

# Green Finance Initiatives to Improve Green Banking Practices in India

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## Abstract

Green finance is an innovative financial system. It is an umbrella term comprising green agriculture, green marketing, green building, green banking, green energy, and environmental friendly projects. It is an important sector of green finance. Global warming and climate change are the biggest problems throughout the world, which start to take their toll. To overcome these problems, to verify the existing business models and to learn clean development mechanisms through adopting clean development mechanism (CDM) projects, new financing models are essential. Green finance helps to protect common and green-ecological factors which intend to save and look after natural resources. Nature's resources are saved and produced through green banking practices. Green banking practices refer to environmentally sustainable banking practices, which reduce the environmental impact of financial institutions while promoting environmentally friendly activities. This article's goal is to examine green banking practices. The function and contribution of banks to environmental sustainability are also covered in this study. In the manuscript an effort has been geared up to study the objectives of the green finance related to green banking practices in our country, to analyze the green financial products and to get know the upcoming opportunity of green finance with regard to regulatory and policy frameworks for green banking. This article only focused on secondary data and focused on present and future renewable energy capacity used for this manuscript and explores ways to strengthen these frameworks to promote the growth of the green economy.

## Keywords

Eco-friendly, green finance, green banking, green entrepreneur, green gross domestic product (GDP)

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## **Green Banking Practices: Introduction**

Banking practices refer to the various methods and processes that banks use to manage their daily operations and provide services to their customers. These practices are shaped by a range of factors, including regulations, market conditions, technological advancements, and customer needs. Green banking refers to the practice of incorporating environmental and sustainability considerations into the operations, products, and services of a bank. This can include implementing green practices such as reducing energy consumption, promoting renewable energy, and reducing paper usage. Green banking is becoming increasingly popular among banks due to several benefits, including improving the bank's environmental performance. Green banking is a proactive method of reducing one's carbon footprint and protecting the natural environment. The primary advantage of using a "green banking" strategy is that it helps to preserve the natural world. Customers may complete their numerous financial activities using electronic methods such as automated teller machines, mobile banking, internet banking, and so on under green banking, which prioritizes the elimination of paperwork to the greatest extent possible. The use of electronic transactions not only contributes to the goal of preserving the environment but also makes business more convenient for both clients and financial institutions. If there is less paperwork, there will be less need to chop down trees (Lalon, 2015). Banks should adopt environmental criteria of lending in order to enhance the quality of their assets and facilitate the implementation of environmentally friendly business practices (Meena, 2013). The environmental performance of the bank's customers is also significantly impacted by this action of the bank, which has a very substantial impact. This is a brand-new concept that has just been introduced in Sri Lanka. Green banking may be a deserving subject to investigate in order to enhance the quality of services offered by the banking industry in Sri Lanka throughout the course of the longer term.

## **Statement of the Problem**

The traditional banking sector has a significant impact on the environment and sustainability due to its heavy reliance on paper-based transactions, energy-intensive operations, and financing of unsustainable projects (Lalon, 2015). As a result, there is a growing concern among stakeholders about the negative environmental and social impacts of the banking industry, and the need for banks to adopt more sustainable practices. Green banking is a concept that aims to promote sustainability in the banking sector by encouraging financial institutions to adopt environmentally friendly practices in their operations and investments. However, despite the growing importance of green banking, there are several challenges that need to be addressed.

## Review of Literature

Green Banking definition “Green bank is reminiscent of a common bank which regards all the common and ecological aspect with intend to guard the surroundings and preserve natural resources,” by Indian Banks Association. Indian green banking; it means traditional banking sectors which can help a lot in attaining various sustainable development goals. Green banking covers all the social, environmental, and ecological factors, green banking works in two categories, first one is internal activities such as, to create awareness for the general people the second one involves external activities covering business people, stakeholders (clients subsidiaries), and general public.

RBI and India’s government should implement rules and financial support. The banking industry survived conversely relative to the global warming level (2012). Central banks should screen guide banks if they were performing green banking or not. So banks had to take part and donate to green banking operations in those days’ extremely domestic and international banking challenges. It was said that for stable development banking and the financial sector were important according to India’s banks. It was an essential of the hour to consider the continuous development of the country (Sudhalakshmi & Chinnadorai, 2014). India had excellent prospects to build a green framework required for funding by mastering the hurdles and developing consciousness in the mid of the concerted people (Goel, 2016). The main prominence was on Micro, Small & Medium Enterprises (MSME), because of their excellent position in our economy and in bright and huge potential for combining funds for strengthening the going green pathway (Sharma & Lodhi, 2015). Green banking could be a direction to decrease tainting, rescue the environment, and help supportable economic development. So for livable banking services, India’s banks must support green banking (2016). This study focuses on improving operations and technology and protecting the environment. Through the digitization of the banking process, green banking gives many benefits to the common people also (Dayananda, 2020). The Covid-19 outbreak has additional improvements in attention to green finance for the green economy for creating healthy living circumstances. The author put a causal relationship between green finance and the green economy in the relationship through changes in lifestyle in society. This study indicates the role and contributions of banks towards the welfare of the society in terms of carbon-free world, by reducing carbon emissions to become a greener world (Mir & Bhat, 2022). It is the best way of profitable and conservation progress for adopting sustainable development goals new technological business model practices is reduced carbon-footprint (Bhatnagar et al., 2022). Green finances are of green securities, green investments, climate finance, carbon finance, green insurance, and green credit (Akomea-Frimpong et al., 2022).

## Research Methodology

This paper is constructed on secondary data which are available in various sources web/portals and published information by NABARD, SIDBI, STATA, YES bank, and Exim Bank. These banks followed various green activities. UNICC, World Bank, Ministry of New and Renewable Energy (MNRE), Budget: pollution control in focus, environment ministry, economic survey, climate change, renewable energy industry in India, other banks websites, journals, magazines and media reports, etc., available secondary data were extensively used for the study. This secondary data is to find various aspects in this manuscript's past, present, and future schedule. In this manuscript, an effort has been made to study the objectives of the green finance related to green banking practices to analyze the green financial products and to get to know the future opportunities of green finance. In this research paper, the researcher has framed two models green banking initiatives in India and green banking ratings in India.

## Research Objectives

In this manuscript, an effort has been made to study the objectives of the green finance related to green banking practices:

- To study the concept of green banking
- To analyze the green banking practices
- To analyze the green financial products

In this research paper, the researcher has framed two models green banking initiatives in India and on green banking ratings in India.

## Green Financial Services and Products in India

Despite the fact that the majority of people do not consider the banking industry to be a polluting one, the size of current banking operations has significantly increased the carbon footprint of banks as a result of their extensive use of energy, excessive use of paper, lack of green buildings, and other factors. As a result, banks implement technology, procedures, and goods that significantly reduce their carbon footprint (Satheesh Kumar, 2017). There are several ways to do this, such as using online banking instead of branch banking, paying bills electronically instead of by mail, creating debit card pins at ATMs instead of via mail, etc. In addition to giving clients possibilities, green banking helps address a number of environmental issues, such as global warming, deforestation, poor air quality, and biodiversity loss (Lalon, 2015).

Green remit cards are prepaid cards issued by banks in India to facilitate environmentally friendly transactions. These cards were introduced by the RBI in

2013, as part of its efforts to promote a “greener” economy. The main purpose of the green remit cards is to encourage people to use electronic modes of payment instead of cash, which can be harmful to the environment due to the large amounts of paper used in printing currency. By promoting the use of prepaid cards, the RBI hopes to reduce the usage of cash and thereby reduce the environmental impact. Green remit cards can be used to make various types of transactions, such as remittances, money transfers, and bill payments (Meena, 2013). These cards are usually available at no cost or at a nominal fee and can be reloaded with funds as and when required. Overall, green remit cards are an innovative way of promoting sustainable development and reducing the carbon footprint associated with traditional cash-based transactions.

- “Green channel counters” typically refer to designated counters at airports or other border entry points that are meant for expedited processing of travelers who meet certain criteria. The purpose of the green channel is to enable quick processing for low-risk travelers who are not carrying any dutiable or restricted items. In many countries, the green channel counters are typically reserved for passengers who are carrying only cabin baggage, have nothing to declare to customs authorities, and are not in need of any additional checks by immigration or security officials. In some cases, certain categories of travelers such as frequent flyers, senior citizens, or those with special needs may also be eligible to use the green channel. The use of green channel counters can help to speed up the processing time for eligible passengers, reduce queues at immigration and customs checkpoints, and improve the overall passenger experience. However, it is important for travelers to carefully review the eligibility criteria for the green channel and ensure that they comply with all the relevant requirements before using the expedited processing lane.
- Green PINs are a type of PIN (Personal Identification Number) used in banking to activate or generate a new debit or credit card PIN. Green PINs are typically generated through a self-service process at the bank’s ATM or mobile app, where the customer can select a new PIN and then confirm it. The term “Green” in green PINs refers to the environmentally friendly aspect of the process, as it eliminates the need for a physical PIN mailer or printed receipt. Green PINs are considered a more secure way of generating a new PIN as the PIN is selected by the customer, and it is not sent through mail or email, which reduces the risk of interception by fraudsters. Additionally, it allows for a faster and more convenient PIN generation process, as the customer can complete the process at their own convenience. It is worth noting that green PINs are specific to each bank and may have different requirements or procedures. Therefore, customers should check with their respective banks for specific details on how to generate or activate their green PIN.
- Green bond issuance refers to the process of issuing bonds with proceeds designated for environmentally friendly or sustainable projects. These

bonds are typically issued by governments, corporations, or other organizations that want to finance plans that contain a positive effect on the surroundings. The starting point for green bonds is typically exercised to support projects such as renewable energy development, energy efficiency improvements, sustainable water management, and other projects that have a positive environmental impact (Raj & Rajan, 2017). By issuing green bonds, organizations can attract investors who are interested in supporting environmentally responsible projects while also generating funding for these initiatives. Green bonds have become increasingly popular in recent years as concerns about climate change and environmental sustainability have grown. The total value of green bond issuance has increased dramatically, from just \$3 billion in 2012 to over \$270 billion in 2020, according to the climate bonds initiative. One of the specific features of green bonds is the use of proceeds. To ensure that the funds are being used for their intended purpose, green bonds are typically certified by independent organizations that verify the environmental impact of the projects being funded. This certification of process helps to build investor confidence in the green bond market and ensures that the funds are being used to promote sustainability. Overall, green bond issuance provides a way for organizations to fund environmentally responsible projects while also attracting investors who are interested in supporting sustainable initiatives.

- Green mortgages: This facility assists the individual client who is ready to acquire new energy-efficient houses to receive a green loan with a lesser interest rate than the bazaar rate. The market rate is the standard rate. They are also able to make investments in appliances that are more energy efficient thanks to this resource.
- Green home loans: The equity of a lesser rate in home loans, also known as second mortgages, may assist in stimulating families to install domestic renewable energy (power or thermal) technology. These loans can also be referred to as green home equity loans.
- Loans for environmentally friendly commercial construction: protecting the environment is whole responsibility of all persons, together with businesses. Eye-catching financing plans and arrangement options begin to become available for green business development, which is distinguished from conventional architecture in terms of its poorer energy consumption, fewer ravage production, and lower pollution levels.
- Green car loans: With an interest rate that is minimum in comparison with the market average, many green car loans encourage consumers to buy vehicles that have a high level of fuel economy.
- Green cards: Debit and credit cards that are related to environmental activities are part of a large family of environmentally friendly goods. The owners of these green credit cards, which are provided by major credit card issuers, are eligible to have contributions made to nonprofit organizations equivalent to about one-half of 1% of any buying, balance transmit, or money proceed that is done using their cards.

- Financing green projects: Now, some of financial institutions are prepared to take on extensive sustainable energy projects. In order to do this, they will need to establish service divisions in order to provide assistance to businesses that are developing extensive sustainable energy systems.
- Green securities: A number of different approaches to ecological securitization start to develop in recent years. Some examples of these approaches include the woods bond, the securitization of eco point programmed, and green collateralized mortgage obligations.
- Environmentally responsible private equity and venture capital we may see that a significant amount of attention is devoted to environmental concerns throughout the processes of raising money via the capital market.
- The Green Index: Several financial institutions have recently devised an index that varies according to the possibilities and problems that the environment may face in the future.

## Present Status of Green Finance in India

- In order to operate renewable energy resources, environment sustainability has improved the scope for investment in green projects. This has been a key issue on a worldwide level. So many financial agencies look forward to these green projects and are ready to support them. From these financial institutions and banks, the investors will get the benefits.
- In 2007, the Prime Minister of India constituted a council on climate change and reconstructed it in the year 2014 for version and also improvement of environmental change.
- It hurls various programs such as National Action Plan on Climate Change (NAPCC), Jawaharlal Nehru National Solar Mission (JNNSM), National Water Mission (NWM), National Mission for Climate Change (NMCC), and National Clean Energy Fund (NCEF). Further programs are of auto fuel vision and policy 2025, expert groups on low carbon strategies, etc. In the year 2015, the green climate fund set up under the framework of the United Nations Framework Convention on Climate Change (UNFCCC) has accepted NABARD as the National Implementing Entity (NIE) to finance clean energy projects in our country.

The scope of green financial products has been increased by government strategies and creativities. They are as follows:

- India would have generated 10 percentage of its energy from renewable energy resources within 2015 and 15 percentage within 2020 of our country's connected energy production volume of 2,55,012.79 which was suggested by India's NAPCC. Renewable energy had a share of 12.42% or 31.692.14 MW which showed that there was a vast range of investment of amount in that section.

- The Ministry of New and Renewable Energy studied its target for a power limit of 1,75,000 MW infinitesimal hydro. The changed plans appeal for huge funding. As the allowed funds would not be enough, MNRE had called on the common and private division fiscal organizations such as power finance corporation, rural electrification corporation, and Indian Renewable Energy Development Agency.
- The use of renewable energy resources in Indian railways has been also planned. It comprises the help of compressed natural gas in functioning, the location of hydro reprocessing plants, and the utilization of solar power to enhance trains, stations, buildings, and platforms. To reduce the noise level of trains, the government has a proposal to modify the design of trains.
- Further techniques on the part of the government include its policies for making solar armed forces, given that undertaking funds to determine solar power production plans and creation of a solar park tallying of 20,000 MW within five years.

#### Future schedule of green finance in India

- It is essential to develop India's green economy to a total amount of \$80 billion until 2024, growing more than threefold to \$250 billion during 2023–30, according to the economic survey 2019.
- The funding estimates that have been completed at existing prices arrive at a moment when our country has become one of the two mending creators internationally with determined capability development plans. India has a connected resumption power capacity of 80 GW and is consecutively the world's leading resumption power programmer by tactics to reach 175 GW by 2023 and 500 GW by 2030, as a component of its climate commitment.

The Government of India has allocated a total of 175 GW toward renewable energy capacity which includes four different sources among them solar power is targeted at the highest of 100 GW and small hydropower is targeted at the least of 5 GW. This Table 1 shows GW Renewable Energy Capacity by 2022 in India.

- India sets a goal of attaining 40% of its full amount of electricity production from nonfossil energy sources by 2030, as confirmed in its envisioned Nationally Determined Contributions (NDC) declaration in the Paris

**Table 1.** GW Renewable Energy Capacity by 2022 in India.

No of Items	Items	175 GW
1	Comprising from solar power	100 GW
2	Wind power	60 GW
3	Bio-energy	10 GW
4	Small hydropower	5 GW

**Source:** unfccc.int

Agreement. Within the year 2027, 57% of the entire power capacity will be from renewable sources which is a plan by central electricity authority projects. For as within 2027, our nation target to get a renewable power connected supremacy of 275 GW, in addition to 72 GW of hydro-energy, 15 GW of nuclear energy, and almost 100 GW of solar energy.

- RBI gives a report on constructing the green bond market funding amounting to as much as 6% of its gross domestic product (GDP). Many organizations have valued the whole financing needs for our country ranging from \$44 billion to 170 billion per year until 2030 to have net zero emissions by 2070.
- The government decides to spend 11 lakh crore till 2030 for every year. The industry exports believe that India will work actively to increase its contribution to green finance even though India faces many natural calamities.

## Conclusion

Banks may enhance their environmental performance, contribute to the mitigation of climate change, and attract clients who are environmentally sensitive if they implement “green banking” methods. The purpose of this study is to evaluate the performance of nationalized banks by assessing the degree of green practices through consumer awareness and perceptions of green banking. It has been discovered that banks do in fact apply the green idea; however, the majority of consumers merely know about it and do not follow it when it comes to implementation. Many people are under the notion that environmentally responsible banking helps them save money. But, it would be wonderful if people understood that the real cost is to their lives rather than their lifestyles, and banks should encourage customers to have this realization. Not just the banking industry but also the general population as a whole has to realize how severe the problem is and step up to the challenge at the appropriate moment.

Therefore, the Reserve Bank of India and our government should accept green banking business forms, green banking policy, and proper eco-friendly exercise programs to adopt the green entrepreneur for future improvement on green finance growth in India. Green banking policy, awareness to existing business people, new business organizations, and general people, and proper eco-friendly exercise programmers have to be adopted by green entrepreneurs for future improvement on green finance growth in India.

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