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Analysis of Green Financing Incentives in Indian Banking Sector from Banks' Viewpoint

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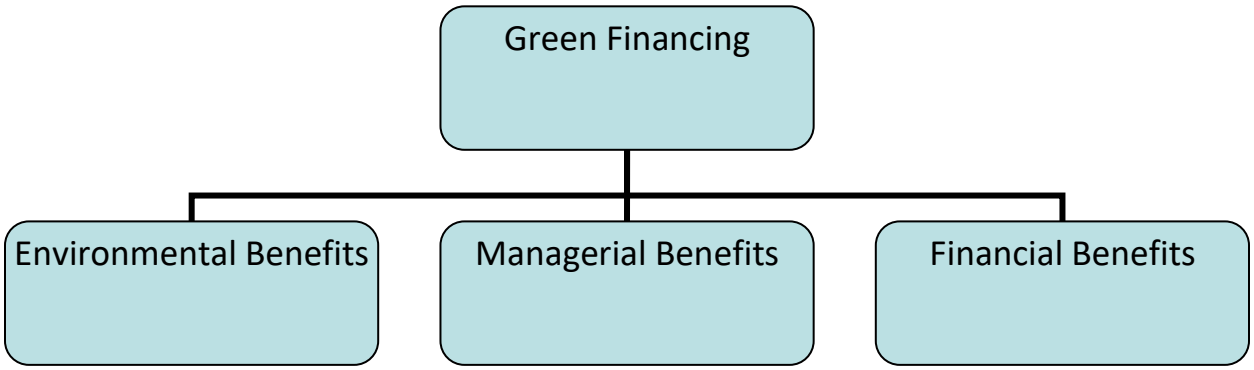
Abstract
The phrase "green finance" has gained popularity in recent years. Business Week reported in 2007 that sustainable mutual fund investment had increased fifteen folds. Energy efficiency is becoming increasingly important in investment decisions. Throughout the 1980s and 1990s, investments were primarily focused on commercially viable ventures. However, we now live in a time when the emphasis is firmly on environmentally friendly initiatives. Many businesses are turning to green financing to ensure their long-term survival. As a result, several businesses have already begun to fund their operations with environmentally friendly resources. Corporations must now comply with the new green finance requirements and rules or risk falling behind. To ensure long-term sustainability, countries such as India should combine economic growth with environmental improvements.
Green finance is an innovative financial system. It refers to green agriculture, green marketing, green building, green banking, green energy, and eco-friendly projects. It is a significant aspect of green finance. Global warming and climate change are the most serious issues facing the world today, and they are beginning to have an impact. To address these issues, new financing models are required to validate existing business models and learn clean development mechanisms through the implementation of clean development mechanism (CDM) projects. Green finance contributes to the protection of common and green-ecological factors aimed at saving and conserving natural resources. Green baking practices help to conserve and produce natural resources. Green banking practices are environmentally sustainable banking practices that reduce the environmental impact of financial institutions while encouraging environmentally friendly behaviour. This article's purpose is to investigate green banking practices. This study also looks at how banks function and contribute to environmental sustainability. The manuscript attempts to study the objectives of green finance in relation to green banking practices in our country, to analyse green financial products, and to learn about the upcoming opportunities of green finance in terms of regulatory and policy frameworks for green banking. This article only used secondary data and focused on current and future renewable energy capacity for this manuscript, and it investigates ways to strengthen these frameworks to promote the growth of the green economy.

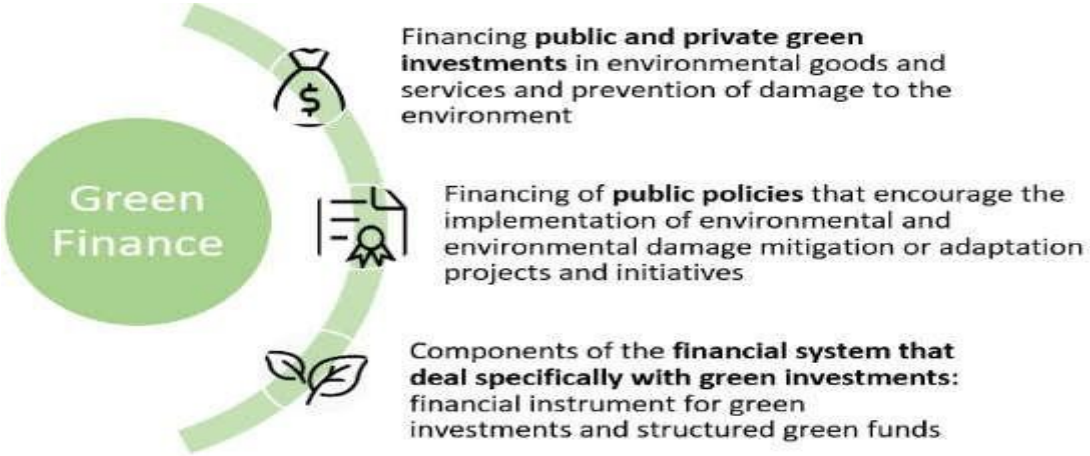
Keywords: Green Finance Customers, Investments, Green Financing, and Green Banking, environmentally friendly, green finance, green banking, green entrepreneur, green GDP.

Green Financing Introduction

Every business must go through a transition to survive. Businesses and organisations have used a variety of strategies to keep up with the rapid pace of change. Some of the unintended consequences of this change have been detrimental to the environment. Natural resources are being harmed by both banks and other corporations. Bank isn't causing much direct environmental damage. The fact that the banks' internal operations do not contribute to pollution is widely recognised. Banks are associated with environmental damage due to their ties to various industries, such as those that manufacture paper, steel, chemicals, cement, power, fertilisers, and textiles. As a bank, we offer a variety of financing options to these companies. To be more environmentally friendly, all banks are now implementing green banking practices.



Green finance' entire business strategy is based on environmentally friendly practices, from the employees to the products and services they offer and the infrastructure they use. There are numerous approaches to implementing 'green financing,' but they all have one goal in common: to educate people on the importance of environmental preservation. As a result, a bank can maintain environmental stewardship. Banks commonly use environmentally friendly electronic equipment to promote green practices. A reduction in carbon emissions would be a direct result.



Green finance differ from traditional banks in several ways, including an emphasis on environmental sustainability. Traditional banks care less about the environment than green banks do. The company aims to conduct business in an environmentally and socially responsible manner. When applying for a loan, they review every aspect of the application. You can only receive a loan if the project you're working on is environmentally friendly. Here are some examples of green banking:

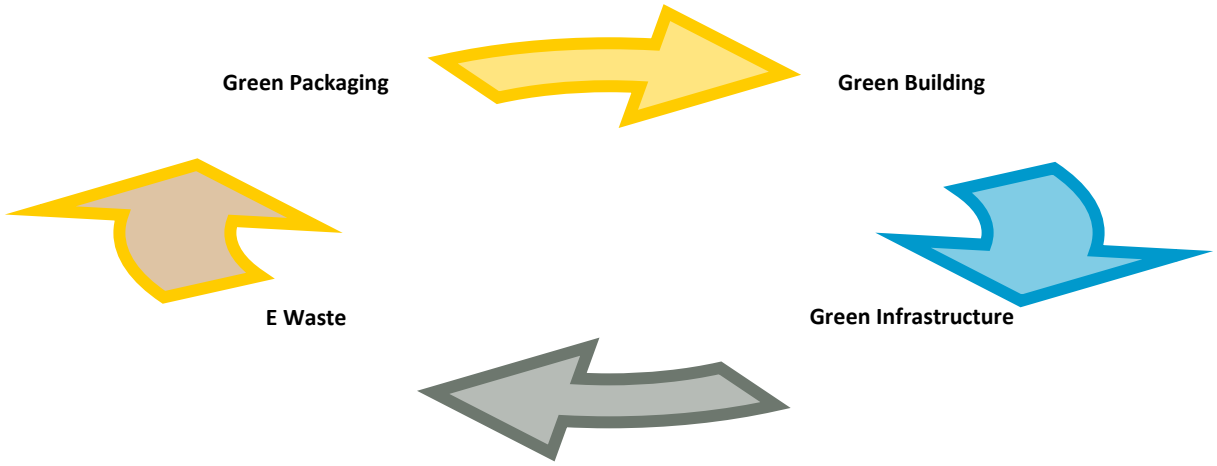
1. Online bill payment is a convenient way to manage business.
2. Online banking is gaining popularity over traditional branch banking.
3. Opening bank accounts through online institutions.

Green financing will help consumers reduce their carbon footprint. Paper conservation is good for both the environment and the customer. Customers and institutions alike should participate in a successful green banking initiative. Online banking is the clearest example of this. Green banking is made possible by combining technological advancements and operational enhancements.

Green Banking Practices: Introduction

Banking practices are the various methods and processes that banks use to run their daily operations and provide services to their customers. Regulations, market conditions, technological advancements, and customer needs all have an impact on these practices. Green banking is the practice of incorporating environmental and sustainable

considerations into a bank's operations, products, and services. This can include implementing green practices such as lowering energy consumption, promoting renewable energy, and reducing paper consumption. Green banking is gaining popularity among banks due to a variety of benefits, including improved environmental performance. Green banking is a proactive approach to lowering one's carbon footprint and protecting the natural environment. The primary benefit of implementing a "green banking" strategy is that it contributes to the preservation of the natural world. Customers can conduct their various financial transactions using electronic methods such as automated teller machines, mobile banking, internet banking, and so on under green banking, which prioritises the elimination of paperwork to the greatest extent possible. Electronic transactions not only help to preserve the environment, but they also make doing business easier for both clients and financial institutions. Less paperwork means less need to cut down trees (Lalon, 2015). Banks should adopt environmental lending criteria to improve asset quality and make it easier to implement environmentally friendly business practices (Meena, 2013). This action by the bank has a significant impact on the environmental performance of its customers. This is a brand-new concept that has recently been introduced in Sri Lanka. Green banking may be a worthwhile subject to investigate to improve the quality of services provided by Sri Lanka's banking industry in the long run.



Problem Statement

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

Literature Review

Research indicates a link between financial success and environmental success. The environment may have a negative impact on a bank's rate of return and asset quality. As a result, banks should go green and make loans that consider the environment and ecology. Furthermore, implementing green banking practices would improve operational efficiency while also benefiting the environment. However, Indian banks and other financial organisations have made little effort in this direction. In terms of the environment, Indian banks are not taking significant steps in the right direction. Green banking has been adopted by some Indian banks, which provide funding for green banking initiatives. Clients and bank employees are also unaware of the benefits of

environmentally friendly banking (Verma M. K., 2012). It was discovered in "Green Banking: An Innovative Approach to Sustainable Development," by Dharwal, Mridul, and Agrwal, Ankur. In terms of green banking, Indian banks lag behind those in wealthy countries.

Green Banking Definition "Green bank is reminiscent of a common bank which regards all the common and ecological aspect with intend to guard the surround- ings and preserve natural resources," the association of Indian banks stated. Indian green banking refers to traditional banking sectors that can help a lot in achieving various sustainable development goals. Green banking encompasses all social, environmental, and ecological factors. Green banking operates in two categories: internal activities, such as raising general awareness, and external activities, which include business people, stakeholders (clients, subsidiaries, and the general public).

The Reserve Bank of India and the Indian government should put in place rules and financial support. In contrast to global warming (2012), the banking industry survived. Central banks should screen guide banks to see if they are practicing green banking or not. As a result of the severe domestic and international banking challenges of the time, banks were forced to participate in and donate to green banking operations. According to Indian banks, banking and the financial sector are critical for long-term development. It was critical to consider the country's ongoing development (Sudhalakshmi and Chinnadorai, 2014). India had excellent prospects for developing the green framework required for funding by overcoming obstacles and raising awareness among the concerted people (Goel, 2016). The main emphasis was on Micro, Small, and Medium Enterprises (MSME) because of their excellent position in our economy and the enormous potential for combining funds to strengthen the going green pathway (Sharma & Lodhi, 2015). Green banking could be a way to reduce pollution, protect the environment, and promote sustainable economic development. To provide livable banking services, India's banks must support green banking (2016). This research focusses on operational and technological improvements, as well as environmental protection. Green banking provides numerous benefits to the general public by digitising the banking process (Dayananda, 2020). The Covid-19 outbreak has resulted in increased focus on green finance for the green economy and the creation of healthy living conditions. The author proposed a causal relationship between green finance and the green economy based on societal lifestyle changes. This study highlights the role and contributions of banks to societal welfare in terms of a carbon-free world, reducing carbon emissions to create a greener world (Mir & Bhat, 2022). Reduced carbon footprint is the most profitable and conservation-friendly way to achieve sustainable development goals through new technological business model practices (Bhatnagar et al., 2022). Green financing includes green securities, green investments, climate finance, carbon finance, green insurance, and green credit (Akomea-Frimpong et al., 2022).

Due to growing concern about climate change, the State Bank of India, the country's largest financial institution by deposits, has taken immediate action to reduce emissions while also educating customers about the benefits (Sharma, N., 2011).

Other banks may learn from it by installing 10,000 new ATMs equipped with environmentally and power-friendly technology, setting a precedent. Despite their popularity with ATMs, various types of electronic banking have yet to gain mainstream acceptance (Joshua A J & Koshy M P 2011). To learn more about a job in e-banking, simply do some research. When compared to other e-banking platforms, ATM has the highest customer satisfaction rating (CSR) and the most users (Komal D. and Rani V. 2012).

Research Methodology

This paper is prepared 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, maga- zines 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

Objectives Of The Study

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

1. To study the concept of green financing
2. To analyze the green financing practices
3. To analyze the green financial products

Green Financial Services And Products In India

Even though the majority of people do not consider the banking industry to be polluting, the size of current banking operations has significantly increased banks' carbon footprints due to their extensive use of energy, excessive use of paper, lack of green buildings, and other factors. As a result, banks use technology, procedures, and goods to significantly reduce their carbon footprint (Satheesh Kumar, 2017). There are several ways to accomplish this, including using online banking instead of branch banking, paying bills electronically rather than by mail, creating debit card pins at ATMs rather than mailing them, and so on. Green banking not only provides clients with options, but it also helps to address several environmental issues such as global warming, deforestation, poor air quality, and biodiversity loss.

Green remit cards are prepaid cards issued by Indian banks to promote environmentally friendly transactions. The RBI introduced these cards in 2013, as part of its push for a "greener" economy. The primary goal of green remit cards is to encourage people to use electronic payment methods rather than cash, which can be harmful to the environment due to the large amount of paper used in printing currency. By encouraging the use of prepaid cards, the RBI hopes to reduce the use of cash and thus the environmental impact. Green remit cards can be used for a variety of transactions, including remittances, money transfers, and bill payments (Meena, 2013). These cards are usually free or cost a small fee, and they can be reloaded with funds as needed. Overall, green remit cards are an innovative way to promote sustainable development while lowering the carbon footprint associated with traditional cash-based transactions.

• "Green channel counters" are designated counters at airports or border entry points that expedite processing for travellers who meet specific criteria. The green channel is intended to facilitate quick processing for low-risk travellers who do not carry any dutiable or restricted items. In many countries, green channel counters are typically reserved for passengers who are carrying only cabin baggage, have nothing to declare to customs authorities, and do not require any additional checks by immigration or security personnel. Certain types of travellers, such as frequent flyers, senior citizens, and those with special needs, may also be eligible to use the green channel. The use of green channel counters can help to shorten processing times for eligible passengers, reduce queues at immigration and customs checkpoints, and improve the overall passenger experience. However, before using the expedited processing lane, travellers should carefully review the eligibility criteria for the green channel and ensure that they meet all the necessary requirements.

• Green PINs (Personal Identification Numbers) are used in banking to activate or generate new debit or credit card PINs. Green PINs are typically generated through a self-service process at the bank's ATM or mobile app, where the customer selects and confirms a new PIN. The term "Green" in green PINs refers to how environmentally friendly the process is by eliminating the need for a physical PIN mailer or printed receipt. Green PINs are considered a more secure method of generating a new PIN because the PIN is chosen by the customer and is not sent via mail or email, reducing the risk of interception by fraudsters. Furthermore, it allows for a faster and more convenient PIN generation process because the customer can complete it at their own pace. It is important to note that green PINs are unique to each bank and may have different requirements or procedures. Customers should check with their banks for specific instructions on how to generate or activate their green PIN.

• Green bond issuance is the process of issuing bonds to fund environmentally friendly or sustainable projects. These Bonds are typically issued by governments, corporations, or other organisations seeking to fund environmentally friendly projects. Green bonds are typically used to fund projects such as renewable energy development, energy efficiency improvements, sustainable water management, and other environmentally friendly projects (Raj & Rajan,

2017). By issuing green bonds, organisations can attract investors interested in supporting environmentally responsible projects while also raising funds for these initiatives. Green bonds have grown in popularity in recent years as people become more concerned about climate change and environmental sustainability. The total value of green bond issuance has significantly increased, from just $3 billion in 2012 to over. The climate bonds initiative predicts $270 billion in 2020. One of the distinguishing characteristics of green bonds is the use of proceeds. To ensure that funds are used for their intended purpose, green bonds are typically certified by independent organisations that assess the environmental impact of the projects being funded. This certification of the process contributes to investor confidence in the green bond market and ensures that funds are used to promote sustainability. Overall, green bond issuance allows organisations to fund environmentally responsible projects while also attracting investors interested in promoting sustainable initiatives.

• Green mortgages offer lower interest rates for clients looking to purchase energy-efficient homes. The market rate is the standard rate. They can also invest in energy-efficient appliances thanks to this resource.

• Green home loans: Lower interest rates in second mortgages can encourage families to install renewable energy (power or thermal) technology. These loans are also known as "green home equity loans."

• Loans for environmentally friendly commercial construction: protecting the environment is the responsibility of all individuals, including businesses. Eye-catching financing plans and arrangement options are becoming available for green business development, which differs from traditional architecture in terms of lower energy consumption, less waste production, and lower pollution levels.

• Green car loans offer lower interest rates than the market average, encouraging consumers to purchase fuel-efficient vehicles.

• Green cards: Environmentally friendly debit and credit cards are part of a larger eco-friendly product category. The owners of these green credit cards, which are provided by major credit card issuers, are eligible to have contributions made to nonprofit organisations equal to approximately one-half of one percent of any purchase, balance transfer, or money transaction made with their cards.

• Financing green projects: Some financial institutions are now willing to fund large-scale sustainable energy projects. To accomplish this, they will need to set up service divisions to assist businesses developing large-scale sustainable energy systems.

• Recently it have been seen the development of various eco-friendly securitisation strategies. Examples of these approaches include the woods bond, the securitisation of eco-point programs, and green collateralised mortgage obligations.

Green Finance In India

Environmental sustainability has led to increased investment in green energy projects. This has been a major issue on a global scale. Many financial institutions eagerly await and are prepared to support these green projects. Investors will benefit from the financial institutions and banks listed here.

• In 2007, India's Prime Minister established a climate change council, which was reconstructed in 2014 to address and improve environmental issues.

• Programs include NAPCC, JNNSM, NWM, NMCC, and NCEF. Additional programs include the 2025 Auto Fuel Vision and Policy, expert groups on low-carbon strategies, and so on. In 2015, the green climate fund established under the framework of the United Nations Framework Convention on Climate Change (UNFCCC) designated 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:

According to India's NAPCC, renewable energy would account for 10% of the country's energy production volume in 2015 and 15% by 2020. Renewable energy accounted for 12.42% (31.692.14 MW), indicating significant investment in the sector.

• The Ministry of New and Renewable Energy evaluated a target of 1,75,000 MW of infinitesimal hydropower. The revised plans call for massive funding. MNRE requested assistance from common and private division fiscal

organisations, including power finance corporation, rural electrification corporation, and Indian Renewable Energy Development Agency, due to insufficient funds. The use of renewable energy resources in Indian railways is also planned. It includes the use of compressed natural gas for operation, the location of hydro reprocessing plants, and the use of solar power to improve trains, stations, buildings, and platforms. The government proposes redesigning trains to reduce noise levels. Further government strategies include policies for creating solar armed forces, as well as funding to determine solar power production plans and the construction of a 20,000-MW solar park within five years.

The Indian government has allocated a total of 175 GW to renewable energy capacity, which includes four different sources. Solar power is targeted at 100 GW, while small hydropower is targeted at 5 GW. Table 1 shows India's GW renewable energy capacity by 2022.

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

Source: unfccc.int

Agreement. The central electricity authority plans to generate 57% of total power capacity from renewable sources by 2027. For example, by 2027, our country hopes to have a renewable energy dominance of 275 GW, in addition to 72 GW of hydropower, 15 GW of nuclear energy, and nearly 100 GW of solar power.

• The RBI reports on constructing green bond market funding worth up to 6% of GDP. Many organisations have estimated that our country will require $44 billion to $170 billion in annual financing until 2030 to achieve net zero emissions by 2070.

•The government has decided to spend 11 lakh crore annually until 2030. Despite the fact that India faces numerous natural disasters, industry exporters believe that India will actively work to increase its contribution to green finance.

Conclusion

Implementing “green financing” methods can help banks improve their environmental performance, contribute to climate change mitigation, and attract environmentally conscious customers. The goal of this study is to evaluate the performance of nationalised banks by assessing the level of green practices based on consumer awareness and perceptions of green financing. It has been discovered that banks do use the green idea; however, the majority of consumers are only aware of it and do not follow through on its implementation. Many people believe that environmentally responsible banking helps them save money. However, it would be wonderful if people understood that the true cost is to their lives, not their lifestyles, and banks should encourage customers to realise this. The banking industry, as well as the general public, must recognise the gravity of the situation and rise to the occasion.

As a result, the Reserve Bank of India and our government should accept green banking business forms, green banking policies, and proper eco-friendly exercise programs to encourage green entrepreneurs for future green finance growth in India. Green banking policy, awareness to existing business people, new business organisations, and general people, and proper eco-friendly exercise programmes must be adopted by green entrepreneurs for the future improvement of green finance growth in India.

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