

## **BEST PRACTICE GUIDELINE**

### **From the Banking Regulation & Supervision Agency:**

## **GUIDELINE ON THE MANAGEMENT OF CLIMATE-RELATED FINANCIAL RISKS**

### **SECTION ONE**

#### **Purpose, Scope and Basis and Definitions**

##### **Purpose, Scope and Basis**

1. The aim of this Guideline is to determine the baseline of the principles that explain banks' the best practices expected from them according to policies, processes and controls across all relevant functions and business units to manage exposures and potential impact of climate-related financial risks within the frame of the article 35 of the "Regulation on Internal Systems and Internal Capital Adequacy Assessment Process of Banks", published in the Official Gazette dated July 11, 2014 and numbered 29057.
2. The guideline has been prepared on the basis of the article of 93 of the Banking Law Nr. 5411 dated October 19, 2005 and the article 7/A entitled "Best Practice Guidelines" of the Regulation on the Principles and Procedures Concerning the Audit to be Performed by the Banking Regulation and Supervision Agency", published in the Official Gazette dated July 22, 2006 and numbered 26236.
3. The principles are applied on a proportionate basis depending on the size, corporate structure, complexity, and scope of the activities of the banks.
4. Banks should take into account the unique characteristics of such risks, including but not limited to transmission channels, the complexity of the impact on the economy and financial sector, uncertainty related to climate change and potential interactions between physical and transition risks.

##### **Definitions**

5. The following terms and expressions used in this guide are defined as follows:

- a) Transmission channels: The causal relationship through which physical and transition risk factors, via the borrower's repayment capacity, asset and collateral valuations, or macroeconomic factors, directly or indirectly affect the bank's financial structure and give rise to financial risks.
- b) Acute risks: Physical risks arise from natural-related factors such as hail, floods, landslides and wildfires which are increasingly intense and appear to have their effects in short term as a result of climate change.
- c) Indirect effects: Developments arising from chronic risks such as desertification, water scarcity, deterioration of soil quality, which negatively affect the environment, economy and human life.
- ç) Physical risks: Acute and chronic risks arising from the natural events resulting from climate change.
- d) Transition risks: Risks arise from changes in national and international policy, regulation, technology and consumer sensitivity during the adapting process towards a low-carbon economy.
- e) Climate-related financial risks: Risks to which banks are exposed as a result of the direct or indirect effect of physical and transition risk factors on the bank's financial structure, through the borrower's repayment capacity, asset and collateral valuations, or macroeconomic factors.
- f) Climate related financial factors: Factors constituting physical and transition risk.
- g) Chronic risks: Risks arise from longer-term shifts in climate patterns such as sustained higher temperatures, sea level rise, changing precipitation patterns that may cause sea level rise or chronic heat waves.
- ğ) Senior management: The senior management body mentioned in the Article of 3 of Regulation on the Internal Systems and Internal Capital Adequacy Assessment Processes of Banks.
- h) Top management: The senior management mentioned in the Article of 3 of Regulation on the Internal Systems and Internal Capital Adequacy Assessment Processes of Banks.

## **SECTION TWO**

### **Principles For The Management Of Climate-Related Financial Risks**

## Corporate governance

**Principle 1- Banks should develop and implement a sound process for understanding and assessing the potential impacts of climate-related risk drivers on their businesses and on the environments in which they operate. Banks should consider material climate-related financial risks that could materialise over various time horizons and incorporate these risks into their overall business strategies and risk management frameworks.**

6. Banks should take material physical and transition risk drivers into consideration when developing and implementing their business strategies. The impact of these risks on the bank's business model in the short, medium, and long term, as well as their potential effects on the bank's ability to achieve its objectives, should be assessed. Risks arising from structural changes in the economic and financial environment, as well as in the competitive landscape where the bank operates, due to climate-related risk factors, should also be taken into consideration. The senior management should be involved in relevant stages of the process and the approach established by the board should be clearly communicated to the bank's managers and employees.
7. The senior management should consider whether the incorporation of material climate-related financial risks into the bank's overall business strategy and risk management frameworks may warrant changes to its compensation policies, taking into account that these should be in line with the business and risk strategy, objectives, values and long-term interests of the bank.
8. Banks' risk management frameworks should be consistent with their stated goals and objectives. Hence, the senior management should ensure that their strategies and risk appetite are consistent with publicly communicated climate-related strategies and commitments.

**Principle 2- The senior management should clearly assign climate-related responsibilities to members and/or committees and exercise effective oversight of climate-related financial risks. Further, the senior management should identify responsibilities for climate-related risk management throughout the organisational structure.**

9. In order to ensure that material climate-related financial risks are appropriately considered as part of the bank's strategy and risk management framework, policies regarding the management of such risks shall be approved by the board of directors. Responsibilities for managing climate-related financial risks should be clearly defined within the policy, including the specific roles of board members and/or committees.
10. Banks should ensure that the senior management have an adequate understanding of climate-related financial risks and that senior management is equipped with the appropriate skills and experience to manage these risks. Where necessary, banks should

build capacity and train the senior management on climate-related topics, such as through internal workshops or external collaboration with expert organisations.

11. Banks should clearly define and explicitly assign roles and responsibilities associated with identifying and managing climate-related financial risks throughout the bank's organisational structure and ensure relevant functions and business units have adequate resources and expertise to effectively fulfil responsibilities regarding climate-related financial risk management. Where dedicated climate units are set up, their responsibilities and interaction with existing governance structures should be clearly defined.

**Principle 3- Banks should determine appropriate policies, procedures and controls that are implemented across the entire organisation to ensure effective management of climate-related financial risks.**

12. Management of material climate-related financial risks should be embedded in policies, processes and controls across all relevant functions and business units.

#### **Internal Systems**

**Principle 4- The internal control framework should include a clear definition and assignment of climate-related responsibilities and reporting lines across the three lines of defence.**

13. The internal control framework should include a clear definition and assignment of climate-related responsibilities and reporting lines across the three lines of defence.
14. In the first line of defence, climate-related risk assessments may be undertaken during the client onboarding, credit application and credit review processes, and in ongoing monitoring and engagement with clients as well as in new product or business approval processes. Staff in the first line of defence should have adequate awareness and understanding to identify potential climate-related financial risks.
15. The second line of defence, the risk function, should be responsible for undertaking climate-related risk assessment and monitoring independently from the first line of defence. This includes challenging the initial assessment conducted by the first line of defence, while the compliance function within the second line of defence should ensure adherence to applicable rules and regulations.
16. The third line of defence, the internal audit function, should provide an independent review and objective assurance of the quality and effectiveness of the overall internal control framework and systems, the risk governance framework in the light of changes in methodology, business and risk profile, as well as in the quality of underlying data.

#### **Capital and liquidity adequacy**

**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 adequacy assessment processes, including their stress testing programmes where appropriate.**

17. Banks should develop processes to evaluate the solvency impact of climate-related financial risks that may materialise within their capital planning horizons. Banks should include climate-related financial risks assessed as material over relevant time horizons that may negatively affect their capital position in their internal capital adequacy assessment process.
18. Banks should assess whether climate-related financial risks could cause net cash outflows or depletion of liquidity buffers, assuming both business-as-usual and stressed conditions. Banks should include climate-related financial risks assessed as material over relevant time horizons that may impair their liquidity position in their internal liquidity adequacy assessment process.
19. Incorporating climate-related financial risks assessed as material over relevant time horizons into banks' internal capital and liquidity adequacy assessment processes includes, those risks related to the bank's business model, risk profile, and business strategy should be incorporated into stress testing.
20. . As the methodology used in the analysis of climate-related financial risks evolves over time and the quality and diversity of data improve, it may become necessary to incorporate these risks into the bank's internal capital and liquidity adequacy assessment processes with a dynamic and evolving approach. To this end banks should start building risk analysis capabilities by;
  - a) Identifying relevant climate-related risk drivers that may materially impair their financial condition,
  - b) Developing key risk indicators and metrics to quantify exposures to climate-related financial risks,
  - c) Assessing the links between climate-related financial risks and traditional financial risk types such as credit and liquidity risks.

### **Risk management process**

**Principle 6- Banks should identify, monitor and manage all climate-related financial risks that could materially affect their financial condition, including their capital resources and liquidity positions. Banks should ensure that their risk appetite and risk management frameworks consider all material climate-related financial risks to which they are exposed and establish a reliable approach to identifying, measuring, monitoring and managing those risks.**

21. The senior management should ensure that climate-related financial risks, where material, are clearly defined and addressed in the bank's risk appetite framework.
22. Banks should regularly carry out a comprehensive assessment of climate-related financial risks and set clear definitions and thresholds for materiality, bearing in mind that a bank's risk management framework should enable it to recognise all material risks with an integrated firm-wide perspective on risk. These risks may include those posed by concentrations, in particular those related to industry, economic sectors and geographic regions. As with other material risks, banks should develop appropriate key risk indicators for effective management of material climate-related financial risks that align with their regular monitoring and escalation arrangements. Banks should comprehensively and regularly assess climate-related financial risks within their risk management frameworks, considering that all material risks must be addressed comprehensively. Clear definitions and thresholds for materiality should be established. Particular attention should be given to ensuring that climate-related financial risks include concentration risks arising from business line, sector, and geographic region. As with other material risks, banks should develop key risk indicators aligned with regular risk monitoring systems and processes for informing relevant senior units about identified issues, to effectively manage material climate-related financial risks.
23. Where appropriate, banks should consider risk mitigation measures such as , establishing internal limits for the various types of material climate-related financial risks to which they are exposed, eg in their credit, market, liquidity and operational risk profiles.
24. Banks should monitor developments related to transmission channels for determining the impact of climate-related financial risks on other financial risks and, where additional transmission channels are identified, seek to identify and, where possible, manage the impacts of risk drivers on other financial risks.

### **Monitoring And Reporting**

**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 senior management decision-making.**

25. A bank's risk data aggregation capabilities should include climate-related financial risks to facilitate the identification and reporting of risk exposures, concentrations and emerging risks. Banks should have systems in place to collect and aggregate climate-related financial risk data across the Banking group as part of their overall data governance and IT infrastructure. Banks should also put in place processes to ensure that the aggregated data is accurate and reliable. Banks should improve investing in data infrastructure and enhancing existing systems where appropriate to make it possible to

identify, collect, cleanse and centralise the data necessary to assess material climate-related financial risks.

26. Banks should consider actively engaging clients and counterparties and collecting additional data in order to develop a better understanding of their transition strategies and risk profiles. Where reliable or comparable climate-related data are not available, banks may consider using reasonable proxies and assumptions as alternatives in their internal reporting as an intermediate step.
27. The reporting should be timely and updated regularly. Banks may decide an appropriate interval for updating internal risk reports, taking into account the evolving nature of climate-related financial risks.
28. Banks should develop qualitative and/or quantitative metrics or indicators to assess, monitor, and report climate-related financial risks. Limitations that prevent full climate risk data assessment should be made explicit to their internal reports.

### **Comprehensive Management Of Credit Risk**

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

29. Banks should have clearly articulated credit policies and processes to address material climate-related credit risks. This includes prudent policies and processes to identify, measure, evaluate, monitor, report and control or mitigate the impacts of material climate-related risk drivers on their credit risk exposures (including counterparty credit risk) on a timely basis. Banks should incorporate consideration of material climate-related financial risks into the entire credit life cycle. Within the scope of the credit life cycle, customer acquisition processes, including customer due diligence assessments, as well as continuous monitoring of customers' risk profiles, shall be conducted on an ongoing basis.
30. Banks should also identify, measure, evaluate, monitor, report and manage the concentrations within and between risk types associated with climate-related financial risks. Banks could use metrics or heatmaps to assess and monitor concentration of exposure to geographies and sectors with higher climate-related risk.
31. Banks should consider a range of risk mitigation options to control or minimise material climate-related credit risks. These options may include adjusting credit underwriting criteria, deploying targeted client engagement, or imposing loan limitations or restrictions such as shorter-tenor lending, lower loan-to-value limits or discounted asset valuations. Banks could also consider setting limits on or applying appropriate alternative risk mitigation techniques to their exposures to companies, economic sectors,

geographical regions, or segments of products and services that do not align with their Business strategy or risk appetite.

### **Comprehensive management of market, liquidity, operational and other risks**

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

32. Banks should identify and understand how climate-related risk drivers could affect the value of the financial instruments in their portfolios, evaluate the potential risk of losses on and increased volatility of their portfolio, and establish effective processes to control or mitigate the associated impacts.
33. Given the specific characteristics of market risk, analysis of a sudden shock scenario can be used to better understanding and assessing the relevance of climate-related financial risks to a bank's trading book. Such a scenario could, for example, feature variation in liquidity across assets exposed to climate-related risk and assume variation in the speed at which exposures could reasonably be closed out.
34. In evaluating mark-to-market exposure to climate-related risks, banks may consider how the pricing and availability of hedges could change given different climate and transition pathways, including in the event of a disorderly transition.

**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.**

35. Banks should assess the impacts of climate-related financial risks on net cash outflows (eg increased drawdowns of credit lines, accelerated deposit withdrawals) or the value of assets comprising their liquidity buffers. Where material and appropriate, banks should incorporate these impacts into their calibration of liquidity buffers and into their liquidity risk management frameworks.

**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. Banks should also understand the impact of climate-related risk drivers on other risks and put in place adequate measures to account for these risks where material.** Strategic risk, reputational risk, and legal risk, as well as climate-related risk factors that may lead to an increase in legal liability risks associated with climate-sensitive investments and activities, shall also be included.

36. Banks should assess the impact of climate-related risk drivers on their operations in general and their ability to continue providing critical operations. Banks are expected to analyse how physical risk drivers can impact their business continuity and to take material climate-related risks into account when developing business continuity plans.

37. Banks should assess the impact of climate-related risk drivers on other risks, such as strategic, reputational, regulatory compliance and liability risk, and take such risks, where material, into account as part of their risk management and strategy-setting processes.

### Scenario Analysis

**Principle 12: Where appropriate, banks should make use of scenario analysis 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. These analyses should consider physical and transition risks as drivers of credit, market, operational and liquidity risks over a range of relevant time horizons.**

38. The objective(s) of climate scenario analysis should reflect the bank's overall climate risk management objectives as set out by its senior management. These objectives could include, for example:
- a) Exploring the impacts of climate change and the transition to a low-carbon economy on the bank's strategy and the resiliency of its business model;
  - b) Identifying relevant climate-related risk factors faced by the bank;
  - c) Measuring vulnerability to climate-related risks and estimating exposures and potential losses;
  - ç) Diagnosing data and methodological limitations in climate risk management,
  - d) Informing the adequacy of the bank's risk management framework, including risk mitigation options.
39. Scenario analysis should be prepared to reflect climate-related financial risks and include physical and/or transition risks within the scope of the bank's business model, risk profile, and business strategy. Scenarios shall, where appropriate, cover potential developments related to climatic changes such as temperature increases, as well as economic conditions such as carbon taxes. The bank shall take into account the selected scenarios and assumptions, including balance sheet-related assumptions, and their potential benefits and limitations.
40. Banks should build sufficient capacity and expertise to conduct climate scenario analysis that are proportionate to their size, business model and complexity. Larger and more complex banks should be expected to have more advanced analytical capability.
41. Scenario analysis should employ a range of time horizons, from short- to long-term, in order to address different risk management objectives. For instance, shorter time frames may be used to analyse the crystallisation of risk within a bank's typical business

planning horizon at a lower level of uncertainty. Longer time frames, which carry higher levels of uncertainty, may be used to evaluate the resiliency of existing strategies and business models to structural changes in the economy, financial system or distribution of risks.

42. Climate scenario models, frameworks and results should be subject to challenge and regular review by a range of internal and/or external experts and independent functions.

### **SECTION THREE**

#### **Miscellaneous and Final Provisions**

##### **Entry into Force**

43. This guideline enters into force on 1/7/2025