Original Article

Green Bond Market in Vietnam: Current Situation and Development Solutions

Mai Thi Dung Ph.D., Nguyen Dang Phuong Minh
University of Labour and Social Affairs.

Abstract: Green growth is currently a development trend covering the world economy. As a country greatly affected by climate change and environmental pollution, green bonds are an indispensable tool in Vietnam’s green growth goals. Research results show that although there has been a change in the Vietnamese government’s perception of green bonds, and there is a basic legal framework for green bonds, to date, there have been very few green bond issuances in Vietnam. The scale of each issuance is very small. Based on the causes of the above situation, the article proposes some solutions to develop the green bond market in Vietnam.

Keywords: Green bonds, Green bond market, Solutions, Vietnam.

I. RAISING THE ISSUES

Vietnam is the sixth most impacted country by climate change (CBI- SSC-IFC & SECO, 2021). The increased frequency and cost of unfavorable climate change affects Climate change has caused and will continue to cause significant economic damage in Vietnam. Climate change will cause 10 billion USD in damage in Vietnam by 2020, equivalent to 3.2% of GDP. Meanwhile, the economy is expanding swiftly, with GDP rising at an annual pace of 8.02% in 2022 (GSO, 2023). Without effective adaptation and mitigation measures, climate change is expected to cost Vietnam 12% to 14.5% of GDP per year by 2050, and up to one million people may slip into severe poverty by 2030 WB, (2022).

Financial resources are required to meet Vietnam’s aim of lowering greenhouse gas emissions. According to the World Bank (2022), the overall financial demand by 2040 is 368 billion USD (equivalent to annual spending on climate change adaptation of 4.7% of GDP and annual spending on decarbonization of 2.1% of GDP). This demand is divided by sector: 184 billion USD for the private sector (equal to 3.4% of GDP per year), 130 billion USD for the public sector (corresponding to 2.4% of GDP per year), and capital from foreign sources. Externally, it is 54 billion USD (equivalent to 1% of GDP each year).

In this context, the green finance market in general, and the green bond market in particular, are a way of mobilizing private sector money for projects with social and environmental advantages to promote sustainable development goals (Quynh., N. N., 2023). This vehicle allows Vietnam to leverage private capital on a wide scale, boosting the economic sector’s move toward greening, sustainable development, and improved climate change adaptation (CBI - SSC-IFC & SECO, 2021). In Vietnam, a green bond market is progressively emerging and developing. Green bonds are a type of finance used to invest in initiatives including clean energy, renewable energy, low carbon emissions, and efficiency—high efficiency, reducing harmful environmental impacts.

Green bonds are gaining popularity among governments, companies, and investors as the movement toward greater social responsibility in investment projects continues. Many measures to support the green bond market have been simultaneously deployed by ministries and branches in recent times, such as guiding businesses to make announcements of information and transparency of green finance activities, encouraging businesses listed on the stock market to make financial reports and annual reports mentioning sustainable development and green development. The Hanoi Stock Exchange (HNX) and the Ho Chi Minh City Stock Exchange (HOSE) have been working hard to establish strategies to attract investment money into Vietnam’s green bond market. At the same time, Vietnam actively collaborated with a number of countries. Simultaneously, Vietnam actively collaborated with a number of foreign organizations to pilot green bond issuance. (Institute of Strategy and Financial Policy, 2018)

However, the issuance of green bonds in Vietnam continues to face numerous challenges, including a lack of credit rating organizations and independent assessment organizations established to verify the quality of projects related to green bond issuance based on actual issuance scale and investor confidence. As a result, the article investigates the idea of green...
bonds, their features, and the present state of the green bond market in Vietnam. On that premise, the essay suggests various ideas for developing Vietnam’s green bond market.

II. THEORETICAL BASIS

A) Definition

a. Green Bond

There are now numerous distinct perspectives on the idea and categorization of green bonds. In 2007-2008, the phrase “green bond” first appeared: “green bonds are financial instruments that finance green projects and provide investors with regular or fixed income payments”. Green initiatives are defined as programs and activities that enhance environmental sustainability (WB, 2018).

Green bonds are a type of green financial instrument, a debt instrument used to fund climate or environmental projects. Green projects, in general, involve a wide range of topics, such as employing renewable energy, enhancing energy efficiency, replacing greener materials, improving production methods, and promoting eco-friendly goods, encouraging the adoption of clean technologies, optimizing waste management, and incorporating environmental management into company plans (Eyraud, L. et al., 2011). The quantity and quality of green projects will expand dramatically in the future years, necessitating the development of a commensurate green capital market. Increased access to possibilities from green bonds, green loans, and local and international carbon markets is critical for directing financial flows to decrease emissions.

Defining criteria for classifying and recognizing green bonds must be established to prevent exploiting the ambiguity between different levels of “greening” when employing investment capital, resulting in financial losses and a loss of investor trust. As a result, green bonds differ from conventional bonds in two ways: (i) capital obtained from bond issuance is exclusively allocated to projects with environmental benefits, and (ii) transparency and clear publicity regarding the management of capital obtained from bond issuance (OECD, 2017).

Green bonds, like conventional bonds, are fixed-income instruments. However, the cash generated by green bond issues is used to fund environmental initiatives (IFC, 2016; ADB, 2019), financing or refinancing “green” projects, assets, or enterprises (International Capital Markets Association, 2015).

In Vietnam, according to Huong., N. T., Giang., N.T., (2023), green bonds are bonds whose revenues will be utilized for initiatives and activities that assist, mitigate and adapt to climate change or other environmental sustainability goals in Vietnam.

b. Green Bond Market

The green bond market is one of the infrastructures that supports green investment and guides the development of green financial products. According to CBI (2022), the green bond market is where green bond issuance, trading, and buying and selling activities occur.

Tam., L. V. T., Trang., L. T. H. (2022) define the green bond market as a place where green debt notes (also known as green bonds) are issued as a sort of fixed-income asset to generate revenue. Obtain funding for green initiatives. The proceeds from the issue of green bonds will be invested in projects to safeguard and decrease environmental consequences.

This is when organizations issue green bonds to raise finance for “green” activities and projects, assisting in resolving climatic and environmental challenges in green growth plans. Green bond markets are now divided into four categories: government green bond markets, government-guaranteed green bond markets, local government green bond markets, and business green bond markets. The four categories of green bond markets mentioned above correspond to three sorts of entities that participate in the green bond market: government, local governments, and companies. The government, local governments, and Vietnamese firms pushing the development of the green bond market will assist in mobilizing maximum financing to support the execution of green and sustainable growth initiatives. This development is in line with the current global trend of focusing on sustainable development and greening the economy. Green projects and green bonds have created new capital mobilization channels for long-term investment projects in infrastructure and renewable energy in our nation to satisfy capital demands for development (Quynh., V. T. N., 2021).

B) Features of the Green Bond Market

Green bonds are fixed-income instruments used to raise cash from investors through the capital market, and the issuer mobilizes a defined amount of funds over time, similar to regular bonds. Investors agree to a defined term, principal payment at maturity, and monthly interest payments during the mobilization period. Green bonds are structured similarly to conventional bonds, with comparable advantages and risk characteristics; they must adhere to the same issuance processes (CBI- SSC-IFC&
Furthermore, green bonds vary from traditional bonds in the following key ways:

- Green bonds can be issued by public institutions such as the government, local governments, or the private sector such as banks and enterprises to raise funding for environmental projects. J. J. Kirton, (2016). Vietnam governs green bond issuers, which include the government, local governments, and companies (National Assembly, 2020). Furthermore, the green bond market includes a variety of issuers and intermediary service providers, such as credit rating organizations and independent rating organizations, to classify and control the project’s “greenness” (Chi., V. M., Gam., N. H., 2022).
- Concerning the issue objective, cash acquired through bond issuance is utilized for various climatic and environmental initiatives, promoting green investments that decrease environmental impacts such as decreasing climate change or increasing energy efficiency (Falsen & Johansson, 2015). Capital raised through the issuance of green bonds is used to fund or refinance “green” projects, assets, or commercial operations that help the environment. Issuance purpose is determined as the basic criterion for classifying Green Bonds and conventional bonds (CBI- SSC-IFC& SECO, 2021).
- Concerning the terms of issuing green bonds, because the objective of using capital is to mobilize funds for green, low-profit projects, some of which may be hazardous, green bonds are issued. There are usually a variety of particular terms regarding the debt repayment procedure, recourse or exemption from recourse to the issuing entity. Green bond issuers must offer information to investors on environmental impact assessments, environmental permits for investment projects, and the use of funds raised through green bond issuance (National Assembly, 2020).
- Concerning inspection and supervision of issuance, it is necessary to have a reputable third party, such as The Climate Bond Standard Board, conduct monitoring and management to ensure transparency and accuracy in order to manage the money collected from green bonds for the right purpose (for projects that create environmental benefits). In general, the government always actively supports bond issuance.
- Concerning the advantages of green bonds for investors, according to Zerbib (2019), green bonds provide similar financial returns (or 2 points lower than conventional bonds). Furthermore, private sector investors profit from environmental and/or social advantages.
- Benefits of green bonds for issuers: a source of sustainable finance, improved investor diversification, seizing new business opportunities by doing new business according to the needs of sustainable development, growing and attracting long-term capital. Gianfrate et al. (2019) said that green bonds can not only help issuers achieve better financial results (mobilize capital at low cost for green projects)
- Benefits of green bonds for the economy: Green bonds are a solution that allows diversifying the investor base, creating competitive capital channels, supporting the socially responsible investment movement and efforts to combat climate change, and improving the efficiency of natural resource management and environmental protection. At the same time, it is also a lever to implement renewable energy projects such as wind power and solar energy or invest in waste treatment systems, minimizing environmental negative impacts (J. Banga, 2019). For a country affected by climate change and aiming for sustainable development like Vietnam, green bonds play an important role in mobilizing capital to finance infrastructure, bringing stable policies and exploiting new investor segments (Huong., N. T., Giang., N.T., 2023)

III. RESEARCH METHODOLOGY

A) Data Collection Method:

The authors used the document research method to systematize the theoretical basis of green financiers and green bonds; Green bond market characteristics (according to market participants, purposes, issuance conditions, benefits of green bonds and accompanying inspection and supervision requirements).

This article examines bond theories and research on green bonds and provides an overview of other relevant studies on sustainable development and green growth. The author team chose literature from databases such as Scopus, the World Bank’s online library, specialist publications, and a research sample of 30 papers from 2016 to 2023. The key observations are broken down by subject and examined using synthesis and storytelling methodologies.

The research team focused on reviewing the following contents to study the current status of the green bond market in Vietnam: (i) reviewing current legal documents on the green bond market, (ii) the current status of the bond market size in general, proportion of green bond size compared to bond market size, achieved results, remaining limitations and causes. Data sources for assessing the present situation include books, local and international scientific publications, and aggregated data from the Ministry of Finance; a report from the General Statistics Office; the Statistical Yearbook; and current law instruments on green finance. The authors synthesized and chose material relevant to the research subject from the acquired data and utilized a mix of descriptive statistical approaches to elucidate the existing situation. In addition, the complete analysis
approach is utilized to examine, compare, and contrast legal restrictions, outcomes, and limits of the Vietnamese green bond market.

B) Data Processing Method:

Data is accumulated, computed, and shown in tables. The study team assessed and analyzed the data using comparative and analytical methodologies. The bond market and information on capital required to tackle problems connected to climate change and pollution are utilized for comparison. Following that, the study team provided options for developing Vietnam’s green bond market.

IV. VIETNAM’S GREEN BOND MARKET ACTIVITIES

A) Vietnam’s Legal Regulation for the Green Bond Market

The Vietnamese government has aimed towards sustainable finance and built a legal framework for green bonds since 2012, improving it every year (Nhung., N. T., Anh., H., 2022). Developing green bonds is one of the tasks set out in the Bond market development roadmap for the period 2017-2020, with a vision to 2030 (Prime Minister, 2017). The National Financial Strategy for 2030 stipulates the tasks of developing green financial instruments, diversifying products, and developing green bonds to mobilize capital for environmental protection projects. The contents related to green bonds are regulated in the following documents:

- 163/2018/ND-CP Decree. This Decree establishes the first legislative framework for Vietnamese corporate green bonds and serves as a leverage mechanism to stimulate more private-sector investment (Government, 2018).
- The Government issued Decree No. 95/2018/ND-CP on June 30, 2018, regulating the procedure of issuing green government bonds and green local government bonds. The government has no requirements in this decree regarding issuing green corporate bonds. As a result, green government bonds are issued, registered, depository, listed, and traded in the same manner as government debt instruments. Green local government bonds must be issued in accordance with local government bond issuance rules, and the province People’s Committee must disclose the list of projects that use funds from local government green bond issuance according to the instructions of the Ministry of Finance. The issue of green local government bonds is organized in accordance with the Prime Minister’s Project and directed by the Ministry of Finance (Government, 2018).
- Decree 153/2020/ND-CP, announced December 31, 2020, replaces Decree 163/2018/ND-CP. Government restrictions on corporate bond issue, capital issuance and usage principles regulations, announcement Green corporate bond issuance information. Green corporate bonds are issued, registered, deposited, listed, and traded in the same manner as ordinary corporate bonds.
- The 2020 Environmental Protection Law also officially recognizes green bonds as an important economic tool for environmental protection (National Assembly, 2020). The law has specific regulations on green bond issuance, including the content of the issuer, usage objectives, accompanying incentives and responsibility for providing information, environmental impact assessment, and environmental licenses of investment projects and using capital mobilized from issuing green bonds to investors.
- Decision No. 1658/QD-TTg dated October 1, 2021, approving the National Strategy on Green Growth for the period 2021 - 2030, Vision 2050,
- Circular No. 101/2021/TT-BTC, dated November 17, 2021, of the Minister of Finance, has introduced a preferential policy to reduce the price of listing registration services by 50% for issuers and green bond investors.
- Decree No. 08/2022/ND-CP of January 10, 2022, directing the Environmental Protection Law. The Decree established guidelines for projects that can issue green bonds.

Thus, the findings of a review of legal documents in Vietnam on green bonds from all three issuers: the government, local governments, and businesses show that Vietnam is well aware that green bonds are an important component of green growth - the development trend that encompasses the current economy (Tu., D., T., T et al., 2020). Legal restrictions on the development of the green bond market are enacted with the goal of enabling circumstances for issuers to mobilize funds through bond issuance to implement green projects and strategies. National green growth and adaptability to climate change. However, legal papers in Vietnam do not distinguish between the green bond market and the general bond market. Vietnam’s Financial Strategy until 2030, issued on March 21, 2022, also vaguely mentioned the orientation and solutions for green bond development. Detailed regulations for green bond issuance and policies to attract and encourage investors are still limited. The market still lacks detailed instructions from authorities. Current regulations are at a general orientation and development level for the green capital market without specific instructions. Especially the domestic green criteria, the mechanism for monitoring and managing the use of green capital mobilized from bonds, and the rights and obligations of related parties.
**B) Analyzing the Operation of the Green Bond Market in Vietnam**

Green bonds are the largest segment in the sustainable finance market: in 2021, more than 620 billion were issued worldwide, double last year, and the market has grown at a compound rate each year. ~60% in the last 5 years (Sarika., C., et al, 2022).

In addition to enacting legislative rules governing the green bond market, Vietnam has adopted other initiatives to assist the green bond market, including directing firms to implement information disclosure and transparency. Green financial operations must be transformed. Encourage publicly traded companies to provide financial and annual reports that emphasize sustainable and green development. Since 2021, authorities and the market have paid close attention to raising finance for green, social, and sustainable bonds. Vietnam has actively engaged in the ASEAN Green Bond Standards (AGBS), ASEAN Social Bond Standards (ASBS), and ASEAN Sustainable Bond Standards (ASUS), which are based on the International Capital Market Association’s (ICMA) Green Bond Principles, Social Bonds, and Sustainable Bond Guidelines...The State Securities Commission will be established in 2021. In 2021, the State Securities Commission (SSC) cooperated with international organizations to launch the Handbook “Guide to Green Bonds, Social Bonds and Sustainable Bonds”. The guidebook is a reference to help mobilize resources from local and international finance markets for ecologically and socially responsible initiatives.

Along with global growth, Vietnam’s green bond market is progressively increasing, generating impetus for producing and using green bonds to attract investment money into green bonds. Initiatives using renewable energy and decreasing negative environmental consequences (Huong., N. T., Giang., N. T., 2023). In particular, the green bond market in Vietnam operates as follows:

In terms of two issuers, the government and enterprises, the Vietnamese bond market is as follows:

<table>
<thead>
<tr>
<th>TT</th>
<th>Classification</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Government bonds</td>
<td>214,722</td>
<td>318,213</td>
</tr>
<tr>
<td>2</td>
<td>Corporate bonds</td>
<td>255,163</td>
<td>742,743</td>
</tr>
<tr>
<td>2.1</td>
<td>Real estate</td>
<td>51,979</td>
<td>270,140</td>
</tr>
<tr>
<td>2.2</td>
<td>Bank</td>
<td>136,772</td>
<td>236,053</td>
</tr>
<tr>
<td>2.3</td>
<td>Stock</td>
<td>5,648</td>
<td>22,504</td>
</tr>
<tr>
<td>2.4</td>
<td>Commodities and Consumption</td>
<td>11,859</td>
<td>61,482</td>
</tr>
<tr>
<td>2.5</td>
<td>Energy</td>
<td>5,045</td>
<td>37,937</td>
</tr>
<tr>
<td>2.6</td>
<td>Construction</td>
<td>21,483</td>
<td>53,246</td>
</tr>
<tr>
<td>2.7</td>
<td>Industrial Production</td>
<td>6,945</td>
<td>21,666</td>
</tr>
</tbody>
</table>

*Source: VBMA, 2023*

In particular, the issuance value of green bonds is still low compared to the bond market size. According to data from (HSBC-CBI, 2021), in 2021-2022, along with some countries in the region, Vietnam’s debt capital market has strong growth. Vietnam’s total issuance value of GSS- green, social, and sustainability reached 1,5 billion USD in 2021, nearly five times the level of 0.3 billion USD in 2020 and maintained stable growth throughout three years immediately. Vietnam is the second largest source of green debt issuance in ASEAN, reaching 1 billion USD, just behind Singapore. However, compared to the size of the bond market and compared to some markets in the region, green bonds have a low issuance frequency and a slower development speed than some markets in the region, especially green business bonds (Quynh., N. N., 2023).

Green bonds are defined in terms of investment areas based on the purpose of employing financial resources in fields connected to overcoming the repercussions of climate change, adapting to climate change, and safeguarding the environment. This is a vast area that may be separated into several vocations. However, when four groups of fields are considered: (i) renewable energy, (ii) construction (building), (iii) water management, and (iv) others (unallocated climate change adaptation), the majority of green bonds and loans in Vietnam in 2021 come from the transportation and energy sectors (78%).
Figure 1: Green bond and lending market in Vietnam – Capital amount
Released according to intended use

Source: CBI- SSC-IFC & SECO, (2021)

According to the VBMA study (2023), construction and energy are two areas that account for 79.5% of total capital mobilized from green loans issued in the ASEAN region between 2016 and 2021. Increase investment in renewable energy sources. Regarding capital scale, corporate bonds in the energy industry (reaching 37,397 billion VND) and corporate bonds in the construction sector (reaching 53,246 billion VND) will account for the majority of green bonds in 2022. As a result, green bonds There is currently a lack of diversity in project kinds, sectors, and issuers, and the majority are still in the testing stage.

Nowadays, local governments mostly issue Green bonds in Vietnam to fund green initiatives. Almost no corporate system has yet issued green bonds to mobilize capital (Thuy., D. T. T, Van., T. M, 2021). According to the Institute of Financial Strategy and Policy (Ministry of Finance), there have been a total of 18 public green bond issuances in Vietnam from 2018 to 2022. The following are the specific outcomes:

<table>
<thead>
<tr>
<th>Time</th>
<th>Issuer</th>
<th>Green bond value</th>
<th>Characteristic</th>
</tr>
</thead>
</table>
| October 2016 | Local government (pilot)            | - Ho Chi Minh: reached 23.4 million USD  
- Ba Ria - Vung Tau reached 3.6 million USD,  
3 - 5 year term                      | With support from the Hanoi Stock Exchange, part of a pilot program between the Ministry of Finance and the German Agency for International Cooperation (GIZ) |
| August 2019 | Corporate bonds                     | - Trung Nam Solar Power Joint Stock Company: 2,100 billion VND, 9-year term  
- Trung Nam Joint Stock Company: 945 billion VND, 5-year term | Used for a solar power project in Ninh Thuan. |
| October 2019 | Corporate bonds                     | Bamboo Capital Joint Stock Company (BCG): 900,000 convertible bonds in the fourth quarter of 2019, interest rate 5%/year, 3-year term | 350 billion VND to invest in solar energy projects, 500 billion VND to invest in real estate projects, and 50 billion VND to supplement working capital. |
| October 2020 | Government                          | 4 green debt issuances with a total value of about 283.9 million USD | Green debt includes green bonds, social bonds and sustainable bonds (GSS) |
| 2022       | EVNFinance                          | 75 million USD for a 10-year term with an interest rate of 6.7%/year, | Receive technical support from the Global Green Growth Institute partially guaranteed by Guarant Co - a multinational guarantee services company. |

Source: Institute of Financial Strategy and Policy (2018) and VBMA (2023)

Capital raised through the issuance of green bonds by the government and local governments has been used to fund green projects aimed at renovating and upgrading drainage systems and resolving flooding in city basins, thereby contributing to environmental improvement, improving the quality of people’s lives, linking economic growth with environmental
Capital collected from issuing green bonds of businesses is used for the field of renewable energy: solar power projects (such as Trung Nam Solar Power Joint Stock Company Bamboo Capital Joint Stock Company).

Furthermore, Vietnam actively collaborates with a number of foreign organizations to test green bond issuing. According to Thuy., D. T. T., Van., and T. M. (2021), with the above-mentioned structure and scale of green bonds, the value of capital mobilization from green bonds in Vietnam is not only low compared to the region but also extremely low compared to the country’s annual need to finance green growth projects. Except for the following causes (Huong., N. T., Giang., N. T., 2023), the aforementioned circumstance happens.

- Regulations guiding the procedures for forming, evaluating, and authorizing project implementation remain complex and long (Public Investment Law, guiding decrees and circulars...), influencing the disbursement and pace of Green project implementation.
- There are no legislative requirements for green bond categorization or a national green bond index in Vietnam. Without a legislative framework, there may be risks related to businesses using ambiguous legislation to issue bonds or utilizing financial resources earned from issuing green bonds for enterprise projects/activities that do not meet green standards. The risks associated with an inconsistent understanding of green bonds are the primary reason why investors are hesitant to choose green bonds over regular bonds.
- There are no rules controlling information disclosure, capital usage, or project oversight.
- The operations of intermediate organizations such as credit rating agencies and independent rating agencies continue to be lacking in the bond market.
- Investor and issuer awareness of the benefits of investing in and issuing green bonds remains low. According to survey data by Chau., M. et al. (2020), up to 37.5% of investors have never heard of green bonds, 14% have heard but have limited interest in green bonds, and just 11% have learnt about green bonds, with no investors having thoroughly investigated this form of bond.

V. SOLUTIONS FOR DEVELOPING THE GREEN BOND MARKET IN VIETNAM

Expansion and development of the green bond market are required and promise to result in significant progress for the Vietnamese economy, both in terms of economic goals and the aim of partially resolving the problem of environmental pollution and climate change. Based on a review of the existing scenario, some recommended solutions for developing Vietnam’s green bond market include:

A) Firstly, Policy Solutions to Develop the Green Bond Market

- The government must finalize the policy framework to develop the green bond market.
- The government must evaluate present regulations and enhance particular restrictions for each market participant. The expansion of the green bond market has attracted a more varied and mainstream investment base. Furthermore, the participation of institutions such as the government, local governments, corporations, assessment and credit rating organizations, associations, training organizations, and so on must be governed by special rules.
- Issue any legal regulations on green bond classification or national green bond index in Vietnam. Applying a green classification system can encourage local governments, businesses, and investors to comply with bond issuance criteria and allow lenders to evaluate the green credentials of loan recipients. That helps investors feel secure when choosing green bonds instead of regular bonds. On the other hand, the green bond classification system also helps Vietnam’s green bond market avoid the phenomenon of businesses taking advantage of unclear regulations to issue bonds, using financial resources obtained from issuing bonds and green votes for other projects/activities of the enterprise that do not meet green standards.

Defining criteria to classify and identify green bonds is necessary. However, it must be considered when promulgating because too loose criteria will result in failure to achieve green goals, and too strict criteria will cause difficulties for businesses due to failure to meet requirements. Vietnam should use a combination of regional and worldwide standards as a reference base for its legislation in order for this categorization to be appropriate and simple. Standards such as the ASEAN Sustainable Finance Taxonomy or the EU Taxonomy, which have rigorous, universal principles but are flexible to adapt to different national contexts, can be used as a reference base. For example, the ASEAN sustainable finance taxonomy identifies the contribution of economic activities to climate change mitigation through a color-coding system of ‘green’, ‘amber’ and ‘red’.

The classification system also provides industry-specific advice on green investments and activities.

- Regulations on controlling information disclosure, capital use, and monitoring green bond projects, especially information related to social benefits, environmental protection, mitigation or adaptation to climate change.
To encourage robust investment sources, implement policies encouraging worldwide green bond issuance. The government must take the initiative in establishing relationships with international institutions such as the World Bank, UNEP, GIZ, and others. This relationship may be made through exchanging information and expertise, policy research and consultation, consulting, advice, and assessment in implementing green bond issuance and market development.

Implement rules that provide incentives to encourage investing in green bonds. Higher tax rates on debt instruments may now affect the attractiveness of bonds; thus, the government should investigate and implement some associated financial assistance, such as tax exemptions and reductions. Reduce green bond evaluation expenses to the yields on green bond investments (as Singapore has done).

B) Second, Solutions for Organizing and Managing the Green Bond Market

- Simplify processes and encourage domestic units to take part in the process of confirming and certifying the green bond framework, as well as labeling green bonds in accordance with international standards. Appraising and rating the “green” level of initiatives on the “Green Project List” requires particular guidelines. Similarly, instructions on addressing and remediing violations, posting information about violations, and evaluating for approval if a project or project item does not achieve “green” status after each assessment period. How to fix it after completion?
- Establish intermediary organizations such as credit rating organizations and independent assessment organizations to verify the quality of projects related to green bond issuance.
- Establish departments responsible for data disclosure and market monitoring, resulting in a public and transparent information disclosure framework. Transparency at every process stage is the foundation for issuers and investors to have faith in green bonds.

C) Third, solutions to encourage businesses and investors

- Encourage investors, businesses, and organizations to hold green bonds through media, emphasizing the benefits of issuing green bonds in supporting the development of a green growth economy. From there, raise public awareness about using green bonds to develop the economy towards sustainable growth.
- Increase investor trust by improving the government’s proactive involvement, unity from the top down, and connectivity across ministries, departments, and branches.
- Issuing green bonds for green projects and programs that come within the spending tasks of the municipal budget should be prioritized. This not only provides greater transparency than traditional bonds, but it also assists local governments in collaborating with the market to address climate change challenges that have regional/regional impacts.

VI. CONCLUSION

Green bonds are a growing market, especially in the context of Vietnam, which is heavily affected by climate change and environmental pollution. On a theoretical basis, this study reviews international and domestic documents on the concept and characteristics of the green bond market. The authors reviewed legal documents in Vietnam on the green bond market to serve as a basis for analyzing the current situation. They analyzed the scale of the bond market in general. With green bonds, the study analyzes three groups of entities issuing green bonds: government, local authorities and businesses. The findings demonstrate that while the green bond market is steadily increasing, the appeal and use of green bonds are focused on initiatives relating to clean energy and decreasing detrimental environmental consequences. However, the issuance value of green bonds remains low in comparison to the size of the bond market; issuance frequency is low, and development pace is slower than in some other markets in the area, particularly green corporate bonds. The paper presents three categories of solutions based on an examination of the reasons for the aforementioned situation: (i) solutions on green bond market development regulations, (ii) solutions on market management organization, and (iii) solutions to encourage enterprises and investors. Future studies might concentrate more on each market investing organization (including government, local authorities, and businesses) or focus more detailed research on each purpose of using green bonds (reducing the impact of climate change, adapting to climate change, environmental protection projects, and renewable energy projects).

VII. REFERENCES