

Partnership to strengthen transparency for co-innovation (PaSTI) of the Ministry of the Environment, Japan and the Ministry of Natural Resources and Environment, Vietnam



Task 1

UPDATING INFORMATION ON GREEN FINANCE IN LINE WITH PRIVATE SECTOR'S TRANSPARENCY AND CLIMATE ACTION

Hanoi, Viet Nam - March 2022

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1 Introduction

1.1 Assignment

This assignment is conducted within Framework between the Overseas Environmental Cooperation Center (OECC), Japan and EPRO Consulting Joint Stock Company (EPRO) for the **Partnership to strengthen transparency for co-innovation (PaSTI) of the Ministry of the Environment, Japan and the Ministry of Natural Resources and Environment, Vietnam.**

The main objective of the assignment is to provide initial background on Vietnam situation per guidance of OECC and logistic supports for further project idea development within the framework of PaSTi. In order to achieve this objective, the assignment includes five main tasks of:

- **Task 1:** Updating information on green finance in line with private sector's transparency and climate actions.
- **Task 2:** Research on progress monitoring of NDC for construction sector measures
- **Task 3:** Support to hold workshops on private sector transparency
- **Task 4:** Other matters for supporting MONRE, line ministries, the MOEJ and OECC
- **Task 5:** Translation and Interpretation on demand basis

This is report of Task 1.

1.2 Report

This report is prepared under guidance of OECC. The analysis is consolidated from desk study and in-depth study and interview with 4 selected banks. They are BIDV, VCB, VietinBank and Exibank. This report includes following topics:

- Introduction
- General assessment of green finance products of commercial banks in Vietnam
- Other specific issues and
- Recommendations

2 Introduction

A survey study of the green finance products was conducted in Vietnam between December 2021 and March 2022 after coordinating the content of the questionnaire with OECC's experts. The survey in Vietnam is focused on ESG finance products of four banks:

- Bank for Investment and Development of Vietnam (BIDV)
- Joint Stock Commercial Bank for Foreign Trade of Vietnam (VCB)
- Vietnam Joint Stock Commercial Bank for Industry and Trade (VietinBank)
- Vietnam Export-Import Commercial Joint Stock Bank (Eximbank)

The survey was organized by Ms. Le Ha Thanh of the EPRO consulting firm and her colleagues. These four banks have a large proportion of green credit outstanding loans in Vietnam (State Bank of Vietnam, 2019). As of end of March 2022, four surveys with VCB, VietinBank, BIDV and Eximbank were completed. Additional information from secondary sources (Laws, regulations, policies, research reports and studies) was used to complement survey data in Vietnam.

The objective of the survey is to engage with banks in Vietnam that are offering ESG finance products to ascertain the key products being demanded in pursuit of sustainable development, as well as the challenges they face in trading these products. To save time and cost, and in the presence of the COVID pandemic, all surveys were conducted in virtual way. Our aim was not to calculate average results over a number of banks surveyed but to extract analytical points. Results are reported in sections below, arranged by topic. Some of them are common for surveyed banks, while some others are bank-specific issues.

3 General assessment of green finance products of commercial banks in Vietnam

Despite impressive economic growth rates in recent years, Vietnam remains highly vulnerable to climate change, primarily due to the country's heavily dependence on agricultural sectors, its location near the end of several trans-boundary river basins, and the low coastline that is constantly threatened by rising sea levels. At the same time, Vietnam's rapid growth and industrialization have had detrimental impacts on the environment and natural assets. Over the past two decades, Vietnam has emerged as the fastest growing per capita greenhouse gas emitters in the world – growing at about 5 per cent annually.

Recognizing the need to address climate change while sustaining long-term economic prospect, the Government of Vietnam has set targets and policies to promote sustainable and green growth, as well as cope with its vulnerability to climate-related risks. Credit organizations are considered an important factor in the government's action plan to direct investments into environmentally-friendly production, to mitigate risks and move towards sustainable development. Mobilizing funding sources via innovative and market-based solutions will accelerate the transition to a low-carbon economy, reduce risks of carbon lock-in and support sustainable growth.

3.1 Green finance products of Vietnamese banks

The summary of green finance products is provided in Table 1. It can be seen from the survey that key green finance products practicing by four Vietnamese banks are project finance and interest preferential loans. All interviewed banks have developed the Green finance framework, which intends to issue green loans to finance and refinance, in whole or in part, existing and future projects that facilitate a shift to a green economy in Vietnam while mitigating the adverse impacts of environment. The main areas eligible for Green finance framework are: (i) Renewable energy; (ii) Energy efficiency; (iii) Clean transportation; (iv) Eco-friendly and/or Circular economy adapted products, Production processes and technology; (v) Sustainable water and wastewater management; (vi) Green buildings; (vii) Agriculture and forestry and (viii) Pollution prevention and control.

While interest preferential loans policy is being applied at VCB and VietinBank, BIDV has no soft loan program for green and environmental-friendly projects unless these projects are under specific joint programs between BIDV and other international development partners/donors like WB, ADB, AFD etc. Currently, there is no specific soft loan program to finance the green project of Eximbank.

Loan guarantee for renewable energy project is another green finance product of BIDV, VietinBank and VCB. This means Vietnamese commercial bank provides guarantee for companies to borrow capital from foreign banks. The eligible projects for bank's guarantee are mostly renewable energy projects. However, this loan guarantee is still limited due to the complicated technical and E&S requirements.

Apart from green finance products, all of three surveyed banks now recognize that ESG risks and opportunities lie within their own lending portfolios and can impact their businesses. All of banks have an environmental and social policy and social and environmental risk (E&S). However, banks are not fully integrating E&S risk management into their client and transaction approval and monitoring processes. The E&S is applied mostly for renewable energy loan projects or projects jointly financed by development partners.

Table 1. Type of green finance products of Vietnamese banks

Types of ESG finance	BIDV	VCB	VietinBank	Eximbank
1 Project finance	X Priority areas: Renewable energy; Energy efficiency; Clean transportation; Eco-friendly and/or Circular economy adapted products, Production processes and technology; Sustainable water and wastewater management; Green buildings; Agriculture and forestry and Pollution prevention and control; Ecotourism.	X Priority areas: Renewable energy projects(solar, rooftop solar, wind); water supply and wastewater treatment	X Priority areas: Renewable energy projects(solar, rooftop solar, wind); agriculture and ecotourism development	X Priority areas: Renewable energy projects(solar, rooftop solar, wind); sustainable agriculture
2 Donation type private placement bonds/loans	Donation activities to support community development, childcare, forest plantation and protection are available. However, the activities are by nature social donation, not in the form of private placement bond/loans.			
3 Environmentally rated private placement bonds	N/A	N/A	N/A	N/A
4 Interest preferential loans	Preferred loan was provided under specific program. BIDV and VCB participated in Pilot project on green finance and credit with total amount of bill. 2,000 VND under the SBV Governor Directive on Promoting Green Credit Growth and Environmental and Social Risks Management in Credit Granting Activities (Directive No.03/CT-NHNN from 24/3/2015). The interest rate applied to SMEs was 1-3% lower than the market interest rate. Commercial banks participating in the program are refinanced by the State Bank with interest rates 1% lower than usual.		Preferred loan was provided under specific program.	N/A
Some examples	On 26 May 2021, BIDV and the French Development Agency (AFD) signed a credit facility agreement of USD100 million aiming at promoting green investments, focused in renewable energy and energy efficiency sectors. Accordingly, AFD will grant a long-term	- Loan to GIF project of USD1.5 million since 2019 - support green investment under the project's framework to convert low carbon into energy saving field.	- Credit products for Rooftop solar power projects since August 2020; <ul style="list-style-type: none"> ▪ Customers: Enterprises (including micro enterprises) sign power purchase and sale contracts with EVN or a unit authorized by EVN; ▪ Preferential interest rate: from 8.1%/year; ▪ Scale of credit package: VND10 billion; 	

Types of ESG finance	BIDV	VCB	VietinBank	Eximbank
	<p>USD 100 million concessional credit line facility to BIDV as well as providing technical assistance of EUR300,000 to BIDV and its customers.</p>	<ul style="list-style-type: none"> - High-tech and clean agriculture projects: Disbursed VND 2,500 billion. Announcement of credit packages for clean agriculture (VND10,000 billion); clean water supply (VND10,000 billion); industrial development and supporting industries (VND10,000 billion); loans for medical development (VND30,000 billion) - In 2019, deploying a credit package worth USD 200 million to finance renewable energy projects (green energy, environmental protection) from the Japan Bank for International Cooperation (JBIC). - The bank has a separate product to finance energy projects. As of August 31, 2020, the disbursement for energy projects was VND27,267 billion. 	<ul style="list-style-type: none"> ▪ VietinBank applies a flexible collateral receipt mechanism for each customer. Enterprises can secure from the project's own equipment assets with a credit level of up to 70% of the assessed value. - Product package for clean agriculture in Vietnam in 2019: <ul style="list-style-type: none"> ▪ The package of policy products on the ceiling interest rate for short-term loans for new agriculture and rural areas is 6.5%/year. In which, for high-tech agricultural projects, the lending interest rate is 0.5 - 1.5%/year lower than that of ordinary production and business loans of the same term. - Credit policies to support agricultural development in the direction of large commodity production, application of technology with unsecured loans from 70% to 80% of the value of the plan/project. In particular, when customers participate in agricultural insurance, they will enjoy a preferential policy with a 	

Types of ESG finance	BIDV	VCB	VietinBank	Eximbank
			minimum interest rate of 0.2% per year compared to the normal interest rate. - Other credit product packages specific to the agricultural industry, designed specifically for each specific customer, such as: Aquatic supply chain financing product packages, traditional village loan products (handicrafts Crafts); lending unsecured loans on the basis of cash flow management from export contracts; export factoring, agricultural chain to provide financial support to individuals and organizations in the agricultural value chain with quick procedures. Collateral is the circulating goods of individuals and businesses.	
5 ESG investment trust	N/A	N/A	N/A	N/A
6 Green bond	Green bond is not available in Vietnam. Currently, Vietnam has only piloted the issuance of local government green bonds in 2 cities (Ho Chi Minh City and Ba Ria Vung Tau). Pilot project for green bond issuance in Vietnam <i>For Ho Chi Minh City</i> <ul style="list-style-type: none"> ▪ Bond type: green local government bonds ▪ Term of bonds: 15 years ▪ Total volume: VND523,5 billion (equal to approximately US\$24 million) 		VietinBank has been doing research on green capital market and green bond on the basis of sharing knowledge and experiences from major financial institutions in the world such as the IFC and MUFG Bank.	N/A

Types of ESG finance		BIDV	VCB	VietinBank	Eximbank
	<ul style="list-style-type: none"> ▪ Usage: Capital from bond issuance disbursed to 11 green projects in the areas of sustainable water management, adaptation to climate change, and sustainable infrastructure. <p><i>For Ba Ria Vung Tau</i></p> <ul style="list-style-type: none"> ▪ Bond type: Green local government bond ▪ Term of bonds: 5 years ▪ Total volume: VND80 billion (equal to US\$3.7 million) ▪ Usage: Capital from bond issuance planned for a project related to sustainable water management. 				
7	Donation type deposit	N/A	N/A	N/A	N/A
8	Positive Impact Finance	N/A	N/A	N/A	N/A
9	Others: Credit guarantee for renewable energy project	All three banks provide Credit guarantee for renewable energy projects			N/A

3.2 Green credit ratio

As shown in previous section and according to the State Bank of Vietnam's statistical report (2019), the green finance focuses on a number of areas such as: Green agriculture, Renewable energy, Clean energy, Sustainable water management in urban and rural areas, Sustainable forestry. Green agriculture, renewable energy, and clean energy projects account for a high proportion of total credit of commercial banks.

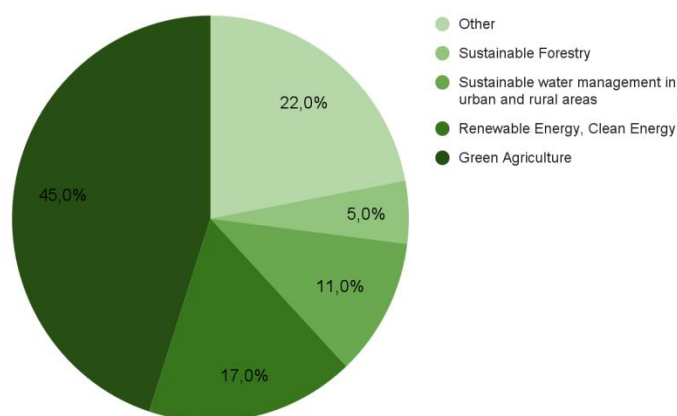


Figure 1. Green finance/credit structure of commercial banks by sector

Source: State Bank of Vietnam

However, this ratio differs depending on the commercial banks. Specifically, at BIDV, green finance/credit focuses on following areas as follows:

Table 2. BIDV's green credit for the period of 2020-2021

No.	Sector	Outstanding loans (%)	
		2020	2021
1	Green agriculture	1.07	1.11
2	Green industry	1.56	0.25
3	Renewable energy, clean energy	94.84	96.84
4	Recycle and reuse resources	0.50	0.34
5	Waste treatment and pollution prevention	1.78	1.00
6	Sustainable water management in urban and rural areas	0.22	0.44
7	Sustainable transportation	0.02	0.01
Total		100	100

Source: BIDV

Although the proportion of green credit by sector may differ from bank to bank, it mainly focuses on green agriculture and renewable energy. In the period of 2020-2021, the proportion of outstanding loan in these fields is 94.84%-96.84%. BIDV is considered as one of leading commercial banks focusing on developing financial services for projects committed to environmental protection and clean energy use. The scale of BIDV's energy industry continued to grow in the period 2017-2021 with an average growth rate of 11.59% per year, reaching outstanding loans of more than VND 68 trillion, accounting for 5.78 % of total outstanding loans

of BIDV. However, the proportion of outstanding loans is still relatively low compared to the proportion of total banks' outstanding loans.

As for VietinBank, the outstanding loan for green finance in 2021 is VND24,000-25,000 bill. accounts for 4-5% of total outstanding loans, of which 70 to 80% is renewable energy projects. The annual growth rate is 1.4%.

3.3 Green credit growth rate

According to the Department of Credit for Economic Sectors (State Bank of Vietnam), green credit outstanding has increased from more than VND71 trillion at the end of 2015, to VND340 trillion at the end of 2020. In the past 6 years, the growth rate of "green credit" has reached 378.9%, or averaging increase of 63.1%/year, which is 3 times higher than the average credit growth during this period. (State Bank of Vietnam, 2021)

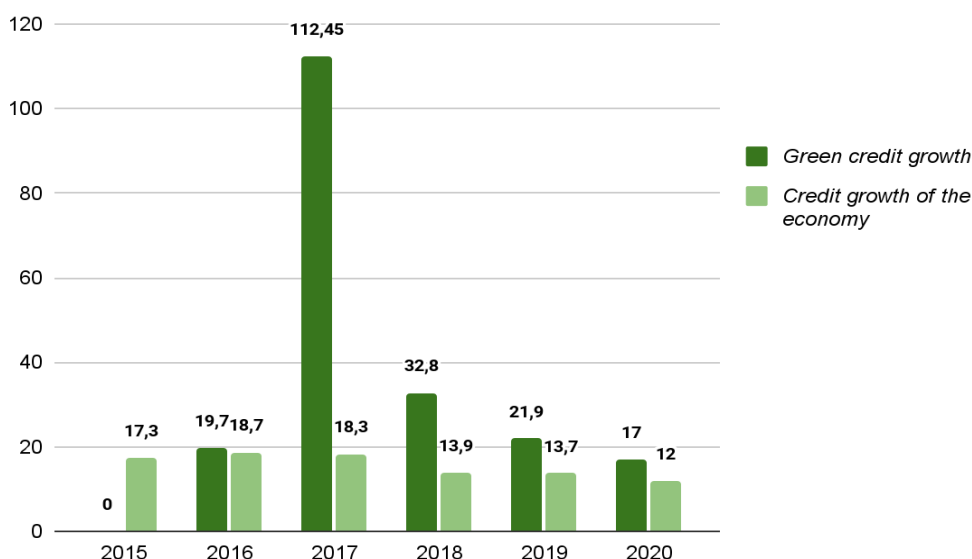


Figure 2. Credit growth rate in period 2015-2020 (%)

Source: State Bank of Vietnam (2021)

Although the size of green credit loans is still small, the growth of green credit outstanding loans has shown some positive trends. In recent years, a number of projects on energy and sustainable agriculture have attracted a huge funding from banks in the medium and long term, leading to a high growth rate. It also makes important contribution to the total credit ratio. However it is observable that, green credit mostly concentrates in a few large commercial banks in Vietnam including BIDV, VCB, and VietinBank. For the whole banking system, the amount of green credit is still very limited. Because sustainable development projects/green projects are by nature long time investment (12-15 years), which require large capital for infrastructure and technological equipment, some Vietnamese commercial banks with small capital capacity cannot meet the financial needs of these projects. For instance, a number of wind power plants in Central and Southern Vietnam such as Bac Lieu wind power plants, Dam Nai wind power plants, Trung Nam wind power plants require investment capital from several hundred billion to several trillion VND.

Although showing interest about green and environmental projects, none of interviewed banks had a particular department responsible for environmental issues and green financing. This function is attached to different banks' departments such as Department of credit, Department of risk management, Department of FDI, Department of financial solution or Department of project development. A credit department of the bank is responsible for loan/credit appraisal for green project through general credit procedure. It is understandable that for banks and any companies, one way to reduce the overhead cost is to keep a minimum level of apparatus and number of employees. Meanwhile interviewed banks said the reason they do not have a particular staff/department for the environmental/green issues is they are not required to have one.

In addition, most solar energy developers have mobilized funding from bank's credit and their equity. The loan's collateral is a combination of several types of assets. These collaterals include other assets of the companies and assets formed from the loan of this project itself. Therefore, they are limited in terms of collateral required by the bank and the loan size is limited. In addition, the assets formed from the project are very specific. These assets are difficult to value. It increases credit risk to the banks. All of the above reasons make it difficult for businesses to raise large capital for renewable energy projects.

Financing sources for green projects mainly comes from credit capital of commercial banks. There are no alternative financial products in Vietnamese financial market that allow developers more flexibility in mobilizing capital for their activities.

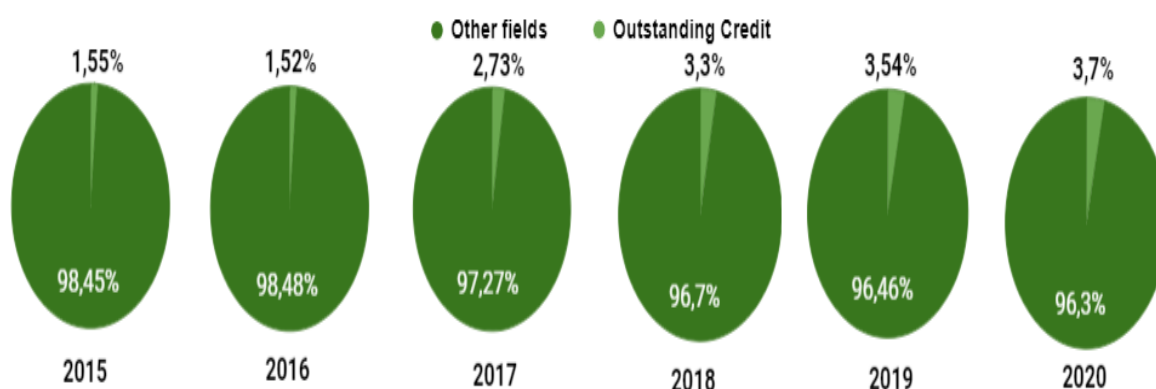


Figure 3. Green credit ratio/total credit balance of the whole economy in the period 2015-2020

Source: State Bank of Vietnam (2021)

4 Other specific issues

4.1 Trends in demand of green finance products

All the surveyed banks see the high potential in increasing demand for green finance products especially in renewable energy sector. The example of high development of solar energy sector has been cited by all interviewed banks. Vietnam's solar energy sector is clearly on the rise. With less than 10 MW of operational solar power capacity in June 2018, capacity jumped quickly to 4,460 MW in July 2019 and then to more than 6,314 MW by September 2020, and with many hundreds of MW of solar projects still under construction or development – Vietnam has effectively overtaken Thailand as the largest solar market in Southeast Asia. Moreover, in Vietnam, it is evident that to sustain an impressive growth rate, while enhancing climate resilience and addressing environmental degradation, is an urgent task. It is estimated that Vietnam needs at least USD35 billion by 2030 to address climate impacts and achieve its NDC target. As such, investments in clean technologies and sustainable infrastructure need to be enabled and scaled up rapidly. This leads to the high demand on financial sources to support the green project implementation.

4.2 Banks' strategy on green finance products

All interviewees are aware the fact that the performance and activities of Vietnamese banks may be impacted in the future as global banks adapt to the changing sustainable finance regulatory landscape by increasing their minimum ESG requirements for borrowers. Demand for green financial products may be impacted too. Any inability to meet investor requirements would materially impact the demand for these products and ultimately impact banks and their clients. VCB tries to securitize existing green loans with special focus on renewable energy sector, while VietinBank tries to capitalize on the changing landscape and tap into new pools of environmental-friendly investors by providing more financial services to the clients in terms of technical consultancy, finding new, reliable clients. BIDV has a strategy to become a leading bank in credit guarantee for environmental projects. Eximbank is quite cautious in approaching the ESG finance product due to some bank's internal issues emerged recently. The interviews also revealed that green bonds are among the most prominent instruments in sustainable finance portfolio for all of the banks. All interviewees concurred that green bond market is an opportunity that Vietnam could tap into to mobilize private resources for green infrastructure projects and to attract potential global investors to the domestic market. However there is need for strong policy landscape and support the development of green bonds in Vietnam¹.

¹ According to the National Strategy for Green Growth 2011-2020 and the vision to 2050, from 2012, Vietnam has had an orientation toward green finance and green financial products for the Vietnam stock market to create financial resources for green growth. In the road map for bond market development in 2017-2020, vision to 2030 (Decision No.1191/QĐ-TTg of the Prime Minister dated 14 August 2017), the mechanisms and policies for the distribution of the green bond market aim to enable issuers to raise capital through the issuance of bonds to carry out green projects. In recent years, corresponding ministries have implemented a large number of measures to support the green bond market, such as guiding enterprises to disclose information and provide transparency on green finance activities and encouraging businesses listing on the stock market to publish financial reports and annual reports referring to sustainable development and green development. Hanoi Stock Exchange (HNX) and Hochiminh City Stock Exchange (HOSE) have actively been working on measures to realize the investment attraction in the green bond market of Vietnam. At the same time, Vietnam is actively working with international organizations to issue green bonds. To date, official green bond issuance has not occurred in the Vietnam bond market due to the need for a revised legal framework and reporting guidelines to support the inadequate level of sustainable growth. The limited application of international standards remains, and there are insufficient independent organizations to assess sustainable development indicators for companies (such as credit rating agencies that have adequate expertise to provide creditworthiness in term of 'green business')

4.3 The challenges for developing new green finance products

The main constraints that are hindering banks expansion in terms of green finance products are as follow:

- Green projects frequently require new/advanced technology, resulting in a big total investment capital, extended repayment time, numerous potential risks, and high production costs, while the output market is selective due to the higher than normal price. Therefore, green projects are often unattractive to banks.
- Banks face challenges in assessing environmental and social impacts, as well as technological and technical aspects of projects, particularly renewable energy projects (wind, solar energy, etc.) because these fields are relatively new and have not been widely deployed in Vietnam.
- Currently, Vietnam lacks a consistent legal framework and policy to support the development of green credit (including standards for banks in managing environmental risks and a credit-monetary policy instrument to enhance bank financing). As a result of the difficulties in managing environmental risks, banks are not interested in green initiatives.
- Low awareness of project owners on the importance of environmental protection and the impact of social and environmental activities on their production and business activities remains the big challenges among others to green financing activities of the banks.
- Policy uncertainty is the big constraint to discourage businesses and trade in green finance products. The feed-in-tariff (FIT) for solar energy has been cited by all the surveyed banks as a case study. The introduction of FIT policy since 2017 generated significant interest in solar projects in Vietnam, especially in the southern regions of Vietnam which have the highest levels of irradiation. Solar energy developers have been allowed to mobilize funding from different sources. The first FIT (FIT phase 1) was launched in 2017. Solar power projects regardless of technologies can sell their electricity to state-owned Vietnam Electricity (EVN) and its subsidiaries at a FIT of US\$93.5/MWh for 20 years. However, the FIT phase 1 was only available to projects that achieve commercial operations (COD) by 30 June 2019. Grid-connected solar power projects that received investment policy decisions by 23 November 2019 and that achieve commercial operation date (COD) no later than 31 December 2020 were entitled to the FIT phase 2. The FITs applied is US\$83.8/MWh for new rooftop solar projects, US\$70.9/MWh for new ground-mounted solar projects, and US\$76.9/MWh for new floating solar projects over the next 20 years. The FIT phase 2 is not as generous as the former FIT phase 1, but it is still viewed as attractive by the investors. Due to the speed of solar market development in Vietnam and its varying policy drafts, turnarounds on draft decisions, and delayed announcements, it poses a significant risk for developers, investors and bankers. Examples include many changing drafts of the FIT phase 2 but only finalization in April 2020, leaving developers and traders in the dark for 10 months. The same situation is reported with after FIT phase 2 policy. As of January 2022, the next stage of the FIT program has yet to be decided. For projects that have been developed under the FIT phase 2 and could not reach COD by December 2020, or the mismatch from the FIT phase 2 tariff or other prospective mechanisms is especially reported. A notable limitation has been raised by the banks is the use of short FIT windows with high levels of uncertainty over the FIT regime for new projects in the post-expiration period of any particular FIT regime.

Box 1. Feed-in-tariff policy in Vietnam

The FIT (Feed in Tariff policy) in Vietnam was first introduced in June 2011 with Government Decision No.37/2011/QĐ-TTg from 29 June 2011 on the Mechanism supporting the development of wind power project in Vietnam. The Decision No.37 was only for wind power, not solar power. As per Decision, the electric purchaser has responsibility for buying whole electric output from wind power projects with the electric buying price at the point of electric receipt of 1.614 dong/kwh (not yet include VAT, equivalence 7,8 US cents/kwh). The electric

buying price is adjusted by changes of rate dong/USD. The government supports electric price for the electric buyer for whole electric output buy from wind power plants of 207 dong/kwh (equivalence 1 US cents/kwh) through the Vietnam Fund of Environment Protection.

Six years later, mechanisms for solar power were first officially enacted in 2017 by Prime Ministerial Decision No.11/2017/QD-TTg from 11 April 2017 on the On the Support mechanisms for the Development of Solar Power Projects in Vietnam. Solar power projects (SPP)—both utility scale and rooftop solar (RTS)—that started commercial operation (COD) prior to 30 June 2019 can sell their electricity to state-owned Vietnam Electricity (EVN) and its subsidiaries at a FIT of US\$93.5/MWh for 20 years. In 2019, the FIT price for RTS continued to be supplemented and amended with the same promotion of SPP (Prime Minister Decision No.02/2019/QD-TTg from 8 January 2019 on Amendments and Supplements to Certain Articles of Decision No. 11/2017/QD-TTg on the Mechanism for Encouragement of Development of Solar Power in Vietnam). In April 2020, the Prime Minister issued Decision No.13/2020/QD-TTg to usher in reduced FITs of US\$83.8/MWh for new RTS, US\$70.9/MWh for new ground-mounted solar PV, and US\$76.9/MWh for new floating solar projects. Projects that entered commercial operation by 31 December 2020 were eligible, with the FITs being applicable to electricity generated over the next 20 years. As of January 2022, the next stage of the FIT program has yet to be decided.

Table 3. The FIT for grid-connected solar energy in 2017-2020

FIT Phase	Year	RTS (US cents/ kWh)	SPP (US cents/kWh)		Tariff Duration (years)	Condition	Policy
			Floating	Ground			
1	2017	9.35*	9.35	9.35	20	Projects started commercial operation (COD) prior to 30 June 2019	PM Decision No.11/2017/QD-TTg from 11 April 2017
	2019	9.35**	9.35	9.35	20		PM Decision No.02/2019/QD-TTg from 8 January 2019
2	2020	8.38	7.69	7.09	20	Projects started COD from 1st July 2019 to the end of 31st December 2020	PM Decision No.13/2020/QD-TTg from 6 April 2020
		9.35**	9.35	9.35	20		

* RTS shall benefit net-metering mechanism by using two-way electricity meters. In a payment cycle, if the generated electricity is bigger than consumption, it must be transferred to subsequent payment cycle.

**RTS are allowed to separately apply electricity transaction mechanism based on input and output of the two-way electricity meter. Electricity seller shall pay for the amount of electricity received from the grid in accordance with current regulations. Electricity buyer shall pay for the electricity fed in to the grid from RTS at electricity purchase price specified in Decision No.11. RTS, of which generation date and meter reading are verified before 1 July 2019, will apply electricity price mechanism for

The Vietnamese government is planning to move from the FIT mechanism to a competitive bidding mechanism, including competitive bidding based on substations, floating solar power parks, and ground solar parks. Final decision is not yet available. The reason for changing FIT price is that the FIT mechanism in Vietnam is determined based on the global weighted

average levelized cost of electricity (LCOE) of a solar PV at the time of issuance and is guaranteed for 20 years thereafter.

Table 4. LCOE of solar energy in VN

Capacity ratio LF%	Investment ratio 1.000US\$/kW	Investment ratio 800US\$/kW
LCOE US cents/kWh		
17	7.99	6.51
18	7.54	6.15
19	7.15	5.82
20	6.79	5.53
21	6.47	5.27
22	6.17	5.03

Source: <https://nangluongvietnam.vn/bieu-gia-fit-2-co-hoi-thach-thuc-phat-trien-dien-mat-troi-viet-nam-24226.html>

In 2020, the LCOE of solar cell fell the most among RES in the world. In Vietnam, the world's third-largest market for solar cell, this weighted-average LCOE declined by 58% between 2016 and 2020. The costs of solar panel modules and their associated installation have been significantly reduced, along with the increase of capacity factors year on year.

4.4 No/little competitive financial market for green products

During the interviews with banks and firms/investors in solar power projects² it was found that the project financing scene for renewable energy in Vietnam to date has seen a high involvement of local Vietnamese banks. Even the solar energy developers have been allowed to mobilize funding from different sources, the financing landscape is still lacking large-scale involvement of the international project financing community, with some large projects, mostly in co-financing constructs with ADB, WB, AFD, taking the lead. Vietnamese banks including VCB, BIDV, VietinBank have received concessional loans from multi and bilateral organizations for direct lending (interests 7–9%, tenures 10–15 years). Vietnamese banks traditionally lend to state-owned or well-established business. Most cases are rather corporate financing than non-recourse project financing in which securities, other than the project itself, are pledged. Vietnamese commercial banks from one side are benefiting from this, but from the other side it creates non-competitive financial market for customers and players.

² During the course of survey, 3 solar panel importers and solar energy developers were also interviewed.

5 Recommendation

5.1 Policy recommendations

The proposed recommendations detailed below seek to address the enabling conditions described above in this report to promote green financing in Vietnam. It is expected that the SBV, MONRE will provide an important supporting role at the central level in establishing these enabling conditions for ESG finance to be promoted, implemented and developed over time. It is also recommended that commercial banks should be more proactive in approaching and designing ESG policy and finance. Proposed actions are presented below.

For the State Bank

1. Develop common ESG standards for commercial banks and group of commercial banks in Vietnam in alignment with international standards and conventions and propose a roadmap for implementation.
2. Incorporate concrete ESG criteria in the banking industry's policy, including Green Credit Development Scheme of the State Bank, decisions, directives, and regulations regarding investments, credit, and other financial services, as well as commercial banks' governance.
3. Develop the assessment and ranking tool on ESG based on the common international ESG standards. The assessment process should be transparent, with engagement and consultation with civil society organizations, academia, institutes, and other relevant stakeholders
4. Issue regulations requiring commercial banks to make public disclosure on ESG commitments and implementation.
5. Develop legal mechanisms and framework on green credit, green financing, green bond, to encourage the commercial banks to issue green bonds and foreign banks to participate in the green bond investment, such as incentives on required reserve ratio and credit limit.

For MONRE and agencies responsible for environmental protection

1. MONRE to study and issue specific guidelines and sets of standards for green projects.
2. Environmental agencies to assist and support green projects in documentation and work with banks in credit appraisal and environmental assessment and to expand the catalogue of the green project and prioritize support for green projects through close coordination with the Credit Guarantee Fund of Small and Medium Enterprises, the Environmental Protection Fund.

For commercial banks

1. Disclose and update ESG-related policies and information concerning the banks' internal operations and the companies receiving investment or credit that have not been published yet in a comprehensive, concrete, accessible and verifiable manner.
2. Prioritize one or several ESG products based on their strategies. However, this does not imply that commercial banks should ignore other ESG products or aspects. Appropriate prioritization and a time-bound framework help the banks incorporate and develop ESG criteria in a more feasible way in alignment with their overall development strategy.
3. Strong communication with all stakeholders including borrowers, shareholders, depositors, customers on the bank's sustainable development strategy, policies and measures to promote ESG for awareness raising and facilitating the implementation of banks' ESG commitments.

4. Enhance bank's leadership capacity, improve training activities to bank staffs and credit officers on the role of implementing ESG commitments and technical appraisal of green investment projects.
5. Set up a risk management framework for bank's green credit and green financial products which should be different with the standardized ones.
6. Actively work with foreign banks for learning purposes to familiarize themselves with a less-experienced concept such as ESG finance and products.
7. Participate in international projects funded by international organization on green finance to enjoy preferential terms interest rates, and increase the bank's reputation for green financing.

5.2 Further research directions and the way forward

This study has attempted to capture the concept of ESG finance products and assess the key products being demanded in pursuit of sustainable development in Vietnam, as well as the challenges Vietnamese commercial banks face in trading these products. Due to limited prior research and quantitative evidence, it is premature to judge from this initial attempt and draw concrete implications for ESG finance policy for Vietnam.

As this study offers only preliminary thoughts, it is suggested that further studies on ESG finance theme be conducted in Vietnam to secure these trends as advantages of Vietnamese banking sector. Possible research topics of interest are:

- Linkages in terms of banking and climate policies (both mitigation and adaptation) under the ESG framework
- International lessons and best practices on ESG financing with strong focus on Japanese experiences
- Potential ESG finance products and priority areas for ESG financing in Vietnam
- "Learning" is quite meaningful for Vietnam policymakers, banking/financial institutions and the private sector to familiarize themselves with a less-experienced concept such as ESG finance. Joint research study or working with Japanese banks/counterparts are useful and effective ways to learn.

6 Appendix

6.1 Questionnaire for conducting semi-structured bank-level interviews: ESG green finance products

Please note that since the intended time for interview is 60-75 mins per bank, the below-mentioned questions (broad and open-ended) have prepared accordingly

1. What are green finance/ESG products your bank offers?

	Types of ESG finance	Concept of products	Reference/ Good Example
1	Project finance	The finance in which a loan is provided to a specific business (project), the cash flow generated from the loan is used as a source of repayment, and the collateral for credit protection is limited to the assets of the target project	
2	Donation type private placement bonds/loans	School education support, child welfare support, employment support, medical / health and health support, environmental conservation, etc. Underwriting / financing of private placement bonds to donate / donate goods to organizations such as schools, facilities, and local governments working on regional revitalization <ul style="list-style-type: none"> ▪ SDGs Donation Type Private Placement Bonds ▪ Donation type loan ▪ Environmental loans for individuals 	
3	Environmentally rated private placement bonds	Underwrite private placement bonds that give preferential interest rates to companies that are actively engaged in environmental protection, based on their own environmental rating (scoring based on CO2 emission reduction, performance of environmentally friendly products and services, recycling, compliance, etc.) <ul style="list-style-type: none"> ▪ Environmentally rated private placement bonds ▪ ESG / SDGs Valuation Loans / Private Placement Bonds 	
4	Interest preferential loans	Preferential interest rates for creative businesses that are expected to grow, businesses that lead to solutions to social issues that can contribute to the creation of a sustainable society (small and medium-sized enterprises / individuals), and corporations /individuals working on ESG / SDGs. Loan. <ul style="list-style-type: none"> ▪ Loan system for introducing energy-saving and renewable energy equipment 	
5	ESG investment trust	Handling of investment trust products that invest in the stocks of companies that are expected to increase their corporate value through efforts to address ESG issues. Donate trust fees and sales commissions received by the bank to organizations working to solve social issues.	
6	Green bond	Issuance and underwriting of bonds with limited use of funds for projects that are expected to contribute to the global environment, such as renewable energy and energy conservation projects.	

Types of ESG finance	Concept of products	Reference/ Good Example
7 Donation type deposit	A deposit in which the bank donates a part of the deposit principal or a part of the interest received by the depositor to an organization working on child-rearing support, environmental conservation, disaster recovery, sports promotion, etc. ▪ Eco time deposit	
8 Positive Impact Finance	Lending to business companies that does not specify the use of funds in line with the “Positive Impact Financial Principles” of the United Nations Environment Program Finance Initiative.	
9 Others		

2. What kind of changes/trends do you observe or foresee in demand of green finance products recently?
3. How do you anticipate bank and financial institutions will adjust their green products portfolio?
4. Do you see any opportunity for the bank to invest in green finance products?
5. Will you have any strategy/plan for development of new green finance products at your bank? What are the new products you would like to have?
6. What are the incentives for your bank to have new green finance products?
7. What factors discourage you from developing new green finance products?
8. What are the main constraints that are hindering your business expansion in terms of green finance products?
9. How could the process of having green finance products be made smoother?
10. Any success stories in your bank or from other banks in developing green finance products which can be replicated in your bank?

6.2. List of Bank Interviewed

No.	Bank	Person interviewed	Time
1	BIDV	Mr. Vuong T.L Head of Foreign Direct Investment Banking Department - BIDV	28/12/2021
2	VietinBank	Ms. Nguyen T.D Deputy Director of Dept. of Financial Solutions	19/1/2022
3	VCB	Mr. Ho V.T Director of Vietcombank – Operations Center Branch	21/1/2022
4	Eximbank	Mr. Vu P. Vice Director	24/2/2022