

# Green Financial Sector Reform in Vietnam

## Green Bonds, Green Index and Green Credit Programmes

### The challenge

Viet Nam is one of the fastest growing economies in South East Asia with an average GDP growth rate of 7.5% (2001-2005), then down to 6.3% (2006-2010) and 5.9% (2011-2015), showing an expansive and not sustainable development model. Moreover, the growth in Vietnam has been based on a carbon intensive path which put a lot of pressure on the environment. In an effort to foster sustainable development and green growth, the Vietnamese Government has issued important strategies and policies, including the Social-Economic Strategy (SEDS 2011-2020 and 5Year-SED), the Vietnam Climate Change Strategy (VCCS, 2011), the Vietnam Green Growth Strategy (VGGS, 2012), the Sustainable Development Strategy (SDS, 2013) and the Master Plan for Economic Restructuring (MPER, 2013-2020). In these strategies the average GDP growth rate target of Vietnam is set to be from 6.5% to 7% in the period 2016-2020.

Green finance demand of Vietnam to 2020	Total capital cost (mil. USD)	Total annual CO <sub>2</sub> emission saved (Mt. CO <sub>2</sub> )	Average MAC (USD/ton CO <sub>2</sub> )
Building	3.33	0.17	-69.46
Construction materials	17.54	0.49	-14.39
Cement	725.00	2.61	-45.27
Textile	0.00	0.08	-60.28
Household	2,279.19	16.54	-32.32
Pulp and paper	0.00	0.19	-93.46
Electricity Generation	27,625.00	61.37	16.11
Iron and steel	79.50	0.22	-44.60
Road transportation	0.00	3.45	0.00
<b>Total</b>	<b>30,729.56</b>	<b>85.12</b>	Source: MPI

In order to finance the Green Growth Strategy, Vietnam needs at least 30.7 billion USD by 2020, i.e. 15% of Vietnam's GDP of 2015 and 21.2 billion USD for the period between 2021 and 2030 to finance Vietnam's INDC. This is very challenging to Vietnamese economy and the financial system due to a very high budget deficit of 5.5% of GDP (2010) and 6.1% of GDP (2015) as well as a very high public debt of 57.1% of GDP (2010) and 62.2% of GDP (2015).

Climate finance demand of Vietnam 2021-2030	Domestic funds to reduce 8% GHG emission	International funds to reduce 17% GHG emission	Total climate finance needed to reduce 25% GHG emission
Green energy	1.9 bil. USD to reduce 29.5 Mt. CO <sub>2</sub>	5.3 bil. USD to reduce 36.5 Mt. CO <sub>2</sub>	7.2 bil. USD to reduce 66 Mt. CO <sub>2</sub>

Green agriculture	0.9 bil. USD to reduce 6.4 Mt. CO <sub>2</sub>	12.1 bil. USD to reduce 39.8 Mt. CO <sub>2</sub>	13 bil. USD to reduce 46.2 Mt. CO <sub>2</sub>
All sectors	3.2 bil. USD to reduce 62.7 Mt. CO <sub>2</sub>	17.9 bil. USD to reduce 135.2 Mt. CO <sub>2</sub>	21.2 bil. USD to reduce 197.9 Mt. CO <sub>2</sub>
Source: INDC of Vietnam			

One of the main goals of the Macro Economic Reform/Green Growth Programme, in particular of the Green Financial Sector Reform Component, is to set up a green financial policy framework and create green financial instruments and products to mobilize funding for sustainable development in Vietnam via the financial market.

### Our approach

The project builds up on over 20 years of fruitful and effective cooperation of GIZ with the State Bank of Vietnam (SBV) and the State Securities Commission (SSC) under the Ministry of Finance of Vietnam (MoF). The current Macroeconomic Reform Programme/ Green Growth follows a top-down approach with three pillars to support the Green Financial Sector Reform as below:

- Setting up an integrated green financial policy framework, including credit, refinancing, fiscal and financing policies for the green private, banking and finance sector, as well as the capital market to channel the capital flow into the green economy and climate change programmes.
- Introducing of new financial instruments and products, i.e. green bonds, green index, green certificates, green funds, green investment funds and green credit products, which will offer a product package for Financial Institutions (FIs) and the financial market to raise funding for green projects and to attract more active participants from the private sector.
- Using integrated green financial policy framework and green financial instruments and products for programming of national green credit programmes, green bonds concepts, green index concepts will assist Vietnam in reaching the goals of VCCS and VGGS comprehensively and nationwide and in restructuring Vietnamese economy towards a sustainable development. All programmes will begin with a pilot phase as a basis for scaling up system wide. Establishing green funds such as a green credit finance fund under SBV will meet the huge green finance demand of such programmes.

<b>Project name</b>	Macroeconomic Reforms/ Green Growth Programme; Component Green Financial Sector Reform
<b>Commissioned by</b>	Federal Ministry for Economic Cooperation and Development (BMZ)
<b>Project region</b>	Viet Nam
<b>Executing agency</b>	Central Bank of Vietnam (State Bank - SBV) and State Securities Commission (SSC) under Ministry of Finance of Vietnam
<b>Duration</b>	2015 – 2018

## The benefits

The top-down approach and green credit programmes mentioned above will support channelling funding into the green economy and create sufficient financial resources to restructure Vietnamese economy following a sustainable economic development model. Under the current circumstance of high state budget deficit and public debt, financial resource mobilization is mostly from the private sector as well as the finance and banking sector, which have an asset volume equivalent to 250% of GDP; and from the significantly increasing capital market with a market capitalization of 34.5% of GDP (2015).

The green financial policy framework and green financial-credit programmes will support Vietnam to implement effectively the green growth strategy, respond to climate change, and especially fulfill the INDC's commitments of Vietnam respective with Paris Agreement.

If Vietnam fully meets the green financial needs of approximately 30.7 billion USD, 85.12 Mt. CO<sub>2</sub> can be reduced in 2020. With 21.2 billion USD to finance all green sectors during 20121-2030 according to the INDC's commitments of Vietnam, 197.9 Mt. CO<sub>2</sub>, i.e. 25% of total CO<sub>2</sub> emission of Vietnam can be reduced.

## Success factors

Vietnam has necessary strategies and established national steering committees for restructuring the economy into a green one and respond to climate change. However, it is required to develop a green financial policy framework, instruments and products so that the funding flow is appropriately and sufficiently channeled. In order to make the Programme successful, learning the experiences from other emerging markets such as South Korea, Brazil, South Africa, Bangladesh, China, Indonesia, etc. especially from their MoF, State Banks and Stock Exchanges was and still is essential. Another important factor is the cooperation with international Financial Institutions (FI) such as World Bank, IFC, ADB, GCF, KfW and international green financial funds. Furthermore, it is important to mobilize domestic green finance resources. Therefore, Vietnam needs to transform banks into green ones and the two stock exchanges into sustainable ones.

One important factor determining the programme's success is the implementation of the training programme following the ToT (train-the-trainer) model to raise awareness and the capacity of policy making and implementation, development and management of green credit projects/programmes.

## Green Financial Policy Framework

Vietnam is facing two major problems of green finance. First of all, the existing very small Environmental Protection Fund using state budget with a chartered capital of 1000 billion VND (ap-proximately 50 million USD) cannot meet the green finance de-mand of VCCS and VGGs, not even the price subsidy for wind energy. Secondly, the state budget spent on environment, green growth and climate change is too scattered and not always in line with international green and environmental standards.

Green financial policy framework is developed based on the combination of fiscal policy and refinancing, credit and financial policies in the capital market. These policies are integrated into the action plans of the entire finance and banking sector. They also serve as the foundation to formulate national green credit programmes and large scale green bond projects.

Most importantly, Vietnam needs to establish large national green funds such as a bigger Environmental Protection Fund under the Ministry of Natural Resources and Environment (MoNRE), a Green Climate Finance Fund under the Ministry of Planning and Investment (MPI) and Green Credit Finance Fund under SBV.

**Box 1: Main Elements of green financial policy framework and GG Action Plan for the banking sector in Viet Nam supported by the programme:**

Eco tax-Law (2010), Green Tax Incentives, Green Fees and Green Procurement (ongoing); GGS Action Plan for financial system by MoF (2015);

Green Investment Guidelines (Draft);

Refinancing Policy (Refinancing Facility of SBV on discussion), Refinancing and Relending Policy through ODA (regulated), Credit Interest Rate Policy (subsidy of 1-3% lower than market rates); social and environmental risk-management for credits (3th draft);

Directive No. 03 of the SBV's Governor to promote green credit (March 2015) and GGS Action Plan for banking sector issued by SBV (August 2015);

Green Credit Pilot Programme (submitted for approval), Integrated Green Credit Programme for SMEs (former JICA SMEs Revolving Credit Programme) using Green Project Catalogue (ongoing) and Green Credit Financial Funds (Draft);

Fees Policy for Green Securities Stock Exchanges (in review), Green Listing (regulated in Directive No. 155, 2015), Green Index Concept (2nd Draft by HoSE and 1st Draft of HNX in 2015), Green Bond Concept (1st Draft of HNX June 2016 and Pilot Green Bonds Issuing Concept will be added in September 2016).

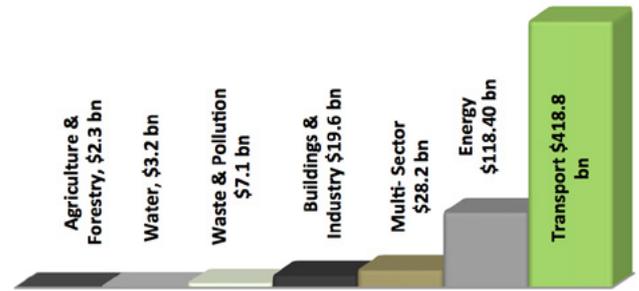


Figure 1. International climate bond universe (Source: HSBC)

Viet Nam's bond market (primarily government bond market) has had the highest growth rate in the world in the last five years, reaching an outstanding volume of 18% of GDP and become the second biggest capital funding source for the economy following banking credits. This funding source has great development potential, especially municipal bonds and corporate bonds.

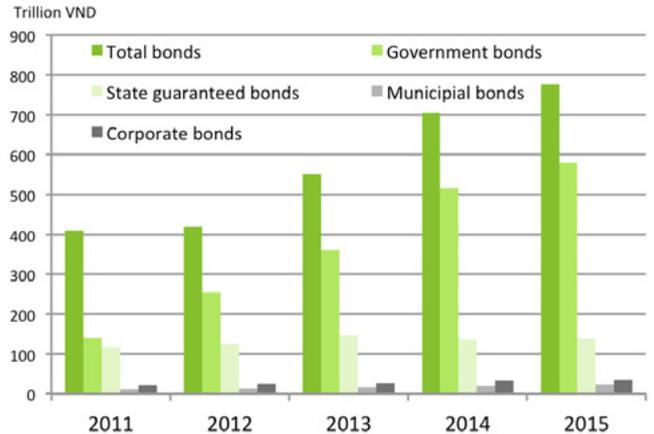
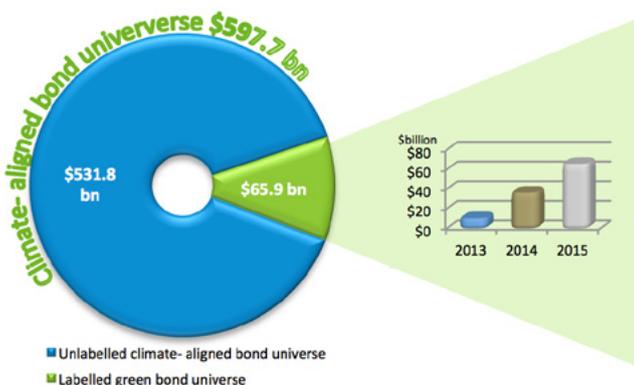


Figure 2. Bond Market Development in Vietnam (Source: HNX)

**Green Bonds**

During the last five years, the international bond market has had a growth rate of 30-40% and is considered an important financial instrument to mobilize capital for green development and climate change.



Creating a green bond market is the main content of the Green Bond Concept. The Concept was based on the best international practices from Sweden (SEB Bank), Brazil (BRF Corporation and Sao-Paulo Stock Exchange), South Africa (the Johannesburg City and Johannesburg Stock Exchange), China (the biggest 4 state banks, the Central Bank issuing green bond project catalogue) and green bond standards of International Capital Market Association (ICMA). The Concept aims to issue government green bonds, municipal green bonds and corporate green bonds as well as green bonds of development organizations guaranteed by government such as Vietnam Development Bank, Vietnam Bank for Social Policies which will be issued at Hanoi Stock Exchange (HNX). Corporate green bonds of large companies will be issued at Ho Chi Minh Stock Exchange (HOSE). This concept will be submitted to the MoF and SSC of Vietnam for approval and then used as a policy framework for green bond issuance in Vietnam.

One important component of the concept is the pilot issuance of green bond of Hanoi City in the 4th quarter of 2016 to finance green projects. Issuing conditions for this green bond will be the same as conventional bonds, but their green projects will be certified following MoNRE's standards. The current integrated green credit

programme of SBV will compensate for the finance need if the green bonds cannot cover the project's financing.

SBV will issue the green project catalogue in 4th Quarter 2016 and apply it for green credit projects. SSC plans to use this catalogue for green bond issuance starting 2017. This catalogue will be upgraded and certified by a second opinion provider to meet the international standards from 2018.

### Box 2: Activities for introduction of Green Bonds supported by the programme

Green bonds conference with multiple cities and provinces in Dalat (November 2015) and Study on green bond financial policy framework in Brazil, South Africa and China (2015 and 2016);

Draft of Green Bond Concept (June 2016) and addition of the Green Bond Pilot Issuance Component (September 2016);

Green Project Catalogue (Draft- 3th Quarter 2016) will be used for the Green Credit Project (4th Quarter 2016) and for Green Bond Projects starting 2017.

## Green Index

Viet Nam has a relatively well-developed stock market with 700 stocks listed on 2 stock exchanges and the market capitalization volume of 65 billion USD (HoSE takes up 85%), equivalent to 34.5% of GDP (as of August 2016).

The VN-Index is the most important index of the market. HNX and HoSE both joined Forum of Sustainable Stock Exchanges (SSE) in 2014 and will proceed to merge into the Vietnam Stock Exchange in the near future. The two Stock Exchanges have signed an agreement to develop a set of standard indices, including the sustainable index. Currently HNX and HoSE have completed the design of the green stock index concepts and HNX has another concept for green bond index in the future.

Circular 155/2015/TT-BCT required the information disclosure on sustainable development in annual reports starting in 2017. However, the number of annual reports containing information of sustainable development and environment has significantly increased from 116 in 2015 to 420 in 2016 on a total of 700 listed companies. Among them only 7 have separate sustainability reports. This circular is the legal basis and the reports are important data sources to build green index as a monitoring indicator of the green economy.

	Thailand	Jakarta	Philippines	Vietnam
	SET Index	JCI Index	PCOMP Index	VN- Index
P/E	16.8	26.8	19.9	11.3
P/B	1.7	2.3	2.5	1.7
ROE (%)	7.9	9.2	12.8	15.5
ROA (%)	1.9	2.3	2.9	2.7

Market cap USDm	340,034	351,814	172,743	51,063
Foreign in-flow USDm	(3,905)	(1,892)	(1,600)	(104)
Inflation YoY	-0.97%	4.90%	1.10%	0.60%
5 yr Govt bond yield	2.15%	8.80%	4.10%	6.50%

Source: Bloomberg

Green and sustainable index of HOSE is expected to be announced on January 1st, 2017 with a pilot period until July 1st, 2017. Afterwards this index will become official. This index includes 30 stocks selected from TOP5 of every important sector. It will be calculated in a rhythm of every 15 second for investors and 1 minute for information disclosure. Annually on July 1st, this index will be reviewed and considered for expansion. The indexing methodology is based on the market capitalization and on the ratio of free tradable stocks. The green index belongs to VNall-share index basket. HNX and HOSE use the experience of Sao Paulo and Johannesburg Stock Exchanges for their own green indices.

### Box 3: Activities for establishment of Green Index supported by the programme

SSE joining of HNX and HoSE in 2014;

Circular 155/2015 regulates the green listing and ESG information disclosure in annual report;

In 2016 there are 420/700 listed companies having an annual reports containing ESG information and participating in the Award of Best Sustainable Annual Report;

Internship at Index German Concerto Financial Company in 2015 and Austrian RFU in 2016;

Draft of Green Share Index Concepts (HNX 2015 and HoSE 2016) and Draft of Green Bond Index (HNX 2015);

1/1/2017 Pilot Launching and 1/7/2017 Official Launching of Green-Sustainable Index at HoSE.

## Green Credit Programmes

Vietnamese economy is a credit economy. Banking credit accounts for 70% of total external corporate financing. Total credit loans outstanding accounted for 94.7% of GDP in 2015. Central Bank of Vietnam (SBV) implements the monetary policy and is also responsible for refinancing state credit programmes, such as credit programmes for Mekong Delta, social housing programmes, offshore ship construction programmes, etc. and coordinating commercial banks participating in the programmes.

Based on Directive no.3 of the Governor on promoting green credit growth, SBV drafted a pilot green credit programme for SMEs with the total amount of 2,000 billion VND (approximately 100 million USD). 3 biggest state commercial banks of Vietnam (Vietcombank, BIDV and VBARD) as well as one private commercial

bank (Sacombank), which is the only bank having green credit policy and green credit project management guidelines, participate in the pilot programme. There are 26 projects in the programme on renewable energy, waste management and organic agriculture. The interests rates which are applied to SMEs will be 1-3% lower than the market interest rates. Banks participating in the programme will be refinanced from SBV at interest rates 1% lower than usual.

**Box 4: Activities towards Green Credit Programmes supported by the programme**

2 training courses on green banking and green finance at Goethe Business School in Frankfurt, Germany (2015);

GGG Action Plan for banking sector (August, 2015);

Green Credit Financial Funds (1st Draft October 2015);

Concept for National Green Credit Programmes (1st Draft March 2016, 2nd Draft August 2016);

Green Project Catalogue (June-September 2016);

Concept Note GCF-Green Credit Programme (July 2016).

Another green credit programme aims to integrate green standards from the green project catalogue of SBV into the on-going project (former JICA revolving fund programme for SMEs). The total credit volume of the programme is about 5,000 billion USD (or 250 million USD).

SBV also promotes another green credit programme, calling for a loan and grant of 50 million USD from Green Climate Fund (GCF) through a Multilateral Implementing Entity (MIE) namely KfW. The purpose of this programme is to implement a green credit programme with a total credit volume of 339 million USD over a time period of 30 years (until 2047). Besides the component of revolving loan of 40 million USD, this programme foresees a component of 10 million USD grant to reduce a maximum 3% of the credit interest rates of green projects, therefore increasing the

programme credit volume by 75 million USD and providing technical assistance for SBV in transforming Vietnamese banks into green banks and in green projects and ESG risk management. If funded by GCF, this programme will help to treat 3,000 tons of waste per day; generate a capacity of 500MW of renewable energy and 500 billion Kcal. of biomass energy.

SBV is also drafting the concept for large-scale green credit programmes, taking into consideration green energy and industry, bio-agriculture and forestation. According to experts' calculation, these programmes have a credit need of up to 348,000 billion VND (equivalent to 16 billion USD), among which the credit amount for green energy and industry takes up about 15 billion USD. At that scale green credit programmes will account for approximately 8-10% of total loan outstanding of Vietnam.

In order to refinance for large-scale green credit programmes as well as other state credit programmes, SBV is doing research and drafting the concept to establish a Green Credit Finance Fund with the purpose to separate the functions of implementing the monetary policy and refinancing state credit programmes. The Fund will be chartered from state budget and use various financial instruments and resources from SBV's refinancing, ODA funding, preferential loans from international FIs including GCF and green bond issuance.

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