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# Evolution of the Green Investment: Prospectus to the Companies

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## Abstract

*This chapter discusses the scenario of Green Investment in small & Medium Enterprises towards sustainable development. Projects. Green finance is an upcoming & novel area under the broader area of Environmental Accounting. Green Bonds are debt instruments which used the raised funds for Green Bonds are issued to raise funds towards environmentally friendly & responsive investing proposals related to green finance. By making investments in energy efficiency, green infrastructure, renewable and conservative energy, community development, and reducing environmental pollution, they stand for socially responsible investing. Academicians are trying to support gearing up the environmentally friendly economy. This project covers a detailed study of the current Green Bonds under the Green Finance scenario from various dimensions like investors, Corporate, and Small & Medium Enterprises. To understand the level of awareness & figure out the facts in figures & bridge the gap between the objective of the issue & reach.*

*"The demand for green bonds should remain elevated amid increased investor appetite for sustainable securities that offer transparency over the use of proceeds, and ongoing regulator and central bank encouragement." Vincent Juoyns, Global market strategist.*

**Keywords:** *Green Investment, environment, Academicians.*

## 1. Introduction

This chapter would require building any model to develop awareness and add advanced features to these Green Bonds to make them more attractive. In prosperous countries, those models will be analyzed and suggested the same according to the feasibility of the Indian Context. The need of the hour is to increase the business with the green issue since very few Indian businesses were included in the world's 600 green companies as well as the top 100. India's ranking among green companies in terms of achieving the Sustainable Development Goals is 152nd. While social and environmental projects may encourage investors to make appropriate investments, the SDG Bond Framework, which went into effect in 2018, is not the same. India has raised more than $7 billion in just five years, whereas China has raised more than $35 Billion in just one year in 2017. This shows that India needs more efforts for a green future which is the vision to raise $100 billion by 2022. This is the scope and limitation of Green bonds in India. The research says India will overtake the U.S. in its investment in green by 2044. Green Bonds can become a sustainable investment for individuals and small and medium businesses. The fundraising process of Green Bonds through LCR projects is not a very new concept, but it is a designated and specific market existing since 2007, which is designated "green." This label differentiates from regular bonds issued by the Government and Corporate. Lyon

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and Maxwell have given an extensive definition of these green world activities and suggested the positive environmental impact, which will minimize the negative impact of sustainable development. Also, Arragon-Correra (2019) defined it as a more favorable process that the company can make when Green Bond Principles are utilized and mentioned that it would be helpful. It is also mentioned that the green bond market helps build trust among the investors in the field of the Green Bonds market in India compared with other nations. The need of the hour is to increase the Sustainable Development Projects with the green issue since very few Indian companies were listed among the top 100 and among the 600 green companies of the world.

The data is available in the audited financial reports of the companies during their' financial performance management in all the publicly listed companies. Companies need to be made aware that it is one of the non-financial factors with great weight towards the Performance Evaluation. Companies may also contribute towards their Goodwill and ranking due to such initiation in these projects, which come under Environmental or Green Accounting. This is also part and parcel of the Balanced Score Card, playing a significant role under the pillar of Corporate Social Responsibility and Climate Change. It also improves the customers' and suppliers' relationships due to these social commitments. It works for the well-being of non-financial stakeholders—the innovative variety of financial instruments. A more diversified portfolio will expand the scope of the Capital market.

From the beginning of the year 2013, the issuance of green bonds at global level is rapidly increasing. This chapter explains the concept and implications of sustainable financial development by issuing green bonds. This has become the driving force for the economic development of any country in the present scenario. The same era is expected with the Corporate also using green instruments as an investment avenue. This massive growth of green bonds has become an attractive concept not only to the corporate and economies but also the scholars. The risk of climate change is going to be severe and catastrophic in the future endeavour. The risks can become serious challenges to the corporate paying price for carbon emissions and affect the value of many assets. There is a need for the day to attract and mobilize the public and the private to climate change. Therefore, it is opening for new investment opportunities. Green bodies help in mobilizing and mitigating finance for developing countries.

## 2. Review of Literature:

A spillover effect has been found among the instruments available in the green market and the stock exchange ( Roboredo, 2018).

Gabriela de Oliveira Junqueira (2021) analyzed the beginning of the 2008 sub-Prime crisis, which paved the way for green bonds, which are sound enough for the savings of even retail investors for climate improvement and emphasized the role of these bonds for the economic development in multiple ways on Environmental, Social, Governance angles.The projects' pivotal role in the green recovery and utilization of the world-ecology approach to broaden its ecological world are also mentioned.

According to David Gilchrist, Jing Yu, and Rui Zhong (2021), the quick development of green bonds assesses the advantages and factors that influence corporations' participation in these eco-friendly loans and projects. This paper has also identified that these practices not only help the shareholders' value increase but also non-financial stakeholder's value increase.

Jeremy Gorelick and Neil Walmsley (2020) argued so much about the Greening of Municipal Infrastructure Investments and the given technical support by the Government. It also included the investments by retail investors and the importance of Green Finance.

The Government support towards the infrastructure and the utilization by the city champions through Green finance Funds was covered in this article.

Yuhang Zhang and Shaunglian Chen (2020) clearly explained the regional green economy development. They explained how this has an impact on financial agglomeration and has proven the evidence from the country China.

Alexandra Maria (2020) has mentioned the new market development in terms of a sustainable environment in which the protection of the climate is very much required, with these investments, which will increase the interest even in stock exchanges. The paper argued about the framework of these financing instruments, the principles and concepts, and the impact on the capitalist economy.

Pauline Deschryver and Frederic de Mariz (2020) say that this market is attracting many new retail investors and issuing companies and projects with a vast diversification available for investors. Moreover, the size remaining micro and small size companies with those other traditional bond instruments due to its challenges. The lack of globally standardized standards was also noted in this article. the possibility of increased expenses for issuers and a shortage of stock for market investors. Additionally, it has recommended getting past these obstacles and luring financing sustainability tools.

ICMA (2019), in its reports, mentioned that the guidelines issued for green bonds promote transparency and valuable information to all the Companies for the issue of green bond securities. Additionally, it is mentioned that, in contrast to other countries, the Indian green bond market contributes to the development of investor trust.

Blagica Novkovska (2019), in this article, mentioned very clearly the actual relation between the Green Economy and the existing shadow and how to minimize and eradicate this so that the economy may run towards Community Development. It concentrates on how this would bring down the shadow when more and more amount invested in these Green Funding.

Shuba Olena (2018) studied the importance of using green investments in financing the modernization of the economy with particular reference to the European Union. It was also mentioned that the Green Bonds status in France & Germany, which are among the top issuers of these bonds in the European Union and, was analyzed to determine the issue supplied to transport and renewable energy projects, with particular reference to Germany.

## 3. Current scenario:

Research is done a lot on Green finance and Green Accounting. However, there still needs to be a gap in discussing the need for more awareness among investors regarding investment and Small & Medium Enterprises regarding the issue of Green Bonds. There still needs to be more consistency among the Corporate about Environmentally friendly projects due to the lack of data on this. Guidelines are issued but not much-circulated and tried to spread awareness. Many scopes are there to fill the gap between the availability and awareness among investors. Also, many SMEs need to be made aware of the consistency, Sustainability, and support provided by the Government. There still needs to be a research gap in this critical area of financing through Green bonds. The data is available in the audited financial reports of the companies during their' financial performance management in all the publicly listed companies.

Companies need to be made aware that it is one of the non-financial factors with great weight towards the Performance Evaluation. Companies may also contribute towards their Goodwill and ranking due to such initiation in these projects, which come under Environmental or Green Accounting. This is also part and parcel of the Balanced Score Card, playing a significant role under the pillar of Corporate Social Responsibility and

Climate Change. It also improves the customers' and suppliers' relationships due to these social commitments and proves to work for the well-being of non-financial stakeholders. Awareness of the corporate should be increased; therefore, a lot of research work needs to be done to achieve this. Corporations should also be educated that such efforts would help for eco-friendly transformation. Also educated about green has become a challenge. Academicians should suggest some projects and ways of means to the SMEs regarding this and also spreading the literacy of Green bonds among existing and potential investors. The majority of the research work has been conducted on Corporate environmental performance, but only a little concentrated on SMEs. Contents of environmental disclosures are also a little, which has to be created with some awareness programs. In order to unify the Green Accounting model, future researchers will need to evaluate the various rating systems. To further our search for ways to safeguard the advancements in the community that are based on humanity and the global community, we require fresh financial analysis data. As a part of ESG, integrated into corporate, every company is trying to address climate change issues and introducing ESG funding mechanisms. Therefore, green assets have been drastically increasing in volume focusing on ESG financial products. In Fixed income investment avenues, green bonds are available to individuals and similar products like social bonds, climate bonds, gender bonds, Sustainability linked bonds.

## 4. Benefits to the Corporates:

4.1.Sustainable Strategy Information: The company, while issuing green bonds, must disclose its sustainable strategies, which makes them put additional efforts into reaching these sustainable goals on behalf of the issuers.

4.2.Coordination between finance & sustainable teams: The coordination between these teams allows for adding to the existing portfolio of debt instruments. At the same time, the sustainability teams can improve themselves in reaching the Sustainable Development Goals to meet the investors' perspectives.

4.3.Companies can initiate sustainable projects: Companies can use the proceeds of green bonds towards initiating sustainable projects such as clean energy, water minimization, waste management, renewable energy, supply chain resilience and manufacturing emission-free vehicles or machinery.

4.4.Demand for funds improves: The investors would like to contribute towards climate change and as a hedging tool against climate change risks.

Improves companies' Goodwill: Since the company issuing green bonds will get much attention from the investors in the market and other stakeholders because it indicates that the company is running towards Sustainability.

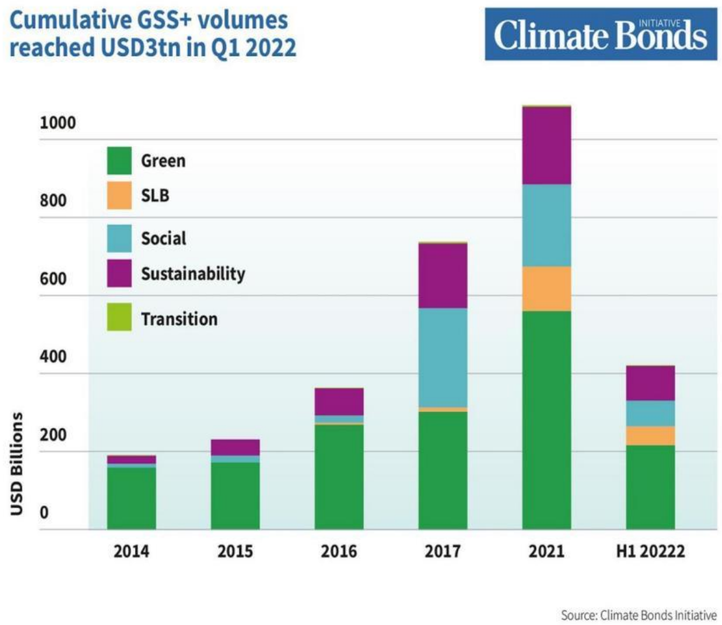
4.5 Innovation/Path-breaking aspects: The concept is innovative to understand the awareness of such an essential Source of Funds for SMEs. Investors' awareness also is necessary to launch more awareness programs for the Government. The concept and relevance to the studies are indicated in India, initiating with 1000 crores of rupees entered in 2015 with Yes Bank and then an investment of about 600 crores of rupees issued by CLP India. Also followed by Axis Bank issued USD 500 million with international certification. Since SEBI released Green Bond Guidelines in 2016, which were to be followed by major bond market issuances, research on this concept has intensified.

4.6 The most recent research work has been done since 2016 with various models. More innovative models must be developed so that the SMEs would come forward and investors would be ready to invest in such instruments. Investors should understand that the market would contribute towards climate change and community development.

4.7 Types of ESG financial products:

Green bonds use the proceeds to fund green projects, backed by the companies' Balance Sheet when issued. Another type of green bond, like project bonds, is where the assets of the specific project and balance sheet back this type of debt. Certain covered bonds may be backed by sources from green projects like green mortgages or solar-based leases. The principles are developed by the Government of each country in association with the International Capital Market Association Overseas. The guidelines were initiated by a consortium of Investment Banks in 2014. Blue Bonds concentrate on the Sustainability of marine resources. Issues of green bonds status:

Fig.1.Green Bonds Issue Status:




Out of the different types of green bond instruments, Green bond instruments rank the highest in quantity in all the years from the year of launch. The following majority-issued bonds are Social bonds which are more than Sustainability bonds. The same trend is expected shortly.

4.8 Future scenario:

Some companies which are partially diverting such funds towards green projects may intimate the investors and should execute the same in the future. Additionally, there is a market for sustainable theme-based bonds, which provide funding for social and environmental initiatives, such as the SDGs.

4.9 Cost of Bonds:

The cost generally depends on the issuer's credit rating and the interest rate changes and risks faced by the concerned Government, and maturity-related differences.

4.10 ETFs: There are also several ETFs offering investment-grade green bonds, like shares global green bond ETF which holds the country's risk. Also, some of the ETFs issue ESG-based debt of some companies like BlackRock, Vanguard, and Invesco, among others; such companies concentrate on reducing carbon emissions, and it could be in any investment, which can bring down the risk landscape.

4.11 Milestones:

2020 was a memorable year for the green and sustainable bonds issued by London Stock Exchange, welcoming 39 bonds in the sustainable bond market in China, India, Europe, Africa, the middle east, Asia Pacific and American countries. Therefore, The London Stock Exchange won the Environmental Finance Sustainable Awards' Stock Exchange of the Year title.

4.12 Integration with strategic business decisions: Most companies throughout the globe are developing plans to manage climate change along with their business strategies. The business models are being tried and launched to achieve the integration between the business future scenario along with the contributor towards Sustainable Development. The research also proved that the companies are progressing towards progression compared to their industry peers.

4.13 Industrial practice towards Sustainable Development: Climate preparedness is observed to be the highest among specific industries like basic materials, energy sectors, and high emitting sectors, which are assessing the risk and opportunities associated with climate change.

Scorecard USDbn

| | Q3 2022 | | 2022 YTD | | Cumulative since 2006 | |
|---|---|---|---|---|---|---|
| | USDbn | % total | USDbn | % total | USDbn | % total |
| Green | 79.4 | 52.1 | 332.5 | 52.3 | 2008.1 | 57.2 |
| Social | 23.1 | 15.2 | 94.2 | 14.8 | 617.0 | 17.6 |
| Sustainability | 34.4 | 22.6 | 142.1 | 22.4 | 678.9 | 19.3 |
| SLB | 14.7 | 9.6 | 63.5 | 10.0 | 192.9 | 5.5 |
| Transition | 0.7 | 0.5 | 3.4 | 0.4 | 12.7 | 0.4 |
| Total | 152.3 | 100 | 635.7 | 100 | 3509.6 | 100 |



Source: Climate Bonds Initiative2022

The Green Bonds market will reach USD 2 tn by the year 2022.

4.14 Regulations & Guidelines:

The guidelines issued by the SEBI and other regulatory bodies should be encouraging so that more and more retail investors and SMEs are coming forward to raise these Environmental Friendly, Eco-friendly, and Sustainable Energy Projects through Green Finance. Once the gap is identified in the awareness of the investors and SMEs, the Government should initiate the policy making and the required changes in the existing policies to make such instruments more attractive to the investors. This will be a Socially Responsible Investment by ordinary investors. The Entrepreneurs also recognize the importance of community development-based projects because of their convenience and motivating policies by the Government. Therefore, the policy would be designed and developed so that the investor and the SMEs run towards Eco-friendly economic development. The eligible social projects include clean drinking water, mass education, health care, green construction, good nutrition, and projects which minimize inequalities in incomes.

4.15 Relevance to the Society:

Society would benefit from investors' understanding of one of the cutting-edge types of financial instruments if they were aware of Green Bonds. The scope of the investment avenues' portfolio will expand in light of the pressing need to raise potential investors' awareness. A more diversified portfolio will expand the scope of the Capital market. The awareness programs would help the existing SMEs and also the budding entrepreneurs to improve their opportunities in initiating environmentally friendly projects; it would motivate the potential entrepreneurs and also to serve the society since these are socially responsible projects for sustainable community development. People with enthusiasm to prove themselves for the development of the community with their talents and skill but no funds are getting an opportunity to become a part of the parcel of successfully serving the nation. The relevance of the study would help in modifying the guidelines issued by the SEBI and other regulatory bodies; when the policy guidelines are modified, this will encourage more and more retail investors and also more SMEs to come forward in raising these Environmental Friendly and Eco-friendly and Sustainable Energy Projects through Green Finance.

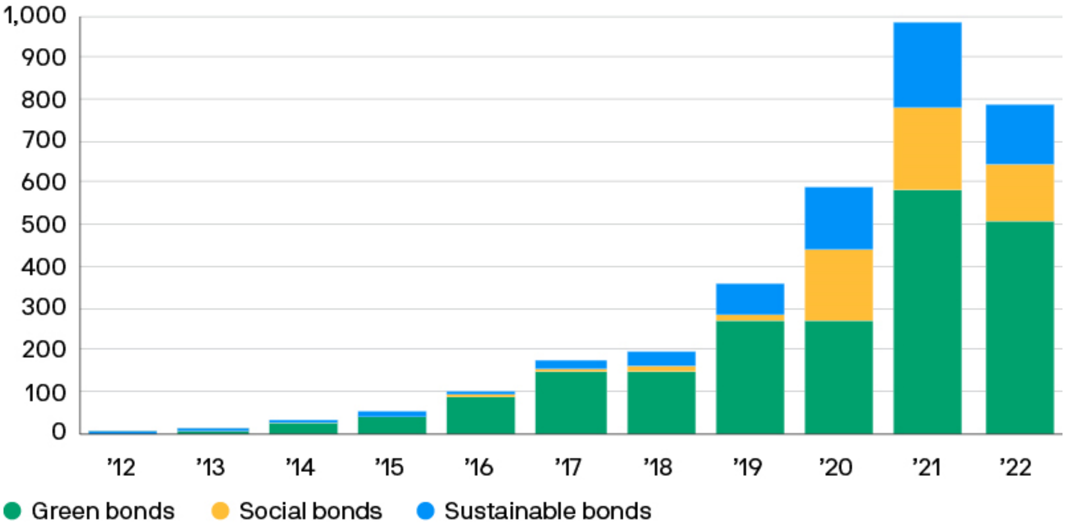
4.16 Principles or guidelines: Green bond transparency is the utmost requirement of these bonds.

Integrating information about the use of proceeds, project evaluation, relationships, and management processing with the reporting process that must be given to the necessary stakeholders. Green projects which can be initiated with green bonds are renewable energy, green buildings, minimizing the cost of transport, water and waste management, and pollution control.

4.17 Investments:

According to BAML research, key investors are both institutional and individual investors. Institutions include Central Banks, Bank treasuries and Government agencies, Fund Managers, Insurance companies, and pension funds.

Fig. 2. Bloom berg Barkley's performance of Green Bonds:

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According to Bloomberg New Energy Finance also, the global green bonds issue has reached US$ 305.3 billion, an increase of 13 per cent in the year 2020, that is post-covid era. Green debt instruments integrated with green capital-based instruments have become one of the emerging areas to observe (Moody's Investor Service.)

In some countries, these green bonds are being issued by the Government, like Germany, Sweden, the Republic of Chile, and some of the leading organizations like EIB and Japan Finance Organization to uplift municipalities. European Central Bank is also planning to invest in Green Bond investment for central banks with a primary goal of E.U. climate change to improve environmental conditions. Some of the banking sector corporates also started issuing green bonds at the global level, like Bank of America and some Japanese banks.

Japanese banks concentrate mainly on wind and solar energy projects. In the U.K., also their own country. In the U.S., the major issuers are I.T. firm APPLE, Real Estate firm DUKE Reality.

Issuance of Climate and Climate awareness bonds backed and issued by EIB. Hawaii issued special purpose revenue bonds to achieve a 100% renewable target by 2045.

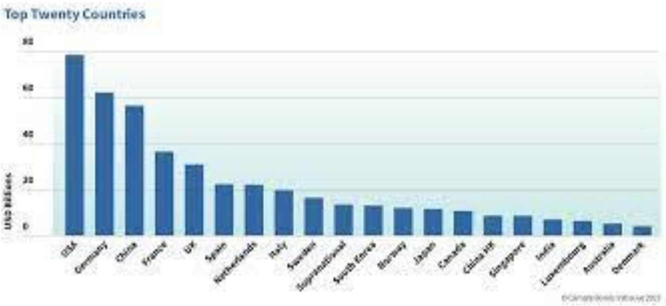
4.18 The crucial role of climate bonds:

Climate bonds conduct surveys and research, analyze the current scenario and recommend the Government and also regulators and also certifies the Global Standard Green Bond scheme. This labelling scheme ensures that the so-called green assets need social criteria. Apart from sovereign green bonds, private sector issue types are mainly non-financial corporates. In this, around 2/3rds of the bonds originated from Europe, the rest coming from APAC, North American States, and LAC; the number of countries where green loans were initiated increased to 25, proving that the instrument is becoming more popular in many countries.

4.19 Countries and Currency: Issue of Green Bonds:

Green Bonds were issued in 33 currencies. The top three currencies are EUR, with almost 50%, USD almost one quarter and CNY, 6%. $500 bn Green Issuance in the year 2021. the top 20 countries are mainly the developed nations.

Fig. 3. Top Twenty Countries issuing Green Bonds:




Source: Refinitiv Eikon, J.P. Morgan Asset Management.

Reviews of articles on Green Bonds and Green Finance have been done both nationally and internationally. Under this theory, Tripathi (2016) discussed the rules and guidelines that have been set and which still need to be adhered to. It is also stated that if followed, the financial scenario would maintain control over green environment activities and be more transparent. The governing bodies are working to improve the new standards, which will require some time to standardize the issuance of these Green Bonds. Unlike environmental and social projects, which might encourage investors to make appropriate investments, the SDG Bond Framework, which went into effect in 2018, is different.

Future research: There needs to be proper and systematic green bond management. Therefore, the market still needs to pick up in developing countries. It is picking up only in emerging and developed countries. Lack of awareness is the only impediment to the success of the Green Bonds issue. Therefore, the necessity of Government is to organize campaigns and arrange Workshops for the SME management personnel and the investors, both retail and institutional, to explain the importance of participation in protecting the country.

## 5. Conclusion:

Multilateral and natural-level financial institutions act as intermediaries for supporting the market. The local municipalities may also provide minimum guaranteed support to the local green bond debt issuing companies, especially MSMEs. The assured amount could cover the transaction costs during the issuance procedure. Awareness of the corporate should be increased; therefore, a lot of research work needs to be done to achieve this. Corporations should also be educated that such efforts would help for eco-friendly transformation. Also educated about green has become a challenge. Academicians should suggest some projects and ways of means to the SMEs regarding this and also spreading the literacy of Green bonds among existing and potential investors. Contents of environmental disclosures are also a little, which has to be created with some awareness programs. An evaluation of various rating systems for future researchers to unify the model of Green Accounting is much required. There is a need for new financial analyzed data to advance our search for the means of protecting our global and humanity-based improvement in the community. Some specific industries, like finance, real estate, and manufacturing, need to recognize climate change as a business issue.This investment helps the existing SMEs and also the budding entrepreneurs to improve their scope in initiating Environmentally friendly projects; it would motivate the potential entrepreneurs and also provide opportunities to serve society since these are socially responsible projects for community development. People with enthusiasm to prove themselves for the development of the community with their talents and skill but no funds are getting an opportunity to become a part of the parcel of successfully serving the nation. The global green bonds raising capital funds are expected to increase yearly @9.7% up to 2030.

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