

<https://doi.org/10.58419/gbs.v10i2.1022411>

---

# THE NOTION OF GREEN BANKING LED AND LEADING FOR SIGNIFICANT DEVELOPMENT IN THE ENVIRONMENT SINCE ITS INTRODUCTION – A COMPREHENSIVE REVIEW

---

**Munnu Prasad V**

*Research Scholar and Assistant Professor, School of Allied Healthcare and Sciences,  
JAIN (Deemed-to-be-University), Whitefield Campus, Bangalore*

[munnu.prasad.r@gmail.com](mailto:munnu.prasad.r@gmail.com)

Orchid ID: 0000-0001-8937-1497

## **ABSTRACT**

*Concept of 'Green Banking' has emerged as a pivotal strategy within the financial sector to promote environmental sustainability. This research paper seeks to evaluate the extent to which the notion of green banking has led and leading the significant developments in the environment since its introduction. Through a thorough review of literature, case studies, and empirical data, this paper examines the impact of green banking practices on key environmental indicators. The findings contribute to the ongoing discourse on sustainable finance and offer insights into the effectiveness of green banking initiatives in fostering positive environmental outcomes.*

*Keywords: Green Banking, Environmental Development, Environmental Indicators, Sustainability, Effectiveness etc.*

## **1. INTRODUCTION**

The global imperative to address the environmental challenges has prompted financial institutions to adopt innovative strategies that integrate sustainability into their operations. One such strategy is 'Green Banking,' which involves promoting environmentally friendly practices, investments in renewable energy, and responsible lending. This paper aims to assess the impact of green banking on environmental development since its inception.

### **1.1 EVOLUTION AND PRINCIPLES OF GREEN BANKING:**

Green banking encompasses a range of practices aimed at reducing the environmental footprint of financial institutions. These practices include financing renewable energy projects, offering green loans, implementing environmental risk management, and integrating sustainability criteria into investment decisions. The principles of green banking emphasize the triple bottom line of environmental, social, and financial sustainability.

## 1.2 GREEN BANKING POLICIES (INTERNATIONAL AND INDIAN):

The Green Banking Policies are well design to promote the environmental sustainable practices in financial sector. These policies are aiming to encourage banks and financial institutions to interrogate environmental, social, and the governance (ESG) considerations into their operations, lend practices and the investment decisions. The following are the overview of Green Banking policies, which focusing on key concepts like:

- a. **Lending to Sustainable practice:** The policies are encouraging banks to prioritize the lending to the environmental sustainable projects, such as the renewable energy, energy for efficiency and the initiatives to control pollution.
- b. **Management of Risk:** The Banks are expected to assess the environmental risks associating to their portfolios, which ensure that the loans and investments are align with sustainability goals.
- c. **Green Financing and Green Bonds:** The policies towards banks are often support in the issuance of Green Bonds for raising the capital for the eco-friendly concerned projects.
- d. **Sustainability Practices for Internal:** The banks are adopting to reduce their carbon footprint, like as paperless banking, waste management, and energy-efficient buildings and so on.
- e. **Regulatory Frameworks:** The Central Banks in the countries and the governments are enforcing the Green Banking concept through mandatory guidelines or the appropriate incentives.
- f. **The objectives for Green Banking Policies:**
  - a. **By Promoting the Environmental Sustainability Practices:** The policies are encouraging the financing for green projects whereas, renewable energy, sustainable agriculture, and the eco-friendly manufacturing.
  - b. **Environment Risks Mitigation:** The banks should ensure that the funded projects are complying with the environmental regulations and also for reducing the exposure to risk like pollution or climate change-related liabilities.
  - c. **Green Investment Incentivize:** The green investments incentivizing the fostering the developments of the green financial instruments such as like a green mutual fund and green bonds.



- d. **Enhancing the CSR (Corporate Social Responsibility):** The positions of the banks and their key stakeholders in the global sustainability efforts are enhancing the Corporate Social Responsibility (CSR).

#### **The Green Banking Policy usage Benefits:**

- a. **The Environment Protection:** The banks investments on the green projects can reduces the environmental degradation by using the green projects funds directly for sustainability in the Environment.
- b. **The efficiency in the Economic:** Green Projects initiatives by the banks promotes the energy efficiency and the reduction in the operational costs ain the businesses.
- c. **Advantages in the Reputation of the Banks using Green Concept:** The banks which adopts the green policies within internal and the external projects can enhance their image in private and public.
- d. **Banks Compliances in the Regulatory:** The Banks aligning with the global frameworks like the Paris Agreement and Sustainable Goals (SDGs).

#### **Challenges while Implementing the Green Banking Policies:**

- a. **Lack of an Awareness:** Some banks having limited understanding among the stakeholders on the green financing and its advantages.
- b. **Initial Costs are high for Implementations:** The Green Projects may requiring the significant upfront the investments in the banks.
- c. **The gaps in the Regulatory:** The insufficient or the inconsistent regulatory frameworks across the regions or the countries.
- d. **Reporting and the concept of Monitoring:** Ensuring the compliances and also the measuring the environmental impacts which can be complex in nature.

## **2. REVIEW OF LITERATURE**

The **emergence** of the concept of Green Banking in the response to the global environment challenges with in the financial institutions taking a proactive role in the sustainable development. According to **Ghosh (2013)**, Green banking prioritize the investments in eco-friendly kind projects, like as renewable energy, sustainable agriculture and waste management, which is significant reducing the carbon footprints. The early adopters includes

like Bangladesh Bank, have mandating the policies for mitigating environmental risks which are associating with the banking activities (**Bangladesh Bank, 2011**).

Some research highlights the **Green lending practices** to have direct contribution to reducing the pollution and enhancing the efficiency in the energy concept. **Singh and Das (2020)**, demonstrating the financial institutions funding green projects not only to promote sustainable development, but also by enabling the industries to adopt the cleaner production methods. A case study by the Europeans Investment Bank's gives information on the green bonds showing show the funds raised through Green Banking instruments having funded in the renewable energy projects, displaying the fossil fuel reliance (**EIB, 2020**).

Green Banking concept has been instrumental for addressing the **climate changes** by correct channelling resources for mitigating and also by adaptation of the projects. A report by the International Finance Corporation (**IFC, 2020**), emphasises that green financing helping to reduce the greenhouse gas emissions by the funding initiatives such as forest preservation, afforestation, and the greening the urban infrastructure. **Choudhary, Salim, and Alzayed (2013)**, the banks in the emerging economic countries are playing a pivotal role in integrating climate risks into their risk assessment model, also encouraging the environmental responsible lending or financing.

The Green Banking has showing the promises, where there is a **significant challenges**. However, the progress has been observed in India by the Reserve Bank of India (RBI) it is incentivizes green loans, and also in the European Unions, where taking a stringent Environment, Social and Governance (ESG) requirement for fostering the greener financial practices, **Khandelwal and Sharma (2021)**.

The course of Green Banking are **indicating its growth importance** in achieving the sustainability goals. According to **UNEP Financial Initiative (2019)**, the upcoming phase in Green Banking involves in integrating the Artificial Intelligence (AI) and the Blockchain Technology for enhancing its role of private-public partnership in scaling the Green Banking's impacts, in particularly the financing large-scale for renewable energy projects.

### **3. METHODOLOGY**

The paper employs a comprehensive literature review methodology with the objective of – to analyse the impact of green banking on environmental development. Academic journals,

reports from financial institutions, and case studies are examined to gathered empirical evidence and insights into the effectiveness of green banking initiatives. The study is limited to the time period. The study has not involved with any statistical analysis.

#### **4. IMPACT OF GREEN BANKING ON ENVIRONMENTAL INDICATORS**

##### **4.1 Renewable Energy Investments:**

Green banking initiatives have significantly contributed to the growth of renewable energy investments worldwide. Case studies from countries such as Germany, China, and the United States demonstrate how financial institutions' support for renewable energy projects has led to increase capacity and reduced carbon emissions.

##### **4.2 Energy Efficiency Programs:**

Financial institutions offering green loans for energy-efficient technologies and building retrofits have facilitated the adoption of sustainable practice by business and households. Studies indicate a positive correlation between green banking initiatives and improved energy efficiency, resulting in reducing in reduced energy consumption and greenhouse gas emissions.

##### **4.3 Environmental Risk Management:**

Incorporating environmental risk assessments into lending practices has encouraged business to adopt eco-friendly practices. Banks that consider environmental factors in loan approvals are incentivizing sustainable operations among their clients, leading to reduce pollution and habitat degradation.

##### **4.4 Sustainable Supply Chain Financing:**

Green banking initiatives extend beyond direct investment to include financing sustainable supply chains. Financial institutions that offer incentives for suppliers to adopt environmentally responsible practices have contributed to a greener, more sustainable product across various industries.

#### **5. CASE STUDIES**



### **5.1 Banco Santander's Green Bond:**

Banco Santander's issuance of green bonds to fund renewable energy and clean transportation projects in Europe has garnered international attention. The bank's commitment to green banking principles has not only attracted investors seeking sustainable options but has also accelerated the transition towards a low-carbon economy.

### **5.2 Bangladesh Bank:**

The Bangladesh Bank to be one of the first bank to implement the comprehensive Green Banking guidelines in the year 2011, where making mandatory in environmental risk assessments for the loans.

**5.3 European Investment Bank (EIB):** The European Investment Bank took initiative in issuing the Green Bonds for funding the climate action and the Renewable Energy Projects Universally.

### **5.4 Green Financing in India:**

India's green banking initiatives, such as the Sustainable Finance Scheme by the State Bank of India, have catalysed investments in solar power, wind energy and energy-efficient technologies. These initiatives have contributed to India's renewable energy targets and reduced its reliance on fossil fuels.

**State Bank of India:** State Bank of India launched the Green Banking and its branches in focusing on funding the projects like Renewable Energy and the Sustainability Projects.

## **6. CHALLENGES AND OPPORTUNITIES**

### **6.1 Data Availability and Measurement:**

One of the challenges in assessing the impact of green banking is the availability of comprehensive data and standardized metrics. Improved data collection and reporting frameworks are essential to accurately quantifying the environment benefits of green banking initiatives.



## **6.2 Policy Support and Market Awareness:**

While green banking has shown promise, its widespread adoption requires supportive policies and increased market awareness. Governments play a crucial role in incentivizing green investments and raising public awareness about the benefits of sustainable finance.

## **7. CONCLUSION**

The adoption of green banking practice by financial institutions has demonstrated a positive impact on environmental development across various indicators. From investments in renewable energy to promoting energy efficiency and sustainable supply chains, green banking initiatives have contributed to greener and more sustainable economy.

However, challenges such as data availability, policy support, and marketing awareness remain hurdles to be addressed. Moving forward, continued research, collaboration between stakeholders, and policy interventions will be crucial in maximizing the environmental benefits of green banking.

## **REFERENCES**

1. Alam, M. N., & Khanam, R. (2020). The Impact of Green Banking on the Financial Performance of Banks in Bangladesh. *Journal of Asian Finance, Economics and Business*, 7(5), 171-181.
2. Bangladesh Bank. (2011). Policy guidelines for green banking. Retrieved from <https://www.bb.org.bd>
3. Choudhury, T. T., Salim, R., & Al-Zayed, A. (2013). Adoption of green banking: Comparative analysis between public and private sector banks in Bangladesh. *International Journal of Business and Management*, 8(7), 17–31. <https://doi.org/10.5539/ijbm.v8n7p17>
4. European Investment Bank (EIB). (2020). Green bonds impact report. Retrieved from <https://www.eib.org>



5. Ghosh, S. (2013). Green banking in India: A study of various strategies adopted by banks for sustainable development. *Asian Journal of Research in Banking and Finance*, 3(6), 85–92.
6. Global Green Finance Index. (2021). Retrieved from <https://www.longfinance.net/programmes/financial-centre-futures/global-green-finance-index/>
7. International Finance Corporation (IFC). (2020). Green finance: A bottom-up approach to sustainable development. Retrieved from <https://www.ifc.org>
8. Khan, H. M. R., Alam, M. N., & Das, S. K. (2021). Green Banking Practices and Sustainable Development: Evidence from Bangladesh. *Journal of Sustainable Finance & Investment*, 11(2), 97-112.
9. Khandelwal, P., & Sharma, A. (2021). Green banking in emerging economies: Challenges and prospects. *Journal of Banking and Financial Technology*, 5(2), 137–148. <https://doi.org/10.1007/s42786-021-00035-6>
10. Kumar, R., & Kapoor, R. (2020). Role of green banking in sustainable development. *International Journal of Innovative Science and Research Technology*, 5(4), 945–949.
11. Nguyen, T., & Nguyen, H. (2022). Impact of green banking practices on financial performance and environmental outcomes: Evidence from emerging economies. *Journal of Environmental Management*, 302(1), 113–128. <https://doi.org/10.1016/j.jenvman.2021.113128>
12. Renewable Energy Policy Network for the 21st Century. (2021). Renewables 2021 Global Status Report. Retrieved from <https://www.ren21.net/gsr-2021/>
13. Singh, H., & Das, S. (2020). Green banking: A way to sustainable development. *Global Business Review*, 21(6), 1559–1575. <https://doi.org/10.1177/0972150918779187>
14. State Bank of India. (2020). Sustainable Finance Scheme. Retrieved from <https://sbi.co.in/web/businesses/loans-and-advances/agricultural-banking/sustainable-finance-scheme>
15. UNEP Finance Initiative. (2019). Principles for responsible banking. Retrieved from <https://www.unepfi.org>
16. United Nations Environment Programme. (2018). Green Banking: Potential for Green Financial Products and Services in India. Retrieved from <https://wedocs.unep.org/handle/20.500.11822/26817>





17. World Bank Group. (2021). Financing climate action: The role of banks in green growth. Retrieved from <https://www.worldbank.org>