonisation strategy, such as net zero emissions by 2050, the BMA would propose that they provide clarity on what those targets aim to achieve and how they will be met (including frequency of disclosure). This should include any information that is relevant to understand the strategic, risk and financial implications of meeting such targets.

50. Alongside reporting on GHG emissions, the TCFD framework requires firms to provide information on the metrics used to measure climate-related risks and opportunities in line with its strategy and risk management process.

V. CLIMATE RISK METRICS

51. While insurers are encouraged to consider disclosing all TCFD metrics that they deem relevant for their decision-making, the BMA further expects insurers to report using a set of ‘core metrics’ that are considered critical to understanding the impact of climate risk. These core metrics should be provided for both underwriting and investment portfolios and should include both sides of the balance sheet.
52. The BMA notes that there is still ongoing work being done in the market and for public initiatives on the methodologies that insurers should use to calculate and report their financed emissions related to underwriting activities. While this work continues, the BMA expects insurers to put in place relevant plans that can be enacted once such methodologies are commonly agreed upon. At such point in the future only, the BMA would expect insurers to report their Scope 3 emissions for their underwriting activities alongside existing disclosures on Scope 3 emissions for their investment portfolio.

CORE INVESTMENT METRICS

53. The metrics and related methodologies for assessing climate risk on investments are more progressed. BMA is proposing that all insurers include the following metrics on their investment portfolio exposures to climate risk:
- a. **Scope 1, 2 and 3 Greenhouse Gas (GHG) emissions.** These should be calculated using the Greenhouse Gas Protocol or any other internationally accepted framework, with insurers clearly disclosing the methodology used. The metrics should reflect the insurer’s investment portfolio rather than the insurer’s own emissions only;
 - b. **Total carbon emissions.** While a simple aggregation of the metrics under part (a), this metric allows users to quickly identify the total emissions exposure of the insurer’s investment portfolio and, over time, build a time-based analysis to show any reduction;
 - c. **Carbon footprint.** This is the total carbon emissions for the insurer’s investment portfolio normalised by the market value of the portfolio;
 - d. **Weighted average carbon intensity (WACI).** The WACI is the investment portfolio’s exposure to carbon-intensive companies as a percentage of revenue. The BMA notes that there are ongoing consultations occurring on the merits of

this metric and will consider any changes needed to the requirements as methodologies develop;

- e. **Climate value-at-risk (CVaR).** This is a leading indicator designed to show a forward-looking measure of the value of the investments that could be affected by climate change; and
- f. **Implied temperature rise metric.** This shows how the insurer's investment portfolio is directionally aligned from a temperature rise perspective.

54. Metrics 'a-d' could be considered mandatory for insurers to report on, while metrics 'e' and 'f' would be optional at this stage given the complexity, both from a methodological and a data requirements perspective. The BMA acknowledges that the quality of some of these metrics will take longer to improve than others. However, given the need for forward-looking climate risk metrics, the BMA has included and emphasised the requirement to report on these core metrics. Where insurers do not report on core metrics, the Authority would expect the reasons to be clearly articulated.

CORE UNDERWRITING METRICS

55. While methodologies for climate risk metrics that assess exposure to insurers underwriting business are still evolving, particularly on the transition risk side, the BMA proposes that general insurers report on the following underwriting metrics:

- g. **Vulnerability to physical risks - exposure:** EP Curve Net Aggregate exposure to natural catastrophes – expressed at the 99.0% Tail Value at Risk (TVaR) level;

The net aggregate exposure for natural catastrophe losses (after reinsurance) must be calculated at the 99.0% Tail Value-at-Risk level for annual aggregate exposure to all risks and all perils in total and on a per peril basis, including reinstatement premiums, for the year following the relevant year based on the insurer's catastrophe model, for the 100-year return period, ensuring that the effects of climate risk are captured in the modelling;

- h. **Climate-Related opportunities:** Net premiums written (expressed as a % of total written premium) related to energy efficiency and low-carbon technology. This includes renewable energy insurance, energy savings warranties and carbon capture and storage insurance; and
- i. **Vulnerability to physical risks – operational:** This is proposed to express the impact of climate-related perils on the company's Combined Operating Ratio (COR) or actual weather-related losses versus expected losses. This is meant to be reflected as a total overall as well as broken down at the geographical level by year. A further breakdown on a 'per peril' basis may also be considered.

Climate-related natural catastrophe perils include hurricanes, hailstorms, flooding (i.e., river, coastal and flash floods), windstorms, tornadoes, landslides, drought and wildfires, tropical cyclone-induced flooding, liquefaction and landslides, severe convective storms and cyclones, Tsunamis, thunderstorms, and all other climate-related perils identified by the regulated entity.

56. The BMA also recognises the importance of disclosing all seven cross-industry metrics as expressed in TCFD’s *Guidance on Metrics, Targets, and Transition Plans*⁶ under Table C1 (GHG Emissions, Transition Risks, Physical Risks, Climate-Related Opportunities, Capital Deployment, Internal Carbon Prices, and Remuneration). These are highly encouraged and should generally apply to all organisations and would enable the comparability of disclosures across insurance entities.
57. The BMA will continue monitoring industry and standard developments and may update the requirements, including metrics laid out in this DP accordingly, for all metrics, particularly for the underwriting metrics. It should be further noted that although the development of accepted insurance underwriting metrics for the long-term sector is still at an early stage and will be discussed with the sector at a later point in time, it is still generally part of the requirements.
58. The BMA has set out the formulas for the metrics in Appendix B. Alongside reporting the core metrics and those needed to fulfil the TCFD metrics and target requirements, there may be further metrics that are financially material for the insurer to disclose. Where this occurs, the BMA proposes for insurers to include them in their disclosure and to provide a commentary on how the metrics should be interpreted, touching upon their constraints and how they are utilised by insurers to drive internal decision-making.
59. The BMA would expect insurers to report their quantitative metrics (including the formulas used) together with historical annual calculations after the first year of reporting in order to show a trend of the insurer’s exposure. Where there are material deviations with year-on-year reporting, both positive and negative, insurers should provide commentary on why this has occurred.

Question 10: Do you agree with having the investment and underwriting metrics as proposed? If not, what approach should be taken?

Question 11: Do you agree with the metrics being proposed as core metrics for reporting purposes, including metrics a-d and g-i? Additionally, for metric 55i.), which of the proposed metrics do you view as the most value-added? Is there something different you wish to propose? If so, please advise.

⁶ TCFD [Guidance on Metrics, Targets and Transition Plans](#) published in October 2021.

Question 12: Do you have any comments on the proposed calculation methodology set out in Appendix B?

Question 13: What are your views on disclosing all seven cross-industry metrics as expressed in TCFD's Guidance on Metrics, Targets, and Transition Plans?

60. The BMA notes that there are existing and ongoing challenges in relation to data availability for reporting the core metrics set out above. In some cases, accurate reporting requires information from individuals and organisations across other parts of the insurance value chain.
61. The BMA expects insurers to make a concerted effort to obtain available data for their disclosures. Where data is not available, appropriate disclosures should be made on the missing data. The BMA expects that insurers will have plans in place to address their data gaps, and the Authority may follow up through supervisory engagements to understand any such gaps in greater detail.
62. Where data is unavailable or significantly limited, the insurer should only use appropriate estimates and assumptions where they can be reliably justified. If this is not the case, then the BMA would not expect such disclosures to be made, provided that adequate reasoning is included in support of such a conclusion in the FCR.

Question 14: What currently existing data limitations prevent disclosure requirements from being made? Please specify if this limitation is concentrated in a particular area (i.e., investments or underwriting), if applicable. Please expand on how the limitation is expected to materially impact disclosure capabilities.

VI. TRANSITION PLANS

63. A transition plan sets out actions that insurers plan to take to reduce their emissions across their underwriting, investment, and operational activities to meet their long-term decarbonisation targets as well as any interim targets.
64. The BMA notes that some jurisdictions are actively looking at introducing regulatory requirements around the disclosure of transition plans and that the TCFD has also developed guidance on transition plans. There are also a growing number of insurers making net zero commitments, raising the importance of transition plans.
65. The BMA generally recognises the value of developing transition plans as they support insurers with integrating climate-related financial decision-making into strategic decisions. However, best practices for transition plans are still evolving and

vary depending on their purpose (e.g., whether they are risk or strategy focused), which eventually will define if these best practices end up being within the mandate of regulation and supervision. Therefore, the BMA will not mandate developing and publishing transition plans at this stage. The BMA's position may change in the future once these best practices have emerged and the link between risk management and the development of transition plans has been strengthened. The BMA would, however, ask insurers to clearly state in their disclosure reporting whether they have transition plans developed or are planning to develop them and their approach to transition plans in general.

66. Where insurers have made decarbonisation targets public, the BMA expects insurers to work towards having at least a detailed internal plan that sets out how they expect to meet their targets. The BMA may ask insurers to provide information on these plans as part of its ongoing supervisory engagement on climate-related financial risk. Where no plan is being developed, the BMA may seek to understand the reasons behind this.

Question 15: Do you agree with the BMA's approach to not yet require the development and more detailed disclosure of a transition plan?

Question 16: For those insurers that have transition plans in place, what has been your approach to developing them? Have you relied on any existing frameworks in developing them?

VII. FUTURE OUTLOOK

67. The landscape for climate risk reporting continues to evolve. A significant milestone established at COP 26 was the creation of the International Sustainability Standards Board (ISSB).
68. As mentioned earlier, the ISSB recently published its first two sustainability disclosure standards: the IFRS S1 *General Requirements for Disclosure of Sustainability-related Financial Information* and IFRS S2 *Climate-related Disclosures*. Having these international baselines will improve the consistency, comparability and completeness of both climate and wider sustainability reporting that may further drive the Authority's forthcoming disclosure requirements consultation paper.
69. The BMA also notes the ongoing work of the EU Corporate Sustainability Reporting Directive (CSRD). The CSRD aims to develop reporting standards that cover a range of sustainability matters and take the double materiality lens into consideration.

70. The Authority also reviewed the standards developed by Taskforce on Nature-related Financial Disclosures (TNFD), and while nature-based disclosures are highly encouraged, they are not a requirement as part of this DP.
71. The BMA also continues to closely monitor developments in other jurisdictions and among various standard setters to assess the impact on insurers in Bermuda and may make changes to local requirements that are appropriate for the Bermuda market in the future. This work will also support the ongoing supervisory work that the BMA is undertaking on climate risk. All of these developments will be taken into consideration in developing the subsequent consultation paper on disclosure.
72. The BMA notes that several insurers are already doing some level of reporting using the TCFD framework on a voluntary basis and supports this across the industry before requirements are specifically introduced. A proactive approach is recommended.

Question 17: Does your organisation plan to align with ISSB's climate-related disclosures? If so, what is the anticipated timing?

Question 18: If your organisation has already been making TCFD disclosures, how will ISSB developments impact your approach?

APPENDIX A: LANDSCAPE OF CLIMATE REPORTING BACKGROUND

The international landscape for climate reporting has evolved rapidly over the last few years with significant regulatory and voluntary developments both on corporate and insurer-specific reporting requirements.

Taskforce for Climate-related Financial Disclosures (TCFD)

The final TCFD recommendations were published in 2017 on a voluntary basis and have since become the key building block of many regulatory regimes around the world. Numerous countries have introduced reporting requirements against the TCFD framework or as an input when developing their own regimes. Given the global support for the TCFD framework, the structure of the framework has become the basis for how more specific disclosure standards are being developed and their existing reporting requirements have been incorporated in those standards under development.

International Sustainability Standards Board (ISSB)

The ISSB⁷ was set up at COP 26 with the ambition to become the standard setter for sustainability matters that can provide a global baseline of sustainability reporting. At the announcement of the ISSB at COP 26, over 40 countries indicated their support for the development of the standards. Several countries have already stated their intent to align with ISSB standards.

ISSB's work culminated in the 26 June 2023 release of two standards, the IFRS S1 *General Requirements for Disclosure of Sustainability-related Financial Information* and IFRS S2 *Climate-related Disclosures*, which provide a comprehensive global baseline of sustainability-related disclosures. The standards are effective from 1 January 2024; however, jurisdictions will have to decide individually whether and when to adopt them. Additionally, it was announced that as early as July 2024, ISSB will take over the responsibilities of the TCFD.

⁷ [Landing page](#) for the International Sustainability Standards Board, which is a sister board to the International Accounting Standards Board housed within the IFRS Foundation.

APPENDIX B: FORMULAS FOR CALCULATING CERTAIN CORE METRICS

Investment Portfolio Metrics

Metric	
Scope 1, 2 and 3 GHG emissions (Disclosed separately)	<p>Insurers should use the GHG Protocol and related guidance to make their disclosures.</p> <p>Scope 1 refers to all direct GHG emissions.</p> <p>Scope 2 refers to indirect GHG emissions from the consumption of purchased electricity, heat or steam.</p> <p>Scope 3 refers to other indirect emissions not covered in Scope 2 that occur in the value chain of the reporting company, including both upstream and downstream emissions.</p> <p>Scope 3 emissions could include the extraction and production of purchased materials and fuels, transport-related activities in vehicles not owned or controlled by the reporting entity, electricity-related activities (e.g., transmission and distribution losses), outsourced activities and waste disposal (see page 63 of the TCFD Final Report).</p>
Total carbon emissions	<p>The absolute greenhouse gas emissions associated with a portfolio, expressed in tons CO₂e.</p> $\sum_n^i \frac{\text{current value of investment}_i}{\text{issuer's market capitalisation}_i} * \text{issuer's Scope 1, 2 and 3 GHG emissions}_i$
Carbon footprint	<p>Total carbon emissions for a portfolio normalised by the market value of the portfolio, expressed in tons CO₂e / \$M invested.</p> $\frac{\sum_n^i \frac{\text{current value of investment}_i}{\text{issuer's market capitalisation}_i} * \text{issuer's Scope 1, 2 and 3 GHG emissions}_i}{\text{current portfolio value (\$M)}}$
Weighted average carbon intensity	<p>Portfolio's exposure to carbon-intensive companies, expressed in tons CO₂e / \$M revenue.</p> $\sum_n^i \frac{\text{current value of investment}_i}{\text{current portfolio value}} * \frac{\text{issuer's Scope 1, 2 and 3 GHG emissions}_i}{\text{issuer's \$M revenue}_i}$

APPENDIX C: Response Form

Comments will only be accepted using the Excel form, as shown.

Bermuda Monetary Authority
Comments on Discussion Paper: Disclosure on Climate Change Risks for Commercial Insurers
Please email completed form to: climaterisk@bma.bm

Date of submission: _____
Name and contact details of submitter: _____

Entity/Organization Name	Registration Number	Section/Question Number	Comment	Resolution (BMA Use)
		Question 1		
		Question 2		
		Question 3		
		Question 4		
		Question 5		
		Question 6		
		Question 7		
		Question 8		
		Question 9		
		Question 10		
		Question 11		
		Question 12		
		Question 13		
		Question 14		
		Question 15		
		Question 16		
		Question 17		
		Question 18		