

Consultation Paper on Guidelines on Transition Planning (Asset Managers)

Contents

1.	Preface	3
2.	MAS' Supervisory Approach to Transition Planning (Asset Managers)	4
3.	Applicability of the Transition Planning Guidelines (Asset Managers)	6
4.	Proposed Transition Planning Guidelines (Asset Managers)	7
5.	Implementation Approach	15
6.	List of Questions	16
7.	Proposed Guidelines on Transition Planning (Asset Managers)	19

1. Preface

- 1.1. The Monetary Authority of Singapore ("MAS") is proposing to introduce a set of Guidelines on Transition Planning, to facilitate financial institutions' ("FIs") transition planning processes as they build climate resilience and enable robust climate mitigation and adaptation measures by their customers and investee companies.
- 1.2. This consultation paper pertains to fund management companies and real estate investment trust managers (collectively referred to as "asset managers"). Two other consultation papers relating to the banks and insurers are concurrently being issued.
- 1.3. MAS invites comments from FIs and other interested parties on the Guidelines on Transition Planning (Asset Managers) ("TPG").
- 1.4. Please note that all submissions received will be published and attributed to the respective respondent unless they expressly request MAS not to do so. As such, if respondents would like:
 - (a) their whole submission or part of it (but not their identity), or
 - (b) their identity along with their whole submission,

to be kept confidential, please expressly state so in the submission to MAS. MAS will only publish non-anonymous submissions. In addition, MAS reserves the right not to publish any submission received where MAS considers it not in the public interest to do so, such as where the submission appears to be libelous or offensive.

1.5. Please submit your written comments to the consultation paper by **18 December 2023** via this link: https://go.gov.sg/tpgams.

¹ Please refer to paragraph 3.1 of this consultation paper, on the scope of asset managers the TPG is intended to apply to.

2. MAS' Supervisory Approach to Transition Planning (Asset Managers)

- 2.1. MAS has previously set out supervisory expectations in relation to environmental risk in the Guidelines on Environmental Risk Management for Asset Managers ("ENRM Guidelines"). The TPG is intended to supplement these with additional granularity in relation to asset managers' transition planning processes. It follows similar broad themes across Governance and Strategy, Portfolio Management, Engagement and Stewardship, and Disclosures.
- 2.2. Transition planning² for asset managers is defined as the internal strategic planning and risk management processes undertaken to prepare for both risks³ and potential changes in business models associated with the transition.
- 2.3. The role that asset managers play in mobilising capital in enabling their investee companies to transition in an orderly manner should also be reflected in their transition planning processes. In particular, asset managers should, through robust client engagement and stewardship processes, encourage changes (through the adoption of risk mitigation and adaptation strategies) in their investee companies' business strategies and risk profiles, instead of indiscriminately withdrawing their investments.
- 2.4. Asset managers need to take a multi-year risk perspective for the continued sustainability of their portfolios, and business models. This implies the use and continual refinement of forward-looking risk management tools like scenario analysis. Asset managers should also seek to improve data availability and understanding thereof, including the need to contextualise metrics for better risk assessment for instance, point-in-time financed emissions should be supplemented with forward looking information, such as investee companies' planned transition pathways. MAS encourages asset managers to consider the setting of decarbonisation targets, that are supportive of the global transition to a low carbon economy.
- 2.5. Asset managers are expected to have clear and actionable strategy and approach that holistically consider risks associated with the transitioning to a low carbon economy. Both mitigation and adaptation measures should be considered in response to transition and physical risks faced by their portfolios through their exposure to investee companies.
- 2.6. Environmental risk beyond climate-related risks should be proactively and holistically considered as part of asset managers' transition planning process given the inter-dependencies between climate and

² "Transition plan" refers to the firm's tangible output of the transition planning process.

³ This includes ensuring resiliency to a range of future states of the world (including varying degrees of physical risk, and potential shifts in policy, technology, or consumer sentiments).



nature. While asset managers have been prioritising climate-related risks for which methodologies are more advanced (albeit still developing), it is increasingly recognised that climate and nature are closely connected. It is also possible that there can be trade-offs in terms of environmental degradation arising from the pursuit of climate solutions. How well an asset manager addresses environmental risk, including through its transition planning process, may have an impact on MAS' overall risk assessment of that asset manager.

- 2.7. Asset managers are expected to make disclosures of meaningful and relevant information to enable stakeholders to understand how they are responding over the short-, medium- and long-term to the material climate-related risks faced by the portfolios they manage, and the governance around processes for addressing such risks. Appropriate and sufficient levels of transparency will support the understanding of asset managers' risk management strategies and the risk profiles of their portfolios, as well as accountability for any public commitments made by asset managers, i.e. whether said commitments will fulfil their intended and stated purpose.
- 2.8. Asset managers are expected to take an iterative approach to enhance their transition planning and to embed better practices into their business-as-usual processes over time. This includes incorporation of refinements arising from their experiences in transition planning, as well as industry developments (such as in the area of other environmental risks beyond climate change).
 - Question 1. MAS seeks comments on the proposed definition of transition planning.
 - Question 2. MAS seeks comments on the proposed context for the TPG as laid out in paragraph 1.3 of the TPG.
 - Question 3. MAS seeks comments on whether the drafting of paragraph 1.3 (d) of the TPG on factoring in the climate-nature nexus accords asset managers with sufficient flexibility to improve their understanding of other environmental-related risks and risk management processes over time. What are some tangible areas regarding other environmental-related risks (e.g. vulnerability on water availability) that you would see value in having elaboration in the guidance?

3. Applicability of the Transition Planning Guidelines (Asset Managers)

- 3.1. MAS proposes to apply the TPG to all asset managers, which would comprise the following:
 - (a) all holders of a capital markets services licence for fund management;
 - (b) all holders of a capital markets services licence for real estate investment trust management; and
 - (c) fund management companies registered under paragraph 5(a)(i) of the Second Schedule to the Securities and Futures (Licensing and Conduct of Business) Regulations (Rg. 10) ["SF(LCB)R"].
- 3.2. MAS recognises that the scale, scope and business models of asset managers can be different. Asset managers should implement the TPG in a way that is commensurate with the size, nature and risk profiles of their activities.
- 3.3. MAS proposes to apply the TPG to asset managers that have discretionary authority over the portfolios that they are managing. This includes funds, real estate investment trusts and segregated mandates. Where asset managers delegate the investment management of such portfolios to sub-managers or advisors, they should still retain overall responsibility for their compliance with the expectations set out in the TPG. They should thus convey their expectations relating to climate-related risk management to the sub-managers or advisors accordingly and put in place appropriate monitoring processes to ensure the sub-managers' and advisors' compliance.
- 3.4. Asset managers, as fiduciaries of their customers' assets, should take into account material climate-related risks in their investment selection, portfolio construction and engagement as well as stewardship processes. Where customers' preferences differ from the asset managers' investment approach, asset managers should engage and educate their customers on the importance of considering material climate-related risks within their portfolios given their potential impact on the portfolios' risk-return profiles across different investment horizons. This will enable the customers to make well-informed investment decisions.

Question 4. MAS seeks comments on the entities and business activities that are in the proposed scope of the TPG.

4. Proposed Transition Planning Guidelines (Asset Managers)

Governance and Strategy

- 4.1. Robust governance is key to asset managers' effective enterprise-wide decisions on their business strategies and approaches in response to climate-related risks. Support from the Board of Directors ("Board") and senior management is also essential for effective ongoing implementation of strategies and incorporation into risk management frameworks, including through effective resource allocation.
- 4.2. The ENRM Guidelines already set out the expectation for the Board and senior management to incorporate environmental considerations into the asset managers' strategies, business plans, and product offerings, and to maintain effective oversight of the asset managers' environmental risk management and disclosure. MAS now proposes that the decisions made by the asset managers' Board and senior management around business strategy and approach should take into consideration how the current and future operating environment will impact the asset managers' or their portfolios' risk profiles.
- 4.3. MAS proposes that asset managers' senior management should actively ensure that their climate-related business strategies are effectively embedded within their operations. MAS has included non-exhaustive steps that asset managers' senior management could take. MAS also proposes that asset managers' senior management establish mechanism(s) through which the asset managers' existing approach (and implementation thereof) to respond to climate-related risks is regularly refined.

Question 5. MAS seeks comments on the proposed expectations on governance and strategy as laid out in paragraphs 2.1 to 2.3 of the TPG.

Portfolio Management

Approach

4.4. For management of climate-related risks in a structured manner, frameworks and processes at an appropriate level of granularity and specificity should be in place. Asset managers can benefit from



grouping investee companies by their risk characteristics - such as at the sector level, risk level and readiness level, and by prioritising investee companies that are exposed to greater risk.

- 4.5. The ENRM Guidelines broadly set out the expectation for asset managers to identify, assess, mitigate and monitor material climate-related risks at the individual asset and at the portfolio levels. MAS now proposes for asset managers to take a differentiated approach for sectors (at an appropriate level of granularity) posing higher climate-related risks in their transition planning to take sectoral specificities into account.
- 4.6. MAS also proposes for asset managers to have differentiated strategies that cater to clients exposed to different levels of climate-related risks, and who are at different stages of readiness. Asset managers should consider:
 - (a) The extent of an investee company's exposure to transition and physical risks over the short, medium- and long-term;
 - (b) The adequacy of the investee company's mitigation actions in addressing climate-related risks;
 - (c) The potential correlations or novel risks that their portfolios are exposed to (individually or in aggregate) as a result of investing into climate solutions; and
 - (d) The effectiveness of the asset managers' engagement and stewardship efforts.

Question 6. MAS seeks comments on the proposed approach to portfolio management as laid out in paragraphs 3.1 to 3.3 of the TPG.

Forward looking risk assessment tools

- 4.7. Forward-looking risk assessment tools like climate scenario analysis allow asset managers to better understand the potential impact of climate-related risks and opportunities under varying scenarios. The value and limitations of such tools should be duly considered as part of asset managers' transition planning processes and incorporated into their business strategies. This extends from existing expectations under the ENRM Guidelines on scenario analysis, which broadly set out the expectation for asset managers to develop capabilities in these areas to assess the impact of environmental risk on their business strategies and the risk profiles of their portfolios, and explore their resilience to financial losses.
- 4.8. MAS proposes that asset managers should employ a range of forward-looking tools, such as scenario analysis, in their transition planning process for risk discovery and quantification. MAS proposes that

the results of such exercises, where material, should be incorporated into the asset managers' planning and risk management processes so as to trigger the appropriate management actions.

4.9. MAS recognises that methodologies are still in the process of maturing, and best practices of incorporating the use of climate scenario analysis in transition planning continue to evolve. MAS proposes for asset managers to continue to develop their capabilities in climate scenario analysis, referencing leading industry practices wherever possible. MAS has included some illustrative examples on the use of forward-looking tools for portfolio management.

Question 7. MAS seeks comments on the proposed expectations on the use of forward-looking tools for portfolio management as laid out in paragraphs 3.4 and 3.5 of the TPG.

Data, metrics and targets

- 4.10. Given current gaps in data availability, quality and comparability, the use of proxy data is inevitable. The use of such proxies brings with it risks that asset managers need to recognise. Potential implications of using proxies to make decisions should be accounted for. Metrics are key to allow asset managers to track their progress, and their limitations should be assessed and mitigated where possible. Asset managers should endeavour to track metrics using a multi-year perspective (in line with the horizon over which risks materialise). For example, portfolios' emissions based on point-in-time emissions data would not capture future reductions in emissions (e.g. an investment to install carbon abatement technology); they should thus be supplemented with forward-looking information from investee companies' transition plans on possible future emissions reductions. Metrics should also be monitored over time and analysed so as to identify drivers (e.g. whether changes are due to improvements in the profile of investee companies or portfolio composition) and address any implications thereof.
- 4.11. MAS proposes that asset managers should recognise the inherent limitations or trade-offs that they face in using proxy data to mitigate data availability issues when performing their climate risk assessments at the investee company and portfolio levels. MAS proposes that asset managers should balance the considerations of having a set of reasonable data to support decision-making against the inherent limitations or trade-offs of using proxy data. Decisions on the choice of proxy data should be documented and material implications of the use of proxy data on their risk assessments should be highlighted to decision-makers.
- 4.12. MAS proposes that the impact of public or internal decarbonisation targets (if any) on asset managers' business strategies and portfolios should be well understood within the asset managers, with residual risks adequately identified and addressed. Decarbonisation targets (if any) should be set based on appropriate science-based pathways and reference scenarios that are sufficiently ambitious, relevant to the risk profiles of the portfolios managed, and include actionable short-, medium- and long-term targets to facilitate tracking and foster better accountability. Targets should be set in consideration of

the materiality and distribution of the portfolios' emissions profiles at the appropriate sectoral and jurisdictional level. Decarbonisation targets (if any) should be supplemented with additional metrics as necessary.

- 4.13. MAS also proposes that asset managers should set metrics and targets to track progress towards their strategic goals. Limitations of the metrics chosen should be recognised and explained with additional information provided as necessary.
- 4.14. Where there are challenges in setting decarbonisation targets for certain investments or portfolios (for e.g. in view of customers' preferences or a lack of credible data and methodology), MAS proposes for asset managers to document their explanation on the approach taken, as well as any mitigation actions taken, where applicable. MAS further proposes that asset managers continually look to expand the scope of the investments or portfolios covered in their decarbonisation targets over time, and engage and educate their customers on the importance of managing material climate-related risks and their impact on investee companies' risk-return profiles.

Question 8. MAS seeks comments on the proposals set out in paragraphs 3.6 to 3.9 and paragraph 3.12 of the TPG, particularly in relation to the expectations around setting of decarbonisation targets by asset managers.

4.15. Where there is a misalignment between the portfolios' actual trajectories vis-à-vis targets set, MAS proposes that asset managers have a structured process in place to explain the variance. The proposed process should include attributing causation to specific factors and considering the need to implement additional measures to achieve their stated targets and commitments. Where misalignment is assessed to be fundamental and not temporary, asset managers should review the continued relevance of their targets.

Question 9. MAS seeks views on the proposed required attribution process set out in paragraph 3.10 of the TPG, including any practical constraints that asset managers may face.

Question 10. MAS seeks views on whether it would be useful to specify broad categories for attribution referenced in paragraph 3.10 of the TPG, and if so, what such categories could include.

4.16. Given the evolving nature and understanding of climate change, MAS proposes that asset managers should review all relevant risk metrics and targets periodically for continued relevance and monitor them using a multi-year risk perspective. For example, short term increases in financed emissions due to actions in support of climate-positive outcomes may not be an indication of a deterioration in asset managers' climate risk management practices or failure to meet their publicly committed climate objectives. MAS recognises that asset managers may see a short-term increase in their financed emissions when they finance investee companies or their activities that are focused on transition.

Where asset managers are not meeting their emissions reductions targets (if any), MAS proposes that asset managers should be able to explain how such transition-related investments are consistent with their commitments and decarbonisation targets, as well as the portfolios' investment objectives/mandates.

Question 11. MAS seeks views on whether the drafting in paragraph 3.11 of the TPG will allow asset managers to support climate positive outcomes. Please also highlight if there are other considerations to include in the drafting to ensure that these are done in a credible manner and not used as a means of transition washing.

Implementation strategy (people, processes, systems)

- 4.17. People, processes and systems are critical for robust implementation and alignment of the transition planning process with asset managers' strategic goals. With adequate capability, tools, technologies and infrastructure, asset managers will be able to execute their strategic goals, prioritise actions and allocate resources effectively.
- 4.18. MAS proposes that asset managers should implement a robust implementation strategy. In particular:
 - (a) Asset managers should hire staff and equip them, including through capacity building and training, with adequate expertise to assess, manage and monitor climate-related risks in a rigorous, timely and efficient manner;
 - (b) Asset managers should update their internal governance and processes, including their risk management framework, to manage climate-related risks in a systematic manner and on a regular basis; and
 - (c) Asset managers should develop and implement a data strategy to build, maintain and effectively utilise relevant environmental-related data to support effective decision-making.

Question 12. MAS seeks views on whether paragraphs 3.13 to 3.15 of the TPG provide an adequate overview of the people, processes and systems necessary for a robust implementation of asset managers' transition planning.

Engagement and Stewardship

4.19. Active engagement and stewardship by asset managers can assist in supporting investee companies' transition to a low carbon future and mitigate portfolios' exposure to climate-related risks. A credible and timely response by investee companies to manage their portfolios' climate-related risks across

short-, medium- and long-term horizons will lower their risk profiles. This will in turn enhance the resilience of the portfolios managed by the asset managers to climate-related risks.

- 4.20. The TPG set out MAS' proposed expectations for asset managers to develop an engagement and stewardship plan to support their overall strategy to address climate-related risks in their portfolios. Asset managers should also equip their staff to effectively engage with investee companies by ensuring that they have sufficient understanding of sectoral and jurisdictional specificities and developments. In addition, MAS proposes for asset managers to develop toolkits to facilitate consistent engagement by their staff.
- 4.21. MAS proposes for asset managers to have a structured process to identify and prioritise investee companies for engagement, particularly those that may be more vulnerable to transition and/or physical risks. MAS has included examples of factors to look out for in assessing an investee company's plans to manage climate-related risks. These examples are not meant to be exhaustive and should be applied as appropriate.
- 4.22. To facilitate a better understanding of the impact of climate change on investee companies' businesses and risk profiles, MAS proposes that asset managers collect climate-related risk data from their investee companies where possible, and encourage investee companies to publicly disclose relevant material climate-related information in accordance with well-regarded international reporting frameworks and standards. Asset managers can consider developing structured templates to facilitate collection of consistent and comparable climate data. MAS has included illustrative examples of possible data to collect.
- 4.23. It is important for asset managers to support investee companies in developing or enhancing their own plans to address climate-related risks, instead of reducing investments or divesting indiscriminately. For investee companies exposed to elevated climate-related risks and who are not implementing adequate risk mitigation and adaptation strategies (due to inability or unwillingness), MAS proposes for asset managers to place these investee companies on enhanced monitoring and engage them further to allow prompt risk mitigation actions to be taken.
- 4.24. MAS further proposes for asset managers to establish an escalation framework with appropriate consequences when engagement is ineffective. These consequences should be made known to the investee companies. A timeframe for escalation could also be set to ensure alignment with the asset managers' overall expected portfolio or sector decarbonisation trajectory.

Question 13. MAS seeks comments on the proposed guidance on engagement and stewardship as laid out in paragraphs 4.1 to 4.8 of the TPG.

Disclosure

- 4.25. Disclosures are critical for enabling the asset managers' stakeholders to understand whether and how the asset managers are responding to material climate-related risks as they navigate the transition towards a low-carbon economy. Sharing of relevant information from the transition planning process could help asset managers avoid adverse reactions and accusations of greenwashing arising from heightened scrutiny of the asset managers' investing activities, while allowing them to demonstrate accountability for any public commitments they have made.
- 4.26. The ENRM Guidelines currently set out broad expectations that asset managers should disclose their approach to managing environmental risk in accordance with well-regarded international reporting frameworks⁴. The International Sustainability Standards Board ("ISSB") standards, which form the new global baseline for sustainability reporting, require companies to disclose information on their transition plans if they have any. MAS thus seeks to provide further guidance through the TPG to asset managers to make additional disclosures encompassing the asset managers' transition planning processes and approaches towards addressing and mitigating the impact of material environmental risk.
- 4.27. MAS proposes that asset managers disclose meaningful and relevant information to enable stakeholders to understand how asset managers are responding over the short-, medium- and long-term to material climate-related risks they and their portfolios face, and governance around processes for addressing such risks, in accordance with well-regarded international reporting frameworks and standards, such as the ISSB standards.
- 4.28. MAS proposes that asset managers clearly communicate their risk management strategies and approaches for different sectors, and how their investing activities relate to the asset managers' publicly committed climate objectives (where relevant), particularly where investment in such sectors could be negatively perceived due to high emissions intensity in the shorter term. Such disclosures are critical in enabling stakeholders to understand the asset managers' reasons for investing in these assets, as well as the corresponding risk strategies and mitigation measures put in place by the asset managers, to avoid adverse reactions and accusations of greenwashing, which may negatively impact the asset managers. Where relevant, asset managers should disclose their engagement strategies for stakeholders, including but not limited to shareholders, rating agencies, regulators and governments, and non-governmental organisations.
- 4.29. In terms of product-level disclosures, MAS proposes that asset managers should consider appropriate level of disclosure of climate-related considerations embedded in every product to facilitate better stakeholder understanding of how these products contribute to the asset managers' publicly committed climate objectives. Sustainability and transition-related products should also be

⁴ Such as the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD) recommendations.

appropriately labelled. The asset managers could also consider the use of credible and well-regarded green and transition taxonomies⁵ in their product-level disclosures.

- 4.30. Lastly, to balance the need for transparency in disclosures with existing challenges that asset managers may face (i.e. data and methodological challenges), MAS proposes that the asset managers may disclose reasonable and supportable information that is available at the reporting date without undue cost and effort. However, asset managers should disclose factors, inputs, methodologies, material assumptions and dependencies underlying their disclosures for transparency.
 - Question 14. MAS seeks views on whether paragraph 5.1 of the TPG should reference other reporting frameworks.
 - Question 15. MAS seeks views on whether paragraphs 5.1 to 5.3 of the TPG set out the key aspects necessary for market transparency.
 - Question 16. MAS seeks views on whether paragraphs 5.1 to 5.3 of the TPG provide sufficient additional guidance (i.e. in addition to existing expectations in paragraphs 7.1 and 7.2 of the ENRM Guidelines) for asset managers to disclose information related to their response to material climate-related risks and governance around processes for addressing such risks.
 - Question 17. MAS seeks views on the proposal in paragraph 5.3 of the TPG for asset managers to consider the use of taxonomies in product-level disclosures, including the suitability of including GFIT's Singapore-Asia and ASEAN taxonomy as examples. For instance, would such suggestions restrict or support asset managers' transition financing activities?
 - Question 18. MAS seeks views on the cited areas of disclosure under paragraph 5.4 of the TPG (i.e. factors, inputs, methodologies, material assumptions and dependencies underlying its disclosures), such as whether there are any practical constraints or competitiveness concerns in providing such disclosures.

⁵ Examples include the Singapore-Asia Taxonomy developed by the Green Finance Industry Taskforce (GFIT), the ASEAN Taxonomy and the EU Taxonomy.

5. Implementation Approach

- 5.1. MAS has included illustrative examples of sound practices in relation to asset managers' governance, portfolio management, engagement and stewardship and disclosure of their transition planning practices in the TPG, to facilitate implementation. MAS welcomes suggestions of other examples of transition planning practices currently implemented by asset managers which would meet the expectations in the TPG. The examples, if incorporated in the TPG, will not be attributed to any individual asset manager.
- 5.2. MAS is cognisant that the maturity of transition planning practices (and environmental risk management more broadly) vary among asset managers. Some asset managers may face initial challenges in implementing the TPG, including in relation to the availability of data and expertise, and will also need time to operationalise the requirements. Hence, MAS proposes to provide a transition period of 12 months after the TPG are issued, for asset managers to assess and implement the TPG as appropriate.

Question 19. MAS seeks suggestions of other examples of transition planning practices currently implemented by asset managers that could be incorporated in the TPG.

Question 20. MAS seeks comments on the proposed implementation approach, including the proposed transition period of 12 months.

6. List of Questions

S/N	Question	Page
Question 1	MAS seeks comments on the proposed definition of transition planning.	5
Question 2	MAS seeks comments on the proposed context for the TPG as laid out in paragraph 1.3 of the TPG.	5
Question 3	MAS seeks comments on whether the drafting of paragraph 1.3 (d) of the TPG on factoring in the climate-nature nexus accords asset managers with sufficient flexibility to improve their understanding of other environmental-related risks and risk management processes over time. What are some tangible areas regarding other environmental-related risks (e.g. vulnerability on water availability) that you would see value in having elaboration in the guidance?	5
Question 4	MAS seeks comments on the entities and business activities that are in the proposed scope of the TPG.	6
Question 5	MAS seeks comments on the proposed expectations on governance and strategy as laid out in paragraphs 2.1 to 2.3 of the TPG.	7
Question 6	MAS seeks comments on the proposed approach to portfolio management as laid out in paragraphs 3.1 to 3.3 of the TPG.	8
Question 7	MAS seeks comments on the proposed expectations on the use of forward-looking tools for portfolio management as laid out in paragraphs 3.4 and 3.5 of the TPG.	9
Question 8	MAS seeks comments on the proposals set out in paragraphs 3.6 to 3.9 and paragraph 3.12 of the TPG, particularly in relation to the expectations around setting of decarbonisation targets by asset managers.	10

_		
Question 9	MAS seeks views on the proposed required attribution process set out in paragraph 3.10 of the TPG, including any practical constraints that asset managers may face.	10
Question 10	MAS seeks views on whether it would be useful to specify broad categories for attribution referenced in paragraph 3.10 of the TPG, and if so, what such categories could include.	10
Question 11	MAS seeks views on whether the drafting in paragraph 3.11 of the TPG will allow asset managers to support climate positive outcomes. Please also highlight if there are other considerations to include in the drafting to ensure that these are done in a credible manner and not used as a means of transition washing.	11
Question 12	MAS seeks views on whether paragraphs 3.13 to 3.15 of the TPG provide an adequate overview of the people, processes and systems necessary for a robust implementation of asset managers' transition planning.	11
Question 13	MAS seeks comments on the proposed guidance on engagement and stewardship as laid out in paragraphs 4.1 to 4.8 of the TPG.	12
Question 14	MAS seeks views on whether paragraph 5.1 of the TPG should reference other reporting frameworks.	14
Question 15	MAS seeks views on whether paragraphs 5.1 to 5.3 of the TPG set out the key aspects necessary for market transparency.	14
Question 16	MAS seeks views on whether paragraphs 5.1 to 5.3 of the TPG provide sufficient additional guidance (i.e. in addition to existing expectations in paragraphs 7.1 and 7.2 of the ENRM Guidelines) for asset managers to disclose information related to their response to material climate-related risks and governance around processes for addressing such risks.	14
Question 17	MAS seeks views on the proposal in paragraph 5.3 of the TPG for asset managers to consider the use of taxonomies in product-level disclosures, including the suitability of including GFIT's Singapore-Asia and ASEAN taxonomy as examples. For instance, would such	14

	suggestions restrict or support asset managers' transition financing activities?	
Question 18	MAS seeks views on the cited areas of disclosure under paragraph 5.4 of the TPG (i.e. factors, inputs, methodologies, material assumptions and dependencies underlying its disclosures), such as whether there are any practical constraints or competitiveness concerns in providing such disclosures.	14
Question 19	MAS seeks suggestions of other examples of transition planning practices currently implemented by asset managers that could be incorporated in the TPG.	15
Question 20	MAS seeks comments on the proposed implementation approach, including the proposed transition period of 12 months.	15

7. Proposed Guidelines on Transition Planning (Asset Managers)

1 INTRODUCTION

- 1.1 The Guidelines on Transition Planning ("TPG") set out MAS' supervisory expectations for asset managers to have a sound transition planning process as they build climate resilience and support robust climate mitigation and adaptation measures through their investment activities. The global transition to a net zero economy and the expected physical effects of global warming will result in transformational shifts in the companies that funds, real estate investment trusts and segregated mandates (hereinafter collectively referred to as "portfolios") invest into, and in the types of products and strategies that customers of asset managers will demand.
- 1.2 Transition planning¹ is the internal strategic planning and risk management processes undertaken by a firm to prepare for both risks² and potential changes in business models associated with the transition.
- 1.3 In their transition planning process, asset managers are to consider the following:
 - a. Asset managers should take a multi-year view for the continued sustainability of their portfolios, as well as their business models. The strategic decisions made by asset managers, including those relating to the decarbonisation trajectory of their portfolios, will have a bearing on the portfolios managed by asset managers, as well as the viability of their businesses in the long run, as the economy changes. Asset managers are expected to assess the implications of their strategic decisions and continually adapt their businesses, as well as governance frameworks, risk management policies and processes, in a forward-looking manner.
 - i. An increasing number of asset managers have set decarbonisation targets, either internal or publicly disclosed, as a strategic decision to guide the pivoting or transformation of their business models towards a low carbon economy. Many have also developed or are developing short-, medium- and long-term roadmaps to guide the transition of their portfolios towards stated targets. MAS encourages asset managers to consider the setting of relevant decarbonisation targets that are supportive of the global transition to a low carbon economy.
 - b. Where climate risk is assessed to be material in the portfolios, asset managers should engage their investee companies on the need to adopt mitigation and adaptation strategies as they transition towards a net zero economy and deal with the physical effects of climate change. In carrying out such engagements, asset managers should bear in mind that:
 - indiscriminate withdrawal of investments from investee companies or sectors deemed to be more carbon-intensive or to have higher physical risk would hinder companies with credible transition and adaptation plans from securing the financing they need to transition. This would impede the real economy's transition;
 - ii. short-term fluctuations in financed emissions due to actions to support climate positive outcomes should not necessarily be viewed negatively at the outset, but should be compared

¹ "Transition plan" refers to the firm's tangible output of the transition planning process.

² This includes ensuring resiliency to a range of future states of the world (including varying degrees of physical risk, and potential shifts in policy, technology, or consumer sentiments).

- against potential longer-term improvement in investee companies' climate risk profiles, and managed through appropriate governance guardrails established by asset managers; and
- iii. collective inaction or delays may increase the chances of a disorderly transition and precipitate climate tipping points which can heighten financial stability risks, resulting in significant downward revaluation of portfolios and impacting the viability of asset managers' business models.
- c. Asset managers should have a clear and actionable strategy and approach to guide the implementation of their transition plans³. This includes selecting the appropriate metrics and targets⁴ for the short-, medium- and long-term to track their transition plans. In selecting these metrics and targets, asset managers are expected to consider the potential adverse impacts or shocks that could manifest from a delayed response in supporting transition or from misalignment with national, regional and/or global decarbonisation pathways⁵.
- d. Asset managers should continue their efforts to address environmental risk beyond climate-related risks⁶, particularly as these risks are interlinked. Asset managers should apply safeguards against other environmental risks that may manifest as a result of their actions to address climate-related risks⁷, while building capacity to enable them to manage both climate-related and environmental risks in a holistic manner. The remainder of the TPG should be read in this context, and asset managers should, to the extent possible, incorporate other environmental risks into their transition planning processes over time.
- e. Asset managers should proactively communicate their transition planning process to stakeholders. This can be done through published sustainability reports, general purpose financial reports and/or transition plans. Such reports or plans can be useful tools to inform stakeholders on an asset manager's short-, medium- and long-term strategy and approach for transition planning. Conversely, a perceived lack of transparency or credibility in an asset manager's transition planning could negatively impact an asset manager's risk profile and its ability to meet customers' expectations, if the asset manager is not viewed as adequately managing climate-related risks or supporting transition.

³ Such plans can refer to how an asset manager intends to manage transition risk within specific portfolios and/or against any targets set in line with their commitments.

⁴ For example, this may include portfolio decarbonisation targets like net zero portfolio emissions at a specified date, sector-level commitments in line with scientific recommendations or proportion of portfolio aligned with science-based sector pathways aiming to limit global warming to 1.5 degrees.

⁵ Countries globally have committed under the Paris Agreement to continue to progress and enhance their Nationally Determined Contributions over time. A country that has not currently committed to limiting global warming to 1.5 degrees may do so in the future. Corporates are expected to face increasing pressure to align to transition pathways that limit warming to 1.5 degrees, with consequent impact on their business models and risk profiles.

⁶ As mentioned in the NGFS (2022) Statement on Nature-Related Financial Risks, nature-related risks, including those associated with biodiversity loss, could have significant macroeconomic implications, and that failure to account for, mitigate and adapt to these implications is a source of risks for individual FIs as well as for financial stability.

⁷ Reasonable effort should be made to consider if risk mitigation and adaptation measures adopted by investee companies have unintended financial or non-financial risks through negative impacts on nature. For example, deforestation caused by expansion of large-scale monoculture plantations for biofuel feedstocks or mining of transition-critical materials like lithium can pose risks to nature-dependent companies operating in the region (e.g. through reduction in water security in view that intact forest ecosystems are needed for water cycling and climate regulation services).

Application

- 1.4 The TPG builds on and should be read together with MAS' existing supervisory guidance⁸ to asset managers⁹. The TPG elaborates on MAS' supervisory expectations around the strategy to address environmental risk.
 - a. The TPG is generally applicable to asset managers which have discretionary authority over the portfolios they are managing.
 - b. Where asset managers delegate the investment management to sub-managers or advisors, they still retain overall responsibility for climate-related risk management and should communicate their expectations on climate-related risk management to the sub-managers or advisors. Asset managers can make these clear in their contractual agreements and put in place processes and procedures to assess and monitor the sub-managers' or advisors' compliance with these requirements/expectations.
 - c. Asset managers should consider extending their implementation of the TPG to their subsidiaries. Asset managers that are branches or subsidiaries of global groups may take guidance from their Group's transition planning as long as the Group's transition planning approach meets the expectations set out in the TPG.
 - d. MAS recognises that the scale, scope and business models of asset managers can be different and will continue to take a risk-proportionate supervisory approach. Asset managers should implement the TPG in a way that is commensurate with the size, nature and risk profiles of their activities.
- 1.5 As asset managers ultimately manage assets on behalf of customers, they should adhere to customers' priorities over how the investments should be made. As responsible fiduciaries of customers' assets, asset managers should also assess the potential materiality of climate-related risks, as well as their impact on customers' portfolio returns across different investment horizons. Asset managers can then engage or educate customers on the importance of considering climate-related risks in their investment portfolios, and consider providing tools to customers to support them in making well-informed assessments of the impact of climate change on their assets.
- 1.6 MAS will update its guidance to the industry as appropriate to reflect the evolving nature and maturity of transition planning practices.

2 GOVERNANCE AND STRATEGY

2.1. Decisions made by the asset manager's Board of Directors ("Board") and senior management around business strategy should take into consideration how the current and future changes in the operating environment will impact the asset manager's or its portfolios' risk profiles. The Board is responsible for ensuring

⁸ Examples include: i) MAS' Guidelines on Environmental Risk Management ("ENRM Guidelines") – effective since June 2022 – which set out MAS' expectations for asset managers to build resilience against the impact of environmental risk; ii) MAS' Information Paper in May 2022 sharing our observations on asset managers' progress in addressing environmental risk, including through the consideration and integration of such risks into their risk management processes and business strategies.

⁹ As defined in the ENRM Guidelines, 'asset managers' refers to all holders of a capital markets services licence for fund management and real estate investment trust management, and to fund management companies registered under paragraph 5(a)(i) of the Second Schedule to the Securities and Futures (Licensing and Conduct of Business) Regulations (Rg.10) ["SF(LCB)R"].

that the asset manager's framework and policies adequately address the asset manager's business strategy and risks as it navigates to a lower-carbon future.

- 2.2. The asset manager's senior management should actively ensure that its climate-related strategies are effectively embedded within the asset manager's operations. Steps taken should include (but are not limited to):
 - a. Establishing a robust governance process to make climate-related decisions (such as on business strategies, targets, scope, risk framework, implementation timelines and approach) that are founded on sufficient understanding of key assumptions, dependencies, and residual risks;
 - b. Establishing a clear tone from the top¹⁰ around the need to address climate-related risks, such as when making decisions around business strategy, investment selection, portfolio construction and risk management;
 - c. Establishing clear lines of communication and escalation across different units within the asset manager to address risks that cut across multiple functions;
 - d. Ensuring that internal strategies and plans are consistent with any publicly communicated climaterelated strategies and commitments; and
 - e. Establishing mechanisms to implement business strategies and align internal behaviour to address climate-related risk (such as through the recruitment policy, performance measurement, remuneration policy and incentive structures).
- 2.3. The asset manager's senior management should establish a mechanism(s) through which the asset manager's existing approach (and implementation thereof) to respond to climate-related risks is regularly refined. In view of the evolving nature of climate risk management practices, the asset manager should view transition planning as an iterative process. The asset manager should regularly review its approach, including its risk framework, for continued appropriateness and effectiveness, as well as to incorporate industry developments and emerging best practices in a timely manner.

3 **PORTFOLIO MANAGEMENT**

Approach

3.1 In developing their product offerings and investment management strategies, asset managers are expected to consider the potential adverse impacts or shocks that could manifest from a delayed response in supporting transition or from misalignment with national, regional and/or global decarbonisation pathways (e.g. stranded asset risk, runaway climate change); amongst other expectations set out below. For example, asset managers with investments in carbon-intensive sectors could be exposed to heightened transition risk if such investee companies are unable to pivot to a low carbon business model in a timely manner. Collective inaction or delay to act may also increase the chances of a disorderly transition and precipitate climate tipping points which can heighten financial stability risk. Conversely, facilitating decarbonisation may in aggregate contribute to reducing systemic physical risk.

¹⁰ Asset managers may wish to consider identifying specific individuals or committees responsible for transition planning and execution at the board and senior management levels.

- 3.2 An asset manager should take a differentiated approach for sectors (at an appropriate level of granularity) posing higher climate-related risks in its transition planning to take sectoral specificities into account. The asset manager should factor in global and/or regional sectoral pathways and jurisdictional specificities to inform risk decisions and facilitate engagement with investee companies, including having sufficient understanding of the assumptions, scope and ambition behind the sectoral pathways it references. This will allow targeted, measurable progress in the investee companies' responses to climate-related risks. The asset manager can also consider the existence and progress of risk mitigation measures such as jurisdiction-level adaptation projects to address systemic risks that could manifest at the portfolio level.
- 3.3 An asset manager should have differentiated strategies that cater to investee companies exposed to different levels of climate-related risk and which may be at different stages of readiness for climate change. An asset manager should consider:
 - a. The extent of an investee company's exposure to transition and physical risks over the short-, medium, and long-term. For instance, asset managers could evaluate the potential impact of changes in public policies, technological developments, consumer preferences on security valuation, by adjusting discount rates, revenue streams and/or capital expenditures;
 - b. The adequacy of the investee company's mitigation actions in addressing climate-related risks (including from their respective supply chains), such as by considering whether such actions are sufficiently ambitious and consistent with science-based *decarbonisation* pathways, the ability to translate its goals/targets/pledges into actionable steps, as well as the robustness of governance and processes to effect these actions;
 - c. Even for investee companies focused on climate solutions¹¹, the asset manager should pay attention to potential correlations or novel risks that its portfolios are exposed to as a result of such exposures (individually or in aggregate), such as potential technological risks arising from uncertainty around future developments and potential supply chain risks (e.g. interruptions to supply of critical minerals required for associated technology) or potential unintended environmental risk that might subject the asset manager to legal or reputational risks; and
 - d. The effectiveness of the asset manager's engagement and stewardship efforts, in particular its voting policy and activities, in guiding the investee companies' in making appropriate transition plans, including the asset manager's ability to guide the pace of *decarbonisation* and alignment with net zero targets, as well as the embedding of relevant climate performance targets in incentive structures.

Forward-looking risk assessment tools

To facilitate well-informed investment decisions and mitigation actions, an asset manager should employ a range of forward-looking tools, such as scenario analysis, in its transition planning process for risk discovery and quantification. In the deployment of these tools, an asset manager should consider the impact of climate-related risks on its portfolios under a range of plausible scenarios. The results of such exercises, where material, should be incorporated into the asset manager's planning and risk management processes so as to trigger the appropriate management actions. For example, this could include, but is not limited to, decisions around business strategy, enhancements to risk management, engagement and stewardship policies and practices, as well as adjustments of sector strategies and product offerings.

¹¹ Climate solutions here collectively refers to (i) assets that directly eliminate, remove or reduce GHG emissions; (ii) indirectly contribute to, but are critical for, emission reductions by facilitating the deployment of assets that directly contribute to GHG emissions reductions; and/or (iii) nature-based solutions.

leading industry practices where possible. An asset manager should develop climate risk modelling frameworks¹² for different asset classes with the appropriate levels of granularity (e.g. specific investment, asset class, sectoral and/or portfolio) to account for the heterogeneity of climate-related risks across different types of investee companies, asset classes, economic activities and investment strategies. An asset manager should incorporate a wide set of climate (e.g. climate policies, frequency and intensity of acute perils) and economic risk factors (e.g. demand and supply-side shocks, stranded assets), and consider both direct (e.g. damage to owned physical assets, carbon tax expenses) and indirect (e.g. supply chain risk, carbon cost pass-through) transmission channels of climate-related on the economy and financial system. When modelling the impact of transition, an asset manager should factor in forward-looking information, such as the investee companies' transition plans, to better capture the level of transition risk that investee companies would be exposed to. An asset manager should seek to address material data gaps and the adequate integration of climate-related risks in financial statements, including through investee company engagement, to better assess its investee companies' climate risk profiles.

Data, metrics and targets

- An asset manager should recognise the inherent limitations or trade-offs in using proxy data¹³ to mitigate data availability issues when performing its climate risk assessment at the investee company and portfolio levels. As asset managers may have to operate in the absence of perfect information, they will need to build sufficient expertise to make well-informed judgements on the choice of proxy data¹⁴ and in accepting data trade-offs. Asset managers should equip themselves to judge the balance between having a sufficiently comprehensive set of reasonable data to support decision-making on the one hand, and the inherent limitations or trade-offs of using proxy data on the other hand. Asset managers should document the decisions on the choice of proxy data, such as the sources, underlying assumptions, methodology and limitations, so as to inform future iterations of analyses. Asset managers should recognise and highlight the potential material implications of the use of proxy data in their risk assessments submitted to decision-makers. Asset managers should also continue in their efforts to obtain actual and verified data to enhance the robustness of their decision-making process.
- 3.7 An asset manager should set metrics and targets to track progress towards its strategic goals, recognise the limitations thereof and supplement their analysis with additional information¹⁵ as necessary. Asset managers which identify portfolio decarbonisation as a strategic goal may track progress using point-in-time emissions data in the absence of forward-looking emissions data. However, point-in-time emissions data would not capture future reductions in emissions (e.g. an investment to install carbon abatement technology). Point-in-time emissions data

¹² In developing such analyses, asset managers can leverage external reference scenarios, such as those published by the Network for Greening the Financial System.

¹³ This includes cases in which the asset managers choose to source their data from data vendors, where the reasonableness of any assumptions or proxies used by the vendor in deriving missing datapoints should be recognised, assessed and considered in decision-making, where material. Where relevant, asset managers could consider information beyond the financial statements of investee companies when conducting their due diligence checks.

¹⁴ Where ESG data and ratings providers are used, in line with IOSCO's 2021 Report on Environmental, Social and Governance Ratings and Data Products Providers, asset managers should evaluate "the criteria utilised in the assessment process, including if they are science-based, quantitative, verifiable, and aligned with existing standards and taxonomies, the relative weighting of these criteria in the process, the extent of qualitative judgement and whether the covered entity was involved in the assessment."

¹⁵ The asset manager should also consider interlinkages with broader environmental risk in choosing metrics and setting targets.

should hence be supplemented by additional information on possible future emissions reductions¹⁶ where relevant. As data availability increases, an asset manager should also review existing metrics for continued relevance.

- 3.8 The impact of any public or internal decarbonisation targets (if any) on the asset manager's business strategy and portfolios should be well understood within the asset manager, with residual risks adequately identified and addressed. Decarbonisation targets¹⁷ (if any) should be set based on appropriate science-based pathways and reference scenarios that are sufficiently ambitious¹⁸ while remaining relevant to the risk profile of the portfolios managed by the asset managers. An asset manager which has not set any decarbonisation targets should likewise have adequate measures in place to address risks associated with the transition to a low-carbon future, including that of stranded assets and any residual risks arising from its choice of metrics.
- 3.9 The targets should include actionable short-, medium- and long-term targets to facilitate tracking and foster better accountability. Targets should be set in consideration of the materiality and distribution of the portfolios' emissions profiles at the appropriate sectoral and jurisdictional level. Decarbonisation targets (if any) should be supplemented with additional metrics as necessary. Examples include the proportion of assets to be managed in line with the attainment of net zero emissions by a specified date, the proportion of investee companies that have set their own science-based targets, amount of capital allocated towards climate solutions and/or the enabling of managed phaseout of high-emitting physical assets, and extent of engagements, such as the number and types of climate-related engagement and stewardship activities carried out, including climate-related votes casted. These additional metrics can help illustrate the extent to which decarbonisation targets are achieved through the adoption of various approaches to support economy-wide transition instead of a strict divestment-based approach.
- 3.10 Where there is a misalignment between the portfolios' actual trajectories vis-à-vis targets set, the asset manager should have a structured process in place to explain the variance. The asset manager should be able to attribute causation to specific factors and should consider whether there is a need to implement additional measures to achieve its stated targets and commitments. If the misalignment is assessed to be fundamental and not temporary, the asset manager should review the continued relevance of its targets.
- 3.11 Given the evolving nature and understanding of climate change, an asset manager should review all relevant risk metrics and targets periodically for continued relevance, and monitor these metrics using a multi-year perspective. For example, short-term increases in financed emissions due to actions in support of climate-positive outcomes (e.g. projects for which reductions in emissions will materialise only after the project is completed) may not be an indication of a deterioration in the asset manager's climate risk management practices or a failure to meet its publicly-committed climate objectives. An asset manager may see a short-term increase in its financed emissions when it finances investee companies or their activities that are focused on transition. Where the asset manager is not meeting its emissions reduction targets (if any), the asset manager should be able to explain how such transition-related investments are consistent with its commitments and decarbonisation targets, as well as the portfolio's investment objective/mandate.

¹⁶ Usage of such projected future emissions should recognise their inherent uncertainty of materialisation, and be premised on the willingness and capability of investee companies' ability to follow through with their plans.

¹⁷ Gross, rather than net, metrics should be used to distinguish the effects of carbon credits.

¹⁸ In the asset manager's choice of pathways, it should consider the likelihood of progressively stronger policy responses by jurisdictions to fulfil Paris Agreement commitments.

3.12 MAS recognises that there may be challenges in setting decarbonisation targets for certain investments or portfolios due to various reasons, such as the lack of credible data and methodology or customers' preferences. For such investments, the asset manager should document its explanation on the approach taken, as well as any mitigation actions taken, where applicable. The asset manager should continually look to expand the scope of the investments or portfolios covered in its decarbonisation targets over time. This would include engaging and educating its customers on the importance of managing climate-related risks and the impact of climate change on investee companies' risk/return profiles.

Implementation strategy (people, processes, systems)

- 3.13 The asset manager should hire staff and equip them, including through capacity building and training, to assess, manage and monitor climate-related risks in a rigorous, timely and efficient manner.
- 3.14 The asset manager should update its internal governance and processes, including its risk management framework, to manage climate-related risks in a systematic manner and on a regular basis. Scalable and consistent processes will allow the asset manager to cascade and implement its climate risk strategy and plans effectively. This could include alignment of existing products, services and business activities with the asset manager's strategy, as well as the embedding of strategic climate consideration in decision-making processes.
- 3.15 The asset manager should develop and implement a data strategy to collect, maintain and effectively utilise relevant environmental-related data to support effective decision-making. Relevant environmental-related data could include information to enable the tracking and analysis of the asset manager's targets and commitments, the climate-related risks faced by its portfolios, mitigating actions committed by its investee companies (e.g. status and adequacy of investee companies' plans to address climate-related risks), and changes in the operating environment of relevant sectors and jurisdictions. Systems should be in place to reliably collect, aggregate and distribute relevant data to different units within the asset manager for timely decision-making. The asset manager should have appropriate mechanisms in place to facilitate improvement of data-related processes over time, including the identification of new relevant data points, sources and collection processes. Where possible, an asset manager should keep abreast with and support emerging developments of technological solutions¹⁹. As data availability and quality are expected to improve over time, asset managers should be agile in how they embed relevant climate-related data in their investment and risk management frameworks and processes, and be flexible enough to allow enhancements (e.g. inclusion of new datapoints or additional granularity) over time.

4 ENGAGEMENT AND STEWARDSHIP

4.1 Active engagement and stewardship by asset managers can assist in supporting investee companies' transition to a low carbon future and mitigate portfolios' exposure to climate-related risks. A credible and timely response by investee companies to manage their portfolios' climate-related risks across short-, medium- and long-term time horizons will lower their risk profiles. This will in turn enhance the resilience of the portfolios managed by the asset managers to climate-related risks.

¹⁹ For instance, industry initiatives to harmonise data.

- 4.2 An asset manager should develop an engagement and stewardship plan to support its overall strategy to address climate-related risks in its portfolios. The plan should specify clear objectives or intended outcomes and define the asset manager's approach towards engagement and stewardship. The asset manager should also equip its staff to effectively engage with investee companies by ensuring that they have sufficient understanding of sectoral and jurisdictional specificities and developments. In addition, the asset manager should develop toolkits to facilitate consistent engagement by its staff. These toolkits should set out the range of engagement and stewardship approaches that are available to the asset manager (e.g. bilateral engagement, proxy voting, filing shareholder resolutions, collaborative engagement) and provide guidance to aid its staff in selecting the approach to be adopted in consideration of the risks posed and the willingness and ability of the investee company to mitigate them. Where relevant, the asset manager should also update its proxy voting policy to include climate-related considerations and provide internal guidance on disclosing proxy voting activity. In addition, asset managers should consider participating in collaborative initiatives and collective engagement platforms with industry peers to address common challenges, subject to applicable laws and regulations.
- 4.3 An asset manager should have a structured process to identify and prioritise investee companies for engagement, particularly those that may be more vulnerable to transition²⁰ and/or physical risks. An asset manager should tailor its engagement approach for different investee companies based on material risk factors, such as their climate risk profiles (considering jurisdictional and sector-specific factors), size of portfolios' investment, and the willingness and ability of the investee company to mitigate climate-related risks.
- 4.4 In assessing an investee company's plans to manage climate-related risks, an asset manager should look out for the following, to the extent the risks are material:
 - a. Consideration of different time horizons;
 - b. Referencing available information about potential future trajectories (e.g. science-based sectoral transition pathways, future sector technological mix and national decarbonisation policies);
 - c. Addressing the risk of stranded assets (which can occur due to factors such as misalignment with decarbonisation pathways, obsolescence due to technological advancements etc) and the continued viability of investee companies' business models;
 - d. Assessing potential physical hazards²¹ arising from climate change that the investee companies are materially exposed to, directly or through their supply chains;
 - e. Consideration of physical risk mitigating measures (such as investments in adaptation measures or recovery efforts after hazard events) and their impact on cashflows and capital expenditure;
 - f. Adequacy of investee companies' governance and accountability mechanisms; and
 - g. The presence of appropriate metrics and targets, ideally science-based and sector-specific.
- 4.5 The engagement process should include collecting climate-related risk data from investee companies, where possible, and encouraging investee companies to publicly disclose relevant material climate-related information in accordance with well-regarded international reporting frameworks and standards, such as the International Sustainability Standards Board (ISSB) standards. This will facilitate a better understanding of the impact of climate change on their businesses and risk profiles. This data can be used to inform investment and risk management decisions (e.g. enhanced monitoring and escalation) and appropriate portfolio strategies. The asset

²⁰ Such as those directly engaging in carbon-intensive activities or are indirectly dependent on such activities through supply chain linkages.

²¹ Such as hazards that could directly affect investee companies' business operations due to the financial impact on their key physical assets/working capital, or indirectly through the impact on business operations etc.

manager can consider developing structured templates to facilitate collection of consistent and comparable climate data. Examples of such data could include, but is not limited to the following:

- a. Investee companies' self-assessed impact of transition and physical risk (where available);
- b. Investee companies' sustainability commitments, initiatives and strategies;
- c. Mechanisms put in place by investee companies to deliver such sustainability commitments, initiatives and strategies (e.g. incentives, compensation, internal pricing, etc);
- d. Locations of investee companies' key assets;
- e. Investee companies' exposure to supply chain risks (including pass through of carbon costs and impact on working capital cycles);
- f. Investee companies' carbon emission data and vulnerability to changes in public policies, technological developments and shifts in consumer and investor sentiments; and
- g. Investee companies' existing or planned measures to address transition and physical risks.
- 4.6 An asset manager should aim to support investee companies in developing or enhancing their own plans to address climate-related risks and not reduce investments or divest indiscriminately. In instances where an asset manager has direct influence over the operations of the investee companies, it should work with investee companies to establish governance frameworks to oversee and manage climate-related risks in their operations.
- 4.7 Investee companies exposed to elevated climate-related risks and which are not implementing adequate risk mitigation and adaptation strategies (due to inability or unwillingness) as they transition towards a net zero economy, should be placed on enhanced monitoring. The asset manager should engage such companies further to allow prompt risk mitigation actions to be taken.
- 4.8 Asset managers should establish an escalation framework with appropriate consequences when engagement is ineffective. These consequences should be made known to the investee companies. When investee companies show little or no response to engagement, asset managers should consider using available stewardship levers, such as voting against directors, remuneration policies and annual reports or exercising financing levers, such as ending support to the investee company's future capital-raising efforts, or divesting. Asset managers should consider whether it is appropriate to establish guidance on the timeframe for escalation that aligns with their overall expected portfolio or sector decarbonisation trajectory.

5 **DISCLOSURE**

- 5.1 The asset manager should disclose meaningful and relevant information to enable stakeholders to understand how the asset manager is responding over the short-, medium- and long-term to material climate-related risks faced by its portfolios, and governance around processes for addressing such risks. Such disclosures should be in accordance with well-regarded international reporting frameworks and standards, such as the ISSB standards.
- 5.2 To manage and mitigate potential reputational and greenwashing risk arising from its investing activities, the asset manager should clearly communicate its risk management strategies and approaches for different sectors, and how these investing activities relate to the asset manager's publicly committed climate objectives (where relevant), particularly where investment in such sectors could be negatively perceived due to high emissions intensity in the shorter term. Such disclosures are critical in enabling stakeholders to understand the

asset manager's reasons for investing in these assets, as well as the corresponding risk strategies and mitigation measures put in place by the asset manager, to avoid adverse reactions and accusations of greenwashing, which may negatively impact the asset manager. Where relevant, an asset manager should disclose its engagement strategies for stakeholders including, but not limited to, shareholders, rating agencies, regulators and governments, and non-governmental organisations (NGOs).

- 5.3 For product-level disclosures, the asset manager should consider the appropriate level of disclosure of climate-related considerations embedded in every product, so as to reflect how the asset manager's overall climate-risk strategy cascades to the product level, and also to help stakeholders understand how these products contribute to the asset manager's overall climate objectives. Sustainability and transition-related products should be appropriately labelled and accompanied by a suitable level of climate-related disclosures. The asset manager could also consider the use of credible and well-regarded green and transition taxonomies²² in its product-level disclosures.
- 5.4 In light of data and methodological challenges, the asset manager may disclose reasonable and supportable information that is available at the reporting date without undue cost and effort. However, the asset manager should disclose factors, inputs, methodologies, material assumptions and dependencies underlying its disclosures for transparency. For instance, the asset manager should disclose the scenarios and time horizons used in its risk assessments, data proxies used (for emissions and/or physical risk data) if it was unable to obtain data directly from its investee companies, the extent of proxy data usage, and the scenarios used in the asset managers' scenario analyses. Where relevant, asset managers should also disclose plans to overcome such data and methodological challenges.

²² Examples include the Green Finance Industry Taskforce (GFIT) Taxonomy, ASEAN Taxonomy and the EU Taxonomy.