The Asia Securities Industry & Financial Markets Association (ASIFMA)

Prudential Treatment of Climate-related Risks and Stress Testing in Asia Pacific

February 2022
Field Work Phases

1. Supervisory Practice Stock Take

Compile a comprehensive list of supervisory guidelines and requirements relevant to the Asia Pacific Region (APAC).

This includes supervisory requirements that are currently issued or are in the process of being developed.

2. Gap Analysis of Supervisory Requirements

Perform a comparison of respective APAC requirements against the 6 BCBS Principles relating to supervisor expectations.

From this comparison we will provide an overview of:

- **Geographic analytics** related to alignment of local guidelines to BCBS principals
- **Geographic maturity** in management and supervision of climate-related financial risks
- **Key themes in APAC** management and supervision of climate-related financial risks

3. Scenario Analysis & Stress Testing

Identify existing stress testing scheduling and scenario analysis guidelines across APAC countries.

Where appropriate, advise on:

- Industry advocacy for NGFS reference scenarios
- Application of climate stress testing in a prudential regulatory context
KEY THEMES

Stock Take

• Supervisors have published various forms of documents related to climate risks, ranging from guidelines (Australia Hong Kong, Singapore), green finance frameworks (South Korea, Thailand) and official speeches (China, India).

• The BCBS proposed framework for the management of climate-related financial risk is more detailed than any regional guidance.

Gap Analysis

• Guidance provided by regional regulators on climate risk management aligns to the BCBS principles with varying levels of coverage.

• Regulators that have focused on frameworks for green financing may introduce requirements that extend the BCBS principles, for instance by influencing bank risk appetites or recommending that customers be incentivised for reducing emissions via differential pricing.

• Few regulators have published commitments to build the capability required to monitor compliance with climate risk management obligations.

Stress Testing

• Climate risk guidance introduces new requirements for banks to conduct scenario analysis, by changing the scenario designs and increasing the time-frames over which bank performance is to be forecast.

• Most regions will conduct 30-year climate stress tests in the next 12 months.

• Supervisory review of stress test outcomes will help banks and supervisors determine the data, systems and resources required to support an orderly transition to net zero carbon emissions.
Oceania

Reserve Bank of India: N/A

China Banking and Insurance Regulatory Commission: N/A

Financial Services Agency: Building a financial system that supports a sustainable society

Financial Services Commission: Climate Risk Management and Supervision: Current status and future plans

Hong Kong Monetary Authority: Range of practices for management of climate risks

Financial Services Authority: Application of Sustainable Finance to Financial Services Institutions, et al.

Bangko Sentral ng Pilipinas: Sustainable finance framework

Monetary Authority of Singapore: Guidelines on Environmental Risk Management for Banks

Australian Prudential Regulation Authority: CPG 229 Climate Change Financial Risks

Reserve Bank of New Zealand: Climate Change Report

Bank Negara Malaysia: Climate Change and Principle-based Taxonomy, Climate Risk Management and Scenario Analysis Exposure Draft

Thai Bankers Association: N/A

Contributed to ASEAN Central Banks in managing climate and environment-related risks, 2020

Member of Bank of International Settlements (Basel Committee)
**Timeline of Regulatory Guideline**

- **2017**: POJK Technical Guidelines for the Implementation of Sustainable Finance for the Banking Sector
- **2018**: TBA Sustainable Banking Guidelines Responsible Lending
- **2019**: BSNP Sustainable Finance Framework
- **2020**: MAS Guidelines on Environmental Risk Management for Banks
- **2021**: Report on The Roles of ASEAN Central Banks

**Timeline of Stress Testing Schedule**

- **Late 2021**: No stress testing schedule yet established
- **Q1 2022**: APRA Prudential Practice Guide – CPG 229 Climate Change Financial Risk
- **Q2 2022**: HKMA Supervisory Policy Manual – Climate Risk Management
- **Q3 2022**: FSA Basic Guidelines on Climate Transition Finance
- **Q4 2022**: BNM CBM Climate Change and Principal-based Taxonomy
- **2023**: MAS Guidelines on Climate Risk Management and Scenario Analysis - Exposure Draft
- **2024**: FSC Green Finance Policy

Analysis based on speeches by senior regulators in 2021

- 2017: POJK Technical Guidelines for the Implementation of Sustainable Finance for the Banking Sector
- 2018: TBA Sustainable Banking Guidelines Responsible Lending
- 2019: BSNP Sustainable Finance Framework
- 2020: MAS Guidelines on Environmental Risk Management for Banks
- 2021: Report on The Roles of ASEAN Central Banks
## CONVERGENCE BETWEEN SUPERVISORY STATEMENTS AND THE 6 BCBS SUPERVISORY PRINCIPLES (PART 1)

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<th>Principle</th>
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58% of supervisory statements have either semi-, strong or full convergence with BCBS principles, particularly in ensuring consistent definition of climate related physical and transition risks as well as ensuring consistent definition of materiality. However, more extensive gaps were identified in assessment of effectiveness of board and senior management oversight.

Principle 13: Incorporating risks (banks)

67% of supervisory statements have not specified review of the extent to which banks regularly assess the materiality of climate-related financial risks. While the review of bank risk appetite statements and key risk indicators were mentioned more regularly, the inclusion of emerging climate risk concentrations in banks’ internal reporting was rarely mentioned.

Principle 14: Monitoring risks (banks)

67% of supervisory statements do not yet oblige banks to comprehensively identify and assess the impact of climate-related drivers on their risk profile including credit, market, liquidity and operational risks. However, there are commitments and plans underway to establish frameworks for climate risk stress testing.

Principle 15: Assessing impacts (banks)

75% of supervisory statements do not schedule supervisory reviews or establish time-frames over which bank management of climate-related financial risk should be embedded. Nevertheless, there are developments via platforms such as ASEAN Central Banks for managing climate & environment-related risks.

Principle 16: Assessing management (supv)

All 12 supervisory statements have either minimal or no reference to ensuring that they have adequate resources and capacity to effectively assess supervised banks’ management of climate-related financial risks. This is the principle with the weakest evidence of convergence with BCBS principles, such as taking stock of existing skills and projected requirements.

Principle 17: Ensuring capacity (supv)

75% of supervisory statements have not considered using climate-related risk scenario analysis, including stress testing. There are commitments and plans underway to establish frameworks for climate risk stress testing, as outlined in forums such as among ASEAN Central Banks and Network for Greening the Financial System (NGFS) Declaration for COP26.

Principle 18: Climate scenarios (supv)
10  and ensure credit risk management systems and processes consider material climate as part of their assessments of banks' risk appetite and risk management frameworks.

Principle 4: Banks should incorporate climate-related financial risks into their internal control frameworks across the three lines of defence to ensure sound, comprehensive and effective identification, measurement and mitigation of material climate-related financial risks.

Principle 5: Banks should identify and quantify climate-related financial risks and incorporate those assessed as material over relevant time horizons into their internal capital and liquidity adequacy assessment processes.

Principle 6: Banks should identify, monitor and manage all climate-related financial risks that could materially impair their financial condition, including their capital resources and liquidity positions.

Principle 7: Risk data aggregation capabilities and internal risk reporting practices should account for climate-related financial risks. Banks should seek to ensure that their internal reporting systems are capable of monitoring material climate-related financial risks and producing timely information to ensure effective board and senior management decision-making.

Principle 8: Banks should understand the impact of climate-related risk drivers on their credit risk profiles and ensure credit risk management systems and processes consider material climate-related financial risks.

Principle 9: Banks should understand the impact of climate-related risk drivers on their market risk positions and ensure that market risk management systems and processes consider material climate-related financial risks.

Principle 10: Banks should understand the impact of climate-related risk drivers on their liquidity risk profiles and ensure that liquidity risk management systems and processes consider material climate-related financial risks.

Principle 11: Banks should understand the impact of climate-related risk drivers on their operational risk and ensure that risk management systems and processes consider material climate-related risks.

Principle 12: Where appropriate, banks should make use of scenario analysis, including stress testing, to assess the resilience of their business models and strategies to a range of plausible climate-related pathways and determine the impact of climate-related risk drivers on their overall risk profile.

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Principle 13: Supervisors should ensure that banks can adequately identify, monitor and manage all material climate-related risks as part of their overall risk management framework and in line with their risk appetite. Supervisors should determine that banks have in place a scenario analysis programme, including stress testing, which could include, for example: (i) exploring the impact of climate change and the transition to a low-carbon economy on supervised banks’ strategies and the resiliency of their business models; (ii) identifying and assessing relevant climate-related risk drivers affecting individual banks or the banking system; (iii) evaluating the impact of climate-related risk drivers on their business models; and (iv) informing the adequacy of supervised banks’ risk management frameworks, including their risk mitigation options.

64. Supervisors should set expectations in a manner proportionate to the nature, scale and complexity of relevant banks’ activities. Supervisors should determine that banks have in place a scenario analysis programme, including stress testing, that is proportionate to their size, business model and complexity, in order to assess the resilience of their business models and strategies to a range of plausible climate-related outcomes. As part of the assessment, supervisors should review and, where necessary, challenge model assumptions, methodologies and results.

65. Supervisors should consider using climate-related risk scenario analysis, including stress testing, to identify relevant risk factors, size portfolio exposures, identify data gaps and inform the adequacy of risk management approaches. Where appropriate, supervisors should consider disclosing the findings of these exercises. (Reference principles: BCP 8, BCP 9, BCP 10, BCP 20)

66. Supervisors should ensure that they have adequate resources and capacity to effectively assess supervised banks’ management of climate-related financial risks. (Reference principles: BCP 9)

67. Supervisors should consider the level of uncertainty associated with emerging climate-related financial risks and keep abreast of emerging practices in scenario design and implementation.

68. As scenario analysis continues to evolve, supervisors should recognise the limitations of their analyses when communicating their results or using them in supervisory assessments. Ongoing dialogue among supervisors and between supervisors and banks will contribute to the development of deeper insights on banks’ climate-related vulnerabilities and their strategies to mitigate climate-related financial risks.

69. Supervisors should take into account the level of uncertainty associated with emerging climate-related financial risks and keep abreast of emerging practices in scenario design and implementation.

70. To foster information-sharing, cross-border collaboration and efficient resource utilisation, home and host supervisors are encouraged to establish frameworks for communicating and coordinating scenario analysis with other relevant domestic and cross-jurisdictional authorities when appropriate.
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<tr>
<th>Country</th>
<th>Central Bank has a sustainability mandate</th>
<th>Implementation of TCFD formally mandated</th>
<th>Member of East Asia Pacific Working Group on Banking Supervision</th>
<th>Member of Bank of International Settlements (Basel Committee)</th>
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<td>4th Green Finance Taskforce Meeting Reviews Progress: &quot;The Financial Supervisory Service has introduced a guideline on the management of climate risks in the financial sector</td>
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Will is Deloitte’s Asia Pacific climate change leader and is lead Partner for Deloitte Risk Advisory’s Asia-Pacific Climate Change and Sustainability Practice.
For more than 20 years Will has led the delivery of dozens of climate risk, adaptation, resilience and carbon management projects across all infrastructure classes and has led the integration of sustainability, climate change and resilience considerations into a number of multi-billion dollar transport infrastructure projects, acting both client and delivery side.

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25 years global experience transforming risk and finance functions for regulatory change; compliance and control; process and cost efficiency; impactful reporting and disclosure; data and model architecture; and scenario planning and stress testing.
Ed worked in the UK before joining Deloitte, remediating NatWest’s stress testing practices and establishing their climate modelling capability. He was a senior leader of Australia’s Basel II community and was previously Head of Risk Reward at Westpac.

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KJ supports risk advisory services in sustainability, climate change. ESG and corporate social responsibility matters to government and ASX50 clients across a range of industries. KJ has completed a Sustainable Finance Course with the Cambridge Institute of Sustainability Leadership, as well as a Master of Environment & Sustainability, specialising in Corporate Sustainability Leadership.
He has previously worked in a Federal Minister’s office as an executive understudy and attended the 2018 International Conference of Sustainable Development which coincided with the 73rd United Nations General Assembly in New York.

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David is an analyst working in the Sustainability & Climate Change team under Risk Advisory. David has built experience across various areas across Deloitte’s sustainability and climate change offerings, particularly with clients in the energy, telecommunications and mining sectors.
David has played a vital role in assessing the climate vulnerabilities faced by organisations, working with clients to developing their organisational emission footprints and informing corporate strategies around climate change.
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