

# Green Accounting Practices and their Influence on the Performance of Commercial Banks: A Conceptual Analysis

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#### Abstract

The role of the banking sector in India extends beyond promoting economic growth and ensuring financial stability to include offering secure financial services to the population. However, the rapid growth of the economy has led to various environmental challenges. Consequently, the banking sector now faces a new challenge arising from environmental concerns, specifically financial risks stemming from loan defaults and environmental liabilities caused by borrowers. To ensure their stability, banks must embrace green accounting practices when making lending decisions to address these risks and comply with environmental regulations. Green accounting, also known as environmental accounting or sustainable accounting, is an accounting framework that integrates the economic value of natural resources and environmental impacts into conventional accounting practices. By incorporating environmental considerations into their operations, banks can contribute to the development of a more sustainable economy and meet the increasing demand for environmentally responsible financial services. This research paper focuses on exploring the concept of green accounting, its practices, and its implementation by the banking industry in India.

**Keywords:** Banking sector, Economic growth, financial stability, Environmental challenges, Green accounting practices

#### **Introduction:**

Green accounting plays a vital role in offering a holistic perspective on the expenses and advantages connected to economic undertakings while considering their environmental consequences. By incorporating green accounting, banks can evaluate and handle the environmental risks associated with their lending and investment portfolios. Moreover, it facilitates sustainable financing, incorporates environmental, social, and governance (ESG) factors, promotes transparent reporting, encourages innovation, and ensures adherence to



regulatory standards. The introduction of corporate environmental reporting (CER) in India has emerged as a significant advancement, benefiting both environmental management and overall corporate governance.

Green accounting is characterized as the provision of integrated, comprehensive, and reliable accounting information that is valuable for users in assessing and understanding an organization's economic and non-economic responsibilities for decision-making. Bangladesh Bank has issued guidelines on green accounting, emphasizing the importance of monitoring environmentally friendly activities through formal processes. The significance of environmental accounting and reporting has increased for both stakeholders and companies, as it impacts the financial well-being and social and ecological outcomes of an organization. While there has been progress in green accounting studies worldwide, its implementation within institutional and stakeholder frameworks remains largely unexplored.

This study introduces a unique approach by using three variables, namely green investments, green initiatives, and green activity management, as proxies for green accounting practices, as per the guidelines provided by Bangladesh Bank. The main objective of this study is to investigate the impact of green accounting practices on bank performance within the framework of institutional and stakeholder approaches. By exploring this relationship, the study innovatively contributes to the existing literature.

**Review of Literature:** The literature review conducted for this study encompasses the following key findings and discussions.

Islam and Rahman (2015) provide an analysis of green accounting and its implementation in Bangladesh. The paper examines the current status of green accounting practices in the country and assesses their application across various sectors. The study emphasizes the need for collaboration between the public and private sectors to enhance existing green accounting practices, as the effective functioning of the system relies on their joint efforts. Ashima Saxena (2018) provides an explanation of the concept of environmental accounting within the framework of the legal environment. She also outlines the stages of environmental accounting and discusses its practices in India. On the other hand, K. Kanakaraju (2018) identifies potential strategies for quantifying environmental issues and analyzes the role of green accounting in facilitating and application of environmental accounting. Tarun and Ramu (2018) highlight the conceptual framework of green accounting and reporting, discuss its scope and limitations, and conclude that well-defined



environmental policies are necessary for achieving sustainable development. Anil Kumar (2018) explains the concept of environmental management accounting and its significance for businesses. They conclude that green accounting in India is in the developmental stage and recommend it as one of the best methods to be adopted for sustainable development. These studies shed light on the current state and importance of green accounting practices in India. Mittal (2018) concluded that India is still in the growth stage of green accountability. This means that while there is progress in terms of corporate social responsibility (CSR) practices, there are no clear legal policies in place to protect the environment effectively.

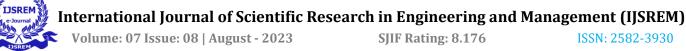
Deb, Saha & Rahman (2020) conducted a study to investigate the impact of green accounting practices on the performance of banks. The study focused on three aspects of green accounting derived from guidelines provided by the Bangladesh Bank, namely green investment, green initiatives, and green activity management. The findings of the study indicate that green investment has a highly significant effect on improving bank performance. Furthermore, the researchers observed that both green initiatives and green activity management also have a substantial influence on bank performance. This suggests that integrating environmental considerations into accounting practices can have positive outcomes for banks. Ginovsky (2009) emphasizes the importance of banks taking proactive measures to introduce green goods, adopt environmentally friendly practices, and integrate sustainability into their core operations. By doing so, banks can play a significant role in promoting sustainable development and addressing environmental challenges. Hart and Ahuja (1996) established a significant correlation between the green accounting sector and bank performance, highlighting the mutually beneficial relationship between these two domains. Their research shed light on the positive impact of environmentally conscious accounting practices on the overall performance of banks. Lober (1996) suggests that as environmental issues continue to emerge rapidly, banks require green banking policies to protect the environment and enhance their profitability. By implementing these policies, banks can improve their environmental performance, aligning their operations with sustainable practices and reducing their negative impact on the planet. Nigamanda Biwas (2011) emphasizes that the concept of green banking is mutually beneficial to banks, industries, and the economy as a whole. Furthermore, green banking promotes greater operational efficiencies within banks. By embracing technological advancements and operational improvements, banks can streamline their processes, reduce waste, and optimize resource utilization. This leads to cost savings and improved profitability. This, in turn, leads to positive environmental impacts and contributes to the overall goal of sustainability. Bai (2011)



highlighted the importance of incorporating social accountability principles into green accounting practices within the banking sector. This involves banks thoroughly assessing the ecological viability and potential environmental consequences of a project before extending financial support. Bai's research underscores the significance of responsible decision-making and ecological considerations in the realm of green accounting in banking encompasses environmentally friendly initiatives that promote sustainability and reduce carbon footprint (Singh & Singh, 2012). By integrating social accountability, banks evaluate the ecological sustainability and potential environmental impacts of projects before providing funding (Bai, 2011). Thus, green accounting fosters sustainable practices in banking while considering environmental consequences.

Moorthy and Yacob (2013) highlight that green accounting plays a crucial role in facilitating proactive environmental planning within enterprises. It enables recognition and enhanced environmental performance., leading to improved profitability. Chang, Huang, and Lin (2012) point out that there is a growing trend toward evaluating corporate performance in terms of environmental and societal impact through the construction of an environmental accounting system. Dharwal and Agarwal (2013) conducted a study on green banking and highlighted its significance in mitigating credit risk, legal risk, and reputation risk for banks. They proposed several green banking strategies that can be implemented to achieve these risk mitigation goals. Rajesh and Dileep (2014) concluded that Green Banking involves adopting practices and guidelines to make banks sustainable across economic, environmental, and social dimensions. It emphasizes the importance of considering environmental risks, implementing environmental safety measures, and establishing incentives for responsible banking to facilitate the development of green banking.

By incorporating green banking practices, banks can contribute to environmental preservation and sustainable development. These initiatives may include adopting renewable energy sources, supporting ecofriendly projects, and implementing environmentally friendly policies and procedures. Hence, the purpose of this research is to take a further stride in assessing the impact of green accounting practices on a bank's performance level.



#### **Objectives of the study:**

- 1. The objective is to gain a comprehensive understanding of the green accounting concept.
- 2. The research aims to investigate green accounting practices by Indian Banks.
- 3. To explore the implementation of green accounting practices affects banks' performance levels.

#### **Research Methodology:**

The data has been collected from secondary sources such as research articles, journals, magazines, websites, annual reports of banks, RBI websites etc. The collected data has been presented in tabular form and interpreted.

#### Limitations of the study:

Firstly, this study has utilized secondary data sources, suggesting the need for future research to employ a mixed research approach to examine the comparative impact of green accounting practices on banks' performance.

Secondly, the study solely focuses on commercial banks, neglecting other corporate sectors such as pharmaceuticals, power, hotels, etc. Given the increasing significance of green accounting practices, it is crucial to regularly assess their application across diverse industries.

Lastly, while the study is conceptual, there is potential for expanding it into an empirical analysis to further investigate the practical implications of green accounting practices.

#### A. Theoretical Discussion on Foundations of Green Accounting:

#### Meaning & Definition of Green Accounting:

Green accounting emerged in the 1960s within the realm of environment and accounting, aiming to facilitate company investment and uphold environmental protection. Environmental accounting, intertwined with economic accounting, is commonly referred to as green accounting, applied at both national and corporate



levels. The objective of green accounting is to assess the long-term sustainability of economic performance, accounting for the environmental impacts that may compromise it.

Environmental accounting, also called green accounting, refers to the modification of the System of National Accounts to incorporate the use or depletion of natural resources.

Green Accounting, also known as environmental accounting or sustainable accounting, is a system of accounting that takes into account the economic, environmental, and social costs and benefits of business activities. It involves measuring and reporting the impacts of economic activities on natural resources and the environment, in addition to traditional financial measures.

#### **Objectives of Green Accounting**

The objectives of Green Accounting include:

- 1. Incorporate environmental costs and benefits into national accounts and decision-making processes for better integration.
- 2. Incorporate environmental and social considerations to provide a holistic perspective on the true costs and benefits of economic activities.
- 3. Support the shift towards a green economy and promote sustainable development.
- 4. Ensure transparency and accountability in managing natural resources and addressing environmental impacts.
- 5. Promote stakeholder engagement and participation in environmental decision-making processes.

#### **Advantages of Green Accounting:**

- Green Accounting aids in controlling pollution, managing product circulation, and administering from an environmental perspective, fostering a centered management system.
- ◆ It facilitates the assessment, testing, and reporting of the performance of environmental activities.
- ✤ Green Accounting incorporates environmental resources and assets into corporate accounts.

- ✤ It measures the environmental, social, and economic impact of businesses.
- Green Computing, a part of Green Accounting, helps achieve economic, environmental, and social sustainability by maintaining the value of goods and services over time.
- ✤ It contributes to sustainability by reducing costs associated with raw materials, utilities, and waste.
- Green Accounting creates a positive image for companies, attracting employees who value businesses that prioritize more than just profit-making.
- By implementing environmental efforts in corporate management, producing eco-friendly products, engaging in environmentally friendly business activities, and taking other eco-balanced steps, companies can work towards becoming environmentally balanced entities.

# **B.** Current Green Accounting Practices by Indian Banks

Green accounting practices by Indian banks were gaining momentum as part of their commitment to sustainable and responsible banking. Some of the common green accounting reporting practices by Indian banks included:

- 1. Environmental and Social Risk Assessments: Indian banks continued to conduct rigorous environmental and social risk assessments to identify potential risks associated with their financing activities. This allowed them to make informed decisions and manage their exposure to environmentally sensitive sectors.
- 2. **Green Financing and Lending:** Banks in India expanded their offerings of green financial products, including loans and bonds, to support environmentally friendly projects such as renewable energy installations, green infrastructure development, and sustainable businesses.
- 3. **Carbon Footprint Reporting:** Many Indian banks measured and reported their carbon footprint to increase transparency regarding their greenhouse gas emissions. These reports highlighted the banks' efforts to reduce their environmental impact and contribute to climate change mitigation.
- 4. **Sustainability Reporting:** Indian banks increasingly published comprehensive sustainability reports, providing stakeholders with insights into their environmental initiatives, social contributions, and progress towards achieving sustainability goals.

- 5. **Compliance with Regulatory Guidelines:** Banks in India continued to adhere to the regulatory guidelines issued by the Reserve Bank of India (RBI) concerning sustainable banking practices, integrating environmental considerations into their policies and operations.
- 6. **Strategic Partnerships:** Indian banks forged partnerships with environmental organizations, nongovernmental organizations (NGOs), and government agencies to collaborate on sustainable projects and initiatives. These partnerships leveraged expertise and resources to drive positive environmental impacts.
- 7. Green Bonds and ESG Investments: Indian banks showed a growing interest in issuing green bonds and making Environmental, Social, and Governance (ESG) investments. These financial instruments attracted investments from environmentally conscious investors seeking to support sustainable projects.
- 8. **Employee Engagement Programs:** Banks actively engaged their employees in sustainability initiatives through training and awareness programs. This fostered a culture of environmental responsibility within the organization.
- 9. Integration of Environmental Criteria in Decision Making: Banks in India incorporated environmental criteria into their investment and lending decisions, encouraging businesses and projects that aligned with sustainable practices.
- 10. **Corporate Social Responsibility (CSR) Initiatives:** Indian banks continued to allocate funds towards environmental and social initiatives as part of their CSR commitments. These initiatives ranged from tree plantation drives to promoting eco-friendly practices in communities.

It's important to note that green accounting reporting practices can vary across banks. It depends on the respective banks and regulatory bodies of the banks.

# C. Green Accounting Practices and Bank's Performance:

The following bank-level factors can significantly influence banks' performance and warrant regulatory attention. These factors are elaborated upon below:

- 1. Green Investment (GIN)
- 2. Green Initiatives (GINV)
- 3. Green Activity Management (GAM)
- 1. **Green Investment (GIN):** This refers to the extent to which banks allocate their funds to environmentally sustainable and socially responsible projects. When banks actively invest in green ventures, such as renewable energy projects, eco-friendly infrastructure, and sustainable businesses, it can positively impact their financial performance and contribute to a more sustainable economy.
- 2. **Green Initiatives (GINV):** Green initiatives encompass the measures and policies implemented by banks to promote environmental sustainability and reduce their ecological footprint. These may include adopting energy-efficient practices, implementing recycling programs, supporting environmental education, and encouraging responsible customer behavior. Effective green initiatives can enhance a bank's reputation and attract environmentally conscious customers.
- 3. **Green Activity Management (GAM):** GAM pertains to how efficiently banks manage their internal operations with an environmentally friendly approach. This involves reducing waste, optimizing energy usage, adopting sustainable procurement practices, and minimizing the bank's overall impact on the environment. Effective GAM can lead to cost savings, improved efficiency, and enhanced public perception of the bank's commitment to sustainability.

Regulatory oversight of these bank-level factors is essential to ensure that financial institutions play a proactive role in addressing environmental challenges and promoting sustainable practices. By setting guidelines and monitoring compliance, regulators can encourage responsible green banking practices, which can have a positive impact on both the financial sector and the broader environment.

By focusing on factors such as Green Investment (GIN), Green Initiatives (GINV), and Green Activity Management (GAM), banks can enhance their performance and drive positive outcomes. These factors provide banks with opportunities to align their operations with environmental sustainability goals, establish themselves as responsible corporate citizens, and potentially attract environmentally conscious customers



and investors. By actively managing and improving these factors, banks can not only contribute to a greener future but also enhance their overall performance and reputation in the market.

The following discussion outlines the bank-level factors that Indian banks have embraced to enhance their performance levels:

#### 1. Green Investment (GIN):

The following banks are doing green investments for enhancing the performance of banks.

#### **ICICI Bank**

As of March 31, 2022, the Bank's outstanding portfolio in sectors like renewable energy, electric vehicles, green-certified real estate, waste management, small-scale khadi, and handicrafts amounted to approximately ₹73.80 billion. • An extra 0.80 million square feet of the Bank's premises received certification from the Indian Green Building Council (IGBC) for their green building rating. • The total area with IGBC certification grew from 2.28 million square feet in fiscal 2021 to 3.09 million square feet in fiscal 2022. • The Bank added 260 KW of solar power capacity during fiscal 2022, resulting in a cumulative renewable energy installed capacity of 3,174 KWP. • The Bank also increased its supply of renewable power under power purchase agreements, and renewable sources contributed to about 7% of energy consumption in fiscal 2022.

#### State Bank of India

- Since FY 2018-19, Green Bonds & Green Loans worth US\$800 million have been issued, with the proceeds earmarked for projects with a positive environmental impact.
- In FY 2020-21, the Bank raised a green loan worth €50 million, further supporting environmentally friendly initiatives.
- The Sustainability Linked Loans portfolio stands at approximately US\$1 billion, reinforcing the bank's commitment to sustainable finance.

- In November 2021, SBI listed US\$650 million in green bonds on India International Exchange (India INX) and Luxembourg Stock Exchange, in line with the 'Sustainable Finance' theme for World Investor Week, as per International Financial Services Centres Authority (IFSCA).
- As of 31st March 2022, SBI has invested over ₹32,000 crores in various solar, wind, biomass, wasteto-energy, and hydro projects, which have contributed to an incremental capacity of over 6,900 MW during the year.
- The bank has sanctioned ₹19,766 crore for Solar Power (rooftop and ground-mounted), ₹2 crore for Biomass, ₹28 crore for waste to energy, ₹7,601 crore for small Hydro/Hydro, and ₹5,077 crore for wind projects as of 31st March 2022, demonstrating its significant commitment to renewable energy initiatives.
- To promote cleaner fuel usage and environment-friendly practices, SBI has sanctioned ₹12.06 crores towards e-rickshaws.
- Notably, SBI has sanctioned more than ₹30,000 crores for renewable energy projects, reaffirming its dedication to driving India's transition to sustainable energy sources.

# Punjab National Bank (PNB)

Punjab National Bank (PNB) sanctioned nine wind energy projects worth ₹185.81 crores and earned the second prize for Best Wind Energy Power Financer at Wind Power India 2011.

#### AXIS Bank:

As of March 31, 2020, Punjab National Bank's total exposure to 'sustainable' sectors, encompassing renewable energy (including large hydro), urban mass transport, and green buildings, amounted to ₹64.47 Billion.

Aligned with Climate Bonds Initiative's Standard version 2.1, the bank introduced its Green Bond Framework. By March 31, 2021, the bank had achieved a funded green exposure of ₹46.05 Billion through Green bond issuance.

Several other banks have also made substantial investments in green initiatives through Corporate Social Responsibility (CSR) and various other activities. The researcher has not mentioned other banks' data due to the unavailability of reliable information.

2. Green Initiatives (GINV): Below are some of the green initiatives being undertaken by the banks.

Green banking promotes eco-friendly practices and reduces the carbon footprint in banking activities. It involves initiatives like adopting green IT and creating energy-efficient premises to minimize the environmental impact of a bank's internal operations.

- 1. Opt for online banking over branch banking to streamline transactions.
- 2. Make bill payments online rather than relying on traditional mail methods.
- 3. Consider opening accounts with online banks, which often have a smaller environmental footprint compared to large multi-branch banks.
- 4. Seek out local banks in your area actively supporting green initiatives to contribute to the community's sustainability efforts.

The following Indian banks have implemented several green initiatives to enhance their performance.

#### State Bank of India (SBI)

- Planting trees is a sustainable and effective way to positively impact the environment.
- Since 2014, eight crore Bio-toilets have been constructed, but untreated sewage remains a pressing challenge.
- Providing Solar Lamps/Lights/Panels.
- In 2010, SBI introduced the Green Channel Counter (GCC) facility to shift from paper-based banking.
- SBI pioneered green power generation by installing 10 windmills with a total capacity of 15 MW in Tamil Nadu, Maharashtra, and Gujarat.
- SBI plans to install an additional 20 MW capacity of windmills in Gujarat and aims to generate 100 MW power through windmills within five years, prioritizing sustainability over purely economic considerations.

- Collaborating with Suzlon Energy Ltd, the bank established windmills in Gujarat, Tamil Nadu, and Maharashtra to generate wind power for selected branches.
- SBI became a signatory to the Carbon Disclosure Project, committing to various environmentally and socially sustainable initiatives across its nationwide branches.

# Punjab National Bank (PNB)

In its Corporate Social Responsibility Report 2010-11 (PNB, 2011), PNB implemented various measures to reduce emissions and energy consumption, including:

- Conducting Electricity Audits of offices as an energy conservation initiative, maintaining a separate audit sheet to assess the impact of green initiatives.
- Organizing over 290 Tree Plantation Drives.
- Emphasizing green building practices such as using energy-efficient lights, repairing water leakages promptly, printing on both sides of the paper, and installing motion sensors for lights and fans.
- Signing a Green Pledge with the Ministry of New and Renewable Energy, setting up a butterfly park at the Guruvayur temple compound with 18 types of medicinal plants.
- Formulating guidelines to ensure obtaining necessary approvals and permissions, including from the Pollution Control Board, before disbursing term loans.
- For project loans, compliance with environmental and social safeguards, including rehabilitation and resettlement of project-affected people, is made a pre-disbursement condition.
- Considering sustainable development with a focus on the Equator Principles for project finance.
- On July 2023 Punjab National Bank (PNB) unveiled its environmental initiative 'PNB Palaash,' an eight-month campaign dedicated to promoting sustainability.

#### Bank of Baroda

According to the annual report of BOB (2013), they had taken various green banking initiatives such as: -

• While financing a commercial project, BOB is giving preference to environmentally friendly green projects such as windmills, biomass, and solar power projects which help in earning carbon credits.

- The organization had made considerable changes in its lending policy, i.e. it is compulsory for industries to obtain a 'No Objection Certificate' from the Pollution Control Board and also they are not extending any finance to environmentally hazardous industries which are using ozone depletion substances such as halos-1211,1301,2402 used in foam products, cholorofluoro carbon CFC 11,12,113, solvents in cleaning and aerosol products.
- The bank had taken several technological initiatives such as compliance with e-business guidelines, use of internet banking, and mobile banking to promote paperless banking, and also increasing the installation of ATMs in most uncovered areas to reduce petrol or diesel consumption in traveling and help in maintaining a clean environment.
- As a part of the green initiative, they made changes to desktop virtualization, backup consolidation, and server virtualization to improve data center operational efficiency.

The bank is also promoting measures for pollution control and environmental conservation.

#### Canara Bank

As per the BOB's annual report (2013), they have implemented various green banking initiatives, including:

- Prioritizing environmentally friendly projects such as windmills, biomass, and solar power to earn carbon credits while financing commercial projects.
- Making changes in lending policies, requiring industries to obtain a 'No Objection Certificate' from the Pollution Control Board, and refraining from financing environmentally hazardous industries that use ozone-depleting substances.
- Adopting technological advancements like e-business guidelines, internet banking, and mobile banking to promote paperless banking. Also, increasing ATM installations in uncovered areas to reduce fuel consumption and maintain a cleaner environment.
- Introducing changes to desktop virtualization, backup consolidation, and server virtualization to enhance data center operational efficiency.
- Actively promoting pollution control and environmental conservation measures.



# **ICICI Bank Ltd**

ICICI Bank's 'Go Green' initiative, as per ICICI Bank (2014), includes:

### **1. Green Products and Services:**

**Instabanking:** Customers can conveniently conduct banking through Internet banking, mobile banking, IVR banking, etc., reducing their carbon footprint by avoiding physical statements and branch visits.

'Vehicle Finance': 50% processing fee waiver on auto loans for car models using alternate energy sources like Honda's Civic Hybrid, Tata Indica CNG, Reva electric cars, Mahindra Logan CNG versions, Maruti's LPG versions, Hyundai's Santro Eco.

Home Finance: Reduced processing fee for customers buying homes in LEED-certified buildings.

#### 2. Green Engagements:

(i) During Diwali 2013, an environmental awareness program was conducted for employees and customers, and money plants were presented as a symbol of collective responsibility for environmental protection.

(ii) The bank partnered with the Green theme CNBC – Overdrive Auto Awards.

(iii) Celebrating World Environment Day every year on June 5 with activities like green pledge signature campaigns, plantation, and sapling distribution. Also, participate in Earth Hour in March by switching off lights in their premises, branches, and ATMs between 8:30 pm to 9:30 pm.

#### **3. Green Communications:**

The bank actively encourages customers to adopt online bill payment, online funds transfer, and estatements for a 'paperless' and 'commute-free' banking experience.



#### 4. Green Partners:

ICICI Bank is seeking partnerships with national and international green organizations and NGOs. They are also involved as partners with the Green Governance Awards by BHNS, appreciating organizations that go beyond statutory compliance to protect the environment.

#### HDFC Bank Ltd

HDFC Bank (2013) is actively reducing its carbon footprint through various measures:

- Employee engagement in conserving natural resources and reducing greenhouse gas emissions.
- Minimizing paper usage by issuing e-transaction advice to corporate customers, using electronic media for communication with high net-worth customers, and promoting e-statements for retail customers.
- Promoting energy conservation by adopting CFL lighting, turning off lights after 11 pm at branches, and establishing green data centers with advanced technologies.
- Exploring renewable energy through the installation of 20 solar ATMs, including a pilot ATM in Bihar, and replacing ATM batteries with Lithium-ion batteries.
- Managing waste through partnerships with vendors for paper and plastic recycling.
- Procuring green products that meet Central Pollution Control Board norms and Energy Star ratings.

#### Axis Bank Ltd

AXIS Bank (2013) has implemented various green banking initiatives:

- Recycling dry waste from the corporate office and 34 branch offices in Mumbai into notepads, notebooks, and envelopes, resulting in over 1,00,000 kgs of paper being recycled and converted to 12,000 eco-friendly items used within the bank.
- Constructing the corporate office in Mumbai as a Platinum LEED certified 'Green Building.'
- Promoting carpooling to reduce carbon footprint.
- Encouraging customers to opt for e-statements and electronic communications to minimize paper usage.



- Sending annual reports via email.
- Deploying ten solar-based ATMs under the Independent ATM Deployment (IAD) model in the Coimbatore circle.

#### Kotak Mahindra Bank

Under the 'Think Green' initiative, Kotal Mahindra Bank (2013) has taken the following initiatives:

- Encouraging customers to opt for e-statements and partnering with 'Grow-Trees.com' to plant one sapling for every e-statement. In FY 2012-13, 16,623 saplings were planted.
- Implementing the 'Social, Environmental Management System Plan' (SEMSP) to assess environmental and social risks of borrowers based on IFC sustainable framework and performance standards.
- Communicating with shareholders to adopt electronic copies of the annual report as per Ministry of Corporate Affairs (MCA) guidelines.
- Consolidating data centers into a single facility in 2009 to improve power usage efficiencies.
- Installing rainwater harvesting tanks and responsibly disposing of used oil from diesel generators through approved Pollution Control Board vendors.

#### **Small Industrial Development Bank of India (SIDBI)**

• SIDBI has implemented significant changes in its lending principles, making it a mandatory precondition for companies to obtain a No Objection Certificate (NOC) from the state pollution control board before establishing their enterprises to sanction credit.

#### IndusInd Bank:

• IndusInd Bank in India has initiated its Green Office Project, installing solar-powered ATMs in different cities to target energy savings and reduce CO2 emissions.



### YES Bank

• YES, Bank in India focuses on projects in the areas of alternative energy and clean technologies.

### HSBC Group

• HSBC Group has set separate targets for data centers, paper consumption, and business air travel, aiming to drive efficiency, reduce environmental impact, and generate cost savings.

# IDBI Bank

• IDBI Bank offers various services in the field of Clean Development Mechanisms (CDM) to its clients.

#### **Export-Import Bank of India (EXIM Bank)**

Export-Import Bank of India (EXIM) and SBI have collaborated to provide long-term loans for up to 14 years to Spain-based companies, Astonfield Renewable Resources, and Grupo T-Solar Global SA, for constructing a solar plant in India (Yadav & Pathak, 2013).

Sl. No	Name of the Banks	Green Banking Implementation Year
1	Union Bank of India	1996
2	City Group INC, HSBC Bank, ING Vyasa Bank, RBS, Syndicate Bank, Standard Charted Bank	2003
3	Yes Bank, Corporation Bank	2005
4	Bank of America, JP Morgan Bank	2006
5	ICICI Bank, OBC, State Bank of India	2007

# Table No:1Green Banking Practices by Indian and Foreign Banks



6	Bank of Baroda, Karnataka Bank, Dena Bank, Industrial Bank	2008
7	HDFC, Indian Overseas Bank, PNB, Kaur Vyasa Bank, Andhra Bank	2009
8	Axis Bank, Kotak Mahindra Bank, South Indian Bank	2010
9	Canara Bank, IDBI Bank, EXIM Bank	2011
10	IDFC Bank	2013

Source: Money Control

**3. Green Activity Management (GAM):** Several banks have formed committees to oversee environmental and social aspects:

**HDFC Bank:** Established an Environmental Social & Governance (ESG) committee comprising senior members across functions, further divided into 3 sub-committees:

• Environment Sub-Committee: Sets targets and identifies improvement opportunities in emissions, energy, water, and waste.

• Social & Governance Sub-Committee: Focuses on workplace policies, diversity, stakeholder engagement, and corporate governance.

• Product Responsibility Sub-Committee: Assesses E&S risks in the portfolio and identifies new business opportunities in the E&S space.

These sub-committees include members from various functions to identify ESG-related risks and their financial impacts on the Bank.

#### Union Bank of India ESG Steering Committee:

- The Bank incorporates climate risk and sustainability in decision-making. Policies and procedures are being established, and stakeholders are identified for managing ESG risk.
- An ESG Cell at the operational level will be formed, comprising members with expertise and responsibilities for research and implementation.

#### **State Bank of India (SBI):**

- Circle Sustainability Committees (CSC) are set up to monitor sustainability performance at the Circle level. DGM Sustainability oversees overall sustainability performance management, executes initiatives, conducts awareness programs, and publishes the annual sustainability report, among other responsibilities.
- The Bank's Corporate Centre Sustainability Committee (CCSC) undertakes the execution of the Sustainability and Business Responsibility (BR) Policy.
- This policy helps in aligning the Bank's sustainability strategy with its business strategy and identifies the key environmental and social areas.
- Further, it outlines SBI's approach to managing economic, environmental, and social performance in an integrated manner.

#### **Findings:**

- The analysis shows that banks should invest in various green initiatives so that performance level will increase.
- The research explores environmental challenges from India's rapid economic growth affecting banks with financial risks due to loan defaults and environmental liabilities.
- The study assesses the adoption of green accounting by Indian banks, aiming for a sustainable economy and meeting demand for environmentally responsible financial services.
- The research analyzes how alignment with environmental regulations impacts banks' sustainable practices.
- It evaluates the growing demand for environmentally responsible financial services among consumers and investors.
- The paper includes case studies of successful banks, highlighting green accounting practices and providing insights for others.

#### **Policy Recommendations:**

Based on the findings, the research could offer policy recommendations for the Indian banking sector and relevant stakeholders to further promote the adoption of green accounting practices. These



recommendations could be aimed at enhancing environmental disclosure requirements, providing incentives for sustainable lending, and fostering a conducive regulatory environment.

#### **Conclusion:**

Green accounting, also known as environmental accounting, presents a new challenge for the accounting system. Increased investments in green projects offer opportunities to optimize bank performance. Moreover, additional green initiatives lead to enhanced bank performance by fostering an environmentally friendly atmosphere, potentially yielding higher returns on assets and market performance. The volume of the risk management committee, referred to as green activity management, ensures elevated green practices. This indicates that green activity management significantly impacts bank performance.

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