ENVIRONMENTAL POLICY AFFECTING THE DEVELOPMENT OF GREEN BANKING AND GREEN ECONOMY: A CASE STUDY IN VIETNAM

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ABSTRACT

Purpose: Research on factors affecting the development of green banking and green economy in Vietnam. The authors proposed policy implications that contribute to developing green banking and green economy in Vietnam based on the research results.

Theoretical framework: Applied theoretical foundations and research model. In this part, the authors present the theoretical basis of green banking and green economy; as domestic and foreign studies related to green banking development, thereby building research models and developing research hypotheses.

Method/design/approach: In research methods, the authors presented research methods such as qualitative research, preliminary quantitative research, and formal quantitative research. These methods are expressed through the research process and scale adjustment to test the research hypotheses. Besides, the authors continue to collect data for the official quantitative research method. This data is collected through a questionnaire survey of about 900 officers and employees of 15 commercial banks in five provinces and the city of Vietnam.

Results and conclusion: The research results suggest some policy implications and recommendations to promote green banking development toward sustainable economic development in the long term. Many countries worldwide, including Vietnam, have chosen to develop green banking development and green economy.

Research implications: Helping bank leaders assess the awareness and concern of bank staff about green banking and customers' understanding, needs, and desires for green services. Finally, banks design green banking products and services in line with the requirements of customers and the green economy.

Keywords: Green Banking, Technology, Legal Framework, Environmental Policy, Risk Management.
Método/design/abordagem: Em termos de métodos de pesquisa, os autores apresentam métodos de pesquisa como a pesquisa qualitativa, a pesquisa quantitativa preliminar e a pesquisa quantitativa formal. Esses métodos são expressos por meio do processo de pesquisa e da definição de escala para testar as hipóteses de pesquisa. Além disso, os autores prosseguem com a coleta de dados para o método de pesquisa quantitativa formal. Esses dados são coletados por meio de uma pesquisa de questionário com cerca de 900 funcionários e empregados de 15 bancos comerciais em cinco províncias e na cidade do Vietnã.

Resultados e conclusões: Os resultados da pesquisa sugerem algumas implicações e recomendações de políticas para promover o desenvolvimento do banco verde em direção ao desenvolvimento econômico sustentável de longo prazo. Muitos países do mundo, inclusive o Vietnã, optaram por desenvolver o banco verde e a economia verde.

Implicações da pesquisa: Ajudar os gerentes dos bancos a avaliar a conscientização e a preocupação dos funcionários do banco em relação ao green banking e a compreensão, as necessidades e os desejos dos clientes em relação aos serviços verdes. Por fim, os bancos projetam produtos e serviços bancários verdes de acordo com as demandas dos clientes e da economia verde.

Palavras-chave: Banco Verde, Tecnologia, Estrutura Legal, Política Ambiental, Gestão de Riscos.

1 INTRODUCTION

Green banks will be an essential resource to implement the green growth strategy until 2025 because the banking system can contribute to limiting environmental and social risks by not lending to customers with projects that pollute or adversely impact the environment and people's lives. On the other hand, strict control from the bank appraisal stage also encourages businesses to move towards cleaner and safer production and business activities. To contribute to the implementation of the national action plan on green growth, the State Bank of Vietnam (SBV) has issued Directive No. 03/CT-NHNN to promote green banking growth and manage environmental risks and social activities, improve the efficiency of resource and energy use, improve environmental quality and protect human health, ensure sustainable development. However, there are still no specific regulations on the priority sectors and industries that need to be prioritized for support and the areas and industries that need to be restricted in the green banking development strategy to serve as a basis for commercial banks in the fixed, bank-level appraisal process.

In addition, there is currently a lack of documents specifying responsibilities for banks that sponsor bank for projects that negatively impact the environment and society. The highest legal document regulating activities to ensure environmental safety is the Law on Environmental Protection, which only focuses on clarifying the responsibilities of production, business, and service enterprises in essential industries. In addition, the responsibility of the financial and banking industry is not mentioned. Sanctions on pollution treatment prescribed in the Law on Environmental Protection and in the Penal Code - the part that regulates environmental crimes - also only apply to organizations and individuals that directly cause pollution.

Research on green banking can be understood in two aspects: (i) The bank carries out direct activities to minimize impacts on the environment, such as economical use of energy, water, and waste treatment, etc. (ii) The Bank has an indirect impact on the environment through increasing support for environmentally friendly projects such as Waste gas plants, renewable energy, and energy plants, the sun, a bio-fertilizer factory…

Green Bank has the following main characteristics: (i) Deployment of electronic and automation services; (ii) Prioritize lending or investing in projects with an assessment of risks...
related to the environment; (iii) Pay attention to social goals, sustainable development goals, and green development; (iv) Monitor and guide clients' projects to reduce environmental pollution; (v) Changing the assessment capacity of bank staff and customers on environmentally friendly activities...

Finally, banks must assess environmental risks during the banking process and conduct other activities such as green marketing, setting up a climate risk fund, and reporting on green banking activities. (2) The Bank develops a specific financing strategy for each environmentally sensitive sector. For internal operations, green banks can set specific targets for efficient energy use, minimizing gas consumption, and reducing greenhouse gas emissions; strengthen electronic pay; and issue electronic notices. In addition, the bank needs to implement a training program on energy efficiency activities for customers. (3) Banks must establish an internal environmental management system to continue implementing 2 activities: Designing and introducing green and environmentally friendly products.

2 THEORETICAL FRAMEWORK

Green economy (KTX): Currently, the green economy is understood as a combination of three factors: economic, social, and environmental. The green economy has a sustainable nature, which means that it is the activities that create profits or beneficial values, aiming to develop the life of the human social community, especially the cultural factor; at the same time, these activities are environmentally friendly, an essential element. These three factors are balanced to satisfy sustainability. A green economy is necessary because it creates jobs, ensures sustainable economic growth, and prevents environmental pollution, global warming, resource depletion, and degradation (Afshan & Sharif, 2016).

Green economy: according to UNESCAP (2012), synthesized from definitions of many countries and pointed out the familiar point that a green economy needs to be towards reducing the negative impacts of activities economy to the environment and society. A green economy brings prosperity to all within the planet's ecological limits. It is based on five principles: Welfare: A green economy must create genuine, sustainable, shared welfare that goes beyond mere monetary wealth to prioritize human development, health, happiness, education, and community. Equity: The green economy emphasizes equity, equality, and community cohesion and supports human rights, especially the rights of minorities and the marginalized. It seeks a just transformation and serves the interests of all citizens, including those who have not yet been born (Chen et al., 2018; Hendri et al., 2022; Miah et al., 2020).

The green economy is human activities associated with preserving natural resources and protecting the environment, in contrast to the brown economy, which consumes a lot but inefficiently natural resources, causing damage to the environment and nature. The brown economy is the old economic development model applied mainly in developing countries. The brown economy is characterized by an emphasis on GDP growth and per capita income. The growth of the brown economy is based on available resources. Economic development means exploitation and depletion of resources, leading to the following consequences: the environment is severely damaged, and resources are exhausted. resources (Prakash et al., 2018; Sharma & Choubey, 2022; Vidyakala, 2020).

Overall, the green economy is a global and transformative change to the worldwide status quo, requiring a fundamental shift in government priorities to set social and economic preferences environmental over financial priorities. Realizing this change is not easy, but it is necessary. Without it, progress toward sustainable development goals would be patchy and inconsistent, and economic, environmental, climate, and social challenges would continue to increase (Wang et al., 2020; Rehman et al., 2021; Owais & Arslan, 2020).
Green bank development (PTNHX): Green Bank development has the following main characteristics: (i) Deployment of electronic and automation services; (ii) Prioritize lending or investing in projects with an assessment of risks related to the environment; (iii) Pay attention to social goals, sustainable development goals, and green development; (iv) Monitor and guide clients’ projects to reduce environmental pollution; (v) Changing the capacity of bank staff and customers to evaluate environmentally friendly activities (Ikram et al., 2019).

Green Bank promotes green credit and green investment activities. Banks will select projects with an assessment of risks related to the social environment and give priority to lending or investing in projects that protect the environment or pose little threat to the environment. Regulations on environmental laws are included in the assessment and compliance, and environmental and social impact assessment tools are developed to carry out the evaluation and appraisal of projects before lending and guiding towards sustainable growth and green development, encouraging businesses to protect the environment and fulfill social responsibilities (Areej & Kadhim, 2022; Aleem & Bowra, 2020; Ghosh et al., 2018).

Green bank manages and supervises client projects to prevent risks and limit/minimize negative impacts on the environment. Banks set management measures, reporting requirements, and standards with the project implementing unit, and the level of control/management depends on the level of impact and influence of the project on the social environment. In case of violation, the customer must be responsible for taking and implementing handling and remedial measures. The bank can also participate in consulting and guiding businesses during project implementation to ensure environmental regulations and commitments (Grover & Kaur, 2019; Masud et al., 2018; Ren et al., 2020).

The green bank has the improvement of the morale, the evaluation capacity of bank staff, and the awareness of customers towards green banking activities are focused. The Bank actively disseminates information, raises awareness, and inspires teams for the bank's sustainable development through internal communication forms and seminars to train and improve their capacity project appraisal force considering environmental factors. The greening process is supported by both management and employees of the bank. At the same time, through product marketing activities, connecting communication channels, and green products and services provided, banks let customers see the benefits and importance of applying the model green bank image (Saurabh & Hardeep, 2019; Xu et al., 2020).

2.1 The Relationship Between Green Banking Development and Green Economy

The economy aims to reduce greenhouse gas emissions and respond to climate change through banking activities, including lending to environmentally friendly projects. To limit the impacts of greenhouse gas emissions and climate change, countries are currently implementing many practical initiatives, policies, and activities to promote the model transformation to a green economy, considered the most effective method. In the green economy, there will be a strong development of renewable energy, especially solar and wind energy, along with economic growth and reduced greenhouse gas emissions (Zheng et al., 2021).

2.2 Factors Affecting the Development of Green Banking and Green Economy

(1) Banking technology (CN): The development of information technology platforms and technical infrastructure has gradually transformed the entire natural world into the digital world and has created revolutionary changes in the economy and the banking industry. Besides, Vietnamese banks are in the digital transformation phase, so the research on the banking industry's digital transformation is few and fragmentary.
Therefore, it is necessary to analyze digital technology factors affecting the banking industry in Vietnam to propose research directions (Wu & Li, 2020; Sadiq et al., 2020).

2) **Financial capacity (TC):** It represents an increase in equity. This is a decisive factor in a financial ability for business expansion: Increasing domestic commercial banks' equity capital is essential to improve competitiveness and reduce risks, especially for commercial banks help commercial banks have conditions to attract more capital, develop human resources, invest in modern technology, expand the network, strengthen facilities, acquire management experience following international practices and standards. (Nizam et al., 2019; Mumtaz & Smith, 2019; Jan et al., 2019).

3) **Green marketing strategy (MK):** Using digital transformation tools in marketing strategy is not only a trend in the bank's efforts to improve the business environment but also an urgent need of customers. In summary, green marketing is a strategy to promote a bank's sustainable development towards limiting negative environmental impacts while always paying attention to environmental factors in the bank's business and service goals banks and contributing to the development of green banking (Iqbal et al., 2018).

4) **The quality of human resources (NNL):** It is in commercial banks is shown through (1) human resources are the factors that directly participate in the process of strategic planning, setting up plans, programs, projects, and building financial services. Business processes, and codes of conduct, are the guiding foundation for all activities in commercial banks (Insawan et al., 2022). (2) human resource is the subject of operating the system, controlling the technology infrastructure, executing the plans according to the set process, working with government agencies, partners, and customers, interacting with colleagues, and controlling cash flows and other resources under the bank's management.

5) **Risk management (RR):** It plays an essential role in ensuring the safety of the bank's credit activities and contributes to minimizing risks in green banking activities. Risk management is vital because of the following factors: (1) preventing and limiting credit risks for green, environmentally friendly projects is a complex problem for all commercial banks because credit risk is an objective necessity, always associated with credit activities, and at the same time very diverse and complex (Igbudu et al., 2018; Hyoungkun & Jong, 2020).

6) **Supporting policies (HT):** Commercial banks are under the management and supervision of the State Bank of Vietnam (SBV), so the green banking development strategy should follow the orientation of the State Bank. These orientations will directly affect the formulation of the green bank development strategy. In addition, planning policies, legal regulations, and practical support from State management agencies will contribute to removing difficulties for commercial banks in developing social banks in general and banking services. in particular (Al-Obaidi & Almashhadani, 2022; An & Pivo, 2020).

7) **The legal framework (PL):** It is on green banking has not been completed and supplemented by the international context and good practices. At present, the primary green banking regulations are still oriented in nature. There is still a lack of specific rules, no unified definition/concept of green banking, and a lack of development standards/conditions for green banking development (Anna, 2018; Antonio et al., 2017). Chatzitheodorou et al. (2019) believed that green banking is an inevitable trend in the global financial industry and an effective solution for preventing and limiting the increasingly adverse impacts of climate change. For Vietnam, green banks play a significant role in promoting sustainable development and realizing the Government's green growth strategy.
Environmental policy (MT): Environmental protection is an issue that most countries worldwide pay special attention to and make great efforts to implement. For Vietnam, environmental protection and promotion of green growth is a significant policy identified in many medium and long-term development strategies and plans. To achieve environmental protection and promote green growth, it is necessary to have an effective combination of many different policies, including green finance policy and green banking development. (Chatzitheodorou et al., 2019; Chen et al., 2022).

Studies show that eight factors affect the development of green banking, and five factors affect the green economy. Of the eight factors above, there are three new factors the authors put into the model, which are: (1) Banking technology; (2) financial capacity, and (3) environmental policy. Thus, the development of green banking is placed in the context of the general development of the domestic and international economy and the specific development of the commercial banking system. Therefore, this development is influenced by internal and external factors of commercial banks (Parveen et al., 2020; Rahman & Rahman, 2020).

The authors recorded a linear structural model based on research results at home and abroad, plus some references to green banking development experiences in some countries. To sustainably develop the economy, governments need to create a strategy to develop a green economy. Accordingly, green credit activities and banks play a crucial role in successfully implementing this strategy (Bang et al., 2023).

3 METHODOLOGY

Qualitative research method: It had based on analytic synthesis: Inheriting the researched topics, the topic uses analytical methods to clarify the contents that need to be further investigated and, at the same time, synthesize the issues that need to be further studied. The topic was analyzed to draw the conclusions of the study. Comparative method: green bank development is considered based on comparison and contrast between different periods and between banks in the Vietnamese commercial banking system. In addition, descriptive and inferential statistical methods: Presenting the collected data in a structure and summarizing through descriptive statistics are used.

In parallel, the authors conducted qualitative research, including synthesis of references, desk research to review research and find new concepts, check and screening independent variables in the evaluation model of green bank development through officers and employees. The authors contained the validity of the scale and in-depth interviews with relevant subjects. This research step is used to explore, adjust, and re-screen the variables included in the research model and add independent variables that affect the dependent variable of green banking and green economy development (Hair et al., 2021).

In addition, the authors studied the theoretical basis to develop a research model and scale design. According to statistical theory, the authors then conducted group discussions with 30 managers managing banks or branches in five provinces and cities, including Binh Duong Province and Ho Chi Minh City, Ba Ria - Vung Tau, Dong Nai, and Can Tho calibrate the model and scale to suit the research context (Hair et al., 2021).

Specifically, the authors had consulted with 30 managers in the banking sector who are heads of customer service departments, deputy directors, and directors of branches of commercial banks in provinces and cities such as Ho Chi Minh City, Can Tho City, Dong Nai, Binh Duong, Ba Ria - Vung Tau. Based on the opinions of 30 knowledgeable managers in the banking sector, the authors had determined exactly what information needs to be collected from experts’ views and formed a survey.

Quantitative research methods: To survey the level of understanding of bank managers on issues related to green banking (NHX), the development of NHX, and the level of
knowledge of officers and employees about the areas of green banking development. The authors used a quantitative method through a 5-level Likert scale in the survey table, values from 1 to 5. Then, the meanings of the levels are as follows: 1. Totally disagree; 2. Disagree; 3. Medium; 4. Agree, and 5. Totally agree.

The method of reliability coefficient Cronbachs’ Alpha: to analyze whether the observed variables measure for a concept to be measured, the contribution value is more or less reflected through the correlation coefficient of the total variable. Cronbach's alpha test will eliminate inappropriate variables in the research model (Hair et al., 2021).

Exploratory factor analysis (EFA). The method is used to reduce many interdependent observed variables into a smaller group of variables. However, they are more meaningful and still contain most of the information content of the original set of variables while still ensuring interdependent relationships. In this study, standard EFA analysis needs to meet the following conditions: Factor loading > 0.5 (the more significant the load factor, the closer the observed variables are to the factor); 0.5 < KMO < 1; Bartlett test has Sig < 0.05; observed variables are correlated with each other in the population; total variance extracted > 50%; Eigenvalue index > 1 (Hair et al., 2021).

After the authors performed preliminary quantification, the authors continued to collect data for the official quantitative research method. This data was collected through a questionnaire of about 900 officials and employees. Member of 15 commercial banks in five provinces and cities of Vietnam. The study used a convenience sampling method. The authors used the data collected from the survey using SPSS 20.0 software, and the reliability of the scales was tested using Cronbach's Alpha reliability coefficient, exploratory factor analysis (EFA), factor analysis confirmatory factor (CFA), and structural model testing (SEM).

4 RESULTS AND DISCUSSION

The development of Vietnam's green credit market in recent years has seen optimistic start-ups from the support from the Government and international financial institutions. However, there are still limitations, difficulties, and challenges, such as specific regulations and definitions of green categories and sectors that have not yet been agreed to be applicable across the country. This leads to difficulties for commercial banks in selecting, appraising, evaluating, and monitoring when implementing green credit.

At the same time, the green sector still lacks a legal framework and criteria for assessing environmental impact measurement tools to support the development of policies and products for green credit development; Business plans also need to meet strict environmental protection conditions and complicated loan procedures. Because of these requirements, customers will need less to use the bank's green credit products if there is no interest rate support or other preferential mechanisms.

Investment capital in industries and fields that bring environmental benefits, especially in renewable energy, saving, and energy efficiency in Vietnam, often requires a long payback period and high investment costs with considerable investment and increased market risk, so there is a need for incentives in terms of loan term and fee. Meanwhile, the capital mobilized by credit institutions is usually short-term and rallied at the cost of commercial capital in the market, so the price is high. To provide credits with long terms and preferential interest rates for green industries and fields, credit institutions must be supported to access long-term, preferential capital sources or have mechanisms sharing loan interest rates among credit institutions.

The regulations and laws on green banking are still incomplete and in their infancy. Although the State Bank has approved the green banking development project in Vietnam, the legal framework for green banking activities in Vietnam is still too sketchy and not highly
coercive. Most of these decisions are only for encouragement, encouragement. Green credit activities have only been initially interested in implementing by some commercial banks because the benefits of becoming a green bank are not really clear.

The new green credit policies focus on incentives. There is no precise mechanism to apply. Guidelines on the list of green sectors and fields are still general, and there are no specific criteria for commercial banks to use as a basis for selection, appraisal, assessment, and supervision when granting green credit; Due to the lack of specific regulations and guidelines of the SBV on green banking/green credit development, most banks have not yet developed a specific strategic framework and implementation roadmap towards green banking development. Only a few banks have developed and established a comprehensive environmental and social risk management system.

Green banking products and services are still monotonous and unsuitable for the characteristics of green projects and investments. Enterprises want to make green investments, specialized green financial products are often discouraged, and lending procedures are complicated. In addition, the awareness and capacity of commercial banks to develop new green credit products are still at the initial stage and limited. In addition, most credit sources for green projects are mainly based on funding from international organizations or partly from the state financial source through Vietnamese funds, the participation of local banks, etc. Merchandise is quite limited.

Human resources to meet the requirements of green banking development have not yet been considered, so the factor of people, from leaders to employees affecting green bank development in Vietnam has not really had an impact. This requires commercial banks to have a human resource development strategy in line with the requirements and procedure of green banking development. Although specific results have been achieved, the implementation of green banking in Vietnamese commercial banks is still limited. Although some guiding documents have been issued, the regulations are still general, unclear, and specific. Few banks still implement green banking activities, and no bank is oriented towards the green banking model. The reason is that banks think they will lose a large amount of profit because credit appraisal will be tighter when considering social and environmental factors.

### 4.1 Descriptive Statistical Analysis of Demographics and Factors

The study surveyed 900 officials and employees working at 15 banks in five provinces and cities, including Binh Duong, Ho Chi Minh, Ba Ria - Vung Tau, Dong Nai, and Can Tho. Thus, the data put into processing was only 865 votes, respectively, 865 officials and employees. Due to missing information and 35 invalid votes, the percentage of votes passed was 96.11 percent. The following shows the results of some demographic information.

The SEM linear structural modeling method is widely used because it has many advantages over traditional methods such as multivariate regression. SEM can calculate measurement error. This analysis will help the authors to determine which factors contribute less/more or not to the change of the dependent variable.

<table>
<thead>
<tr>
<th>The relationship between the factors</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Std. Error</th>
<th>C.R</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTNHX ---- CN</td>
<td>0.497</td>
<td>0.533</td>
<td>0.028</td>
<td>17.848</td>
<td>***</td>
</tr>
<tr>
<td>PTNHX ---- MK</td>
<td>0.087</td>
<td>0.072</td>
<td>0.030</td>
<td>2.917</td>
<td>0.004</td>
</tr>
<tr>
<td>PTNHX ---- PL</td>
<td>0.143</td>
<td>0.148</td>
<td>0.029</td>
<td>4.896</td>
<td>***</td>
</tr>
<tr>
<td>PTNHX ---- TC</td>
<td>0.073</td>
<td>0.081</td>
<td>0.026</td>
<td>2.847</td>
<td>0.004</td>
</tr>
<tr>
<td>PTNHX ---- MT</td>
<td>0.175</td>
<td>0.095</td>
<td>0.052</td>
<td>3.369</td>
<td>***</td>
</tr>
<tr>
<td>PTNHX ---- RR</td>
<td>0.085</td>
<td>0.092</td>
<td>0.028</td>
<td>3.068</td>
<td>0.002</td>
</tr>
<tr>
<td>PTNHX ---- HT</td>
<td>0.078</td>
<td>0.092</td>
<td>0.023</td>
<td>3.337</td>
<td>***</td>
</tr>
</tbody>
</table>
Table 1 shows that the SEM model test results are satisfactory, the values of the regression coefficients are positive, and the statistical significance is less than 0.05. The column P value is the significance level of the relationship between the impact of the factors. If this value is less than 5%, the hypothesis is accepted. In the case of ***, as shown in Table 1, it is because this value is less than 0.001, the better because it is < 5%, and all hypotheses are accepted.

**Figure 1:** Results for testing the structural equation model

Source: Prepared by the authors (2023)
Figure 1 shows that for the above problem, the authors relied on the theoretical basis and related studies, the results of descriptive statistics analysis, reliability, exploratory factor analysis (EFA), and confirmatory factor analysis (CFA), linear structural model (SEM) and analysis of variance (ANOVA), the authors had some general conclusions as follows: (1) the analysis results show that there are 8 factors affecting the development of green banking, including (1) Quality of human resources (NNL), (2) Banking Technology (CN), (3) Supporting policies (HT), (4) Risk management (RR), (5) Financial capacity (TC), (6) Environmental policy (MT), (7) Legal framework (PL), (8) Marketing Strategy (MK) with 1.0% significance level. (2) The analysis results show that there are 5 factors affecting the green economy, including (1) Banking Technology (CN), (2) Supporting policies (HT), (3) Financial capacity Main (TC), (4) Environmental Policy (MT), (5) Legal Framework (PL) at 1.0% significance level. The following discusses the impact of factors on the development of green banking and the green economy.

Commercial banks must invest, build and complete electronic payment infrastructure for all transactions, contributing to green banking and economic development. Investment in information technology systems cannot be ignored, not to mention the goal of increasing utilities to improve competitiveness, enrich the customer experience, and promote programs to reach customers on time. As a result, commercial banks increasingly diversify their services to give customers an increasingly new, convenient, and modern experience. Banks continue to expand the network of traditional service channels combined with the development of contemporary banking transaction channels such as online banking, payment via the Internet, mobile phone, contactless payment, and payment via QR Code, a new generation ATM, multi-function as a banking transaction office in line with the payment trend in the world, ensuring fast, safe, convenient and affordable payment.

The State Bank needs to improve the legal framework to create a more favorable environment for attracting green capital flows. The State Bank should continue and urgently complete the legal framework, issuing circulars guiding credit institutions to manage environmental risks in credit extension activities to meet the requirements of the law on environmental protection. Environment, perfecting mechanisms and policies to support digital transformation in the banking industry for sustainable development and contributing to green economic growth. Finally, it is necessary to change and complete the legal framework to create a more favorable environment for attracting green capital flows such as solar power. Foreign financial institutions and institutions are still very concerned about the risks of electricity price reduction and legal cuts.

The State Bank needs to give incentives, refinance, and rediscout for environmental protection through green, clean, and environmentally friendly projects. Commercial banks must issue specific and explicit policies or programs on preferential interest rates or provide documents for businesses investing in green environmental protection and clean or resolutely refuse to grant credit for companies that adversely affect the environment and society. In addition, banks need to strictly implement the process of appraising and assessing the impacts of projects on the environment and society, assessing the environmental and social security risk factors of previous projects when granting credit.

Commercial banks must continue applying modern digital technology to strengthen risk management capacity. Modern digital technology has increased the level of information sharing, thereby creating a massive demand for information security and safety. Commercial banks should pay special attention to building data backup centers, upgrading security systems, and maintaining high levels of security; to ensure the expansion of the scope of operation while still being stable and safe, bringing long-term efficiency. In addition, commercial banks need to have multiple layers of customer information protection.
The State Bank should continue to have policies to support capital to encourage banks to develop green capital. There should be a clear support policy for banks that lend to the green sector, such as providing preferential loans, applying low-interest rates, and providing interest rate difference compensation. Commercial banks with a high proportion of green credit loans should also prioritize accessing preferential loans from international organizations and development partners. In the coming time, it is necessary to continue to improve the legal framework for green credit and green banking and promote the mechanism to support access to capital to provide green credit, such as developing the green bond market and attracting foreign investors to offer green capital. The State Bank should continue to direct and guide commercial banks to focus on allocating appropriate capital sources for preferential loans to encourage investors to implement projects on the green classification list; coordinate with relevant ministries and branches to support commercial banks in receiving foreign aid and concessional loans. At the same time, research and develop an action plan for the banking industry to implement the green growth strategy.

Commercial banks need to build human resources to ensure the knowledge, skills, and professional ethics to meet the development of green banking. The top mandatory requirements that bank officers must never forget and strictly implement are compliance with banking laws and other legal regulations. Comply with the general business process of the State bank and each commercial bank's own. Do not cut off or skip any steps in the business process to avoid errors. Developing human resources, especially high-quality human resources, should be identified by commercial banks as one of the strategic breakthroughs, an essential factor, and a solid foundation to create momentum for sustainable development. In addition, bank officials and employees must be proactive, creative, and adaptive.

Commercial banks must diversify green products and services to meet integration and environmental protection. Commercial banks should also aim to comply with international standards to keep up with globalization and integration, as well as inheriting standards that have been researched and developed by reputable organizations with environmentally and socially relevant standards. In addition, banks must focus on researching, surveying customers, learning, and grasping trends to offer and diversify appropriate green products to meet the market's needs and satisfy customers. Many customers place on correlation with the bank's resources. Diversified but not spread, there are many products, but there are also advantageous products that promote the potential and take advantage of available factors to attract and retain customers.

Commercial banks must develop a methodical and scientific green marketing strategy plan to meet practical needs. Regularly check marketing activities' quality and effectiveness, making appropriate adjustment plans. Commercial banks must develop methods to evaluate and measure the effectiveness of marketing activities. This helps banks boldly launch effective marketing campaigns in the future but also allows banks to eliminate inappropriate, ineffective, or wasted marketing activities.

5 CONCLUSION

In-depth research on green banking and green economy development is a wide-ranging, complex, multi-dimensional, and interdisciplinary issue; forming a framework for green banking and green economy development also requires the coordination of many related ministries and sectors. Within the framework of the theoretical part, the authors had solved some of the following issues: First, the authors mentioned the research results obtained, thereby making a general conclusion with the main content, which are eight factors affecting the development of green banking and 5 factors affecting the development of green banks and green economy. Second, the study has given the Government's development orientations for green
banking and green economy in terms of economy, society, and environment. Thirdly, the study has eight policy implications for developing green banking and a green economy. Research results show that banking technology has the highest standardized Beta coefficient of 0.533 out of eight factors and should be given the first priority in implementing policy implications. Besides, the research results show that the Marketing strategy (MK) has the lowest standardized Beta coefficient of 0.072 of the eight factors. Marketing strategy (MK) positively correlates with green bank development at the 1.0% significance level and carries out the final policy implications. Fourth, the study also points out limitations in the research process and suggests further research directions that must be supplemented and perfected.

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