VPBANK

Task Force on Climate-related Financial Disclosures (TCFD)

Update 2024

VPBank
Vì một Việt Nam thịnh vượng

TCFD Update 2024

"Recent extreme weather events have once again highlighted the profound impacts of climate change. Vietnam, one of the most vulnerable countries to these effects, could face a potential GDP loss of 15-16% by mid-century if such extreme conditions continue to intensify. In this context, the Government has introduced a series of policies to advance the transition towards sustainable energy, including the Power Development Plan VIII and the National Green Growth Strategy to 2030. These initiatives aim to gradually reduce reliance on fossil fuels, increase the share of renewable energy, and promote the development of green industries. Aligned with these national priorities, VPBank is committed to embedding emission reduction and sustainability initiatives into its core strategy. The Bank continues to advance green financial products and solutions that support clients' transition to a low-carbon economy while enhancing climate risk management in accordance with IFRS S1, IFRS S2, and TCFD recommendations. Through these efforts, VPBank strives to achieve net zero emissions and contribute to a sustainable, climate-resilient economy by 2030."

CONTENT

APPROACH TO CLIMATE CHANGE

1.1. TONE FROM THE TOP

In 2024, the world faced a host of uncertainties, from escalating geopolitical tensions, the slowing growth of major economies to the resurgence of trade protectionism, but the challenges extended far beyond the economic sphere. The World Meteorological Organization (WMO) confirmed 2024 as the hottest year on record, with global average temperatures rising 1.5ºC above pre-industrial levels, a symbolic threshold in the fight against climate change. Climate change has triggered increasingly extreme events including heatwaves, floods, and severe droughts, with total global asset losses from 2014 to 2023 estimated at USD 1.6 trillion, according to the International Chamber of Commerce (ICC).

For Vietnam, 2024 brought widespread impacts of natural disasters under the dual influence of El Niño in the first half of the year and La Niña in the second[1]. The country experienced 18/22 types of disasters such as record-breaking heatwaves, prolonged drought, salinity intrusion, storms, floods, and landslides. Yagi, the most powerful storm to make landfall in 70 years, caused unprecedented devastation in the North with damages exceeding VND 81 trillion. Numerous temperature records were shattered in April 2024, with 110/186 monitoring stations nationwide recording the highest daily temperatures in history. In Dong Ha (Quang Tri), the mercury soared to 44ºC on April 28, the highest since 1976 and the third-highest ever recorded in Vietnam.

Recent years have witnessed unprecedented extremes of heat, floods, and storms, making clear that climate change has advanced into an ever more destructive phase. In Vietnam, a 2022 World Bank study projected that the frequency of tropical cyclones and river floods will rise, inflicting annual economic losses of 3-5% of GDP, while the Network for Greening the Financial System (NGFS)[2] estimated cumulative damages could reach 15-16% of GDP by 2050 under an extreme scenario. Against this backdrop, the energy transition roadmap and Vietnam's commitments at COP28 have become imperative, not only to mitigate climate risks but also to safeguard long-term economic stability and growth.

In 2024, mounting pressure to transition towards a net-zero economy has placed the banking sector under heightened financial and non-financial risks. VPBank has taken decisive steps to strengthen its sustainability foundation by publishing its first standalone Sustainability Report, refining its ESG risk management framework, and expanding its portfolio of green and social financing. At the same time, the Bank has deployed international-standard climate risk management tools, reinforcing resilience while channeling capital into clean energy, sustainable infrastructure, and the circular economy.

With robust financial capacity and the international expertise of SMBC as a strategic partner, VPBank envisions a clear trajectory towards becoming a leading force in green finance in Vietnam. The Bank is dedicated to broadening its sustainable initiatives and offering a diverse range of financial solutions to support businesses on their journey towards a green and circular economy. VPBank holds the firm belief that the actions taken today will lay the foundation for an economy that is sustainably growing, energy-secure, and resilient against the challenges posed by climate change.

Representative of Vietnam Prosperity Joint-Stock Commercial Bank
Standing Deputy Chief Executive Officer and Senior Executive Managing Director

Luu Thi Thao

[1] The ENSO (El Niño–Southern Oscillation) phenomenon is a natural climate oscillation comprising three phases: El Niño (unusually warm conditions), La Niña (unusually cool conditions), and a neutral state. ENSO is associated with fluctuations in sea surface temperatures across the central and eastern equatorial Pacific, with the potential to significantly influence global weather patterns and climate variability.
[2] The Network for Greening the Financial System (NGFS): Scenarios Portal https://www.ngfs.net/ngfs-scenarios-portal/use/

1.2. ABOUT THE TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURE

Acknowledging the profound challenges and opportunities that climate change brings to both its clients and operations, VPBank boldly advances its leadership by disclosing climate-related financial information in accordance with TCFD recommendations, while progressively aligning with IFRS S1 and S2 standards. This decisive approach not only fortifies the Bank's climate risk management and elevates reporting to world-class standards, but also positions VPBank at the forefront of Vietnam's drive towards sustainable development and transparent finance.

The Task Force on Climate-related Financial Disclosures (TCFD), established in 2015 by the Financial Stability Board (FSB), has become a cornerstone for organizations seeking to develop transparent frameworks for climate risks and opportunities. Nearly a decade since its inception, more than 4,900 global entities, including corporations, financial institutions, and regulators, have formally endorsed the TCFD's recommendations, which focus on four pillars: Governance, Strategy, Risk Management, and Metrics & Targets.

The year 2023 marked a milestone with the ISSB's issuance of its first two global sustainability disclosure standards, IFRS S1 (General Requirements for Disclosure of Sustainability-related Financial Information) and IFRS S2 (Climate-related Disclosures), to formally adopt and expand the TCFD framework. Effective from 2024, the new standards mark a major milestone in elevating the TCFD recommendations into a comprehensive global framework for ESG and climate-related disclosures. Expanding upon the principles established by the TCFD, the standards introduce more detailed requirements, particularly on greenhouse gas emissions reporting and sustainability-related financial information, paving the way for a unified and comparable global reporting system. This development underscores the urgent need for financial institutions to enhance transparency, comparability, and responsiveness to growing investor and stakeholder expectations.

In 2024, VPBank continues to anchor the reporting on TCFD recommendations while gradually integrating IFRS S1 and S2 requirements. This dual approach ensures consistency with international standards, strengthens climate risk management capabilities, and enhances transparency, thereby laying the groundwork for deeper integration into the global financial system. By combining TCFD adherence with IFRS alignment, VPBank fortifies internal governance and expands access to international green and climate finance, setting a benchmark for other Vietnamese financial institutions and contributing to the development of a transparent, climate-aligned financial market.

VPBank remains committed to close collaboration with both domestic and international partners to explore and apply advanced climate risk and opportunity assessment tools, enabling more precise identification and quantification of climate impacts on its operations and clients. The Bank also plans to further develop its climate disclosures in line with best international practices, covering transition planning, scenario analysis, stress testing, physical risk assessment, and financed emissions measurement, with increasing levels of detail in future reporting cycles.

1.3. ABOUT US

Name	
In Vietnamese	**Ngân hàng Thương mại Cổ phần Việt Nam Thịnh Vượng**
In English	**Vietnam Prosperity Joint-stock Commercial Bank**
Ticker symbol	**VPB**
Business Registration Certificate No.	**0100233583**
First registration	**8/9/1993**
45th amendment	**21/11/2023**
CHARTER CAPITAL	**VND 79,339,236** million
Head Office	**VPBank Tower, 89 Lang Ha Street, Lang Ha Ward, Dong Da District, Hanoi**
Phone number	**(84) 1900 545 415**
Fax	**(84) 024 3928 8901**
Website	**www.vpbank.com.vn**

Banking services: VPBank's principal activities include:

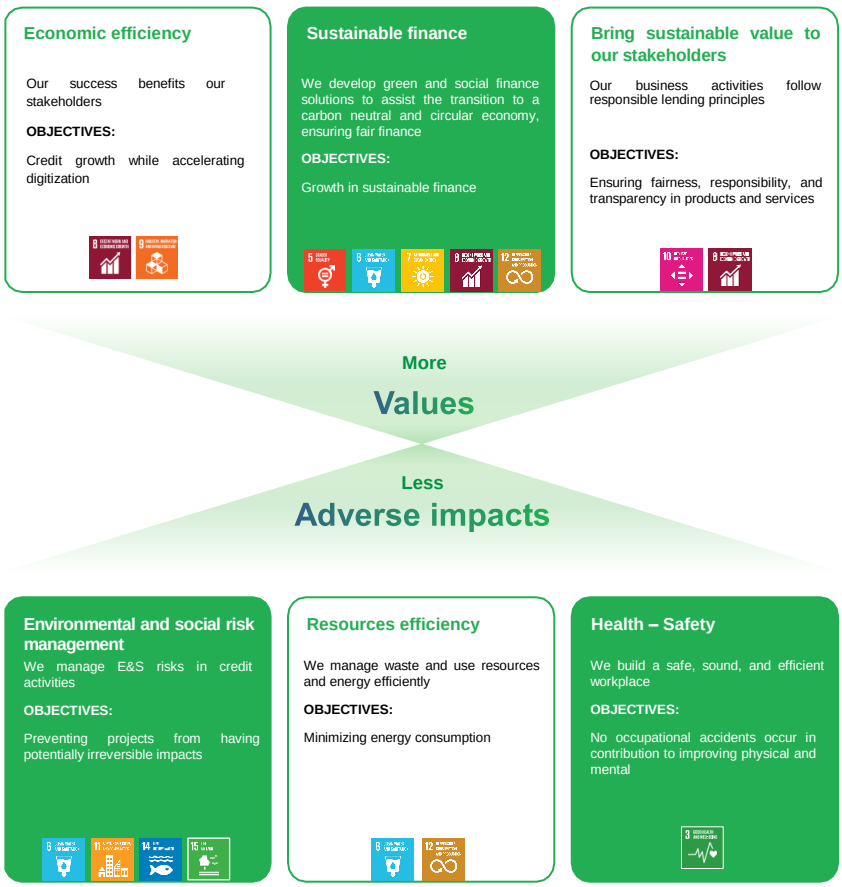
1	Providing banking services, including mobilizing and receiving short-, mediumand long-term deposits from organizations and individuals; making short, medium and long-term loans and advances to organizations and individuals.	4	Providing settlement payment and e-wallet services.
2	Conducting foreign exchange transactions; providing international trade finance services; discounting commercial papers, bonds, and other valuable papers.	5	Providing asset management services.
3	Investing in securities and bonds; investing in Government bond futures contracts.	6	Extending credit in the form of rediscounting negotiable instruments and other valuable papers and other banking services permitted by the State Bank of Vietnam.

TCFD Update 2024

Sustainable development strategy

Vision	Becoming the top 3 largest banks in Vietnam and top 100 largest banks in Asia, contributing to promoting the sustainable development and prosperity of the country and community; VPBank transforms robustly to become the leading green and sustainable bank in Vietnam, comprehensively contributing to economic, social, environmental goals and creating a future of sustainable development.
Mission	Pioneering innovation, improving the quality of outstanding financial solutions for customers and partners, and efficiently delivering sustainable prosperity to shareholders, the community, and society; • Expanding a multi-layered ecosystem along with accelerating digital transformation and technology application across all segments and products; • Creating "More value - Less negative impact" through responsible lending principles, ensuring fair and equitable financing for sustainable development activities; • Create the best conditions for all employees to exploit their potential and develop comprehensively; • Maximize long-term benefits and added value for all stakeholders.

Actions



1.4. TCFD Index

The table below highlights how the contents of this report align with the disclosure recommendations set out by the TCFD.

Pillar	Recommendation	Page reference
Governance	a) Describe the Board's oversight of climate-related risks and opportunities.	9-10
	b) Describe management's role in assessing and managing climate-related risks and opportunities.	11-13
Strategy	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	15-20
	b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	15-29
	c) Describe the resilience of the organization's strategy, considering different climate-related scenarios, including a 2°C or lower scenario.	29-40
Risk management	a) Describe the organization's processes for identifying and assessing climate-related risks.	42-43
	b) Describe the organization's processes for managing climate-related risks.	43-51
	c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	43-45
Metrics and Targets	a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	53-58
	b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks.	54-55
	c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	53-58

GOVERNANCE

VPBank's governance around climate risks and opportunities

CHAPTER 2. GOVERNANCE

2.1. VPBank's risk governance structure

VPBank integrates the management of climate-related risks and opportunities into its governance structure, with the Board of Directors providing strategic oversight of the Bank's climate risk agenda. The Board monitors the Executive Board in implementing approved strategies and reviews periodic reports to ensure effectiveness, transparency, and accountability.

At VPBank, the Three Lines of Defense framework serves as the foundation for risk governance, clearly delineating the roles and responsibilities of each department and unit. This approach not only reinforces the comprehensiveness and effectiveness of the Bank's enterprise-wide management system, but also enables proactive oversight of Environmental, Social, and Governance (ESG) matters, including, but not limited to, climate-related risks.

The diagram below illustrates how the Board's climate strategy is cascaded and implemented throughout the organization.

Figure 1. VPBank's risk governance structure follows Three lines of defense model

2.2. Board oversight of climate risks and opportunities

Board of Directors

The Board of Directors (BOD) has ultimate responsibility for VPBank's ESG Risk Management Framework and directly oversees the Board of Management (BOM) in the development and implementation of the ESG Risk Management Framework, with advisory support from the Risk Management Committee. The BOD also sets the strategic direction and ESG risk appetite, monitoring implementation to ensure the bank not only adheres to its internal risk management objectives but also meets the ESG governance requirements of external stakeholders, ensuring sustainability and transparency in operations.

Risk Management Committee

The Risk Management Committee (RMC) advises the Board of Directors (BOD) on ESG risk governance, with a particular focus on climate-related risks. The RMC's key responsibilities include overseeing the implementation of the ESG governance framework, strategy, and risk appetite; periodically assessing the effectiveness of relevant policies and procedures; and recommending enhancements to address any identified gaps. The RMC reports significant findings and decisions directly to the BOD to ensure transparency and accountability.

In 2024, the RMC received high-level risk reports to monitor strategy implementation and the overall risk profile, including climate risks. Key updates and decisions encompassed:

- Quarterly updates on VPBank's loan exposure to high-risk, carbon-intensive sectors and the overall portfolio-level assessment of E&S risks, presented as an Environmental & Social (E&S) Risk Score;
- Approval of the Risk Appetite Statement and top-down strategic risk metrics, which integrate considerations for the impacts of climate risks;
- Review and advisory on the results of the climate risk stress test to assess the long-term impact of physical and transition risks on the Bank's business resilience.

2.3. Management's role in assessing and managing climate risks & opportunities

The Chief Executive Officer (CEO) is delegated authority by the Board of Directors (BOD) for the day-to-day management of business operations and the implementation of approved strategies. The Board of Management (BOM) and its sub-level risk management councils support the CEO in this process, with clear responsibilities assigned to each specialized unit.

On its sustainable development path, VPBank focuses on two primary missions: promoting sustainable finance and enhancing climate risk management, in line with regulatory requirements and international best practices. The responsibility structure is designed to ensure that climate risks and opportunities are integrated into all relevant business areas.

VPBank also identified three specialized units in charge of promoting initiatives that strengthen ESG governance capacity. In particular, the Risk Management Division integrates ESG risk management (including climate risk) into the organization's overall risk management framework. The Legal and Compliance Division is responsible for developing and overseeing the system and policies for managing

environmental and social risks in credit granting activities. The Financial Markets and Transaction Banking Division mobilizes international funding and coordinates with other business units to promote green and sustainable finance.

Members of the BODs and BOM at VPBank possess extensive knowledge and expertise in various sustainability topics, enabling them to proactively provide high-level guidance on managing ESG issues, including climate change:

Table 1. ESG experiences of senior management

	Corporate governance	Risk management / Audit/ Law	Economics/ Finance/ Banking	Human resources/ Operations/ Information technology	Environment/ Society/ Climate	Social responsibility/ Communication/ Marketing
BOARD OF DIRECTORS						
Mr. Ngo Chi Dung BOD Chairman	✓	✓	✓	✓	✓	✓
Mr. Bui Hai Quan BOD Vice Chairman	✓	✓	✓	✓	✓	✓
Mr. Lo Bang Giang BOD Vice Chairman	✓	✓	✓	✓	✓	✓
Mr. Nguyen Duc Vinh BOD Member and CEO	✓	✓	✓	✓	✓	✓
Mr. Nguyen Van Phuc BOD independent member	✓	✓	✓	✓	✓	✓
Mr. Takeshi Kimoto BOD Member	✓	✓	✓	✓	✓	✓
Ms. Pham Thi Nhung BOD Menber, Standing Deputy CEO and Head of Partnership Management and External Relations Division	✓	✓	✓	✓	✓	✓
BOARD OF MANAGEMENT						
Mr. Nguyen Duc Vinh BOD Member and CEO	✓	✓	✓	✓	✓	✓
Ms. Luu Thi Thao Standing Deputy CEO and Senior Executive Managing Director	✓	✓	✓	✓	✓	✓
Mr. Phung Duy Khuong Standing Deputy CEO in charge of the South and Head of Retail Banking	✓	✓	✓	✓	✓	✓

	Corporate governance	Risk management / Audit/ Law	Economics/ Finance/ Banking	Human resources/ Operations/ Information technology	Environment/ Society/ Climate	Social responsibility/ Communication/ Marketing
Division cum Head of Debt Collection Division						
Ms. Pham Thi Nhung Standing Deputy CEO and Head of Partnership Management and External Relations Division	✓	✓	✓	✓	✓	✓
Mr. Kamijo Hiroki Deputy CEO	✓	✓	✓	✓	✓	✓
Mr. Nguyen Thanh Binh Deputy CEO and Head of Credit Division	✓	✓	✓	✓	✓	✓
Ms. Duong Thi Thu Thuy Deputy CEO and Head of Corporate & Investment Banking Division	✓	✓	✓	✓	✓	✓
Mr. Nguyen Thanh Long Deputy CEO and Head of Legal & Compliance Division	✓	✓	✓	✓	✓	✓
Mr. Dinh Van Nho Deputy CEO and Head of Commercial Banking Division	✓	✓	✓	✓	✓	✓
Mr. Wong Kok Seng Augustine Head of Information Technology Division	✓	✓	✓	✓	✓	✓
Ms. Tran Thi Diep Anh Head of Human Resource Division	✓	✓	✓	✓	✓	✓
Mr. Andre Debakhapouve Head of Risk Management Division	✓	✓	✓	✓	✓	✓
Mr. Nguyen Huy Phach Head of SME Division	✓	✓	✓	✓	✓	✓
Ms. Le Hoang Khanh An Head of Finance Division	✓	✓	✓	✓	✓	✓

	Corporate governance	Risk management / Audit/ Law	Economics/ Finance/ Banking	Human resources/ Operations/ Information technology	Environment/ Society/ Climate	Social responsibility/ Communication/ Marketing
Ms. Vo Hang Phuong Head of Financial Market and Transaction Banking Division	✓	✓	✓	✓	✓	✓
Mr. Poh Wei Li Johnson Head of Enterprise Data and Analytics Division	✓	✓	✓	✓	✓	✓
Ms. Nguyen Thuy Duong Head of Marketing and Communications Center	✓	✓	✓	✓	✓	✓
Mr. Mochizuki Masashi Head of Foreign Direct Investment Center	✓	✓	✓	✓	✓	✓
Mr. Vu Minh Truong Head of Asset & Liability Management Center	✓	✓	✓	✓	✓	✓
INTERNAL AUDIT						
Ms. Tran Thi Hue Head of Internal Audit Division	✓	✓	✓	✓	✓	✓

Note:

✓ *: Having experiences in charge of the mentioned area, having graduated from a related major or managing tasks related to the mentioned areas for 5 years or more;*

✓ *: Having adequate, relevant knowledge/ experience in the mentioned area.*

STRATEGY

The actual and potential impacts of climate risks and opportunities on VPBank's financial resilience

CHAPTER 3. STRATEGY

3.1. Climate risks identified over the short, medium, and long term

As the world accelerates towards net-zero emissions, climate risk has moved from the periphery to the forefront, emerging as a decisive factor reshaping the development strategies of the financial sector. Accelerating shifts in policy, technological innovation, and market behaviour, alongside the escalating impacts of extreme weather events, are compelling financial institutions to reassess their approaches to risk management and to align investment portfolios with sustainable development objectives.

At VPBank, climate risk management is embedded at the heart of the Bank's long-term strategic agenda. The Bank has delineated **two main categories of climate-related risks**:

- **Physical risks** arise from the increased frequency and severity of extreme weather events (acute risks) such as floods, landslides, and wildfires, or from long-term shift in climate patterns (chronic risks) including increased rainfall frequency and volume, rising sea levels and higher average temperatures. These phenomena not only damage assets and disrupt customers' business operations but also give rise to cascading impacts across the financial system, such as rising non-performing loans, higher provisioning requirements, supply chain disruptions, and slower economic growth. For VPBank, these risks result in pressure on overdue debts, declining credit quality, and increased provisioning to manage potential losses. Under the circumstance, VPBank not only faces up with indirect impacts through customers, natural disasters can directly affect VPBank's infrastructure, causing branch and transaction office closures, damage, or operational interruptions, which in turn lead to higher operational costs and service continuity challenges. Collectively, these dual impacts underscore that climate risks have become a critical factor in operational management and financial risk governance**.**
- **Transition risks** are associated with the shift towards a low-carbon economy and manifest through policy changes, compliance with evolving environmental standards, technological breakthroughs, and changing investor and consumer expectations. Adjustments in environmental policy, the emergence of carbon credit mechanisms, carbon taxes, advancements in green technologies, and heightened stakeholder expectations may lead certain assets to become "stranded," losing value prematurely. In this context, banks face not only financial risks but also intensified reputational pressures and stricter scrutiny from regulators and international capital markets.

Accordingly, integrating climate risk scenarios into business planning, upgrading technology to ensure operational continuity, and strengthening resilience to natural disasters have become essential to maintain stability and sustainability. The Bank applies advanced measurement tools, develops response scenarios, and ensures transparency in line with global standards. These measures not only mitigate risks but also support clients in their transition to a low-carbon economy, highlighting VPBank's proactive role in Vietnam's banking sector.

Potential operational impacts of climate-related risks on both clients and the Bank have been identified, with the most material risk categories summarized in the table below.

Table 2. Examples of climate risks and potential impacts

Risk type	Physical risk	Transition risk
Credit risk	- Severe natural disasters damaging customers' factories, warehouses, or farms, disrupting production and operations, reducing revenue, and impairing customers' repayment capacity. - Prolonged climate shifts, such as droughts and extreme temperatures, can undermine agricultural productivity, forcing customers to liquidate assets prematurely and adversely affecting their debt repayment capacity.	- New carbon tax policies or mandatory emission limits increase customers' operating and investment costs, reducing profitability and debt repayment capacity. - Legal risks arise when customers face lawsuits or liabilities due to negative environmental impacts, leading to higher costs and lower revenues.
Market risk	Natural disasters or extreme events reducing the value of collateral or customers' equities, indirectly affecting the bank's investment portfolio.	Global and domestic shifts towards clean energy, products, and services drive down the value of shares, bonds, or investments linked to high-emission sectors, adversely affecting banks' profitability.
Liquidity risk	Floods or storms compel customers to withdraw funds to restore operations, leading to deposit depletion and heightened liquidity demands on the bank.	Customers' need for greater liquidity to finance projects aligned with new climate regulations places pressure on banks' funding and lending capacity.
Compliance risk	Natural disasters or wildfires disrupting branch or office operations, impeding reporting and regulatory compliance.	Delays in complying with international and domestic standards on climate, ESG, or GHG emission reporting expose banks to potential penalties or reputational damage.
Operational risk	Disruptions to branch operations, data centers, or logistics caused by natural events, affecting service delivery and internal controls.	Supplier or process transitions required to meet new environmental standards may abruptly alter operational workflows, creating operational risks tied to change management.
Strategic risk	Inaccurate forecasting of natural disaster or drought impacts can lead to underprepared investment or insurance plans, undermining strategic execution.	Slow adaptation to low-carbon economy requirements or ESG mandates may render banks' business plans, products, and services less competitive.
Reputational Risk	Perceptions by customers, partners, or the public that the bank manages physical events (storms, floods) poorly, resulting in negative evaluations of risk governance.	Public or investor scrutiny of VPBank's exposure to high-emission sectors or its failure to meet climate targets could erode trust and damage reputation.

From 2021 to 2024, following the strong commitments to GHG reduction at COP26, the Vietnam Government has actively accelerated the transition towards a low-carbon economy through the

enhancement of legal frameworks and macroeconomic policies guided by green growth principles. Key initiatives include:

- Low-Carbon Economic Development Strategy 2021–2030 (Decision 167/QD-TTg, 2021)
- National Climate Change Strategy towards 2050 (Decision 896/QD-TTg, 2022)
- Plan on Tasks and Solutions for Implementing COP26 Outcomes (Decision 888/QD-TTg, 2022)
- Implementation Plan for the Just Energy Transition Partnership (JETP) Political Declaration (Decision 1009/QD-TTg, 2023)
- National Energy Development Strategy to 2030, with a Vision Towards 2045 (Decision 215/QD-TTg, 2024)

In parallel with macro policies, Vietnam has issued a series of sector-specific policies to steer the green transition across key industries:

- Energy: Power Development Plan VIII (2023)
- Green Transport: Decision 876/QD-TTg (2022) on the Action Program for Green Energy Transition and Carbon and Methane Emissions Reduction in the Transport Sector
- Energy Efficiency: Directive 20/CT-TTg (2023) on Strengthening Electricity Savings for 2023–2025 and Beyond
- Circular Economy: Decree 08/2022/ND-CP

The adoption of Decree 06/2022 on greenhouse gas mitigation and ozone layer protection has established the initial legal framework for a carbon market, incentivizing businesses and financial institutions to engage in green and clean energy projects. These measures contribute directly to Vietnam's objectives of achieving carbon neutrality and net-zero emissions by 2050.

3.2. Climate opportunities identified over the short, medium, and long term

At VPBank, the shift towards a low-carbon economy is regarded not only as an environmental imperative but also as a strategic opportunity to shape a sustainable future. This transition demands profound changes across sectors, with finance playing a central role in driving climate action. Embracing that role, VPBank is both capturing emerging opportunities and fulfilling its responsibility to support Vietnam's journey towards Net Zero by advancing green and sustainable finance. The Bank is focused on elevating the quality of climate disclosures, setting out long-term strategies and vision, embedding sustainability into its business model, and strengthening risk management capabilities across the organization. At the same time, VPBank is utilizing national and global initiatives to expand new business avenues from financing renewable energy and green infrastructure to supporting enterprises that deploy energy-efficient and low-carbon technologies.

In the context of a worldwide transition, VPBank has identified a number of strategic opportunities to be pursued across the system. The success of these initiatives will depend on a combination of factors, including government policy and regulation, technological breakthroughs, as well as evolving consumer behavior and customer demand.

Table 3. Examples of climate opportunities of some strategic sectors

Type of opportunities	Examples of climate opportunities	Opportunities for VPBank
Efficient Resource & Energy Utilization	• Enhance efficient use of energy and resources through wastewater recycling, deployment of water and energy-saving devices, and construction of environmentally friendly green buildings; • Implement rooftop solar systems, energy-efficient lighting and cooling, and upgrade HVAC[3] systems to green standards.	• Expand financing opportunities for energy-saving and green building projects, including supporting investments in lighting, cooling, HVAC upgrades, and smart energy management solutions in offices, commercial centers, and residential complexes; • Support the development of renewable energy initiatives and green infrastructure, such as rooftop solar installations, battery storage systems, public EV charging stations, and energy optimization technologies, while promoting carbon-neutral start-ups.
Efficient energy usage & Regeneration	• Expand the application of smart energy management technologies and upgrade electricity infrastructure across industrial, commercial, and residential sectors. • Promote national programs on energy efficiency and green construction; encourage investments in solar power and storage systems	• Investment financing for energy service companies (ESCOs) to implement and operate energy-saving projects with performance guarantees; • Loans for retrofitting and upgrading production lines for energy efficiency; green loans for buildings certified under EDGE/LEED; financing for companies deploying smart energy management systems; • Project financing for offshore wind and rooftop solar, issuance of green bonds to fund clean energy projects, and financial solutions for households installing solar systems.
Sustainable transportation	• Develop electric vehicles, charging infrastructure, green public transport, and environmentally friendly logistics. • Promote electric vehicle adoption, expand public charging infrastructure, and encourage green logistics	• Expand green financing opportunities for EV and hybrid vehicle loans, support construction of charging stations, and assist businesses in fleet upgrades, in line with government restrictions on conventional petrol vehicles in key zones and higher taxation on traditional vehicles. • Offer preferential loan packages for EV buyers; provide financing for charging station

[3] HVAC (Heating, Ventilation, and Air Conditioning) is a system that regulates temperature, humidity, and air quality within a given space or environment.

Type of opportunities	Examples of climate opportunities	Opportunities for VPBank
		construction; issue green bonds for public transport fleet modernization projects; • Extend financing to support the green transition in the transportation sector, including inland waterways (electric vessels, green ports), railways (electric/ magnetic trains), and aviation (Sustainable Aviation Fuel – SAF)[4].
Sustainable supply chain	• Develop closed-loop production models, recycling, and resource reuse	• Develop supply chain financing solutions with preferential rates for ESG-compliant suppliers; provide credit to businesses investing in product traceability and automation; offer comprehensive cash flow and payment management services for green supply chains. • Offer unsecured preferential loans for circular agriculture projects; finance recycling plants and waste treatment facilities; provide financial solutions for companies transitioning to circular production models.
Sustainable agriculture	• Reduce emissions from rice cultivation, apply water-saving irrigation technologies, develop organic agricultural products, and promote biomass energy. • Climate-smart agriculture	• Provide financing for agricultural technology upgrades; offer preferential loans to organic agriculture producers and processors; support biomass energy projects using agricultural by-products. • Promote capital flows into high-tech, low-emission agriculture, with smart, automated farming models replacing traditional methods, alongside the adoption of climate-resilient crop varieties and technologies.
Climate change Adaptation	• Develop climate-smart agricultural models • Build climate-resilient infrastructure • Restore forests, protect coastal ecosystems, biodiversity, and water resources to mitigate the impacts of natural disasters	• Provide funding for projects and research that apply climate-adaptive agricultural solutions, such as developing salt- and drought-tolerant crop varieties, and implementing automated farming systems with early warning mechanisms • Finance the upgrade, repair, and improvement of factory facilities, roads, drainage systems, dikes, and irrigation works

[4] SAF (Sustainable Aviation Fuel) is an aircraft fuel derived from renewable and sustainable sources, including used cooking oil, animal fats, agricultural residues, or carbon captured directly from the atmosphere. Chemically equivalent to conventional jet fuel, SAF can be safely used in modern aircraft without modifications to engines or infrastructure, while delivering substantial reductions in carbon emissions.

Type of opportunities	Examples of climate opportunities	Opportunities for VPBank
		to enhance resilience and climate adaptability • Support ecotourism models and activities focused on forest, marine, and ecosystem restoration and conservation

3.3. Climate strategy

In 2024, VPBank continues to implement the comprehensive ESG Strategy adopted by the Board of Directors in 2023 to guide its business activities towards achieving the goal of Net Zero emissions by 2050, including:

i. Reducing direct GHG emissions from operations and indirect GHG emissions from the Bank's credit granting activities;

ii. Developing green finance and participating in the carbon credits market.

The Bank's climate strategy is designed to promote the responsible use of financial resources, ensure financial fairness, and accompany customers and businesses in their journey towards carbon neutrality.

To achieve the Net Zero emissions target, the Bank simultaneously implements two solutions: **(i) GHG emissions reduction** and **(ii) Carbon offsetting**, under which:

- **GHG emission reduction**: This is the core solution and has the greatest impact on the pathway towards achieving the Net Zero target, including::
  - ***Scope 1 & 2 emission reduction:*** Based on improving energy efficiency, switching to renewable energy sources, digitalizing operational processes, and establishing green, clean, and sustainable offices, VPBank implements measures to minimize direct GHG emissions from sources owned or controlled by the Bank (Scope 1) as well as indirect GHG emissions from purchased energy such as electricity, steam, heating, or cooling (Scope 2) across its operations.
  - ***Scope 3 emission reduction:*** Based on reducing indirect GHG emissions from credit granting activities (Scope 3 – Financed emissions), through the following approaches:
    i. **Green the finance** through Restructuring the portfolio to "green" the credit book, including restricting lending to carbon-intensive industries or only approving loans if the purpose is to support green transition initiatives (e.g., investment in emission control equipment or technology);
    ii. **Finance the green** by extending lending to projects that enable carbon capture and storage, projects with solutions to eliminate or reduce GHG emissions (e.g., energy efficiency projects), or projects with negative carbon emissions (e.g., reforestation) in order to reduce the total indirect GHG emissions across the Bank's credit portfolio (Scope 3).

- **Carbon offsetting**: For the volume of GHG emissions that cannot be eliminated through the above reduction measures, carbon offsetting serves as the next necessary solution. "Carbon offsetting" refers to the practice of mitigating the impact of GHG emissions released into the atmosphere through (i) Direct investment in projects that generate carbon credits by reducing or absorbing GHG emissions, such as reforestation, renewable energy development from wind and solar, or energy efficiency improvement; or (ii) Indirect investment through trading carbon credits in the market. Carbon credits, also referred to as emission allowances, represent a unit of measurement equivalent to the right to emit one metric ton of CO_2 or an equivalent amount of another GHG (tCO_2e) into the atmosphere. Based on their impact on net emissions, carbon credits can generally be categorized into three types including Carbon reduction, Carbon removal and Carbon avoidance:
    - Carbon reduction: Activities that reduce GHG emissions compared with previous or existing practices;
    - Carbon removal: Processes that extract carbon from the atmosphere (absorption) and lock it away for decades, centuries, or millennia;
    - Carbon avoidance: Activities that prevent carbon emissions from occurring in the first place.

- The deployment of these solutions must ensure the following:
    - Transparency and accountability: Continuous monitoring and regular reporting on GHG emission measurements to help the Bank identify areas for improvement and track progress towards its Net Zero targets.
    - Stakeholder engagement: Active participation of stakeholders (including employees, customers, shareholders, investors, and the community) is key to fostering a culture of sustainable development and progressively realizing the Bank's climate commitments.

3.3.1 Achieving Net Zero emissions target

Through climate-related disclosures and communications, VPBank provides a clear and transparent account of the Bank's transition efforts to adapt to climate change, reaffirming the commitment to achieve net-zero emissions by 2050. As the sustainable transition strategy moves forward, industry guidelines and environmental regulations are expected to undergo continuous refinement across different phases. In this context, VPBank remains proactive in studying global best practices, with a view to applying national carbon quotas for specific sectors to better control emissions from financed industries, on which foundation the Bank will periodically review, update, and refine the transition roadmap to ensure alignment with the national climate change strategy and the evolving regulatory framework.

To achieve Net Zero emissions by 2050, VPBank has developed a roadmap as below:

- Step (1): Statisticize and measure GHG emissions;
- Step (2): Develop a roadmap for implementing GHG emission management solutions;
- Step (3): Monitor, report, and disclose information.

In the short term, the Bank will focus on building an information system of GHG emissions measurement results, which will be the fundamental basis for implementing the following tasks such as setting GHG emissions reduction targets.

Table 4. Roadmap to Net Zero emissions target

Step	Scope 1 & 2	Scope 3
1. Statisticize and measure GHG emissions	• Establish a mechanism to collect and build a database to store and monitor the energy consumption (fuel, electricity) of units/branches for the calculation of operational GHG emissions across the Bank. • Scope: Study the feasibility of expanding the calculation scope to include the Bank's subsidiaries • Assessment method: Fine-tune the calculation methodology in line with IPCC, ISO 14064, and other international standards.	Apply the following methods simultaneously in order of decreasing priority: 1. Collect data directly from customers • For businesses subject to mandatory GHG inventory: Collect the GHG inventory results report/ GHG Certificate (ISO 14064-1:2018) of the company; • For businesses not subject to mandatory GHG inventory but voluntarily applying: Collect the company's self-inventory results if aligned with international voluntary industry standards (e.g., Higg Index, Global Recycled Standard in the textile industry) or GHG Certificate (ISO 14064-1:2018). 2. Use tools or models to estimate GHG emissions (to address the lack of national GHG inventory data). 3. Apply an estimation approach consistent with the Partnership for Carbon Accounting Financials (PCAF) Global GHG Accounting and Reporting Standard for the financial industry, based on consideration of the reliability of emission factors, aligned with the Bank's portfolio.
2. Develop a roadmap and mitigation solutions	Set emission reduction targets for each period (short and medium term) to adopt energy-saving measures, including but not limited to: • Issue regulations on energy standards for specific activities; • Prioritize renewable energy use at headquarters/buildings; • Maintain, renovate, and upgrade cooling and lighting systems in buildings to enhance efficiency; • Use electric vehicles for business operations to replace gasoline-	• Based on data on emission scale to identify high-emission sectors, the Bank will prudently make decisions to restructure the credit portfolio; • Develop a roadmap and solutions to reduce Scope 3 GHG emissions by adjusting credit policy orientations in the short, medium, and long term, aiming to achieve the Net Zero target by 2050.

Step	Scope 1 & 2	Scope 3
	powered vehicles; • Integrate environmental and energy-saving/ high-efficiency standards into the Bank's procurement process.	
3. Monitor, report, and disclose information	• Develop a monitoring mechanism; • Continue to maintain and strengthen transparency by applying international sustainability reporting standards.	• Develop a monitoring mechanism; • Continue to maintain and strengthen transparency by applying international sustainability reporting standards.

VPBank acknowledges that the process of measuring GHG emissions is still at an early stage and is prioritizing the development of Scope 3 financed emission reduction targets within credit portfolios for high-emitting sectors. These targets are framed based on carbon neutrality scenarios, in alignment with the Paris Agreement as well as Vietnam's climate policies and legal framework.

Rather than pursuing a pure divestment approach, VPBank has adopted a prudent strategy: partnering with customers in their energy transition, encouraging the use of low-carbon energy sources, promoting electrification, and adopting advanced technologies. This approach contributes to maintaining national energy security while enabling customers to transition sustainably, mitigating the risk of reliance on alternative capital sources with lower transparency and accountability. However, establishing specific emission reduction targets for each sector still faces significant constraints due to data limitations, particularly the availability of reliable emissions data from customers. This challenge is common not only to VPBank but to the broader financial sector in advancing towards net-zero emissions.

3.3.2 Financing the transition to Net Zero future

Although many nations made strong climate commitments at COP26 in 2021, practical actions still appear to fall short of expectations. Global CO_2 emissions reached a new record in 2024, rising by approximately 1% from 2023 to 40.8 gigatons. This coincided with 2024 becoming the hottest year on record, with the global average temperature exceeding the 1.5°C pre-industrial threshold for the first time.

As temperatures surpass the 1.5°C pre-industrial level, leading to more severe natural disasters, escalating recovery costs, threatened assets, and declining labor productivity. Banks can no longer remain on the sidelines. Green finance is no longer a matter of ethical or environmental choice; it has become a critical component of risk management, a necessity for sustainable development, and an affirmation of the banking sector's essential role in maintaining both climate and economic stability.

Vietnam is advancing rapidly in its transition to realize its pledged emission reduction targets, which include: (i) by 2030, cutting total methane emissions by at least 30% compared with 2020 levels, and reducing overall greenhouse gas emissions by 15.8%, with the potential to increase this reduction to 43.5%, equivalent to 45 million tons of CO_2, with international support; and (ii) by 2050, achieving net-zero emissions. Investment demand for projects mitigating environmental impacts is set to rise sharply. According to estimates, global resources of USD 4-6 trillion per year will be required to shift towards a

low-carbon[5] economy. The World Bank further estimates that for Vietnam to pursue a climate-resilient development pathway and achieve net-zero emissions, around USD 368 billion will be needed between 2022 and 2040, equivalent to 6.8% of GDP[6], of which USD 118 billion is allocated for decarbonization technologies and USD 262 billion for enhancing resilience and climate adaptation.

As one of Vietnam's leading financial institutions, VPBank has developed an ESG Strategy with a phased action plan designed to support the nation's goal of achieving net-zero emissions by 2050. In 2024, VPBank's long-term international capital mobilization strategy will continue to prioritize collaboration with financial institutions to advance sustainable development objectives.

The global ESG capital market has experienced robust growth over the past decade (Figure 2). In 2024, total issuance in the ESG syndicated loan market reached USD 1,648 billion[7], up 10.8% YoY, comprising:

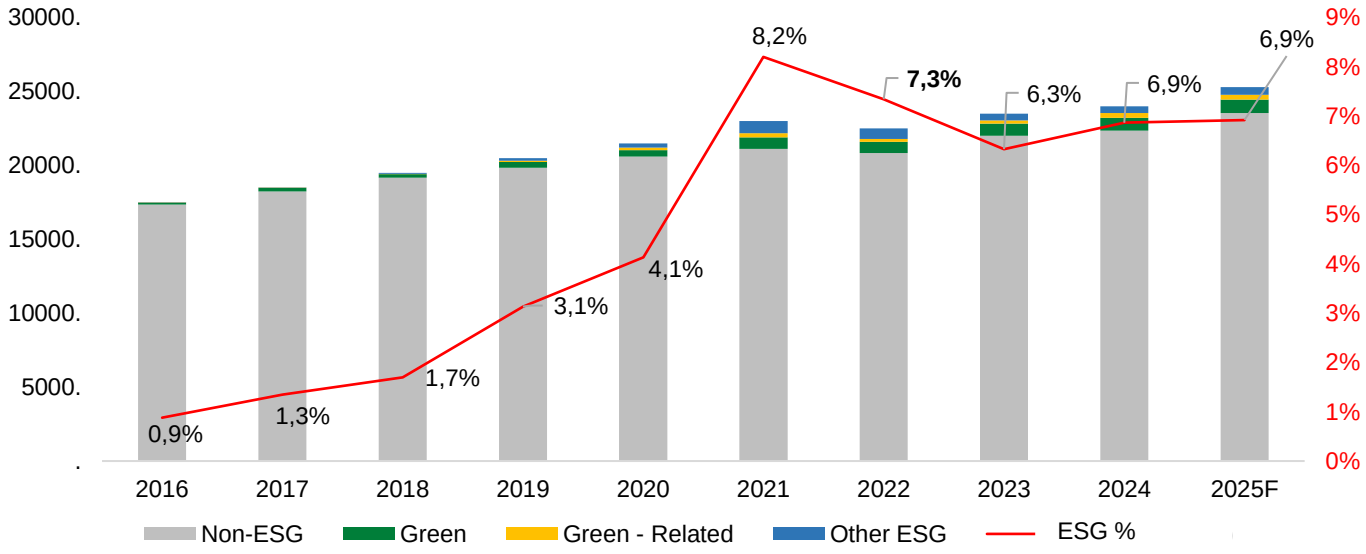
- 1,169 billion USD (▲8.6% YoY) from the issuance of green bonds, social bonds, sustainability bonds, green convertible bonds, and sustainability-linked bonds (SLB);
- 479 billion USD (▲16.3% YoY) from green loans, social loans, sustainability loans, green transition loans, and sustainability-linked loans (SLL).

These figures have demonstrated that international ESG financing not only contributes to national sustainable development goals but also presents attractive business opportunities for banks in the global capital market.

Enhancing the mobilization of international funding from Development Finance Institutions (DFIs) dedicated to advancing sustainable development in both the public and private sectors of developing economies is a key direction consistent with VPBank's ESG Strategy. This approach strengthens the Bank's capital foundation to finance sustainability-focused initiatives in Vietnam. In parallel, through technical cooperation and capacity-building partnerships with DFIs, VPBank has made significant strides in recent years to establish itself as a national leader in sustainable finance. The Bank continues to integrate global best practices in ESG risk management, including the Environmental and Social Risk Management framework, climate risk management, and climate-related financial disclosures in line with TCFD standards, while cultivating a team of specialists in environmental and social management, green finance, and sustainable finance.

[5] USD 4-6 trillion as of COP27 (see:i unfccc.int/documents/624444)
[6] World bank: New World bank group report proposes path for Vietnam to address climate risks while sustaining robust economic growth https://www.worldbank.org/en/news/press-release/2022/07/01/new-world-bank-group-report-proposes-path-for-vietnam-to-address-climate-risks-while-sustaining-robust-economic-growth
[7] https://think.ing.com/articles/sustainable-finance-paint-it-green/

Figure 2. Global ESG and Non-ESG Debt Instruments Breakdown (2016–2024)



Source: ING Bank & S&P Global

In 2024, VPBank made a significant mark by successfully securing sustainable funding from global financial institutions, including:

- ✓ In January 2024, VPBank successfully secured a USD 35 million loan with a 5-year tenor from the Dutch Entrepreneurial Development Bank (FMO) aimed to support SMEs and promote climate finance. This marks the first medium- to long-term loan for a Vietnamese bank and FMO's return to the market after more than a decade.
- ✓ In May 2024, VPBank obtained a USD 400 million syndicated loan with a 3-year tenor, arranged by SMBC, along with Maybank, MUFG, Commerzbank, CTBC and KGI…to support SMEs, WSMEs, as well as projects in public healthcare, education and vocational training, social housing, clean water and sanitation, and basic infrastructure in remote areas.
- ✓ In June 2024, VPBank mobilized a USD 300 million bilateral loan with a 7-year tenor from the U.S. International Development Finance Corporation (DFC) provided crucial financial support for VPBank's sustainable finance initiatives. This marks the largest loan ever extended by DFC to Vietnam's private sector, enabling VPBank to enhance access to finance for SMEs, particularly women-owned SMEs, while supporting green and sustainable projects.

In October 2024, within the framework of its strategy to diversify international green financing sources, VPBank and Japan Bank for International Cooperation (JBIC) signed a credit agreement for up to USD 150 million to finance renewable energy projects in Vietnam, contributing to the realization of the Net Zero target by 2050. This green loan is structured under the principles of the Asia Zero Emissions Community (AZEC), an initiative launched by the Government of Japan to promote carbon neutrality and economic growth in line with each country's circumstances. It is also consistent with the Just Energy Transition Partnership (JETP), agreed in 2022 between Vietnam and partner countries including Japan and the United States. In line with the Net Zero commitments of both the Vietnamese and Japanese

Governments, the loan is set to be channeled into corporate clients and projects in power grid development and renewable energy, delivering tangible environmental benefits across provinces nationwide. The partnership between VPBank and JBIC represents a significant milestone, reaffirming the confidence of international financial institutions in Vietnamese banks, and in VPBank in particular. It also serves to further strengthen the comprehensive relationship between Vietnam and Japan across key areas such as economy, finance, investment, and industry…

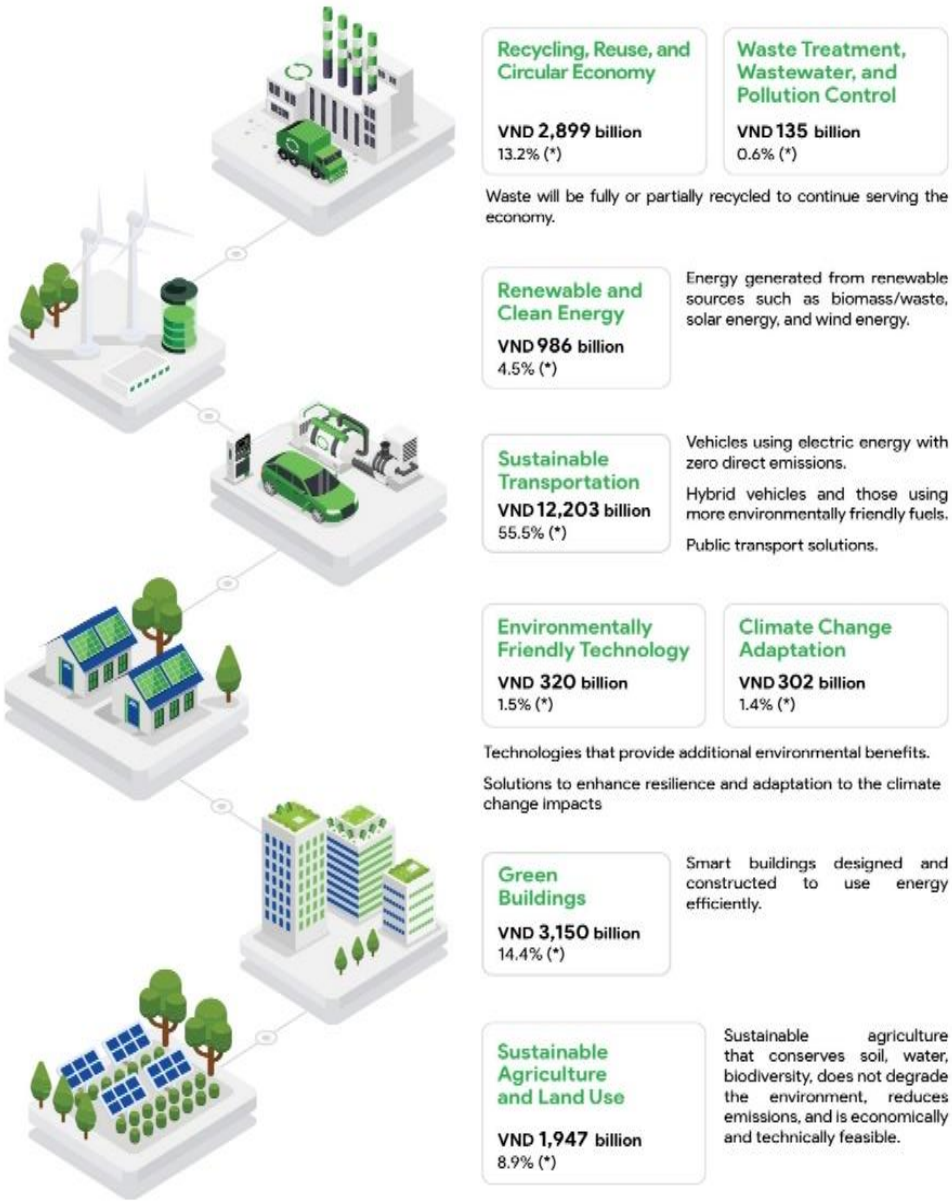
To ensure transparency in the criteria for selecting projects and loans that qualify as green, social, or sustainable, VPBank has established the Green Finance Framework (2020), the Social Finance Framework (2022), and the Sustainable Finance Framework (2024). These frameworks are aligned with international capital market practices and support relevant global commitments, such as the United Nations Sustainable Development Goals and the Paris Agreement on climate change. Through these frameworks, VPBank sets out detailed portfolios and specific technical criteria for projects across green sectors, serving as the basis for assessing and appraising their positive environmental, climate, or social impacts.

Framework	Year of issuance	Reference Standards	SPO Provider	Access link
Green Loan	2020	Green Loan Principles (GLP) 2018, jointly issued by the Loan Market Association (LMA) and the Asia Pacific Loan Market Association (APLMA)	SUSTAINALYTICS	https://www.vpbank.com.vn/-/media/vpbank-latest/8aboutvpbank/phat-trien-ben-vung/082020_khung-tn-dng-xanh-ca-vpbank.pdf
Social Finance	2022	Social Loan Principles (SLP) 2021 jointly issued by LMA, APLMA, and the Loan Syndications and Trading Association (LSTA	SUSTAINALYTICS	https://www.vpbank.com.vn/-/media/vpbank-latest/8aboutvpbank/phat-trien-ben-

Framework	Year of issuance	Reference Standards	SPO Provider	Access link
				vung/khung-tai-chinh-xa-hoi
Sustainable Finance	2024	Green Bond Principles (GBP) 2021 by ICMA; Social Bond Principles (SBP) 2023; Sustainability Bond Guidelines (SBG) 2021; Green Loan Principles (GLP) 2023 by LMA; Social Loan Principles (SLP) 2023	SUSTAINALYTICS	https://www.vpbank.com.vn/-/media/vpbank-latest/8aboutvpbank/phat-trien-ben-vung/2024/khung-tai-chinh-ben-vung-2024.pdf

Total green loan balance in 2024	
VND 21,943 billion *(2023: VND 14,774 billion)*	In 2024, VPBank's total outstanding green credit reached VND 21,943 billion, marking a 48.5% increase compared to 2023. Growth was primarily driven by lending in low-carbon transportation, green buildings, recycling and circular economy, sustainable agriculture and forestry, and renewable energy. In terms of customer base, 3,708 individual clients and 220 corporate clients accessed green credit at VPBank in 2024, representing a 6.5-fold increase over the previous year. The detailed allocation of VPBank's green credit portfolio is illustrated in the diagram below.

Figure 3. VPBank's green portfolio breakdown by categories



(*): Percentage share of the total outstanding balance in the green credit portfolio

In 2024, with the official issuance of international standards such as IFRS S1 and S2 and increasingly stringent climate disclosure requirements, financial institutions continue to play a pivotal role in supporting clients' transition towards a low-carbon economy. In line with this global trend, VPBank is expanding its portfolio of sustainable financial products and solutions, enabling clients to mobilize capital for green projects and climate adaptation initiatives. Achieving this goal requires close alignment between public policies that prioritize critical sectors, mandatory ESG reporting and greenhouse gas inventories, and proactive technological innovation from the business community. The synergy among policy frameworks, client strategies, and commitments from the financial system will provide the foundation for a transparent, fair, and effective green finance market.

Building on these achievements, VPBank will continue to strengthen sustainable capital mobilization from development finance institutions (DFIs) under the ESG Strategy, thereby contributing to Vietnam's national commitment to reducing greenhouse gas emissions and advancing the United Nations Sustainable Development Goals. These include poverty alleviation, improved public health, enhanced social welfare, quality education, gender equality, climate and environmental protection, clean water, and resilient infrastructure. In parallel, VPBank is actively pursuing opportunities to collaborate on new financial products and services to expand market share and accelerate the growth of green finance. A diverse range of ESG-focused instruments will be deployed, including export credit agency financing; social loans and bonds (fostering positive social outcomes); sustainability loans and bonds (covering both green and social projects); blue bonds (supporting marine and ocean ecosystem projects that generate environmental, economic, and climate benefits); sustainability-linked loans and bonds (performance-based instruments tied to measurable KPIs); as well as other ESG-driven and sustainable investment activities.

3.4. Testing the resilience of the Bank's strategy and business model in different climate scenarios

To assist the Board of Directors in making strategic and financial decisions in response to risks arising from climate change, the Bank has developed and implemented climate scenario analysis to assess the potential impacts of climate risks on its loan portfolio. The characteristics of these risks are comprehensively reflected in the analyses, providing useful insights to support effective risk management and business operations.

3.4.1 Scenario analysis

At VPBank, climate scenario analysis has been carried out with the objectives of: (1) Exploring the impacts of climate change and the transition to a low-carbon economy on the resilience of the Bank's strategy and business model; (2) Identifying climate-related risk factors, including physical and transition risks, and recognizing the most vulnerable sectors, industries, and clients; (3) Measuring sensitivity and estimating potential losses by constructing assumptions under each scenario, assessing impacts on asset quality and credit risk, and thereby quantifying possible financial losses to the loan portfolio; and (4) Evaluating the effectiveness of the climate risk management framework, including the integration of climate risks into the overall risk governance process and the adequacy of risk mitigation measures to ensure sustainable business operations.

In parallel, VPBank periodically conducts climate risk stress tests, an essential tool for analyzing future potential impacts, identifying vulnerable economic sectors under different scenarios, and assessing implications for the Bank's earnings.

Scenario analysis is undertaken with a focus on the Bank's material risks, particularly exposures to sectors with heightened climate vulnerability (covering both physical and transition risks) across credit, operational, market, and reputation risks. VPBank also identifies transmission channels through which climate risks may transform into traditional financial risks, as outlined below:

- **Credit risk:** The value of collateral may decline when adversely affected by extreme weather events such as storms, floods, droughts, or sea-level rise. Carbon-intensive industries or those heavily dependent on fossil fuels may face declining revenues and rising operating costs due to

emission-reduction policies and shifting consumer behavior. This increases the likelihood of default and directly affects the quality of the Bank's credit portfolio

- **Operational risk:** Climate change may disrupt the Bank's business operations through damage to infrastructure, power outages, IT system interruptions, or limitations in service delivery to clients. Furthermore, global supply chain dependence on climate-vulnerable regions may indirectly impact the Bank's operations, driving up remediation costs and reducing efficiency.
- **Market risk**: Climate-related developments make commodity, energy, and financial asset prices increasingly volatile and difficult to predict. Regulatory changes such as the imposition of carbon taxes, adoption of green technologies, or implementation of emission caps may sharply reduce the market value of certain businesses, affecting the Bank's investments, financial assets, and capital market activities.
- **Reputation risk:** Stakeholder expectations from the public, investors, and regulators regarding the Bank's role in managing climate risks are rising. Continued financing of carbon-intensive or environmentally harmful projects could provoke negative reactions from the media, investors, and credit rating agencies, as well as erode trust among clients and strategic partners. Conversely, strong climate risk management enhances the Bank's reputation, attracts clients, and creates opportunities for sustainable business growth.

3.4.2 Climate risk stress test

Recognizing the strategic importance of climate risk stress testing, VPBank in 2024 continued to conduct assessments designed to measure the potential impacts of climate-related risks on its lending portfolio. The objective is to evaluate the resilience of the Bank's business model under a range of climate scenarios, thereby gaining deeper insights into potential implications and identifying both areas of strength and points of vulnerability.

The results have been incorporated into the Bank's strategic planning and risk assessment processes, supporting VPBank's gradual transition towards a low-carbon economy. In particular, the outcomes serve to:

(1) Provide additional information to improve risk governance and decision-making capabilities;

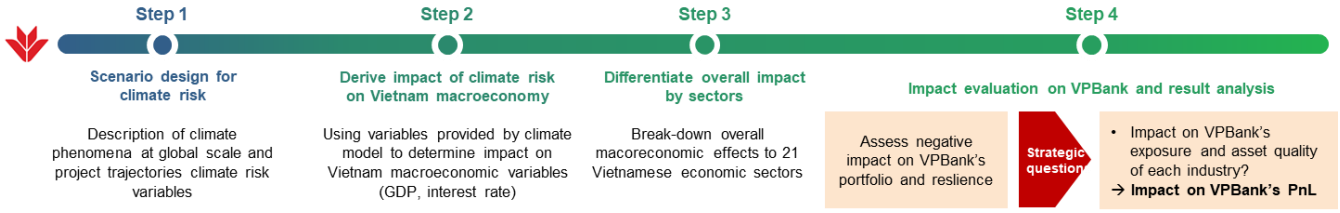
(2) Integrate environmental factors into the risk appetite development process, ensuring a comprehensive risk management strategy aligned with sustainable development trends;

(3) Shape a more flexible and adaptive business strategy in response to future climate changes, minimizing risks while capitalizing on new opportunities.

The climate risk stress test is conducted in line with the guidance of the Bank for International Settlements (Bank for International Settlements – BIS)[8], and translates climate risks into financial impacts on the Bank's loan portfolio. The assessment follows four key steps, as illustrated in the figure below.

[8] FSI Study on the Implementation of Policy No. 34: Banks' Climate Stress Testing – A Comparison of Practices
https://www.bis.org/fsi/publ/insights34.pdf

Figure 4. The process of analysis on climate risk impact



The implementation has reviewed and assessed the medium - and long-term impact of transition and chronic physical risks on the Bank's lending portfolio.

Scenario design

VPBank climate risk stress test is developed based on a set of climate scenarios published by the NGFS for use by international financial institutions executing climate risk stress tests as a standard and consistent starting point for analyzing climate risks. In 2024, NGFS did update the new climate scenario. The table below summarizes four scenario groups with different transition pathways:

- **Orderly transition** scenarios assume climate policies are introduced early and gradually become more stringent to achieve ambitious climate targets. Both physical and transition risks are relatively subdued.
- **Disorderly transition** scenarios assume policies are delayed and applied in a fragmented, uncoordinated manner across countries and sectors. This increases transition risk, exemplified by the potential for a sharp spike in carbon prices after a period of delay, causing significant volatility in markets and production.
- **Hot house world** scenarios assume that some climate policies are individually implemented in some countries, but these efforts are insufficient to halt global warming. The scenarios in this group recorded severe chronic physical risks, including irreversible impacts (e.g., higher sea level).
- **Too little, too late** scenarios assume a delayed and divergent climate policy response among countries globally, leading to high levels of both physical and transition risks, with severe and prolonged impacts on the economy and financial system.

These climate scenarios were designed with five-year intervals over a 30-year forecast horizon. This approach ensures that the analysis captures both medium- and long-term impacts of the physical and transition risks faced by the Bank.

Table 5. Overview of NGFS Climate Scenarios

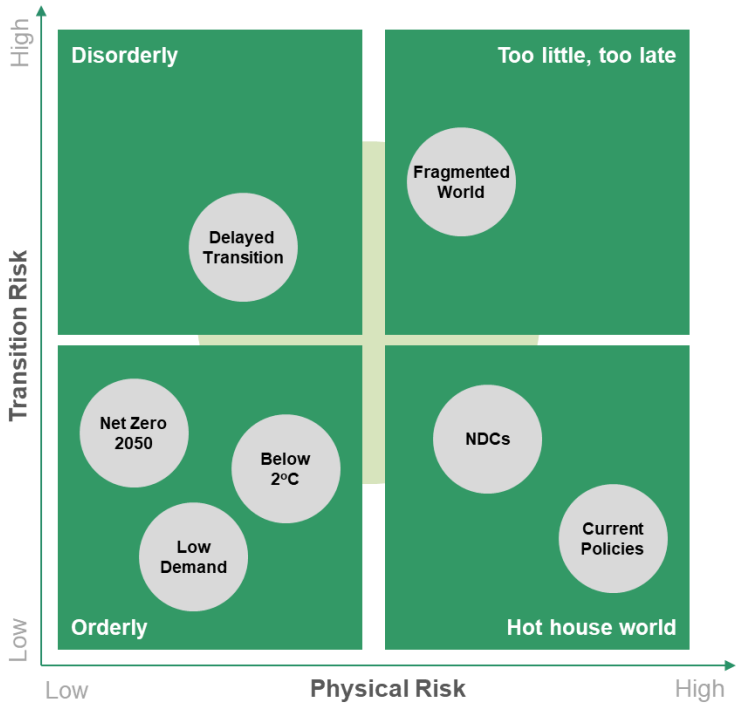
Category	Scenario	Main assumptions
Orderly	Low Demand	• Global warming limited to 1.5°C and net zero CO_2 emissions achieved around 2050;

Category	Scenario	Main assumptions
		• Countries with a political commitment to a net zero target defined before March 2024 reach net zero at their target year or earlier; • Several countries/regions, including the US, EU, UK, Canada, Australia, and Japan, achieve net-zero for all GHGs; • Additional measures in end-use sectors (e.g., behavioral changes, reduced energy demand, accelerated electrification, and renewable substitution) help alleviate pressure on carbon taxes.
	Net Zero 2050	• Global warming is limited to 1.5°C (with a 50% probability), achieving net zero emissions by 2050; • Stringent climate policies, initiatives, and technological advancements are implemented early and smoothly; • Several countries/regions, including the US, EU, UK, Canada, Australia, and Japan, achieve net-zero for all greenhouse gases (GHGs).
	Below 2°C	• Global warming is limited to 1.5°C (with a 50% probability), achieving net zero emissions by 2050; • Stringent climate policies, initiatives, and technological advancements are implemented early and smoothly; • Several countries/regions, including the US, EU, UK, Canada, Australia, and Japan, achieve net-zero for all greenhouse gases (GHGs)..
Disorderly	Delayed Transition	• Global warming limited to 2°C by the end of 21st century; • Annual GHG emissions do not decline until 2030. Countries maintain current policies and continue using fossil fuels. In 2030, climate policies are abruptly implemented, negatively affecting economic development; • Countries with net-zero policy target commitments are assumed to follow-through on 80% of them.
Hot house world	Nationally Determined Contributions (NDCs)	• Global warming limited to 2.3°C by the end of 21st century; • Climate policies are based on voluntary (but non-binding) commitments in addition to existing policies.
	Current Policies[9]	• Global warming limited to 3.0°C by the end of 21st century • Only currently implemented policies are preserved, leading to high physical risks.

[9] Climate policies include mitigation policies (e.g., carbon pricing) and adaptation policies (e.g., shifting to carbon-neutral investment, technological innovation, etc.).

Category	Scenario	Main assumptions
Too little, too late	Fragmented World	• Global warming is limited to 2.4°C by the end of 21st century; • Current policies continue to be implemented until 2030; after that, countries adopt climate policies in a slow and fragmented manner. Countries that set net zero emissions targets only achieve 80% of their reductions by 2050; others simply maintain current policies.

Figure 5. Scenarios Framework of NGFS



Climate scenarios and impacts on Vietnam's macro economy

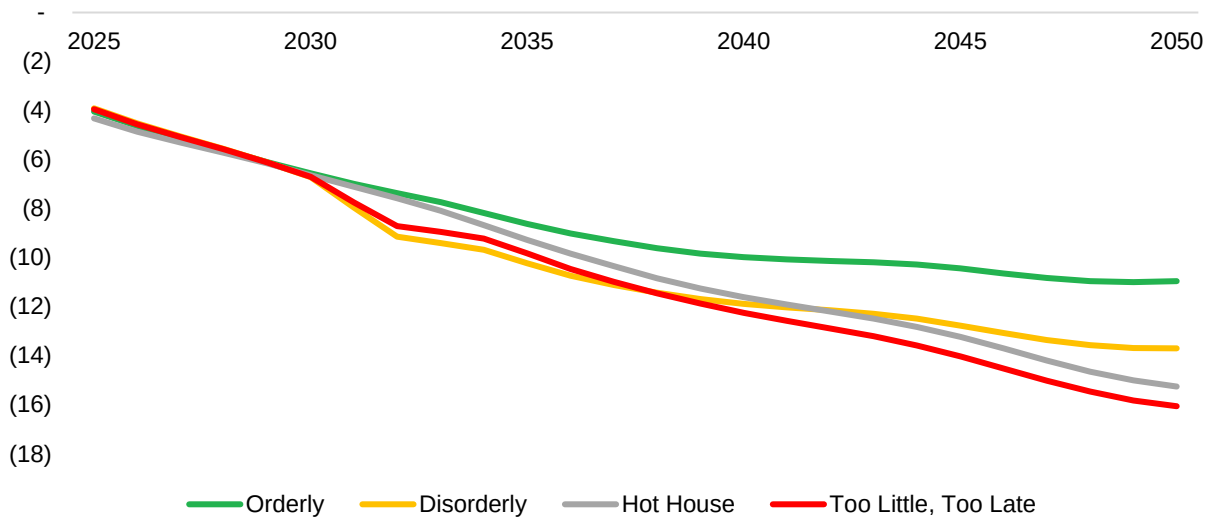
Based on four climate scenario groups, VPBank has assessed the impacts of climate risks on Vietnam's macroeconomic indicators, including, but not limited to, GDP growth, interest rates, carbon emissions, and energy prices. These scenarios clearly reflect the impact of climate risks on the economy, stemming from the interplay between the cost of implementing (transition risk) and not implementing (physical risk) climate-change policies.

The analysis results indicate that the projected GDP loss in 2025 is higher compared to 2024, as the NGFS damage assessment model has more comprehensively captured the impacts of climate change on the economy, thereby increasing the estimated losses from physical risks relative to previous scenarios.

Specifically, the Too little, Too late scenario is projected to result in the most severe GDP decline, owing to the consequences of delayed and fragmented implementation of climate policies.

Meanwhile, projections under the Orderly and Disorderly scenarios are revised upward. This adjustment is attributed to delays in the introduction and enforcement of stringent climate policies, combined with the energy crisis triggered by escalating geopolitical tensions. The shrinking window for policy implementation necessitates more intensive efforts from countries, leading to higher carbon prices and more pronounced adverse impacts on economic growth.

Figure 6. Vietnam's GDP loss under each scenario (Unit: %)



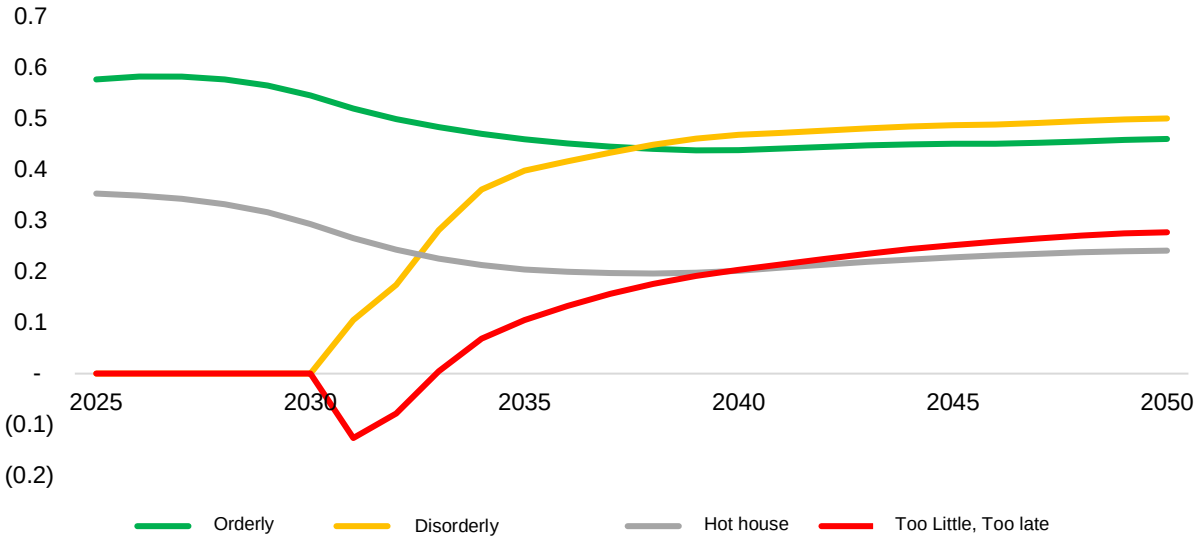
In addition to analyzing the impact on GDP growth across the four climate scenarios, VPBank also assessed the effect of climate risk on the economy's interest rates.

The results indicate that in the "Disorderly" scenario, interest rates are projected to increase significantly compared to the baseline scenario. This is primarily driven by inflationary pressure from escalating carbon prices beginning in 2030, the point at which countries are forced to implement simultaneous climate policies after a prolonged period of delay. This compressed policy adjustment over a short timeframe creates a significant cost shock for the economy, leading to a sharper rise in interest rates.

Conversely, in the "Hot House World" scenario, the interest rate differential compared to the baseline remains low due to the limited scope of policy implementation and emission reduction targets. This implies less inflationary pressure from carbon prices but reflects a higher physical risk, as climate change is not effectively controlled.

For the "Too Little, Too Late" scenario, the interest rate trajectory is similar to the "Disorderly" scenario but with a lower differential. This is because the climate policies in this scenario are both delayed and uncoordinated, resulting in a less immediate and abrupt impact on inflation and interest rates. However, in the long term, the economy still faces significant risk from the combined burden of delayed transition costs and physical risk damages.

Figure 7. Interest rate change compared to Vietnam's baseline scenario in climate scenarios (Unit: %)



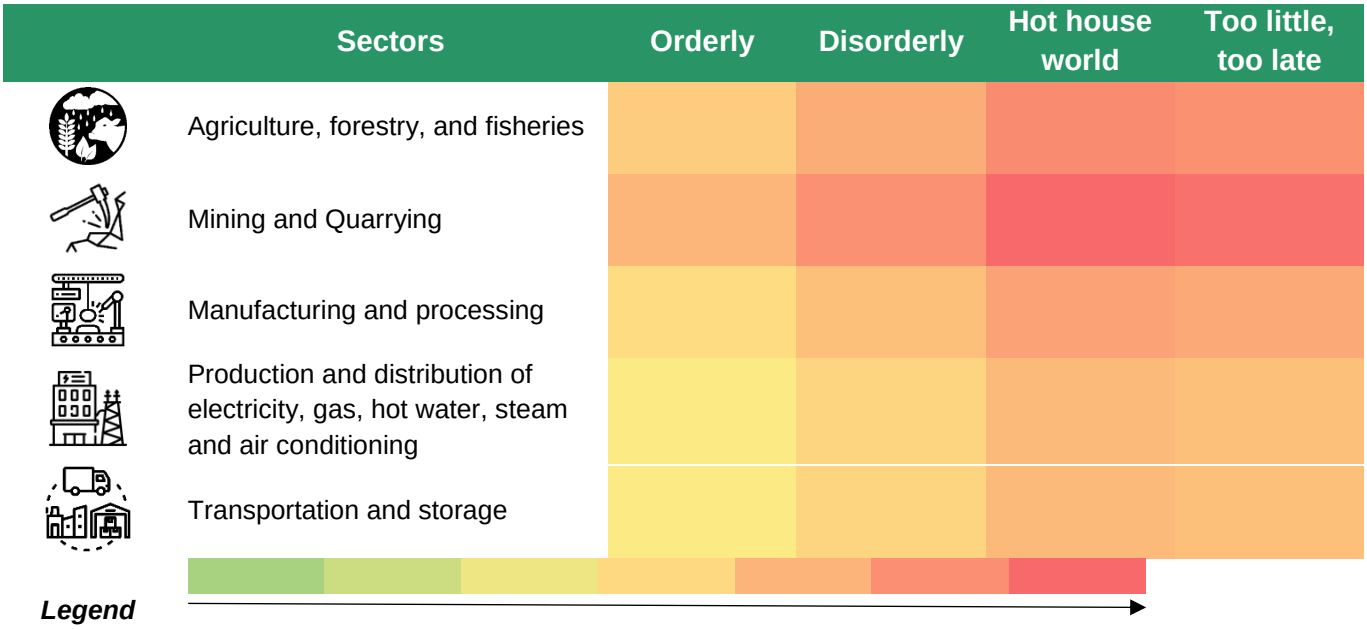
Impact on economic sectors

Following the overall assessment of climate risk impacts on Vietnam's economy, VPBank proceeded to analyze the effects of transition and physical risks on individual economic sectors. The objective of this analysis is to identify industries, sectors, or economic activities that are more vulnerable than others, thereby informing the Bank's risk governance orientation and appropriate adaptation strategies.

The results show that climate-sensitive industries, particularly those with high carbon emissions, will face multiple challenges, including (1) pressure to reduce emissions to meet policy requirements and market trends, and (2) direct risks from the physical impacts of climate change. This places these sectors at risk of more severe impacts compared to those with lower emissions or less dependence on natural conditions.

The figure below illustrates the assessment results, identifying the top 5 economic sectors most affected by climate risks in each scenario. These are sectors with a high proportion of carbon emissions in the economy.

Figure 8. Top 5 economic sectors that are most affected by climate risks in each scenario



Analysis results

From the impact analysis in the previous steps, VPBank compared the relative impacts of the climate risk scenarios against the baseline to assess the effect on the Bank's business performance (reflected through profit and loss impact).

According to the 2024 climate stress test results, VPBank projects the highest P&L loss under the "Too Little, Too Late" scenario. This is due to a convergence of two factors:

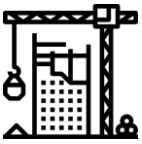
- **Transition risk:** The delayed and uncoordinated global implementation of emission reduction policies leads to higher compliance costs and a severe decline in GDP growth.
- **Physical risk:** Many economic sectors suffer severe and irreversible impacts from climate change, such as sea-level rise, prolonged droughts, rising temperatures, and extreme weather events.

This outcome reflects the consequences of delayed, inefficient, and uncoordinated global climate policy, forcing the economy to bear the dual burden of adjustment costs and climate damages.

Conversely, under the "Disorderly" scenario, the profit and loss in the short term (until 2030) is projected to be the lowest. However, after this period, the loss is expected to accelerate and become more severe, reflecting the cumulative consequences of lacking a long-term adaptation and response plan for climate change. This indicates that short-term benefits do not outweigh the escalating risks in the medium and long term.

In particular, high-carbon-emission sectors will face more severe impacts from transition risks. VPBank has identified several key sectors exposed to elevated risks, summarized in the table below.

Table 6. Impacts of climate risks on some sectors

Industry		Risk sector rationale
	**Agriculture, Forestry & Fishing**	Shifts in environmental regulations may **raise production costs** for animal protein. Volatile weather conditions and increased ESG regulation in the food sector will affect agriculture. Due to social and behavioral changes, **meat and dairy consumption will likely fall.**
	**Construction**	**Higher expense to develop technology**, such as constructing sustainable building design, minimizing resource extraction, decarbonizing construction processes, and adopting low-emission heating and cooling technologies.
	**Manufacturing & processing**	Difficulties in reducing emissions in some sectors (e.g., cement production) face the combined challenge of **carbon taxes** and **increased abatement costs** in the *Orderly*, *Disorderly*, and *Too little, too late* scenarios. This may lead to a **significant rise in credit expenses.**
	**Mining and Quarrying**	**Costs are likely to rise** due to tighter environmental regulations and increasing water stress. There has been a **reduction in coal demand** due to the transition of the energy sector and decreasing reliance on fossil fuels. Some heavy metal industries (e.g., steel) **are likely to face higher pressure** to reduce emissions.
	**Real Estate Activities**	Extreme weather events (e.g., floods, and storms) can affect real estate and **lower property values** and borrowers' **ability to afford their mortgage payments**. The transition to a low-carbon economy could also **reduce borrowers' ability to repay loans.**
	**Wholesale & Retail Trade**	**Negative impact** on the sale of energy category (e.g., gas, oil) from the low carbon transition and carbon tax.

Challenges

VPBank took the initiative to implement a climate risk stress test exercise to better understand the challenges and nuances of climate modeling and shall continue to enhance the tool for scenario analysis and stress testing. However, unique and complex features of climate risks, with potential tipping points, represent major challenges in accurately capturing the climate risk impacts. Major challenges are:

- Climate risk analysis requires approaches and tools that are more granular (e.g., company-level analysis). This creates a need for more granular data, which VPBank may not have maintained;
- Climate risk assessment typically occurs over long time horizons subject to significant uncertainty. When estimating large and diverse portfolios, pinpointing where and when risks will manifest and their severity is quite challenging.

3.5. Assessing the impact of climate hazards on the business operations of VPBank's branches and transaction offices

3.5.1 Impact of physical risks on VPBank's physical asset network

The year 2024 experienced more pronounced extreme weather events compared to previous years, particularly in tropical storms and riverine floods. According to the National Centre for Hydro-Meteorological Forecasting (2024), there were 12 storms and tropical depressions in the East Sea during the year, with Typhoon Yagi (Storm No. 3) recorded as the strongest in the past 30 years. Concurrently, the National Steering Committee for Natural Disaster Prevention and Control reported multiple episodes of heavy rainfall causing widespread flooding, with dozens of rivers in the Central and Northern regions exceeding alert levels II–III, resulting in significant economic losses. These developments reflect the escalating trend of climate change, increasing physical risks to VPBank's branch and transaction office network, as well as raising the potential for business continuity disruptions.

In 2024, VPBank continued to identify and assess acute physical risks, focusing on the impacts of tropical storms and riverine floods on its branches and transaction offices. The assessment drew on data from the Disaster Management Policy and Technology Center and the National Centre for Hydro-Meteorological Forecasting, combined with internal operational incident reports, to capture both potential risks and actual impacts on VPBank's physical infrastructure.

The assessment results are summarized in the table below:

Table 7. Impacts of climate hazards on the Bank's property network

Number of Storms & Floods[1]	Properties at Risk 2024		
	No. of properties at risk[2]	No. of properties affected[3]	Business Impact
12	48	19	Minor impact [4]
Breakdown by regions			
Region	**Number of Storms & Floods [1][5]**	**No. of properties at risk [2]**	**No. of properties affected [3]**
Northern midland and mountainous	2	8	2
Red River Delta	4	20	13
North Central Coast and South Central Coast	4	17	4
Southeast	2	3	-
Mekong River Delta	0	-	-

Note:

(1) Riverine floods were recorded at alert level 2 or higher and affect branches/transaction offices;
(2) Properties at risk: Properties located within the affected area of the storm and/ or flood risk areas;
(3) Buildings affected: Properties that have sustained some level of damage reported, such as water ingress from heavy rain;
(4) Minor impact: Immaterial impact on business operation and/ or minor financial losses and no injuries;
(5) Only included tropical storms in 2023 that made landfall directly and weakened to a tropical depression.

3.5.2 Impact of physical risks on VPBank's credit granting activities

In 2024, VPBank initiated the identification of physical risk impacts on economic sectors and the business areas where the Bank has a presence.

The assessment methodology applied is a Quantitative Matrix, adapted from the environmental impact assessment technique guided by the Ministry of Natural Resources and Environment. This matrix illustrates: (i) the exposure level of each sector to selected physical risks and (ii) the physical risk level across the 63 provinces and cities of Vietnam. This method allows for the quantification of the level and likelihood of impact by dividing each matrix cell into two parts, each rated on a 1-5 scale. The composite impact of each physical risk is calculated by multiplying the scores of (i) sectoral exposure and (ii) regional risk level, then classified as follows:

- Score 1-5: Very Low Risk
- Score 6-10: Low Risk
- Score 11-15: Medium Risk
- Score 16-20: High Risk
- Score 21-25: Very High Risk

Input data was sourced from reputable sources, including: (i) sectoral exposure levels based on IFC research; and (ii) regional risk levels published by ThinkHzard![10].

The assessment results, summarized in the table below, serve as a critical foundation for VPBank to shape future climate risk management activities. This includes formulating a Climate Risk Management Policy consistent with the *Joint MDB Methodological Principles for Assessment of Paris Agreement Alignment* and setting strategic priorities for sectors and business activities.

[10] https://thinkhazard.org/en/. ThinkHazard! provides a general overview of the hazards relevant to a specific location that should be considered in project design and implementation to build disaster and climate resilience. The tool indicates the likelihood of various natural hazards affecting a project area (Very Low, Low, Medium, and High) and provides guidance on how to mitigate their impacts and where to find further information. The provided hazard levels are based on published data from a range of private, academic, and public organizations.

Table 8. Impacts of Physical Risks on economic sectors and the Bank's business operations

No.	Physical Risk	Impact Identification
1	Water Scarcity	The composite impact is mostly at the **Very Low or Low level**. No impacts are at the High or Very High level. A Medium impact is projected in 23/63 provinces and cities for sectors related to fossil fuels and renewable energy, including: oil and gas exploration & production, fossil fuel production and distribution, and renewable energy equipment manufacturing. These are primarily areas with numerous industrial parks, export processing zones, high population density, or high urbanization rates.
2	Earthquake	The composite impact for all sectors and regions is at the **Very Low or Low level.**
3	Landslide	The composite impact for all sectors and regions is at the **Very Low or Low level.**
4	Volcano	The composite impact for all sectors and regions is at the **Very Low or Low level.**
5	Riverine Flood	Most industry groups and regions are assessed to be affected at levels ranging from **Medium to Very High**. - Fossil fuels and renewable energy: 50/63 provinces and cities are assessed at a Very High level of impact, while 8/63 are assessed at a High level. - Power generation & transmission, telecommunications, tourism, and clean water supply: the majority of regions are assessed to face impacts ranging from Medium (13/63 provinces and cities) to High (49/63 provinces and cities). - Healthcare and pharmaceuticals: many regions are assessed at a High level of impact, with only 8/63 provinces and cities at a Medium level. Some localities, such as Da Nang, Lang Son, Ninh Thuan, and Quang Ninh, recorded a Low level of impact. - Other sectors: predominantly assessed at a Medium level, accounting for 53/63 provinces and cities.
6	Coastal Flood	The composite impact for all sectors and regions is at the **Very Low or Low level.**
7	Heatwave	- Approximately 20% of industries/sectors are significantly affected, with impact levels assessed from **Medium to High**. - Power generation & transmission, telecommunications, tourism, and clean water supply: 32/63 provinces and cities are assessed at a High level, while 32/63 are assessed at a Medium level. No regions recorded impacts at Low or Very Low levels. - Household goods, furniture, textiles and apparel, consumer products, construction, healthcare, and pharmaceuticals: the assessment indicates impacts at Low or Medium levels across all 63 provinces and cities.

RISK MANAGEMENT

The risk management process to identify, assess, and manage climate risks

CHAPTER 4. RISK MANAGEMENT

VPBank's proactive approach to climate risk management is underpinned by the determined climate strategy, governmental authorities' requirements, and international best practices. Instead of classifying climate risks as a standalone category, they have been integrated directly into the overall risk taxonomy, which involves the concurrent assessment of impacts from natural disasters and extreme weather events, alongside policy, technology, and consumer behavior shifts. In parallel, the Bank places priority on expanding data infrastructure and monitoring tools, recognizing these as critical foundations for managing risks in a systematic manner and supporting the transition to a green economy.

4.1. Processes for identifying and assessing climate risk

4.1.1 Risk identification

Acknowledging that insufficient preparedness for climate change could expose banking operations to severe risks, VPBank positions climate risk as an emerging risk with increasing influence. Climate risk is considered a standalone category and closely intertwined with traditional risks such as credit risk, market risk, and operational risk. VPBank has categorized these risks by climate factors and analyzed their expected impacts over the short, medium, and long term, which serves as a foundation for adjusting its risk governance strategy. *Details are provided in Table 3.1. Climate Risks in the Short, Medium, and Long Term.*

Risk identification at VPBank is an ongoing process that synthesizes information from both the first (a bottom-up approach) and the second (a top-down approach) line of defense, and also referencing expert opinions, international guidance, and internal risk analysis based on the loan portfolio structure. These assessments are reviewed periodically on an annual basis to accurately reflect the severity and likelihood of each risk type.

The phenomenon of *Greenwashing* presents growing complexities as nations increasingly enact stringent regulations governing ESG disclosures and green finance taxonomies, thereby creating both legal and reputational risks for financial institutions. The banking sector is concurrently confronted with additional challenges: the absence of standardized climate data, supply chain risks associated with the EU's implementation of the CBAM mechanism, and technological risks stemming from the rapid evolution of emission reduction solutions.

In Vietnam, the implementation of Power Development Plan VIII and the Green Growth Strategy to 2030 imposes an urgent imperative upon the banking system to reconfigure its credit and investment portfolios towards a sustainable orientation. Within this context, VPBank seeks to not only strengthen its supervisory capacity but also continuously enhance the quality of its green financial products and services, with the dual goal of upholding its reputation and accompanying clients on their journey towards a low-carbon economy.

4.1.2 Risk measurement

Scenario analysis and stress testing are utilized as primary tools for banks to assess the magnitude of potential losses from climate change, and concurrently to shape business strategies appropriate for the new context.

VPBank has conducted climate risk stress tests for four consecutive years with NGFS's updated climate scenarios and fine-tuned methodology. These exercise enable the Bank to quantify the medium and long-term impacts of climate change on the lending portfolio, thereby identifying the root causes of risks and evaluating the effectiveness of current management measures. Details are presented in *3.4. Testing the resilience of the Bank's strategy and business model in different climate scenarios*. VPBank has also expanded its scope of assessment by specifically analyzing the impacts of acute physical risks, such as storms and floods, on the operations of the Bank's branch and transaction offices. This is a necessary step given the increasing frequency and intensity of extreme weather events in Vietnam, which directly threaten the ability to maintain financial service continuity. Details are provided in *3.5. Assessing the impact of events on business operations of VPBank's branches and transaction offices*.

VPBank also acknowledges the limitations of current assessment tools, ranging from a lack of detailed historical data to challenges in modelling the multi-faceted impacts of climate change. The Bank commits to continually refining measurement methodology in accordance with IFRS S1, IFRS S2, and TCFD recommendations, and also disclosing assessment results transparently and in a timely manner. This approach not only meets increasingly stringent disclosure requirements but also strengthens investor and community confidence in the Bank's commitment to sustainable development.

4.1.3 Risk monitoring and reporting

At VPBank, reports on material risks, including new risks arising from the socio-economic context, are submitted periodically to the RCO. Climate change has been included as a component in reports to enhance monitoring, early warning capabilities, and the transparency of governance measures. Integrating climate risk into the reporting into the reporting mechanism not only enables the Bank for more proactive management but also reflects the commitment to complying with international disclosure standards. The monitoring and reporting mechanism is described in *Chapter 2. Governance*

4.1.4 Risk controlling

Climate risk control at VPBank is implemented based on the three lines of defense principle, ensuring a balance between rigorous oversight and response flexibility. Control measures include integrating climate risk into the overall risk appetite framework, establishing exposure limits for high-emission sectors, and developing the credit and investment portfolio in a manner that encourages customers to transition towards low-carbon business models. The Bank applies advanced management tools such as early warning systems, quantitative monitoring indicators, and green credit screening criteria to mitigate risks from the initial approval stage. These measures serve to safeguard VPBank's operational safety and establish a foundation for accompanying clients in their process of adapting to climate change.

4.2. Processes for managing climate risk at VPBank

4.2.1 The integration of climate risk into VPBank's overall risk management

As one of the pioneering banks in sustainable development in Vietnam, VPBank developed and conducted an independent review of a comprehensive ESG risk management framework and was confirmed by EY Consulting Vietnam that key components in the framework met international standards and practices on ESG risk management, including the guidelines of the Monetary Authority of Singapore (MAS), the European Central Bank (ECB), the Bank for International Settlements (BIS), the International

Finance Corporation (IFC) as well as the State Bank of Vietnam's regulation on environmental risk management in credit granting activities.

In 2024, the Bank continues to enhance the integration of ESG risk into the overall risk management framework. VPBank implements ESG risk management process through: (i) integrating climate risk management aspects into risk appetite when setting credit exposure limits for the coal thermal power sector, (ii) developing ESG risk measurement tools including scenario analysis and stress testing, and (iii) emphasizing environmental and social risk management in credit granting activities through environmental and social management system (ESMS).

VPBank has published Sustainable Finance Framework, a set of standards independently verified by Sustainalytics to be aligned with global objectives. By the end of 2024, VPBank's green finance portfolio reached nearly VND 22,000 billion, equivalent to almost 88% of the target set for 2030. In terms of governance, VPBank continues to elevate operational standards by applying the principles of the OECD, the ASEAN Corporate Governance Scorecard, and the IFC. This serves as the foundation for the Bank's inclusion in the Top 10 best-governed companies in the large-cap group and the Top 5 largest-cap stocks in the VNSI, the sustainable development index on the HOSE. In parallel with upholding advanced governance standards, VPBank conducts extensive internal communication and training, integrating climate risk into its risk culture at both managerial and operational levels. The BOD's approval to incorporate climate risk into the Risk Appetite Statement and strategic indicators helps to establish a basis for sustainable business decisions, enhancing climate resilience and advancing towards the Net Zero target, thereby meeting the growing expectations of international investors.

VPBank has identified two primary categories of climate risk: physical risks, encompassing both acute and chronic climate and weather-related events; and transition risks, arising from the shift towards a low-carbon economy. Both categories have the potential to amplify the complexity of other key risk types, including credit, market, and operational risks. The specific impacts of climate change are summarized in *Table 2*.

Given the direct exposure through the lending and investment portfolios, VPBank has prioritized the integration of climate risk into credit risk management process. This approach enables the Bank to mitigate potential losses while proactively identifying green finance opportunities, supporting clients on the sustainable transition.

Table 9. Integration of climate risk into credit risk management process

	Integration of climate risk into credit risk management process
Description	The risk of loss from the failure of clients, customers, or counterparties, including sovereigns, to fully perform their payment obligations to VPBank, including the whole and timely payment of principal, interest, and other receivables.
Identification and measurement	At the counterparty level, VPBank applies environmental and social risk management system as part of the due diligence process for credit granting activities. Specifically, environmental and social risks are identified and evaluated to classify specific risk category for each project/ credit grant. At the portfolio level, VPBank focuses on identifying high carbon-emitting sectors, which are considered high-risk areas in relation to climate change. Carbon-intensive enterprises without a clear transition plan will face increasing carbon tax costs, which puts pressure on cash flows and elevates credit risk. This serves as the basis for VPBank to adjust governance approach and progressively shape a sustainable credit portfolio that is more resilient to the impacts of climate change. The Bank concurrently utilizes scenario analysis and stress testing to estimate the medium and long-term impacts of climate change on the quality of credit portfolio.
Management	At the counterparty level, an Environmental and Social action plan is developed to bring the project into compliance with VPBank's Environmental and Social Policy within a reasonable timeframe. For project-related loans, the action plan becomes a binding covenant of the loan agreement that requires the customer to adhere to the plan and report the results to VPBank regularly to confirm compliance. At the portfolio level, climate risk management is monitored and managed based on a set of metrics integrating climate considerations. The Risk Management Division will coordinate with business units to develop and implement an action plan to bring such metrics back to the safe zone if any breach or signal of potential violation arises.
Reporting	The compliance status of climate-related metrics (on a quarterly basis) and assessment results of climate risk stress test (on an annual basis) are timely reported to RCO. The reporting system is designed to progressively align with international standards (IFRS S2, TCFD), aiming to meet transparency disclosure requirements and enhance oversight capabilities across the entire system.

VPBank's strategic orientation is to expand the integration of climate risk beyond credit risk and embed it across other risk governance pillars such as operational, market, and liquidity risk. In relation to operational risk, the Bank intends to incorporate climate factors into business continuity planning while proactively addressing emerging compliance challenges under an increasingly stringent regulatory framework on climate change. A central priority for the upcoming period is to establish a more reliable data foundation and to develop analytical tools capable of accurately measuring climate impacts, ranging from the frequency of extreme weather events to long-term dynamic scenarios. These initiatives will enable VPBank to strengthen the effectiveness of risk management while at the same time positioning the Bank to capture opportunities arising from the transition towards a green economy.

4.2.2 The integration of climate risk into due diligence process

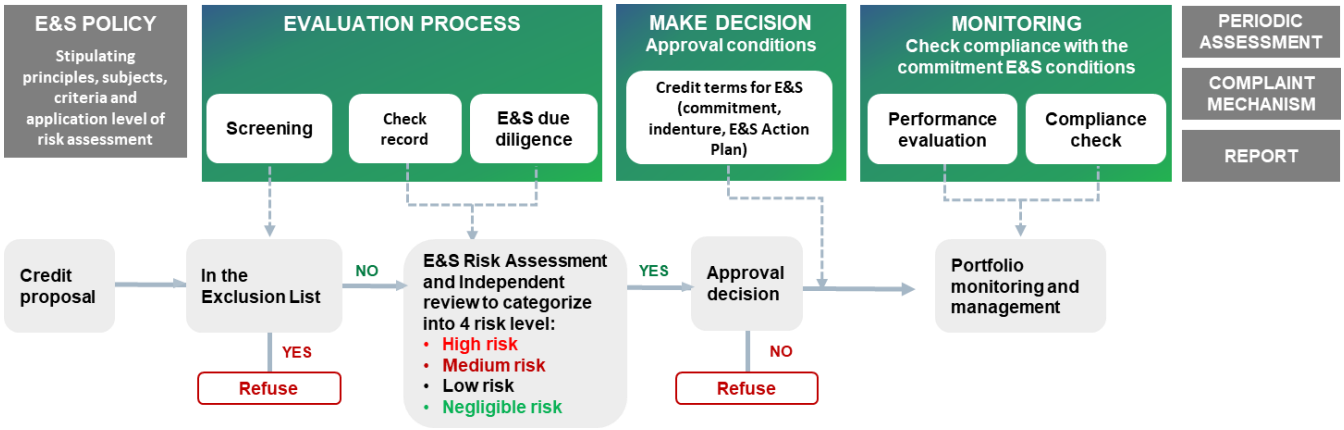
Environmental and Social Management System

Recognizing the mounting challenges of climate change, natural capital, and biodiversity, VPBank has developed an Environmental and Social Risk Management (ESRM) framework that applies across all lending and investment activities. This framework enables the Bank to identify, assess, and manage climate, natural resource, and biodiversity-related risks as an integral part of its overall risk governance. The ESRM system integrates environmental and social considerations directly into risk management processes, while providing flexibility to adapt decisions when material issues arise, ensuring that every financing activity is aligned with environmental protection and community responsibility.

VPBank maintains rigorous oversight of its credit and investment portfolio, embedding environmental and social (E&S) factors throughout the appraisal, approval, and post-disbursement monitoring stages. To reinforce this commitment (as illustrated in the model below), the Bank has introduced a Policy on Environmental and Social Considerations in Financing and Investment. The policy clearly stipulates that VPBank will not provide financing or credit to activities that may cause significant adverse impacts on the environment or society, including risks related to climate change, natural resource depletion, and biodiversity loss (details in Figures 9 and 10).

VPBank is committed to progressively enhancing the ESRM framework to ensure closer integration with its overall risk management system. This approach affirms the Bank's long-term objectives to encourage sustainable business models, protect natural resources, mitigate negative impacts on communities and the environment, and actively contribute to the green development goals of Vietnam and the international community.

Figure 9. Environmental and Social Risk Management Process Flowchart



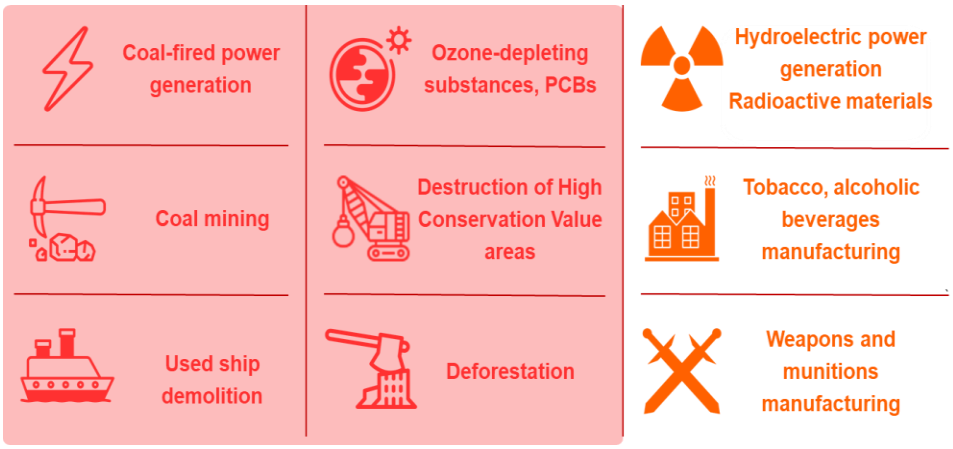
Environmental and social exclusion list

As part of the measures implemented to manage E&S risks, VPBank establishes specific criteria to restrict and exclude activities in sectors sensitive to these risks, as well as criteria for classifying sustainable credit products and lending transactions. In relation to the financing activities, the Bank has issued an Exclusion List[11] that specifies the businesses and sectors likely to cause significant and

[11] VPBank's Exclusion List: https://www.vpbank.com.vn/-/media/vpbank-latest/8aboutvpbank/phat-trien-ben-vung/danh-sach-khong-cap-tin-dung-v-mtxh-2022---vpbank.pdf

irreversible adverse impacts on the environment and society, and commits not to finance companies and projects with such adverse impacts, as illustrated in Figure 10 below:

Figure 10. Businesses and sectors likely to have significant impacts on the environment



Note: *Businesses and sectors in the red frame are those likely to have more significant adverse effects on climate change.*

The diagram below illustrates specific sectors that may be subject to adverse impacts from the perspectives of climate change, natural resources, and biodiversity. These sectors are categorized into groups with shared environmental issues.

Figure 11. Groups of sectors with shared environmental issues

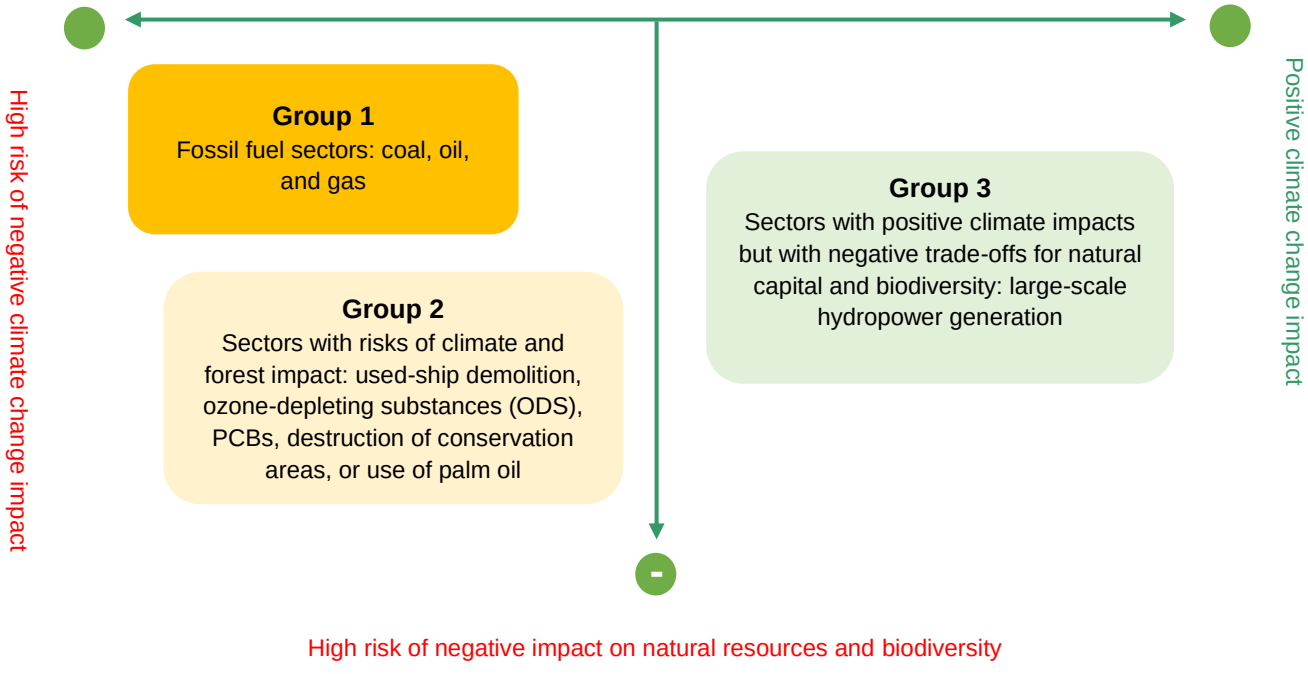


Table 10. VPBank's policies on sectors that have significant climate change impacts

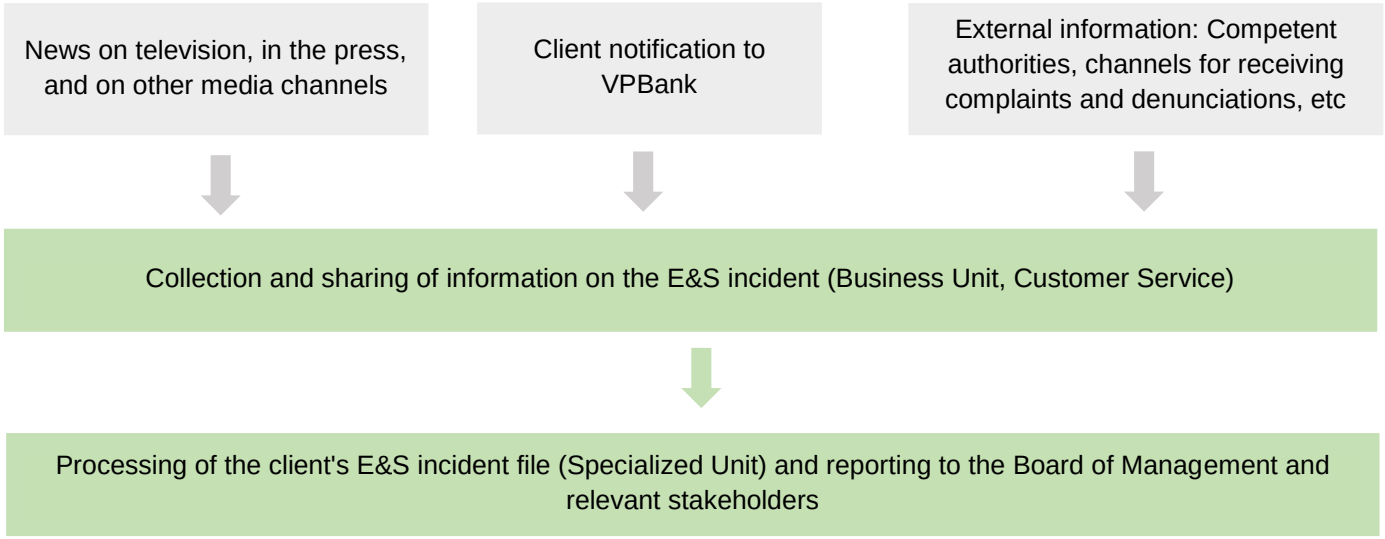
Business/ Sector	Policy
GROUP 1	
Coal thermal power	No support for new coal thermal power plant projects/ the expansion or life-extension of any existing coal thermal power facilities. Clients are only eligible for credit consideration under the following circumstances: 1. Requiring for investing in equipment and technology for emission reduction, environmental protection, and climate change mitigation, including but not limited to: dust filtration, carbon capture, sulfur SOx, NOx removing, continuous emission monitoring systems, dust suppression systems, and fire particulate treatment. These include, but are not limited to: dust filtration, carbon capture, SOx and NOx desulfurization, continuous emission monitoring systems, dust suppression spraying, fine particle treatment in coal processing plants, or fire prevention and firefighting systems. 2. Requiring working capital financing that does not involve extending the lifetime or increasing the capacity of the project, while committing to a roadmap for implementing greenhouse gas emission reduction technologies (e.g., carbon capture, desulfurization, fuel switching from coal to sustainable alternatives, or transitioning to renewable energy), and remains within the approved credit limits stipulated by VPBank from time to time. Additionally, clients are **required to sign a contractual commitment** with VPBank to implement emission reduction solutions and adhere to a carbon neutrality roadmap. The Bank also encourages clients to establish and publicly disclose long-term strategies aimed at realizing a carbon-neutral business model and other climate change mitigation initiatives.
Coal mining	No support for coal mining or services and infrastructure dedicated to coal mining activities, in order to limit adverse environmental impacts.
GROUP 2	
Used-ship demolition	No support for used-ship demolition activities, as this is a source of significant risks to the environment and community livelihoods. This process depletes aquatic resources, affects coastal agriculture, and generates large volumes of toxic chemicals and hazardous waste. The risk is further exacerbated when it involves the dismantling of tankers that carried oil, chemicals, radioactive substances, or other hazardous materials.
Ozone-depleting substances, PCBs	Commitment to not support for any activities related to the production or use of ozone-depleting substances or PCBs, which are considered agents of severe harm to the environment and public health.

Business/ Sector	Policy
Destruction of areas with high conservation value	No support for activities that destroy high conservation value areas (including UNESCO World Heritage Sites, IUCN Red List species habitats, and Ramsar Wetland Sites) through any means (i.e., production, trade of timber or forest products from non-sustainably managed sources) No support for unsustainable fishing practices.
Deforestation	No support for the production or trade of timber or other forest products that do not originate from sustainably managed forests. Timber and non-timber forest product harvesting activities are only considered when they comply with legal regulations and international practices on management and traceability of origin.
Refining, production, processing, or trade of palm oil originating from natural forest conversion	No support for the refining, production, processing, or trade of palm oil originating from natural forest conversion (except where certified by RSPO, RSB, SAN, ISCC, or equivalent certifications). This sector presents high potential risks of deforestation and adverse impacts on biodiversity, climate change, and community livelihoods. Therefore, when considering related investments or loans, the Bank requires clients to provide appropriate environmental certifications before credit approval.
GROUP 3	
Large-scale hydropower	No support for large-scale hydropower plants (including dams with a height of 15 meters or more from the foundation to the crest, or dams with a height of 5-15 meters but a reservoir capacity exceeding 3 million cubic meters). Large-scale hydropower projects contribute to clean energy supply as a renewable source. However, VPBank recognizes the risks associated with dam construction, including impacts on the biodiversity of river basins. To respond, the Bank considers clients' implementation of environmental and social considerations in their investments and loans for large-scale hydropower projects.

Responding to environmental and social incidents

VPBank regularly monitors information regarding environmental and social incidents (activities of enterprises, business operations, and related events that may cause severe impacts on the environment and society) involving the clients. Based on continuously updated information, the Bank proactively implements timely response measures to mitigate reputational and credit risks arising from environmental and social factors.

Figure 12. Process for responding to environmental and social incidents



Protecting nature and biodiversity

Natural resources and biodiversity provide the foundation for the health of economies and societies. In line with current global trends, the financial sector is expected to play an increasingly pivotal role in supporting governments to address environmental challenges, including biodiversity loss, by channeling capital into initiatives that safeguard nature and ecosystems. As a leading financial institution with a nationwide presence and a diverse client base across multiple sectors, VPBank recognizes the intrinsic link between climate change and biodiversity loss. The Bank is actively seeking to deepen its understanding of its dependencies on nature while taking steps to mitigate the environmental impacts of its business operations.

VPBank recognizes that a resilient economy is inseparable from a sustainable environment, and that the responsible use of natural resources and the preservation of biodiversity are fundamental to addressing climate change. For financial institutions in general, these linkages are reflected across operational activities, supply chains, as well as financing and investment decisions.

In 2024, in addition to ongoing efforts to improve and mitigate environmental impacts from the credit granting activities under the Environmental and Social Risk Management (ESRM) policy, the Bank has begun to apply in-depth risk assessments of clients' business operations in certain specific products related to agriculture, forestry, and fisheries. VPBank is also raising awareness of responsible resource use in the operational activities and enhancing the exchange of topics on sustainable development with relevant stakeholders.

VPBank's ESRM policy VPBank provides specific guidance on assessing risks related to natural resources and biodiversity, helping the Bank control significant direct and indirect impacts from clients' business activities, as detailed below, taking into account the scope, duration, and intensity (strong, weak, reversible, or irreversible) of impacts:

i. Compliance with legal regulations and standards on biodiversity, including ensuring the possession of necessary operating permits.

ii. Pollution (the presence of non-naturally occurring substances in the living environment from point and non-point sources);

iii. The emergence of invasive species, pests, and pathogens;

iv. Species decline;

v. Habitat conversion;

vi. Changes in ecological processes beyond the range of natural variability (i.e. changes in salinity, groundwater levels, etc).

METRICS AND TARGETS

The metrics and targets used to assess and manage climate risks and opportunities

CHAPTER 5. METRICS AND TARGETS

VPBank uses GHG emission metrics to assess and control risks as well as to capitalize on opportunities related to climate change. These tools enable the Bank to implement the national commitments made at COP26 and realize the Net Zero emissions target. This data is updated regularly and reported to the BOD, BOM, and RMC, serving as a basis for shaping business strategy and monitoring VPBank's operations.

The tracking methodologies and targets are summarized in the table below and will be detailed further in the subsequent sections.

Table 11. Metrics and targets to manage climate-related risks and opportunities

Strategy	Metric	2020	2021	2022	2023	2024	Target
Reduce operational GHG emissions	GHG emissions, volume of own operations [12]	25,015 MtCO_2e	19,862 MtCO_2e	20,413 MtCO_2e	16,615 MtCO_2e	16,552 MtCO_2e	Net zero by 2027
Reduce financed emissions	GHG emissions, volume per financed sector	-	-	-	-	-	Net zero by 2050
Enhanced management of top-risk sectors	Loan balance for coal-related activities	0.25%	0.20%	0.18%	0.13%	0.25%	Completely excluded by 2050
Promote green finance	Green Finance outstanding balance	USD 55 million	USD 177 million	USD 378 million	USD 611 million	USD 863 million*	2020–2030: USD 1 billion

** The USD exchange rate is based on the Bank's audited financial statements at the end of each fiscal year.*

Due to strong growth in green finance over the past five years, VPBank has achieved 87.7% of the target set at the outset of the green finance implementation, which is to reach a portfolio size of USD 1 billion by 2030 (equivalent to a growth target of over 20 times). Based on this growth trajectory and the experience in the green finance market that the bank has accumulated over the years, VPBank is confident for achieving the USD 1 billion green loan target earlier than the 2030 deadline. This provides a basis and a stepping stone to set more challenging and ambitious targets for green growth.

[12] Data has been restated to reflect VPBank's actual operations over the past five years.

In 2024, VPBank continued to foster collaboration with partners outside the financial industry to determine the greenhouse gas (GHG) emissions arising from the financing activities. The initial estimation methodology helps overcome data challenges, especially as many clients have not yet conducted comprehensive GHG inventories. Although the preliminary results still have limitations in terms of quality according to PCAF standards, VPBank maintains the monitoring and analysis to better understand the total emissions, while updating the methodology based on advancements in climate science and industry standards. This foundation enables the Bank to develop a strategy to reduce emissions from financing activities, guiding towards Net Zero target by 2050, with an initial priority on sectors with the highest emission levels.

Vietnam is gradually finalizing the legal framework and roadmap for the development of the carbon market, stemming from Decree 06/2022/ND-CP. It is expected that during the 2025-2026 period, approximately 150 large facilities in the thermal power, steel, and cement industries will be allocated emission quotas, which will subsequently be expanded to other sectors. A new draft decree amending Decree 06/2022/ND-CP is expected to introduce provisions allowing the borrowing of up to 15% of quotas, increasing the offset ratio using carbon credits from 10% to 30%, and requiring all transactions to be conducted on a domestic exchange, and connecting to international mechanisms under Article 6 of the Paris Agreement. The market is projected to be fully operational from 2029. This implies that in the near future, GHG inventory and disclosure will become mandatory, creating both pressure and opportunities for businesses. With the sustainable development orientation, VPBank is aligning with international standards, ready to accompany the clients in carbon risk management, support the green transition, and access new financial opportunities from this market.

5.1. Greenhouse gas emission

The table below presents VPBank's GHG emissions data for the 2020-2024 period, covering Scope 1 and Scope 2 emissions. The inventory methodology is based on the Decree on GHG emissions inventory, the guidance of the Intergovernmental Panel on Climate Change (IPCC), and the Guidelines for National GHG Inventories (2006). The application of these standards ensures the consistency, comparability, and reliability of the disclosed data.

Databases, models, and methodologies are continuously being updated and refined, emission data from prior periods may be adjusted to reflect these changes. Consequently, in some instances, readers may encounter challenges in making direct like-for-like comparisons of disclosed emission levels between reporting periods. To ensure transparency, whenever data is restated or adjusted, the report will consistently include a specific explanation of the underlying reasons and the nature of the adjustments.

Table 12. VPBank's GHG emissions data, 2020-2024

GHG emissions	Unit	2020	2021	2022	2023	2024
Scope 1 Direct emissions						
Mobile and Transportation [1]	$MtCO_2e$	728.2	694.6	793.5	879.9	952.7
Standby generator	$MtCO_2e$	52.5	36.0	28.3	6.6	5.5
From wastewater	$MtCO_2e$	116.5	124.9	143.1	164.9	185.9

GHG emissions	Unit	2020	2021	2022	2023	2024
CO_2 directly from the use of fire extinguishers	*$MtCO_2e$*	0.3	0.3	0.3	0.3	0.3
Scope 2 Indirect emissions from the use of purchased electricity, steam, heating and cooling						
Purchased electricity, steam, heating and cooling(2)	*$MtCO_2e$*	22,117.4	19,005.9	19,447.4	15,563.0	15,407.6
TOTAL Scope 1 & Scope 2 emissions	*$MtCO_2e$*	23,014.9	19,861.7	20,412.7	16,614.6	16,552.0
Scope 3 Indirect emissions	Not yet disclosed					

Note:

(1) The monthly fuel consumption is determined by the total payment divided by the average gasoline/diesel fuel price per month.
(2) The monthly electricity consumption is determined by the total payment divided by the average price of electricity per month.

In 2024, VPBank's estimated GHG emissions under Scope 1 and Scope 2 continued to improve compared with previous years, with a 34.8% reduction against the 2018 baseline, despite the Bank's expansion with 4 new branches and 20 additional transaction offices. This positive outcome was mainly driven by the effective implementation of energy-saving measures in the operation of buildings and offices. VPBank is also researching and assessing the feasibility of other technical solutions, such as the installation of solar power systems and the application of renewable energy at the headquarters, branches, and transaction offices. These orientations are consistent with the Government's Directive No. 20/CT-TTg on enhancing electricity savings for the 2023-2025 period and subsequent years.

Regarding Scope 3 emissions, VPBank acknowledges that the majority of the total GHG emissions originate from the financing activities for clients (financed emissions), as well as other indirect emissions within their value chains. In the context of Vietnam's data scarcity at both national and corporate levels, and with support from domestic and international financial organizations, VPBank has piloted a model-based approach to preliminarily estimate the emissions from the credit portfolio. This methodology adheres to the international standards of the Partnership for Carbon Accounting Financials (PCAF). However, due to the inherent limitations of model-based estimations, VPBank is adopting a cautious approach, closely monitoring the results while enhancing the internal capabilities and knowledge before formally setting targets and disclosing the monitoring roadmap.

The initial pilot results have provided VPBank with a better understanding of the scale and sources of the emissions, thereby enabling the gradual adjustment of the credit portfolio structure towards a transition from carbon-intensive activities to lower-emission sectors. Specifically, VPBank has added coal mining and related infrastructure and services to the exclusion list, and also tightening the credit policy for the coal thermal power sector. The Bank only considers providing credit in two specific cases:

(1) Investment in equipment and technology to mitigate environmental impacts and reduce GHG emissions. Combating climate change and ensuring fire safety compliance;

(2) Provision of working capital for existing coal thermal power plants, on the condition that it does not extend their operational life or expand capacity, and that a roadmap for applying GHG emission reduction technology is in place, in compliance with internal sectoral limits for each period.

5.2. Green finance

Each green credit facility at VPBank is assessed based on the volume of greenhouse gas (GHG) emissions reduced or avoided, directly reflecting the Bank's contribution to advancing low-emission technologies. While a comprehensive methodology for calculating GHG impacts across all green sectors is not yet available, VPBank has proactively adopted international tools to monitor and transparently disclose results.

The Bank currently focuses on three priority areas: sustainable transportation; recycling and circular economy; and renewable energy, waste-to-energy, energy efficiency, and green buildings. Measurement is conducted using the Climate Assessment for Financial Institutions (CAFI) tool developed by IFC. When disclosing results, VPBank goes beyond absolute emission reductions, taking into account the proportion of its financing relative to project size or the client's total assets, thereby reflecting the climate-related contributions of the Bank's provided capital.

Figure 13. Calculation of GHG reduction

$$GHG\ reduction\ account\ for\ VPBank = Project's\ GHG\ reduction\ (CAFI)\ x\ \left[\frac{Outstanding}{Investment\ amount}\right]$$

$$or\ = Project's\ GHG\ reduction\ (CAFI)\ x\ \left[\frac{Outstanding}{Equity + Liability}\right]$$

Example

VPBank's GHG reduction **3,000** tCO_2e/ year = Project's GHG reduction **5,000** tCO_2e/ year × Finance factor **0.6**

The table below shows the indirect GHG emission reductions from lending to customers for renewable energy projects.

Table 13. GHG reduction resulting from green project funded by VPBank's Green Credit Programme

	Unit	2020	2021	2022	2023	2024
GHG reduction (via Green Credit Programme)[13]	$MtCO_2e$	22,662	32,840	33,487	36,466	23,127

In 2024, VPBank underwent a structural shift in the green portfolio, with sectors such as sustainable transport (electric vehicles), green buildings, and recycling/circular economy experiencing rapid growth. The proportion of financing for the renewable energy sector has trended downward, influenced by changes in Vietnam's policy mechanisms regarding electricity prices for renewable energy.

[13] The data pertains only to energy and energy consumption-related sectors within VPBank's green portfolio, calculated according to the detailed guidance on GHG emissions provided by the CAFI tool

For certain specific energy projects, such as waste-to-energy, the avoided GHG emissions metric is applied instead of the mitigated GHG emissions metric. This means that the project's emissions are compared against Vietnam's current standard solutions or technologies for waste treatment, such as landfills without energy recovery or power generation. By diverting waste from landfills for energy production, these projects help avoid a significant amount of direct CO_2 emissions into the atmosphere, aligning with Vietnam's updated NDC commitments and international climate reporting standards like IFRS S2. This serves as a testament to the significant shift in VPBank's role of shaping green finance, in line with the global trends of carbon neutrality and sustainable development.

5.3. Top risk sectors

Climate change is placing unprecedented pressure on the financial system as the shift from carbon-intensive energy to cleaner alternatives accelerates. Decisive government policies on climate are expected to channel capital away from high-emission industries, leaving companies in these sectors increasingly exposed to default risk, weaker repayment capacity, and declining equity valuations.

In this context, VPBank is taking a forward-looking approach by closely monitoring high-carbon sectors and formulating tailored risk management responses. The Bank is tracking its loan exposure to coal-related activities and has initiated portfolio-level emission measurements, laying the foundation for phased reduction targets towards Net Zero. At the same time, VPBank is developing financial solutions to assist existing clients along their energy transition journey, while also attracting new businesses with firm carbon-reduction commitments, and further expanding research and disclosure practices to encompass additional greenhouse-gas-intensive sectors in the future.

Table 14. Outstanding loan balance of coal power and coal-related industries

Sector	Unit	2020	2021	2022	2023	2024	2050
Coal thermal power	*USD mln*	1.7	1.9	1.2	1.8	0	0
Other coal-related fields	*USD mln*	33.6	32.7	29.5	25.7	61.4	0
Grand total	*USD mln*	35.3	34.6	30.7	27.5	61.4	0
% of total outstanding loans	*%*	**0.25**	**0.20**	**0.18**	**0.13**	**0.25**	**0**

Note: *The USD exchange rate is based on VPBank audited financial statements at the end of each fiscal year.*

According to disclosures for the period 2020–2024, VPBank has maintained only a modest level of exposure to the coal thermal power sector and coal mining activities, representing an immaterial share of the Bank's total loan portfolio. The majority of these loans are short-term in nature, serving commercial needs and supporting Vietnam's energy security, thereby reflecting the Bank's prudent approach. In line with the stringent criteria set out in its publicly available Environmental and Social Exclusion List, VPBank does not provide financing either for new coal thermal power projects or for the extension of existing plants, and it declines to fund coal mining infrastructure, reaffirming its commitment to environmental protection and sustainable development.

Vietnam is gradually reducing dependence on coal thermal power, aiming to increase the share of renewable energy in line with Power Development Plan VIII, which includes the phase-out of a total of 13,220 MW of coal power. The growth rate of coal thermal power is expected to remain low during the

2023-2030 period and decline sharply after 2030. However, coal power still accounts for nearly half of the country's energy mix, and the current renewable energy supply is not yet stable and lacks sufficient storage capacity, making a complete and immediate phase-out unfeasible. In the short term, the share of coal power in Vietnam's electricity mix is still trending upward due to factors such as investment delays and limitations in alternative renewable sources, while electricity demand is rising to meet economic development needs. The gradual phase-out of coal power must be accompanied by measures to ensure energy security and a just transition for over 100,000 workers in the coal industry, as well as developing a skilled workforce for clean energy technologies in the future. According to forecasts from the International Research Institute (IRI), during the 2024-2025 period, El Niño is expected to continue with a probability of 80-90%, with the intensity gradually decreasing before transitioning to a neutral phase. Hydropower plants will continue to be adversely affected by the El Niño phase, which causes drought and lower water levels in reservoirs. Consequently, it is forecasted that Vietnam will still need to mobilize maximum thermal power capacity to compensate for the shortfall from hydropower.

To promote a sustainable transition in the coal power sector while ensuring national energy security, VPBank will exercise caution in providing working capital for existing coal thermal power plants, on the condition that it does not extend their operational life or expand project capacity. Clients receiving such financing will be required to establish a roadmap for applying carbon capture, utilization, and storage (CCUS) technologies, while gradually transitioning from coal to other sustainable fuels.

LOOKING FORWARD

As the world accelerates efforts to achieve net-zero emissions, Vietnam, along with VPBank, is actively engaged in the ongoing energy transition and the fight against climate change. Recent extreme weather events, ranging from prolonged droughts to severe storms and floods, have underscored the risks that climate change poses to the economy, society, and the financial system. In response, VPBank has made the integration of climate risk into all management activities and business strategies a strategic priority, aiming both to safeguard financial interests and to support clients in their transition towards a low-carbon economy, thereby contributing to a sustainable and resilient society.

VPBank fully acknowledges its pivotal role in guiding clients and communities through this transition. The Bank integrate climate risk into risk management framework, credit approval processes, and investment strategy, aiming to reduce GHG emissions and promote the transition to a low-carbon economy, while contributing to the realization of the sustainable development goals set forth by the Government of Vietnam in strategies such as Power Development Plan VIII, the Green Growth Strategy, and other policies supporting renewable energy development. We also proactively apply advanced tools in climate risk governance, and conducting assessments of emerging risks, from market and liquidity risks to operational risks, and continuously reviewing data and methodologies to ensure accurate and timely evaluations. Concurrently, VPBank is moving towards alignment with international standards for climate measurement and reporting, such as IFRS S1, IFRS S2, and the TCFD recommendations to enhance transparency, comparability, and will not support projects that extend the lifespan or capacity of existing coal plants. This is part of our's effort to ensure that investments are both financially effective and consistent with the commitment to sustainable development and social responsibility.

VPBank’s foremost priority is to support projects, investments, and business activities that align with the vision, directives, and sustainable development strategy of the Government of Vietnam. The Bank places particular emphasis on sectors such as renewable energy, green buildings, energy efficiency, greenhouse gas emission reduction, and low-carbon technologies. VPBank actively encourages clients to establish carbon-neutral roadmaps, adopt emission reduction innovations, and adhere to international Environmental, Social, and Governance (ESG) reporting standards. At the same time, the Bank upholds a prudent stance towards coal thermal power generation, coal mining, and other environmentally intensive activities, refraining from financing projects that extend the lifespan or capacity of existing coal plants. These principles reflect VPBank’s continued commitment to ensuring that its investments deliver both financial soundness and meaningful contributions to sustainable development and social responsibility.

Recognizing the critical role of data and analytical tools in implementing its sustainability strategy, VPBank continues to strengthen capabilities, refine methodologies, and enhance the collection and management of data on greenhouse gas emissions, climate risks, and green investment opportunities. The Bank is committed to regularly reviewing and updating policies, targets, and implementation progress to maintain adaptability in a rapidly changing regulatory, technological, and market environment. VPBank also works closely with government agencies, international organizations, industry associations, and client partners to advance national sustainability goals, strengthen climate risk governance, and expand disclosure practices in line with international standards. The ultimate objective is to establish a comprehensive and effective climate risk management system that protects VPBank’s financial interests, supports clients through their transition, and fosters a sustainable low carbon society for future generations.

Disclaimer

In preparing this TCFD Report, we have:

- *made necessary judgments, estimations, and assumptions to simplify the complex processes, for example, the case in relation to the climate risk stress test.*
- *used ESG and climate data, models, and methodologies that we consider appropriate and suitable at the date they were deployed. However, these data, models, and methodologies are subject to future risks and uncertainties and may change over time. There is an inability to rely on historical data as a strong indicator of future trajectories, in the case of climate change and its evolution. Outputs of models, processed data, and methodologies will also be affected by underlying data quality, which can be hard to assess or challenges in accessing data on a timely basis.*
- *continued (and will continue) to review and develop our approach to data, models, and methodologies in line with market principles and standards as this subject area matures. The data, models, and methodologies used and the judgments, estimates, or assumptions made are rapidly evolving, and this may directly or indirectly affect the metrics, data points, and targets contained in the climate and sustainability content within the TCFD Report. Further development of accounting and/or reporting standards could impact (potentially materially) the performance metrics, data points, and targets in this report. In future reports, we may present some or all of the information for this reporting period using updated or more granular data or improved models, methodologies, market practices, or standards, or recalibrated performance against targets based on updated data. Such re-presented, updated, or recalibrated information may result in different outcomes than those included in this TCFD Report. Where information is represented from time to time, we will identify this and (where we think it is appropriate) include an explanation. Readers and users of this TCFD Report need to be aware that direct like-for-like comparisons of each information disclosed may not always be possible from one reporting period to another..*

ANNEX 1. LIST OF ACRONYMS

BOD	Board of Directors
BOM	Board of Management
CAFI	Climate Assessment for Financial Institutions
DFC	US International Development Finance Corporation
DFI	Development Financial Institution
ESG	Environment, Social, Governance
GHG	Greenhouse Gas
IFC	International Finance Corporation
IPCC	Intergovernmental Panel on Climate Change
IRI	International Research Institute
NDC	Nationally Determined Contribution
NGFS	Network for Greening the Financial System
RCO	Risk Management Committee
SDG	Sustainable Development Goal
SME	Small and Medium-sized Enterprise
WMO	World Meteorological Organization

ANNEX 2 – LIST OF FIGURES

ANNEX 3 – LIST OF TABLES

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