



Giant Barb

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MAY-2025

GREEN BONDS

**Sustainable Financing
Solution for a Green Future**



Website

www.giantbarb.com





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Overview

Green bonds are a crucial capital-raising channel for activities that promote sustainable development by mobilizing funds for environmentally friendly projects and initiatives.

In Vietnam, the green bond market is still nascent but is steadily being promoted to attract investment for renewable energy projects, environmental protection, and greenhouse gas emission reduction.



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I. What are Green Bonds?

1.1. Definition

Green Bonds are **financial instruments** issued to raise capital from investors with the purpose of financing sustainable and environmentally friendly projects and activities (according to the **World Bank**).

The **International Capital Market Association (ICMA)** defines a **green bond** as any type of **bond instrument** where the proceeds will be exclusively applied to **finance or re-finance**, in part or in full, new and/or existing eligible Green Projects.

In Vietnam, the **2020 Law on Environmental Protection** defines a green bond as "a bond issued by the **Government, local authorities, or enterprises** in accordance with the law on bonds to **mobilize capital for environmental protection activities and investment projects** that bring environmental benefits."

1.2. Role of Green Bonds

For Environment

Green bonds provide capital for green projects like wastewater treatment, renewable energy, and green transportation, **helping to reduce environmental pollution, greenhouse gas emissions, and protect natural resources.**

For Businesses

They offer a long-term funding source, enabling businesses to **invest in more advanced new technologies**, thereby minimizing negative environmental impacts.

For Investors

Through green bonds, investors can make **responsible investments** that contribute to environmental protection and sustainable development. The green bond market is rapidly gaining popularity and offers **significant potential returns** for many investors.

For Economy

Green projects often **create more jobs** than traditional projects, thus addressing employment needs and fostering local economic development. The growth of the green bond market **enhances a nation's international standing and commitment** to environmental protection and more sustainable development.



II. Types of Green Bonds

Classification by Purpose of the Bond

Climate Bonds

Issued to finance projects with a positive impact on **climate change** (e.g., renewable energy, greenhouse gas emission reduction).

Environmental Bonds

Issued to finance **environmental protection projects** (e.g., ecosystem conservation, waste management).

Sustainable Bonds

Bonds that combine environmental and social elements, financing projects beneficial to both the **environment and society** (e.g., sustainable development, education, and healthcare).

SDG Bonds

SDG bonds invest in projects and assets that align with and contribute to achieving the **Sustainable Development Goals (SDGs)**.

Renewable Energy Bonds

Issued to finance **renewable energy development projects** (e.g., solar power, wind power, biomass energy).

Green Municipal Bonds

Issued by local authorities to finance **green projects** (e.g., improving public infrastructure, developing urban green spaces).

Classification by issuer

- Green Corporate Bonds
- Green Government Bonds
- Green Municipal Bonds





III. How Green Bonds work



Issuance

Green bonds are issued by public entities, such as governments and local authorities, or by private sector entities like banks and corporations, to raise capital for environmentally friendly projects or activities.

Use of proceeds

Funds raised from green bonds must be used for projects or activities that deliver environmental benefits, such as renewable energy, energy efficiency, environmental protection, and climate change mitigation. The use of proceeds must be supervised by an independent third party to ensure transparency.

Yield

Investors in green bonds can receive either a fixed or variable yield. The yield level of green bonds can be higher or lower than other bond types, depending on the project's risk and market demand.

IV. Green Bonds issuance process

4.1. Develop Green bond framework

- List subset of eligible activities that falls within the core business of the issuer.
- Who prepares, recommends (e.g. Sustainability Committee, Green Finance Officer, etc.) and approves green projects (e.g. Credit Manager).
- Description of governance within the issuer to manage use of proceeds, including supervision, tracking and ring fencing of proceeds.
- Description of process to track and report use of proceeds (investment amount) and impact indicators per eligible use of proceeds.

4.2. Second opinion/ External review of green bond framework

- **Assurance report:** an external party confirmation of compliance with GBP/SBP/DBG.
- **Second Party Opinion:** an external assessment of the issuer's green, social or sustainability bond framework, confirming GBP/SBP/DBG compliance and analysing the eligible asset categories.
- **Rating:** an evaluation of the labelled bond framework against a third-party rating methodology, which considers the environmental/social aspects of the investments. In Vietnam, these mainly include products developed by international rating agencies such as S&P and Moody's.
- **Verification report for Certified Climate Bond (green bonds only):** third party verification, pre- and post-issuance, which confirms that the use of proceeds adheres to the Climate Bonds Standards and Sector Criteria and the Paris agreement to keep global warming to 2°C and achieve full decarbonisation by 2050.

4.3. Green bond information for investors

4.4. Annual impact report

- Track and report use of proceeds (investment amount) per eligible use of proceeds.
- List impact indicators to be used to report impact per project type (e.g. energy saved, GHG emissions saved, etc.)



V. Principles of Green Bond issuance

According to the International Capital Market Association (ICMA), the four core components for green bond issuance include:

Use of proceeds

01

- The intended use of proceeds from green bond issuance must be widely disclosed prior to issuance for investors to track.
- This involves defining a set of eligible green/social/sustainable project categories or a list of projects and assets that will be funded by the bond proceeds.

Process for project evaluation and selection

02

The green bond issuer needs to establish an internal process for identifying eligible projects that will utilize the funds from the green bond.

Management of proceeds

03

The management of proceeds from green bond issuance must be transparent in its accounting to facilitate the issuer in managing, tracking, and allocating funds to green projects.

Reporting

04

The green bond issuer must report and provide updates on the full use and disbursement of funds raised from green bond issuance, encouraging the use of quantitative and qualitative indicators to assess project effectiveness.



VI. Benefits and Challenges of the Green Bond Market

6.1. Benefits of the Green Bond market

Benefits for Investors

- **Financial Returns:** Green bonds often offer competitive yields, attracting investors seeking profitable opportunities while supporting green projects.
- **Portfolio Diversification:** They provide an opportunity to diversify investment portfolios, reduce risk, and generate stable income from various sources.
- **Promoting Sustainable Development:** Investing in green bonds helps meet Environmental, Social, and Governance (ESG) requirements, contributing to climate change adaptation, food security, and public health.
- **Increased Transparency:** Investing in green bonds also helps enhance the transparency of the bond issuer.
- **Creating Social and Environmental Added Value:** By investing in green bonds, investors contribute to addressing environmental and social issues, creating added value for the community.

Benefits for Green Bond Issuers

- **Sustainable Financing Source:** Provides an additional source of financing for environmental protection projects, renewable energy, and other social activities.
- **Enhanced Reputation:** Issuing green bonds helps improve corporate image and reputation, attracting interest and trust from the community, customers, and investors.
- **Diversified Investor Base:** Improves investor diversification and attracts long-term capital, seizing new business opportunities aligned with sustainable development trends.
- **Enabling Economic and Social Development:** Investing in green projects helps build a sustainable future and protect the environment for future generations.
- **Access to New Capital:** Issuing green bonds opens up opportunities to access new capital from investors interested in sustainable development.



VI. Benefits and Challenges of the Green Bond Market

6.2. Challenges for the Green Bond market

- **Lack of Harmonized Legal Framework:** Many countries lack comprehensive, clear, and uniform legal frameworks for the green bond market, leading to difficulties in management, oversight, and ensuring transparency.
- **Absence of Global Common Standards:** Current green bond standards often lack consistency across countries and regions, making it challenging for investors to compare, evaluate, and select suitable bonds.
- **Difficulty in Assessing Green Risks:** Assessing the risks of green projects remains challenging due to a lack of experience and historical data, making investors hesitant and cautious.
- **Higher Issuance Costs:** Green bond issuance costs are typically higher than those of conventional bonds, including independent verification, reporting, and monitoring expenses, which can deter businesses.
- **Nascent Market:** The green bond market is still relatively nascent, particularly in developing countries, leading to a shortage of investors with specialized knowledge and limited supply of green bonds.





VII. Practical application of Green Bonds in the world and Vietnam

Region/ Country	Content
European Union (EU)	<p>Between 2014 and 2021, the green bond market in Europe witnessed robust growth. Initially, green bonds were primarily used for energy, transport, and construction projects.</p> <p>By 2021, their scope expanded to various other sectors with higher investment values.</p> <p>In 2023, the value of green bonds issued in this region accounted for a significant portion of the total global green bond value.</p> <p>The EU has become the largest market for green bonds, with countries like France, Germany, the Netherlands, and Nordic nations such as Sweden and Denmark playing pivotal roles.</p> <p>The increase in ESG funds across the continent, with total investments in ESG funds reaching \$3.5 billion in the first two months of 2025, serves as clear evidence of investors' strong trend towards countries with firm commitments to climate goals and sustainable development.</p>
China	<p>In 2014, China emerged as one of the world's leading green bond issuers with a total value of \$37 billion, accounting for 40% of the global market.</p> <p>By 2021, this value had risen to \$109.5 billion, placing China as the second-largest market globally, only behind the US, affirming its crucial role in the green bond sector.</p> <p>In April 2025, China issued its first government green bond on the international market at the London Stock Exchange, valued at 6 billion Renminbi (approximately \$825 million). The boom in the green bond market has driven China to invest heavily in critical sectors such as energy, transportation, and environmental protection, laying the groundwork for its transition to a green and low-carbon economy.</p>

VII. Practical application of Green Bonds in the world and Vietnam

Region/ Country	Content
India	In January 2025, India issued its first government green bonds, paving the way for the development of its domestic green bond market. The country is expected to mobilize approximately INR 320 billion (about \$3.8 billion) through green bonds in the fiscal year 2025-2026, according to Reuters.
Japan	Japan issued convertible bonds worth JPY 2.6 trillion (approximately \$17 billion) in 2024 and plans to issue an additional JPY 950 billion in 2025. Despite rising interest rates and limited liquidity, Japan maintains its position as the largest green bond market in the Asia-Pacific region, according to CCW The Asset.
Vienam	<p>The green bond market in Vietnam is in its nascent stage of development compared to developed countries. As of 2023, the total value of green bonds issued in Vietnam remains modest compared to the global market, specifically reaching approximately \$284 million.</p> <p>The majority of green bonds have been issued by international financial organizations such as the World Bank and the Asian Development Bank (ADB) to finance renewable energy and sustainable infrastructure projects in Vietnam.</p>



VIII. Giant Barb accompanying businesses on their Green Transition Journey

In March 2025, **Giant Barb Environment and Science Joint Stock Company (GB)** completed the establishment of a green bond framework, in accordance with the **International Capital Market Association (ICMA) standards**, for **Xuan Mai - Hanoi Clean Water Transmission Co., Ltd.**, valued at over VND 317 billion. This issuance was partially guaranteed by GuarantCo Ltd. - a multinational guarantee provider within the Private Infrastructure Development Group (PIDG).

Given the increasing global demand for investments in sustainable projects within capital markets, Vietnamese businesses need to swiftly adapt and prepare to tap into this trend of mobilizing capital through green bonds, reflecting a strong commitment to a green and sustainable future. Moreover, decisive action from the Government and regulatory agencies is crucial, through the implementation of a series of priority measures and policies to foster Vietnam's green bond market:

1/Complete and Update the Legal Framework: A robust legal framework is the essential foundation for effective green bond market development. Establishing clear incentive mechanisms will provide strong motivation for businesses to invest in green projects.

2/ Encourage and Support Businesses to Issue Green Bonds in International Markets: Enhancing the role of reputable and experienced banks and financial institutions will be key to expanding the scale and improving the efficiency of the green bond market.

3/ Clearly Define and Announce Green Project Selection Criteria: This should be coupled with the establishment of independent evaluation organizations to ensure the transparency and quality of projects financed through green bonds.

4/ Review and Supplement Tax and Fee Incentive Policies: This will create favorable conditions for bond issuers and investors to participate in the market, while also stimulating the robust development of the green bond market.

5/ Raise Awareness: Increasing awareness among businesses and investors about the benefits of green bonds will help promote market development. Simultaneously, developing a specialized workforce with deep expertise in green bonds is essential to meet market demand. Enhanced awareness empowers investors with comprehensive information to assess risks, potential returns, and make informed investment decisions.





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“REACH OUT TO US TODAY, AND TOGETHER, LET'S SHAPE A BETTER TOMORROW”

*Together, we can make a difference that transcends boundaries
and leaves a positive legacy for generations to come.*

Giant Barb is a pioneer in the field of **Carbon Finance in Vietnam**, offering comprehensive services such as **Greenhouse Gas Inventory**, **ESG Reporting**, and **Carbon Credit Market solutions** to both domestic and international enterprises.

With the motto "**Towards a low carbon society**", Giant Barb connects individuals, investors, businesses, and governments together to build green projects aimed at carbon neutrality, contributing to global efforts in combating climate change.



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