



# “Green Finance”-An Effective Tool To Sustainability

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## ABSTRACT

Gone are the days when profit was the only motive of all the organizations across the globe. Nowadays, the need of protecting the environment and preserving natural resources is gaining more importance in all fields. Researchers have been conducted continuously all over the world to find innovative ways to attain the goal of sustainability. Green finance is defined as the monetary assistance provided for the projects that deal with environmental protection, mitigating the effects of climate change, investing in renewable sources of energy, increasing the green cover, and all other projects related to sustainable development. This article considers the aspects of Green Banking, Green Insurance, and Green Bonds as a part of Green Financing. It also evaluates the opportunities and challenges for Green Finance in developing countries like India with the help of existing literature and attempts to give new insight about Green Finance as an effective tool of Sustainability.

**Keywords:** Green Finance, Sustainable Development, Green Investment Product, Awareness

## 1. INTRODUCTION

The need of protecting the environment and preserving natural resources is getting more attention among all the stakeholders because of increase in the problems like ozone layer depletion, global warming, increasing pollution levels, cut-throat competition for scarce non-renewable sources of energy, and other environmental issues. Green finance intends to create a balance between nature and economics. Though there is no clear cut definition for Green finance, any monetary assistance provided for projects with the major aim of contributing to sustainability like the construction of green buildings, efficient management of energy, waste management, preservation of biodiversity, projects related to renewable sources of energy and other related projects can be termed as Green financing. Public sector investments are not sufficient to meet the requirements under these projects. Initiatives from the private sectors and cross-border investments should be encouraged to meet the rising demands. At the same time, regulatory framework

and proper policy actions are required to address the problems related to fundraising and the application of those funds.

Unfortunately, funding of renewable energy generation, energy efficiency management, and green investment products are not given priority because of limited awareness, subsidies given to fossil fuel in various countries, the bias of low returns, fear of breach of trust, and mismanagement of funds invested, and other such reasons. Finance and Environment are treated as two separate domains and no proper actions are taken to integrate this approach. The 2015 Paris agreement has considered the financial aspect as one of its three long-term goals along with others being limiting the rise of global average temperature and increasing the ability in adapting to the impacts of climate change. Measures are needed to integrate these two aspects through international agreements, policy actions, and bringing them under the proper regulatory framework. In this article, attempt has been made to evaluate the role of Green Financing as an effective tool of Sustainability and the various opportunities available and challenges that arise while integrating the approaches of Finance and Environment in India.

## 2. LITERATURE REVIEW

Literature Review being the major aspect of the research work helps in understanding the past research work carried out regarding the topic and will give the base for formulation and analysis of research problem and help us to know the scope, limitations of the past research and gives an idea about the aspects not covered by past researchers. Jeffrey D.Saches et al (2019) analyzed that the investment in renewable and energy efficiency has been declining which would threaten the expansion of green energy and concluded that to achieve the sustainable development goals, Green Financing needs to be accelerated which covers green projects, green investments, green banking, financial technologies ,etc

Sharif Mohd et al (2018) examined the role played by Green Finance as a solution to bring harmony between the environment and the economy and also discussed the various Green financial instruments available and the sustainability initiatives in India and opined that India has a great potential to create a green infrastructure needed for green finance.

Parvadavardini Soundarrajani et al (2016) described Green finance as the core part of low carbon growth connecting, financial industry, environmental improvement, and economic growth and concluded that sustainable finance is the future and Indian banks should continue to play the role of change agent with the overall emphasis on three P's of People, Planet and Profit.

Dr. Karthrin Berensmann et al (2016) discussed the role of major actors driving the development of green finance including banks, institutional investors, and international financial institutions. The researchers concluded that the extent to which the ambitious climate and sustainability goals can be achieved will largely depend on the determination with which the above-mentioned actors drive the development of green finance forward.

Dipika (2015) studied the tendency that business organizations and the stakeholders are giving more importance to environmental protection and sustainable development. The researcher concluded that Green banking helps in improving economic growth and protects the environment. Thus, green lending should be given priority as part of sustainable development.

Keerthi B.S. (2013) analyzed the recent trends, challenges, and opportunities of Green finance in India. Further, the researcher has discussed creating of Green jobs and concluded that promoting sustainable equitable agriculture and rural prosperity is needed and this can be achieved through the measures like effective credit support, related services, institutional development, and other innovative initiatives.

Tasnim Uddin Chowdhury et al (2013) discussed the role of green finance in the economic development and

sustainability and explained financing in renewable energy, agriculture, green banking, green building, etc. The researcher has concluded that investment in renewable energy and other eco-friendly projects should be enhanced.

### 3. Research objectives

- To study the various aspects of green finance that helps in attaining sustainability goals.
- To identify the types of green financing products
- To analyze the benefits and limitations of green finance

### 4. Research Methodology

The research paper is descriptive in nature. The data is collected from secondary sources collected through published sources such as reports, journals, research articles, and websites.

Meaning of Green finance: Green Finance is an effective tool through which balance between the economy and the environment can be achieved. Further, it is all about funding or providing monetary assistance for projects and programs that are aimed towards sustainable development.

Meaning of sustainable development: It involves all the efforts made to achieve harmony between the development and environmental aspects. This concept aims at protecting natural resources so that future generations will derive benefits from them.

### 5. Green finance as an effective tool to sustainability

Green financing through funding the projects which aim at achieving sustainable development helps in creating harmony between the environment, finance, and development. Thus it helps in protecting the natural resources, encourages using of renewable energy resources, and thus attempts to reduce the exploitation of the environment by the human beings. Hence it works as an effective tool to attain sustainable development goals

#### Areas covered by Green Finance

##### 5.1 Green Banking

It deals with encouraging eco-friendly practices with the help of banking activities. Green banking helps in the protection of the environment and thus contributes to the welfare of nature and the financial sector. It operates by integrating technological improvements, changing stakeholders' expectations, and operational innovations.

The Indian banks providing green banking services to their customers are State Bank of India, Punjab National Bank, Bank of Baroda, Canara Bank, ICICI Bank Ltd, DFC Bank Ltd, Kotak Mahindra Bank, IndusInd Bank, YES Bank, HSBC Group, IDBI ,etc.

The various practices used as a part of green banking are listed in the below table

Table 1: Green banking practices

Sl.no	Areas covered	Explanation
1	Online Banking	Providing banking services to the customers with the help of internet. Encourages paperless and cashless transactions.
2	Green mortgage	The mortgage provided for the purchase of a green building or for renovating the already built building to green building.
3	Green home equity loan	The Loan provided to purchase install energy-efficient equipment at home
4	Home office conversion loans	Loans to create working place at home and start home working
5	Green car loan	offers less interest rate for purchase of non to low emission vehicles
6	Green credit cards	Every time the cardholder makes the payment, a certain percentage of the amount is deducted and used for environment-friendly projects
7	Energy-efficient loans	Loans for efficient management of energy
8	Alternative fuel Vehicle and Fuelling Infrastructure loans.	Incentives and loans provided to the conversion of existing vehicles to cleaner and efficient fuels

## 5.2 Green Insurance

The Insurance industry is a member of the family of Green financial sector, and thus plays a major role in attaining sustainability goals. Although the insurance industry hasn't been involved directly in environmental degradation and has nothing to do with framing regulations regarding these issues, it works as the backbone for green financing by providing information related to risk management and significantly lowers the risk involved with its various strategies and its business of underwriting.

The Insurance Regulatory and Development Authority of India (IRDAI) recently announced that Third Party (TP) premium rates for insurance of private electric vehicles will be given at 15 percent discounted rates from FY 2019-20

Table 2: Green insurance types

Sl.no	Type of green insurance	Explanation
1	Green car insurance	The amount of insurance premium will depend on the miles travelled by car thus will reduce the unnecessary use of private vehicles and hence contributes to the environmental protection
2	Green business insurance	Incentives to the owners of the business for the renewal or reconstruction of the damaged buildings with environment friendly products.
3	Eco-friendly home insurance	Provides technological and maintenance support for the renewable energy power systems along with insurance coverage.
4	Green travel insurance	This insurance compensates for the effects of emission of carbon dioxide on the environment during travelling by donating part of the premium paid for the projects with the aim to reduce carbon emissions.
5	Green life insurance	The insurance company will donate a certain percentage of the insurance premium received for eco-friendly projects.
6	Carbon insurance	Provides insurance cover for the plantation forests against the weather-related risks.

### 5.3 Green bonds

Here the issuer of the bond promises to utilize the proceeds from the bond in the funding of energy-efficient products, reforestation, climate-related projects, and other assets or business activities aimed at the protection of the environment. A balanced approach is needed which considers the proper allocation of funds in eco-friendly projects and at the same time, it has to consider the risk and return involved with the bonds.

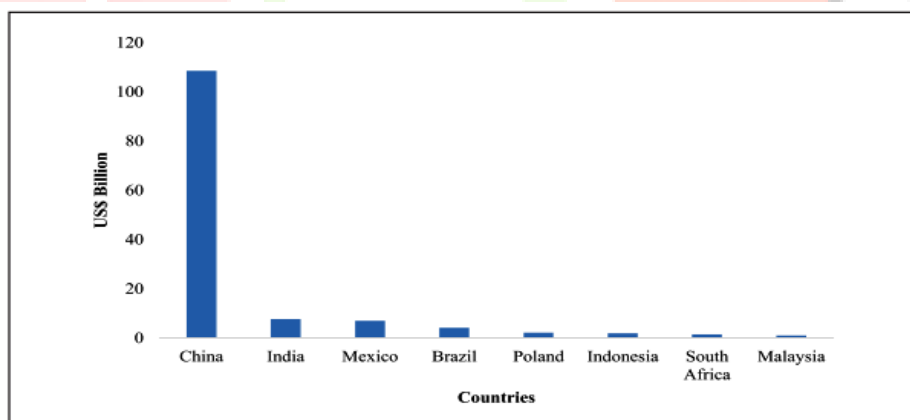
Green bonds help the issuing company or financial institution in enhancing its goodwill among the stakeholders and helps in getting access to the investor base who are determined to invest only in green investment products. At the same time, it helps those investors who want to invest in socially responsible projects and thus satisfies their urge to integrate investment and social responsibility.

Green bonds were first issued by the European Investment Bank and the World Bank in the year 2007. Later, private companies, banks, and financial institutions started issuing green bonds. Securities and Exchange Board of India (SEBI) has issued guidelines for listing and issuing of these debt securities in India. As per SEBI guidelines, the proceeds of such bonds should be invested in green projects including renewable energy, initiatives of climate change action, preserving biodiversity, reducing pollution levels, management of waste, etc.

Table 5.3: Types of green bonds

Sl.no	Type of green bond	Explanation
1	Green “Use of Proceeds” bond	Secured by assets
2	Green “Use of Proceeds” revenue bond	Secured by projects with income-producing nature
3	Green project bond	Secured by a project’s assets and liabilities
4	Green securitized bond	Secured by a large asset pool

Figure 1: Major emerging markets for Green Bonds Issuance 2012-18(US\$ Billions)



Source: Emerging Market Green Bonds Report 2018

Economic Survey 2019-20 has reported that India has emerged as the second-largest green bond market next to China with transactions amounting to \$10.3 billion in the first half of 2019.

### 6. Benefits of Green Finance

Not only the environment but also the economy will get benefits from Green finance. It helps in bringing harmony between the monetary aspect and nature. The various benefits offered are,

- 1) Efficient energy management: Various incentives are provided for installing and using renewable energy resources and funding is provided for projects aimed at reducing wastage of energy under Green financing. Thus efficient energy management can be achieved.
- 2) Environmental protection: As the major aspect of green financing is the funding of the projects aimed at

sustainable development, environmental protection is an integral part of the funding. Thus this concept will help in reducing pollution levels, adapting to climate changes, mitigating depletion of the ozone layer, preserving biodiversity, etc which are very much needed for the survival of living organisms.

3) Enhances reputation: Since the increasing number of stakeholders wants to contribute to society through their investments and thus to perform their social responsibility work they will be giving priority to the companies that work towards benefiting the environment. Even the government provides incentives for eco-friendly projects. Hence green financing will help the organizations to build and enhance their reputation in the long run.

4) Helps in attracting FDI: Concerns about the protection of the environment are rising across the globe. As a result foreign investors while investing in domestic companies will evaluate the projects taking into consideration the social cost and the benefits. Thus issuing green investment products will attract foreign direct investment to our country.

## **7. Limitations of Green finance**

1) Ambiguity regarding definition: There is no standard uniform definition for green finance. It will become difficult for investors to choose the right green projects as there is no clarity regarding the definition, which will lead to confusion, and thus it works as a barrier for investment in green projects.

2) No proper regulatory framework: There are no specific laws, rules, and regulations related to the evaluation of green projects and there exist no particular policy actions regarding green investment. This regulatory gap acts as a hurdle for the growth and development the green investment.

3) Lack of awareness: Though certain groups of people are opening up to eco-friendly investments, there exist a large number of stakeholders who are not aware of the concept of green finance itself. The lack of information and awareness will result in less capital accumulation in green investment products than required. This will lead to an imbalance in terms of demand and supply of funds.

4) Give rise to the unhealthy competition: The market participants will take unfair advantage of the growing demand for green investment products and try to maximize their market share by using the name of green projects. This will lead to unhealthy competition and ultimately ignores the concept of sustainable development, for the sake of short term economic profit.

## **8. Recommendations**

1) Creating awareness among the general public: Government, banks, financial institutions, and business organizations should come forward to create awareness about the need of protecting the environment and about the wide variety of green investment products available. Technology should be combined with finance to come up with innovative products that attract investors and at the same time contributes to the development of the environment.

2) Developing a proper regulatory framework: The proper regulatory framework is needed to evaluate the projects related to green finance and to protect the interest of the investors. The regulating authorities have to ensure that funds raised for each project are to be used for the intended purpose only.

3) Separate laws to be passed to regulate the misuse of funds: Strict laws need to be passed to punish those market participants who are taking unfair advantage of the growing demand for green projects. The law should also concentrate on the use of raised funds. In case of violation of guidelines, proper actions have to be taken.

4) Providing support to research: Initiatives to be taken to encourage research in the field of green financing which will combine the technological developments with the financial sector and thus helps in bringing out the innovative green investment products, efficient green projects, and proper policy actions needed for full development and the growth.

## 9. Conclusion

Sustainable development is the need of the day, green financing being an effective tool of sustainability is gaining more importance in the present scenario. Investors are thinking beyond risk and returns, they are becoming more and more responsible towards society. Raising awareness about the need of protecting nature and increased funding of green projects has opened a wide variety of opportunities in the area of green finance. Policymakers, researchers, environmentalists, government, investors, and financial institutions have to work together to clearly define the concept of green finance. A Proper regulatory framework has to be set to evaluate the green projects and thus to ensure that investors are not cheated in the label of green. India being a developing country should concentrate on renewable energy generation, protecting natural resources, efficient energy management, climate adoption, and other ecological issues with the help of green financing. Thus, it can be concluded that green finance if properly managed will work as an effective tool for sustainable development.

## 10. Limitations and scope for further research

The present study is based on secondary sources and had not analyzed the perception of investors about green financing. Further, the study had not conducted on primary data so future studies may consider these issues for their research.



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