

# RESPONSE TO FEEDBACK RECEIVED

December 2020

## Proposed Guidelines on Environmental Risk Management (Banks)

MAS

Monetary Authority of Singapore

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## **1 Preface**

1.1 On 25 June 2020, the Monetary Authority of Singapore (“MAS”) issued a set of three consultation papers to seek feedback on the proposed Guidelines on Environmental Risk Management (“Guidelines”). The Guidelines seek to enhance financial institutions’ (“FIs”) resilience to and management of environmental risk. They set out sound practices in relation to FIs’ governance, risk management and disclosure of environmental risk. The Guidelines were co-created with FIs and industry associations from the banking, insurance and asset management sectors.

1.2 The Guidelines are tailored to each sector based on its business activities and risk management practices. This paper sets out MAS’ responses to feedback received on the Guidelines for banks, merchant banks and finance companies.

1.3 The consultation period closed on 7 August 2020, and MAS would like to thank all respondents for their contributions. The list of respondents and their submissions are respectively provided under Annex A and Annex B.

1.4 MAS has carefully considered the feedback received and has incorporated them in finalising the Guidelines as appropriate. Comments that are of wider interest, together with MAS’ responses, are set out below.

## **2 Scope**

2.1 MAS proposed to apply the Guidelines to all banks, merchant banks and finance companies (collectively referred to as “banks”). In addition, it was proposed for the Guidelines to apply to banks’ extension of credit to corporate customers, underwriting for capital market transactions, and other activities that expose the bank to material environmental risk. In particular, banks with material investment activities should refer to the relevant sections of the Guidelines on Environmental Risk Management for Asset Managers, for sound practices on the management of environmental risk with respect to investments.

### ***Scope of risks covered***

2.2 A few respondents suggested that the Guidelines should initially only apply to climate risk, as measurement and management methodologies for other environmental risks are still nascent. Some other respondents suggested extending the Guidelines to social and governance risks.

### MAS' Response

2.3 The Guidelines focus on environmental risk, as the linkage between environmental risk and impact on the financial system is more established at this juncture than social risk, while governance issues can be addressed by existing governance requirements. In addition, climate risk and other environmental risks are closely interrelated, given that climate change could lead to environmental degradation and vice versa. MAS recognises that methodologies for assessing, monitoring and reporting environmental risk factors beyond climate change are less developed at present, and expects banks' risk management approaches to mature as methodologies and international frameworks evolve.

### ***Scope of activities covered***

2.4 Some respondents suggested that banks be given flexibility to exclude certain corporate lending activities such as small and medium-sized enterprises ("SME") lending from the scope of the Guidelines. One respondent sought clarification on the definition of "capital market transactions".

2.5 There were also queries on the types of investment activities in scope and how to determine materiality of investment activities. A few respondents asked about the applicability of the Guidelines in the case where a bank delegates discretionary investment management to another entity.

2.6 Separately, some respondents requested for guidance on the definition of material environmental risk and examples of activities posing such risk.

### MAS' Response

2.7 MAS would like to clarify that banks have the flexibility to calibrate their risk management approach according to the risk posed and to apply the Guidelines in a manner that is commensurate with the bank's size, nature of activities and risk profile. "Capital market transactions" refer to banks' debt and equity capital market underwriting activities.

2.8 In terms of the investment activities in scope, MAS intends for the Guidelines to be generally applicable where banks have discretionary authority over the investments. Where a bank appoints another entity to undertake investment management, the bank still retains overall responsibility and should convey its expectations on environmental risk management to the entity. The bank should also monitor the entity's compliance with the expectations set. In addition, banks should determine materiality of its investment

activities using criteria as appropriate to its circumstances, such as contribution to assets, revenue, risk-weighted assets or staff headcount.

2.9 In assessing the applicability of the Guidelines to other activities that expose it to material environmental risk, a bank should conduct its own materiality assessment, taking into account the impact on business strategy and overall risk profile. As with other forms of risks, banks are best placed to assess the materiality of their risk exposures, taking into consideration the nature and scale of their activities. Banks could also take guidance from ongoing industry and international efforts, including the Network for Greening the Financial System (“NGFS”), to share good environmental risk management practices.

#### ***Group application of the Guidelines***

2.10 A few respondents sought clarification on whether the Guidelines would apply on a solo or consolidated basis.

#### **MAS’ Response**

2.11 The Guidelines apply on a group basis for locally-incorporated banks. For a locally-incorporated bank that is headquartered in Singapore, this refers to the group including the holding company in Singapore, as well as the bank’s subsidiaries and branches in Singapore and overseas, where applicable. For a locally-incorporated subsidiary of a foreign bank, this refers to the subsidiary’s operations in Singapore and its downstream subsidiaries and branches in Singapore and overseas, where applicable. We have amended the Guidelines to reflect this clarification.

#### ***Compliance costs for smaller banks***

2.12 Some respondents expressed concerns over significant compliance costs and challenges, especially for smaller banks, in monitoring the environmental risk of their customers. Some respondents remarked that other sectors do not have similar expectations imposed upon them and suggested for this to be done at a later stage when there is more maturity in environmental risk management practices.

#### **MAS’ Response**

2.13 Banks should apply the Guidelines in a manner that is commensurate with the size and nature of their activities, as well as their risk profile. The implementation of environmental risk management practices is intended to be an iterative process, as methodologies continue to evolve and mature. Banks could also look to ongoing industry efforts to develop and share good environmental risk management practices.

2.14 For banks with limited resources and capacity, MAS does not expect such firms to ramp up their environmental risk management capabilities immediately. Instead, smaller firms can take measured steps to uplift their environmental risk management capabilities. For example, as a start, smaller banks which require more guidance can turn to available resources online such as guidance published by the NGFS, and attend environmental risk management training courses to gain relevant environmental risk management knowledge and proficiency.

### **3 Governance and Strategy**

3.1 The Guidelines set out MAS' expectations on the Board and senior management to incorporate environmental considerations into the bank's risk appetite, strategies and business plans, and to oversee the bank's environmental risk management. The proposed responsibilities of the Board include approving an environmental risk management framework and policies, setting clear roles and responsibilities of the Board and senior management, and ensuring that environmental risk, where material, is addressed in the bank's risk appetite framework. The proposed responsibilities of senior management include developing an environmental risk management framework and policies, regularly reviewing their effectiveness, and allocating adequate resources to manage environmental risk.

3.2 MAS also proposed that where environmental risk is deemed material to a bank, the bank should designate a senior management member or a committee to oversee environmental risk.

#### ***Board and senior management oversight***

3.3 Some respondents sought guidance on the appropriate governing body to perform the proposed responsibilities of the Board in foreign bank branches. Several respondents suggested that the proposed responsibilities of the Board and senior management set out in the Guidelines could be carried out at the head office of foreign banks. A few respondents asked if the Board may delegate oversight of environmental risk management to sub-committees.

#### **MAS' Response**

3.4 MAS would like to clarify that for a bank incorporated in Singapore, the Board responsibilities set out in the Guidelines could be performed by the Board or a Board-level committee. For a bank incorporated outside Singapore, the Board responsibilities could be performed by the Board, a Board level committee, or a management committee or body responsible for the oversight of the institution in Singapore. In the context of foreign

banks, Board oversight of environmental risk management could be performed by a combination of local and global committees, with clear duties set out between these committees.

3.5 Foreign banks may also take guidance from their group's policies and frameworks. Nonetheless, this does not absolve the local Board (for foreign banks incorporated in Singapore) and senior management from their responsibility for effective oversight of the Singapore operations, and they remain accountable for the responsibilities set out in the Guidelines.

***Leveraging group policies and frameworks***

3.6 Some respondents queried whether banks could comply with the Guidelines using group policies and frameworks.

**MAS' Response**

3.7 Banks may apply and adapt policies and procedures that have been instituted at the group-level to their Singapore operations, for the purpose of complying with the Guidelines in Singapore.

***Risk appetite framework***

3.8 Some respondents suggested that banks should be given flexibility to start with qualitative risk appetite measures before progressing towards quantitative measures after quantitative tools and metrics have developed. One respondent sought confirmation that banks would be allowed to consider environmental risk within the scope of broader risk appetite statements as opposed to a separate environmental risk appetite statement.

**MAS' Response**

3.9 MAS recognises that tools and metrics for quantifying environmental risk are still being developed. Banks are expected to progressively enhance and refine their risk appetite framework to include additional quantitative measures, as tools and metrics for measuring environmental risk evolve. Banks have the flexibility in determining the approach for addressing environmental risk in their risk appetite framework, including establishing specific or broader risk appetite statements.

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***Designated senior management member or committee***

3.10 Most respondents were generally supportive of the proposal for banks to designate a senior management member or committee to oversee environmental risk, where such risk is material. A few respondents suggested that it would be preferable for senior management to be collectively accountable, including to encourage collaboration and resource sharing. Some respondents sought guidance on which individual or committee to designate to oversee environmental risk, including whether the individual or committee should be based in Singapore, and if oversight could be at the global level.

3.11 Two respondents sought clarification on how the expectation to designate a senior management member or committee to oversee environmental risk interacts with the MAS Guidelines on Individual Accountability and Conduct (the “IAC Guidelines”)<sup>1</sup>.

**MAS’ Response**

3.12 MAS does not intend to prescribe the specific senior management member or committee that banks should designate to oversee environmental risk. Banks have the flexibility to determine which senior management member or committee to designate, including whether the individual or committee is based in or outside Singapore, and exercises global or local oversight. Banks should exercise sound judgment in doing so.

3.13 MAS views the expectation to designate a senior management member or committee to oversee environmental risk as being complementary to the IAC Guidelines. The expectation in the Guidelines on Environmental Risk Management focuses specifically on environmental risk, and banks may designate a senior management member or committee to oversee environmental risk. The senior management member or committee needs to have clear responsibilities and reporting line(s), with respect to environmental risk management.

***Three lines of defence***

3.14 Some respondents suggested that the role of the three lines of defence be made explicit in the Guidelines.

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<sup>1</sup> The IAC Guidelines were issued on 10 September 2020, with a focus on the measures that financial institutions should put in place to promote the individual accountability of senior managers, strengthen oversight over material risk personnel, and reinforce standards of proper conduct among all employees.



### MAS' Response

3.15 As the first line of defence, business line staff should assess environmental risk before accepting new businesses and in the ongoing management of business relationships, particularly for sectors with higher environmental risk. Both the risk management and compliance functions play important roles as the second line of defence. The risk management function should monitor the business line's implementation of the bank's environmental risk management policies, including challenging practices and decisions, where appropriate, while the compliance function should ensure adherence to applicable rules and regulations. The internal audit function, as the third line of defence, should consider as part of its independent review, the robustness of the bank's risk management framework in managing environmental risk. We have amended the Guidelines to reflect these considerations.

### ***Other feedback***

3.16 Some respondents noted that appointment of Board members should consider their experience and expertise in environmental risk management. A few respondents suggested that environmental risk management should be considered as part of performance evaluation of Board and senior management. Some respondents commented that responsibilities on environmental risk management should be included in terms of reference of the Board.

### MAS' Response

3.17 As set out in the Guidelines, MAS expects banks to ensure that directors have adequate understanding of environmental risk, and senior management is equipped with appropriate expertise for managing environmental risk. MAS expects banks to apply the governance expectations in the Guidelines as appropriate to their circumstances. MAS does not intend to set more prescriptive expectations on banks' governance arrangements at this stage.

## **4 Risk Management**

4.1 The Guidelines set out MAS' expectations for a bank to put in place robust policies and processes to identify, assess, mitigate and monitor material environmental risk at both a customer and portfolio level. The Guidelines proposed for the bank to assess each customer's environmental risk as part of its assessment process for credit facilities or capital markets transactions. The bank should engage each customer that poses higher environmental risk to improve the customer's risk profile, and support its transition towards sustainable business practices. On risk monitoring, the bank should develop tools

and metrics to monitor and assess its exposures to environmental risk. This includes developing capabilities in scenario analysis and stress testing to assess the impact of material environmental risk on its risk profile and business strategies, and explore its resilience to financial losses.

### ***Identification of higher-risk sectors***

4.2 Some respondents requested MAS to provide additional guidance on higher-risk sectors, which include providing examples of such sectors and relevant criteria to identify them. Several respondents also suggested for MAS to develop sector policies in consultation with the industry.

#### **MAS' Response**

4.3 MAS' approach is not to prescribe higher-risk sectors, or banks' financing policies towards these sectors at this stage. Instead, we expect banks to determine higher-risk sectors and take the appropriate steps to assess, mitigate and disclose these exposures. The Guidelines set out qualitative criteria to help banks identify higher-risk sectors, including the level of greenhouse gas emissions, vulnerability to extreme weather events, and linkages to unsustainable energy practices, deforestation and pollution. In addition, banks may reference external literature to support their approach to risk identification, such as the Association of Banks in Singapore ("ABS") Guidelines on Responsible Financing, which include a list of industries with elevated environmental, social and governance risks.

### ***Calibration of environmental risk assessment***

4.4 Several respondents requested more discretion to decide which customers to subject to risk assessment, with an initial focus on larger customers in higher-risk sectors.

#### **MAS' Response**

4.5 Banks should implement the Guidelines in a way that is commensurate with the size and nature of their activities, as well as their risk profile. In this regard, the bank should assess each customer's environmental risk as part of its assessment process for credit facilities or capital markets transactions, particularly for sectors with higher environmental risk. The bank may calibrate the scope and extent of this assessment based on factors including the sector, customer's operations, and nature and size of the transaction. The calibration approach should be documented appropriately. We have made amendments to reflect this clarification in the Guidelines. It is expected that a

bank's capacity to perform such assessments will mature over time, taking into consideration the availability of information from both internal and third-party sources.

#### ***Use of third-party ratings in risk assessment***

4.6 Several respondents sought clarity on the use of third-party Environmental, Social and Governance ("ESG") ratings in risk assessment, citing challenges including opaque and changing methodologies. One respondent suggested for MAS to promote and recognise third party rating agencies which FIs can factor into risk assessment. Another sought clarification on whether banks are allowed to adopt external ratings on environmental performance without developing its own rating methodology, and if MAS has plans to require banks to incorporate ratings on environmental performance into their existing borrower credit rating methodology.

#### **MAS' Response**

4.7 Banks should determine how best to implement their environmental risk assessment methodologies and processes, to effectively assess the risk profile of their customers and inform the extent of due diligence and mitigating actions to be taken to address these risks. The Guidelines set out a range of practices to cater to banks at varying stages of development in their environmental risk assessment. These include referring to external ratings on environmental performance or developing their own risk assessment and rating methodologies. MAS does not promote or endorse specific third-party rating agencies, as we recognise that environmental risk measurement methodologies are at a nascent stage and continue to evolve. The relevance of such third-party ratings would also depend on the business activities and the risk profile of the bank.

4.8 While MAS expects banks to assess each customer's environmental risk as part of its assessment process for credit facilities or capital market transactions, we recognise that the integration of environmental risk rating into banks' credit rating methodology will be an iterative process. These practices will take time to mature, particularly as measurement methodologies continue to develop, and more research and data is needed to assess risk transmission channels and understand the linkages between environmental risk and the credit risk profile of a customer.

#### ***Challenges in customer engagement***

4.9 A number of respondents cited challenges in engaging each customer posing higher environmental risk to improve its environmental risk profile and support the transition towards sustainable business outcomes. They highlighted that its effectiveness would depend on the influence that the bank has over the customer, the customer's

willingness to prevent or mitigate the environmental impact, and the materiality of the environmental risk. Several respondents also requested further guidance on what banks can do to improve the customer's risk profile, and support its transition towards sustainable business practices.

4.10 In terms of mitigating options for customers that do not adequately manage their environmental risk, several respondents noted that most banks would not have a systematic way to reflect the cost of additional risk in their loan pricing and requested additional guidance in this regard.

#### MAS' Response

4.11 MAS expects banks to engage customers posing higher environmental risk as part of their ongoing relationship management process, which will help inform the actions to effectively mitigate the banks' risk exposures. While efforts should be made by banks to actively encourage customers to improve their environmental risk profile and transition to sustainable business practices, MAS recognises the challenges faced by banks in influencing customers' behaviour and the dependencies on customers themselves to achieve a sustainable business outcome.

4.12 The Guidelines set out that the bank may calibrate the extent of customer engagement based on factors including the materiality of the risk, the customer relationship and its willingness and ability to improve its environmental risk profile, and the availability of alternative options to effectively mitigate the bank's exposures to environmental risk. The Guidelines also include a range of mitigating options that banks may consider for customers that do not adequately manage their environmental risk, including reflecting the cost of the additional risk in the loan pricing, applying limits on the loan exposure, and re-assessing the customer relationship.

4.13 MAS has provided more guidance in the Guidelines on how banks can work with customers and encourage them to improve their risk profiles, including through establishing specific and meaningful environmental performance targets, such as carbon emissions reduction and improvement in energy efficiency. Banks can incentivise customers to attain these targets in a progressive manner, for example, through a corresponding lowering of the interest rates based on the targets met. This can be effected via financial instruments such as sustainability-linked loans.

#### ***Additional guidance on tools and scenarios for risk analysis***

4.14 Respondents were generally supportive of the expectation to develop tools and metrics for risk analysis. Several respondents requested more guidance on tools and

metrics to adopt, so as to bring about greater standardisation and a level playing field. Some respondents also asked for MAS to provide and endorse a comprehensive list of tools and metrics that FIs may adopt. A few respondents noted that metrics for environmental risk (beyond climate change) are still in their infancy, and propose to focus on a sub-set of environmental risks (e.g. climate change) deemed most material and where methodologies are more well established.

4.15 On stress testing and scenario analysis, several respondents suggested for MAS to provide standard scenarios and assumptions that FIs can reference. Two respondents also sought clarification on MAS' expectation regarding the frequency of scenario analysis, and the definition of "short-term" and "long-term" horizons.

#### MAS' Response

4.16 MAS recognises that measurement methodologies are continuing to evolve, and these are more established for climate risk at this stage, compared to other types of environmental risk. Banks may take a progressive approach towards environmental risk analysis, starting in areas with more well-established methodologies, and progressing to other environmental risk types as generally accepted methodologies and practices emerge. Risks of greater materiality and severity should also be prioritised and monitored more closely.

4.17 While MAS is not endorsing or prescribing specific tools and metrics at this stage, we have been working with other regulators on the international front, including the NGFS, to review and profile tools and methodologies used by FIs in environmental risk analysis<sup>2</sup>. This catalogue of case studies would provide a useful reference for banks, as they continue to build capabilities in this space. MAS has included additional examples of tools and metrics to assess environmental risk in the Guidelines, drawing from international work and analysis done by other regulators, including on biodiversity risks<sup>3</sup>. Such examples are meant to be illustrative, and are neither prescriptive nor exhaustive at this stage.

4.18 On scenario analysis and stress testing, MAS similarly recognises that work in this space remains nascent, particularly for physical risk. There remain challenges in assessing

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<sup>2</sup> Network for Greening the Financial System, *Overview of Environmental Risk Analysis by Financial Institutions*, 2020.

<sup>3</sup> De Nederlandsche Bank, *Indebted to nature: Exploring biodiversity risks for the Dutch financial sector*, 2020.

the effects of climate change over longer time horizons, alongside the uncertainty in the global response to climate mitigation and adaptation. MAS will provide guidance to banks on relevant scenarios and risk factors, including through our industry-wide stress tests in future, and also accord flexibility for banks to determine the scenarios and risk factors that are more relevant for them in their individual assessments. The NGFS has also developed guidance on reference climate scenarios, which may serve as a useful reference for banks. Banks may also consider referring to scenarios aligned with scientific climate change pathways, including from the Intergovernmental Panel on Climate Change (“IPCC”) and the International Energy Agency.

4.19 Banks may determine the frequency of scenario analysis appropriate for them, but this should be sufficiently regular to inform the banks’ assessment of their risk profile and business strategies. Banks may also define the time horizons that are appropriate to assess their short-term and long-term risks, in accordance with their business model and risk profile.

4.20 To support banks’ efforts in stress testing, MAS will within the next two years incorporate climate-related scenarios in our annual industry-wide stress tests for the financial industry, providing some standard assumptions that FIs can reference. MAS’ work on climate stress testing and climate-related modelling will involve an iterative process in consultation with the industry, which will be refined as we collectively gain experience in this area. The climate-related scenarios will serve as an exploratory exercise to help attune banks to climate risk, and consider how best to incorporate such risks in their own stress testing approach. Banks can build up their capabilities in a gradual manner, by starting with identifying relevant metrics, improving data collection, and exploring pilot analyses in particular sectors, such as those with higher environmental risk. MAS will continue to work with the industry to build capacity in stress testing, including exploring how new and existing datasets can be used to better capture the impact of climate risk.

#### ***Challenges in data availability***

4.21 Some respondents requested guidance from MAS on managing challenges relating to data availability (including on greenhouse gas emissions, energy and water usage) and suggested for MAS to provide reference data sources. Several respondents asked for MAS to clarify minimum standards on the type of environmental data that banks should require their customers to disclose, and promote the adoption of the Task Force on Climate-related Financial Disclosures (“TCFD”) recommendations among corporates.

### MAS' Response

4.22 As environmental risk measurement and reporting methodologies are nascent, and disclosure frameworks continue to evolve, it will take time to converge on some form of minimum standards on disclosures across corporates. MAS recognises that data challenges pose a key impediment to banks' environmental risk analysis, and data constraints would in part arise from the limited data reported by customers and a lack of comparability of the data. MAS is engaged in ongoing initiatives on international and domestic fronts to alleviate these challenges.

4.23 Internationally, MAS is working with other regulators through the NGFS to identify key data needs for environmental risk analysis, and the means to bridge these data gaps. We also participate in the International Organisation of Securities Commissions ("IOSCO") Sustainable Finance Task Force, which looks at improving sustainability-related disclosures by issuers and asset managers, and the International Platform on Sustainable Finance ("IPSF"), which enhances international coordination on disclosures.

4.24 Domestically, Singapore Exchange ("SGX") mandates annual sustainability reporting for listed issuers, whereby all SGX-listed issuers are required to report on five primary components on a comply-or-explain basis. SGX will soon include the TCFD recommendations within its existing guidance to assist listed issuers with their climate-related financial disclosures.

### ***Setting targets on carbon emissions***

4.25 One respondent suggested MAS to provide clarity on the expectation for banks to work towards a carbon emission reduction target.

### MAS' Response

4.26 MAS expects banks to disclose in accordance with well-regarded international reporting frameworks, such as the TCFD recommendations, which include metrics and targets to assess and manage climate-related risks and opportunities. We have not prescribed the specific targets to be used by banks at this stage given the data challenges. For example, we recognise that banks may face challenges in sizing their financed emissions when tracking their emissions target. Nevertheless, we expect banks to play an important role in supporting the transition to an environmentally-sustainable economy. It is therefore useful for banks to consider their broader responses to objectives set out under international agreements such as the Paris Agreement and relevant national policies as part of their business plans and strategies, to help inform the type of targets that banks set over time. We have incorporated this in the Guidelines.

### ***Alignment with international standards***

4.27 Some respondents indicated that the Guidelines should be consistent with international standards and supervisory perspectives in other jurisdictions. One respondent sought clarification on how the Guidelines would reflect the harmonisation of risk management standards with international best practices.

#### **MAS' Response**

4.28 The Guidelines incorporate best practices on environmental risk management developed by global regulators, including at international fora that MAS is actively involved in. MAS is working closely with our global counterparts to identify and adopt best practices to manage environmental risk. As a founding member of the NGFS, MAS collaborates with other regulators to develop guidance on environmental risk management and scenario analysis. We also participate in the Basel Task-force on Climate-related Financial Risks ("TCFR") that examines effective measurement methodologies and supervisory practices to mitigate climate risk, which other regulators can adopt.

4.29 MAS will continue to review international developments and best practices in other jurisdictions, and update our guidance as appropriate, to reflect the evolving nature and maturity of environmental risk management practices.

## **5 Disclosure**

5.1 MAS proposed that banks disclose, at least annually, their approach to managing environmental risk and the potential impact of material environmental risk on the bank. MAS also proposed that banks take reference from international reporting frameworks, including the TCFD recommendations, to guide their environmental risk disclosure.

### ***Form of disclosure***

5.2 Some respondents requested more guidance on metrics for disclosure, or for MAS to develop a disclosure template for banks.

5.3 In addition, some respondents sought clarifications on the applicability of disclosure requirements on foreign banks and whether MAS would accept reports prepared and issued by a foreign bank's head office. One respondent suggested that allowing consolidation of disclosures at head office would obfuscate material information regarding environmental risk.



5.4 Some respondents also queried if banks could disclose information via non-financial reports (e.g. sustainability reports), and whether banks are to disclose publicly or report the data to MAS directly.

MAS' Response

5.5 MAS has not prescribed metrics to be disclosed as the maturity of environmental risk management practices varies amongst banks, and practices are still evolving with multiple disclosure frameworks now available. We have reflected in the Guidelines that banks' disclosures should be in accordance with well-regarded international reporting frameworks, such as the TCFD recommendations.

5.6 MAS would like to clarify that the expectations set out in our Guidelines are applicable to all banks with operations in Singapore. Disclosures could be prepared and issued by a foreign bank's head office as long as they meet the expectations in the Guidelines. MAS considered that foreign banks may already have processes in place to consolidate reporting with their head offices, and requiring foreign banks with small Singapore operations to issue a separate local disclosure may be too onerous.

5.7 MAS would also like to clarify that we accept disclosure via banks' annual reports, sustainability reports, and/or website. Banks should evaluate the various means of disclosure and adopt an approach that best enables them to provide clear and meaningful information to stakeholders, based on the size and nature of their activities as well as their risk profiles. For avoidance of doubt, these disclosures are to be issued publicly.

***Disclosure of non-material risks***

5.8 One respondent suggested that disclosures be made mandatory irrespective of whether the risks are material or not. The disclosures should also state the information based on which the materiality is determined.

MAS' Response

5.9 MAS has taken a risk-based approach in setting out our expectation for a bank to disclose the potential impact of material environmental risk on the bank. We recognise that requiring banks to disclose all non-material risks may be operationally burdensome. However, banks should describe their processes for determining materiality, which is also in line with TCFD's recommendation.

***References to international reporting frameworks***

5.10 One respondent asked if banks could rely on their existing forms or reports instead of taking reference from international reporting frameworks.

5.11 Several respondents suggested including other reporting frameworks/guidances in our Guidelines, such as the Taskforce for Nature-related Financial Disclosures and the ABS' Guidelines on Responsible Financing Practices.

**MAS' Response**

5.12 Disclosing in accordance with well-regarded international reporting frameworks such as the TCFD recommendations would boost the financial sector's implementation of meaningful, consistent and comparable environmental risk disclosures, thereby promoting market discipline and efficient allocation of capital. However, banks have the discretion to supplement the recommendations from these international reporting frameworks with their own established forms or reports.

5.13 MAS acknowledges that disclosure standards continue to evolve and some areas could be challenging given data and methodological constraints. MAS will continue to monitor developments on international reporting frameworks, and work with the industry to ensure that disclosures are increasingly meaningful and comparable.

***Frequency of disclosure***

5.14 Several respondents had questions on frequency of disclosure, including (i) whether the frequency would be primarily driven by investor demand; (ii) whether the timing of disclosure could be aligned with sustainability reporting requirements that individual banks already have in place; and (iii) whether disclosures should be made publicly accessible every quarter.

**MAS' Response**

5.15 In determining the frequency of disclosure, MAS took into consideration recommendations by international reporting frameworks such as the TCFD recommendations, which advocates an annual disclosure at the minimum. Banks may align the timing of their disclosures with their existing sustainability reporting requirements so long as the frequency is at least annual. Banks may disclose on a more frequent basis at their own discretion.

### ***Independent review***

5.16 Several respondents suggested that disclosures be subject to independent third-party review.

#### **MAS' Response**

5.17 We recognise that it may be challenging for banks to subject their disclosures to independent third-party review at this stage, as disclosure standards are continuing to evolve. Banks may place reliance on their internal controls and checks to ensure that their disclosures are appropriate. However, we note that more banks are likely to seek independent verification over time.

## **6 Implementation Approach**

6.1 MAS proposed a transition period of 12 months after the Guidelines are issued, for banks to assess and implement the Guidelines as appropriate.

### ***Extended transition period***

6.2 Majority of the respondents requested a longer transition period of 18 to 24 months.

6.3 In addition, one respondent asked about the impact of the Guidelines on existing committed credit lines or capital market transactions. Another respondent sought clarification on when banks will be required to make their first disclosure after the Guidelines have been issued.

#### **MAS' Response**

6.4 MAS will extend the transition period from 12 months to 18 months. We recognise that banks may face initial challenges in implementing the Guidelines, and banks' approaches to managing and disclosing environmental risks are expected to mature as the methodologies for assessing, monitoring and reporting such risks evolve. Notwithstanding, banks should strive to implement the Guidelines as soon as possible, and demonstrate evidence of implementation progress over the transition period. MAS will start engaging key banks on their implementation progress from Q2 2021.

6.5 By the end of the transition period, banks are expected to apply the Guidelines to both existing and new credit facilities and capital market transactions. Banks should strive to make their first disclosure as soon as practicable after the Guidelines have been issued and within the transition period. The first disclosures should be made in the bank's

next annual report/sustainability report following the end of the 18-month transition period and on its website immediately after the 18-month transition period.

***Incorporation into supervisory and regulatory frameworks***

6.6 Some respondents requested for more details on how MAS will incorporate the expectations in the Guidelines into our supervisory and regulatory frameworks, as well as the supervisory actions that can be expected if banks fail to comply.

**MAS' Response**

6.7 As part of our supervisory approach, MAS will consider how banks have incorporated environmental risk into their risk management and business activities. How well an institution observes the Guidelines and assesses, monitors, mitigates and discloses its risk exposures will factor into MAS' overall risk assessment of the bank.

6.8 We recognise that more data (e.g. on risk differentials between green and other assets) is needed to inform the incorporation of environmental risk in capital requirements. We will continue to monitor international developments and research in this area.

***Building an enabling environment***

6.9 Several respondents suggested that MAS provides more guidance and support for the industry in implementing environmental risk management practices. Suggestions by the respondents include developing a best practice guide, including a reference list of sustainability standards, and providing the industry with an implementation roadmap with milestones.

6.10 In addition, several respondents asked if MAS would arrange industry-wide capacity programmes or accredit firms to provide certification and training on green finance.

6.11 Furthermore, several respondents highlighted the need to develop a taxonomy of green and other assets to harmonise implementation across the industry.

**MAS' Response**

6.12 Building knowledge and capabilities in green and sustainable finance is a key thrust in MAS' Green Finance Action Plan. MAS will be organising townhalls for banks to raise their awareness on MAS' expectations in relation to environmental risk management

issues and our Guidelines. We are also working with the industry to develop practical implementation guidance on environmental risk management.

6.13 MAS is anchoring Centres of Excellence, think tanks and research networks in Singapore, to develop Asia-focused green finance research and training, and build a deep pool of expertise. The first such centre, the Singapore Green Finance Centre, was launched in October 2020, and is a partnership between Singapore Management University and Imperial College Business School, to conduct Asia-focused green finance research and training. MAS is also working with the Institute of Banking and Finance, the national accreditation and certification agency for financial industry competency, on accreditation of green finance training programmes.

6.14 MAS acknowledges that taxonomy is a common language on green finance, and clarity and consistency in such definitions will help support FIs to channel more green financing flows with confidence. MAS is working with the financial sector to assess the potential of a taxonomy for Singapore-based FIs, which could cover both green and transition activities, and could also be applied to these FIs' regional and global operations. MAS is also involved in discussions on taxonomy at regional and international platforms. This includes the IPSF, which MAS is a member of, where work on a "common ground taxonomy" is ongoing, to highlight commonalities among existing taxonomies.

#### ***Timeline for review of the Guidelines***

6.15 Two respondents requested for clarity on MAS' timeline for future reviews of the Guidelines.

#### **MAS' Response**

6.16 MAS will monitor developments in international standards and established methodologies, and review our Guidelines when appropriate.

### **MONETARY AUTHORITY OF SINGAPORE**

8 December 2020

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**Annex A**

**LIST OF RESPONDENTS TO THE CONSULTATION PAPER ON  
PROPOSED GUIDELINES ON ENVIRONMENTAL RISK MANAGEMENT (BANKS)**

1. E.Sun Bank Co., Ltd
2. Sumitomo Mitsui Banking Corporation Singapore Branch
3. MUFG Bank
4. CPA Australia
5. ABN AMRO Bank N.V., Singapore Branch
6. Asia Research & Engagement
7. Climate Conversations, SG Climate Rally, Singapore Youth Voices for Biodiversity, PM Haze, and LepakInSG<sup>4</sup>
8. Standard Chartered Bank (Singapore) Limited
9. Münchener Rückversicherungs-Gesellschaft, Singapore Branch
10. Moody's Analytics & Moody's ESG Solutions and its affiliates, Four Twenty Seven and Video Eiris
11. Singapore Environment Council
12. Ernst & Young
13. Asia Securities Industry & Financial Markets Association
14. Carbon Care Asia Pte. Ltd.
15. HL Bank
16. Tata Consultancy Services
17. RHB Bank
18. Calvin Quek
19. WWF Singapore

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<sup>4</sup> We received multiple submissions from individuals that were duplicates/near-duplicates of this submission. We have omitted these respondents from Annex A.

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20. State Bank of India, Singapore, which requested for confidentiality of submission
  21. Rajah & Tann Singapore LLP, which requested for confidentiality of submission
  22. Maybank Singapore Limited, which requested for confidentiality of submission
  23. Deutsche Bank AG, Singapore Branch, which requested for confidentiality of submission
  24. Deloitte & Touche, which requested for confidentiality of submission
  25. Linklaters Singapore Pte. Ltd., which requested for confidentiality of submission
  26. Respondent A, which requested for confidentiality of identity
  27. Respondent B, which requested for confidentiality of identity
  28. Respondent C, which requested for confidentiality of identity
  29. Respondent D, which requested for confidentiality of identity
  30. Respondent E, which requested for confidentiality of identity and submission
  31. Respondent F, which requested for confidentiality of identity and submission
  32. Respondent G, which requested for confidentiality of identity and submission
  33. Respondent H, which requested for confidentiality of identity and submission
  34. Respondent I, which requested for confidentiality of identity and submission
  35. Respondent J, which requested for confidentiality of identity and submission
  36. Respondent K, which requested for confidentiality of identity and submission
  37. Respondent L, which requested for confidentiality of identity and submission
  38. Respondent M, which requested for confidentiality of identity and submission
  39. Respondent N, which requested for confidentiality of identity and submission
  40. Respondent O, which requested for confidentiality of identity and submission
  41. Respondent P, which requested for confidentiality of identity and submission
  42. Respondent Q, which requested for confidentiality of identity and submission
  43. Respondent R, which requested for confidentiality of identity and submission

Annex B

**SUBMISSION FROM RESPONDENTS TO THE CONSULTATION PAPER ON PROPOSED  
GUIDELINES ON ENVIRONMENTAL RISK MANAGEMENT (BANKS)**

| S/N | Respondent           | Responses from respondent  |
|-----|----------------------|--|
| 1   | E.Sun Bank Co., Ltd. | <p><b>Question 1. MAS seeks comments on the entities and business activities that are in the proposed scope of the Guidelines.</b></p> <p>Mainly Loan. Possibly Wealth Management regarding perspective product offered to customers. Also general affair regarding purchase for the Branch.</p> <p><b>Question 2. MAS seeks comments on the proposed responsibilities of the Board in overseeing environmental risk management, including its role in ensuring that environmental risk, where material, is addressed in the bank’s risk appetite framework.</b></p> <p>For loan, we follow HO's guideline as we are one of the Equator Principal Financial Institution. The guide line was approved by HO.</p> <p><b>Question 3. MAS seeks comments on the proposed responsibilities of senior management in overseeing environmental risk management, including its role in developing an environmental risk management framework and policies, regularly reviewing their effectiveness, and allocating adequate resources to manage environmental risk.</b></p> <p>For general affair purchasing, the Branch has to submit forms to prove that the purchasing is compliant with environmental risk management. For loan, to abide HO's guide line for equator principal, it is forbidden to proposing any loan that is not within the regulation given by HO.</p> <p><b>Question 4. MAS seeks comments on the proposal for banks to designate a senior management member or a committee to oversee environmental risk, where such risk is material.</b></p> |



| S/N | Respondent | Responses from respondent  |
|-----|------------|--|
|     |            | <p>HO got different division to monitor the environment risk. For example, for loan, we got credit risk management dept. And for purchasing, we have general affair dept. to monitor if a certain procurement is abide to environment risk management.</p> <p><b>Question 5. MAS seeks comments on the expectation for banks to engage each customer that poses higher environmental risk to improve its risk profile and support its transition towards sustainable business practices.</b></p> <p>For project finance, in order to comply with equator principal, it is only allowed to lend to those project compliant to equator principal.</p> <p><b>Question 6. MAS seeks feedback on the expectation for banks to develop tools and metrics to monitor and assess their exposures to environmental risk, and examples of the aforementioned tools and metrics that may be adopted.</b></p> <p>We will follow HO's instruction and command should there is any.</p> <p><b>Question 7. MAS seeks comments on whether there are specific aspects of environmental risk management policies and processes that would benefit from further supervisory guidance.</b></p> <p>Might still be Equator Principal.</p> <p><b>Question 8. MAS seeks comments on the proposed form and frequency of disclosure of environmental risk by a bank.</b></p> <p>Annually by submitting the bank's CSR report should do.</p> <p><b>Question 9. MAS seeks comments on any aspects of the Guidelines that have not been covered in earlier questions.</b></p> |

| S/N | Respondent   | Responses from respondent  |
|-----|--|--|
|     |  | <p>Suggest that a foreign FI branch could simply follow HO's guideline or policies to make the whole risk management more efficient and not to develop branch's own policy.</p> <p><b>Question 10. MAS requests for examples of sound risk management practices currently implemented by banks, which would meet the expectations in the Guidelines.</b></p> <p>We cannot lend to project finance that is not abiding to Equator Principal. For procurement, we have to ensure a certain level of green purchasing.</p> <p><b>Question 11. MAS seeks comments on the proposed implementation approach, including the proposed transition period of 12 months.</b></p> <p>Suggest to differentiate by level of activity complication and each for different timeline to implement.</p>  |
| 2   | Sumitomo Mitsui Banking Corporation Singapore Branch | <p><b>Question 1. MAS seeks comments on the entities and business activities that are in the proposed scope of the Guidelines.</b></p> <p>In terms of the scope of coverage of the Guidelines, could MAS provide further guidance on the definition of “business activities”? For example, would “business activities” apply to activities which are exposed to the risk from environmental elements or do they apply to activities that contribute to environmental damage?</p> <p><b>Question 2. MAS seeks comments on the proposed responsibilities of the Board in overseeing environmental risk management, including its role in ensuring that environmental risk, where material, is addressed in the bank’s risk appetite framework.</b></p> <p>In the context of a Singapore branch incorporated outside Singapore, we would like to clarify the Board’s responsibilities and</p> |

| S/N | Respondent | Responses from respondent  |
|-----|------------|--|
|     |            | <p>whether reference to the Board should refer to the bank's board of directors at the head office level. We would also like to seek clarification on whether a global risk appetite framework would suffice for the purposes of the Guidelines.</p> <p><b>Question 3. MAS seeks comments on the proposed responsibilities of senior management in overseeing environmental risk management, including its role in developing an environmental risk management framework and policies, regularly reviewing their effectiveness, and allocating adequate resources to manage environmental risk.</b></p> <p>NA.</p> <p><b>Question 4. MAS seeks comments on the proposal for banks to designate a senior management member or a committee to oversee environmental risk, where such risk is material.</b></p> <p>NA.</p> <p><b>Question 5. MAS seeks comments on the expectation for banks to engage each customer that poses higher environmental risk to improve its risk profile and support its transition towards sustainable business practices.</b></p> <p>We would appreciate it if MAS could share with the industry criteria (geography, size of revenue, industry, type of products, etc.) that the industry may use to classify customers as customers that pose higher environmental risk?</p> <p><b>Question 6. MAS seeks feedback on the expectation for banks to develop tools and metrics to monitor and assess their exposures to environmental risk, and examples of the aforementioned tools and metrics that may be adopted.</b></p> <p>The tools and metrics to be developed to monitor and assess our exposures to environmental risks would depend heavily on the</p> |

| S/N | Respondent | Responses from respondent  |
|-----|------------|--|
|     |            | <p>availability of data. We foresee experiencing some difficulty in accessing or obtaining some specific information like greenhouse gas emissions, in addition to water/energy usage for all relevant entities in high-risk sectors. We would appreciate it if MAS could provide further guidance on how should banks deal with issues relating to limitations of data availability.</p> <p>We would also like to clarify whether banks are expected to monitor their exposure amount for portfolios or customers with exposure to environmental risk and whether banks are expected to set threshold limits or guidelines for such exposure?</p> <p>Further, for the Singapore branch of a bank incorporated outside Singapore, we would like to seek clarification on whether tools and metrics which are adopted by the bank on a global level would suffice for the purposes of the Guidelines.</p> <p><b>Question 7. MAS seeks comments on whether there are specific aspects of environmental risk management policies and processes that would benefit from further supervisory guidance.</b></p> <p>NA.</p> <p><b>Question 8. MAS seeks comments on the proposed form and frequency of disclosure of environmental risk by a bank.</b></p> <p>Given that the bank’s disclosure may be consolidated at the group or head office level, in terms of granularity of the information to be disclosed, for assets booked in Singapore, we would like to clarify the expectation relating to the disclosure of exposure to/impact from environmental risks.</p> <p><b>Question 9. MAS seeks comments on any aspects of the Guidelines that have not been covered in earlier questions.</b></p> <p>NA.</p> |

| S/N | Respondent | Responses from respondent   |
|-----|------------|---|
|     |            | <p><b>Question 10. MAS requests for examples of sound risk management practices currently implemented by banks, which would meet the expectations in the Guidelines.</b></p> <p>The bank has a framework in place for managing environmental and social risks. Please refer to the following link for details:<br/><a href="https://www.smfg.co.jp/english/sustainability/materiality/environment/risk/">https://www.smfg.co.jp/english/sustainability/materiality/environment/risk/</a></p> <p><b>Question 11. MAS seeks comments on the proposed implementation approach, including the proposed transition period of 12 months.</b></p> <p>NA.</p>   |
| 3   | MUFG Bank  | <p><b>Question 1. MAS seeks comments on the entities and business activities that are in the proposed scope of the Guidelines.</b></p> <p>We suggest for the Guidelines to align with the core principles set out in other international guidelines on this area (e.g. NGFS guidelines) as much as possible. This is especially important for foreign bank branches of global financial institutions and we request MAS to allow foreign bank branches to rely on their Head Offices' existing framework and policies on environmental risk management and also to recognise the activities/actions taken by foreign bank branches in line with their Head Office's global directions/strategies.</p> <p><b>Question 2. MAS seeks comments on the proposed responsibilities of the Board in overseeing environmental risk management, including its role in ensuring that environmental risk, where material, is addressed in the bank's risk appetite framework.</b></p> <p>Para 3.3 of proposed guidelines - For foreign incorporated bank branches, we suggest that there is no need for a specific delegation from Board to a committee for item a to e. We suggest</p> |

| S/N | Respondent | Responses from respondent  |
|-----|------------|--|
|     |            | <p>that reliance can be placed on the bank's existing general delegation arrangements, this could be delegation to a committee or to Head of the branch/local committee, as long as the appropriate seniority is observed. Please also refer to our comments in point 1.</p> <p><b>Question 3. MAS seeks comments on the proposed responsibilities of senior management in overseeing environmental risk management, including its role in developing an environmental risk management framework and policies, regularly reviewing their effectiveness, and allocating adequate resources to manage environmental risk.</b></p> <p>Para 3.4 of proposed guidelines - For foreign incorporated bank branches where Head Office has existing framework and policies on environmental risk management, we suggest that reliance can be placed on Head Office's framework and policies (that the local branch also has to adhere to).</p> <p><b>Question 4. MAS seeks comments on the proposal for banks to designate a senior management member or a committee to oversee environmental risk, where such risk is material.</b></p> <p>For foreign incorporated bank branches, we suggest that reliance can be placed on existing committees/senior management members designated at Head Office level to oversee environmental risk. Local management will be kept apprised of matters escalated to such Head Office management/committee.</p> <p><b>Question 5. MAS seeks comments on the expectation for banks to engage each customer that poses higher environmental risk to improve its risk profile and support its transition towards sustainable business practices.</b></p> <p>The engagement/influence of banks may be less effective compared to engagement by equity investors/regulators given the competitive banking market.</p> |

| S/N | Respondent | Responses from respondent   |
|-----|------------|---|
|     |            | <p>From the standpoint of the banks, it is important to communicate with clients on environmental risk through promoting the bank’s support for internationally-recognized risk management frameworks such as the Equator Principles. Support by regulators on such international frameworks will be important in achieving the intended outcomes.</p> <p><b>Question 6. MAS seeks feedback on the expectation for banks to develop tools and metrics to monitor and assess their exposures to environmental risk, and examples of the aforementioned tools and metrics that may be adopted.</b></p> <p>Implementation of TCFD disclosure recommendations by corporates will make it easier for the banks to monitor and assess the exposures to environmental risk in their portfolio. We request for support from MAS and other government agencies to promote the TCFD recommendations and disclosure of non-financial information by corporates. For banks with global franchise, it is equally important for any metric or taxonomy to be sufficiently broad and aligned with other global standards to facilitate such banks to have a consistent approach in assessing our clients across jurisdictions.</p> <p><b>Question 7. MAS seeks comments on whether there are specific aspects of environmental risk management policies and processes that would benefit from further supervisory guidance.</b></p> <p>We appreciate further guidance or factors to consider when assessing materiality of environmental risk to the bank. In addition and similar to comments above, it is important to have broad alignment with global frameworks (e.g. Guide to Climate Scenario Analysis for Central Banks and Supervisors” published in June 2020) as much as possible.</p> <p><b>Question 8. MAS seeks comments on the proposed form and frequency of disclosure of environmental risk by a bank.</b></p> |

| S/N | Respondent | Responses from respondent  |
|-----|------------|--|
|     |            | <p>We are agreeable with MAS' proposal that a bank disclose, at least annually, its approach to managing environmental risk and the potential impact of material environmental risk on the bank, taking reference from international reporting frameworks, including the TCFD recommendations. Given that disclosure to climate change is fairly new, we request MAS to give banks a reasonable grace period to observe and implement the best practices on disclosures.</p> <p><b>Question 9. MAS seeks comments on any aspects of the Guidelines that have not been covered in earlier questions.</b></p> <p>NIL</p> <p><b>Question 10. MAS requests for examples of sound risk management practices currently implemented by banks, which would meet the expectations in the Guidelines.</b></p> <p>Some of our Head Office's practices include:</p> <ul style="list-style-type: none"> <li>• Due diligence process for individual transactions in accordance with the Equator Principles.</li> <li>• Publication of the bank's environmental and social policy framework to manage customer's expectations</li> <li>• Publication of risk amount based on the calculation and disclosure of transition risks and physical risks according to TCFD recommendations.</li> <li>• Proactively demonstrating the long-term direction and goals in this area</li> </ul> <p><b>Question 11. MAS seeks comments on the proposed implementation approach, including the proposed transition period of 12 months.</b></p> <p>NIL</p> |



| S/N | Respondent    | Responses from respondent   |
|-----|---------------|---|
| 4   | CPA Australia | <p><b>Question 1. MAS seeks comments on the entities and business activities that are in the proposed scope of the Guidelines.</b></p> <p>-</p> <p><b>Question 2. MAS seeks comments on the proposed responsibilities of the Board in overseeing environmental risk management, including its role in ensuring that environmental risk, where material, is addressed in the bank’s risk appetite framework.</b></p> <p>A range of well-regarded and authoritative corporate governance resources which reiterate the role of the board in setting risk appetite, and the monitoring and management thereof, now make direct reference to climate change within a broadening horizon of environmental and social risks. This reflects both the practical complexities of dealing with the interconnection between risks occurring within the corporate external environment and developing societal expectations of corporate conduct. These include, for example, Recommendation 7.4 of the ASX Corporate Governance Principles &amp; Recommendations (4th ed. 2019)[<a href="https://www.asx.com.au/documents/regulation/cgc-principles-and-recommendations-fourth-edn.pdf">https://www.asx.com.au/documents/regulation/cgc-principles-and-recommendations-fourth-edn.pdf</a>] which states “A listed entity should disclose whether it has any material exposure to environmental or social risks and, if it does, how it manages or intends to manage those risks.” Measures such as these are applied broadly across the listed entity environment on a ‘report or explain’ basis and are complementary, again for example, to direct statutory reference to environmental risks such as section 172 [<a href="https://www.legislation.gov.uk/ukpga/2006/46/section/172">https://www.legislation.gov.uk/ukpga/2006/46/section/172</a>] of the UK Companies Act 2006.</p> <p>Moreover, these approaches reflect common law legal principles applicable in both Singapore and Australia whereby directors who are vested with powers of management owe duties to safeguard and promote the interests of the company to which they are</p> |

| S/N | Respondent | Responses from respondent   |
|-----|------------|---|
|     |            | <p>appointed. A valuable resource to which the Authority may wish to refer is produced by the UK-based Commonwealth Climate Law Initiative [<a href="https://ccli.ouce.ox.ac.uk/wp-content/uploads/2019/10/CCLI-Directors'-Liability-and-Climate-Risk-Comparative-Paper-October-2019-vFINAL.pdf">https://ccli.ouce.ox.ac.uk/wp-content/uploads/2019/10/CCLI-Directors'-Liability-and-Climate-Risk-Comparative-Paper-October-2019-vFINAL.pdf</a>]. This reference analyses the evolving understanding of corporate and director liability posed by the impact, and associated regulatory and investor responses, of climate change</p> <p>Notable also, is “Governance” being one of the ‘four pillars’ within the FSB’s Taskforce on Climate-related Financial Disclosures (TCFD) 2017 Recommendations [<a href="https://www.fsb-tcfd.org/wp-content/uploads/2017/06/FINAL-2017-TCFD-Report-11052018.pdf">https://www.fsb-tcfd.org/wp-content/uploads/2017/06/FINAL-2017-TCFD-Report-11052018.pdf</a>] – the other three being; Strategy, Risk Management, and Metrics and Targets. At the first tier of disclosure, is a description of the board’s oversight processes of climate-related risks and opportunities.</p> <p>The dynamics of evolving risks which permeate across vast areas of economic and market activity is particularly well captured in the World Economic Forum’s annual global risks reports. Their 2020 report [<a href="http://www3.weforum.org/docs/WEF_Global_Risk_Report_2020.pdf">http://www3.weforum.org/docs/WEF_Global_Risk_Report_2020.pdf</a>] notes, in particular, physical climate change (both catastrophic weather events and permanent shifts in climatic conditions) as a systemic risk to global capital markets, acknowledging views such as those of the Bank of England [<a href="https://www.bankofengland.co.uk/news/2019/april/open-letter-on-climate-related-financial-risks">https://www.bankofengland.co.uk/news/2019/april/open-letter-on-climate-related-financial-risks</a>] that non-action is not an option. The myriad of emerging risks relevant to central bank oversight and prudential regulation of market participants, includes stranded assets for extractive companies, pension fund shortfalls, disruption to mortgage markets and continued widening of the insurance catastrophic protection gap. We point to these types of analysis as context supporting the significance of financial market entity capacity building as complementary, if</p> |

| S/N | Respondent | Responses from respondent   |
|-----|------------|---|
|     |            | <p>not essential, to market oversight and associated policy setting by central banks.</p> <p><b>Question 3. MAS seeks comments on the proposed responsibilities of senior management in overseeing environmental risk management, including its role in developing an environmental risk management framework and policies, regularly reviewing their effectiveness, and allocating adequate resources to manage environmental risk.</b></p> <p>Following on from the above reference to the TCFD Recommendations, the second tier of Governance disclosures requires description of management’s role in assessing and managing climate-related risks and opportunities. At one level, this merely reflects the reality of delegated management responsibility within any relatively complex and sophisticated corporation. More particularly though, are the aspects of development of suitable processes and associated capacity building. With respect to the latter, the TCFD’s Annex/ Implementation Guide [<a href="https://www.fsb-tcdf.org/wp-content/uploads/2017/12/FINAL-TCFD-Annex-Amended-121517.pdf">https://www.fsb-tcdf.org/wp-content/uploads/2017/12/FINAL-TCFD-Annex-Amended-121517.pdf</a>] to their 2017 Recommendations provides, firstly, what should constitute minimum best governance practice across all sectors (financial and non-financial), and secondly, attributes of business practices – here in the context of banks; lending and other financial intermediary activities – to which exposure to climate-related risks and opportunities should be analysed and reported on. Relevant also to the Authority’s considerations will be the TCFD supplementary guidance for insurance companies and asset managers.</p> <p>With respect to the process and discipline around delegation and application of climate-related risk governance, the TCFD suggest the following:</p> |

| S/N | Respondent | Responses from respondent  |
|-----|------------|--|
|     |            | <p>"In describing management's role related to the assessment and management of climate-related issues, organizations should consider including the following information:</p> <ul style="list-style-type: none"> <li>• whether the organization has assigned climate-related responsibilities to management-level positions or committees; and, if so, whether such management positions or committees report to the board or a committee of the board and whether those responsibilities include assessing and/or managing climate-related issues,</li> <li>• a description of the associated organizational structure(s),</li> <li>• processes by which management is informed about climate-related issues, and</li> <li>• how management (through specific positions and/or management committees) monitors climate-related issues."</li> </ul> <p>Generally, this may be seen as merely descriptive of sound practice. However, it is when overlaid with the TCFD's description of the nature of exposure associated with banking activity that both the internal practices, and the disclosure thereof, set out above, can be fully appreciated as vital to sustaining transparent and long term viable financial institutions. As such, banks, as financial intermediaries, will assume exposure to climate-related risks through their borrowers, customers or counterparties who themselves are directly exposed to physical risk (for example; real property owners) or transition risk (for example; fossil fuel producers). This is in addition to the bank's own reputation and litigation risk. The 'flipside' of course, are the opportunities offered as funding gravitates to economic transformation associated with emissions reduction and, increasingly, technology-based decarbonisation. The TCFD supplemental guidance for banks recommends, for example, that:</p> <ul style="list-style-type: none"> <li>• Banks should describe significant concentrations of credit exposure to carbon-related assets.</li> <li>• Banks should consider characterising their climate-related risks in the context of traditional risk categories</li> </ul> |

| S/N | Respondent | Responses from respondent   |
|-----|------------|---|
|     |            | <p>such as credit risk, market risk, liquidity risk and operational risk.</p> <ul style="list-style-type: none"> <li>• Banks should provide metrics used to assess the impact of both physical and transitional climate-related risk on their lending and intermediary activities in short, medium, and long-term time horizons, broken down by industry, geography, credit quality and average tenor (time to maturity).</li> </ul> <p>In making reference to this body of climate-related reporting architecture and guidance developed by the TCFD, which is readily accessible by MAS, CPA Australia is more than merely referencing what in many respects has emerged as the preferred or default framework understood by regulators, standard setters, preparers and investors. Importantly, what underlies these developments is complexity and uncertainty in the data and subject matter itself. As such, we urge a focus on capacity building within the reporting entities concerned, accompanied by a communicated regulatory expectation of continuous improvement. Achieving the desired ends will take time. However, we recognise the ever-shortening timeframe for effective emission reduction and averting runaway global warming.</p> <p><b>Question 4. MAS seeks comments on the proposal for banks to designate a senior management member or a committee to oversee environmental risk, where such risk is material.</b></p> <p>-</p> <p><b>Question 5. MAS seeks comments on the expectation for banks to engage each customer that poses higher environmental risk to improve its risk profile and support its transition towards sustainable business practices.</b></p> <p>CPA Australia broadly supports the endeavour of driving business practices more widely, which appears to underlie this consultation question and is elaborated on in para. 4.4 of the</p> |

| S/N | Respondent | Responses from respondent   |
|-----|------------|---|
|     |            | <p>Consultation Paper (Banks). However, we suggest that the transparency and risk response gains being sought by MAS, and to be applied to entities in each of the key Singapore economic sectors of banking, insurance and asset management, might be undermined if capacity within the wider economy is not appropriately developed. Capacity development is critical in relation to the collection, assimilation and presentation of relevant data, along with the growing capacity to adjust practices and wider business models in response to climate-related risks and opportunities. CPA Australia sees this as both a significant challenge and opportunity for Singapore with its real and financial economies spanning manufacturing clusters, financial and transport hubs, and with Singapore being seen as a preferred location for the regional and global corporate headquarters.</p> <p>Broader policy considerations and actions that should be considered include:</p> <ul style="list-style-type: none"> <li>• Aside from urging an approach which is cognisant of the need for economy-wide capacity building, CPA Australia believes that regulatory development around disclosure and wider governance response to climate change risks and opportunities, warrants collaborative cross-agency action. Two Australian developments are possible useful reference points for allied development. Firstly, in August 2019 the Australian Securities and Investments Commission updated its Regulatory Guide (RG 247) for preparation of an operating and financial review by listed company directors (Corporations Act 2001 section 299A). In addressing prospects for future financial years, this update provides an emphasis that “climate change is a systemic risk that could have a material impact on the future financial position, performance or prospects of entities,” (RG 247.66). Within this, direct mention is made of the TCFD. Secondly, in April 2019 the Australian Accounting Standards Board and the</li> </ul> |

| S/N | Respondent | Responses from respondent   |
|-----|------------|---|
|     |            | <p>Auditing and Assurance Standards Board released their joint bulletin: Climate-related and other emerging risk disclosures: Assessing financial statement materiality using AASB/IASB Practice Statement 2<br/>[<a href="https://www.aasb.gov.au/admin/file/content102/c3/AASB_AUASB_Joint_Bulletin_Finished.pdf">https://www.aasb.gov.au/admin/file/content102/c3/AASB_AUASB_Joint_Bulletin_Finished.pdf</a>]. Aside from the reference again to the TCFD, this Practice Statement is highly significant with respect to its criteria for application, including investor expectations that climate-related risks could influence their decisions, thus creating a positive obligation on entities to assess these risks as potentially affecting the amounts recognised or disclosed in financial statements.</p> <ul style="list-style-type: none"> <li>• More broadly, respective financial and non-financial disclosure responses to climate change mitigation and adaptation, should be drawn from an as common as possible understanding of the economic transformation implications. As such, both management and disclosure responses in the financial and real economy sectors, need to reference and understand major policy drivers associated with transition risk. For example, both Singapore and Australia as signatories to the Paris Agreement (United Nations Framework Convention on Climate Change (UNFCCC) 21st Conference of Parties (COP 21) held in Paris December 2015) are subject to the Convention’s required five-year cycle for updating of emissions reduction targets within nationally determined contributions (NDCs). The progressive ‘review, refine and ratchet’ mechanism can form part of signalling to both financial economy and real economy participants, the trajectory of climate-related impacts and associated economic adjustments. [The means and extent to which NDCs influences twenty or so climate risk and opportunity variables is examined in a</li> </ul> |

| S/N | Respondent | Responses from respondent   |
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|     |            | <p>CPA Australia commissioned research report: Australia's international climate change commitments – Associated accounting assumptions and auditing of climate risk disclosures<br/> <a href="https://www.cpaaustralia.com.au/-/media/corporate/allfiles/document/professional-resources/esg/cpa-australia-climate-risk-assumptions-final-report-january-2020.pdf?la=en&amp;rev=d4654c69924644979ffda812c847b7ab">https://www.cpaaustralia.com.au/-/media/corporate/allfiles/document/professional-resources/esg/cpa-australia-climate-risk-assumptions-final-report-january-2020.pdf?la=en&amp;rev=d4654c69924644979ffda812c847b7ab</a>]</p> <p><b>Question 6. MAS seeks feedback on the expectation for banks to develop tools and metrics to monitor and assess their exposures to environmental risk, and examples of the aforementioned tools and metrics that may be adopted.</b></p> <p>CPA Australia is of the view that the key relevant themes in response to this question are financial institution readiness and capacity building. We acknowledge the endeavours outlined in para. 4.5 of the Consultation Paper (Banks) and expect that the Authority would rely, to substantial degree, on the scenario analysis technical supplement [<a href="https://www.fsb-tcfd.org/wp-content/uploads/2017/06/FINAL-TCFD-Technical-Supplement-062917.pdf">https://www.fsb-tcfd.org/wp-content/uploads/2017/06/FINAL-TCFD-Technical-Supplement-062917.pdf</a>] developed by the TCFD.</p> <p>Sustainability report practices amongst both banks and insurance companies, as a possible proxy for management aptitude and technical capacity to easily adopt such tools and metrics, should be considered.</p> <p>In June this year, CPA Australia published its research report "Banking on Governance, Insuring Sustainability" [<a href="https://www.cpaaustralia.com.au/professional-resources/esg/corporate-governance/banking-on-governance">https://www.cpaaustralia.com.au/professional-resources/esg/corporate-governance/banking-on-governance</a>]. The report is wide ranging, and probes corporate governance, remunerations and risk management in major Asia-Pacific banks and insurance companies. We believe the section on</p> |



| S/N | Respondent | Responses from respondent  |
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|     |            | <p>Sustainability (pp. 66 – 71) is pertinent to the Authority’s current considerations in addressing the speed at which the banking and insurance sectors could be expected to fully implement the integration of environmental risk considerations into their financial management practices. Although, we note that the Consultation Papers states that the companies concerned are at different stages along this path. Our report notes that all except three of the 50 banks surveyed produce a section/report on sustainability. Nevertheless, the predominant areas of focus are community development, customer welfare and sustainable development. This propensity towards social aspects might be indicative of a lesser capacity, or willingness, to disclose and discuss environmental risks. This points to a need for closer regulatory engagement to encourage practices in these directions.</p> <p>Our report also addresses attributes of emerging risk disclosure practices amongst Asia-Pacific insurance companies directed at managing insurance value chain risks, whilst aiding the minimisation of adverse environmental and social impacts. Using as its reference point the UN Environmental Program Finance Initiative Principles for Sustainable Insurance, there is presently only very limited disclosure of these commitments - relevantly only three Australian insurers and one Singaporean insurer (Great Eastern Holdings) make such disclosures. Again, we believe this analysis, while somewhat secondary and anecdotal in character, points to an associated need in the promulgation of the MAS Guidelines to work with the targeted organisations in building both technical risk management capacity and sympathy towards a diverse, yet interconnected, range of emergent risks.</p> <p><b>Question 7. MAS seeks comments on whether there are specific aspects of environmental risk management policies and processes that would benefit from further supervisory guidance.</b></p> <p>-</p> |

| S/N | Respondent                                    | Responses from respondent  |
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|     |   | <p><b>Question 8. MAS seeks comments on the proposed form and frequency of disclosure of environmental risk by a bank.</b></p> <p>Consistent with the recommendations of the TCFD and CPA Australia’s broader views around the harmonisation of financial and non-financial reporting, environmental risk disclosures by banks should be part of annual reporting. Aside from promoting governance discipline and meeting reasonably anticipated report-user expectations, this formality would complement, where necessary, any audit and assurance requirements. Also, we note that Singapore, like Australia, operates a continuous disclosure regime for stock exchange listed entities, offering a critical safeguard of market integrity to which climate-related risks will potentially, in the not distant future, become a major driving factor.</p> <p><b>Question 9. MAS seeks comments on any aspects of the Guidelines that have not been covered in earlier questions.</b></p> <p>-</p> <p><b>Question 10. MAS requests for examples of sound risk management practices currently implemented by banks, which would meet the expectations in the Guidelines.</b></p> <p>-</p> <p><b>Question 11. MAS seeks comments on the proposed implementation approach, including the proposed transition period of 12 months.</b></p> <p>-</p> |
| 5   | ABN AMRO<br>Bank N.V.,<br>Singapore<br>Branch | <p><b>Question 1. MAS seeks comments on the entities and business activities that are in the proposed scope of the Guidelines.</b></p>   |

| S/N | Respondent | Responses from respondent  |
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|     |            | <p>To include guidelines/requirements that are applicable regardless of size/nature of activities and/or risk profile. These types of requirements would be ‘exclusions’ such as ‘excluding the financing of new thermal coal-fired power plants’.</p> <p><b>Question 2. MAS seeks comments on the proposed responsibilities of the Board in overseeing environmental risk management, including its role in ensuring that environmental risk, where material, is addressed in the bank’s risk appetite framework.</b></p> <ul style="list-style-type: none"> <li>• Agree on proposed responsibilities of the Board in overseeing environmental risk management; final responsibility should fall under the Chief Risk Officer.</li> <li>• Disclosure should be included in the responsibility.</li> <li>• It is key that environmental risk is included in the risk appetite framework.</li> </ul> <p><b>Question 3. MAS seeks comments on the proposed responsibilities of senior management in overseeing environmental risk management, including its role in developing an environmental risk management framework and policies, regularly reviewing their effectiveness, and allocating adequate resources to manage environmental risk.</b></p> <p>Comments as above under Question 2.</p> <p><b>Question 4. MAS seeks comments on the proposal for banks to designate a senior management member or a committee to oversee environmental risk, where such risk is material.</b></p> <p>Comments as above under Question 2.</p> <p><b>Question 5. MAS seeks comments on the expectation for banks to engage each customer that poses higher environmental risk to improve its risk profile and support its transition towards sustainable business practices.</b></p> |

| S/N | Respondent | Responses from respondent   |
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|     |            | <p>Agree. The environmental risk assessment should be incorporated in the credit process. The approach should be 'comply or improve – not exclude'. However, some activities could be excluded (eg. new thermal coal-fired power plants). Banks should be transparent on their policies and approach, for example by publishing this on their website.</p> <p><b>Question 6. MAS seeks feedback on the expectation for banks to develop tools and metrics to monitor and assess their exposures to environmental risk, and examples of the aforementioned tools and metrics that may be adopted.</b></p> <p>Agree. Is there a list of tools that MAS endorses? Suggest to include guidance on the type of tools/what tools can be used.</p> <p><b>Question 7. MAS seeks comments on whether there are specific aspects of environmental risk management policies and processes that would benefit from further supervisory guidance.</b></p> <p>To clarify, will MAS monitor the level of implementation of policies?</p> <p><b>Question 8. MAS seeks comments on the proposed form and frequency of disclosure of environmental risk by a bank.</b></p> <p>Agree to refer to the TCFD. Other relevant reporting frameworks could be included, such as integrated reporting.</p> <p><b>Question 9. MAS seeks comments on any aspects of the Guidelines that have not been covered in earlier questions.</b></p> <ul style="list-style-type: none"> <li>• Suggest to strongly recommend banks to publish their commitments and policies on environmental risk management eg. on their website, as this will help in creating a level playing field.</li> </ul> |

| S/N | Respondent                 | Responses from respondent   |
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|     |                            | <ul style="list-style-type: none"> <li>• Include the process of determining the environmental risk level (low, medium, high).</li> <li>• Include 'legal risk', as inappropriate management of environmental risk can lead to a legal risk as environmental legislation is increasing.</li> <li>• Suggest that bank's environmental risk management team/specialists are organised under the risk organisation.</li> </ul> <p><b>Question 10. MAS requests for examples of sound risk management practices currently implemented by banks, which would meet the expectations in the Guidelines.</b></p> <p>Suggest to look at the Equator Principles/ UN Principles for Responsible Banking (especially the stepwise approach).</p> <p><b>Question 11. MAS seeks comments on the proposed implementation approach, including the proposed transition period of 12 months.</b></p> <p>To overcome maturity, we suggest to include a stepwise approach (similar to the UNPRB), which means for example, that the amount of criteria will increase over certain time periods.</p> |
| 6   | Asia Research & Engagement | <p><b>Question 1. MAS seeks comments on the entities and business activities that are in the proposed scope of the Guidelines.</b></p> <p>-</p> <p><b>Question 2. MAS seeks comments on the proposed responsibilities of the Board in overseeing environmental risk management, including its role in ensuring that environmental risk, where material, is addressed in the bank's risk appetite framework.</b></p> <p>We recommend that there be sufficient training or relevant operational experience in areas related to environmental risk</p>   |

| S/N | Respondent | Responses from respondent   |
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|     |            | <p>management as part of the Board’s skills matrix. This is aligned to other board level expectations on other corporate governance issues.</p> <p>The Board should also have a responsibility for overseeing appropriate communications with stakeholders on environmental risk management.</p> <p>We also note that HKMA suggested that performance on environmental risk management can be considered as part of a performance scorecard for board or senior management. ING is an example of a bank that has integrated progressing on climate goals for its loan book as part of 2019 Executive Board performance evaluation.</p> <p><b>Question 3. MAS seeks comments on the proposed responsibilities of senior management in overseeing environmental risk management, including its role in developing an environmental risk management framework and policies, regularly reviewing their effectiveness, and allocating adequate resources to manage environmental risk.</b></p> <p>Senior management should also be responsible for communicating with stakeholders regarding the exposure and management of material environment risks.</p> <p><b>Question 4. MAS seeks comments on the proposal for banks to designate a senior management member or a committee to oversee environmental risk, where such risk is material.</b></p> <p>We recommend that additional references and direction are provided to determine whether a certain category or type of environmental risk is material so that this is aligned across the industry. While a bank’s portfolio is diversified across industries, certain environmental risks categories might be pervasive across a number of industries.</p> |

| S/N | Respondent | Responses from respondent  |
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|     |            | <p>For example, SASB's materiality matrix can be a useful reference to find similar material issues across industries.</p> <p>A number of banks, including ANZ and Credit Agricole have also distinctly acknowledged climate risk as material given its potential impact is more widespread and diverse than other types of structural changes. This widespread impact is also clearly recognized by the Network for Greening the Financial System.</p> <p>We therefore also recommend that MAS provide guidance on certain potentially pervasive environmental risks, where banks are required to provide clear explanation should they deem them as immaterial. External independent assessment of decisions around materiality of environmental risks can also be considered.</p> <p><b>Question 5. MAS seeks comments on the expectation for banks to engage each customer that poses higher environmental risk to improve its risk profile and support its transition towards sustainable business practices.</b></p> <p>We recommend that high-risk customers are managed with both sector level policies, as well as active customer engagement. Clear sector level policies set the foundation for a bank's discussion for active engagement on the topic of transitioning a business towards a lower risk profile.</p> <p>We also recommend a high bar of transparency and clear expectation setting. ANZ bank provides detail of their expectations communicated to customers in their annual reporting process and has developed an internal rating on how many customers are effectively transitioning. In HKMA's latest white paper, they suggest that banks help companies set internal targets on efficiency or emissions reduction.</p> <p><b>Question 6. MAS seeks feedback on the expectation for banks to develop tools and metrics to monitor and assess their exposures</b></p> |

| S/N | Respondent | Responses from respondent   |
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|     |            | <p><b>to environmental risk, and examples of the aforementioned tools and metrics that may be adopted.</b></p> <p>We recommend providing a more comprehensive list of tools and metrics that can be useful reference points, especially for institutions that are in the relatively early part of their journey. This list of tools and metrics should help to provide a view of other environmental risks, aside from climate risks.</p> <p>A non-exhaustive list we have compiled is in the Annex: Reference list of tools/metric developed by other organizations on environmental/climate risk.</p> <p>In developing metrics, we recommend MAS provide an avenue for industry testing and alignment around the usefulness and possible unintended consequences from the choice of relying on absolute or intensity-based metrics. While an absolute measure of Scope 3 emissions from financing activities can be important in understanding the climate impact of a bank, using this metric as a target may lead to decisions around divestment. On the other hand, intensity-based metrics might make it harder to understand a bank's active role in the transition to a sustainable economy.</p> <p><b>Question 7. MAS seeks comments on whether there are specific aspects of environmental risk management policies and processes that would benefit from further supervisory guidance.</b></p> <p>We recommend that MAS set out a timeframe for banks to develop and publish sector-specific policies across high risk industries.</p> <p>One example would be for the coal power industry. Paris Agreement compliant transition would mean a phase out of use of coal by 2037 in non-OECD Asia . All Singapore banks should be required to develop sector specific policy that will ensure coal exposure meets this phase out requirement, and that banks</p> |



| S/N | Respondent | Responses from respondent   |
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|     |            | <p>engage corporate clients to achieve this transition. A good reference point would be BNP’s latest coal power policy.</p> <p>Other high-risk sectors like forestry, extractive industries, oil and gas should have sector-specific policies developed. Sector specific policies for these sectors are now the norm, including for Asia-headquartered banks.</p> <p><b>Question 8. MAS seeks comments on the proposed form and frequency of disclosure of environmental risk by a bank.</b></p> <p>We recommend that MAS gives more direction on the baseline expectation of annual reporting on environmental risk by banks.</p> <p>In our collaborative engagements with Asian banks, the investors we have worked with are expecting to see a set of disclosures of climate risk by banks in Asia, with reference to TCFD. We have provided the expectations in Annex: Expectations of international investors on climate-risk disclosures.</p> <p>For example, while there are still remaining difficulties in obtaining GHG data from customers to report on Scope 3 emissions from financing activities, HKMA is requiring that banking institutions have a clear workplan on engaging customers for such data. The UK Prudential Regulatory Authority has also noted the disclosure expectation around climate risk is part of Pillar 3 risk disclosure expectations.</p> <p><b>Question 9. MAS seeks comments on any aspects of the Guidelines that have not been covered in earlier questions.</b></p> <p>We recommend better clarity in the Guidelines around the responsibility of banks and their active role in transitioning to sustainable practices through their financing decisions. In Diagram A, it can be interpreted that banks can only play a supporting function in limiting or reducing negative environmental impact. However, clear sector level policies,</p> |

| S/N | Respondent | Responses from respondent   |
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|     |            | <p>lending limits and strong environmental risk management requirements during financing a project are all tools that a bank can use to ensure it is minimizing its own negative impacts on the environment.</p> <p>We also recommend an expanded reference list for sustainability standards and certification schemes that banks should refer to when develop sector specific policies. We provide a non-exhaustive list in Annex: Examples of certification and international/regional standards.</p> <p><b>Question 10. MAS requests for examples of sound risk management practices currently implemented by banks, which would meet the expectations in the Guidelines.</b></p> <p>Asia Research and Engagement is compiling best practices across Europe, Australia and Asia on climate risk and climate impact management and will be happy to share in early 4Q 2020.</p> <p><b>Question 11. MAS seeks comments on the proposed implementation approach, including the proposed transition period of 12 months.</b></p> <p>We recommend a:</p> <ol style="list-style-type: none"> <li>i. clearer timeline of the implementation of supervisory discussions. This can be annual or biannual status reviews;</li> <li>ii. clearer description of the supervisory tools that will be used, in the event of lack of progress in compliance;</li> <li>iii. forward-looking timeline for the potential review of these supervisory guidelines, given the fast paced development of this discussion by central banks and the BIS in recent years.</li> </ol> <p>In a recently released consultation, the People’s Bank of China incorporates how well banks are doing in green finance into banks’ quarterly performance evaluation on managing risk.</p> |

| S/N | Respondent   | Responses from respondent   |
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| 7   | Climate Conversations, SG Climate Rally, Singapore Youth Voices for Biodiversity, PM Haze, and LepakInSG | <p><b>Question 1. MAS seeks comments on the entities and business activities that are in the proposed scope of the Guidelines.</b></p> <p>-</p> <p><b>Question 2. MAS seeks comments on the proposed responsibilities of the Board in overseeing environmental risk management, including its role in ensuring that environmental risk, where material, is addressed in the bank’s risk appetite framework.</b></p> <p>We agree that the oversight of environmental risk management needs to be with the Board such that we accord environmental risk the appropriate level of importance within the bank’s strategy and risk management. We recommend that environmental science and/or environmental risk become part of the expertise and skills considered in Board appointments, to ensure the effectiveness of the oversight.</p> <p>We also note that ING bank already includes progressing climate goals as part of their Executive Board performance evaluation as at 2019<sup>5</sup>.</p> <p><b>Question 3. MAS seeks comments on the proposed responsibilities of senior management in overseeing environmental risk management, including its role in developing an environmental risk management framework and policies, regularly reviewing their effectiveness, and allocating adequate resources to manage environmental risk.</b></p> <p>While senior management should be responsible in developing the framework and policies, we recommend that MAS give more specific directions on (1) what is considered material risk, (2)</p> |

<sup>5</sup> ING Groep N.V. 2019 Annual Report.

| S/N | Respondent | Responses from respondent  |
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|     |            | <p>which are high environmental risk sectors, (3) how a bank can identify the category of environmental risk their client might be exposed to. This ensures that banks are using a consistent benchmark appropriate to the urgency of the issue, and addresses the concern that potential clients will shift towards an institution with a lower benchmark for material risk.</p> <p>Climate risk is increasingly recognized as a material risk to financial institutions. ANZ and Barclays have clearly articulated or integrated climate risk into their list of principal risks and Standard Chartered has publicly disclosed its intention to do so as well. We recommend that the MAS require that any financial institution that does not see climate risk as a material environmental risk to provide grounds for their stance in their public reporting. In HKMA’s latest White Paper on Green and Sustainable Finance, their principles based approach clearly articulates the need for climate change to be embedded in the governance and strategy, instead of leaving it up to the financial institutions.</p> <p>We also suggest that MAS prescribes sectors where sector-specific policies are required, and to require their development in phases. Such sector-specific policies should eventually be articulated as portfolio exposure limits from a risk management perspective. Articulating sector specific policies sets the foundation for banks to be engaging with its clients in support of a transition in their risk profile.</p> <p>One such sector where sector-specific policies for environmental risk management should be immediately required is for coal power and its value chain. The trajectory of coal decline is clear. Both governments and companies are stepping away from coal. Just recently, it was noted that Vietnam is considering cancelling seven planned coal projects in its Power Development Master</p> |

| S/N | Respondent | Responses from respondent   |
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|     |            | <p>Plan 8<sup>6</sup> that will take effect next year. Studies have also shown that solar and wind power will reach cost parity with coal power by 2021 in Vietnam<sup>7</sup>. In December 2019, China Light and Power, a Hong Kong based power utility with interests across Asia, had also stepped away from a coal power plant it had been in discussion with for many years. According to the Institute of Energy Economics and Financial Analysis, as at Feb 2019, there were already 100 financial institutions that have put in place sector-specific policies that restrict the financing of coal plants. This includes new projects as well as reduction of financing for utilities that are still heavily reliant on coal power. Considering both the transition risks as well as increasing reputational risks from the environmental health and climate breakdown impacts, we recommend that MAS consider listing coal power and its value chain as a sector that requires a sector-level policy immediately. Another sector to be considered would be agriculture and any activity resulting in deforestation, as increased deforestation not only releases carbon dioxide into the atmosphere, but pose large risks to biodiversity collapse and pollution of increasingly scarce water resources.</p> <p>Given the urgency of the transition to a sustainable economy, a timeline for when other sector-specific policies for high environmental risk sectors are completed should be required. We suggest that all high risk sectors articulated in the ABS Guidelines to Responsible Financing Practices (2018) have sector specific environmental risk management policies to be developed within a 3-year timeframe.</p> <p>We are encouraged that the Guidelines require banks to assess material environmental risk at the customer level. In the spirit of</p> |

<sup>6</sup> Eco-business, Jul 2020. <https://www.eco-business.com/news/vietnam-considers-scrapping-half-of-coalpower-plant-pipeline-in-favour-of-gas-and-renewables/>

<sup>7</sup> Carbon tracker, Jun 2019. [https://carbontransfer.wpengine.com/reports/here\\_comes\\_the\\_sun/](https://carbontransfer.wpengine.com/reports/here_comes_the_sun/)

| S/N | Respondent | Responses from respondent   |
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|     |            | <p>levelling the playing field, we recommend a reference to SASB industry materiality maps or TCFD’s guidance for non-financial entities.</p> <p>Lastly, we suggest that the process by which a bank uses to identify material environmental risk, policy development and implementation processes should be subject to third-party and independent review and that the sector-specific policies are publicly disclosed. Should smaller financial institutions require financial support, MAS can support this process in the same way it is supporting the independent review of the Green Bond Framework and issuance processes.</p> <p>We also note that HKMA’s suggestion that climate risk considerations can be linked to performance evaluation and remuneration<sup>8</sup>.</p> <p><b>Question 4. MAS seeks comments on the proposal for banks to designate a senior management member or a committee to oversee environmental risk, where such risk is material.</b></p> <p>We would recommend provisions to be made on the appropriate experience around environment science and/or environmental risk management as a requirement for any senior management member or member of the committee designated for oversight.</p> <p><b>Question 5. MAS seeks comments on the expectation for banks to engage each customer that poses higher environmental risk to improve its risk profile and support its transition towards sustainable business practices.</b></p> |

<sup>8</sup> HKMA, 2020. White Paper on Green and Sustainable Banking. <https://www.hkma.gov.hk/media/eng/doc/key-information/guidelines-and-circular/2020/20200630e1a1.pdf>

| S/N | Respondent | Responses from respondent   |
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|     |            | <p>To meet the intention for financial institutions to support the transition to a sustainable economy, we agree that banks should actively engage with customers to facilitate and accelerate a transition process to reduce their environmental footprint. We recommend that MAS give more specific direction on the expectations for companies belonging to high environmental risk categories. MAS should require banks to:</p> <ol style="list-style-type: none"> <li>1. outline the steps they would take to help clients transition. For example, banks could require customers to set science-based targets<sup>9</sup> consistent with limiting global average temperature increase to 1.5°C and reaching net-zero emissions by no later than 2050;</li> <li>2. set the timeframe for clients to achieve transition;</li> <li>3. describe how they will measure the client’s progress;</li> <li>4. articulate what steps the bank could take if the transition fails to occur. This could include exit of a relationship. An example would be ING and BNP’s policy on corporate financing for coal power.</li> </ol> <p>We also recommend that MAS require banks to make relevant public disclosure of the number of companies and percentage of total credit portfolio where such discussions have occurred, and the progress. ANZ is an example of a bank that discloses the progress in their customer engagement for transition.</p> <p><b>Question 6. MAS seeks feedback on the expectation for banks to develop tools and metrics to monitor and assess their exposures to environmental risk, and examples of the aforementioned tools and metrics that may be adopted.</b></p> |

<sup>9</sup> Science Based Targets Initiative is a multi-organization partnership that supports companies in developing science-based targets. <https://sciencebasedtargets.org/>

| S/N | Respondent | Responses from respondent   |
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|     |            | <p>Aforementioned portfolio limits and the corresponding exposure to high-risk sectors should be a metric which banks are required to monitor and publicly disclose. As the Guidelines cover both loans and capital market transactions, we suggest that the value of capital market transactions underwritten in these sectors are also disclosed and disclosed separate to loan exposure.</p> <p><b>Question 7. MAS seeks comments on whether there are specific aspects of environmental risk management policies and processes that would benefit from further supervisory guidance.</b></p> <p>-</p> <p><b>Question 8. MAS seeks comments on the proposed form and frequency of disclosure of environmental risk by a bank.</b></p> <p>We support the reference to Taskforce for Climate-Related Financial Disclosures (TCFD) as a framework, and suggest that MAS also include reference to the upcoming framework from the Taskforce for Nature-related Financial Disclosures (TNFD). Given the intention of risk reduction as well as supporting the transition to a sustainable economy, we recommend that MAS requires the:</p> <ul style="list-style-type: none"> <li>• Public disclosure of metrics that measure a bank’s exposure to the range of environment risks as well as describe the bank’s environmental footprint. <ul style="list-style-type: none"> <li>○ In terms of a bank’s exposure to environmental risk, we would suggest disclosure of portfolio exposure by a list of specific sectors that have high and distinct environmental risk. ANZ’s and Shinhan Bank’s portfolio exposure disclosure are useful reference points. An aggregated portfolio figure of all high environmental risk sectors does not allow for an adequate view for risk management as the specific environmental risk transmission mechanism for each industry type can be different. For example, the physical risk and transition risk of agriculture and real estate can be very different. We would suggest that</li> </ul> </li> </ul> |



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|     |            | <p>the sectors identified in the ABS Guidelines for Responsible Financing practices are required to be reported separately.</p> <ul style="list-style-type: none"> <li>○ In terms of a bank’s climate footprint, relevant metrics can include GHG resulting from financing activities. For example, Mizuho bank discloses the GHG resulting from their project financing activities annually.</li> <li>○ In terms of other environmental footprint, relevant metrics that banks can report on can take reference from internationally established metrics like for SASB’s industry guidance. There should be risk metrics identified for the high-risk sectors in the ABS Guidelines for Responsible Financing Practices the banks have exposure to.</li> </ul> <ul style="list-style-type: none"> <li>● Public disclosure of the intended metrics and set a reasonable timeframe for its first disclosure, if the bank determines that it needs time to work with customers for the relevant data. This public commitment also serves to signal their intention clearly to all customers equally.</li> <li>● Independent review of these disclosures to give investors and the public confidence</li> </ul> <p>In order to support the disclosure of environment footprint, we suggest that the SGX Sustainability Reporting guidelines be enhanced to identify specific metrics required for disclosure. This can incentivize companies to put concerted effort into collecting reliable and verifiable data which banks can meaningfully assess and aggregate. The standards required of listed companies will set the reference for non-listed entities to follow.</p> <p><b>Question 9. MAS seeks comments on any aspects of the Guidelines that have not been covered in earlier questions.</b></p> <p>To meet the intention for financial institutions to support the transition to a sustainable economy, it will be useful for there to be a taxonomy of “green” vs “brown” assets. The EU, China and Bangladesh are jurisdictions that have developed such</p> |

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|     |            | <p>taxonomies<sup>10</sup>. Having such a standardized taxonomy can ensure an industry moves together, allow for comparable metrics and assist banks in setting a foundation for assessing if a customer has adequately addressed the environmental risk and transition, before suggesting increased loan pricing or introducing covenants.</p> <p><b>Question 10. MAS requests for examples of sound risk management practices currently implemented by banks, which would meet the expectations in the Guidelines.</b></p> <p>-</p> <p><b>Question 11. MAS seeks comments on the proposed implementation approach, including the proposed transition period of 12 months.</b></p> <p>We suggest that there is clarity over how supervisory review is expected to be conducted after the transition period, and what are the typical outcomes and potential remedial actions or supervisory actions that can be expected. The Network for Greening the Finance Sector has suggested a range of supervisory tools. Clear articulation of how these tools will be deployed right after the transition period, and a fixed timeframe as to when banks are expected to improve their understanding and development of processes for environmental risk management will be helpful. It will also be helpful that outcomes of supervisory review is disclosed through the annual reporting, allowing investors and the public to understand how quickly banks are acting to address the urgency of climate breakdown and other environmental challenges.</p> |

<sup>10</sup> World Bank, Jul 2020. <https://www.worldbank.org/en/news/press-release/2020/07/12/how-to-develop-anational-green-taxonomy-for-emerging-markets-a-new-world-bank-guide>

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| 8   | Standard Chartered Bank (Singapore) Limited | <p><b>Question 1. MAS seeks comments on the entities and business activities that are in the proposed scope of the Guidelines.</b></p> <p>SCBSL agrees with the list of banking entities in scope of the Guidelines (section 3.1) and welcomes the proportionate approach taken by the MAS (section 3.2).</p> <p>We would like to seek clarification on whether the Guidelines would apply to the Singapore banking entity only (solo basis) or the foreign banking entities within the bank group of the Singapore banking entity (consolidated basis). Longer implementation timeline or transitional arrangements would be required if the Guidelines apply to foreign banking entities consolidated under the Singapore banking entity due to the broader scope. In setting up the implementation timeline, the MAS should consider the state of development in other jurisdictions, including current and expected policy/ regulatory initiatives and the availability of data. In addition, the MAS should also specify which type of foreign banking entities within the bank group of Singapore banking entities are in scope of the Guidelines (e.g. licensed banks only).</p> <p>The draft guidelines cover both environmental and climate risks. Although related, the nature of these topics differs significantly, and policy makers tend to address them separately. To date, policy makers and international agencies have tended to focus more on climate risk rather than environmental risk. For instance, in the case of UK banks, the Bank of England (“BoE”) guidelines S3/19 mandate the inclusion of climate risk considerations across businesses by end 2021. Environmental risk, beyond responsible financing, is in its infancy and there is currently no framework or international standards available to serve as references on the financial impact for banks. We would therefore recommend the MAS to initially focus supervisory expectations on climate risk and allow more time for environmental risk considerations to be integrated in banks’ governance, strategy and risk management practices (see our answer to Question 11 for more detailed</p> |

| S/N | Respondent | Responses from respondent  |
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|     |            | <p>recommendations on implementation timelines). We are supportive of the development in the environmental risk framework.</p> <p>For clarity, we would also suggest to systematically distinguish between “environmental” and “climate” risks in the text of the final Guidelines. For instance, under section 3.1 the Governance and Strategy, the final Guidelines should read “The Board of Directors (“Board”) and senior management play critical roles in incorporating environmental and climate-related considerations into the bank’s risk appetite, strategies and business plans.”</p> <p>We would recommend that business activities without material environmental and climate risks be excluded from the Guidelines’ requirements, subject to adequate periodic review (sections 3.2 and 3.3). This will allow a more effective and efficient implementation and supervision of the Guidelines by allowing in-scope entities and supervisors to focus resources on business activities and/ or portfolios with material environmental and climate risks. For example, lending to sectors supporting the transition to the green economy should be excluded.</p> <p><b>Question 2. MAS seeks comments on the proposed responsibilities of the Board in overseeing environmental risk management, including its role in ensuring that environmental risk, where material, is addressed in the bank’s risk appetite framework.</b></p> <p>SCBSL recognises the important role and responsibilities of the Board in overseeing environmental and climate risks (section 4.1).</p> <p>Data quality, availability and traceability remain fundamental challenges to financing the transition and is a major source of dependency for banks to be able to fully comply with supervisory expectations set in the Guidelines on both environmental and climate risks. For example:</p> |

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|     |            | <ul style="list-style-type: none"> <li>• Risk management and disclosure: For risk management and disclosure, banks are dependent on data from their clients to understand, measure and manage their exposure. Efforts to improve scenario analysis and measurement will be undermined if banks do not have the relevant input data;</li> <li>• Decision making: For financial decision making, banks will need reliable data in order to help make the right decisions to channel capital to where it is needed most.</li> </ul> <p>Policy makers can play a major role in facilitating the transition. Specifically:</p> <ul style="list-style-type: none"> <li>• Reporting and disclosures: Domestically, we support reporting and disclosure requirements, aligned to the Financial Stability Board’s Task Force on Climate-related Financial Disclosures (“TCFD”), to ensure better data from the real economy and across countries. We would also support alignment to the reporting and disclosure requirements that will be set by the recently created Task Force on Nature-related Financial Disclosures (“TNFD”) in 2021;</li> <li>• Coordination: Internationally, we support greater coordination and consistency on these requirements. Climate change is a global problem and needs global solutions, supported by internationally agreed standards. Harmonised and comparable data, accessible cross-border, is necessary to be truly transformative. A patchwork of local requirements creates implementation and compliance inefficiencies, which ultimately hinders the transition to a low-carbon economy. The Network for Greening the Financial System (“NGFS”) should be leveraged on to promote consistency;</li> <li>• Data: Support the use of common database for environmental and climate related risks, with consistent criteria, definitions and common reporting and data management standards. The MAS, in partnership with other government agencies and regulators could play an</li> </ul> |

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|     |            | <p>important role in supporting such initiative within the ASEAN and beyond. For instance, the benefits of a free and public database include disseminating of information and building relationships between banks and corporates in relation to the materialisation of environmental and climate-related risks in financial returns.</p> <p><b>Question 3. MAS seeks comments on the proposed responsibilities of senior management in overseeing environmental risk management, including its role in developing an environmental risk management framework and policies, regularly reviewing their effectiveness, and allocating adequate resources to manage environmental risk.</b></p> <p>Consistent with our comment under Questions 1 and 2, we agree with the expectations proposed in sections 4.1 and 4.2 of the Guidelines but stress that a reasonable implementation period is necessary to reflect key dependencies, complex implementation challenges and the different levels of maturity between environmental and climate risks.</p> <p>On climate risk and for UK banks, the Prudential Regulatory Authority (“PRA”) lists out the responsibilities of the Board and Senior management. The PRA expects firms to have clear roles and responsibilities for the board and its relevant sub-committees in managing the financial risks from climate change. In particular, the board and the highest level of executive management should identify and allocate responsibility for identifying and managing financial risks from climate change to the relevant existing Senior Management Function(s). The PRA expects to see evidence that the board and its relevant sub-committees exercise effective oversight of risk management and controls. Further, the PRA expects the board to ensure that adequate resources and sufficient skills and expertise are devoted to managing the financial risks from climate change.</p> |

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|     |            | <p>On environmental risk, guidance and banks' frameworks and policies have focused on responsible financing and managing reputational risk for sensitives industries.</p> <p><b>Question 4. MAS seeks comments on the proposal for banks to designate a senior management member or a committee to oversee environmental risk, where such risk is material.</b></p> <p>SCBSL agrees that this is important to have an adequate level of dedicated oversight and expertise, especially during the implementation period and before the impact of climate risk into risk factors such as credit, market and operational risks has been fully incorporated.</p> <p>We would like to seek clarification on the following:</p> <ul style="list-style-type: none"> <li>• whether the internal committee or appointed individual approving transactions with higher environmental and/ or climate risks as proposed in section 4.5 of the Guidelines can be the same senior management member or committee that oversees environmental risk mentioned in section 4.2 of the Guidelines;</li> <li>• whether such senior management member or committee overseeing environmental and/ or climate risks can be at both global / region level and country level, where country oversight will be specific to considerations from Singapore's perspective.</li> </ul> <p><b>Question 5. MAS seeks comments on the expectation for banks to engage each customer that poses higher environmental risk to improve its risk profile and support its transition towards sustainable business practices.</b></p> <p>Our specific comments on section 4.4 are set out below:</p> <ul style="list-style-type: none"> <li>• Proportionality: The draft text proposes that banks undertake an environmental risk assessment of each customer as part of its credit facilities or capital market</li> </ul> |

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|     |            | <p>transactions, which seems to go against the principle of proportionality established under section 3.2. As proposed in our response to Question 1 above, customers identified as part of a business segment or portfolio without material environmental and climate risks should not be subject to an individual environmental and climate risks assessment. Blanket exemption should be available for these customers to support an effective and efficient implementation of the Guidelines;</p> <ul style="list-style-type: none"> <li>• Supporting the transition: The Guidelines should make it clear that banks' engagement and support is on a best effort basis only and acknowledge dependency on the customer to achieve material improvement toward sustainable business practices;</li> <li>• Additional Guidance: Further guidance would be required in relation to the "sustainable business practices" to banks to be able to manage their customer relationship and help them in the transition. The guidance should include qualitative and quantitative metrics and milestones linked to domestic environmental policy and climate-resilient objectives;</li> <li>• Loan pricing: We have two concerns with the specific approach suggested in the Guidelines on loan pricing for customer that does not manage its environmental risk adequately. There is no scientifically based reference data available that would allow banks to determine the "cost of additional risk" attached to the customer non-compliance. Assuming reference data will be available, there is also a need to set an adequate level of governance and a framework to guide the pricing process for non-compliant customers. This would reduce the risk of unintended consequences and the set clear expectations for banks, customers and other stakeholders in the process. Those two issues should be addressed at the international level and developed by policy makers working in close collaboration with all stakeholders, including banks.</li> </ul> |



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|     |            | <p><b>Question 6. MAS seeks feedback on the expectation for banks to develop tools and metrics to monitor and assess their exposures to environmental risk, and examples of the aforementioned tools and metrics that may be adopted.</b></p> <p>Our specific comments in relation to section 4.5 are set out below:</p> <ul style="list-style-type: none"> <li>• Further guidance on the suggested tools and metrics to promote standardisation, consistency and ensure a level playing field. The tools and metrics will be different for environmental and climate-related risks;</li> <li>• Improving data: The development of tools and metrics to monitor and assess exposures to environmental and climate risk is constrained by the availability and reliability data. As mentioned in our answer to Question 2, policies initiatives and coordination will be required to support the collection of the necessary data, which in turn would support comparability and standardisation of metrics and tools. In the interim, further guidance on reference data source would be welcome;</li> <li>• Third-party providers: In the area of third-party providers of sustainability tools, the market is expanding quickly and in a disorderly manner. Environmental, Social and Governance (“ESG”) rating is a concern given the high level of competition. Such market is confusing for users of these rating, and standards in terms of due diligence, transparency and conflict of interest should be put forward to avoid unintended consequences. There is also an additional challenge in terms of coverage. It is our longstanding experience that ESG ratings providers have very limited coverage of companies outside of the US and the EU, providing an inherent challenge to integrating their ratings into decision-making. Overall, we find that many ratings operate on the basis of an opaque and changing methodology. Whilst we acknowledge</li> </ul> |

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|     |            | <p>this is in some ways driven by the need to protect the proprietary nature of such ESG ratings, it presents challenges when integrating ESG ratings in the context of an individual financial institution’s perspectives;</p> <ul style="list-style-type: none"> <li>• Scenario analysis and stress testing: The development of capabilities in scenario analysis and stress testing is focused on climate risk currently, and it is widely accepted that the process is in its infancy and challenging. To date, there is no reference work or international standards, that would guide the design and implementation of the financial impact of environmental risk for banks. For instance, it would be extremely challenging to manage different environmental risks in one single scenario such as extreme weather due to climate change and loss of biodiversity due to chemical pollution;</li> <li>• Cooperation: We strongly encourage the MAS to promote international cooperation, contribute to the development and incorporate internationally consistent standards in the Guidelines, leveraging on organization and work from the like of the NGFS. It would be ineffective and inefficient from a policy making point of view to implement a variety of scenario and stress testing requirements based on uncoordinated implementation of local requirements;</li> <li>• Framework recognition: Banks headquartered outside of Singapore subject to equivalent supervisory expectations in their home jurisdiction should be permitted to leverage on their group frameworks and processes as much as possible to meet the Guidelines. This is especially important for climate risk given its de facto global nature and the complexity of the tasks ahead to fully integrate it in business as usual.</li> </ul> |

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|     |            | <p>Overall climate related data availability (emissions, scenario pathways, measuring baseline emission intensities) is nascent and requires significant external development and standardisation.</p> <p><b>Question 7. MAS seeks comments on whether there are specific aspects of environmental risk management policies and processes that would benefit from further supervisory guidance.</b></p> <p>Please refer to our recommendations under Question 6.</p> <p><b>Question 8. MAS seeks comments on the proposed form and frequency of disclosure of environmental risk by a bank.</b></p> <p>Disclosures should be aligned with international standards to enable comparability between reporting entities. We therefore support the of MAS' recommendation to take reference from international reporting frameworks including the Financial Stability Board's TCFD (section 4.8).</p> <p>We also welcome the MAS's approach to allow the disclosure to be consolidated at the group or head office level (section 4.7).</p> <p>We support the development of a science-based 'brown' taxonomy in order to facilitate a more detailed assessment of 'do no significant harm' and the extent of harm that is enabled by 'brown' activity. This will ensure greater level of disclosures – i.e. being able to disclose against brown to give all market participants a view of financial and non-financial actors' relative 'green' and 'brown' activity or financing levels. This also provides more information to shareholders and investors on a company's true portfolio as to activity aligned to doing significant harm.</p> <p><b>Question 9. MAS seeks comments on any aspects of the Guidelines that have not been covered in earlier questions.</b></p> <p>No comment.</p> |

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|     |  | <p><b>Question 10. MAS requests for examples of sound risk management practices currently implemented by banks, which would meet the expectations in the Guidelines.</b></p> <p>-</p> <p><b>Question 11. MAS seeks comments on the proposed implementation approach, including the proposed transition period of 12 months.</b></p> <p>We would recommend a staggered implementation of the Guidelines to allow for more time to meet supervisory expectations. Specifically, we would suggest providing 24 months after the publication of the final Guidelines for banks to meet expectations on climate-related risk. This would better reflect the current constraints on resource given the ongoing covid-19 pandemic.</p> <p>On the financial impact of environmental risk, we would recommend setting an implementation date at a later stage, once the necessary tools, metrics and methodologies have been developed at the international level. The phase-in approach should be considered based on typology of the counterparty (e.g. corporates, sovereign) and the type of environmental risks.</p> |
| 9   | Münchener Rückversicherungs-Gesellschaft, Singapore Branch | <p><b>Question 1. MAS seeks comments on the entities and business activities that are in the proposed scope of the Guidelines.</b></p> <p>-</p> <p><b>Question 2. MAS seeks comments on the proposed responsibilities of the Board in overseeing environmental risk management, including its role in ensuring that environmental risk, where material, is addressed in the bank's risk appetite framework.</b></p> <p>-</p>   |

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|     |            | <p><b>Question 3. MAS seeks comments on the proposed responsibilities of senior management in overseeing environmental risk management, including its role in developing an environmental risk management framework and policies, regularly reviewing their effectiveness, and allocating adequate resources to manage environmental risk.</b></p> <p>-</p> <p><b>Question 4. MAS seeks comments on the proposal for banks to designate a senior management member or a committee to oversee environmental risk, where such risk is material.</b></p> <p>-</p> <p><b>Question 5. MAS seeks comments on the expectation for banks to engage each customer that poses higher environmental risk to improve its risk profile and support its transition towards sustainable business practices.</b></p> <p>-</p> <p><b>Question 6. MAS seeks feedback on the expectation for banks to develop tools and metrics to monitor and assess their exposures to environmental risk, and examples of the aforementioned tools and metrics that may be adopted.</b></p> <p>-</p> <p><b>Question 7. MAS seeks comments on whether there are specific aspects of environmental risk management policies and processes that would benefit from further supervisory guidance.</b></p> <p>-</p> |

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|     |            | <p><b>Question 8. MAS seeks comments on the proposed form and frequency of disclosure of environmental risk by a bank.</b></p> <p>-</p> <p><b>Question 9. MAS seeks comments on any aspects of the Guidelines that have not been covered in earlier questions.</b></p> <p>Section 4.7 of the Guidelines recommends that banks should actively manage and monitor its environmental risk exposure at both customer and portfolio levels. Section 4.8 recommends that banks should engage each customer that poses higher environmental risk to improve its profile. It also talks about various mitigation strategies by the bank including reflecting the cost of additional risk in loan pricing, applying limits on loan exposure among others.</p> <p>Physical risks resulting from climate change may manifest as an increase in frequency and severity of natural catastrophes in the future. In certain instances, the effects of climate change accumulated over earlier decades may already be manifesting in the natural catastrophes experienced today.</p> <p>From this perspective, some of the strategies as mentioned in the MAS guidelines against physical risk resulting from climate change may benefit from insurance/reinsurance expertise.</p> <p>In particular, the insurance/reinsurance industry possesses expertise in pricing for catastrophic and other physical risks, which may form the basis for banks to reflect the cost of catastrophic risks in its loan pricing. It also extensively utilises proprietary catastrophic models to assess the level of natural catastrophe risk, and in some cases, developed climate models to assess current and future climate risks covering a range of hazards for single asset location and portfolio level analysis.</p> |

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|     |            | <p>To give an illustration, banks may have a portfolio of residential mortgages or industrial loans/infrastructure financing in a region exposed to flood. Exacerbated by climate change, such risks may increase in frequency and severity, possibly leading to increased loan defaults/impairment, depreciation of property, impact on property pricing and a capital hit.</p> <p>Insurance/reinsurers with their global coverage (and hence diversification capabilities) can provide portfolio or stand-alone solutions on indemnity and/or parametric covers to provide protection to the bank or its underlying customers.</p> <p>In addition to protection, insurers/reinsurers may deploy their models in terms of assessment of any accumulation and concentration risk to the portfolios. In many cases, some insurers/reinsurers will have specialist underwriting expertise for project financing/green tech/infrastructure risk to provide the assessment for projects/assets on a stand-alone basis.</p> <p>While any such insurance/reinsurance coverage is typically on an annual basis rather than over the multi-years/longer term, such solutions already protect banks and/or their underlying clients in the next 1 year from immediate threats, and they can be renewed annually over longer periods to cater for the evolution of environmental risks.</p> <p>In this regard, we would urge MAS to encourage in the Guidelines, the banking and insurance/reinsurance industries to collaborate, combine their respective expertise and develop more innovative stand-alone and portfolio solutions to address climate change.</p> <p><b>Question 10. MAS requests for examples of sound risk management practices currently implemented by banks, which would meet the expectations in the Guidelines.</b></p> <p>-</p> |

| S/N | Respondent   | Responses from respondent   |
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|     |  | <p><b>Question 11. MAS seeks comments on the proposed implementation approach, including the proposed transition period of 12 months.</b></p> <p>-</p>  |
| 10  | <p>Moody's Analytics &amp; Moody's ESG Solutions and its affiliates, Four Twenty Seven and Video Eiris</p> | <p><b>Question 1. MAS seeks comments on the entities and business activities that are in the proposed scope of the Guidelines.</b></p> <p>The MAS Guidelines cover a comprehensive range of entities and business activities.</p> <p>In addition to the list of key entities in scope, and within the scope of application context, we acknowledge the fundamental logic to apply the principles of materiality, context and proportionality, in a commensurate and proportionate manner with respect to the scale, scope, size and business models of a broad range of financial institutions.</p> <p>Frameworks and defined timelines for managing and measuring operational complexity and resilience require alignment with this fundamental logic. Factors such as scale and size can determine the ability and speed of business transformation and transition, especially where sustainability and innovation are concerned.</p> <p><b>Question 2. MAS seeks comments on the proposed responsibilities of the Board in overseeing environmental risk management, including its role in ensuring that environmental risk, where material, is addressed in the bank's risk appetite framework.</b></p> <p>ESG-related risks that were once considered as "emerging" and / or "intangible" are now more widely recognized as being significant. These include Climate Risks, Cyber Risks, Social Risks etc.</p> |



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|     |            | <p>The evolving risk management landscape prompts many board of directors to take a more active role in understanding and addressing ESG-related issues and to demonstrate how boards are evaluating risk exposures to various issues, including ESG. We believe it is important for boards to implement processes to provide oversight of management’s measurement and mitigation efforts with respect to managing these risks.</p> <p>We believe boards should provide oversight of ESG risks while senior management should be responsible for the management of ESG risks in relation to the implementation of a risk management framework. This would help make certain that ESG risks are integrated into an entity’s strategic thinking and decision-making processes at the highest level of the organization.</p> <p>From a risk perspective, we believe ESG risks should be fully integrated within the existing internal control and risk management framework. The board (and, when appropriate, a designated committee) should be responsible for establishing the governance and culture for risk management including both ESG and non-ESG related risks.</p> <p>This approach was highlighted by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in their paper “Demystifying Sustainability Risk - Integrating the triple bottom line into an enterprise risk management program” (May 2013), “Managing sustainability risk is not the responsibility of one function, nor should it be a stand-alone proposition. [...]. Sustainability must permeate organizational thinking from the boardroom and executive suite to the shop floor. It needs to be integrated into division, business unit and operations planning and activities to be truly effective.”</p> <p>The assessment goes beyond the classic analysis of board composition, election cycles and independence in order to</p> |

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|     |            | <p>understand how ESG factors are integrated in board committees, audit functions, remuneration plans and more.</p> <p>We believe ESG risks may in turn affect credit, counterparty, operational, and market risks. Therefore, incorporating ESG risks into a financial institutions' Risk Appetite Framework is well-aligned with the aim of proactive risk and resilience management. institutions. The allocation of dedicated resources and the type of committees tasked with overseeing ESG risks needs to be appropriate in the context of the size and complexity of an organization.</p> <p><b>Question 3. MAS seeks comments on the proposed responsibilities of senior management in overseeing environmental risk management, including its role in developing an environmental risk management framework and policies, regularly reviewing their effectiveness, and allocating adequate resources to manage environmental risk.</b></p> <p>We believe boards should provide oversight of ESG risks while senior management should be responsible for the management of ESG risks in relation to the implementation of a risk management framework.</p> <p><b>Question 4. MAS seeks comments on the proposal for banks to designate a senior management member or a committee to oversee environmental risk, where such risk is material.</b></p> <p>We believe environmental risk management and oversight should be incorporated into an organization's overall risk management framework to provide for a strengthened, effective and integrated risk management process.</p> <p>Organizations should consider existing governance frameworks for the management of financial risks when integrating their ESG risk frameworks since environmental risks are being quantified</p> |

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|     |            | <p>and managed in alignment to the relevant financial and operational risks and opportunities.</p> <p>The common practice is for organizations to create sustainability and climate change taskforces or committees which are led by an existing executive such as the chief financial officer, chief risk officer or the chief investment officer (also as referenced as part of the Climate Financial Risk Forum Guide 2020, issued by the FCA, UK, <a href="https://www.bankofengland.co.uk/news/2020/june/the-cfrf-publishes-guide-to-help-financial-industry-address-climate-related-financial-risks">https://www.bankofengland.co.uk/news/2020/june/the-cfrf-publishes-guide-to-help-financial-industry-address-climate-related-financial-risks</a>) who will assume the overall responsibility for environmental risk management and its implementation.</p> <p>Essentially the taskforce and or designated committee is tasked with the implementation of a climate change risk management framework within the organization and, following its implementation, will monitor and enforce the integrated risk management operating model. In addition, the taskforce and or designated committee should have a clear mandate, defined roles and responsibilities and should include representatives and roles assigned from across the three lines of defence.</p> <p>The executive in charge, should be tasked with raising the awareness of the environmental risk agenda among the board committees and leadership teams within the organization, and should make recommendations to drive the strategy and mindset of the organization in this space.</p> <p>This means targets for environmental risk management (identification, quantification and reporting), defined targets and metrics in line with the organizations' risk appetite, and recommendations for new lines of business or products.</p> <p><b>Question 5. MAS seeks comments on the expectation for banks to engage each customer that poses higher environmental risk to improve its risk profile and support its transition towards sustainable business practices.</b></p> |

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|     |            | <p>The engagement opportunities identified by MAS are comprehensive and meaningful.</p> <p>It is commonly perceived as good practice to foster engagement with firms, clients and investee companies to improve an environmental risk profile. PRI signatories, are required to take such a proactive role in conducting their business.</p> <p>The engagement phase is paramount in the risk identification and measurement phases. An operating framework set up to manage the associated risks while originating financial resources (e.g. lending/investments) instead of distributing such risk meets the ultimate goal of reducing environmental risks.</p> <p>A drawback of enhancing expectations towards more relationship-based business models for financial institutions may be the higher costs of such an organizational model which in turn disadvantages smaller firms (size bias). Organizations of all sizes have a role to play in order to meet the 1.5-2 degrees Paris Agreement goals.</p> <p>As per Moody's affiliate, Vigeo Eiris ESG assessments for banks, approaches to corporate customer engagement may include:</p> <ul style="list-style-type: none"> <li>• Drawing from the findings of risk identification to strengthen management systems to better track information and flag risks, including those associated with the clients, geographies, products or sectors, before adverse impacts occur.</li> <li>• Building up sectoral expertise that includes understanding what preventive measures can be put in place and working with clients on implementing those.</li> <li>• Defining exclusionary criteria that prohibit the provision of a financial service to companies under specific circumstances or for specific clients.</li> </ul> |

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|     |            | <ul style="list-style-type: none"> <li>• Defining conditions for the provision of financial services to companies based on their adherence to well-established and recognized standards (UN Convention on Biological diversity, CITES, OECD guidelines on MNE...) and/or good practices.</li> <li>• Providing training that is fit-for purpose for the bank’s relevant staff and management.</li> <li>• Assigning relevant senior responsibility to oversee implementation of preventive measures.</li> <li>• Seeking to influence a client to develop stronger environmental risk management systems.</li> <li>• Joining geographic or issue-specific initiatives that seek to prevent and mitigate adverse impacts in the areas identified (e.g. country, commodity, or sector roundtables or multi-stakeholder initiatives), which may also include engagement with governments.</li> </ul> <p>Specifically, for corporate lending activities:</p> <ul style="list-style-type: none"> <li>• Assigning responsibility for ensuring that bank activities that cause or contribute to adverse impacts cease.</li> <li>• Encouraging clients to create a roadmap for how the client can cease the activities that are causing or contributing to adverse impacts, involving impacted or potentially impacted rightsholders and other stakeholders as relevant. Banks can recommend the client to hire an external environmental and social consultant to support mitigation activities.</li> <li>• Engaging with prospective and existing clients through face-to-face meetings with its representatives from operations, senior management, and/or board level to discuss on how their clients are approaching the key environmental matters relevant to their business and to request time-bound action to address or mitigate an impact.</li> </ul> |

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|     |            | <ul style="list-style-type: none"> <li>• Collaborating with other banks involved in the transaction or other stakeholders to exert leverage on environmental matters, subject to legal obligations.</li> <li>• Connecting clients with needed resources to address impacts and manage risks.</li> <li>• Providing prospective clients with incentives to meet certain environmental related targets (e.g. coupling the interest rate of the loan with the company’s sustainability performance).</li> <li>• In certain high-risk cases, requiring third party review of compliance with environmental policies and/or requirements for high-risk clients on behalf of the banks can be conducted</li> </ul> <p>For underwriting securities activities:</p> <ul style="list-style-type: none"> <li>• Where a deep level of due diligence is required e.g. for an environmental impact assessment, to encourage the client to report on the related risks in investor information disclosures (prospectus).</li> <li>• Advising clients to include environmental issues in disclosure documents (e.g. the prospectus or brochure in a securities underwriting transaction) and requesting the client to explain how it is planning to address the key issues that are likely to affect its future performance.</li> <li>• Challenging a client’s perception of material risk issues (with related risks often being not financially material, or not relevant to investors).</li> <li>• In the case of securities underwriting, if a company in a carbon-intensive industry does not consider environmental and climate change to be a risk because there is no foreseeable short-term impact on the company, then the bank can play a role in explaining to the client the significant environmental and social risks that climate change poses and its potential material impact for the client, for example due to changing investor sentiment and increasing regulation.</li> </ul> |

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|     |            | <p>For insurers, we can break down as underwriting and investments as follows:</p> <p>Underwriting:</p> <ul style="list-style-type: none"> <li>• Active dialogue with insured companies with high environmental impacts (i.e. Systematic engagement with companies having high environmental impacts (i.e. palm oil; climate change, biodiversity): support companies' management of material risks related to climate change and establish the transition away from coal)</li> <li>• As risk experts, engaging with consultative dialogue and sharing of expertise can add value to improve overall risk awareness and mitigation.</li> </ul> <p>Investments (proprietary assets/asset management activities):</p> <ul style="list-style-type: none"> <li>• Active ownership – ESG engagement</li> <li>• Active ownership – voting</li> <li>• Exclusions policies</li> <li>• Membership in engagement initiatives at a sector level</li> </ul> <p><b>Question 6. MAS seeks feedback on the expectation for banks to develop tools and metrics to monitor and assess their exposures to environmental risk, and examples of the aforementioned tools and metrics that may be adopted.</b></p> <p>Although it may be argued that environmental risk is reflected through and within other existing risks (e.g. credit, market, etc.) the scientific nature of it requires to be managed with respect to an appropriate level of granularity.</p> <p>Tools and metrics are expected to be developed / integrated by banks in order to detect such risks also with the support of new data insights, analytics and specific expertise, associated to Environmental risk drivers and in consideration with materiality and data limitations.</p> |

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|     |            | <p>Examples of tools include:</p> <ul style="list-style-type: none"> <li>• systematic screening and assessment of ESG risks through ESG rating assessments and scoring</li> <li>• monitoring of the CO2 emissions associated with its investment/lending portfolios (i.e. portfolio carbon footprint/carbon intensity)</li> <li>• monitoring investment/lending activities to reduce CO2 emissions (i.e. phasing out from investments/lending in fossil fuels, limits to invest/lend in sectors with high environmental impacts)</li> <li>• forward-looking geospatial analysis of climate hazards affecting client / investees businesses, supply chains and market</li> <li>• granular assessment of environmental rating's / assessment drivers to represent client / investees businesses profile and risk sensitivities</li> <li>• economic impact's estimation of climate scenarios under alternative policy actions, socio economic context, technological context and market context</li> <li>• comprehensive portfolio scenarios-based analysis able to catch second order effects of climate events</li> <li>• rich set of climate-related financial risk metrics aimed to improve transparency and understanding of portfolio sensitivities to Environmental risk drivers</li> </ul> <p>The accuracy and completeness for tracking of climate risk impacts remain the biggest challenge. There needs to be a consolidated reporting effort, to ensure that data biases and discrepancies are being addressed.</p> <p>TCFD disclosures are improving and the market has seen a positive improvement in terms of both quantity and quality of data for both adaptation and mitigation in the last 2 years. However, there is still some way to go for TCFD reports to provide</p> |



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|     |            | <p>adequate level of details for banks and insurance risk management efforts as per a study conducted by Vigeo Eiris, which can be shared upon request.</p> <p>In brief, we outline some approaches that address some of these challenges.</p> <p>Physical Risks - While the exposure of bank's own operations is important, their material risk to physical climate risks will come from primarily through the exposure of the assets underlying their loan portfolios based on their geographic locations. Leveraging forward-looking climate data is a critical way to understand exposure to physical risks such as floods, heat stress, hurricanes &amp; typhoons, sea level rise and water stress. For scenario analysis it's important to consider that in any scenario there will be some level of physical risk exposure, due to the climate impacts already locked-in from past emissions.</p> <p>Transition Risks -</p> <p>Transition risks for banks mainly arise from the involvements in business activities related to fossil fuel, tar sands, arctic oil, ultra-deep-water oil, coal mining and coal-based power generation. Therefore, identifying the level of involvement of the portfolio holdings against these abovementioned activities is of an essential, this helps to assess risk in a both short and long-term perspective, and thus set ambitious targets across the timeframe that adheres to the banks risk appetite and where the most significant positive impact can be attained. UNEP FI Principle for Responsible Banking provides a framework that banks can refer to mitigate and adapt transition risk.</p> <p>Whenever possible, bottom-up asset-level data need to underpin the basic framework of climate risk identification. However, integrating financial disclosures and collecting and harmonizing such data from a range of different data providers is a complex and time-consuming endeavor. Another challenge that many</p> |

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|     |            | <p>firms face is that relevant data points in external databases may be scarce for asset classes such as corporate bonds of non-listed companies or retail portfolios such as household or SME loans.</p> <p>Based on our experience, we observe that sector, technology and location specific proxy (benchmark) scoring for ESG risks are essential to complete the methodology to derive balance-sheet assessment addressing environmental risks.</p> <p>Scenario Analysis –</p> <p>Climate change scenarios must incorporate both the physical and transition risk transmission channels. The scenarios should be of sufficient duration to holistically account for physical and transition risks over at least a 30-year period, and preferably an 80-year period. The forecast scenarios should provide forecasts at a country level for key macroeconomic variables and industrial detail. The scenarios should accompany a broader narrative about how climate change is expected to unfold. This involves assumptions such as a carbon tax or emissions and temperature trajectories and economic inputs such as expected economic and population growth rates at a country level. Banks would then use the macroeconomic detail from the climate change scenarios to help quantify the risk to their enterprise.</p> <p>Historical data are typically insufficient to help banks quantify the impact of environmental risk on their balance sheets and risk profile. Forward-looking macroeconomic scenarios are a great tool to be used in risk-management exercises, because they provide the inputs that banks frequently use in their risk management and capital adequacy exercises. Climate scenarios should have a long duration that reflects the nature of the risk posed.</p> <p>Physical risks compound over time and become more pronounced in the second half of the decade. Physical risk affects each country differently, making macroeconomic scenarios for each country</p> |

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|     |            | <p>necessary to fully quantify the enterprise risks posed by climate change. Transition risks potentially register sooner, depending on scenario design.</p> <p>The Network for Greening the Financial System (NGFS) published in June 2020, proposed three types of climate change scenarios: Early (Orderly) Policy Transition, Late (Disorderly) Policy Transition and Hot House World (Limited action). These descriptions capture a wide range of outcomes for how international governments might combat the global macroeconomic threats posed by climate change.</p> <p>Moody’s Analytics Economic Research team creates macroeconomic scenarios for supervisory exercises globally, such as the US CCAR, EBA and PRA Stress testing exercises and the upcoming BES 2021 by the Bank of England for climate stress tests. Similarly, the Economic Research Roadmap includes the NGFS Climate scenarios proposed.</p> <p>Two of the scenarios – early and late policy action – will include physical and transition risk components while the third scenario – no policy action – will include only physical risk, consistent with the scenario narratives. Physical risk exposure is incorporated under all three scenarios as we would caution against assuming that the physical risks can be significantly mitigated over the horizons being modelled. Much of the expected levels of climate change are effectively ‘locked in’ due to lags in the climate system and inertia in the economic transition. Mitigation impacts may be more significant in the 2050-2080 period.</p> <p>Moody’s Analytics intends to construct macroeconomic scenarios that can also span to 2100, although the modelling period can be different for different risk management purposes. This longer time frame is necessary to provide a full assessment of the physical risks that firms will face. The 2100 time frame is consistent with climate change literature and the IPCC.</p> |

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|     |            | <p>With respect to technology, because the rate of technological progress is very difficult to forecast, even in a baseline case, Moody's assumptions will be implicit rather than explicit. We estimate the price elasticities of energy demand by source and geography and use these equations to create forecasts for energy demand and emissions. The rate of transition to renewable sources of energy, therefore, will be a function of price, and the speed with which the transition occurs will be a function of the price elasticity of energy demand. Using history as a guide provides a more market-centric response to the relationship between energy demand, carbon pricing, and emissions.</p> <p>In addition, probabilistic modelling (or scenario neutral modelling) and real option valuations methodologies may be necessary to complement the deterministic analysis. Whilst deterministic analysis has its relevant applications, it may not adequately capture the tradeoffs (and option valuations) inherent in this environment.</p> <p>Considering data limitations and materiality, firms may adopt a top down (Macro assessment) or bottom up (firm level/micro assessment) analysis when quantifying financial risk implications that are elaborated next.</p> <p>Financial Impact Analysis -</p> <p>Corporates - As mentioned, the progress made by firms in disclosing under the TCFD are far from providing the adequate level of information (Vigeo Eiris tracks disclosures under TCFD under recommendation criteria and a recent report can be shared upon request) Relying on direct engagement with counterparties to gather this data will be impracticable in shorter timeframes. Considering the state of market and the existing TCFD reporting, data will unlikely be comparable and transparent.</p> <p>Due to data limitations, financial firms will likely rely on modelling which may yield inconsistencies based on differing assumptions</p> |

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|     |            | <p>from model providers, or miss on company specific characteristics, e.g. Supply Chain risks. Alternatively, MAS may ask financial firms to focus on a smaller number of very large and financially material counterparties for a more bespoke approach.</p> <p>In spite of these data gaps, there are sound approaches available for the publicly listed firms, sovereigns/municipalities as well as commercial real estate that can incorporate the climate physical and transition risks and scenario modelling when assessing financial impact.</p> <p>For example, physical and transition risks can be modeled by linking the risk scenarios to the key drivers of a structural model framework for publicly listed firms. Thus, each firm’s asset value, asset volatility and liability can be considered to be affected by each scenario through information obtained by transition and physical scenario pathways.</p> <p>As observed, climate change happens globally and interconnectedly across regions, sectors and supply chains and so on. As such, it is important to integrate granular geo-location climate hazard data with granular asset specific portfolio analytics (Value at Risk), allowing for measurement and management of portfolio risk in the face of climate change.</p> <p>The approach can be to incorporate local climate hazards into a granular and forward-looking asset correlation framework, allowing for cross-sectional differentiation in the measurement of counterparty sensitivity to factors such as temperature and flooding, recognizing variation in their industry and geographic footprint. By linking the factor model with credit exposure-level information, the framework identifies and quantifies the likelihood of a material loss driven by common factors across an organization’s portfolio.</p> <p>Thus beyond assessments of expected loss (e.g., climate-scenario conditioned PD and LGD for credit exposures), Portfolio (VaR)</p> |

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|     |            | <p>climate solutions should uniquely identify sources of portfolio concentrations driven by common exposure to local climate hazards as well as provide an accurate assessment of sector, industry and regional ranges, enabling the design of climate-resilient financial system as a whole and account for contagion effects.</p> <p>Mortgages - Physical risk drivers can be linked to collateral values based on the location of the properties. Computing physical risks based on geographical location can be obtained at a very granular level. Among the key risks are flooding and sea level rises. Assuming firms can provide accurate street addresses for their mortgage exposures, the mapping to physical risks should be feasible and relatively straightforward. But the translation of the exposure to hazard into financial risks (or credit risk drivers) can be challenging due to the lack of historical loss data.</p> <p>Commercial property performance is subject to environmental influences on revenue generation potential, operating costs, and ultimately, collateral asset valuation. The potential impacts of climate change on real estate assets can occur through several channels.</p> <p>Acute physical risks, such as hurricanes and floods, represent catastrophic events that can cause considerable property damage. Long-term chronic physical risks, like sea level rise and changing precipitation patterns have the potential to impact both supply and demand for real estate.</p> <p>Accurate assessment of the net income potential for a given property is vital for lenders and under different climate scenarios.</p> <p>The above-mentioned climate change impact on properties' net operating income (NOI) and value in turn can be translated into the key ratios such as DSCR and LTV, which serve as the most critical inputs to real estate loans' credit risk assessment framework. The end results for this integrated analysis framework can be compared to assess various climate change scenarios.</p> |

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|     |            | <p>Expert judgement may be needed in order to map physical risks to collateral value and risk parameters. Additionally, it will be difficult to capture effective impacts on local real estate market prices, increases in taxes due to adaptation investments, changes in population, and overall impact in the local economic environment.</p> <p>Transition risk may be harder to assess with precision as data on household energy efficiency may not be available at scale. Some transition risk assessment could be performed on Real Estate agencies who manage properties that serve as collateral for buy-to-let portfolios.</p> <p>Other Retail exposures - Physical risk drivers can shape the outlook for local economic areas, affecting employment, retail sales, and production. Natural disasters, as an extreme example, will have direct effects on economic activity at a granular geographical level. Some industries will suffer more than others. This type of analysis can be performed in line with what-if type exercises; assuming increased likelihoods for specific physical risks. Yet the quantitative challenges of connecting climate risks to local economic performance will not be straightforward. Case studies of economic impacts of natural disasters can serve as a benchmark. Once the effects of physical risks into the local economy are calculated, they need translation into risk management metrics.</p> <p>Transition risk will be harder to assess with precision. Perhaps an area to explore is the development of a rank-ordering mechanism for industries (according to the sensitivities of sectors to the specific transition path that is under analysis). Once the economic sectors have been identified in light of transition pathways, we can connect employment characteristics of each retail borrower against the sector they have exposure to.</p> |

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|     |            | <p>The proposed approach that connects transition risks to (1) industry performance first, and (2) employment status next, could also be applied to mortgage clients (i.e., across all retail exposures) and small business portfolios.</p> <p><b>Question 7. MAS seeks comments on whether there are specific aspects of environmental risk management policies and processes that would benefit from further supervisory guidance.</b></p> <p>For banks' lending activities, MAS may consider the following:</p> <ul style="list-style-type: none"> <li>• For sensitive sectors that may harm biodiversity (palm oil, land use and agroforestry, food production, wood production, water management, marine fisheries and aquaculture...) banks can be encouraged to develop sector specific policies and systematically conduct an environmental risk assessments and environmental due diligence.</li> <li>• With regards to high emitting sectors (energy production with fossil fuel industries, transport...), banks can have processes that systematically consider climate risks in their financing prior to engaging in lending activities.</li> <li>• Environmental risk assessments can be reported against IFC's E&amp;S Performance Standards 1, 3 on Resource Efficiency and Pollution Prevention, and 6 on Biodiversity conservation and Sustainable Management of Living Natural Resources on Environmental and Social Sustainability and/or the Equator Principles. Main steps can be considered as follow: <ul style="list-style-type: none"> <li>○ Risk identification and establishment of sector exclusion policies: Identifying and assessing the most significant areas of environmental and climate risks across client portfolios based on information provided by clients via independent research. Examples: unconventional fossil fuel (tar</li> </ul> </li> </ul> |



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|     |            | <p>sands oil, Arctic oil exploration and extraction, ultra-deep-water oil &amp; gas, etc.)</p> <ul style="list-style-type: none"> <li>○ Categorization: based on the IFC standards and based on the magnitude of potential environmental and social risks and impacts related to climate change, and biodiversity.</li> <li>○ ESIA: The client is expected to include assessments of potential adverse and climate change risks as part of the ESIA or Other Assessment, with these included in the Assessment Documentation. The Climate Change Risk Assessment should be aligned with Climate Physical Risk and Climate Transition Risk categories of the TCFD.</li> </ul> <p>For securities underwritings:</p> <ul style="list-style-type: none"> <li>● Exclusionary screening/positive screening (best-in-class approach)/divestment from ecological sensitive and high carbon intensive sectors</li> <li>● Climate risk assessment: carbon asset risk stress testing, climate scenario analysis, measures to forecast potential future outcomes under a range of different assumptions, inclusion of additional metrics such as green/brown metrics, carbon pricing.</li> <li>● Promotion of 'green' products through capital market mechanisms, such as green, sustainability and transition bonds referring to ICMA &amp; CBI principles, development of ESG thematic indices and funds</li> <li>● Assisting corporate clients in analyzing carbon exposure and developing emissions reduction strategies following Science-Based-Targets and Net-Zero Carbon initiatives recommendations.</li> <li>● To develop an appropriate approach for the disclosure of the CO2 emissions of assets/loans/investments portfolio under supervisory guidance.</li> </ul> |

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|     |            | <p>For insurers, processes and policies related to the integration of environmental risks should be applied to the insurance underwriting as well as to the investment and asset management activities.</p> <p>It is good practice to determine clear risk and oversight management responsibilities (i.e. via the ESG teams), with specific skills and regular training on emerging risks.</p> <p>Insurance underwriting:</p> <ul style="list-style-type: none"> <li>• Potential environmental risks identified (environmental risk identification)</li> <li>• Transaction subject to a detailed assessment (environmental risk assessment). Depending on the outcomes (in the framework of the environmental risk management): 3 different options: 1) proceed with transaction 2) proceed with conditions (dialogue with the client) 3) decline the transaction</li> </ul> <p>Investments:</p> <ul style="list-style-type: none"> <li>• ESG ratings and scoring (threshold to be set)</li> <li>• If issuers below the threshold are included in the portfolio: engagement process (see above)</li> <li>• Impact Investment funds</li> <li>• Apart from the identification of high environmental risks – already commented - insurers have different tools at their disposal, such as: <ul style="list-style-type: none"> <li>• Educating customers on climate-friendly behaviors;</li> <li>• Utilizing terms and conditions to foster climate-friendly behaviors from customers (rewarding risk-minimizing behavior to excluding environmental liabilities; pay-as-you-drive (PAYD) insurance products, i.e. with discounts for policyholders who drive less than the average driver); discounts for fuel-efficient or low-emission vehicles);</li> </ul> </li> </ul> |

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|     |            | <ul style="list-style-type: none"> <li>• Financing climate-protection improvements (insurers, especially those associated with banking operations, are able to engage in financing customer-side projects that either improve resilience to the impacts of climate change or contribute to reducing emissions);</li> <li>• Offering a climate risk management service and developing specific products promoting climate-friendly technologies and practices</li> </ul> <p>Vigeo Eiris will be pleased to share further details on above as part of its assessments upon interest.</p> <p><b>Question 8. MAS seeks comments on the proposed form and frequency of disclosure of environmental risk by a bank.</b></p> <p>Some level of partial disclosure or phasing in of the disclosures as part of the transition period may be considered to allow the firms time to comply and add the required level of complexity.</p> <p>In addition, banks and asset managers may consider the recommendations outlined in the report, “Advancing TCFD Guidance on Physical Climate Risks and Opportunities” that outlines guidance for disclosure on physical climate risk.</p> <p>Given the level of assessment and metrics that are considered for a firm level disclosure, as well as the scenarios and the horizons that are being considered, a widely accepted disclosure frequency for banks, insurers and asset managers is following an annual cycle, typically as part of an annual report which is used by shareholders and other stakeholders for resource allocation decision-making.</p> <p>For asset managers product level disclosures which by nature are more dynamic and short term may require a more frequent level of disclosure.</p> |

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|     |            | <p>There is also an increasing trend among supervisory authorities to assess financial stability in response to ESG risks and climate change on a periodic basis through the climate stress test exercises and/or incorporating climate scenario analysis in existing risk frameworks, such as the Bank of England 2021 biennial exploratory scenario on the financial risks from climate change, published in December 2019.</p> <p><b>Question 9. MAS seeks comments on any aspects of the Guidelines that have not been covered in earlier questions.</b></p> <p>In terms of content: Disclosures under the TCFD framework are considered as important in terms of value added and cross regional appeal. Within our TCFD reporting alignment research we have already identified the cross regional reach these recommendations are having (as well as the limited number of issuers from across the financial sector that are currently reporting in line with the TCFD requirements). MAS recommending the TCFD framework could further develop the current global status and bring different regions under the same framework thus facilitating approaches and data comparability.</p> <p>In terms of form: the TCFD recommends placing ESG disclosures in the annual financial reports. We understand the view that one integrated financial/ESG report at group level can provide complete view on Banks' (or any other companies) exposure to environmental risks. However, we do not consider integrated reporting formats to be absolutely necessary. Ultimately, the most important element is that the information is disclosed publicly.</p> <p>In terms of frequency: we agree with the MAS proposal of annual reporting, at the same time with the financial disclosure. As mentioned, these can be complemented by relevant stress testing and other risk management practices.</p> |

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|     |            | <p><b>Question 10. MAS requests for examples of sound risk management practices currently implemented by banks, which would meet the expectations in the Guidelines.</b></p> <p>Below is a non-exhaustive, select number of examples collated from publicly available sources.</p> <p>Examples for Banks:</p> <p>Rabobank</p> <p>Clients engagement: In 2011, Rabobank entered into a partnership with the Worldwide Wildlife Fund (WWF) with the mission of establishing projects and practical examples jointly with clients to achieve a sustainable food supply, with an emphasis on international food and agri projects. Rabobank and WWF helped a palm oil business in Indonesia to meet the criteria for obtaining certification for the Round Table on Sustainable Palm Oil (RSPO). In addition, a partnership agreement was signed in 2013 with various international parties in the fishing industry to develop an instrument for measuring sustainability performance.</p> <p>Sound methodological assessment: Within Rabobank the relationship managers together with the central sustainability department are responsible for the correct implementation of the Equator Principles (EP). As part of the sustainability assessment of the client, all transactions are checked for applicability of the EP. Implementation of the Equator Principles (EP). When the client applies for a new transaction, a checklist is completed to ensure the correct application of the principles. This checklist should be signed by the Sustainability Department before the transaction can be executed. The Company conducts a Social and Environmental Assessment for each proposed project. The terminology to categorise the projects is based on the International Finance Corporation's categorisation process, and</p> |

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|     |            | <p>classifies projects into high, medium and low, in terms of environmental and social risk.</p> <p>In addition, the bank has initiated the client photo process (Klantfoto) in which it has started to collect certain sustainability information about clients. Information includes a description of the client’s sustainability strategy, track record, governance of sustainability, monitoring, progress reporting, transparency, supply chain management, customer stimulation, adoption of sustainable business concept and more. This information translates into a sustainability rating from A to D. The bank uses this rating methodology together with a methodology based on external quality labels to identify sustainability front runners among its clients. Account managers, who are the ones responsible for the establishment of the sustainability category are trained to further improve the KPI data in concrete terms.</p> <p>ABN Amro</p> <p>ABN AMRO's Environmental, Social and Ethical (ESE) Policy for lending requires that the group identifies the sustainability risks for each commercial loan application. In higher risk cases, the group performs an additional due diligence based on environmental standards.</p> <p>The bank’s sustainability risk management process for lending consists of four steps: (i) risk determination; (ii) assessment; (iii) approval; and (iv) monitoring and reporting.</p> <p>The group provides advice to customers to reduce environmental risks. In order to help customers in the farming industry, ABN AMRO regularly publishes news and views on specific agricultural topics and market segments. ABN AMRO also produces a quarterly newsletter for the agricultural sector, presenting the latest news and trends and highlighting topical issues. The group stated that it works with clients to achieve a better world by offering customised advice and products.</p> |

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|     |            | <p>ABN AMRO reports to have an objective to give customers a special 'green booklet' when they take out a mortgage or meet with a bank employee or intermediary. This booklet contains 17 tips on how to make homes more sustainable. ABN AMRO's Energy, Commodities &amp; Transportation (ECT) Clients Department provides advice to global clients in sectors such as commodity finance, shipping, agriculture, oil &amp; gas and offshore oil services.</p> <p>For the Chemicals and Pharma policy, the group consults the relevant industry and organisations and NGO's and they are invited to send their feedback to the group's sustainability department.</p> <p>Through its impact assessment, ABN AMRO works with clients to improve their impact through financing and client advisory services, focusing on supporting clients' transitions in energy, circularity and social impact.</p> <p>ING Group</p> <p>In order decrease its portfolio exposure to climate change risks, the Group set up the Terra approach, an accurate way to steer its lending portfolio towards meeting the Paris Agreement's well-below two-degree goal. The Terra approach looks at the technology shift that's needed across certain sectors and it measures it against the actual technology clients are using today and planning on using in the future. Having this information, ING measures its loan book and it focuses on investments and divestments that are needed by clients and it supports them on their path to a sustainable business. In addition, Terra approach is open source and ING dialogues with other banks and stakeholder.</p> <p><b>Question 11. MAS seeks comments on the proposed implementation approach, including the proposed transition period of 12 months.</b></p> |

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|     |                               | <p>Moody's agrees with the observation made by MAS that the methodologies for assessing, monitoring and reporting environmental risk will evolve and that these Guidelines will be updated as appropriate to reflect the evolving nature and maturity of risk management practices.</p>  |
| 11  | Singapore Environment Council | <p><b>Question 1. MAS seeks comments on the entities and business activities that are in the proposed scope of the Guidelines.</b></p> <p>Singapore is a major global trading and financial hub, with its part to play in greening the financial system. Greening the financial system for a low-carbon future requires a comprehensive road map and these Guidelines form an essential building block. Beyond a risk assessment exercise, SEC urges bank and finance companies to embrace environmental risks as a source of opportunity, business driver and pillar of core banking strategy. Regulatory incentives and requirements should be set in place to drive behaviours not only at the bank level but across the industry. This will encourage banks and finance companies to manage environmental concerns holistically for growth of the wider banking portfolio.</p> <p>Although these Guidelines do not exert the force of legislation, they serve as guidance to drive institutional readiness which could pave the way for future legislation to be built on. As regulator and supervisor, MAS is instrumental in strengthening the practice of environmental risk disclosure since banks and finance companies are unlikely to be voluntarily called upon by their clients to do so. The mitigation and right-pricing of environmental risks by banks and finance companies play a key role in nudging corporate customers and portfolio assets towards environmentally-beneficial practices such as investing in energy-efficient properties, renewable energy systems, incorporating recycled content into product packaging and implementing take-back programmes. In so doing, banks and finance companies influence counter-parties along the corporate value chain. While implementation of the Guidelines may commensurate with the</p> |



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|     |            | <p>risk profile, the size and nature of activities of banks and finance companies, SEC appeals for banks to exhibition ambition and adopt a more pro-active approach to integrate environmental risk into business, driven by best practices that extend beyond compliance.</p> <p>SEC welcomes MAS' view to subject these Guidelines to regular reviews and revision as part of ongoing efforts to capture the evolving nature and maturity of risk management practices. Review exercises can help to bolster risk management systems which may be informed by discoveries from stress testing exercises carried out on a multi-factor, multi-scenarios and multi-horizon basis. In view of this, the unit of environmental risk analysis could broaden beyond sector granularity to include the company and asset level which will can be aggregated to the industry and segment levels.</p> <p>Banks and finance companies, in their capacity as credit providers and enablers of capital transactions, play a critical role in spurring innovation for greater climate action and social inclusion in order to strengthen the resilience of our financial system. As much as the impacts of environmental risk are felt unevenly across the globe, Singapore's import-reliant and urbanised environment is vulnerable to the threat of property value impairment and food supply chain disruptions due to sea-level rise and climate variability. By adopting these Guidelines, banks and finance companies contribute to mitigating Singapore's non-traditional security risks and advancing our goal to create a vibrant green finance hub for the world.</p> <p><b>Question 2. MAS seeks comments on the proposed responsibilities of the Board in overseeing environmental risk management, including its role in ensuring that environmental risk, where material, is addressed in the bank's risk appetite framework.</b></p> |

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|     |            | <p>Commitment and accountability begins at the top. Boards should be responsible for strategic oversight and integration of material environmental risks within enterprise risk management systems and in ensuring that organisational risk appetite does not conflict with the UNFCCC’s goal of limiting warming to 1.5 C.</p> <p>In this regard, Boards should champion the integration of environmental risks with enterprise risk management systems, review and approve material environmental issues identified and ensure that a process of gaps analysis and action planning is set in place and adhered to. Boards bear the fiduciary duty to care for stakeholders, to review and alert where unexpected concentrations of environmental risks may occur and build up.</p> <p>However, as the first progress report of NGFS notes, “climate- or environmental-related criteria are not yet sufficiently accounted for in internal credit assessments or in [...] credit agencies’ models which many Central Banks rely on for their operations” (NGFS 2018, p. 9). In response to this gap, SEC would call upon Boards to adopt a governance structure that considers environmental risk as one that cuts across the organisation, rather than stand-alone.</p> <p>To demonstrate commitment, Boards should establish risk appetite limits and the basis for them in their public communications. SEC urges banks and finance companies to clearly define risk appetite based on types of risks and total exposure that banks and finance companies are willing to bear (e.g. % earnings or equity). The risk-return trade-off should be transparent.</p> <p>Boards should caution against overly optimistic assumptions and/or mild scenarios. Especially given these challenges facing banks and finance companies - the non-linearity of environmental risks, difficulties in estimating frequencies and severities of environmental events, and the limitation of historical data to cater for future forecasts.</p> |

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|     |            | <p>To carry out their responsibilities competently, Board should be appointed while taking into account their experience and/or expertise in managing environmental risk. Boards should ensure at least one member of the Board is equipped with expertise in environmental risk management. Banks and finance companies should also implement a training plan to guide board members in developing strategies for environmental risk management. Ideally these responsibilities would be written into the committee’s charter. As part of Board meetings, a record of the agenda and discussions on environmental risk topics and management responses should be kept for review.</p> <p>The emphasis on board-level oversight is also encouraged by sustainability reporting frameworks such as the Global Reporting Initiative (GRI) Standards and also features as a primary component under the Singapore Exchange Sustainability Reporting Guide.</p> <p><b>Question 3. MAS seeks comments on the proposed responsibilities of senior management in overseeing environmental risk management, including its role in developing an environmental risk management framework and policies, regularly reviewing their effectiveness, and allocating adequate resources to manage environmental risk.</b></p> <p>It is important that Board oversight is cascaded via delegated authority to senior management who are responsible to develop and ensure implementation of comprehensive review mechanism, effective internal escalation process and an effective strategy deployment process. Senior management may consider allocating resources and organising roles &amp; responsibilities along 3 lines of defence:</p> <ul style="list-style-type: none"> <li>• First line – Engage clients to carry out initial environmental risk assessment during on-boarding clients or periodic review of existing clients</li> </ul> |

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|     |            | <ul style="list-style-type: none"> <li>○ Measure energy use, water &amp; effluent discharge, chemicals use and carbon intensities and understand their business plans for environmental risk management</li> <li>○ Assess uncertainties and developments around timing and channels of environmental risk along supply chain</li> <li>• Second line - Set-up and manage central risk frameworks that integrate front, middle and back office activities <ul style="list-style-type: none"> <li>○ Support first line activity to understand, assess and consider uncertainties and developments around timing and channels of environmental risk</li> <li>○ Develop tools for identifying and assessing environmental risks</li> <li>○ Develop scenarios, review parameters &amp; assumptions and undertake stress-testing</li> <li>○ Deliver environmental risk training</li> </ul> </li> <li>• Third line – Monitor and review the design, adequacy of controls and implementation of environmental risk management processes based on second and third line activities above</li> </ul> <p>To back up the three lines of defence, the SEC enhanced Singapore Green Labelling Scheme (SGLS+) adopts the following monitoring and control measures to facilitate escalation and enable engagement with errant organisations on remedial actions and improvement plans, based on severity of the breach.</p> <ul style="list-style-type: none"> <li>• Serving a written notice. In our User Agreement, a serious breach will lead to an automatic disqualification from the labelling scheme, with written notice given for the use of our Green Label on the company's product(s) to be immediately terminated.</li> </ul> |

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|     |            | <ul style="list-style-type: none"> <li data-bbox="584 342 1382 640">• Suspending use of the Green Label. Depending on the severity of the breach, SEC may suspend the use of our Green Label by the company for a given period of time to be determined by the Council. If it is a relatively minor breach, SEC may give the company the chance to improve their environmental performance to the standards required.</li> <li data-bbox="584 701 1382 1133">• Imposing temporary restrictions. Instead of exercising SEC’s right under this User Agreement to suspend or terminate the approval to use the Green Label, the Council may also chose to impose temporary restrictions on the user’s right to represent its product(s) as approved by SEC to qualify for use of the Green Label. SEC can choose to further subject the user to investigations, inspections, evaluations or audits that may be more than what would normally apply.</li> <li data-bbox="584 1193 1382 1447">• Non-compliance. These restrictions may also be imposed on the user should there be reasonable grounds to believe or suspect that any term of this Agreement has not been complied with. In which case, SEC reserves the right to take legal action against such acts of non-compliance.</li> </ul> <p data-bbox="531 1507 1382 1626"><b>Question 4. MAS seeks comments on the proposal for banks to designate a senior management member or a committee to oversee environmental risk, where such risk is material.</b></p> <p data-bbox="531 1686 1382 1850">Banks and finance companies should not treat environmental risk reporting to boards merely as a compliance exercise. Instead, environmental risk reporting to the board should be used to inform decision-making.</p> <p data-bbox="531 1910 1382 1984">A good practice is to require a named senior manager to be responsible for the management of environmental risks as</p> |

| S/N | Respondent | Responses from respondent  |
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|     |            | <p>overseeing material environmental risks will help to promote accountability and ownership on a day-to-day execution basis. The designated member should be vested with the authority and command of knowledge to monitor, flag and propose interventions to engage multiple actors and add rigor to processes of risk identification, risk assessment, risk control &amp; monitoring.</p> <p>A committee approach (e.g. credit risk committee) is another possible approach to decision-making. For the committee to be effective, they must be empowered by senior management and equipped with cross-functional expertise. Drawing on domain expertise is important given the lack of data and the uncertainties of environmental analysis. While promoting greater consensus and diversity of views, caution should be exercised on the available time of committee members to make decisions. To support this core committee structure, banks and finance companies may also induct environmental ‘ambassadors’ to span every level of the organisation.</p> <p>A cross-functional composition (e.g. operations, policy, technology, sustainability, finance, HR) is important to strike a balance between environmental risk, competitiveness and operational capacity. These are critical functions that impact the operational capacities and competitiveness of any organisation.</p> <p><b>Question 5. MAS seeks comments on the expectation for banks to engage each customer that poses higher environmental risk to improve its risk profile and support its transition towards sustainable business practices.</b></p> <p>In addition to the Responsible Financing Guidelines issued by the Association of Banks in Singapore (ABS) which facilitates exclusionary screening, banks and finance companies may also develop a classification / taxonomy to steer lending and investments towards green activities that are aligned with a set of environmentally-beneficial objectives.</p> |

| S/N | Respondent | Responses from respondent  |
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|     |            | <p>A classification / taxonomy benefits banks and finance companies by enabling them to originate and structure green banking products more consistently and efficiently, thereby reducing uncertainty and environmental risks. Classifications/taxonomies may be internally developed or take reference from widely-accepted versions developed externally. For a small open economy like Singapore, the reference to harmonised standards and classification/taxonomy is always favoured.</p> <p>To deploy such a classification/taxonomy, banks and finance companies will have to, in parallel, engage their corporate customers to exercise greater disclosures of their credit use. This way, banks and finance companies do not just profile their customers, they constructively engage their customer to transit towards more environmentally-beneficial activities that are aligned with the classification / taxonomy. Customer omissions of information around material environmental risks should be flagged for enhanced due diligence and/or corrective actions.</p> <p>In addition to TCFD, global reporting frameworks such as GRI Standards can be referenced for a range of environmental disclosures that inform customer risk profile. These include GRI 301 Materials, GRI 302 Energy, GRI 303 Water &amp; Effluent, GRI 304 Biodiversity, GRI 305 Emissions, GRI 306 Waste, GRI 307 Environmental Compliance and GRI 308 Supplier Environmental Assessment.</p> <p>Further to mitigating options outlined, banks and finance companies may also consider setting in a place a range of remedial actions to achieve desired outcomes, as referenced to the China Green Credit Guidelines (Feb 2012):</p> <ul style="list-style-type: none"> <li>• Revoke commitment already made to grant credit;</li> <li>• Suspend loan disbursement until the borrowers take remedy measures to satisfy bank requirements;</li> <li>• Recall loans disbursed before pre-determined time;</li> </ul> |

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|     |            | <ul style="list-style-type: none"> <li>• Exercise the right on relevant collaterals when the loans can not been paid back.</li> </ul> <p><b>Question 6. MAS seeks feedback on the expectation for banks to develop tools and metrics to monitor and assess their exposures to environmental risk, and examples of the aforementioned tools and metrics that may be adopted.</b></p> <p>Next to enhanced disclosures, the deployment of tools and metrics are critical in facilitating decision-making for effective environmental risk management. However, fewer than 10% of the industry have a robust data-driven approach to do so (Wyman 2020). Despite the gap between macro-economic and environmental risk analysis, banks should also measure and track environmental risk exposures more granularly, at the transaction level.</p> <p>Instead of starting from scratch, SEC would propose for banks and finance companies to adopt, where applicable, credible certifications as tools for portfolio screening and industry analysis. Due to their availability, market acceptance and subject to rigorous standards, credible environmental certifications offer cost-effective and expedient means for banks and finance companies to assess the green-ness of a transaction, taking into account geography and sector information.</p> <p>- Singapore Green Labelling Scheme (SGLS) -</p> <p>The Singapore Green Labelling Scheme (SGLS) is a prime example of how credible certifications create an enabling regulatory environment and signal quality for industry change. Launched in 1999 by the Singapore Environment Council, the SGLS is a 3rd party verified Type 1 Eco label that evaluates the impact of a product on a life cycle basis. Beyond the composition of a product, SGLS evaluates environmental criteria across life cycle stages of material extraction, manufacturing, transportation, packaging, use and end-of-life. SGLS thus promotes supply chain</p> |



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|     |            | <p>transparency and facilitates the incorporation of environmental &amp; social risks. By considering the impact on both the techno-sphere and biosphere, SGLS also promotes circular product considerations.</p> <p>Environmental aspects evaluated under SGLS include:</p> <ul style="list-style-type: none"> <li>• Fit for purpose – product that meets performance requirements</li> <li>• Environmental &amp; health factors – ISO 9001, 14001, 45001, 50001</li> <li>• Prohibited substances – carcinogens, mutagens, reproductive toxins, heavy metals, dioxins, flaming additives, AOX etc.</li> <li>• Energy &amp; Water consumption – resource use and intensity</li> <li>• Emissions to air – VOCs, Formaldehyde, particulate matter</li> <li>• Emission to water – suspended solids, heavy metals</li> <li>• Recycled &amp; sustainably-sourced materials – incorporate recycled content to packaging and final product, biodegradability</li> <li>• Safe storage of raw materials – effective policies &amp; procedures to prevent contaminants to water, air and soil</li> <li>• Waste management – effective policies &amp; procedures that cover manufacturing operations</li> <li>• Take-back at end-of-life – take-back for reuse, recycling, energy recovery</li> </ul> <p>- Enhanced Singapore Green Labelling Scheme (SGLS+) -</p> <p>In 2017, SEC enhanced the pulp &amp; paper category of SGLS (SGLS+) to incorporate environmental &amp; social risk and fire management considerations into the certification, going above and beyond traditional forestry auditing requirements. SGLS+ uses a comprehensive risk management profiling to complement its</p> |

| S/N | Respondent | Responses from respondent  |
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|     |            | <p>more extensive qualification criteria which are based on internationally recognised practices. In 2019, SEC was awarded ISO/IEC 17065:2012 accreditation for its SGLS+ processes which are based on impartial, independent, sound and reliable risk management profiling, making SEC the first NGO certifying body in the world to receive this accolade.</p> <p>The environmental strength of SGLS+ lies in the range of material environmental and social risk factors evaluated which are in turn translated into a risk score and assessed to be of risk levels – low (1), medium-low (1.5), medium (2), medium-high (2.5) and high (3). Companies need to demonstrate they comply with each of the 25 audit criteria under the SGLS+ certification. Under requirements of this enhanced scheme, companies are required to improve their peatland management and commit to the early detection and suppression of fires when they occur. They must also comply with the existing requirements of zero-burning on their plantations.</p> <p>In addition to desktop audits of 3rd party accredited test lab reports, site surveillance are carried out at the source (e.g. plantations, mills) to ensure that upstream supply chain practices and conditions are compliant with minimum standards. In other words, the entire supply chain of an SGLS+ applicant will be assessed and audited on site. This includes forests and plantations, pulp and paper mills and converting plants. The audit process is enabled by data transparency and documented evidence of products having met with environmental and social performance thresholds, which ultimately facilitates wider supply chain transparency and can become inputs for environmental risk models.</p> <p>The rigor and enabling role of SGLS+ to mobilise green financing for the region can be observed through the scope of the Responsible Financing Guidelines published by the Association on Banks in Singapore (ABS), which identifies pulp &amp; paper as part of the high-risk environmental sector of agriculture.</p> |

| S/N | Respondent | Responses from respondent  |
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|     |            | <p>In summary, key features of SGLS+ criteria include:</p> <ul style="list-style-type: none"> <li>• Full disclosure of supply chain - the entire supply chain of a manufacturer will now be assessed and audited. This includes forests and plantations, pulp and paper mills, converting plants as well as distributors and retail companies.</li> <li>• Fibre source - all fibre is required to be sourced from legal sources and the use of wood and fibre from protected or high conservation value areas is banned. The use of recycled fibre is required to be maximised.</li> <li>• Zero-Burning Policy - the company, owner or concessionaire in charge of the plantation is required to have a zero-burning policy.</li> <li>• Fire Management - companies are now required to undertake a comprehensive range of fire prevention and preparation activities so they can quickly detect and suppress fires before they get out of control. This includes the identification and mapping of fire risks, a fire prevention budget, engaging the community to promote alternatives to fire as a land preparation tool, daily hotspot monitoring, and putting in place firefighting training and equipment.</li> <li>• Peatland Management - proper peatland management is crucial to the prevention of haze. Peatland is a naturally water-saturated landscape and an efficient carbon sink. Uncontrolled draining of peat to plant pulpwood timber makes it susceptible to fire and releases the stored carbon. Companies are now required to protect the biodiversity of peatlands through proper assessment and water management.</li> <li>• Annual Audits - SEC will undertake annual surveillance audits of companies awarded the enhanced SGLS certification to ensure the criteria is continually met.</li> </ul> |

| S/N | Respondent | Responses from respondent  |
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|     |            | <p>More than 4,000 products from 43 countries have been certified since inception of SGLS/+. Being a member of the Global Ecolabelling Network (GEN), SEC is networked with other Type 1 Ecolabelling organisations around the world. The European Commission, which administers the EU Eco Label is also a member of GEN. In addition, SEC has also been awarded the GENICES certification which is peer review framework that promotes mutual and recognition of eco label criteria with other GEN members, thereby fostering information exchange and harmonisation with other Eco Labels at the global level.</p> <p>To encourage banks to offer green financing, SEC has partnered with HSBC to facilitate their SME Green Loan scheme. This marks the first-ever Green Loan in Singapore to draw on existing eco labelling certifications instead of the externally-reviewed bespoke Green Finance Frameworks typically associated with large corporates, thus filling a gap in SME green financing by reducing time, complexity and cost.</p> <p>- SEC Eco Certifications -</p> <p>Beyond the sourcing, production and distribution of products, environmental risks are also inherent in business management and operations activities. It is hence important to green business activities and people across industries that could have an adverse impact on the environment as they contribute to economic growth.</p> <p>Launched in 2002, SEC has expanded its Eco Certification scheme beyond corporate offices to also cover retail, F&amp;B outlets and MICE activities. These certifications offer a holistic framework that evaluates the impact of operating premises across both hardware and heart-ware features to drive sustainable practices while managing waste and improving on resource efficiency levels. Management oversight in spearheading green strategy and initiatives is also incorporated as key criterion.</p> <p>The environmental factors evaluated across these schemes include:</p> |

| S/N | Respondent | Responses from respondent  |
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|     |            | <ul style="list-style-type: none"> <li>• Eco Office Plus – Energy efficiency, Water efficiency, Waste Management, Interior Environment, Management Systems, Staff Awareness &amp; Engagement</li> <li>• Eco F&amp;B – Resource management, Sustainable procurement, Waste management and Environmental stewardship</li> <li>• Eco Events – Provides a comprehensive carbon calculation programme to enable event organisers to understand the carbon footprint of their event, quantify impact and facilitate comparison, and undertake mitigation measures via carbon offset initiatives like tree planting</li> </ul> <p>With the eco certification schemes' focus on the activities and its impact arising from green procurement choices, resource consumption, waste generation, emissions and wider environmental pollution, the schemes facilitate closer monitoring, higher levels of engagement and the implementation of improvement measures that eventually enables impact reporting for greater transparency.</p> <p>- Long term: Scenario Analyses and Stress Testing -</p> <p>Environmental risk models should be robust and responsive. To measure environmental impacts, banks may adopt quantitative metrics to assess and manage customer and portfolio risks. As more data is gathered, this enable comparisons across sector and geography.</p> <p>Banks may establish bounding metrics to check that their risk appetite does not conflict with the objective of achieving a 1.5 C future.</p> <p>Examples of quantitative metrics include</p> <ul style="list-style-type: none"> <li>• Portfolio carbon intensity per revenue dollar earned (kgCO<sub>2</sub>e/\$)</li> </ul> |

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|     |            | <ul style="list-style-type: none"> <li>• Environmental value-at-risk (VaR) metric which weights present value of climate costs &amp; profits against market value, as opposed to book value VaR</li> <li>• Assessing portfolio exposures to stranded assets</li> <li>• Exposure to fossil fuel reserves</li> </ul> <p>In addition to sector specific tools outlined in the TCFD Technical Supplement, other data modelling tools include, but are not limited to:</p> <ul style="list-style-type: none"> <li>• Vivid Economics Climate Risk Toolkit – model both physical and transition risks; paid</li> <li>• Climate Value-at-Risk (VaR) by Carbon Delta – models physical and transition risks; paid</li> <li>• ClimateWise Risk Framework by CISL – models physical and transition risks; paid</li> <li>• Ortec Finance ClimateMAPS - models physical and transition risks; paid</li> <li>• JBA Risk Management – used by BoE to model physical risks; paid</li> </ul> <p>Other Tools include:</p> <ul style="list-style-type: none"> <li>• Heat maps and detailed reports of specific situations where necessary, to highlight high risk exposures by sectors. Heat maps are able to visualise the probability and potential impact of certain risks occurring.</li> <li>• In corporate banking, measurement and reporting might support a environmentally-adjusted credit scorecard (covering cash flows, capital, liquidity diversification, and management experience) for corporate customers.</li> <li>• Banks may then choose to assign specific risk limits. Indeed, some banks have already moved to integrate these types of approaches into their loan books.</li> </ul> |

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|     |            | <ul style="list-style-type: none"> <li>• Scenario analysis, which is already commonly used to inform lending decision making, can be applied to environmental problems to assist financial institutions to understand how the concentrations of risk arising from these factors could affect investment portfolios and loan books over the near to mid-term.</li> <li>• In absence of empirical data, Banks may rely on expert judgement.</li> <li>• Scenario implied probability of default (PD), loss given default (LGD), exposure at default (EAD) will enable banks to project expected losses (EL). Examples include PACTA, 2 Degrees of Separation (2DS) and IEA Sustainable Development Scenarios (IEA B2DS).</li> <li>• Risk mitigation plan - calculate the cost/benefit ratio of each measure. The loss aversion potential (the benefit) is assessed by modelling the effect each specific measure has in reducing the loss. The cost is calculated by assessing the capital and operating expenses necessary to implement the measure.</li> </ul> <p><b>Question 7. MAS seeks comments on whether there are specific aspects of environmental risk management policies and processes that would benefit from further supervisory guidance.</b></p> <p>Banks and finance companies by themselves may find it difficult to identify useful climate scenarios, as such expertise is not typically found within their organisations. There is a need to draw on the expertise of other specialists in this domain, for example, climate scientists and meteorology specialists, in coming up with plausible and useful climate scenarios.</p> <p>Other aspects of risk management policies and processes that would benefit from supervisory guidance include:</p> <ul style="list-style-type: none"> <li>• Clarify goals of environmental risk management: Presently, banks and finance companies assessing environmental risks using scenario analysis or stress-</li> </ul> |

| S/N | Respondent | Responses from respondent  |
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|     |            | <p>testing, are likely to cover physical risks only. Beyond that, these Guidelines should encourage banks and finance companies to focus on environmental issues that bear transition risks and pose a value-at-risk or potential opportunities for long-term financial performance and impact on the real economy. The environmental risk management system should be applied to determine the potential impact on earnings volatility, capital position or business model viability.</p> <ul style="list-style-type: none"> <li>• Depth of risk assessment: With more data gathered, banks and finance companies may extend the depth of risk assessment to include sensitivity analysis and adaptive capacity analysis, on top of exposure analysis for both the corporate customers and portfolio assets. The scope of risk assessment can also broaden beyond the company or asset level to include the supply chain and macro-environmental factors.</li> <li>• ‘Tragedy of the Horizon’: As the impact of transition risks is felt over a longer term period, institutions may under-estimate their importance when assessed over a typical strategic business cycle of 3 to 5 years. Consequently, SEC proposes the transition risk of environmental factors be assessed for its impact over a longer term horizon of say, 10 to 30 years. This serves to foster long-term thinking and transparency.</li> <li>• Incentives: SEC proposes implementation of green credit be appropriately reflected in the overall KPI evaluation of senior management.</li> <li>• Supervisor statement and road map: SEC proposes banks work on a multi-year road map to communicate their strategic vision and approach to tilt customer lending and their portfolio assets to meet strategic risk and organisational objectives. Supervisors can express their expectations with a supervisory statement, setting out how banks and finance companies should manage these risks from the perspectives of governance and risk management. The Statement can</li> </ul> |



| S/N | Respondent | Responses from respondent  |
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|     |            | <p>also call for industry action and provide support to front-line supervisors in starting conversations with banks and finance companies on environmental risks.</p> <p><b>Question 8. MAS seeks comments on the proposed form and frequency of disclosure of environmental risk by a bank.</b></p> <p>SEC through the Singapore Green Labelling Scheme (SGLS/+) enables disclosure of environmental impact on a life cycle basis and promotes supply chain transparency. Beyond the proposed annual frequency of reporting referencing globally recognised frameworks such as TCFD, SEC notes that in certain jurisdictions, larger institutional investors are required to undertake stress tests and scenario analyses as frequently as semi-annually, at quarterly intervals or when their risk model and/or portfolio changes significantly.</p> <p>A key outcome of quality disclosures are that it allows for these quantitative outputs for scenarios and stress testing to be gathered:</p> <ul style="list-style-type: none"> <li>• claims and investment losses;</li> <li>• profitability;</li> <li>• capital requirement;</li> <li>• capital resources;</li> <li>• average annual loss change;</li> <li>• aggregate or occurrence exceedence;</li> <li>• market value of investments; and</li> <li>• value-at-risk (VaR) or tail value-at risk (TVaR).</li> </ul> <p><b>Question 9. MAS seeks comments on any aspects of the Guidelines that have not been covered in earlier questions.</b></p> <p>SEC would encourage all banks and finance companies to sign up to the UN Principles for Responsible Investment (PRI) initiative. Launched in 2006, UN PRI boasts over 2,800 signatories who are investors and signatories would report on Responsible</p> |

| S/N | Respondent | Responses from respondent  |
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|     |            | <p>Investment / ESG activities and progress on implementation of the 6 principles. In January 2020, UOB became the first Singapore bank to have its investment subsidiaries (UOB Asset Management, UOB Investment, UOB Global Capital) signed on as signatories to UNPRI.</p> <p>To advance MAS supervisory expectations on environmental risk management, SEC would propose for the development of sector-specific environmental risk guidelines. This can be similar to the ABS Haze Diagnostic Toolkit launched for the high-risk agricultural sectors of palm oil and pulp &amp; paper. This can be expanded to cover more high-risk sectors over time.</p> <p>Banking like most sectors, does not yet have all the environmental-risk resources it needs. As part of capacity-building, banks and finance companies may consider accumulating skills and developing proprietary systems or buying relevant IT, data, and analytics.</p> <p>Banks and finance companies may collaborate with 3P partners to integrate sustainability into education and professional training in furtherance of best practices and environmental risk management expertise through these initiatives:</p> <ul style="list-style-type: none"> <li>• Develop effective reporting systems and guidelines for impact reporting</li> <li>• Consider criteria for environmental fitness assessment of Board members</li> <li>• Integrate environmental finance into standard financial sector training</li> <li>• Integrate financial literacy and environmental finance into school curricula and tertiary education</li> <li>• Promote research programmes on blended finance to finance sustainable development</li> <li>• In partnership with IHLs, set up education programme and professional certification courses in environmental finance e.g. asset management, impact management &amp; measurement</li> </ul> |

| S/N | Respondent | Responses from respondent   |
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|     |            | <ul style="list-style-type: none"> <li>• Build, strengthen and extend existing expertise in assessing and measuring social and environmental impact investments</li> <li>• Organise regular events, conferences and workshops on environmental finance to raise awareness and showcase environmental finance initiatives and products</li> <li>• Industry dialogues and/or bilateral exchanges to promote peer-to-peer sharing of best practices that would encourage banks and finance companies to benchmark their practices against peers and against objective environmental standards and certifications.</li> </ul> <p><b>Question 10. MAS requests for examples of sound risk management practices currently implemented by banks, which would meet the expectations in the Guidelines.</b></p> <ul style="list-style-type: none"> <li>• HSBC Sustainability Risk Policy (sector-specific):<br/><a href="https://www.hsbc.com/our-approach/risk-and-responsibility/sustainability-risk">https://www.hsbc.com/our-approach/risk-and-responsibility/sustainability-risk</a></li> <li>• DBS Sustainable and Transition Finance Framework and Taxonomy:<br/><a href="https://www.dbs.com/iwov-resources/images/sustainability/responsible-banking/IBG_Sustainable_&amp;Transition_Finance_Framework_Jun2020.pdf?pid=DBS-Bank-IBG-Sustainable-Transition-Finance-Framework-Taxonomy">https://www.dbs.com/iwov-resources/images/sustainability/responsible-banking/IBG_Sustainable_&amp;Transition_Finance_Framework_Jun2020.pdf?pid=DBS-Bank-IBG-Sustainable-Transition-Finance-Framework-Taxonomy</a></li> <li>• ICBC Stress Testing:<br/><a href="http://icbcina.com/icbc/en/newsupdates/icbc_news/ICBCReleasesGreenFinanceStressTestingResults.htm">http://icbcina.com/icbc/en/newsupdates/icbc_news/ICBCReleasesGreenFinanceStressTestingResults.htm</a></li> </ul> |

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|     |               | <p><b>Question 11. MAS seeks comments on the proposed implementation approach, including the proposed transition period of 12 months.</b></p> <p>As part of a phased approach, SEC would appeal for banks and finance companies to embark on implementation of the Guidelines as early as possible during the proposed 12-month transition period. Banks and finance companies that are unable to meet the transition period, should be allowed to appeal for an extension before the transition period closes, backing up their requests with reasons. This would offer MAS some flexibility amidst the unevenness in readiness - ensuring all banks and finance companies are able to right-track themselves for full adoption of these Guidelines, while being subject to MAS' evaluation where falling short.</p> |
| 12  | Ernst & Young | <p><b>Question 1. MAS seeks comments on the entities and business activities that are in the proposed scope of the Guidelines.</b></p> <p>Nil</p> <p><b>Question 2. MAS seeks comments on the proposed responsibilities of the Board in overseeing environmental risk management, including its role in ensuring that environmental risk, where material, is addressed in the bank's risk appetite framework.</b></p> <p>Nil</p> <p><b>Question 3. MAS seeks comments on the proposed responsibilities of senior management in overseeing environmental risk management, including its role in developing an environmental risk management framework and policies, regularly reviewing their effectiveness, and allocating adequate resources to manage environmental risk.</b></p> <p>Nil</p>                        |

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|     |            | <p><b>Question 4. MAS seeks comments on the proposal for banks to designate a senior management member or a committee to oversee environmental risk, where such risk is material.</b></p> <p>Nil</p> <p><b>Question 5. MAS seeks comments on the expectation for banks to engage each customer that poses higher environmental risk to improve its risk profile and support its transition towards sustainable business practices.</b></p> <p>We support such engagements with customers which pose higher environmental risk. We view the engagement process as an integral part of managing the identified environmental risks material to the banks and on a wider ecosystem perspective, it helps tackle climate change at the global and national levels, in driving the practices of the customers through the banks. However, barriers to effective engagement need to be recognized and consideration for collaboration with other stakeholders should be included.</p> <p>To facilitate the engagement process, a phased-in approach may be more practical. Each bank could first solicit responses from their higher environmental risk customers to assess how its exposure stacks up against its risk appetite. The engagement with clients to mitigate environmental risk would progress over time with better measures and progressive targets. Mitigating measures that commensurate with the bank’s targets would follow, including incremental loan pricing for environmental risk, limits on such exposure and termination of customer relationship. That said, a recommended timeline for each phase by the MAS would ensure consistency and progress made by the industry.</p> <p>In the process of developing the engagement process, banks should have an internal process that helps borrower identify, manage, and disclose environmental risks. Banks can use their</p> |

| S/N | Respondent | Responses from respondent  |
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|     |            | <p>internal environmental risk management framework that helps identify material issues for different sectors and geographies. The bank's position on different sectors will help take a decision during the due diligence phase and identify key indicators that should be measured and communicated by the borrower. To help support the transition towards the sustainable business practice, the bank should request the borrower to keep long term targets around the key environmental factors.</p> <p><b>Question 6. MAS seeks feedback on the expectation for banks to develop tools and metrics to monitor and assess their exposures to environmental risk, and examples of the aforementioned tools and metrics that may be adopted.</b></p> <p>The development of tools and metrics for assessment of bank's exposures to environmental risk would certainly be useful, as part of a bank's enterprise risk assessment. Given the varying stages of development of the different bank participants in this area, it would be useful for the industry to also share some useful tools through MAS.</p> <p>MAS may wish to consider the "Portfolio Impact Analysis Tool for Banks" developed jointly by the Positive Impact Initiative with signatories of the Principles for Responsible Banking and UNEP FI Member Banks. The tool covers a wide sustainability spectrum and includes full banking services and may serve as a good reference for banks exploring a tool for impact assessment for their environmental risk exposures.</p> <p>Another reference source is the "Guidance for Applying Enterprise Risk Management (ERM) to Environmental, Social and Governance (ESG)-related Risks" issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and the World Business Council for Sustainable Development (WBCSD).</p> |

| S/N | Respondent | Responses from respondent  |
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|     |            | <p>The latest publication by World Economic Forum (WEF) together with the Big 4 accounting firms can also be considered to identify relevant indicators. The Sustainability Accounting Standards Board (SASB) and the Global Reporting Initiative (GRI) provide industry specific indicators that can be used to manage material environmental risks.</p> <p><b>Question 7. MAS seeks comments on whether there are specific aspects of environmental risk management policies and processes that would benefit from further supervisory guidance.</b></p> <p>Nil</p> <p><b>Question 8. MAS seeks comments on the proposed form and frequency of disclosure of environmental risk by a bank.</b></p> <p>MAS could consider leveraging on existing non-financial disclosure by banks (such as Sustainability Report, Integrated Report, Impact Report, etc.). Banks could consider using these reports to disclose its practice in relation to environmental risks. It makes it easier for external stakeholders to then refer to one source of information for such information. We would like to recommend a common framework/standard on disclosure of environmental risk as it will contribute to more accurate and higher quality information and data for the stakeholders This standardization will result in more comparable, relevant and reliable disclosures.</p> <p>Existing frequency defined by SGX is to provide a disclosure for each financial year.</p> <p><b>Question 9. MAS seeks comments on any aspects of the Guidelines that have not been covered in earlier questions.</b></p> <p>EY believes environmental/climate risk is a priority now. Greater transparency/disclosure in this area would address investor's</p> |

| S/N | Respondent | Responses from respondent  |
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|     |            | <p>growing interest on this topic. Having assurance over such disclosures would also improve market confidence.</p> <p><b>External Assurance</b><br/>To create added impetus for and trust on the disclosures of approach to managing environmental risk, MAS could consider the requirement for external assurance over the disclosures.</p> <p><b>Internal Assurance</b><br/>Additionally, or alternatively, the internal audit function can play a role in ensuring that the framework, policies and procedures established by the bank to manage environmental risk are appropriate and that the internal control environment in relation to managing environmental risk is designed and operating effectively.</p> <p><b>Overall</b><br/>The focus on environmental risk is a first step in the right direction, as we seek ways to ensure sustainability of the environment in our daily business and activities. Alongside environmental risk, we should also consider sustainability risk from a wider perspective, including social objectives, in the provision of financial services. MAS should consider guidance on managing social risks as we embark on new initiatives. A good balance would have to be struck as certain practices arising from new initiatives have negative externalities. We should also take into account the competition and realities that financial institutions in Singapore face vis-à-vis their regional and global peers. A calibrated and phased-in approach balancing short and longer-term benefits should be considered.</p> <p><b>Question 10. MAS requests for examples of sound risk management practices currently implemented by banks, which would meet the expectations in the Guidelines.</b></p> <p>Nil</p> |



| S/N | Respondent   | Responses from respondent   |
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|     |  | <p><b>Question 11. MAS seeks comments on the proposed implementation approach, including the proposed transition period of 12 months.</b></p> <p>Nil</p>  |
| 13  | Asia Securities Industry & Financial Markets Association | <p><b>Question 1. MAS seeks comments on the entities and business activities that are in the proposed scope of the Guidelines.</b></p> <p>The Asia Securities Industry &amp; Financial Markets Association (“ASIFMA”) and its members welcome the invitation to respond to the consultation paper issued by the Monetary Authority of Singapore (“MAS”) on “Proposed Guidelines on Environmental Risk Management (Banks)” (“Consultation Paper”). ASIFMA’s Asset Management Group (“AAMG”) will provide its views separately in relation to the MAS’ consultation paper on “Proposed Guidelines on Environmental Risk Management (Asset Managers).”</p> <p>In March this year, ASIFMA published its whitepaper on sustainable finance – Sustainable Finance in Asia Pacific: Regulatory State of Play (“State of Play Whitepaper”) (See <a href="https://www.asifma.org/wp-content/uploads/2020/03/sustainable-finance-in-asia-pacific.pdf">https://www.asifma.org/wp-content/uploads/2020/03/sustainable-finance-in-asia-pacific.pdf</a>) – which provides an overview of regulatory developments and frameworks adopted to date in major Asia Pacific jurisdictions and on a global scale. In particular, within the paper, ASIFMA strongly encourages policymakers in the Asia Pacific jurisdiction to coordinate with each other and apply the following principles:</p> <ul style="list-style-type: none"> <li>○ avoid requirements that are unduly complex or prescriptive, whilst being aware of unintended consequences of regulation such as market distortion and fragmentation;</li> </ul> |

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|     |            | <ul style="list-style-type: none"> <li>○ strive for consistency and compatibility whilst allowing flexibility for the variation of economic and capital markets development, a key feature of the Asia Pacific region;</li> <li>○ where possible, align policies and frameworks with international standards to avoid unnecessary complexity and unlevel playing field issues for market participants operating globally; and</li> <li>○ where standards are not yet under development, seek to encourage and catalyse development of such standards, particularly as Asia Pacific jurisdictions have unique perspectives in not only being significant recipients of sustainable finance, but also being most impacted by sustainability challenges.</li> </ul> <ul style="list-style-type: none"> <li>● We also highlighted key industry concerns within the paper, which in summary, are as follows: <ul style="list-style-type: none"> <li>○ the need for a consistent and representative taxonomy which is developed upon a common global framework of taxonomy, whilst ensuring flexibility for regional specificities;</li> <li>○ the need for a coherent and harmonised disclosure framework to have available reliable data for ensuring transparency and comparability between sustainability metrics throughout the economy;</li> <li>○ the need for a common approach to prudential risk assessment and stress testing; and</li> <li>○ the need for policymakers and regulators to be mindful of overly prescriptive policy measures which risk stifling market-led initiatives that have supported the development of sustainable finance to date.</li> </ul> </li> </ul> |

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|     |            | <p>We hope that the ASIFMA State of Play Whitepaper provides useful insight to MAS as we believe it important that policymakers and regulators take these points into consideration in light of the complex and multidimensional nature of this issue, and susceptibility to cross-jurisdictional problems.</p> <p>Specifically in relation to the proposed scope under Question 1, the industry welcomes a proportionate application of the Guidelines, recognising that banks vary in size and nature of business activities, and that the implementation of the Guidelines would be in a way that is commensurate with the size and nature of each bank's activities, as well as its risk profile.</p> <p>We note that the business activities of "extending credit to corporate customers, underwriting capital market transactions" would already fall within most banks' risk management frameworks. We would however, discourage labelling of any products or transactions to be of a certain risk profile due solely to it being compliant or non-compliant with ESG or sustainability frameworks, as this may otherwise affect the banks' own internal profiling and risk management policies.</p> <p>Our members feel that it would be helpful if MAS could also provide further clarity or specify examples of "other activities which expose it to material environmental risks", as stated in section 1.1 of the Guidelines.</p> <p>Furthermore, we would suggest that business activities with non-material environmental risk be excluded from the guideline requirements, subject to adequate periodic review, as our members feel this would allow entities in scope to better focus resources on business activities with material environmental risk.</p> <p><b>Question 2. MAS seeks comments on the proposed responsibilities of the Board in overseeing environmental risk management, including its role in ensuring that environmental</b></p> |

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|     |            | <p><b>risk, where material, is addressed in the bank’s risk appetite framework.</b></p> <p>The industry recognises the Board's share of responsibilities in identifying and managing environmental risk and addressing the challenges of climate change. We also recognise that the role of the Board and senior management in overseeing environmental risk management is aligned with the existing oversight responsibilities of the Board.</p> <p>In relation to the proposed responsibilities of the Board, ASIFMA would like to seek clarification on the following:</p> <ul style="list-style-type: none"> <li>○ whether oversight of environmental risk management, specifically with respect to non-Singapore incorporated entities, can be done by global supervision based on its global framework, with Singapore-based arrangements made to consider the Singapore-centric aspects; and</li> <li>○ whether section 3.4 of the Guidelines may be clarified to permit for delegation to one or more sub-committees.</li> </ul> <p>We would also suggest section 3.3(c) of the Guidelines be amended so that it refers to the requirement by the Board to designate specific roles and responsibilities of individuals at senior management level to deal with environmental risk, instead of the current wording which relate to the roles and responsibilities of the Board and senior management.</p> <p><b>Question 3. MAS seeks comments on the proposed responsibilities of senior management in overseeing environmental risk management, including its role in developing an environmental risk management framework and policies, regularly reviewing their effectiveness, and allocating adequate resources to manage environmental risk.</b></p> |

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|     |            | <p>On the proposed responsibilities of senior management, our members agree with the approach outlined in section 3.4 and appreciate that the responsibilities are set out in descriptive, rather than prescriptive form.</p> <p><b>Question 4. MAS seeks comments on the proposal for banks to designate a senior management member or a committee to oversee environmental risk, where such risk is material.</b></p> <p>The industry agrees with this proposal, particularly noting that this would only be applicable where risks are material.</p> <p>ASIFMA would like to seek clarification on the following:</p> <ul style="list-style-type: none"> <li>○ whether the internal committee or appointed individual approving transactions with higher environmental risk as proposed in section 4.4 of the Guidelines can be the same senior management member or committee that oversees environmental risk mentioned in section 4.2 of the Guidelines;</li> <li>○ whether such senior management member is required to be from the local offices in Singapore, or whether this person may be someone at the global offices. This is in reference to the fact (as also noted in section 1.2 of the Guidelines) that "[a] bank should implement the Guidelines in a way that is commensurate with its size and nature of its activities as well as its risk profile"; and</li> <li>○ how such requirements and responsibilities fit with the Individual Accountability Guidelines (which MAS consulted on previously).</li> </ul> <p><b>Question 5. MAS seeks comments on the expectation for banks to engage each customer that poses higher environmental risk</b></p> |

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|     |            | <p><b>to improve its risk profile and support its transition towards sustainable business practices.</b></p> <p>Some of our members have raised concerns in relation to section 4.4 of the Consultation Paper which states: “The bank should also engage each customer that poses higher risk, to improve its environmental risk profile, and support its transition towards sustainable business practices...”</p> <p>Our members feel that if this were to be a regulatory requirement, it may impose banks to be more akin to an environmental regulator of corporations rather than just a "force for good," as contemplated by the Guidelines and stated in section 2.4 of the Consultation Paper.</p> <p>Most of our members note that banks are already engaged increasingly with customers on environmental risks as a result of both the banks’ own risk management frameworks, and in response to changing commercial drivers for customers. Thus, it should not be necessary for MAS to impose on the banks mandatory obligations to engage with customers. In particular, there are concerns that the due diligence involved for purposes of assessing each customer on whether or not it poses a higher environmental risk to improving its risk profit and supporting its transition towards sustainable business practice (which may in practice, involve conducting a direct dialogue with the customer, setting of conditions, monitoring such customer's performance) would be substantively resource intensive. In that regard, we would recommend that banks be given discretion to focus on those cases where engagement is most likely to result in a positive outcome, particularly in high risk sectors. This may be a function of the bank's leverage over the particular customer, the customer's willingness to prevent or mitigate the environmental impact, and the materiality of the environmental impact. In a similar vein, our members would also like to request flexibility to define and manage exposures, as we consider the requirement to</p> |

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|     |            | <p>conduct engagement with any higher risk client to improve their environmental risk profile to be too broad.</p> <p>ASIFMA would like to seek clarification on the following:</p> <ul style="list-style-type: none"> <li>○ whilst this question states that banks are to engage each customer "that poses higher environmental risks", the drafting in section 4.4 of the Guidelines states "[a]t the customer level, MAS proposes for the banks to undertake an environmental risk assessment of each customer as part of its assessment process for credit facilities or capital market transactions, particularly for sectors with higher environmental risks". ASIFMA seeks clarification as to whether the order of assessment would be to first do an assessment on each customer's environmental risk profile, generally based on the relevant sector in which the client operates, and then to subsequently engage the customers that pose higher environmental risks. This approach would enable banks to direct appropriate and focused resources on such customers;</li> <li>○ whether MAS would be able to provide general guidelines or parameters on what it expects banks to do to improve the customer's environmental risk profile and support its transition towards sustainable business practices, for example, whether there would be a requirement for banks to have a certain level of expertise in the sustainable finance field before engaging with corporations on this aspect; and</li> <li>○ in relation to the customer review for environmental risk, whether MAS would consider excluding client level monitoring and/or engagement on environmental risk if a business activity or a portfolio has been identified as having non-material environmental risk, or if an industry or sector has generally been identified to pose limited environmental risks. For some banks, it is worth noting</li> </ul> |

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|     |            | <p>that business lines (e.g. custody services) are more middle-back office processing in nature, and the environmental impact from the services provided to clients may not be directly apparent.</p> <p>Overall, our members acknowledge and are supportive of the role that banks have to play in raising the customers' awareness about environmental risks and in supporting the customers' transition towards sustainable business practices, such as low-carbon and climate-resilient business activities. However, we are also cognisant of the importance of appropriate framework conditions for companies in the "real economy," and recognize that the financial sector is only one part of the sustainability equation. In this regard, we strongly encourage MAS to work with other agencies and regulators to apply environmental risk management regulations and frameworks and disclosure requirements across other sectors in which banks' customers operate, so that there can be a more consistent and coherent implementation of policies in managing environmental risks and developing sustainable business practices.</p> <p>Furthermore, we suggest that MAS focus on enabling the ESG data ecosystem on the back of support for clear, comparable, and detailed ESG disclosure guidelines. The focus needs to be on getting companies to provide environmental and climate change information, as addressing the problem of lack of information is most critical for progress. Regulators may subsequently consider at a future stage to partner with other agencies and regulators to support the set-up of a common, free and publicly accessible environmental and climate change database with companies' ESG information. The accessibility and transparency of ESG information would promote awareness amongst banks and corporates and facilitate the making of financial decisions for economic returns. Nevertheless, we note that a database is only as good as the data able to be obtained.</p> |



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|     |            | <p><b>Question 6. MAS seeks feedback on the expectation for banks to develop tools and metrics to monitor and assess their exposures to environmental risk, and examples of the aforementioned tools and metrics that may be adopted.</b></p> <p>The industry acknowledges and agrees with the expectations in the Guidelines for management and monitoring environmental risk.</p> <p>ASIFMA would highlight however, that MAS must also be aware of the certain inherent challenges in developing tools and metrics, and in assessing each bank's exposures to environmental risks, which include the following:</p> <ul style="list-style-type: none"> <li>○ Development of tools and methodologies is still at a nascent stage: the development of appropriate environmental risk management framework and policies is dependent on the preceding condition that the senior management be equipped with tools and methodologies for measuring, disclosing and managing wider environmental risks factors. However at present, the development of such tools and methodologies are still at a nascent stage, largely due to the unavailability of quality data for certain environmental risks, and the lack of consistent and widely applied standards for measuring and disclosing biodiversity risks and universally accepted indicators for biodiversity impacts;</li> <li>○ Availability of reliable data: The Guidelines also include climate risk change, for which data availability and reliability is lacking, and this together with the lack of historical data, amongst others, have also brought about challenges in forward-looking climate risks modelling. We would therefore request that MAS give due weight to the lack of climate related data when coming up with its guidelines, and also consider collaborating with other regulators to support the use of a common database for</li> </ul> |

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|     |            | <p>climate related risks, with consistent criteria, definitions and common reporting and data management standards. We believe this would aid in the continued development and the comparability of metrics for banks.</p> <p>Given the above challenges, ASIFMA would also further request that MAS be mindful of overly prescriptive policy measures. As we have noted in our State of Play Whitepaper (see section 2.4 of <a href="https://www.asifma.org/wp-content/uploads/2020/03/sustainable-finance-in-asia-pacific.pdf">https://www.asifma.org/wp-content/uploads/2020/03/sustainable-finance-in-asia-pacific.pdf</a> for details), global financial institutions would typically align their sustainability practices to industry developed frameworks and best practices which can be valuable in ensuring consistency in a market where consistent global regulatory and supervisory approaches have yet to be developed. This would provide due flexibility for the shifts and variations that come about as markets mature.</p> <p>We would also like to emphasise that scenario analyses and stress tests are particularly important in the management of environmental related risks. However, these should only be limited to physical and transition-related risks (rather than reputational risks, as it may be difficult to quantify such risks which would vary from institution to institution).</p> <p><b>Question 7. MAS seeks comments on whether there are specific aspects of environmental risk management policies and processes that would benefit from further supervisory guidance.</b></p> <p>We set out some examples as below which would benefit from further supervisory guidance:</p> <ul style="list-style-type: none"> <li>○ environmental and climate related data (or minimum standards) that banks should require corporate clients to disclose (including data from corporate clients);</li> </ul> |

| S/N | Respondent | Responses from respondent  |
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|     |            | <ul style="list-style-type: none"> <li>○ environmental and climate related metrics that banks should look towards assessing and in turn, what banks would be required to disclose; and</li> <li>○ setting out benchmarks for environmental risks and giving examples of key climate scenarios which could be used for risk management purposes.</li> </ul> <p>ASIFMA would like to seek clarification on the reference data sources which would be in the quantification of metrics for environmental and climate change risk assessment.</p> <p>We would like to further highlight that the development of metrics would require reliable and consistent data. However, as noted in our State of Play Whitepaper (See section 2.2 of <a href="https://www.asifma.org/wp-content/uploads/2020/03/sustainable-finance-in-asia-pacific.pdf">https://www.asifma.org/wp-content/uploads/2020/03/sustainable-finance-in-asia-pacific.pdf</a>), ESG data is difficult to obtain for reasons outlined therewithin. MAS may then have to ensure that data required for use in the metrics be easily obtainable, possibly through the imposition on banks' customers to provide the necessary information to banks, rather than having banks require the customers provide it to them by contractual means.</p> <p>The industry would like to suggest that MAS provide case studies and detailed examples of tools, methodologies and metrics to aid implementation.</p> <p>We reiterate that the tools and metrics at present, are at a nascent stage and still developing as markets evolve and the landscape continues to shape itself, in the area of environmental and climate change risks. As such, we request that MAS take into consideration the fact that a specific set of tools and metrics adopted now may be less relevant or appropriate in the future.</p> <p>We note that the maturity level of methodologies and tools / metrics to monitor and assess broader environmental risks</p> |

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|     |            | <p>beyond climate risks (such as biodiversity risk, water consumption, or pollution risk) are much less developed compared to that of climate risks – as such, the industry believes these aspects would benefit from further supervisory guidance, and regulatory expectations on the management and disclosure of these areas of risk should reflect this imbalance.</p> <p>Specifically, in the area of third-party providers of sustainability tools, we note that the market is expanding quickly, and in a rather inconsistent manner, while there exists a high level of competition in the ESG ratings space. As users of these ratings may find such market landscape confusing to navigate, we recommend that standards in relation to due diligence, transparency, and conflict of interest should be put forward to avoid unintended consequences.</p> <p><b>Question 8. MAS seeks comments on the proposed form and frequency of disclosure of environmental risk by a bank.</b></p> <p>The industry believes that the disclosure framework should be aligned with international standards and we appreciate MAS' recognition of finding reliance on group level disclosures to be appropriate. We are therefore supportive of MAS' recommendation to take reference from international reporting frameworks including the Financial Stability Board's Task Force on Climate-related Financial Disclosures.</p> <p>As to the form of disclosure, for banks listed in Singapore, we would recommend that the timing and the form of disclosure be aligned with the sustainability reporting requirement already in place. The same approach can be taken for banks listed in other markets, to reduce duplication of work and information, but be balanced with the considerations of transparency and sufficiency of details for regulatory purposes.</p> |

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|     |            | <p>Given the evolutionary nature of the Guidelines, we would also expect that the Guidelines will continue to align and converge with global standards over time.</p> <p>Lastly, our members believe that the following areas should remain at the discretion of each individual bank:</p> <ul style="list-style-type: none"> <li>○ where the proposed disclosure of climate and environmental risks should be made or filed (see the "Final Report: Recommendations of the Task Force on Climate-related Financial Disclosures" on TCFD's recommendation that preparers of climate-related financial disclosures provide such disclosures in their mainstream (ie. public) annual financial filings); and</li> <li>○ at which structural level of a customer's organisation such disclosure should be made (see for example, section 4.1.3 of HKMA White Paper on Green and Sustainable Banking, where group practice can be referred to if that applies to HK operations, and the SGX Sustainability Reporting Guideline also set out requirements for group and investment holding company reporting).</li> </ul> <p><b>Question 9. MAS seeks comments on any aspects of the Guidelines that have not been covered in earlier questions.</b></p> <p>Currently, scenario-analysis and stress testing methodologies are still underway for capturing the broader environmental risks beyond climate-related risks. We encourage further work to be conducted in this context to better understand potential transmission channels, interlinkages with climate risks, and to develop globally aligned environmental risk scenarios. We suggest MAS consider an ongoing programme of guidance and communication across all financial institutions to provide appropriate guidance as approaches to this area develop. In addition, a cross agency approach with other regulatory bodies in Singapore may help ensure consistency, and aid the development</p> |

| S/N | Respondent | Responses from respondent  |
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|     |            | <p>of a comprehensive and consistent framework for Singapore’s sustainable finance ecosystem, providing a stronger basis for implementation.</p> <p>The industry requests clarity on the definition of terms such as "green" and "material" (for example, reference may be made to the SGX-ST Sustainability Reporting Guide on the definition of "materiality" and the methodology used to determine it), and clarity in relation to the taxonomy used, and in this regard, we encourage MAS to take into consideration currently existing international and regional taxonomies to allow for harmonised implementation by international banks or banks with international customer bases.</p> <p>We also seek clarification on the consequences of non-compliance with the Guidelines, and query whether there should be any legal implications in these early stages, of transitioning to a sustainable finance landscape in the Singapore.</p> <p>We note that MAS has stated in paragraph 2.5 of the Consultation Paper that MAS is working closely with other financial supervisors at international forums, including the Network of Central Banks and Supervisors for Greening the Financial System (“NGFS”) and the Sustainable Insurance Forum, to strengthen the financial system's resilience to environmental risk, and notes that best practices for supervisors, banks and financial institutions to manage the impact of environmental risk are currently being developed at the international level. We look forward to further details from MAS on how the Guidelines would reflect the harmonisation of risk management standard of banks and financial institutions in relation to these international best practices that are underway.</p> <p>In relation to section 4.5 of the Guidelines stating that "[t]ransactions with higher environmental risk should be subject to the bank’s enhanced due diligence, which may include site visits to the customer and separate review by in-house or external</p> |

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|     |            | <p>personnel with environmental risk expertise", our members would like to emphasise that on-site visits or third party reviews should be considered in situations where the bank provides a service that is directly linked to the actual ESG labelled project / impact, for example, in the context of project finance, and should not be considered as a standard requirement for any transaction with higher environmental risk.</p> <p>As a next step, we would like to further encourage MAS to develop an overall policy roadmap outlining the following areas:</p> <ul style="list-style-type: none"> <li>○ the regulator's intentions with respect to ESG and sustainable finance related regulations and policies (for example, by setting out its plans for a standardised taxonomy, establishing data standards, harmonising disclosure requirements, setting standards for ESG ratings agencies, capacity building including training programs and subsidies for knowledge building); and</li> <li>○ details of other efforts to nudge the key players to jump start a green finance market (see for example, developments in the region such as Hong Kong Exchange's STAGE platform <a href="https://www.hkex.com.hk/eng/stage/index.htm">https://www.hkex.com.hk/eng/stage/index.htm</a>) and to link the Singapore markets to other global and regional markets on the ESG and sustainable finance front).</li> </ul> <p>This would enable market participants to have a better understanding of MAS' policy intentions, and further enable banks to more efficiently prepare for the implementation of the future regulatory framework in these aspects.</p> <p><b>Question 10. MAS requests for examples of sound risk management practices currently implemented by banks, which would meet the expectations in the Guidelines.</b></p> |

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|     |            | <p>We have listed below several examples of sound risk management practices currently being implemented by our member banks (See also the HKMA circular issued on 7 July 2020 on “Range of practices for management of climate risks” and the relevant Annex and the practices of “more advanced AIs”):</p> <ul style="list-style-type: none"> <li>○ A member bank has set up a Group-wide Climate Risk Strategy (CRS), sponsored by the Chief Risk Officer, for the implementation of the Task Force on Climate-related Financial Disclosures (TCFD) programme while at the same time supporting customers by financing and/or advising on the transition of their businesses towards low-carbon operations, technologies, products and services. The CRS is governed by a senior Steering Committee with senior management representation from five business divisions, as well as from the General Counsel, Compliance and Risk functions and the Impact Advisory and Finance department. The Committee oversees the management of climate-related risks across the bank;</li> <li>○ A member bank has identified sensitive sectors that pose greater environmental and social risks (including impacts to the climate) and has developed policies and guidelines to govern the responsible provision of financial services to clients within these sectors. The bank's internal specialist unit, Sustainability Affairs, evaluates whether a particular client's activities are consistent with the relevant industry standards and whether the transaction is compatible with its policies and guidelines for sensitive sectors. Based on the outcome of this analysis, the Sustainability Affairs submits its findings to a Reputational Risk Approver who is a senior manager independent from the area of business in question, or to the respective Reputational Risk Committees. They have the authority to approve, reject or impose conditions on our participation in a</li> </ul> |



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|     |            | <p>transaction or the establishment of a client relationship. In cases of particularly complex or cross-divisional transactions, the decision may be referred to the Position &amp; Client Risk (PCR) cycle of the Capital Allocation &amp; Risk Management Committee (CARMC). The PCR cycle of CARMC, chaired by the Group's Chief Risk Officer, is the most senior governing body responsible for the oversight and active discussion of reputational risks and sustainability issues (including climate change); and</p> <ul style="list-style-type: none"> <li>○ as a participant in the Paris Agreement Capital Transition Assessment (PACTA), a member bank is currently working with the think tank 2° Investing Initiative (2°ii) and 17 other international banks to develop and test methodologies for measuring the alignment of corporate lending portfolios with the Paris Agreement.</li> </ul> <p>We would also like to mention that through a comparative analysis of the proposed regulatory requirements of key regulators in this region (notably MAS and HKMA) which has been prepared with the help of Ernst &amp; Young, an ASIFMA member firm, our members generally observe the two jurisdictions' sets of regulatory expectations to be closely aligned (though wording and ordering may differ in parts), and are largely in line with what is expected of a good risk management system for environmental risk. As the majority of ASIFMA's membership and their clients operate globally and regionally between Singapore and Hong Kong as their major operating hubs in APAC, we underscore the criticality to ensure that wide divergence does not occur between the regulatory frameworks and standards across the region. We would be keen, in this regard, to share this comparative table with MAS to serve as a useful reference, and as a supplement to our submission. Please ask us if you wish to receive a copy of our analysis.</p> |

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|     |            | <p><b>Question 11. MAS seeks comments on the proposed implementation approach, including the proposed transition period of 12 months.</b></p> <p>The industry is generally supportive of the proposed implementation approach, but would strongly encourage that the Guidelines take into consideration the following:</p> <ul style="list-style-type: none"> <li>○ reflect international reporting standards, namely the TCFD's recommendations and the EU Non-Financial Reporting Directive, and disclosure obligations on banks and non-bank corporates are aligned (given that the disclosure obligations of banks are interlinked with the information obtained by the banks' customers);</li> <li>○ the implementation be done in phases, to take into account the lack of availability of data, tools and metrics for integration of environmental and climate risks and other risk quantification methodologies. We would like to request an overall policy roadmap to be developed on what may be expected at different phases (including MAS' expectations on banks during and after the implementation period with respect to the adoption of the guidelines); and</li> <li>○ the implementation timeline to take into account expected timelines in other key jurisdictions to ensure a consistent implementation process as many of our members are also subject to regulations in other jurisdictions that may be more complex and take longer to be finalised. This would also ensure unintended consequences, such as unlevel playing fields, are mitigated.</li> </ul> <p>In relation to the proposed transition period, we ask that MAS consider extending the transition period to 18 months, after taking into account the implementation timeline of similar regulations in other jurisdictions (e.g. EU, Hong Kong, etc.), and as such, we would like to suggest a phased-in implementation period to be aligned to mid-2022. We also believe it would be helpful if</p> |

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|     |                            | <p>MAS is more explicit about its expectations of banks during and after the implementation period with respect to the adoption of the guidelines, especially given that the industry may not be ready to achieve a complete implementation of the guidelines for the reasons laid out in our response to Question 6.</p> <p>ASIFMA would like to thank MAS for considering our comments. We look forward to further engaging with MAS on these issues going forward, and remain at your disposal in the development of the proposed Guidelines, and also on future work in relation to addressing climate change and the development of a more green and sustainable financial market ecosystem. (This submission was prepared with the assistance of the law firm Rajah &amp; Tann Singapore LLP, an ASIFMA member, based on feedback from the wider ASIFMA membership.)</p> |
| 14  | Carbon Care Asia Pte. Ltd. | <p><b>Question 1. MAS seeks comments on the entities and business activities that are in the proposed scope of the Guidelines.</b></p> <p>-</p> <p><b>Question 2. MAS seeks comments on the proposed responsibilities of the Board in overseeing environmental risk management, including its role in ensuring that environmental risk, where material, is addressed in the bank’s risk appetite framework.</b></p> <p>-</p> <p><b>Question 3. MAS seeks comments on the proposed responsibilities of senior management in overseeing environmental risk management, including its role in developing an environmental risk management framework and policies, regularly reviewing their effectiveness, and allocating adequate resources to manage environmental risk.</b></p> <p>-</p>   |

| S/N | Respondent | Responses from respondent  |
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|     |            | <p><b>Question 4. MAS seeks comments on the proposal for banks to designate a senior management member or a committee to oversee environmental risk, where such risk is material.</b></p> <p>-</p> <p><b>Question 5. MAS seeks comments on the expectation for banks to engage each customer that poses higher environmental risk to improve its risk profile and support its transition towards sustainable business practices.</b></p> <p>-</p> <p><b>Question 6. MAS seeks feedback on the expectation for banks to develop tools and metrics to monitor and assess their exposures to environmental risk, and examples of the aforementioned tools and metrics that may be adopted.</b></p> <p>Apart from considering the customer and portfolio levels, banks should also assess whether environmental risks “could cause net cash outflows or depletion of liquidity buffers and, if so, incorporate these factors into their liquidity risk management and liquidity buffer calibration”, as suggested by the European Central Bank’s draft Guide on Climate-related and environmental risks.</p> <p><b>Question 7. MAS seeks comments on whether there are specific aspects of environmental risk management policies and processes that would benefit from further supervisory guidance.</b></p> <p>-</p> <p><b>Question 8. MAS seeks comments on the proposed form and frequency of disclosure of environmental risk by a bank.</b></p> <p>-</p> |

| S/N | Respondent | Responses from respondent  |
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|     |            | <p>Question 9. MAS seeks comments on any aspects of the Guidelines that have not been covered in earlier questions.</p> <p>-</p> <p>Question 10. MAS requests for examples of sound risk management practices currently implemented by banks, which would meet the expectations in the Guidelines.</p> <p>-</p> <p>Question 11. MAS seeks comments on the proposed implementation approach, including the proposed transition period of 12 months.</p> <p>-</p>  |
| 15  | HL Bank    | <p>Question 1. MAS seeks comments on the entities and business activities that are in the proposed scope of the Guidelines.</p> <p>-</p> <p>Question 2. MAS seeks comments on the proposed responsibilities of the Board in overseeing environmental risk management, including its role in ensuring that environmental risk, where material, is addressed in the bank's risk appetite framework.</p> <p>-</p> <p>Question 3. MAS seeks comments on the proposed responsibilities of senior management in overseeing environmental risk management, including its role in developing an environmental risk management framework and policies, regularly reviewing their effectiveness, and allocating adequate resources to manage environmental risk.</p> |

| S/N | Respondent | Responses from respondent   |
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|     |            | <p>-</p> <p><b>Question 4. MAS seeks comments on the proposal for banks to designate a senior management member or a committee to oversee environmental risk, where such risk is material.</b></p> <p>-</p> <p><b>Question 5. MAS seeks comments on the expectation for banks to engage each customer that poses higher environmental risk to improve its risk profile and support its transition towards sustainable business practices.</b></p> <p>The bank foresees challenges -</p> <ul style="list-style-type: none"> <li>i. in transposing the risk management tools into the credit process and credit documentation for each borrower; and</li> <li>ii. to clearly communicate to the borrower that the failure to meet environmental targets would result in actual and immediate repercussions on the borrower.</li> </ul> <p><b>Question 6. MAS seeks feedback on the expectation for banks to develop tools and metrics to monitor and assess their exposures to environmental risk, and examples of the aforementioned tools and metrics that may be adopted.</b></p> <p>In paragraph 4.3 of the Guidelines, MAS recommends that FIs "develop sector-specific policies, which clearly articulate the bank's expectations towards an existing or prospective customer, and where possible, take into account internationally recognised sustainability standards and certification schemes".</p> <p>Where reference is made to an external sustainability rating agency / provider, the challenge is that borrowers will have little control over, e.g., the frequency of the rating. Should the external rating not be available, the bank and borrower may face the difficulty of not being able to risk-assess the borrower.</p> |

| S/N | Respondent | Responses from respondent   |
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|     |            | <p>In addition, environmental, social, and governance ("ESG") performance may be difficult to measure, and even ESG ratings by prominent ESG rating agencies may diverge.</p> <p><b>Question 7. MAS seeks comments on whether there are specific aspects of environmental risk management policies and processes that would benefit from further supervisory guidance.</b></p> <p>MAS could provide further guidance on:</p> <ul style="list-style-type: none"> <li>• Performing scenario analysis and stress testing on borrowers;</li> <li>• Developing tools on monitoring of environmental risk exposures at portfolio level.</li> </ul> <p><b>Question 8. MAS seeks comments on the proposed form and frequency of disclosure of environmental risk by a bank.</b></p> <p>-</p> <p><b>Question 9. MAS seeks comments on any aspects of the Guidelines that have not been covered in earlier questions.</b></p> <p>-</p> <p><b>Question 10. MAS requests for examples of sound risk management practices currently implemented by banks, which would meet the expectations in the Guidelines.</b></p> <p>-</p> <p><b>Question 11. MAS seeks comments on the proposed implementation approach, including the proposed transition period of 12 months.</b></p> <p>-</p> |

| S/N | Respondent                | Responses from respondent   |
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| 16  | Tata Consultancy Services | <p><b>Question 1. MAS seeks comments on the entities and business activities that are in the proposed scope of the Guidelines.</b></p> <p>Proposed scope is acceptable and is commensurate with regulation intent.</p> <p><b>Question 2. MAS seeks comments on the proposed responsibilities of the Board in overseeing environmental risk management, including its role in ensuring that environmental risk, where material, is addressed in the bank’s risk appetite framework.</b></p> <p>Acceptable. We would recommend a Senior Manager regime to complement the Board oversight.</p> <p><b>Question 3. MAS seeks comments on the proposed responsibilities of senior management in overseeing environmental risk management, including its role in developing an environmental risk management framework and policies, regularly reviewing their effectiveness, and allocating adequate resources to manage environmental risk.</b></p> <p>The data aggregation mechanism that Senior Management overseeing environmental risk management establishes for Climate Risk management should have granularity at Customer level, Portfolio Level, Asset Line/ Sector, and Investment Line. This requirement should be clearly stated as part of the Guideline.</p> <p><b>Question 4. MAS seeks comments on the proposal for banks to designate a senior management member or a committee to oversee environmental risk, where such risk is material.</b></p> <p>The data that is qualified by a mechanism and quantified as Environmental material risk should then be used for ALL disclosures uniformly (TCFD/ Internal/ External). Such data be ratified by Board for effectiveness of data aggregation measures and methodology.</p> |



| S/N | Respondent | Responses from respondent   |
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|     |            | <p><b>Question 5. MAS seeks comments on the expectation for banks to engage each customer that poses higher environmental risk to improve its risk profile and support its transition towards sustainable business practices.</b></p> <p>No comment.</p> <p><b>Question 6. MAS seeks feedback on the expectation for banks to develop tools and metrics to monitor and assess their exposures to environmental risk, and examples of the aforementioned tools and metrics that may be adopted.</b></p> <p>Banks/ Asset managers should be supported in their data aggregation mechanisms with comparable taxonomy within each sector (Similar to the EU Green Bond Taxonomy). This will help sector wise comparability and roll-up for co-operative efforts such as NGFS.</p> <p><b>Question 7. MAS seeks comments on whether there are specific aspects of environmental risk management policies and processes that would benefit from further supervisory guidance.</b></p> <p>The set of Climate parameters specific to the island nation (Singapore) should be made mandatory for all Financial institutions operating within Singapore.</p> <p><b>Question 8. MAS seeks comments on the proposed form and frequency of disclosure of environmental risk by a bank.</b></p> <p>The form and frequency for a bank, should be matched with the same for all firms in Singapore.</p> <p><b>Question 9. MAS seeks comments on any aspects of the Guidelines that have not been covered in earlier questions.</b></p> <p>None</p> |

| S/N | Respondent | Responses from respondent  |
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|     |            | <p><b>Question 10. MAS requests for examples of sound risk management practices currently implemented by banks, which would meet the expectations in the Guidelines.</b></p> <p>-</p> <p><b>Question 11. MAS seeks comments on the proposed implementation approach, including the proposed transition period of 12 months.</b></p> <p>Instead of the proposed transition period of 12 months, a split of 9 months &amp; additional 3 months is recommended. Data aggregation and metrics at 9 months and next 3 months for Internal Audit/ Stress Test and Governance Oversight before disclosure/ reporting to MAS.</p>  |
| 17  | RHB Bank   | <p><b>Question 1. MAS seeks comments on the entities and business activities that are in the proposed scope of the Guidelines.</b></p> <p>No comments</p> <p><b>Question 2. MAS seeks comments on the proposed responsibilities of the Board in overseeing environmental risk management, including its role in ensuring that environmental risk, where material, is addressed in the bank's risk appetite framework.</b></p> <p>RHB agrees with MAS' proposed responsibilities of the Board in overseeing environmental risk management.</p> <p>RHB seeks clarity from MAS on the parameters and boundaries of environmental risk. RHB also opines that MAS should define the parameters, boundaries and considerations of environmental risk, as environmental risk encompasses a wide spectrum of categories and examples such as climate risk, deforestation risk, water security risk, pollution risk, biodiversity loss risk, etc. Clarity</p> |

| S/N | Respondent | Responses from respondent  |
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|     |            | <p>on examples of types of environmental risks will enable banks to define its risk appetite and implement specific controls.</p> <p><b>Question 3. MAS seeks comments on the proposed responsibilities of senior management in overseeing environmental risk management, including its role in developing an environmental risk management framework and policies, regularly reviewing their effectiveness, and allocating adequate resources to manage environmental risk.</b></p> <p>RHB agrees with MAS' proposed responsibilities of senior management in overseeing environmental risk management.</p> <p><b>Question 4. MAS seeks comments on the proposal for banks to designate a senior management member or a committee to oversee environmental risk, where such risk is material.</b></p> <p>RHB agrees with MAS' proposed responsibilities of senior management in overseeing environmental risk management.</p> <p><b>Question 5. MAS seeks comments on the expectation for banks to engage each customer that poses higher environmental risk to improve its risk profile and support its transition towards sustainable business practices.</b></p> <p>RHB opines that MAS should provide awareness sessions, capability building and technical workshops for banks, which is critical to raise the level of awareness and knowledge. This is particularly important for (i) the development, refinement and implementation of sector-specific policies; (ii) the development of assessments for environmental risk for each customer as part of the assessment process for credit facilities and/or capital markets transactions; and (iii) ability to engage customers to improve their environmental risk profile and support their transition towards sustainable business practices.</p> |

| S/N | Respondent | Responses from respondent  |
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|     |            | <p>RHB opines that the development of sector-specific policies or guidelines / guidance notes should be undertaken by MAS in consultation with banks and insurance companies, as stances on certain commitments should be consistent across all local banks (e.g. through the prohibition of the financing of new coal-fired power plants). This will promote a level playing field and a consistent tone from the top by MAS across the country. Depending on the criticality and severity of the stance, foreign banks may be required to adopt a similar stance.</p> <p>RHB is supportive of MAS' proposal for banks to consider mitigating actions, which may include an increased cost for the additional risk in the loan pricing, applying limits on the loan exposure and potentially re-assessing the customer relationship for recalcitrant customers who are not supportive of the transition towards sustainable business practices.</p> <p><b>Question 6. MAS seeks feedback on the expectation for banks to develop tools and metrics to monitor and assess their exposures to environmental risk, and examples of the aforementioned tools and metrics that may be adopted.</b></p> <p>RHB opines that the development of metrics to monitor and assess exposures to environmental risk should be undertaken by MAS in consultation with banks and insurance companies. This would ensure consistency in the measurement and disclosures by banks to MAS.</p> <p>Banks may develop and implement their respective tools to monitor and assess its exposure to environmental risk in a way that is commensurate with the size, maturity and risk profile of the bank.</p> <p>RHB opines that MAS should provide awareness sessions, capability building and technical workshops for banks, which is critical to raise the level of awareness and knowledge. This is particularly important for (i) the measurement of carbon intensity</p> |

| S/N | Respondent | Responses from respondent  |
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|     |            | <p>of portfolios; (ii) consideration of impact of environmental risk on valuation of collaterals and (iii) methods of assessments of exposure to environmental risk.</p> <p><b>Question 7. MAS seeks comments on whether there are specific aspects of environmental risk management policies and processes that would benefit from further supervisory guidance.</b></p> <p>As highlighted in RHB’s response within Question 5 and Question 6, banks would benefit from further supervisory guidance in the development of sector-specific policies and metrics to monitor and assess exposures to environmental risks. This would ensure consistency in implementation of environmental risk management processes, disclosure in reporting and a clear understanding of expectations.</p> <p><b>Question 8. MAS seeks comments on the proposed form and frequency of disclosure of environmental risk by a bank.</b></p> <p>RHB seeks guidance from MAS to clarify if the bank’s disclosure would be in the form of corporate reporting (public information) or in the form of report correspondences to MAS.</p> <p>RHB seeks guidance from MAS for clarity on the disclosure guidelines for foreign banks.</p> <p>RHB also seeks guidance from MAS for clarity on the timeline for banks to begin disclosing its environmental risk. RHB also seeks MAS’ kind consideration to provide a transition period for smaller and less matured banks, whom require additional time to understand and disclose its environmental risk impacts according to the guidelines as appropriate.</p> <p>RHB opines MAS should establish defined quantitative metrics for banks’ disclosure to ensure consistency across banks which facilitates benchmarking.</p> |

| S/N | Respondent  | Responses from respondent   |
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|     |             | <p>RHB is supportive of MAS' proposal to take reference from TCFD recommendations to guide environmental risk disclosures.</p> <p><b>Question 9. MAS seeks comments on any aspects of the Guidelines that have not been covered in earlier questions.</b></p> <p>No comments</p> <p><b>Question 10. MAS requests for examples of sound risk management practices currently implemented by banks, which would meet the expectations in the Guidelines.</b></p> <p>No comments</p> <p><b>Question 11. MAS seeks comments on the proposed implementation approach, including the proposed transition period of 12 months.</b></p> <p>RHB opines that the proposed transition period of 12 months is too short and RHB seeks MAS' kind consideration for smaller and less matured banks, whom may require additional time to understand and implement the guidelines as appropriate. At the same time, RHB seeks MAS' kind consideration to supplement banks with additional guidance and support in terms of awareness sessions and capability building to accelerate the learning curve.</p> <p>RHB also seeks MAS' kind consideration for additional time in its proposed transition period for foreign banks who are less matured such as ourselves, where our head office is starting on this journey on integrating ESG considerations in decision-making and need time to align with the expectations from the different regulatory bodies apart from MAS.</p> |
| 18  | Calvin Quek | <p><b>Question 1. MAS seeks comments on the entities and business activities that are in the proposed scope of the Guidelines.</b></p> <p>-</p>   |

| S/N | Respondent | Responses from respondent  |
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|     |            | <p><b>Question 2. MAS seeks comments on the proposed responsibilities of the Board in overseeing environmental risk management, including its role in ensuring that environmental risk, where material, is addressed in the bank’s risk appetite framework.</b></p> <p>-</p> <p><b>Question 3. MAS seeks comments on the proposed responsibilities of senior management in overseeing environmental risk management, including its role in developing an environmental risk management framework and policies, regularly reviewing their effectiveness, and allocating adequate resources to manage environmental risk.</b></p> <p>Senior Management should also be responsible for proper public disclosure of ERM risks.</p> <p><b>Question 4. MAS seeks comments on the proposal for banks to designate a senior management member or a committee to oversee environmental risk, where such risk is material.</b></p> <p>-</p> <p><b>Question 5. MAS seeks comments on the expectation for banks to engage each customer that poses higher environmental risk to improve its risk profile and support its transition towards sustainable business practices.</b></p> <p>Rather than based solely at the customer level, an E&amp;S (environmental and social) risk assessments should rely on a fit-for-purpose principle.</p> <p>For some customers with portfolio of risk assets, the E&amp;S (environmental and social) issues may differ significantly in scope and depth. Thus, it may be more appropriate to go with asset-</p> |

| S/N | Respondent | Responses from respondent  |
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|     |            | <p>level assessment of E&amp;S risk, specific to the characteristics of the asset and market instrument. In other cases, it may be appropriate for the bank to do an assessment of the customer's E&amp;S system, as opposed to individual assets.</p> <p><b>Question 6. MAS seeks feedback on the expectation for banks to develop tools and metrics to monitor and assess their exposures to environmental risk, and examples of the aforementioned tools and metrics that may be adopted.</b></p> <p>-</p> <p><b>Question 7. MAS seeks comments on whether there are specific aspects of environmental risk management policies and processes that would benefit from further supervisory guidance.</b></p> <p>-</p> <p><b>Question 8. MAS seeks comments on the proposed form and frequency of disclosure of environmental risk by a bank.</b></p> <p>Regarding point 4.4: " To inform its assessment, the bank should develop sector-specific policies, which articulate its expectations towards customers in sectors with higher environmental risk." - Sector specific policies should be publicly disclosed so that the bank can benefit from public input and engagement.</p> <p>Regarding point 4.7: "A bank's disclosure may be consolidated at the group or head office level", - Consolidation at a group or head office level may obfuscate material information regarding environmental risks. Instead, disclosure should be principles-based, where the level of disclosure is commensurate with the materiality of the information to be made public.</p> <p>Regarding point 4.2: "MAS also proposes that the Board ensure that environmental risk, where material, is addressed in the bank's risk appetite framework, so that environmental risk</p> |



| S/N | Respondent | Responses from respondent  |
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|     |            | <p>exposures beyond the bank’s risk appetite can be promptly recognised and addressed." - Material environmental risk should also be disclosed in the risk commentary sections of public filings.</p> <p><b>Question 9. MAS seeks comments on any aspects of the Guidelines that have not been covered in earlier questions.</b></p> <p>It would be better to separate climate risk management from environmental risk management (ERM).</p> <p>ERM is a longstanding practice that seeks to “do no harm” with respect with environmental assets and socials, as the natural habitat and local communities. In contrast, climate risk management is a more specialized field that covers two areas physical risks and transition risks.</p> <p>In addition, while ERM typically relies on local regulation within in a framework of compliance, Climate Risk is a much faster moving field, relying both on regulation and physical risk attributes, and raises both risks and opportunities that lends analysis of the issue through both the lens of compliance and increasingly, performance measurement.</p> <p>As an example regarding climate risk and changing dynamics, Singapore’s NDC’s are “highly insufficient” according to Climate Action Tracker (<a href="https://climateactiontracker.org/countries/singapore/">https://climateactiontracker.org/countries/singapore/</a>). As such, given the Paris Accord is designed to allow for regularly increase in a country’ climate ambition and NDCs, it would be good to mention that policies outlined in any final ERM guidelines with respect to climate are likely to be adjusted accordingly to changes in national climate policy.</p> <p><b>Question 10. MAS requests for examples of sound risk management practices currently implemented by banks, which would meet the expectations in the Guidelines.</b></p> |

| S/N | Respondent       | Responses from respondent  |
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|     |                  | <p>-</p> <p><b>Question 11. MAS seeks comments on the proposed implementation approach, including the proposed transition period of 12 months.</b></p> <p>There should be a more phased and sophisticated approach towards implementation.</p> <p>It will take time to analyse ERM practices, build appropriate systems, train staff, and to complete other activities towards implementation. Ensuring self-compliance is challenging enough to say nothing of customer compliance. There are also legal issues to consider.</p>  |
| 19  | WWF<br>Singapore | <p><b>Question 1. MAS seeks comments on the entities and business activities that are in the proposed scope of the Guidelines.</b></p> <p>The proposed scope of entities, and the modalities of application (commensurate with the size and nature of banks' activities as well as their risk profile) is satisfactory. The modalities of application to business activities (corporate lending and underwriting for capital market transactions, as well as "to other activities that expose it to material environmental risk" is also satisfactory and in line with good practices (i.e. not only directed towards lending).</p> <p>WWF Singapore does not have additional comments on this question.</p> <p><b>Question 2. MAS seeks comments on the proposed responsibilities of the Board in overseeing environmental risk management, including its role in ensuring that environmental risk, where material, is addressed in the bank's risk appetite framework.</b></p> |

| S/N | Respondent | Responses from respondent  |
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|     |            | <p>The proposed responsibilities of the Board, as outlined in section 3.3 of the proposed ERM Guidelines (points a. to d.) are satisfactory and in line with good practices, such as the NGFS Guide for Supervisors published in May 2020 (in particular, recommendation #4 on setting supervisory expectations), as well as with the TCFD recommendations. It is indeed crucial that the Board provides a clear direction (tone from the top) and ensures that adequate resources are made available throughout the relevant teams.</p> <p>Where the Board designates a senior management member or a committee to oversee environmental risk, as described in article 3.2, WWF Singapore recommends to set a clear expectation for the Board to establish communication procedures between the Board and the designated senior management member or committee, including through regular reporting to the Board. Notwithstanding these arrangements, the Board and senior management should remain responsible for their respective duties, as set out in section 3.3 and 3.4 of the Guidelines.</p> <p>A critical success factor for the successful implementation of the ERM Guidelines (and the proper management of climate and environmental risks in general), is to ensure that key staff are equipped with the adequate knowledge and understanding of the issues at stake and how they can be addressed in a banking context. This is particularly important for key decision-makers in the bank (Board and senior management). While training and capacity building are explicitly addressed in the proposed ERM Guidelines (notably in section 4.15), WWF Singapore recommends to clarify and strengthen the following paragraph: "3.3 The Board [...] is responsible for: d. ensuring adequate Board and senior management expertise and resources for managing environmental risk, including through training and capacity building".</p> <p>In addition, for the Board members to be able to effectively carry out their oversight responsibility, and for key staff to have the right incentives, WWF Singapore believes it is necessary to add the following expectations in the ERM Guidelines:</p> |

| S/N | Respondent | Responses from respondent  |
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|     |            | <ul style="list-style-type: none"> <li>• Formally include sustainability considerations in the Board charter / terms of reference</li> <li>• Include sustainability-related criteria in the appraisal and remuneration policy of board members</li> </ul> <p>This last point is mentioned as a good practice expected by certain supervisors in the NGFS Guide for Supervisors published in May 2020 (section 4.2.1). Of note, the recently issued BSP Circular #1085 stipulates that Philippine banks' Board of Directors will have "Ensure that the sustainability agenda is integrated in the bank's performance appraisal system". The KPIs underlying the CBIRC's Green Credit Guidelines also refer to the inclusion of sustainability-related indicator in the performance appraisal system of bank staff (KPI #5.23.1: "The banking institutions shall integrate green credit indicators into the overall performance appraisal and evaluation system and conduct related review periodically to relevant functional and geographical business units, including: [...] (2) Appraisal and evaluation indicators relevant to environmental and social risk management").</p> <p><b>Question 3. MAS seeks comments on the proposed responsibilities of senior management in overseeing environmental risk management, including its role in developing an environmental risk management framework and policies, regularly reviewing their effectiveness, and allocating adequate resources to manage environmental risk.</b></p> <p>The proposed responsibilities of the senior management, as outlined in section 3.4 of the proposed ERM Guidelines (points a. to e.) are satisfactory and in line with good practices, such as the NGFS Guide for Supervisors published in May 2020 (in particular, recommendation #4 on setting supervisory expectations). It is particularly important that the senior management is tasked with ensuring a proper implementation of a bank's strategy, that it provides regular updates to the Board, and that it allocates resources and ensures appropriate expertise is available.</p> |

| S/N | Respondent | Responses from respondent  |
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|     |            | <p>WWF Singapore also recommends that training expectations for senior management are clarified, and that sustainability-related criteria are included in the appraisal and remuneration policy for senior management (please refer to the answers to question #2).</p> <p><b>Question 4. MAS seeks comments on the proposal for banks to designate a senior management member or a committee to oversee environmental risk, where such risk is material.</b></p> <p>Yes, this is an important point, in line with what other leading supervisors such as the UK PRA are expecting from their supervised banks. This is also highlighted as a good practice, and an expectation from several supervisors, in the NGFS Guide for Supervisors (May 2020). However, we do believe that environmental risks such as climate change – defined as an existential challenge and national priority for Singapore – should be considered as material across a broad range of sectors.</p> <p>Given the lack of a standardized definition of "materiality", and the extensive use of this materiality qualifier throughout the Guidelines, WWF Singapore recommends that, during the supervision process, banks are expected to provide MAS with details on the qualitative and/or quantitative analysis performed to determine which risks are material to the bank and which are not. MAS would then be able to discuss and potentially challenge the bank in order to refine the analysis over time (taking into account new developments, tools, data availability, etc.). Please also refer to the further comments on materiality in the answer to question 9.</p> <p><b>Question 5. MAS seeks comments on the expectation for banks to engage each customer that poses higher environmental risk to improve its risk profile and support its transition towards sustainable business practices.</b></p> |

| S/N | Respondent | Responses from respondent   |
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|     |            | <p>WWF Singapore considers that the expectations set for banks on the identification and management of environmental risks related to their customers are clearly laid out and in line with good practices. In particular, it is positive to see the reference to "internationally recognised sustainability standards and certification schemes", that should be taken into account "where possible" by banks in their sector-specific policies (Risk Identification and Assessment, paragraph 4.3).</p> <p>However, WWF Singapore recommends that the reference to such standards and certification schemes is kept in the Risk Management and Monitoring section. More specifically, in section 4.8: "4.8 The bank should engage each customer that poses higher environmental risk, to improve the customer's environmental risk profile and support its transition towards sustainable business practices over time, in line with internationally recognised sustainability standards and certification schemes, and while maintaining the bank's risk management standards".</p> <p>In paragraph 4.8, WWF Singapore recommends that the specific provisions related to customers that have a higher environmental risk or those that do not manage such risk adequately (developing a time-bound action plan, using financing conditions or covenants, etc.), should also be applicable to customers that do not comply with the applicable sector-specific policies set by the bank.</p> <p><b>Question 6. MAS seeks feedback on the expectation for banks to develop tools and metrics to monitor and assess their exposures to environmental risk, and examples of the aforementioned tools and metrics that may be adopted.</b></p> <p>WWF Singapore fully supports MAS' expectation for banks to develop tools and metrics to monitor and assess their exposures to environmental risk, which is important both at individual customer and portfolio level, and recommends to:</p> |

| S/N | Respondent | Responses from respondent  |
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|     |            | <ul style="list-style-type: none"> <li>• Use science-based and forward-looking tools. These tools should focus on climate change related impacts such as the PACTA tool (developed by 2Dii, methodology for banks to be released in 2020), as well as environmental issues beyond climate such as water or deforestation. The tools, leveraging geospatial technology and data, are developing rapidly and include platforms such as the Water Risk Filter (developed by WWF) or Global Forest Watch (developed by WRI).</li> <li>• Set science-based targets. The Science Based Targets initiative (SBTi) is currently finalising its methodology for financial institutions to climate-related targets. Methodologies for numerous other industry sectors are available, with more in development. Beyond environmental risk management measures, setting such targets is critical to meet the climate goals under the Paris Agreement, and banks have a critical role to play, both in setting their own targets and working with their customers to do so. WWF Singapore would like to point to a number of useful resources that are available, such as the Aligning Finance For One Planet framework (and associated reports accessible through this webpage) as well as a recent report commissioned by the French Ministry for the Ecological and Inclusive Transition and WWF France that provides a comparative assessment of various portfolio-alignment methodologies (The Alignment Cookbook).</li> <li>• Understand the dependencies of industry sectors on natural capital and ecosystem services, using tools such as ENCORE</li> </ul> <p>The analysis generated by these different tools, complemented by insights from direct engagement with customers, can be compiled in internal dashboards that offer a comprehensive view of a bank's exposure to certain environmental risks, that can also be broken down by industry sectors and/or geographies.</p> |

| S/N | Respondent | Responses from respondent   |
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|     |            | <p>WWF Singapore fully supports MAS' inclusion of scenario analysis in the ERM Guidelines as we believe this is a key tool to evaluate portfolio resilience and measure exposure to climate-related and other environmental risks. We would recommend that MAS provides further guidance on the scenarios that banks should use as reference in their analysis - specifying the mention of "conservative and regularly reviewed assumptions" used in article 5.3, and in line with the recent reports and guidance issued by the NGFS. This would ensure consistency across the Singaporean banking industry.</p> <p>Banks should also include a scenario that addresses a higher level of warming such as 3C or 4C, whilst recognising the limitation of existing climate scenarios. For example, as noted in the recent NGFS guidance report on climate scenarios<sup>1</sup>, most climate models do not take into account tipping points in the climate system such as the loss of important ecosystems such as coral reefs, meaning that they could be an underestimate of the true impacts of climate change.</p> <p><b>Question 7. MAS seeks comments on whether there are specific aspects of environmental risk management policies and processes that would benefit from further supervisory guidance.</b></p> <p>WWF Singapore recommends that the ERM Guidelines be more explicit in that sector policies developed and implemented by banks should contain minimum requirements for their customers to go beyond applicable E&amp;S laws and regulations.</p> <p>WWF Singapore recommends that the ERM Guidelines make a more explicit mention of three lines of defence. Whereas "internal controls" are already mentioned in 4.1.c, this could be clarified by mentioning the need for the internal audit and compliance functions to perform controls, or simply by using the "three lines of defence" terminology, which is widely understood within the banking industry.</p> |



| S/N | Respondent | Responses from respondent   |
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|     |            | <p><b>Question 8. MAS seeks comments on the proposed form and frequency of disclosure of environmental risk by a bank.</b></p> <p>WWF Singapore fully supports the need for banks to disclose their approach to managing environmental risks and the potential impact of material environmental risk on the bank, including quantitative metrics, and to disclose such information on an annual basis.</p> <p>It is also encouraging to see clear expectations for banks to use the TCFD recommendations as the reference for their climate-related disclosures. The number of institutions supporting the TCFD recommendations is continuously growing and there are increasing calls to make TCFD reporting mandatory, especially as countries strengthen their climate commitments ahead of COP26.</p> <p>WWF Singapore recommends that banks are expected to disclose their sector-specific policies, as well as the sectors or activities that they do not support (exclusionary principles).</p> <p><b>Question 9. MAS seeks comments on any aspects of the Guidelines that have not been covered in earlier questions.</b></p> <p><u>Defining materiality</u></p> <p>Throughout the Guidelines terminology such as “where relevant” or “where material” is used. Hence, we recommend that the Guidelines include a definition of materiality and guide banks in how to carry out robust materiality analysis (alternatively, such guidance can be provided separately). During the supervision process, MAS can also consider requiring banks to provide details on the qualitative and/or quantitative analysis performed to determine which risks are material to their banking activities and which are not. MAS would then be able to discuss, and potentially challenge, the bank in order to refine the analysis over time</p> |

| S/N | Respondent | Responses from respondent  |
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|     |            | <p>(taking into account new developments, tools, data availability, etc.).</p> <p>WWF Singapore would recommend referring to the double materiality perspective highlighted in the EU Non-Financial Reporting Directive (mentioned in these guidelines from the European Commission, starting p6), looking both at the material impacts of environmental risks on the bank, and at the material impacts of the bank on the environment (e.g. through its customers). In particular, it is important to note the following text: “the two risk perspectives already overlap in some cases and are increasingly likely to do so in the future. As markets and public policies evolve in response to climate change, the positive and/or negative impacts of a company on the climate will increasingly translate into business opportunities and/or risks that are financially material.” Therefore, both perspectives on risk and materiality are important to consider for robust environmental risk management and banks should be encouraged to consider both.</p> <p>Further resource on materiality include:</p> <ul style="list-style-type: none"> <li>• the SASB Materiality Map<sup>®</sup> which identifies “sustainability issues that are likely to affect the financial condition or operating performance of companies within an industry”, or</li> <li>• GRI Universal Standards (GRI 101: Foundation) which define material topics as those that reflect an “organization’s significant economic, environmental and social impacts; or that substantively influence the assessments and decisions of stakeholders.”</li> <li>• The report published by the Climate Disclosure Standards Board on Materiality and climate-related financial disclosures.</li> </ul> <p><u>Suggested wording changes when defining environmental risks</u></p> |

| S/N | Respondent | Responses from respondent  |
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|     |            | <p>For paragraph 2.1 (current wording): “Environmental risk arises from the potential adverse impact of changes in the environment on economic activities and human well-being”</p> <p>Suggested wording: “Environmental risk refers to the potential adverse impact of environmental issues on banks and their customers”</p> <p>For paragraph 2.2 (current wording): “Environmental risk poses potential financial and reputational impact to banks (refer to Diagram A for illustration). The financial impact on banks’ portfolios and activities can arise through physical and transition risk channels”</p> <p>Suggested wording: “Environmental risk translates into potential financial and reputational impact to banks, through various transmission channels (refer to Diagram A for illustration). Environmental risks are typically classified as either physical risks or transition risks”</p> <p>For paragraph 2.3 (suggested addition in red): “Through these transmission channels, environmental risk can translate into known financial risk types for banks including: a. Credit risk [...] Market risk [...] Liquidity risk [...] Operational risk [...]”</p> <p><u>Diagram A</u></p> <p>To clarify the risk transmission channels, WWF would recommend to replace Diagram A by the more detailed figures 1 &amp; 2 in the NGFS Guide for Supervisors (May 2020, p13).</p> <p><u>Implementation of the guidelines</u></p> <p>WWF Singapore recommends adding a description of how MAS will ensure the proper implementation of the Guidelines by the banks.</p> |

| S/N | Respondent | Responses from respondent   |
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|     |            | <p><u>Social risk management</u></p> <p>As a next step, WWF Singapore strongly recommends that MAS develops and implements similar guidelines / supervisory expectations for the management of social risks.</p> <p><b>Question 10. MAS requests for examples of sound risk management practices currently implemented by banks, which would meet the expectations in the Guidelines.</b></p> <p>WWF Singapore has developed the Sustainable Banking Assessment tool (SUSBA), that assesses and tracks progress on the integration of environmental &amp; social considerations by a number of Southeast Asian and international banks. The detailed assessment results (accessible after free registration to the platform) allows the identification of banks that score positively on each indicator, thereby highlighting good practices. Links to the source of information are provided.</p> <p><b>Question 11. MAS seeks comments on the proposed implementation approach, including the proposed transition period of 12 months.</b></p> <p>WWF Singapore considers that 12 months is a reasonable and realistic transition period, given that (i) the 3 Singaporean banks are well advanced on their sustainability journey and have already started to put in place many of the measures proposed in the ERM Guidelines, (ii) international banks in general have robust E&amp;S risk management policies in place, and (iii) regional banks active in Singapore are also subject to increasing expectations from their national supervisors, very much in line with the proposed ERM Guidelines.</p> <p>Additionally, WWF Singapore believes that in any case where banks consider the Guidelines not to be applicable or feasible they should be required to provide a justification. While we understand the increased supervisory workload this would entail,</p> |

| S/N | Respondent   | Responses from respondent   |
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|     |              | <p>such a measure would help MAS to better understand the extent to which the Guidelines are being adopted, and any implementation challenge faced by the industry.</p> <p>While we are very much conscious of the impact of Covid19 on the banks' (and their clients') activities, it is widely acknowledged that climate-related and environmental risks are ever increasing and should be embedded in robust policies and decision-making processes without delay.</p>   |
| 20  | Respondent A | <p><b>Question 1. MAS seeks comments on the entities and business activities that are in the proposed scope of the Guidelines.</b></p> <p>-</p> <p><b>Question 2. MAS seeks comments on the proposed responsibilities of the Board in overseeing environmental risk management, including its role in ensuring that environmental risk, where material, is addressed in the bank's risk appetite framework.</b></p> <p>-</p> <p><b>Question 3. MAS seeks comments on the proposed responsibilities of senior management in overseeing environmental risk management, including its role in developing an environmental risk management framework and policies, regularly reviewing their effectiveness, and allocating adequate resources to manage environmental risk.</b></p> <p>-</p> <p><b>Question 4. MAS seeks comments on the proposal for banks to designate a senior management member or a committee to oversee environmental risk, where such risk is material.</b></p> <p>-</p> |

| S/N | Respondent | Responses from respondent   |
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|     |            | <p><b>Question 5. MAS seeks comments on the expectation for banks to engage each customer that poses higher environmental risk to improve its risk profile and support its transition towards sustainable business practices.</b></p> <p>Banks currently assess client’s creditworthiness as well as the level of AML Risk presented. To include a separate risk matrix to assess the environmental risk may be too onerous on the bank.</p> <ul style="list-style-type: none"> <li>• Is there an expectation to refresh the environmental risk assessment on regular basis? If yes, what is the proposed timeframe?</li> <li>• Is the assessment of environmental risk applicable to customers who are natural persons and would being a senior employee or owner of a company that is deemed to pose high environmental risk be considered as a risk criteria?</li> </ul> <p><b>Question 6. MAS seeks feedback on the expectation for banks to develop tools and metrics to monitor and assess their exposures to environmental risk, and examples of the aforementioned tools and metrics that may be adopted.</b></p> <p>Is there an expectation on the frequency on the conduct of scenario analysis and stress testing and can this be conducted at a group level?</p> <p><b>Question 7. MAS seeks comments on whether there are specific aspects of environmental risk management policies and processes that would benefit from further supervisory guidance.</b></p> <p>It would be good if the guidelines could provide a sample list of high environmental risk sectors (.e.g are oil exploration / refineries considered as high environmental risk sectors?) as well as more prescriptive threshold levels (e.g. what is deemed as high / acceptable in relation to carbon intensity / greenhouse emission</p> |

| S/N | Respondent   | Responses from respondent  |
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|     |              | <p>levels). This will also help the industry set a consistent / uniform approach.</p> <p><b>Question 8. MAS seeks comments on the proposed form and frequency of disclosure of environmental risk by a bank.</b></p> <p>1. The bank currently discloses information on its approach to managing environmental risk via its group website and is updated as when there are changes which should meet the disclosure requirements standards.</p> <p>2. It might be worth disclosing the impacts of environmental risks before disclosing its approach to managing such environmental risks via its group website.</p> <p><b>Question 9. MAS seeks comments on any aspects of the Guidelines that have not been covered in earlier questions.</b></p> <p>-</p> <p><b>Question 10. MAS requests for examples of sound risk management practices currently implemented by banks, which would meet the expectations in the Guidelines.</b></p> <p>-</p> <p><b>Question 11. MAS seeks comments on the proposed implementation approach, including the proposed transition period of 12 months.</b></p> <p>-</p> |
| 21  | Respondent B | <p><b>Question 1. MAS seeks comments on the entities and business activities that are in the proposed scope of the Guidelines.</b></p> <p>-</p>  |

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|     |            | <p><b>Question 2. MAS seeks comments on the proposed responsibilities of the Board in overseeing environmental risk management, including its role in ensuring that environmental risk, where material, is addressed in the bank’s risk appetite framework.</b></p> <p>-</p> <p><b>Question 3. MAS seeks comments on the proposed responsibilities of senior management in overseeing environmental risk management, including its role in developing an environmental risk management framework and policies, regularly reviewing their effectiveness, and allocating adequate resources to manage environmental risk.</b></p> <p>The climate breakdown is urgent, and bank policies to manage environmental risks need to reflect that. MAS should require banks to develop sector-specific policies on coal power and deforestation and set a reasonably immediate timeframe for development of policies in other sectors with high environment risk like oil and gas, chemicals, mining and agriculture. Banks need to be held accountable for environmental commitments and be required to be transparent in reporting progress against their stated stance. MAS should require banks to make public whether they see climate risk as a material environmental risk and if they do not, to provide grounds for their stance in their public reporting.</p> <p>Independent reviews are fundamental for ensuring accountability as well as alignment to industry best practices. MAS should require that the process by which a bank uses to identify material environmental risk, policy development and implementation processes be subject to third-party and independent review.</p> <p><b>Question 4. MAS seeks comments on the proposal for banks to designate a senior management member or a committee to oversee environmental risk, where such risk is material.</b></p> |



| S/N | Respondent | Responses from respondent  |
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|     |            | <p>I think it's vital for banks to think carefully, the role they can play in preventing projects that come with potential environmental risk from receiving access to capital. However, this risk assessment and the associated commercial calls can only be taken by officers with appropriate level of seniority within the organisation. The designated officers or committees should have clearly defined responsibility on identifying and managing environmental risk and should ideally report to a C Level executive within the bank.</p> <p><b>Question 5. MAS seeks comments on the expectation for banks to engage each customer that poses higher environmental risk to improve its risk profile and support its transition towards sustainable business practices.</b></p> <p>Where banks believe certain customers need to improve their profile with respect to environmental management, they should agree a time based and clearly defined plan with their customers to reduce the customers' environmental risk profile as part of the bank's ongoing commitment to provide funding support. In such instances funding packages can contain clear and objective environmental covenants just as they contain customary financial covenants that customers need to adhere to presently.</p> <p><b>Question 6. MAS seeks feedback on the expectation for banks to develop tools and metrics to monitor and assess their exposures to environmental risk, and examples of the aforementioned tools and metrics that may be adopted.</b></p> <p>-</p> <p><b>Question 7. MAS seeks comments on whether there are specific aspects of environmental risk management policies and processes that would benefit from further supervisory guidance.</b></p> <p>-</p> |

| S/N | Respondent   | Responses from respondent  |
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|     |              | <p><b>Question 8. MAS seeks comments on the proposed form and frequency of disclosure of environmental risk by a bank.</b></p> <p>-</p> <p><b>Question 9. MAS seeks comments on any aspects of the Guidelines that have not been covered in earlier questions.</b></p> <p>-</p> <p><b>Question 10. MAS requests for examples of sound risk management practices currently implemented by banks, which would meet the expectations in the Guidelines.</b></p> <p>-</p> <p><b>Question 11. MAS seeks comments on the proposed implementation approach, including the proposed transition period of 12 months.</b></p> <p>-</p> |
| 22  | Respondent C | <p><b>Question 1. MAS seeks comments on the entities and business activities that are in the proposed scope of the Guidelines.</b></p> <p>-</p> <p><b>Question 2. MAS seeks comments on the proposed responsibilities of the Board in overseeing environmental risk management, including its role in ensuring that environmental risk, where material, is addressed in the bank's risk appetite framework.</b></p> <p>Currently, there are a number of committees set up and tasked with different roles to oversee environmental risk on a global basis at our Head Office. As a smaller FI, we hope to leverage on</p>    |

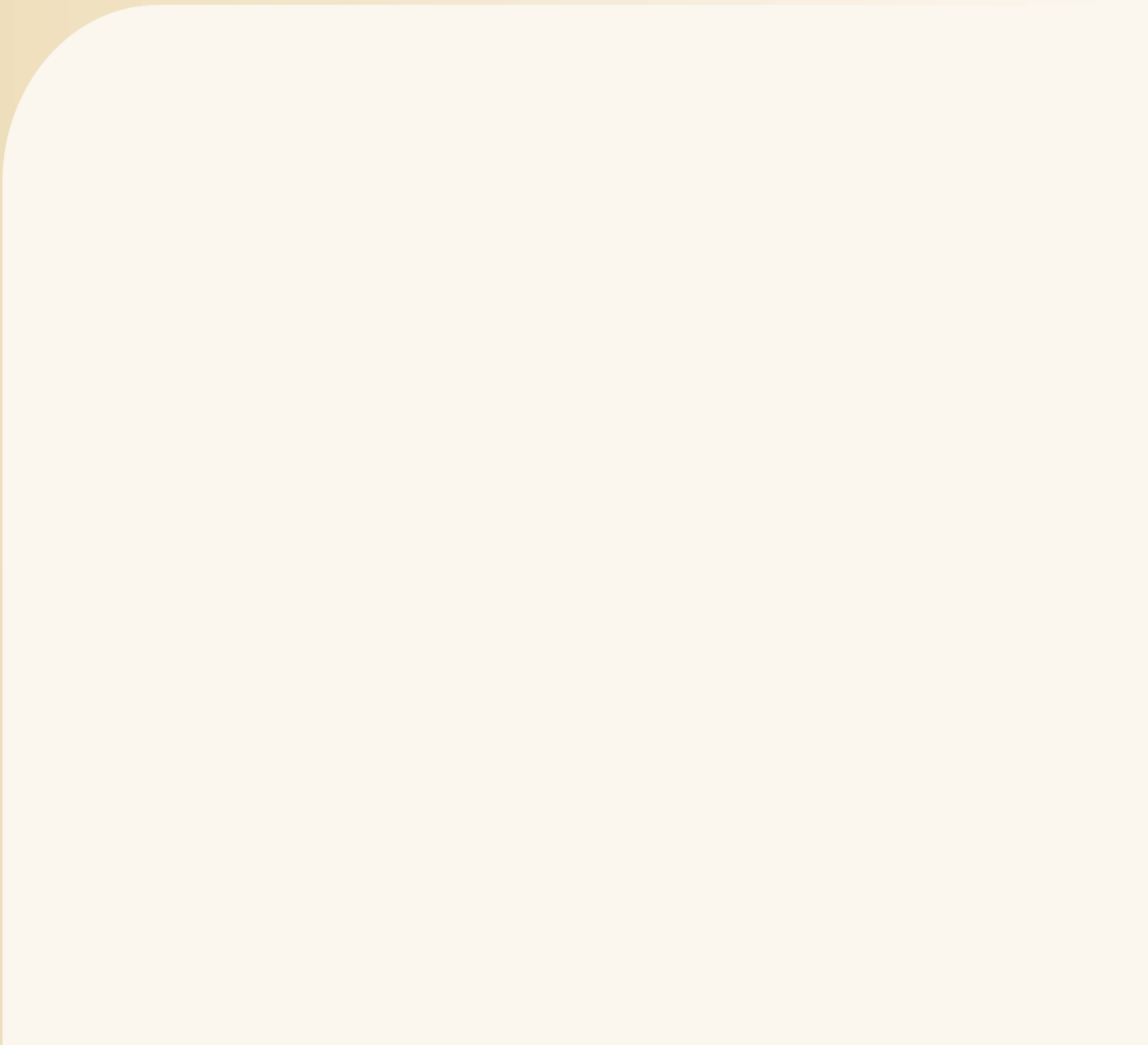
| S/N | Respondent | Responses from respondent  |
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|     |            | <p>Head Office set up in particular to the requirements relating to the role and responsibilities, the framework and policies.</p> <p><b>Question 3. MAS seeks comments on the proposed responsibilities of senior management in overseeing environmental risk management, including its role in developing an environmental risk management framework and policies, regularly reviewing their effectiveness, and allocating adequate resources to manage environmental risk.</b></p> <p>Currently, there are a number of committees set up and tasked with different roles to oversee environmental risk on a global basis at our Head Office. As a smaller FI, we hope to leverage on Head Office set up in particular to the requirements relating to the role and responsibilities, the framework and policies.</p> <p><b>Question 4. MAS seeks comments on the proposal for banks to designate a senior management member or a committee to oversee environmental risk, where such risk is material.</b></p> <p>Currently, there are a number of committees set up and tasked with different roles to oversee environmental risk on a global basis at our Head Office. As a smaller FI, we hope to leverage on Head Office set up in particular to the requirements relating to the role and responsibilities, the framework and policies.</p> <p><b>Question 5. MAS seeks comments on the expectation for banks to engage each customer that poses higher environmental risk to improve its risk profile and support its transition towards sustainable business practices.</b></p> <p>-</p> <p><b>Question 6. MAS seeks feedback on the expectation for banks to develop tools and metrics to monitor and assess their exposures to environmental risk, and examples of the aforementioned tools and metrics that may be adopted.</b></p> |

| S/N | Respondent | Responses from respondent   |
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|     |            | <p>Some aspects of the requirements may be challenging to smaller FIs to fully comply to the requirement. In particular, the paper calls on Banks to develop capabilities in scenario analysis and stress testing to assess the impact of environmental risk on its risk profile and business strategies, and explore its resilience to financial losses, incorporating forward looking information. Perhaps some additional guidance / information can be made available to help FIs establish portfolio level management controls as part of the aforementioned requirements. It will also be helpful to provide some guidance on the monitoring and reporting expectations should Banks that are incorporated outside of Singapore be allowed to tap on their Head Office set up (e.g. will there be a requirement to produce separate reporting if monitoring and management is centralised at Head Office outside Singapore).</p> <p><b>Question 7. MAS seeks comments on whether there are specific aspects of environmental risk management policies and processes that would benefit from further supervisory guidance.</b></p> <p>-</p> <p><b>Question 8. MAS seeks comments on the proposed form and frequency of disclosure of environmental risk by a bank.</b></p> <p>-</p> <p><b>Question 9. MAS seeks comments on any aspects of the Guidelines that have not been covered in earlier questions.</b></p> <p>-</p> <p><b>Question 10. MAS requests for examples of sound risk management practices currently implemented by banks, which would meet the expectations in the Guidelines.</b></p> |

| S/N | Respondent   | Responses from respondent   |
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|     |              | <p>-</p> <p><b>Question 11. MAS seeks comments on the proposed implementation approach, including the proposed transition period of 12 months.</b></p> <p>-</p>   |
| 23  | Respondent D | <p><b>Question 1. MAS seeks comments on the entities and business activities that are in the proposed scope of the Guidelines.</b></p> <p>-</p> <p><b>Question 2. MAS seeks comments on the proposed responsibilities of the Board in overseeing environmental risk management, including its role in ensuring that environmental risk, where material, is addressed in the bank's risk appetite framework.</b></p> <p>-</p> <p><b>Question 3. MAS seeks comments on the proposed responsibilities of senior management in overseeing environmental risk management, including its role in developing an environmental risk management framework and policies, regularly reviewing their effectiveness, and allocating adequate resources to manage environmental risk.</b></p> <p>-</p> <p><b>Question 4. MAS seeks comments on the proposal for banks to designate a senior management member or a committee to oversee environmental risk, where such risk is material.</b></p> <p>-</p> |

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|     |            | <p><b>Question 5. MAS seeks comments on the expectation for banks to engage each customer that poses higher environmental risk to improve its risk profile and support its transition towards sustainable business practices.</b></p> <p>Include an element of financial materiality not just environmental risk materiality. Important to also consider what is material to the financial resilience of the bank. Suggest to add a qualifier that it is the bank’s responsibility to deal with material risks and those customers who pose an environmental risk where that risk is impactful to the bank’s overall risk appetite. Might differ across different bank activities. Financial materiality must be considered for customers with high environmental risks.</p> <p>Banks could introduce transition pathways for their clients as part of engagement – the practical steps needed depending on clients’ maturity. A transition pathway would be suitable for addressing mid-to-longer term challenges such as climate change.</p> <p>Worth differentiating the environmental risk in question. Some environmental issues present immediate hazards like pollution-related or damage to the local environment which are not necessarily linked to climate change, transition or physical risks. These immediate hazards are associated with compliance and regulations.</p> <p><b>Question 6. MAS seeks feedback on the expectation for banks to develop tools and metrics to monitor and assess their exposures to environmental risk, and examples of the aforementioned tools and metrics that may be adopted.</b></p> <p>-</p> <p><b>Question 7. MAS seeks comments on whether there are specific aspects of environmental risk management policies and processes that would benefit from further supervisory guidance.</b></p> |

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|     |            | <p>-</p> <p><b>Question 8. MAS seeks comments on the proposed form and frequency of disclosure of environmental risk by a bank.</b></p> <p>-</p> <p><b>Question 9. MAS seeks comments on any aspects of the Guidelines that have not been covered in earlier questions.</b></p> <p>-</p> <p><b>Question 10. MAS requests for examples of sound risk management practices currently implemented by banks, which would meet the expectations in the Guidelines.</b></p> <p>-</p> <p><b>Question 11. MAS seeks comments on the proposed implementation approach, including the proposed transition period of 12 months.</b></p> <p>If the banks are expected to develop tools and also implement within 12 months, they might not achieve much progress especially if the banks are starting from scratch.</p> |



Monetary Authority of Singapore