
krungsri
กรุงศรี
A member of MUFG
a global financial group
KRUNGSRI
TCFD Report 2024
Task Force on Climate-related
Financial Disclosures

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Introduction

Environmental and climate change impacts are among the most pressing global challenges, directly affecting economies, businesses, ecosystems, biodiversity, and human life. The Intergovernmental Panel on Climate Change (IPCC) has emphasized that achieving net-zero emissions by approximately 2050 is essential to limiting global warming to 1.5°C above pre-industrial levels, thereby preventing the most severe consequences of climate change.

Krungsri recognizes that our business operations have both direct and indirect impacts on the environment and climate change. As a responsible financial institution with the aspiration to be “The Leading Sustainable and Regional Bank”, we are committed to managing our environmental footprint by collaborating with public and private sectors, as well as civil society, to address climate challenges. Our approach integrates climate risk management and opportunities into our business strategy, not only to reduce greenhouse gas (GHG) emissions from our own operations and financial service activities, but also to mitigate climate-related risks for both Krungsri and our customers.

Krungsri has established a “Carbon Neutrality Vision” to align with global and national climate action frameworks, including the United Nations Sustainable Development Goals (SDGs), the Paris Agreement’s commitment to a low-carbon economy, and Thailand’s Nationally Determined Contributions (NDCs) towards GHG reduction. Furthermore, our commitments are in line with MUFG’s goal of achieving carbon neutrality in their own operations by 2030 and their finance portfolio by 2050. Krungsri remains steadfast in our commitment to sustainability, integrating climate considerations into our business strategies to drive meaningful change toward a greener and more sustainable future.

Krungsri's Task Force on Climate-related Financial Disclosures Report

Krungsri has prepared our first Task Force on Climate-related Financial Disclosures (TCFD) report for the year 2024 in accordance with the TCFD framework, covering four key areas:

Governance

A robust governance framework has been established to effectively oversee Environmental and Climate-related (E&C) risks and opportunities, comprising multiple levels of oversight to ensure strategic alignment and risk management across the organization.

The governance is led by the Board of Directors with the support from several committees, including the Executive Committee, the Nomination and Remuneration Committee, the Audit Committee, and the Risk and Compliance Committee, in managing and monitoring E&C risks and opportunities as well as their associated impacts. Additionally, other committees and senior management play a significant role in executing the governance framework and implementing E&C-related initiatives.

Strategy

Krungsri has integrated climate-related risk and opportunities management into our business strategy, ensuring alignment with short and long-term term sustainability goals. This includes analyzing the impact of climate-related risks and opportunities on the business model, strategy, and financial planning as well as reducing GHG emissions.



Risk Management

Krungsri has established processes to identify, assess, mitigate, and monitor E&C risks which have been classified as "Transverse Risks", broadly impacting across multiple principal risk categories. To address these risks, we have developed and implemented a Policy for Sustainability Lending with an aim to enhance mitigation and monitoring efforts.

Metrics and targets

Key metrics and targets are set to assess and manage climate-related risks and opportunities, including:

1) Decarbonizing Krungsri's own operations to achieve the Net Zero target by 2030 (Scope 1 and 2).
2) Decarbonizing Krungsri's financial services operations to achieve the Net Zero target by 2050.
   - Increasing social and sustainable finance portfolio by increasing the target from Baht 100 billion by 2030 to Bath 250 billion by 2030 (from the baseline year 2021).
   - Phasing out our exposure to coal-fired power plants within 2030.

Governance

Krungsri's Governance on Environmental and Climate Risks and Opportunities

Krungsri's Board of Directors (BOD) and its supporting committees are responsible for the oversight of Environmental and Climate (E&C) risks and opportunities. At the management level, several committees and designated working groups within Krungsri also support the BOD and Senior Management Team in the management and monitoring of E&C risks and opportunities as well as their associated impacts as following details:

Governance Structure



Remark: *The establishment of the three working groups has been approved by the BOD in 2024 and expected to commence their undertakings in 2025.

The below table sets out how E&C has been integrated across Krungsri's governance framework and activities.

Purpose and responsibilities related to E&C	2024 and ongoing E&C topics and discussions	Frequency of E&C agenda in 2024
Board of Directors		
2024 and ongoing: • Set the overall direction and strategic objectives of Krungsri Group, including both short-term and long-term strategies and business plans. Ensure clarity and measurability by providing sufficient detail for effective management practices, aligning with the principles of Sustainable Banking, integrating of Environmental, Social, and Governance (ESG). • Consider and approve Risk Governance Frameworks and Risk Appetites that are clear and consistent with the strategic plan, business plan, and risk management capabilities of Krungsri. Review strategic plans, business plans, important policies, good risk governance framework, and approved risk appetite levels with appropriate frequency. 2025 and ongoing: • Collaborate in establishing, recommending, and considering the approval of policies related to climate risks, and environmental and social responsibilities. Ensure regular review and effective communication to directors, executives, and employees to comply with the policies accordingly.	2024: • Approved the establishment of the Internalizing Environmental and Climate Change Aspects into Financial Institution Business (IECC) Program in accordance with the perspective of the Bank of Thailand (BOT) and global standards. • Approved E&C governance framework and artifacts, including climate risk components. • Approved the results of Climate Risk Stress Test for submission to the BOT. • Approved the revision of the Policy for Sustainability Lending. 2025 and ongoing: • Determine and regularly review the strategic objectives and business plans of Krungsri Group to ensure alignment taking into consideration with E&C's short-term and long-term goals. • Undertake actions to ensure the establishment of clear and quantifiable targets for each strategic plan, with regular monitoring and periodic evaluation • Consider and periodically review corporate governance principles, including policies related to climate risk, environmental and social responsibilities. • Oversee the effective communication and dissemination of policies and guidelines to directors, executives, and employees. • Consider and approve a robust Risk Governance Framework and Risk Appetite that integrates E&C risks.	4

Purpose and responsibilities related to E&C	2024 and ongoing E&C topics and discussions	Frequency of E&C agenda in 2024
Executive Committee		
2024 and ongoing: • Take charge of Krungsri's business management to achieve the set goals, policies, strategies, and business plans relating to E&C. • Screen strategic plans, annual business plan, capital expenditure budgets, operational objectives, and other project plans, including income/non-interest expenditure controls before submitting to the BOD. • Undertake assignments from the BOD in relation to E&C. 2025 and ongoing: • Consider, approve, and monitor the operations of sustainability strategy and Net Zero related elements across business units, including the Sustainable Financial Targets, Transition Plan, Financed Emissions pathways, and ESG Data strategy. • Appoint and set the roles and responsibilities of the management-level committees and/or individuals as deemed appropriate to assist the management of Krungsri and drive the completion of E&C initiatives.	2024: • Approved the E&C governance framework and artifacts, including climate risk components. • Approved the results of Climate Risk Stress Test for submission to the BOT. • Approved the engagement of external consultants to assist in the sustainability journey of climate change risk management, starting from assessments from the perspective of the BOT and global standards, transition plan development, consultation, and implementation. • Approved the revision of the Policy for Sustainability Lending. 2025 and ongoing: • Approve key elements of the sustainability strategy and Net Zero initiatives, including sustainable financial targets, transition plan, financed emissions pathways, and ESG data strategy. • Continuously monitor progress and performance across business units in implementing sustainability and Net Zero strategies. • Appoint management-level committees and/or individuals deemed appropriate to support Krungsri's management to drive the successful completion of E&C initiatives.	4

Purpose and responsibilities related to E&C	2024 and ongoing E&C topics and discussions	Frequency of E&C agenda in 2024
Audit Committee		
2024 and ongoing: • Monitor progress of Krungsri's IECC Program. 2025 and ongoing: • Review the approach to ESG disclosure and its alignment with sustainability reporting frameworks. Oversee the process for preparing and disclosing sustainability-related information to ensure the compliance with regulatory requirements.	2024: • Acknowledged the progress of overall IECC Program and timeline, development of transition finance products customized to clients' segments and industries. • Acknowledged principles of key pillars of the TCFD framework and discussed the working preparation process to ensure the readiness for compliance with TCFD framework and the BOT's timeline. 2025 and ongoing: • Review the preparation process of the climate-related disclosure to ensure alignment with the TCFD framework. • Consider ESG Disclosures to ensure they are in compliance with regulatory requirements and address stakeholder expectations.	1
Nomination and Remuneration Committee		
2024 and ongoing: • Oversee and endorse company KPI and results (One Krungsri Scorecard) and company bonus pool to reflect Krungsri's strategic execution, including E&C aspects. 2025 and ongoing: • Determine the policies on the amount of remuneration and other benefits commensurate with roles and responsibilities, reflecting the strategic objectives and relevant risks of Krungsri, including E&C aspects, in accordance with the clear and transparent criteria as well as comparable to the industry benchmark.	2024: • Oversaw and endorsed company KPIs and performance (One Krungsri Scorecard) which incorporated climate-related aspects as one of the company's measurements, such as ESG rating, Krungsri Decarbonization target, as well as consider bonus payout according to performance.	1

Purpose and responsibilities related to E&C	2024 and ongoing E&C topics and discussions	Frequency of E&C agenda in 2024
Risk and Compliance Committee		
2024 and ongoing: • Oversee and monitor the implementation of strategies for integrated risk management, inclusive of capital, liquidity, and compliance management in mitigating the major risks, and integrate effectively E&C related risks throughout the principal risks. • Revisit and review the sufficiency and effectiveness of the overall risk management policies and strategies as well as the annual compliance plan and risk appetite level at least once a year. 2025 and ongoing: • Discuss and exchange views with the Audit Committee to ensure that the risk management policies and strategies are comprehensive and inclusive of E&C risks.	2024: • Approved the revision of the Policy for Sustainability Lending. • Approved the results of Climate Stress Test for submission to the BOT. • Acknowledged the report on Enterprise-wide Risk Summary on a monthly basis. 2025 and ongoing: • Annually discuss and exchange views with Audit Committee to ensure the comprehensiveness of risk management policies and strategies to be inclusive of E&C risks.	12
Risk Management Committee		
2024 and ongoing: • Review Krungsri Group's risk management policies in order to improve the quality and effectiveness of Krungsri's approach to E&C risk management. • Oversee risk management practices for E&C risk, in particular E&C throughout the enterprise-wide risk management framework, which includes considering, monitoring and reviewing of non-financial risk arising from E&C activities, such as the reputational risk of strategic sustainability initiatives. 2025 and ongoing: • Oversee, approve and monitor the E&C risk working group, which is responsible for supporting and providing focus to the integration of E&C risks throughout the traditional risk types.	2024: • Approved the revision of Policy for Sustainability Lending. • Acknowledged the results of an E&C gap analysis based on the BOT's requirements. • Reviewed and monitored risk management implementation practices for E&C risk. 2025 and ongoing: • Oversee, approve, and monitor the E&C risk working group.	2

Purpose and responsibilities related to E&C	2024 and ongoing E&C topics and discussions	Frequency of E&C agenda in 2024
Sustainability Committee		
2024 and ongoing: • Develop Krungsri group's policy, direction, and framework on ESG or sustainability, in particular the environmental and climate change (E&C) agenda, in alignment with the principle of sustainable banking and regulators' guidance and expectations as well as the United Nations Sustainable Development Goals (the UN's SDGs) at large, to be proposed to the Executive Committee for approval. • Determine material ESG matters and maintain oversight of ESG matters, including environmental and climate change risks and opportunities which may affect Krungsri's business activities. • Monitor progress on strategies and targets, particularly key milestones established by the BOT and/or the Thai Bankers' Association (TBA) on sustainable banking as well as environmental and climate change agendas. 2025 and ongoing: • Oversee, approve, and monitor the Net Zero Working Group on agendas, among others, transition plan execution, own emissions reduction strategy execution, financed emissions pathways, Social and Sustainable Finance (SSF) target, industry engagement and advocacy strategy, and ESG-related disclosure strategy.	2024: • Acknowledged the BOT's requirement for a transition plan and approved the "Land Transportation" sector as Krungsri's second priority sector to develop a transition plan. • Acknowledged the BOT's requirements for the Climate Risk Stress Test exercise. • Approved joining the membership of the Partnership for Carbon Accounting Financials (PCAF), the Alliance for Green Commercial Banks, and the Thailand Climate Business Network (Thai CBN). • Acknowledged the revision of Policy for Sustainability Lending. • Acknowledged the MOU with EGAT for Smart Energy Solutions with an aim to support Krungsri's corporate clients' decarbonization journeys. • Deliberated and acknowledged the progress update of Krungsri's decarbonization roadmap. • Deliberated and approved in principle to seek external consultation services on climate risk management. • Approved for replacing the corporate cars that the lease expires with battery electric vehicles (BEVs). • Approved the revised E&C governance framework, including Krungsri's Committee Structure and Working Group Structure which comprises of E&C Risk working group, Net Zero working group, and ESG Data working group. • Approved a new target for the Krungsri Social and Sustainability Finance (SSF). • Acknowledged the financing product for transition to environmental sustainability.	4

Purpose and responsibilities related to E&C	2024 and ongoing E&C topics and discussions	Frequency of E&C agenda in 2024
	2025: • Approved the Target Operating Model (TOM) and accountabilities (RACI) matrix for E&C management. • Approved the Directive for Appointment of the Net Zero Working Group. • Approved 2024 TCFD disclosure scope outline. • Acknowledged the baseline calculation of financed emissions for Power generation and Oil and gas sectors. • Acknowledged Krungsri's climate risk assessment, risk and opportunities inventory and assessment, and the incorporation of the E&C Risk into the Bank's risk taxonomy. • Acknowledged the 2024 GHG emission report and the progress of the decarbonization activities and 2025 own emission decarbonization plan.	4

Krungsri's IECC Program Overview

Krungsri's IECC (Internalizing Environmental and Climate Change Aspects into Financial Institution Business) Program, also known as the Climate Change Working Group, was established in 2024 with the remit of driving forward Krungsri's decarbonization and E&C risk management frameworks. Centered on five key pillars—Governance, Strategy, Financial Products & Services, Risk Management, and Disclosure — this initiative has cemented the fundamental capabilities and culture necessary for Krungsri's green and transition finance aspirations and pathway. Concurrently, the IECC Program has been instrumental in meeting the BOT's requirements as well as serving Thailand's commitment to the road to decarbonization together with our customers in the real economy.

The IECC Program has established the critical foundations and organizational frameworks to advance Krungsri's green transformation, while also built out our expertise in helping real sector customers as they commence their journeys towards low-carbon activities and operations. Furthermore, the integration of E&C considerations into our operations, decision-making processes, and overall business strategies will further improve the understanding of financial risks and opportunities associated with climate change, promote sustainable lending and investment practices, and support the transition to a low-carbon economy. The Program aims to enhance capabilities in sustainability, mitigate environmental risks, and contribute to achieving Krungsri Group's E&C goals.

To deliver progress, the IECC Program has utilized a range of skill sets, pulling in specialists from areas, such as Sustainability, Strategy, Finance, Frontline units, Risk, Data Management, and Human Resources, as well as E&C experts from ESG risk and strategy consulting firms. The IECC Program and outputs have also effectively supervised and governed throughout the process, with regular updates and/or approvals by Board of Directors, its sub-committees and management-level committees. The Program has worked to foster a culture of resilience and responsibility, empowering Krungsri Group to take meaningful action on climate change while ensuring long-term profitability and environmental stewardship.

The Program's key deliverables include E&C risk governance, organizational resource planning and development, capacity building, transition planning strategies and decarbonization pathways, and climate risk assessment and stress testing. Throughout the design of deliverables, the Program has used global and regional peer benchmarking to help set the standards that Krungsri Group wants to achieve. They also include adherence to climate-related financial disclosures and ensure alignment with industry standards, such as TCFD and IFRS S2.

Chief Risk Officer

The Chief Risk Officer (CRO) takes a critical role in overseeing the overall development of environmental and climate (E&C) risk management framework covering both financial and non-financial risks. The CRO provides a leadership role to ensure the implementation through strong support in capacity building, assigning key staffs to support developments, and regular progress monitoring. Regular assessments of E&C risk exposure are conducted and formally reported to the CRO to ensure ongoing oversight and accountability.

Risk Management Group

Climate-related risks are positioned as one of the top risks and cross-cutting across multiple identified principal risks of Krungsri Group. Risk Management Group actively participates in the IECC Program. Risk Management Group's Program roles are segregated across relevant risk management functions with dedicated staffs assigned to oversee the development of the overall E&C risk management framework across the Group.

Risk Management Group leads the Climate Risk Assessment (CRA) exercise, which feeds into the development of risk and opportunities and climate risk controls across all impacted risk areas. Furthermore, as a proactive measure, the Credit Risk function develops tools to assess and monitor climate risk arising from credit transactions which are the major assets of Krungsri Group. The implementation is performed in collaboration with respective frontline units.

Environmental, Social, and Governance Division

The Environmental, Social, and Governance Division operates under the supervision of the Corporate Strategy and Planning Group and takes the main responsibility in establishing strategic operations and policies as well as conducting socially responsible activities in alignment with 'the sustainable banking' framework covering environmental, social, and governance aspects, particularly the climate change management agenda.

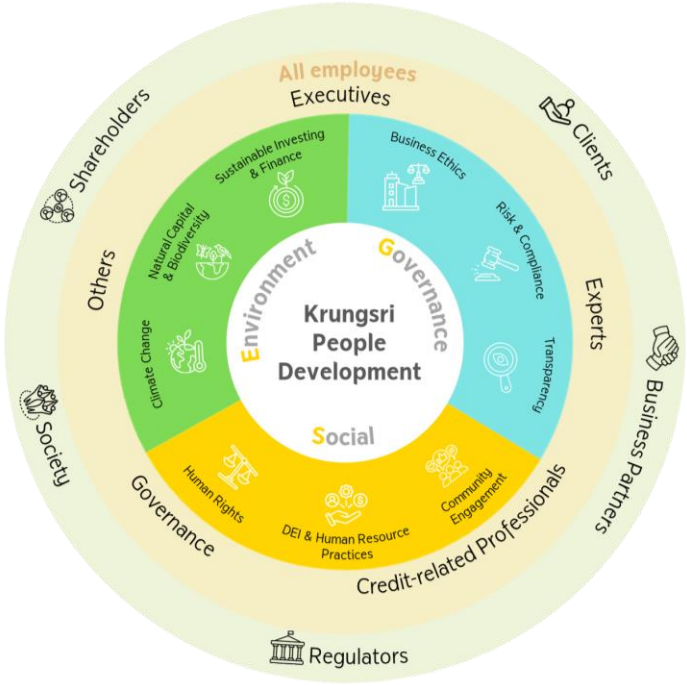
ESG Finance Department

The ESG Finance Department (EFD), under the Corporate and Investment Banking (CIB) Group, supports CIB clients in structuring and executing a range of sustainable finance products, including but not limited to, Green, Social, Sustainability, and Sustainability-Linked Loans and Bonds. The EFD also provides advisory services to integrate ESG considerations into financing solutions, ensuring alignment with global standards and regulatory frameworks. By facilitating sustainable finance transactions, the EFD strengthens Krungsri's commitment to responsible banking and contributes to the transition towards a low-carbon and inclusive economy, as well as Krungsri's own sustainable finance ambition.

Development of Overall Accountabilities Matrix for E&C Management

To align with our focus on E&C risks and opportunities, Krungsri recognizes the need to establish clear accountability and resource allocation across relevant functions. In response, we have developed a Target Operating Model and accountabilities with a Responsible, Accountable, Consulted, Informed (RACI) matrix as part of the Sustainability Process Inventory. This approach aims to clearly define the key roles and responsibilities of relevant business units, ensuring that tasks related to climate-related activities are appropriately assigned, resourced, and executed.

Environmental and Climate Learning and Capability



At Krungsri, we recognize that addressing climate-related challenges and seizing emerging opportunities require not only strategic vision but also empowered individuals. As part of our commitment to being “The Leading Sustainable and Regional Bank”, we have embedded Environmental, Social, and Governance (ESG) principles and climate action into the fabric of our organization. In alignment with our Carbon Neutrality Vision, we are steadfast in our mission to decarbonize own operations by 2030 and our financial services operations by 2050.

Development Approach

Our approach empowers both people and the organization to lead in sustainable finance and climate action. Using a role-based strategy, we equip our workforce to drive low-emission operations and deliver innovative financial services. By fostering growth, learning, and innovation, we ensure sustainable development that benefits all stakeholders—customers, shareholders, employees, and society. This approach reflects our commitment to impactful transition, economic growth, and a sustainable future, aligning with Krungsri’s vision. Tailored programs for Environmental and Climate (E&C) knowledge focus on five critical roles to achieve targeted results as follows:

1) **Board of Directors and Executives**: We empower senior leaders to integrate climate considerations into decision-making, driving sustainable transitions and fostering long-term organizational value. Enhanced climate governance capabilities enable our leaders to navigate environmental challenges and lead the company toward a sustainable future.
2) **Environment and Climate Experts**: The experts deepen their expertise in E&C issues, equipping them to assess and mitigate risks effectively. This ensures proactive management of environmental challenges and opportunities, and supports long-term sustainability.
3) **Client Relationship and Credit Professionals**: Professionals are upskilled to evaluate climate-related risks and opportunities, enabling them to guide clients in transitioning to sustainable models and accessing green finance solutions that drive positive impacts.
4) **Governance Team**: Employees are equipped to align with climate goals, manage ESG data, and provide assurance to meet ESG commitments. The training enhances their ability to identify risks and opportunities while ensuring compliance and transparency.
5) **All Employees**: All employees gain a foundational understanding of ESG principles, fostering a climate-conscious culture across the organization. The training empowers them to integrate sustainability into their daily roles, driving meaningful contributions to Krungsri's long-term goals and reinforcing our commitment to a sustainable future.

Achievements in 2024 & Strategic Plans for 2025

The following table outlines Krungsri's key achievements in 2024 and our strategic plans for 2025 for E&C learning and capability development, underscoring our ongoing commitment to sustainability and responsible banking:

2024	2025
Krungsri successfully equipped 100% of employees with foundational ESG and E&C knowledge, embedding sustainable practices across the organization. We also launched a targeted learning plan to enhance understanding of climate risk and sustainable finance, establishing a solid foundation for addressing climate challenges. In addition, Krungsri enhanced capacity building for the Board of Directors and senior management on key E&C topics including: 1) Climate Action for Boards 2) Climate Change & Sustainable Finance	We will deepen this impact by empowering employees to integrate ESG principles into their roles, driving meaningful contributions to our vision. Our focus will be on further strengthening expertise across key roles to accelerate progress in sustainable finance and climate action. Developed across 5 distinct persona groups, the training sessions cover a comprehensive range of topics, such as ESG concepts, climate foundations, E&C risk management, nature and biodiversity, sustainable finance, and climate reporting. Krungsri will also continue enhancing learning and capacity for the Board of Directors and senior management on key E&C topics including:

2024	2025
3) The Board's Roles in Climate Governance 4) ESG in the Boardroom: A Practical Guide for Board 5) Science-Based Target of Climate Mitigation for Board-Level 6) Introduction to Climate Risk Management 7) Introduction to Transition Finance 8) 2024 APAC ESG and Sustainable Finance Outlook 9) ESG Taxonomy: A New Chapter of Sustainable Banking 10) Board's Roles in Purpose-driven Transition 11) Consumer Trends Update: The Impacts on Financial & Banking Services 12) ESG for Internal Auditors: Navigating the Evolving ESG Landscape in Thailand's Banking Sector 13) ESG Strategy and Sustainable Finance for Leaders in Transition Program 14) ESG Training: Green Banking 15) ESG: The Next Big Thing of Banking 16) Future of Financial & Banking Services 17) Sustainability Landscape 18) Sustainability-related Finance 19) Sustainability-related Financial Disclosure 20) Sustainability Strategies and Climate Risk in Banking	1) Environmental and Climate Risk Governance 2) Sectorial Decarbonization 3) Climate Scenario Analysis and Stress Testing 4) Nature & Biodiversity 5) ISSB Standards (IFRS S1 and S2) 6) Climate Change Act 7) Transition Finance 8) ESG Risks & Opportunities

Environmental and Climate-linked Remuneration

The Nomination and Remuneration Committee (NRC) is responsible for considering and proposing to the Board of Directors (BOD) for approval on the remuneration of the President and Chief Executive Officer and senior executives. Remuneration criteria are stipulated by the BOD with a fair, reasonable, and incentivizing consideration to retain proficient executives as well as creating long-term value for all stakeholders. The remuneration is also associated with Krungsri's performance and targets, both short-term and long-term, as well as KPI results of each individual's performance against targets under the One Krungsri Scorecard criteria, including performance indicators aligning with organizational strategies and a scope of responsibilities of an individual executive which is comparable to the industry benchmark.

In 2024, Krungsri incorporated ESG targets into the performance evaluation of the CEO and executives. The targets that were taken into account by the NRC and the BOD are as follows:

Corporate Level – One Krungsri Scorecard (CEO's KPI)

- ESG rating

Segment/Group & Individual KPIs allocated by proportion based on their roles

- Develop IECC Program and BOT Taxonomy Program
- Achieve Krungsri Net Zero commitment (own operations by 2030) and deliver 2024 targets consistent with that plan
- Expand Net Zero commitment to our local and ASEAN subsidiaries
- Increase Social and Sustainable Finance Portfolios

Apart from specific targets for each executive as seen in the Segment/Group & Individual KPIs allocated above, One Krungsri Scorecard (CEO's KPI) was shared by all executives of Krungsri, namely all staff at Executive Vice President (EVP) and above, as well as Managing Directors of Krungsri's subsidiaries, with different weightings assigned based on their level of accountability towards Krungsri Financial Group's business performance. With this shared target, the individual performance result of all these executives was derived by the achievement of One Krungsri Scorecard and calculated into individual performance scores and ratings. Ultimately, the performance rating was linked to annual variable compensation of each executive.

Krungsri determines the remuneration of the President and Chief Executive Officer as well as senior executives annually by considering practice of other organizations in the same industry, Krungsri's operating results and the economic situation, whereby its criteria, targets, and performance assessment using the One Krungsri Scorecard are endorsed by the NRC and approved by the BOD in the transparent and auditable basis.

Strategy

Krungsri's Climate Change Strategy

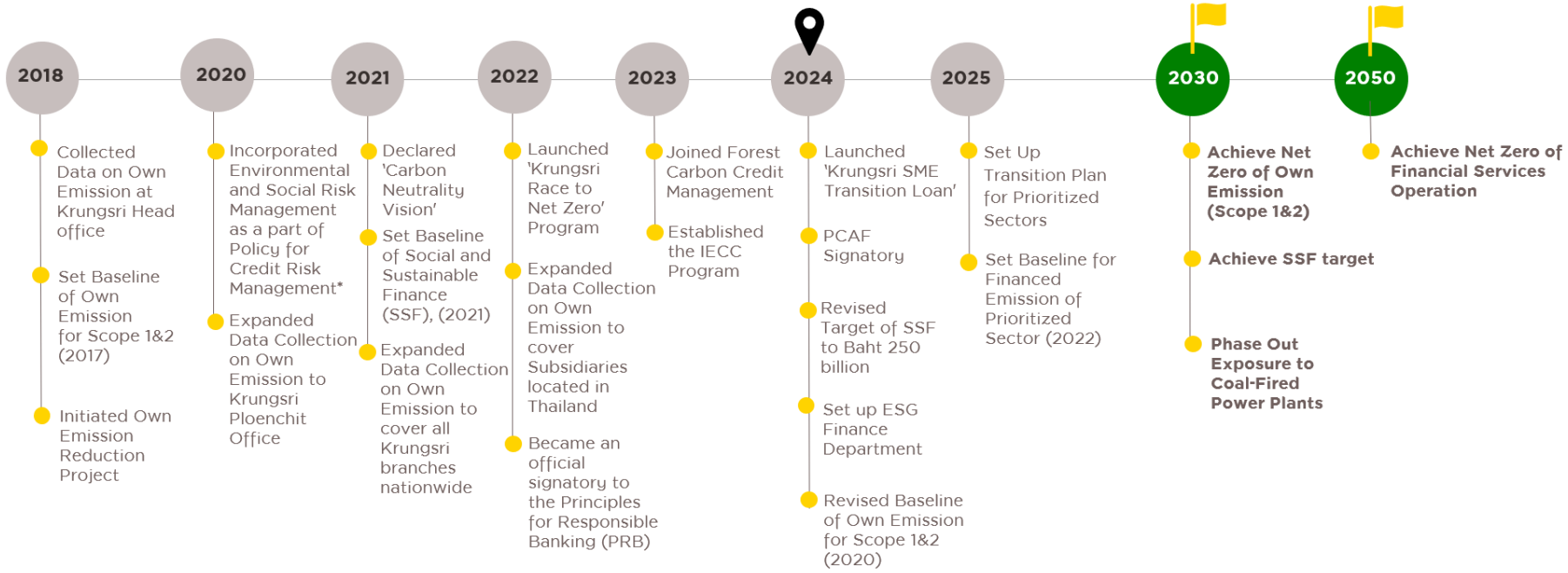
The Intergovernmental Panel on Climate Change (IPCC) has stated that achieving net zero emissions by approximately 2050 is crucial to keep global warming under 1.5°C above pre-industrial levels and prevent the most severe impacts of climate change. Thailand attaches great importance to the global efforts to address this common and pressing challenge. The country enhanced its first Nationally Determined Contribution (NDC) at the 26th Conference of the Parties (COP26) to fulfil the long-term temperature goal to reduce its greenhouse gas (GHG) emissions by 30 percent from the projected business-as-usual (BAU) level by 2030. The level of contribution could increase up to 40 percent, subject to adequate and enhanced access to technology development and transfer, financial resources, and capacity building support. Furthermore, Thailand will continue vigorous efforts in its challenge to meet the long-term goal of carbon neutrality by 2050 and net-zero GHG emissions by 2065.

At Krungsri, we are doing business in countries that are vulnerable to climate change and our aim is to be “The Leading Sustainable and Regional Bank”. We declared our “Carbon Neutrality Vision” in 2021 committing to decarbonizing own emissions (Scope 1 and 2) by 2030 and financial services operations by 2050, aligning with Thailand’s COP26 pledge of carbon neutrality by 2050.

We commit not only to doing our part but also to leading the efforts in collaboration and cooperation, which are vital for driving the transition to a low-carbon economy. Our climate goals include identifying potential climate-related risks and exploring various climate-related opportunities emerging to tackle the climate challenges.

Krungsri's primary objective is to reach net-zero emissions. We recognize the necessity of both reducing own emissions and supporting our customers' decarbonization efforts. This builds a sustainable ecosystem by aiding in the transition to net-zero for business and consumers. We foster benefits to the environment, our society, and the economy. Additionally, we emphasize the importance of engaging with customers and collaborating with partners to drive our society toward the net-zero goal.

Krungsri' s Net Zero Milestone



Remark: *The Environmental and Social Risk Management Policy has been reviewed and elevated to become the Policy for Sustainability Lending since 2023.

Climate-related Risks and Opportunities

Krungsri has systematically identified the multifaceted impacts of climate change, encompassing a spectrum of risks driven by both physical and transition factors. These risks permeate various sectors, portfolios, and operational frameworks through both direct and indirect mechanisms. The subsequent analysis describes key events, impacts, and timelines pertinent to physical and transition risks, underscoring their materiality and relevance to our comprehensive risk profiles. Krungsri has also identified several key climate-related opportunities spanning physical and transition risks, aimed at addressing climate change while creating value for our customers and stakeholders. We summarize these opportunities, the rationale behind them, and their alignment with business segments.

The following climate-related risks and opportunities are categorized based on their time horizons: short-term (0–5 years), medium-term (5–10 years), and long-term (10 years and beyond):

Climate-related Risks

Climate Risks	Risk Type	Events	Expected Time Horizon	Potential Impact	Principal Risks Impacted
Physical risks	Acute	Increased flooding events, impacting customers' assets and business operations.	Short to Medium	Business disruptions, asset impairments, and diminished long-term values.	Credit risk Operational risk Market risk
	Chronic	Change in rainfall pattern, amplifying flooding and drought risks, which could disrupt business operations.	Medium to Long		
Transition risks	Policy & Legal	- Stricter environmental regulations, particularly carbon tax leading to lower profit and ability to pay. - Mandated adaptation of new policies in high-risk sectors.	Short to Medium	Increased operational costs, compliance burdens, and lower ability to pay.	Credit risk Operational risk Regulatory compliance risk
	Technology	- Rising costs to enhance operation to meet emissions standards. - High investment in low-carbon technologies.	Short to Medium	High investment in replacing legacy systems and machinery, and disruption in operational process.	Credit risk Operational risk
	Market	- Market preferences towards environmental-friendly products. - Client expectation for transition towards Net Zero.	Medium	Reformed products, disruption in market positioning, loss of market share, and increased branding cost.	Credit risk Reputational risk
	Reputation	- Increased scrutiny from stakeholders on environmental action. - Negative public perception of insufficient climate initiatives.	Short to Medium	Reputational damage, lowered customer loyalty, and shareholder confidence.	Reputational risk Regulatory compliance risk

Climate-related Opportunities

Category	Opportunity Type	Explanation and Rationale	Customer Segments	Products/Services	Expected Time Horizon
Physical - Climate Change Adaptation	- Providing financing, investment, or advisory services to reduce vulnerability to climate change impacts. - Supporting local communities in climate adaptation and mitigation.	- Activities include infrastructure upgrades, landscape restoration, reforestation, R&D on catastrophes, preventive measures, wildfire resilience, drought-tolerant crops, coastal management, flood and landslide defences, and business continuity. - Initiatives supporting local communities in climate adaptation and mitigation include building flood defences.	- Corporate segment - Small and Medium Enterprise segment - Retail segment	Loans, Partnerships, Climate advisory, Educational programs	Medium
Physical - Resilience Financing	Financing solutions for climate resilience.	Providing resources for enhancing infrastructure and operations against climate vulnerabilities.	- Corporate segment - Small and Medium Enterprise segment - Retail segment	Green infrastructure financing	Medium
Transition – Customer Engagement	- Education on climate change and mitigation strategies. - Collaboration with industry groups and governments to drive low-carbon solutions.	- Leveraging climate topics to engage and educate customers on sustainable practices, such as risk and opportunity assessments and supporting customer conversations with ESG Finance team. - Engaging sectors and governments to drive decarbonization, incentivize sustainable practices, access global peer networks, and manage reputational risks.	- Corporate segment - Small and Medium Enterprise segment - Retail segment	Climate advisory, Educational programs	Short
Transition - Financing Innovation	Supporting climate change mitigation through financing.	Loans and investments for renewable energy, energy-efficient solutions, and carbon reduction.	- Corporate segment - Small and Medium Enterprise segment - Retail segment	Green loans, Renewable energy investments, Sustainable finance, Blended finance	Short

Business Impact, Sectoral Focus, and Climate-driven Solutions

- Lines of Business Impacted: The initiatives' products and services primarily focus on Corporate segment, Small and Medium Enterprise segment and Retail segment.
- Sectors Affected: Green energy, housing, automotive, and local infrastructure sectors are central to these opportunities.
- Products and Services: Tailored green loans, sustainable mortgages, sustainable finance, blended finance, supply chain finance, renewable energy investments, and educational programs drive these initiatives.

Krungsri's proactive approach ensures alignment with sustainable goals while fostering customer engagement and creating new growth avenues across business lines. This strategy enables both risk mitigation and value creation in the transition to a net-zero economy.

Krungsri's Climate Risk Assessment

While climate change presents emerging threats, a robust risk and opportunity assessment can transform these challenges into business opportunities. To this end, Krungsri conducted a qualitative Climate Risk Assessment (CRA) on Krungsri Group's Balance Sheet taking into consideration both physical and transition risks based on current, medium- and long-term scenarios. As lending activity is our core business, the key risk factors with implications for the lending portfolio are identified as below.

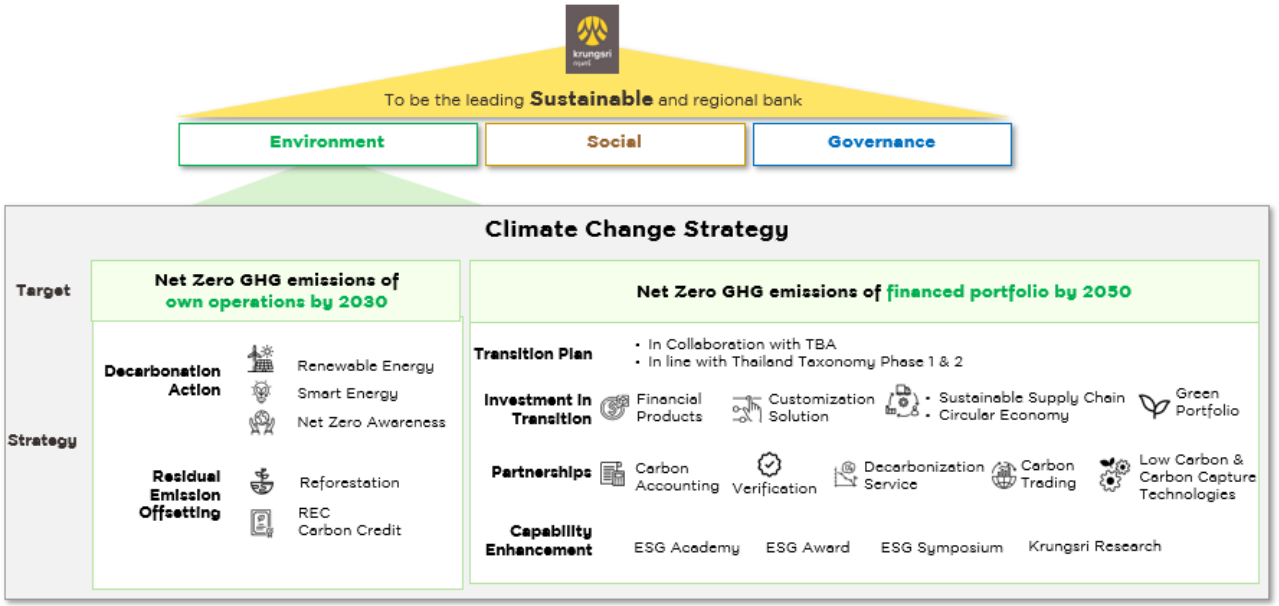
Physical Risks: Krungsri has identified flood risks as the key physical risk, given the increasing frequency of flooding across Thailand. In the event of flooding, customers' business operations could be disrupted, potentially leading to lower repayment capacity and a decline in collateral value, which would negatively impact the recovery.

Transition Risks: Krungsri has identified climate regulation as the key transition risk factor with evolving laws and regulations both domestically and internationally. The potential massive changes in regulation towards a more sustainable economy could negatively impact business operations, increase costs and accelerate additional capital investments. The implications would warrant our customers to formulate strategic move to transition robustly amidst the new global standards.

The CRA results have shown that Krungsri's lending portfolio has potential future exposure to climate change risk. Further discussion of results, including the identified priority sectors are contained within the Risk Management section of this Report.

Climate Change Strategy

In line with Krungsri's vision and CRA outcomes, Krungsri strives to proactively manage risks and opportunities, both within our organization and across the value chain, through the implementation of strategic initiatives to reduce GHG emissions as follows:



Climate Mitigation and Adaptation of Krungsri's Customers

Krungsri recognizes the urgent need for both climate mitigation and adaptation to ensure long-term environmental sustainability and economic resilience. As part of our sustainable finance strategy, we support businesses and communities in addressing climate challenges through targeted financial solutions that foster both adaptation to the impacts of climate change and the reduction of future climate risks. In 2024, Krungsri's environmental support through the promotion of green financing included the following:

1) Sustainability-linked bonds (SLB)
   - In November 2024, Krungsri supported the issuance of the Ministry of Finance's first SLB, with a total offering of Baht 30,000 million, featuring predetermined key performance indicators (KPIs) and sustainability performance targets (SPTs).
   - During 2024, Krungsri also supported Minor International Public Company Limited (MINT) in issuing a Baht 5,000 million SLB, the first of its kind within Thailand's hospitality sector.
2) A Blue bond
   - In June 2024, Krungsri supported Export-Import Bank of Thailand (EXIM Bank) in their inaugural blue bond offering, raising Baht 3,000 million of funding for marine resource conservation businesses and the blue economy, supporting a sustainable ecology and a low-carbon economy.
3) Sustainability debentures
   - During 2024, Krungsri supported Bangkok Expressway and Metro Public Company Limited (BEM) across two separate offerings of Baht 5,000 million and Baht 7,000 million to invest in or replace funds in clean energy transportation projects. This cooperation capitalized on the success in issuing sustainability debentures consecutively.
   - In November 2024, Krungsri also supported Advanced Info Service Public Company Limited (AIS) in a Baht 25,000 million debenture offering to invest in projects regarding energy efficiency and 5G network expansion, promoting access to basic digital infrastructure for people or households in remote areas.
4) Green loans
   - Krungsri supported Bangpakok-Piyavate Hospital Group with a Baht 3,200 million green loan to support the construction of Piyavate 2 Prannok Hospital. The project is designed with environmental conservation in mind, aiming for the LEED (Leadership in Energy and Environmental Design) Gold certification by the U.S. Green Building Council (USGBC).
   - In October 2024, Krungsri, as the sole lender, supported Advanced Wireless Network Company Limited (AWN) with a Baht 1,200 million green loan to support financing turning digital infrastructure and 5G networks into a green network by investing in solar power systems at base transceiver stations, data centers, and exchange units countrywide.
   - In November 2024, Krungsri was a joint lender supporting One Bangkok Company Limited with a Baht 50,000 million green loan, the largest of its kind in Thailand. The loan was designated to finance environmentally friendly projects contributing to socioeconomic sustainability. The project achieved LEED for Neighborhood Development Platinum certification, as well as WiredScore and SmartScore Platinum certifications.

5) Sustainability loan

- Krungsri, as the Sustainability Structuring Advisor and sole lender, supported a Baht 2,183 million sustainability loan to BEM for refinancing existing debt and investing in clean energy projects.

6) Sustainability-linked loan (SLL)

- Krungsri, as the Joint Sustainability Structuring Advisor together with MUFG, provided an SLL of Baht 10,000 million to Thai Beverage Public Company Limited (ThaiBev). It is the first SLL for a local beverage company in Thailand, in Southeast Asia, and in Asia (excluding Japan).

Krungsri's Net Zero Initiative

To turn Krungsri's Carbon Neutrality Vision into actions, we have established our Net Zero Initiative covering the decarbonization of both own emissions and financial services operations to remain steadfast in our Net Zero commitment.

Net Zero in Own Emissions

Krungsri is committed to decarbonizing our own emissions (Scope 1 and 2) by 2030, with a reduction plan based on the baseline year 2020 as below strategies.

Management Approaches

Krungsri is embedding sustainability into our corporate governance, business model, strategy, and financial planning, by conducting regular performance reviews, and leveraging technological advancements to accelerate emission reductions as follows:

1) Business model adaptation

Krungsri acknowledges that managing our own emissions is critical to mitigating climate risks and aligning with regulatory and stakeholders' expectations. In response, Krungsri is:

- Reducing our Operational Carbon Footprint by implementing energy efficiency measures across facilities and optimizing processes to lower direct (Scope 1) and indirect (Scope 2) emissions.
- Enhancing data monitoring by strengthening emissions recording, tracking and reporting systems to ensure accurate measurement and compliance with climate disclosure standards.

2) Strategic response to climate risks and opportunities

Krungsri recognizes that climate-related regulations and stakeholders' expectations will continue to shape its emission reduction strategy. In response, Krungsri is:

- Committing to regulatory compliance by preparing for stricter carbon reporting and reduction mandates to align with international frameworks and national policies.
- Improving cost efficiency by reducing emissions through energy efficiency and renewable energy adoption to mitigate potential carbon pricing impacts and operational costs.
- Building corporate reputation and investors' confidence by strengthening Krungsri's sustainability credentials to enhance investor trust and attract ESG-conscious stakeholders.

3) Financial planning adjustments

Krungsri is embedding emission reduction strategies into its financial planning by:

- Investing in decarbonization technologies by allocating resources toward low-carbon infrastructure, energy-efficient technologies, and facility upgrades.
- Improving operational cost management by reducing long-term exposure to rising energy costs through proactive emission management.
- Preparing scenario analysis by considering the implications of climate change and assessing financial impacts of various climate scenarios, including carbon pricing and energy market fluctuations, to proactively shape strategic decision-making.

Strategic Direction for Own Emissions

- **Decarbonizing operations**: Krungsri is prioritizing the reduction of Scope 1 and 2 emissions by transitioning to cleaner energy sources and improving operational efficiency.
- **Sustainable infrastructure investment**: Krungsri is upgrading its facilities to be more energy-efficient and integrating smart technology to optimize resource use.
- **Sustainable partnerships**: Krungsri is engaging with renewable energy providers and technology firms to accelerate its transition toward lower-carbon operations.

Additional Resources or New Lines of Business for Own Emissions

- **On-site renewable energy generation**: Krungsri is investing in solar panels and other renewable energy solutions at its operational sites to reduce reliance on fossil fuel-based electricity.
- **Carbon accounting and reporting enhancements**: Krungsri is implementing advanced data analytics tools to improve emissions tracking, measurement, and reporting accuracy.
- **Sustainability training and workforce development**: Krungsri is expanding internal programs to ensure employees are equipped with the knowledge and skills needed to drive carbon reduction initiatives.

Decarbonization of Krungsri's Own Emissions

Since 2017, Krungsri has assessed the amount of GHG emissions from our own emissions, identified the most significant contributors of GHG emissions from our own operations, and formulated strategic plans for emissions reduction accordingly. This effort is to identify the most appropriate activities to reduce the organization's GHG emissions, including:

1) Promote green procurement

   Krungsri has mandated the Policy for Environment, Resource, Occupational Health, and Safety across all Krungsri group companies to promote the purchasing of the environmentally friendly products and services.

2) Improve energy efficiency

   In 2024, Krungsri completed the implementation of chiller enhancements to improve energy efficiency, followed by conducting a study and strategic planning to further enhance energy efficiency across our Head Office, Krungsri Ploenchit Office, and branches, aiming to reduce our emissions and minimize our environmental impacts. Key initiatives which reinforce Krungsri's commitment to sustainability and energy optimization across our operations include:

   - Air conditioning upgrades, with the replacement of the air conditioning system at the Head Office, scheduled for completion by February 2025.
   - Solar roof installation with the deployment of solar roof panels at the Head Office, Krungsri Ploenchit Office, and branches, expected to be completed by the mid of 2025.
   - Lighting efficiency improvement with the replacement of branch lighting with LED bulbs, targeted for completion by the mid of 2025.

3) Promote renewable energy

Krungsri has prioritized measures to reduce emissions from energy consumption, the organization's largest source of GHG emissions. In 2024, Krungsri began feasibility studies and planning for the installation of a solar power system to reduce reliance on fossil fuel-based electricity and promote environmentally friendly renewable energy. The solar power system will be installed at the Head Office, Krungsri Riverside Office, and standalone branches nationwide, with the project expected to be completed in 2025.

4) Promote electronic vehicles (EV)

In 2024, Krungsri actively contributed to the development of the EV ecosystem while promoting the adoption of EVs within our corporate fleets to support our Carbon Neutrality Vision by:

- Transitioning corporate vehicle fleets to EVs: Krungsri is conducting a feasibility study and planning to change our corporate fleets, including executive and general business vehicles, from internal combustion engine (ICE) vehicles to environmentally friendly alternatives, such as EVs and plug-in hybrid electric vehicles (PHEVs) by considering various factors, such as vehicle life cycles, the EV market in Thailand, and after-sales services.
- Use of EV bikes: In collaboration with Thai Honda Co., Ltd., Krungsri has rented the Honda "BENLY e" electric bike for internal document submission, offering a 78-kilometer range per charge.

Net Zero in Financial Services Operations

Krungsri is developing our transition plan for environmental and climate (E&C) risk management and related targets, and initiatives are set in alignment with Krungsri's business strategies in achieving the low-carbon transition and decarbonization of our financial services by 2050. To achieve our decarbonization goal for financial services operations, Krungsri's transition plan is structured around four key deliverables/activities:

- Baseline Assessment: Measure and calculate financed emissions for two material sectors following the Partnership for Carbon Accounting Financials (PCAF) methodology.
- Decarbonization Pathways: Identify sector-specific decarbonization strategies, including critical levers, categories, and technologies necessary for achieving carbon reduction.
- Target Setting: Establish credible decarbonization targets for 2050.
- Strategic Implementation: Integrate these targets and plan into business operations and financing activities to ensure alignment with global sustainability goals.

The ESG Finance Department is dedicated to promoting a sustainable environment and society through sustainable finance products. These initiatives include climate transition financing, lending aligned with internationally recognized standards, and funding businesses and industries as contributing to sustainable finance, in accordance with the following underwriting frameworks:

1) Environmental Initiatives
    - Financing businesses that contribute to climate change adaptation and mitigation, including climate transition financing.
    - Providing loans to renewable energy sectors, such as solar, wind, hydro, biomass, biogas, and industrial waste-to-energy projects.
    - Supporting various green financial instruments, including green bonds, sustainability debentures, green loans, sustainability-linked loans (SLL), and green and blue bonds.
2) Sustainable Finance
    - Providing financing for green or blue projects, social initiatives, and sustainability-linked bonds (SLB) in alignment with the principles established by the International Capital Market Association (ICMA).

Krungsri's Resilience to Climate Risk

Krungsri recognizes the increasing impact of climate change on the financial system and is committed to assessing and managing climate-related risks. Given that the majority of Krungsri's activities are concentrated in credit lending, the most significant impact of climate risk on financial performance arises from credit risk. However, Krungsri also recognizes the important of managing the climate-related risk across other risk categories, including market risk, liquidity risk, operational risk, reputational risk, and regulatory compliance risk.

In 2024, Krungsri conducted a qualitative Climate Risk Assessment (CRA) with an aim to qualitatively identify portfolios where climate-related risks have the potential to pose material impacts. Two scenarios were chosen from the Network for Greening the Financial System (NGFS), which were (1) Net Zero 2050 Scenario and (2) the Current Policies Scenario, with the drivers reflecting both physical (acute and chronic) and transition risks. The assessment results and our methodology are described in Risk Management section of this Report.

Physical Risk

In addition to the qualitative CRA, Krungsri has started developing the quantitative assessment of climate risk focusing on physical risk and embarked on a pilot physical risk stress testing program with the Bank of Thailand (BOT). The details of the physical risk stress test analysis can be summarized as follows:

Physical Risk Stress Test

The physical risk stress test considers two scenario pathways: a baseline scenario reflecting current economic and financial market trends, and an adverse scenario assuming a major acute flood event in Thailand in 2030. The impact assessment focuses on the potential materialization of risks between 2030 and 2032 following the acute flooding event.

The onset of physical risk stress test is referenced to a SSP2-4.5[1] situation. This scenario explores a future where socioeconomic factors follow the "Middle of the Road" pathway, where social, economic and technology trends do not shift markedly from historical pattern. It assumes:

Areas of major flood in 2011



Key Assumptions

- Direct impact to each sector is similar to 2011
- No change in basic infrastructure since 2011

1) **Carbon Emissions and Climate Trends**: Carbon emission control remains at current levels, leading to continued greenhouse gas (GHG) emissions growth until the mid-century before a gradual decline. Global temperatures are projected to rise by approximately 2.0°C by mid-century and 2.7°C by the end of the century, with moderate increases in the frequency and severity of climate-related events.
2) **Policy and Economic Landscape**: Economic, social, and environmental policy trends remain largely consistent with current levels, with no significant shifts in regulatory frameworks or climate-related interventions. As an adverse situation, it assumes a major acute flood that severely impacts the Thai economy in 2030, with the situation gradually improving in 2031 and beyond. The flood uses factors from the major flooding in Thailand in 2011, albeit with double the severity. The area of flooding impact is assumed to be the same as 2011 flood event.

[1] The term "SSP2-4.5" refers to a specific scenario within the framework of climate modeling that combines a Shared Socioeconomic Pathway 2 (SSP2) with a Representative Concentration Pathway 4.5 (RCP4.5).

Credit Risk Assessment Scope and Methodology	
Assessment Period	3 Years (2030-2032)
Coverage	1) Corporate lending portfolio in Thailand, focusing on selected sectors includes: • Manufacturing of electronic products • Manufacturing of electrical equipment • Wholesale trade • Retail trade • Hotels and Catering 2) Retail lending portfolio secured by real estate collateral
Methodology	1) Determine the macroeconomic variable based on the onset of scenario (the BOT specific and Krungsri owned expansion). 2) Adopt the existing credit risk models used for provision calculation under Thai Financial Reporting Standard no. 9 (TFRS 9) to determine the impact assessment arising from macroeconomic situation. 3) Adopt historical experience on flood impact (including debt restructuring impact) to adjust to probability of default (PD) calculation. 4) Adjust with the impact on the collateral's damage assessment and replacement value. The assessment is varies based on areas of flood, severity of flood, and duration of flood to loss given default (LGD) calculation.

Krungsri's Own Operational Resilience

Krungsri also identifies extreme flooding as a major climate-related event that could disrupt business operations. These potential climate-driven disruptions are addressed within our Business Continuity Plan (BCP) and Disaster Recovery Plan (DRP), ensuring that critical operations have redundancies and can be transitioned to alternate locations in case of severe weather or physical damage. In addition, as part of Krungsri's physical risk stress test exercise, the potential damage to physical infrastructure has been assessed using the following assumptions and methodologies:

1) **Coverage**: Potential damages from flooding on Krungsri's Head Office (HO), Krungsri's branches, and Cash Operation Centers within the affected flood areas.
2) **Damage Assumptions**: Flooding impacts limited to the basement and first floor of affected HO, branches, and Cash Operation Centers.
3) **Financial Impact Evaluation**: Estimated renovation costs for affected properties based on historical damage assessments and industry benchmarks.

Results of the Physical Risk Stress Test

Krungsri conducted a physical risk stress test to assess the impacts of severe flood events over a 3-year period from 2030 to 2032. The assessment evaluates both credit risk and operational risk, with the results summarized in the following table:

Credit Risk	Operational Risk
• The qualitative assessment of physical risk stress test yields a relatively mild impact to Krungsri's financial and operating performances. • The economic impact of the flood event, coupled with collateral devaluation in affected areas on the selected portfolio, results in an incremental credit cost of less than 8% compared to Krungsri's credit cost in the normal situation during the 3-year period.	• The impact from infrastructure damage under severe flood event is considered mild. • The estimated additional operating expenses for branches and facility renovations in flooded areas account for less than 0.5% of Krungsri's total operating expenses for the 3-year period.

Transition Risks

Understanding Transition Risks

In addition to the physical risk scenario analysis above, Krungsri plans to conduct a pilot quantitative stress test exercise for transition risk in 2025. Krungsri has been developing a detailed approach to customer transition engagement, which will allow us to better understand the risks our customers face and how they are managing them. All of this will serve as a foundation for Krungsri's journey toward effective transition risk management.

Limitation and Uncertainty

The quantitative stress test risk assessment is subject to uncertainty due to evolving climate policy and market dynamics, data limitation in risk quantification, especially on flood map and collateral value assessment, and non-linearity of climate impact and feedback loops.

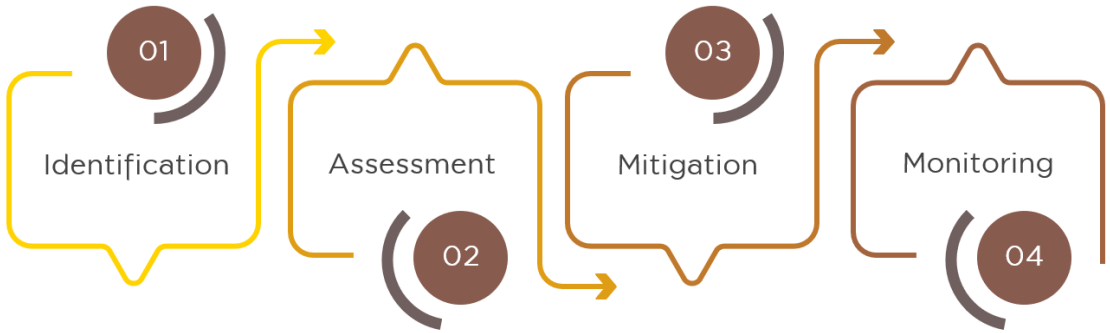
To address those limitations and uncertainties on the risk assessment, Krungsri remains committed to enhancing our climate risk assessment capabilities by:

1) Strengthening data quality and availability for more precise risk quantification.
2) Advancing modelling techniques to capture complex climate risk dynamics and enhance our disaster preparedness.
3) Collaborating with regulators, industry peers, and stakeholders to refine methodologies and ensure a robust risk management framework in an evolving climate landscape.
4) Continuous assessment and integration of emerging climate risks within our BCP and DRP.

Risk Management

Krungsri's Environmental and Climate Risk Management

Integrating climate risk into Krungsri's risk management framework involves assessing the risks that a changing climate poses and will continue to pose to Krungsri's business activities and operations, as well as the risks that Krungsri's business activities and operations cause to the climate. To address this, Krungsri has defined Environmental and Climate (E&C) risk as a "Transverse Risk" which is a cross-cutting risk that has an impact across the current principal risks. The following explains how Krungsri does this across the four key stages of our Enterprise Risk Management Framework (ERMF).



1) Risk Identification

E&C risk impacts many of the financial and non-financial risks that Krungsri faces. Therefore, Krungsri has taken steps to build and embed the consideration of E&C risks throughout the ERMF, ensuring comprehensive consideration across business activities.

As a "Transverse Risk", E&C risk is also considered as one of Krungsri's "Top Risks", meaning it warrants timely and appropriate handling actions. Krungsri's Chief Risk Officer (CRO) is fully responsible for the Group's overall risk management, including E&C risk management, while each respective Head of Risk is responsible for ensuring that E&C risk is well integrated as a part of their principal risk management function.

To provide a central repository of Krungsri's E&C risks, the Risk Management team maintains the E&C Risks Inventory which forms part of the risk assessment framework and includes documentation of key controls and control owners. The Inventory builds on six factors to understand specific climate-related risks and determined for relevance across Krungsri's principal risk classes. These six factors sit under physical risk (two factors - Acute and Chronic) and transition risk (four factors - Market Preference, Law & Regulations, Technology, and Reputation).

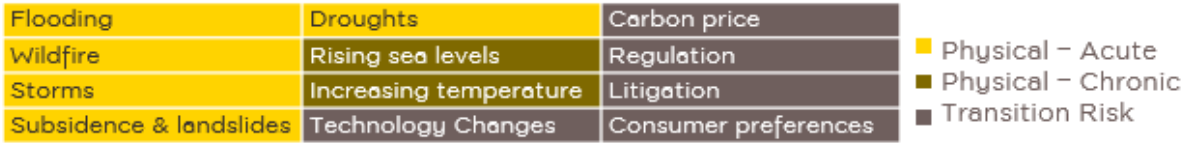
2) Risk Assessment

To assess E&C risks, Krungsri has performed two key exercises:

Climate Risk Assessment

To robustly manage climate-related risks, a qualitative Climate Risk Assessment (CRA) has been conducted on Krungsri Group's Balance Sheet with an aim to qualitatively identifying portfolios where climate risks have the potential to pose material impacts, and to set the tone for establishment of a climate risk management approach. The CRA exercise is the starting point of the formation of business strategy and E&C risk management framework where the balance of the two pillars is a critical factor for business sustainability. The risks and opportunities are then carefully identified to formulate the roadmap for Krungsri based on the results of the CRA exercise. The Risk Management team develops a E&C heatmap to more efficiently prioritize and address the material risk areas.

The two scenarios selected for use in the CRA were from the Network for Greening the Financial System (NGFS): (i) Net Zero 2050 Scenario and (ii) the Current Policies Scenario covering short, medium- and long-term scenarios with the drivers listed below reflecting both physical (acute and chronic) and transition risks.



Climate risk research on an idiosyncratic view of the segments/sectors was also conducted to identify “High”, “Medium” and “Low” risk levels following an exposure assessment. The CRA took into consideration both likelihood and materiality of drivers and impacts. Each of the segments/sectors was allocated to a tier of risk, which is indicative of overall climate risk ratings. The CRA results show that the lending portfolio has potential impact in future from climate-related risks with those priority sectors under commercial lending and priority products under consumer lending summarized below.

The most material sectors (Priority 1) identified using the CRA were: • Power generation • Oil and gas	The second most material sectors (Priority 2) identified using the CRA with material exposures, or slightly lower climate risk ratings but a highly material exposure were: • Land transportation • Manufacturing • Mortgages • Auto lending

Krungsri aims to perform the assessment on an annual basis to refresh results and to capture emerging climate change risks that may occur. A more quantitative assessment exercise will also be considered when data is sufficient to ensure meaningful analysis.

Expansion of analysis to consider all risk classes beyond credit risk

In addition to the CRA, which focuses primarily on credit-related risks, Krungsri has expanded its assessment of E&C risks within the E&C Risk Inventory to include all its principal risks. Each risk is assigned scoring based on the likelihood of occurrence and impact should this crystallize to Krungsri. This blended score drives an overall risk rating, which can then be taken forward for controls development in the E&C risk mitigation stage, should it trigger a defined threshold.

3) Risk Mitigation

Credit-related E&C risk mitigation:

Krungsri has developed and implemented a "Policy for Sustainability Lending" (the Policy), identifying "Four ESG categories", which proactively manage credit risk arising from ESG risks as follows:

1) Prohibited Transaction: No new or additional financing is allowed.
2) High Caution Transaction: Financing is subject to meeting certain requirements.
3) Closely Monitored Transaction: Financing is allowed with close monitoring.
4) Sustainable Finance Transaction: Support with taking into consideration credit worthiness.

From a risk management perspective, the most important category is "Prohibited Transactions" which acts as an "Exclusion List" for Krungsri's commercial credit portfolio, listing transactions where new or additional financing is not allowed. The following table summarizes what constitute as "Prohibited Category":

Specific Sectors	Cross-sectoral Characteristics
• Production or trade in radioactive materials, weapons, and munitions which are harmful to human and animal lives • Unabated coal-fired power generation • Forestry, i.e., plantation and hunting in reserved areas • Coal-related activities including coal mining, coal transportation as well as infrastructure services exclusively dedicated to support any of these activities	• Illegal transactions and transactions for illegal purposes • Transactions which violate public order and/or good morals • Transactions that negatively impact wetlands designated under the Ramsar Convention • Transactions that negatively impact UNESCO designated World Heritage Sites • Transactions violating the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) • Transactions involving the use of child labor, forced labor, or human trafficking

E&C risk mitigation in other risk classes

Operational Risk

Krungsri recognizes that environmental and climate changes, such as severe flooding and pandemics, can cause significant operational risks, including service disruptions, physical asset damage, and employee safety concerns. To effectively manage these risks, we have regularly conducted scenario-based risk assessments and developed a comprehensive Business Continuity Plan (BCP) to identify and mitigate potential impacts.

Our BCP includes flood-prepared infrastructure, secure remote working capabilities, and alternate site strategies to ensure continuous operations. Additionally, we have established a Crisis Management Team to make rapid decision, along with a crisis communication protocol to promptly inform employees and customers during emergencies. In the event of flooding, we can relocate operations to alternate sites and maintain banking services through digital channels. Lessons from past events, such as major floods and the COVID-19 pandemic, have strengthened our crisis response, ensuring that our critical banking services can be continue during crisis situations.

Market and Liquidity Risk

Krungsri also recognizes the potential price volatility of assets due to E&C risk. Based on the CRA exercise, the result indicates low potential market and liquidity risks. However, we will continue to assess potential climate-related market and liquidity risks to ensure timely action is properly taken.

Reputational Risk

Reputation is always the primary concern of the banking business where the trust of customers and clients is precious. Krungsri is well aware of reputational risk, specifically greenwashing arising from E&C as well as ESG as a whole. As a result, product campaigns, disclosures, and deal lending are carefully considered.

Regulatory Compliance Risk

Krungsri adheres to related regulations as well as adopts local and international standards of environmental and climate changes, including but not limited to, Partnership for Carbon Financials Accounting (PCAF), etc.

4) Risk Monitoring

Monitoring of Krungsri's Four ESG categories has been regularly reported to the relevant committees, including Credit Committee and Risk Management Committee. Reporting to these committees aims to demonstrate that the Policy for Sustainability Lending is being strictly adhered to and for members to be able to closely monitor ESG risk exposures of the commercial lending portfolio.

Three Lines of Defense in E&C Risks

Krungsri has started to embed E&C risk management across the Three Lines of Defense as set out below.

First Line: Relationship Managers gather relevant information from a range of sources and work closely with Credit Analysts to conduct risk analysis pertaining to Environmental and Social Risks. Completing or refreshing Due Diligence templates is required whenever the credit application is prepared.

Second Line: Credit decisions made take into consideration E&C risks arising from the credit transactions. Additionally, the Commercial Credit Risk Management Division is responsible for developing relevant policies, procedures, and tools to robustly manage E&C risks arising from the credit transactions.

Third Line: Internal Audit Group has actively conducted thematic audits around E&C risk areas as determined by their current risk profiles, including topics such as E&C policy and E&C reporting.

E&C Risk Culture

As the E&C risk management is a long-term journey, integrating E&C risk culture in the business-as-usual practice is crucial. The Risk Management team has regularly provided training to roll out the Policy for Sustainability Lending and the Due Diligence templates to ensure effective implementation. The refresh session is additionally taken place at least on an annual basis to ensure an on-going practice.

Next Steps

Krungsri is currently in the process of developing the following areas of the ERMF to embed E&C risk more comprehensively:

ERMF Areas	Activities underway
Risk Appetite	Definition of a qualitative E&C Risk Appetite and a supporting framework considering limits, KRIs, and escalation processes.
Risk Policies	Creation of a Policy for Environmental and Climate Change Risk Management as well as review and refresh of existing policy framework for updated E&C content.
Risk Procedures	Establishment of additional key controls for E&C risks.
Risk Reporting	Development of enhanced monitoring, including areas such as E&C Concentration Risk.
Risk Culture	Rollout of the overall E&C Learning Plan, including risk topic modules.

Metrics and Targets

As part of our commitment to transparency and accountability across climate-related financial disclosures, Krungsri has established key metrics and targets to measure and manage our environmental and climate change impact, as well as to ensure effective climate risk management and support the transition to a low-carbon economy. Our approach focuses on two core aspects that reflect our carbon footprint and financing activities which contribute to sustainable development, including:

1) Decarbonizing Krungsri's own operations to achieve the Net Zero target by 2030 (Scope 1 and 2)
2) Decarbonizing Krungsri's financial services operations to achieve the Net Zero target by 2050
    - Increasing social and sustainable finance portfolio by increasing the target from Baht 100 billion by 2030 to Bath 250 billion by 2030 (from the baseline year 2021)
    - Phasing out our exposure to coal-fired power plants within 2030

GHG Emissions from Own Operations

Krungsri Group is committed to reducing greenhouse gas (GHG) emissions generated from own operations. This metric enables us to track and mitigate our operational carbon footprint, aligning with Krungsri's Carbon Neutrality Vision, with the goal of achieving net-zero emissions from Scope 1 and 2 by 2030. Krungsri has conducted a carbon footprint evaluation by collecting data on GHG emissions and absorption from Krungsri's business operations and activities including:

Scope 1: Direct GHG emissions from organizational activities and operations calculated from combustions of various types of fuel, leakage of refrigerants, leakage of fire extinguisher solutions, leakage of methane emitted from the septic tank system and wastewater treatment tanks.

Scope 2: Indirect GHG emissions from the generation of purchased energy consumed in the organization. In this regard, it refers to electricity purchased from the State-Owned Electricity Enterprise.

Target & Performance Tracking

Krungsri integrates GHG emissions metrics into our reduction targets and tracking, including percentage reduction against baseline and previous year and progress toward net-zero goals. The decarbonization plan was presented and acknowledged by the Sustainability Committee in 2024, and the reduction activities have been reported to the Sustainability Committee and MUFG regularly to manage and track the own emissions decarbonization pathway required to achieve the 2030 target.

In 2024, key performance indicators (KPIs) related to own emissions were cascaded from the President and Chief Executive Officer down to the relevant Group Heads, Division Heads, and Department Heads. These KPIs include the target to reduce GHG emissions by 22.13% in 2024 compared to the baseline year 2020 and by 4.20% compared to the previous year. To drive these efforts, we have established an ESG Program Management Office team to lead Krungsri's emissions reduction. The progress of emission reduction initiatives and related areas are closely managed by this team to ensure effective execution and alignment with the goals.

GHG Emissions from Own Operations across Krungsri Group

Krungsri Group initiated our carbon emission tracking in 2017 and continues to capture and report our emissions information. This disclosure encompasses the Head Office, Krungsri Ploenchit Office (KSPO), branches nationwide, and 14 subsidiaries across Thailand. This has been verified BSI Group (Thailand) Co., Ltd and endorsed by the Thailand Greenhouse Gas Management Organization (TGO) as presented in the following table:

Parameter	Unit	Total GHG Emissions				
		2020 (Baseline)	2021	2022	2023	2024
GHG Emissions						
Scope 1	tCO_2e	10,032	9,792	8,421	8,601	9,007
Scope 2 (Location based)	tCO_2e	53,496	40,429	37,866	43,032	41,748
Scope 2 (Market based)*	tCO_2e	53,496	40.429	37,866	43,032	37,748
Scope 1 and 2	**tCO_2e**	**63,528**	**50,221**	**46,287**	**51,633**	**46,755**
Scope 1 and 2 emission intensity	tCO_2e/persons	2.96	2.44	2.27	2.43	2.20
Full-time employees (FTE)	persons	21,445	20,612	20,632	21,283	21,260
Actual vs Baseline year						**26.40%**
Actual vs Previous year						**9.45%**

Remark: * In 2024, indirect GHG emissions (Scope 2: electricity purchased for internal use) were offset by purchasing 8,000 Renewable Energy Certificates (RE Cs), equivalent to a GHG emission reduction of 4,000 tCO_2e.

Krungsri is committed to reducing our carbon footprint through a comprehensive Carbon Credit Management. We collaborate with partners to drive forest carbon credit management and carbon neutral events. The following initiatives support emissions reduction, carbon sequestration, and sustainable development while aligning with Krungsri's Carbon Neutrality Vision:

1) Forest Carbon Credit Management

Realizing that forestation, reforestation, and forest conservation serve as the mechanism that absorbs carbon dioxide from the atmosphere while mitigating greenhouse gases, forest carbon credits can be used to reduce corporate carbon footprints, Krungsri, thus, collaborated with business partners and alliance networks in forest carbon credit management with an aim to participate in emissions reduction and carbon absorption with following details:

- **The forest carbon credit management for sustainable development:** Krungsri joined hands with the Mae Fah Luang Foundation under Royal Patronage in the carbon capture project in northern community forests with around 1,000 rai in total areas, which is expected to generate approximately 0.9 - 1.5 tons of carbon dioxide equivalent per rai over three years (2023-2025). In addition, this project's purpose is to manage natural resources and enhance the general public's quality of life in terms of socio-economic aspect, particularly boosting communities' capacity in conserving or increasing carbon captures in forest areas, as well as adding extra income from preserving forests for sustainable communities.
- **Mangrove planting project for carbon credit benefits:** In cooperation with the Department of Marine and Coastal Resources, Krungsri and mangrove planting officers conducted a survey in 2024 of 44.35 rai of mangrove forests in Trang Province, an area allocated by the Department of Marine and Coastal Resources. The survey revealed that the area had naturally regenerated, with a significant presence of mangrove species, including nipa palms. After evaluating the area's condition and surrounding environment, the officers determined that the location was not suitable for additional mangrove planting or forest improvement. However, Krungsri remains committed to the forest carbon credit project, particularly in mangrove forests, and is currently considering submitting a proposal to the Department of Marine and Coastal Resources to allocate a new area for a future mangrove planting project for carbon sequestration.

2) Carbon Neutral Event

Krungsri acknowledges the environmental impact of the business operations and is committed to reducing the carbon footprint. As part of this effort, we have introduced Carbon Neutral Events, ensuring that all aspects of event planning take into consideration sustainability aspect. These measures include selecting event venues certified with environmental standards, utilizing electronic media, and choosing eco-friendly materials and equipment to reduce waste and emissions from various activities.

In 2024, Krungsri organized environmentally responsible events and received Carbon Neutral Event certification from the TGO as follows:

- Krungsri ESG Awards 2024 press conference on 8 May 2024, at KSRO, Bank of Ayudhya, with 80 attendees and carbon offset from the event of 2 tons of carbon dioxide equivalent.
- Krungsri-MUFG ESG Symposium held on 29 May 2024, at the Siam Kempinski Hotel, with 600 attendees and carbon offset from the event of 13 tons of carbon dioxide equivalent.

GHG Emissions from Financial Services Operations

1) Reducing Financed Emissions

Krungsri Group recognizes the critical importance and urgency of addressing global temperature rise, as well as the essential role of financial institutions in supporting the transition to a low-carbon economy. Acknowledging that financed emissions constitute the largest share of its overall emissions, Krungsri Group is committed to taking decisive action.

In 2024, Krungsri became a member of the Partnership for Carbon Accounting Financials (PCAF) to adopt the globally recognized PCAF calculation methodology. Krungsri Group began assessing financed emissions for Scope 3, Category 15 in two priority sectors: Power generation and Oil and gas. Additionally, we are currently developing our first Transition Plan in collaboration with various stakeholders, and progress on this initiative will be reported in the upcoming iteration of the TCFD report. The Group will consistently measure the progress and strive to align our financing activities with climate resilience and sustainability objectives, with the ultimate goal of achieving Net Zero financed emissions by 2050.

The following table summarizes our approach and key assumptions of our financed emissions calculation exercise conducted in 2024 through following the PCAF framework, covering two priority sectors:

Coverage	
• Sectors and its Value Chain	• Power generation: Upstream (Power generation) and Midstream (Transmission) • Oil and gas: Upstream (Extraction) and Midstream (Refinery)
• Asset Classes	• Corporate Lending • Project Finance • Investment
Baseline Year	2022 (Data period: 1 January – 31 December 2022)
Calculation Methodology	PCAF
Basic Equation	Financed Emissions = Customer Emissions X Attribution Factor
Customer Emissions	In line with PCAF guidance, Scope 1 and 2 emissions are required as a minimum for financed emissions calculations with Scope 3 emissions only included for Oil and gas sector, due to the materiality and challenges with reliability, transparency and coverage of Scope 3 data for other sectors.
Emission Scope	• Power generation: Scope 1 and 2 • Oil & gas: Scope 1, 2 and 3
GHG Emissions	We have collected emissions disclosed by the clients (PCAF Score 1 and 2). Where such data is not available, the customer emissions are estimated mainly based on the physical activity approach (PCAF Score 3) using PCAF's acceptable Emission Factors. Where physical activity data is not available, the economic value approach is applied (PCAF Score 4 and 5) using PCAF's acceptable Emission Factors.
Load Factors for Power generation	We managed to obtain Production Capacity of each power generation technology. Where production data is available, the capacity for power generation has been determined using publicly available load conversion factors (local and regional where available).
Attribution Factor	The attribution factor has been calculated for the different asset classes in line with PCAF methodology.
Exposure	• Outstanding on Cash Loan and Equity • Book Value on Debenture or Bond Instruments
Customer's Financial Data	We use data from 3 sources: 1) Internal data for each customer 2) Data from information vendors 3) Publicly available data, e.g., customers' annual reports and www.settrade.com

The following table presents Krungsri's baseline financed emissions for the baseline year 2022 for the Power generation and Oil and gas sectors:

	Power generation	Oil and gas	
	Scope 1 and 2	Scope 1 and 2	Scope 3
Financed Emissions ($MtCO_2e$)	5.10	0.36	3.53
PCAF Data Score	3.34	2.28	2.44

Data Limitations

The financed emissions calculation is based on the best available data at the calculation date. It is then possible to be changed subject to data availability. Krungsri will continue enhancing the calculation process as well as updating data to expand the coverage and to reflect more accurate data, e.g., verified GHG emissions reported by the customer.

2) Increasing Financial Support Social and Sustainable Finance Portfolio

To support the sustainability transition, Krungsri Group is expanding our Social and Sustainable Finance (SSF) portfolio. This metric reflects our proactive efforts in financing projects and businesses that contribute to environmental and social sustainability.

Target & Performance Tracking

Target: Increase the SSF portfolio target by Baht 250,000 million from the baseline year 2021 by 2030, being revised from the previous target at Baht 100,000 million.

Performance: As of the end of 2024, Krungsri has expanded the SSF portfolio of Baht 95,183 million from the baseline year 2021 with the following details:

Category		Outstanding Balance (Unit: million baht)			
		31 Dec 2021	31 Dec 2022	31 Dec 2023	31 Dec 2024
Environment	Underwriting: Green Bond	7,450	14,044	19,891	21,391
	Underwriting: Green Bond (Self-Issuance)	-	-	14,236	14,236
	Green Loan	1,000	3,000	3,335	4,492
	Loan to Renewable Energy Business	9,210	9,150	11,180	11,566
	Other Loans	-	4	234	365
Society	Underwriting: Social Bond	-	-	-	500
	Underwriting: Social Bond (Self-Issuance)	7,040	7,040	7,040	7,040
	Loan from WSME Bond	21,033	19,866	23,138	20,048
	Social Loan	20,246	23,763	21,230	16,691
	Loan to Regional Development Projects	21,608	18,797	14,821	15,276
Sustainability	Underwriting: Sustainability Bond[1/]	20,567	44,427	47,659	57,031
	Underwriting: Sustainability-Linked Bond	11,000	11,000	11,000	18,938
	Sustainability Loan	-	3,151	2,496	6,042
	Sustainability-Linked Loan	6,953	6,946	9,232	22,580
	Investment	830	3,145	4,320	5,925
Total		126,937	164,333	190,512	222,120

Remark:

1) Definition of Social and Sustainable Finance: The term "Social and Sustainable Finance" (SSF) refers to the provision of finance through following financial products and services (including loans, underwriting of bonds, and investment) in compliance with relevant external standards (i.e., the Green Loan Principles, Green Bond Principles, and Social Bond Principles) and in alignment with Mitsubishi UFJ Financial Group Inc. (MUFG)'s Carbon Neutrality Declaration. There are three types of area in financial products and services as follows:

   Environment

   - Financial products and services contributing to the adaptation to and the moderation of climate change, including renewable energy, energy efficiency improvement, and green buildings, i.e. arrangement of loans and project finance for renewable energy projects and other loans (e.g., Solar Roof Lend ing Program, underwriting and distribution of green bonds).

Society

- From basic financial products and services to infrastructure businesses, such as hospitals, water supply, and schools (e.g. arrangement of loans and project finance for public infrastructure, underwriting and distribution of social bonds).
- Financial products and services contributing to the development of startups, job creation, and poverty alleviation (i.e., Women SME bonds).
- Financial products and services contributing to local community development and regional revitalization (i.e., loans to the Eastern Economic Corridor (EEC) area which covers three eastern provinces of Thailand - Chonburi, Rayong, and Chachoengsao).

Sustainability

- Financial products and services contributing to both green and social projects based on the customer's sustainability objecti ves and performance (i.e., sustainability loans, sustainability-linked loans, underwriting and distribution of sustainability bonds and sustainability-linked bonds).
- Investments in ESG bonds.

2) Bond underwriting is accumulated amount from 2019 onwards.
3) Loans constitutes commercial lending only, including Corporate and Small and Medium Enterprise segments.

3) Phasing out Exposure to Coal-Fired Power Plants

Krungsri has adjusted investment strategies and loan portfolios in line with the "Responsible Lending" guidelines which align with Krungsri's Policy for Credit Risk Management and Policy for Sustainability Lending. This includes increasing the proportion of green loans across various business sectors, such as clean energy projects and low-carbon industries, while reducing the risk of lending to businesses with high environmental impacts or greenhouse gas emissions, such as coal-fired power plants. Krungsri has adopted and implemented the Policy for Sustainability Lending which includes restrictions on transactions related to unabated coal-fired power generation. Krungsri is committed to environmental stewardship and have set a clear goal to phasing out exposure to coal-fired power plants within 2030.

Target & Performance Tracking

Target: To phase out exposure to coal-fired power plants within 2030.

Performance: As of 31 December 2024, Krungsri's outstanding financial exposure to coal-fired power plants was reduced to Baht 2,115 million which is expected to decrease to zero within 2030 as planned.

By monitoring these key metrics, Krungsri aim to strengthen our climate risk strategy, enhance stakeholder confidence, and contribute to the broader transition toward a sustainable and resilient financial system. Our targets are periodically reviewed to ensure alignment with national policies, global climate commitments, and evolving regulatory requirements.

