

## GREEN AND SUSTAINABLE DEVELOPMENT PRACTICES OF BANKS IN INDIA

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### ABSTRACT

*"Green banking" is when banks consider all the social and environmental factors for the purpose of sustainable development of society. With the rising concern for environmental sustainability, the concept of green banking is becoming popular. Therefore, this study aims to identify the need for green banking and various initiatives taken by Indian banks toward green banking. Moreover, the study also identifies the green banking products offered by banks in India and the challenges faced by them. To accomplish the study's purpose, data is collected from various secondary sources like HDFC's Environment Integrate Report, ICICI Bank's ESG Report, SBI's Sustainability Report, and published books, magazines, and newspapers. The study's findings show that green banking has helped reduce carbon footprints by adopting digitalization and reducing paperwork. Moreover, the HDFC and ICICI banks, as the top banks in India, have helped reduce carbon emissions by financing energy efficiency projects. In the end, it is concluded that the excessive use of natural resources negatively impacts the environment; hence various organizations are taking measures to curb this. The Indian banking sector has also adopted various green initiatives like online banking, mobile banking, green mortgage, green building loans, and many more to reduce carbon emissions. In addition, it helps to conserve the environment by planting more trees and using renewable energy.*

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**Keywords:** Mobile Banking, Green Banking, Carbon Footprint, Digitalization, Sustainable Development.

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### Introduction

***"Earth provides enough to satisfy every man's needs, but not every man's greed."***  
**Mahatma Gandhi**

With the rising concern for the environment, every sector is taking the initiative to move towards sustainability by adopting measures that can preserve natural resources and reduce the carbon footprint (Bouterra & Hisham, 2020; Taneja & Ali, 2021). Customers nowadays are also becoming socially responsible and support companies that fulfil their corporate social responsibilities and adopt sustainable practices. The Indian banking sector, which provides employment to 65 million people and contributes 16% of the Indian GDP, can do a lot towards sustainability by adopting green banking practices (Kumar, 2022). "Green banking" is a synonym for ethical and sustainable banking (Aracil et al., 2021; Scholtens, 2009).

Green banking has emerged because of changes in the regulatory framework, technology, and customers' perceptions. Moreover, the flaws in the traditional banking system, i.e., more paperwork and consuming lots of customers' time in traveling to banks, standing in long queues, and transaction processing, led to the opening of doors for a new form of banking (Meena, 2013; Sahoo & Nayak, 2007). The aim of adopting green banking practices is to make every unit and every department environmentally friendly (Deka, 2015). Considering the corporate, social, and environmental assistance green banking provides, there is a need to accept green banking practices in India (Prabhu & Aithal, 2021). Green

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banking can also be understood as switching to online banking from branch banking, paying online bill expenses using mobile apps of associated banks, or using net banking for money transfers (Tu & Dung, 2017). Some of the benefits associated with green banking include avoiding paperwork due to computerized processing, creating awareness in the minds of customers regarding the environment and sustainability, and promoting digitalization (Meena, 2013). The public and private sector banks in India are taking many initiatives to promote green banking and spread awareness among citizens regarding the benefits provided by it (Ellahi et al., 2021; Prakash et al., 2018a). Therefore, it is essential to comprehend the meaning of green banking and the initiatives taken by Indian banks towards it to spread awareness among citizens.

### Literature Review

#### • Green Banking

Nature always looks after us as we were born and raised in it. However, with regard to such natural benefits, we humans are destroying the environment by deforestation, polluting the planet, and experimenting with atomic energy as a sign of technological progress and industrialization (Aracil et al., 2021). Thereupon, nature retaliates by unleashing a slew of natural disasters, including storms, floods, droughts, earthquakes, global warming, and so on (Zhixia et al., 2018). Environmental sustainability has become a concern all over the world. As a result of it, environmentalists from around the world have banded together to curb this problem and to implement sustainable environmental policies to handle the adverse consequences (A. Prakash et al., 2018b). Green banking, as part of e-commerce, can contribute to environmental sustainability by ensuring online banking and e-banking by incorporating the 3D approach (De-materialization, De-carbonization, and De-mobilization) into the bank's day-to-day operations (Adegbite et al., 2012; Zhixia et al., 2018). The bank is regarded as an economy's backbone, with direct and indirect effects on environmental sustainability, preservation, and destruction (Tara & Kumar, 2015). The banking sector has implemented the green banking revolution to preserve the environment. Sahoo & Nayak (2007) conducted research to scrutinize the adoption of green banking products among users of different ages. In comparison to the medium and senior age groups, they discovered that youngsters are more inclined to green banking products. As a result, people in their middle and senior years need to be more aware of the situation (Sahoo & Nayak, 2007). Environmental concerns are becoming increasingly important in marketing. As a result, the green marketing concept was born, which focuses on developing marketing tactics that meet clients' environmental needs (Sahitya & Lalwani, 2014). It is critical to highlight that an organization's environmental commitment is rapidly becoming a decisive factor for investors. It is deemed crucial for the banking sector to adopt green banking because of its environmental, corporate, and social benefits (Nath et al., 2014; Park & Kim, 2020). It acts as a competitive advantage to retain the customers and their loyalty. Consumer perceptions of green banking practices and their impact on bank loyalty were investigated by (Ibe-enwo et al., 2019). Green banking practices and green image is thought to have a positive relationship, and green banking practices and green image have influenced bank loyalty (Deka, 2015). This indicates that institutions that are devoted to the protection of the environment through their operations and other relevant activities establish a green image for their firm, and clients are more likely to be loyal to banks that have a green image.

#### • Green Initiatives

Zhixia et al. (2018) elucidated that many initiatives have been taken around the world to curb the issue of environmental sustainability. "Green banking" is the main concern for environmental factors with the main objective of conserving the environment and its natural resources (Bouteraa et al.) (Falcone et al., 2018). Banks have taken various initiatives to protect the environment. SBI was the first public bank that introduces green banking products (Prakash & Pappu, 2017). The Reserve Bank of India's Institute for Development and Research in Banking Technology (IDRBT) issued recommendations for green money, laying the groundwork for Indian banks to examine green practices more seriously. Furthermore, they established a green-rating system for banks (Fernando & Fernando, 2017).

China's banking and environmental policymakers' green credit card policy urges the banks to cut down the number of loans to those companies that damage the environment and consume high energy, whereas granting more to energy-efficient businesses that focus on pollution reduction (Fernando & Fernando, 2017). Bangladesh's central bank issued a circular in 2011 directing banks to adopt green banking practices. Green bank general policies were developed, in-house environment management was improved, and a bank-specific ecological risk plan was devised (Fernando & Fernando, 2017).

### **Research Gap**

Green banking in India is in its evolving stage, and customers have very little knowledge of the various green banking products and services served by Indian banks (Sahoo & Nayak, 2007). Based on the literature review, it was found that the Indian banking sector is taking numerous initiatives towards green banking, and hence introducing the concept of green banking to customers is very crucial. Therefore, this study will focus on the various green banking initiatives taken in India, the understanding of various green banking products launched in India, and the challenges banks face in going green.

### **Research Objectives**

- To identify the need for adopting green banking practices in India.
- To examine the various green banking efforts undertaken by Indian banks.
- To identify various green banking products offered by banks in India.
- To find out the challenges faced by Indian banks in going green.

### **Need of the Study**

Climate change has been one of the world's most pressing challenges for decades. Many governments worldwide have made numerous initiatives to reduce climate change risk and make the planet more liveable. As responsible members of society, banks are conscious of environmental changes. They seek to support and supplement government initiatives to reduce global carbon emissions by introducing green banking or sustainable banking practices. Despite extensive research in both established and developing countries, India still has a long way to go regarding green banking and environmental sustainability difficulties, owing to the fact that most of the populace is oblivious to the issues. This is the fundamental incentive for working on such an important subject, and the researchers believe it will take significant effort to get important information to the general public and practitioners.

### **Research Methodology**

It is a descriptive research project. For this, data is gathered using secondary data collection methods such as literature reviews, and data is gathered from HDFC's Environment Integrate Report for 2021-22, ICICI Bank's ESG Report for 2021-2022, SBI's Sustainability Report, as well as various published and published books, magazines, newspapers, and articles.

### **HDFC Bank Initiatives**

The HDFC Bank has implemented various measures for its green goal, including green locks, solar panels, going paperless, encouraging online banking, and accepting payments via mobile devices (Yadav & Pathak). Over the years, the bank has adopted several strategic efforts to positively impact the environment and raise awareness among its customers.

### **Procurement Practices**

The Financial institution acknowledges the importance of collaborating closely with suppliers to eliminate pollution, increase efficiency, and cut carbon emissions. It will keep striving for better environmental considerations in our operations. The Financial institution will take every opportunity to procure products that are: a) reused, b) eco-friendly, and c) energy-saving.

### **Energy and Emission Management**

Every year, the Bank will work to reduce greenhouse gas (GHG) emissions. The Bank will evaluate and cut its energy usage. These initiatives will strive to accomplish the following goals:

- Energy consumption and emissions measurement and reporting.
- Marketing products and services that use less energy and emit fewer greenhouse gases.
- Using energy-efficient facilities management and travel processes.

By FY 2021-2022, the Bank plans to cut its aggregate Scope 1 and Scope 2 emissions intensity by about 10% by implementing the best energy management approach.

### **Water Management**

Water is mostly used for employee consumption at the Bank's offices and branches. To reduce use even more, the bank will promote guiding enactment and encourage staff to participate in water-saving activities.

### Management of Waste

The bank will strive to dispose of waste in an environmentally friendly manner. The bank's main sources of trash are IT and paper waste, both of which must be sent to permitted recyclers. The Financial institution will ensure that no perilous IT trash is transported to a landfill.

HDFC has introduced a 'green and sustainable' deposit scheme for retail clients. Depositors will receive 6.55 percent interest under the program for 3 to 10 years. On deposits of up to Rs 2 crore, senior citizens are entitled to an additional 0.24 percent yearly. For deposits of up to Rs 50 lakhs made on the bank's online platform, an additional interest rate of 0.1 percent per annum is offered. The main goal of this step is to use the funds for green initiatives such as pollution prevention, renewable energy, green building, waste management, etc<sup>1</sup>.

**Table 1: HDFC Bank Targets Set for FY 2025**

Reduction in carbon emission intensity*	34%
Reduction in absolute emissions from fuel consumption in own vehicles and emissions due to fuel use in DG sets and purchased electricity	9%
Reduction in energy intensity	23%
Tree plantation targets	25 Lakhs

Source: HDFC BANK<sup>1</sup>

**Table 2: Change made by HDFC Bank through its Initiatives**

Field	From FY21 to FY22
Reduction in grid electricity consumption	126 million kWh
Reduction in absolute energy consumption	28%
Total Energy saved	4.4 million kWh
A rise in renewable energy finance	Rs. 2307 crores
Tree plantation to date	17.69 Lakhs
Electrical energy saved during FY 2022	54,450 kWh
Installed a centrally controlled energy management system	600 branches

Source: HDFC BANK<sup>1</sup>

### ICICI Bank Initiatives

#### Responsible Financing

- After a thorough risk-return analysis, the Bank encourages the development of capacity in sustainable sectors such as renewable energy, waste management, and energy efficiency.
- New project finance bids are screened using the Bank's Social and Environmental Management Framework (SEMF). The framework mandates environmental and social due diligence for projects that exceed certain criteria. It has a list of industries that are not eligible for funding.

#### The Bank's Operations are Sensitive to the Environment

- The Bank invests in offering customers digital solutions, encouraging adoption, and minimizing paper use. The Bank also encourages internal work and operations to be digitized.
- Wherever possible, the bank invests in creating and upkeep environmentally friendly and sustainable workplaces that adhere to Indian Green Building Certification Standards.
- Water conservation is an important aspect of long-term sustainability. In its operations, the Bank has implemented water management methods such as recycling and reuse, and rainwater collection.
- The Bank will work to implement long-term procurement procedures that are integrated throughout the organization and the value chain. This would comprise natural resource conservation, using little or no harmful chemical ingredients, adherence to local/national/international legislation, product user safety, recyclability, reusability, and the promotion of green labelled products<sup>2</sup>.

<sup>1</sup> [https://v.hdfcbank.com/htdocs/common/2022/july/Annual\\_Report\\_FY22/environment.html](https://v.hdfcbank.com/htdocs/common/2022/july/Annual_Report_FY22/environment.html)

\* Targets are based on FY 2022 as base year.

<sup>2</sup> [https://www.icicibank.com/managed-assets/docs/personal/general-links/ESG\\_Policy.pdf](https://www.icicibank.com/managed-assets/docs/personal/general-links/ESG_Policy.pdf)

<sup>3</sup> [https://www.icicisecurities.com/Upload/ArticleAttachments/ICICI\\_Securities\\_ESG\\_Report\\_2021\\_22.pdf](https://www.icicisecurities.com/Upload/ArticleAttachments/ICICI_Securities_ESG_Report_2021_22.pdf)

<sup>4</sup> <https://www.icicibank.com/aboutus/Annual-Reports/2020-21/environmental-social-and-governance-report/index.html>

<sup>5</sup> <https://www.icicibank.com/aboutus/Annual-Reports/2020-21/AR/assets/pdf/icici-bank-annual-report-fy.pdf>

**Table 3: ICICI Bank Green India Initiative**

Solar electrification in Tehsil village	7 villages
Grant for tree plantation	Rs. 7 million
Solar power facilities installed in Gramin branches	522 branches
Total Renewable energy capacity	11.9 MWp
Paper saved during the digital initiative	9 million
Solar power capacity added in FY21	97.5 KWp
Reduction in paper consumption from FY 2019	35%
Reduction in energy consumption from FY 2019	20%
Total Scope 1 and Scope 2 emissions decrease from FY2019	37%

Source: ICICI BANK<sup>3</sup>

- Scope 1: Direct GHG emissions from boilers, furnaces, vehicles, etc. owned by the organizations.
- Scope 2: Indirect GHG emissions by the organizations<sup>4</sup>

#### ICICI Bank's Digitalization Initiatives

ICICI Bank is a pioneer in adopting new technologies that can digitalize their activities. The bank aims to reduce its carbon footprint by adopting sustainable banking practices and transferring a superior banking experience to its customers.

- The bank has launched the iMobile Pay app that can be used by customers of other banks. It has connected 2.5 million customers from other banks within five months.
- 90% of the transactions are done through digital modes, which include internet banking, mobile banking, point-of-sale, and debit card.
- UPI transactions have increased by 3.3 times in value and 1.9 times in volume within one year.
- The bank has issued 75% of its credit cards digitally.
- ICICI is the first bank to introduce 'EMI Internet Banking' services, in which pre-approved customers can transform high-value online purchases into instant EMI.
- ICICI is the first bank to launch 'Video KYC', which completes the KYC process through video interaction with the customers.
- The bank has also launched 'WhatsApp Banking', 'DigitalLite', and 'CorpConnect' to digitally connect customers<sup>5</sup>.

#### Green Banking Products Offered by Indian Banks

- **Online Banking:** Internet banking or online banking in which banks provide facilities to conduct various financial transactions like money transfers or bill payments using the internet(Sahitya & Lalwani, 2014).
- **Mobile Banking:** In mobile banking, financial transactions are carried out using smartphones/mobile phones. Mobile banking is expanding with the use of mobile wallets, digital payment applications (like Google Pay and Paytm), and Unified Payment Interface (UPI) facilities provided by banks(Yang, 2009).
- **Green Mortgage:** Green mortgage is provided to design more energy-efficient houses. To promote sustainability, banks provide mortgages with either a lower interest rate or an increased loan amount to purchase an energy-efficient house or buy energy-efficient appliances for the house(UNEP FI, 2007).
- **Green commercial building loans:** A green loan is provided to promote lower water wastage, lower energy consumption, and less pollution during the construction of the commercial building(UNEP FI, 2007).
- **Green Credit Cards:** Green credit card is a facility in which economic rewards in the form of reward points that can be either converted into cash or donated to eco-friendly organizations are provided to the users for showing eco-friendly behavior. Green cards encourage users to buy environmentally friendly products(Kim & Son).

- **Green Deposits:** A green deposit is a fixed-term deposit facility for big investors interested in investing their surplus cash reserves in eco-friendly projects. This is also known as sustainable investment.

#### Challenges Faced by Banks

- **Start-up Face:** Several green banks are still in the planning stages. Because it takes three to four years for a bank to start making money, it isn't useful to banks during a downturn.
- **Operating Expenses:** Green banks require talented, experienced people to provide good customer services, which implies a higher operational cost. Additional loan officers with experience working with green businesses and clients are required.
- **Diversification:** Diversification is a key issue for green banks, making it difficult to do business with companies that pass the screening process. Because there would be fewer clients, green banks would have a smaller customer base to support them.
- **Credit Risk:** Credit risk is created by businesses that are impacted by the costs of pollution, environmental regulation modifications, and new emission standards.

#### Findings of the Study

- Green banking is an emerging concept that helps reduce the paperwork and hassle caused by traditional banking methods.
- It helps reduce carbon footprint by promoting digitalization through online banking, mobile banking, net banking, and ATMs.
- HDFC Bank and ICICI Bank are top private sector banks in India that have taken various initiatives towards green banking.
- HDFC, as a top private sector bank, has taken steps for energy emission, water management, and waste management.
- The ESG policy of ICICI Bank promotes sustainability by financing renewable energy, waste management, and energy-efficient projects.

#### Conclusion

India's rapid industrialization has created new business prospects for potential investors. Previously, their primary focus was on profit-making; later, they served clients' wants or provided customer service; however, the pattern has now completely changed due to continued reliance on nature and the environment. The economy was left with diminished natural resources due to excessive use of its resources. As a result, businesses and financial organizations have taken environmental protection measures. Banks are not categorized as polluting industries, but their operations have an environmental impact. Banks' green banking practices help reduce both external and internal carbon emissions. Everything in green banking is done online. Therefore, it not only helps to minimize the usage of paper, but it also helps to conserve the environment by reducing the chopping down of trees for paper manufacturing.

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