ENVIRONMENTAL, SOCIAL, & GOVERNANCE (ESG) RISK MANAGEMENT

ESG RISK MANAGEMENT COVERAGE

Alignment of ESG aspects is also one of Bank Mandiri's priorities in long-term business transformation. Through the stream "Conduct Sustainable Business", Bank Mandiri has developed ESG frameworks, roadmaps and initiatives with a target focus on the transition to a low-carbon economy, emission reduction and net zero in bank operations and increasing social impact in achieving SDGs targets.

To achieve this target, particularly in fostering the transition to a low-carbon economy, Bank Mandiri continues to identify, measure and evaluate ESG risks including climate risks, specifically in the financing aspect.

The ESG risk management system in the loan process includes Bank Mandiri's loan services for the wholesale and retail segments. Bank Mandiri establishes and implements Environmental and Social Risk Management (ESRM).

This is in line with the efforts made by the Financial Services Authority (OJK) regarding the Asset Quality Assessment of Commercial Banks, which regulates the assessment of the debtor's business prospects is also associated with the debtor's efforts in maintaining the environment.

ESG Risk Management System

ESG risk assessment on loan is carried out at each stage of loan disbursement end-to-end and integrated by the Business Unit, Credit Operation Unit and Credit Risk Management Unit. Each Business Unit conducts an assessment based on the Loan Portfolio Guideline then carries out a pre-approval process using credit risk tools including the application of ESG aspects, for the wholesale segment, the assessment is stipulated in the Industry Acceptance Criteria (IAC), while for the retail segment, the assessment is carried out through a credit risk scorecard, with reference to the Risk Acceptance Criteria of each product.

Bank Mandiri establishes risk appetite and industry appetite in line with ESG issues in the Bank's policies as outlined in the Industry Acceptance Criteria (IAC) technical guidelines in Internal Regulation

No.B3.P1.T16.IAC. Details of businesses covered is presented in the Environmentally Friendly Financing Policy section of this report and in full in the Sustainability Report.

The Bank periodically reviews and refines general credit policies, credit procedures per business segment and risk management tools, particularly sectors with high ESG and climate risks. Each Business Unit conducts a more detailed and in-depth assessment of each business activity to determine related ESG requirements in IAC and RAC, including based on input and involvement from regulators and resource persons.

Bank Mandiri has an early warning system through the initiation of the ALERT Forum, engaging the Business Unit and Risk Management Unit. The ALERT Forum functions to identify and monitor risks that could affect credit quality, including risks related to ESG aspects, financial performance, and industry prospects. In addition, this forum serves a role in evaluating the implementation of ESG practices by debtors, assessing business sustainability, and monitoring mitigation measures for the impacts of climate change.

ESG Risk Surveillance

The ESG Risk Management framework and governance at Bank Mandiri involves the active role of the Board of Commissioners and the Board of Directors. The Board of Directors monitors the implementation and fulfillment of ESG targets through the Risk Management Committee (RMC) forum, in accordance with the duties & authorities stipulated in the Decree of the Board of Directors of PT Bank Mandiri (Persero) Tbk, No. KEP. DIR/028/2024 on Risk Management Committee (RMC), held quarterly with the topic of Sustainable Finance Action Plan (RAKB) performance, ESG trends, to discussion of critical issues in ESG aspects.

Furthermore, the Board of Commissioners supervises ESG implementation, fulfillment of ESG targets or commitments through the Risk Monitoring Committee (KPR) forum, which is with topics such as reviewing the effectiveness of ESG-related risk management and supervision in financing activities.

Bank Mandiri monitors compliance in lending related to ESG aspects in accordance with bank policy, with the following measures:

1. Periodically monitor the fulfillment of ESG requirements. Bank Mandiri reviews regularly to ensure that the progress of customer projects is in accordance with the action plan that has been set. To ensure compliance with lending policies and procedures, Bank Mandiri also conducts periodic reviews and audits. For debtors who have not been able to meet these minimum requirements, there will be a periodic monitoring mechanism, determination of action plans and schedules needed.
2. Implement the ALERT system (watchlist) as an early warning system to identify risks that can affect the debtor's credit quality to ensure that preventive actions can be taken immediately to prevent credit quality deterioration based on financial performance, industry prospects, and fulfillment of ESG requirements.
3. Conduct an annual review as a form of check and balance of compliance with the latest internal credit policy requirements, including ESG requirements.

CLIMATE RISKS

Climate risk is an emerging risk embedded in key financial risks. Bank Mandiri has assessed key financial risk accordingly and has considered ESG aspects in it. Climate risk is also embedded in every other type of risk managed by the Bank. Accordingly, Bank Mandiri conducts a comprehensive risk management process in accordance with established procedures, including those addressing climate risk.

Bank Mandiri has conducted an Pilot Project Climate Risk Stress Test in accordance with OJK guidelines. On credit risk, credit portfolios that are potentially vulnerable to floods and forest fires have been identified; and sectoral portfolios that are characteristically classified as high emission sectors and are affected by government policies to control climate risk. For market risk, the Bank identifies market value movements in the Bank's securities portfolio which are included in the high emission sector category as a result of changes in government policy for carbon emissions.

Bank Mandiri manages climate-related financial risks, starting from risk identification and risk management framework, including conducting scenario analysis. The results of the climate risk analysis become inputs to increase the Bank's resilience to the impacts of climate risk and strengthen through various initiatives and alignment of ESG aspects in internal business processes. The impact of climate change on Bank Mandiri's sustainability based on the risk period is as follows:

1. Short-Term (1–5 Years): Includes the target to complete the transition plan by 2025, strengthening credit policies for high-emission sectors, and preparing to achieve net-zero emissions for Scope 1 and Scope 2 through offsetting strategies currently under internal review.
2. Medium-Term (5–10 Years): Encompasses strategic planning to mitigate risks associated with evolving climate regulations while enhancing efforts toward net-zero. These initiatives include targeted investments in green technology, collaborative partnerships, and adjustments to operational practices to meet emerging regulatory standards.
3. Long-Term (10–36 Years): Focuses on achieving net-zero emissions in financing by 2060, guiding strategies to build a low-carbon economy through portfolio diversification, green product offerings for customers, and the development of a green ecosystem.

Climate Risk Mitigation

Bank Mandiri is committed to managing its business and operations by prioritizing ESG principles to become "Indonesia's Sustainability Champion for a Better Future". This commitment is Bank Mandiri's response in supporting the Government's aspirations towards a low-carbon economy.

In sectors that have high climate risk such as plantations, mining and energy, Bank Mandiri conducts intensive monitoring in fulfilling the ESG aspects that have been required by the Bank. Going forward, Bank Mandiri strives to conduct more comprehensive climate risk impact measurements, such as conducting climate scenario analysis and testing credit portfolios for customers against climate risks including transition and physical risk.

Climate related Risks	Mitigation
Compliance with policies and regulations related to climate risk in Indonesia, as well as the legal responsibilities arising as part of the implementation of policies addressing climate change.	• Bank Mandiri implements sustainable finance in accordance with POJK 51/2017 and POJK 60/2017, and has developed a Sustainable Finance Action Plan (RAKB) for 2025–2029 to support the NZE 2060 target or an earlier achievement. • Bank Mandiri establishes an acceptable risk level (risk appetite) and industry-level standards (industry appetite) aligned with Environmental, Social, and Governance (ESG) aspects, as outlined in the Industry Acceptance Criteria (IAC) under Internal Regulation No. B3.P1.T16.IAC.
The impacts of climate change affecting debtors' financial conditions, the transition to low-emission technology products, changes in customer preferences, and negative publicity related to climate change management.	• In the lending process, Bank Mandiri has implemented Environmental and Social Risk Management (ESRM), starting from the pre-selection process (feasibility tests), loan analysis, legal and compliance reviews, loan approval, to the monitoring process. The ESG risk management system in the loan process covers all of Bank Mandiri's loan services (retail, treasury, corporate finance, and consumer finance segments). • Bank Mandiri accelerates the digitization of banking services to enhance public access through digital innovations such as Livin', Kopra, and Smart Branch. • Bank Mandiri minimizes reputational risk by analyzing news and public opinion with negative sentiment and providing strategic and structured responses.
Rising Temperatures, Sea Levels, and Extreme Weather.	• Conducting a Pilot Project on Climate Risk Stress Testing and creating a watchlist to regularly monitor customers affected by climate change-related issues. • The Business Continuity Management Group has implemented business continuity management in accordance with the international standard ISO 22301:2019 and applied the Business Continuity Management Framework to ensure organizational resilience through the readiness of components such as Building, Equipment, Technology, Human Resources, and Third Parties (BETH3).

Climate related Opportunities	Respons
Increased Bank Portfolio Diversification	Bank Mandiri issued Sustainable Green Bonds I Phase 1 with a total issuance nominal of up to Rp5 trillion, which was oversubscribed by 3.74 times in 2023. The proceeds from the issuance have been fully allocated, with 69% directed to the renewable energy sector and 31% to the management of biological natural resources and sustainable land use sectors.

Governance Bodies' Involvement on Climate Risk

Coordination of ESG-related aspects, including climate risk, at Bank Mandiri is carried out by ESG Group under the Vice President Director who is authorized to manage the framework, alignment of provisions in line with ESG and climate change issues, sustainable portfolio management, and responsible operational strategies of the Bank, including communication and reporting functions to external and internal parties. Reports from the ESG Unit are regularly forwarded to the Board of Directors as needed, as well as to the Board of Commissioners.

In the implementation of ESG and climate management, the Board of Directors takes a role in strategic functions, to:

1. integrate ESG aspects bank-wide, establish the direction of Bank Mandiri's Sustainable Finance (Sustainability) which includes Framework, Commitment, Strategy, Initiatives, Roadmap related to climate targets and SDGs achievement;

2. carry out supervisory functions related to ESG and climate risks and opportunities, implementation of Sustainable Finance, fulfillment of appropriate ESG targets and initiatives;
3. accountable in ensuring the achievement of sustainability aspirations to stakeholders; and
4. build the collaboration and partnership needed to accelerate the Company's progress towards achieving SDGs and climate targets.

The Board of Directors in this case is assisted by Risk Management Committee (RMC). The forum with Risk Management Committee (RMC) is held quarterly on the topic of Sustainable Finance Action Plan (RAKB) performance, ESG trends, including discussion of critical issues in ESG aspects.

The Company's Board of Commissioners takes an important role in managing ESG and climate aspects, particularly to ensure the integration of ESG and climate aspects in Bank Mandiri's long-term goals, including fostering efforts beyond compliance and adoption of best practices, and overseeing the management of risks and opportunities related to sustainability and climate. To carry out this task, the Board of Commissioners is supported by the Risk Oversight Committee (ROC). The Risk Oversight Committee (ROC) forum is held periodically including discussing the effectiveness of ESG-related risk management and supervision in financing activities.

The functions and obligations of the Board of Directors and in the implementation of Bank Mandiri's sustainable finance are stipulated in Board of Directors Decree No. KEP.DIR/028/2024 on Risk Management Committee (RMC) and Decree of the Board of Commissioners No. KEP.KOM/004/2023 dated 13 September 2023 on the Risk Monitoring Committee Charter. The specific organ, ESG Group, was established in accordance with the Decree of the Board of Directors of KEP.DIR/32/2022 dated 12 September 2022.

Climate Risk Resilience

In the reporting period, Bank Mandiri has conducted a climate risk resilience assessment based on OJK Letter No. S-16/PB.013/2023 which requires KBMI 3 & 4 banks to assess climate risk in the portfolio. In the study, climate-related risks were compared with an initial qualitative assessment linked to other bank risks concerning physical risk events, such as flooding, for credit portfolios secured by residential and commercial properties, as well as drought/forest fire risk events for corporate and MSME portfolios in the forestry and plantation sectors.

The assessment conducted provides an overview of potential losses and their impact on various bank risks. For transition risks, the assessment was carried out on portfolios in several high-emission sectors by projecting the impact of increased carbon emissions and changes in government policies on various bank risks and the Bank's capital. The transition scenario uses the NGFS scenario according to OJK guidelines, namely Net Zero 2050, Delayed Transition and Current Policies.

In credit risk, portfolios that are potentially vulnerable to floods and forest fires have been identified as well as sectoral portfolios that are classified as high emission sectors and affected by government policies to control climate risk. For market risk, the Bank identifies market value movements in the Bank's securities portfolio which are included in the high emission sector category as a result of changes in government policy for carbon emissions.

We analyze drought/forest fire/flood climate risk events to Bank Mandiri's operations and property which, based on the study, have the potential to cause damage and loss to the Bank's technology system and property, as well as disruption to employee mobility and health. In this scenario, the Bank already has a Disaster Recovery Plan mitigation plan that includes a contingency plan for catastrophic events.

Bank Mandiri will continue to develop climate risk stress testing in accordance with regulatory directives and the Bank's needs in planning climate risk management in the Company's portfolio. In accordance with technological advances, going forward it is necessary to develop specific models and analytics used in quantifying climate and environmental impacts, more detailed current data and information, scenarios and assumptions according to the direction of regulators.

RISK ASSESSMENT OF THE BANK

To comprehensively understand the risk exposures faced by the Bank, Bank Mandiri conducts regular assessments of the Bank Soundness Level and Risk Profile. The Bank Soundness Level assessment is performed and reported to the regulator every six months, while the Risk Profile assessment is conducted quarterly.

The Bank Soundness Level assessment complies with Financial Services Authority Regulation No. 4/POJK.03/2016 and Circular Letter No. 14/SEOJK.03/2017 concerning the Assessment of Commercial Bank Soundness Level. This assessment covers the Risk Profile, which includes an evaluation of inherent risks and the quality of risk management implementation, Good Corporate Governance (GCG), earnings, and capital. The Risk Profile assessment focuses on eight primary risks: credit risk, market risk, liquidity risk, operational risk, legal risk, strategic risk, compliance risk, and reputational risk. Moreover, the Integrated Risk Profile assessment includes two additional risks, namely insurance risk and intra-group transaction risk, ensuring a comprehensive understanding of the Bank's risk landscape and alignment with regulatory standards.

The assessment of Bank Mandiri Individual Risk Profile as of 31 December 2024 is categorized as rating 1 (Low Risk), with the assessment of Inherent Risk categorized as rating 2 (Low to Moderate) and the assessment of Quality of Risk Management Implementation categorized as rating 1 (strong), as follows:

Types of Risks	Inherent Risk Rating	KPMR Rating	Risk Level Rating
Credit Risk	Low to Moderate	Satisfactory	Low to Moderate
Market Risk	Low	Strong	Low
Liquidity Risk	Low to Moderate	Strong	Low
Operational Risk	Moderate	Satisfactory	Low to Moderate
Legal Risk	Low	Strong	Low
Strategic Risk	Low	Satisfactory	Low
Compliance Risk	Low to Moderate	Satisfactory	Low to Moderate
Reputation Risk	Low	Satisfactory	Low
Composite Rating	Low to Moderate	Strong	Low