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GREEN BANKING PRACTICES IN INDIA: A CASE STUDY OF STATE BANK OF INDIA

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ABSTRACT

Now-a -days almost all the countries are changing their conventional approach to environmental friendly approach in all the fields. Banking is not an exception to it. As the growth engine of the economy, commercial banks can be the change agent by adopting greener banking practices. Adoption of greener banking practices will be useful in many ways like increase in operational efficiencies, lower chance of manual errors and fraud, and cost reductions in banking activities etc. The main objective of this paper is to study how the Indian banking sector leader i.e., STATE BANK OF INDIA responding to environmental changes and to provide an overview of its action in view of green banking adoption, awareness, drivers, challenges and gaps etc. by secondary data and reports published. The results reveal that the banking leader is taking different green steps like carbon neutrality, energy saving, use of renewable energy, waste management, digital innovation etc.

Keywords: *Green Banking, Corporate Social Responsibility, Global Warming, Low Carbon Economy*.

Introduction

Now-a-days Green Banking is a buzzword in the world of finance. Banks as the growth engine have an important role in promoting overall sustainable development. The term green banking means adopting such strategies which will ensure sustainable economic development. It may be defined as promoting environment friendly practices and reducing carbon footprint from banking activities. In other words banking business conducted in such a manner that helps the overall reduction of external carbon emission and internal carbon footprint. To aid the reduction of external carbon emission, banks should finance projects using green technology and doing less pollution. As banking is not considered a polluting industry still the present scale of banking operations have considerably increased the carbon footprint of banks due to their massive use of energy, high paper wastage, lack of green buildings etc. Therefore, Banks should adopt technology, process and products which result in substantial reduction of their carbon footprint.. This can be done in many ways like using online banking instead of branch banking, paying bills online instead of mailing them, debit card pin generation through ATMs instead of mailing pin through post etc. Green banking helps to address a range of environmental problems, including global warming, deforestation, air quality issues and biodiversity loss, and at the same time providing opportunities to the customers.

Literature Review

Dharwal, Mridul and Agrwal, Ankur (2011), in research article on "Green Banking: An Innovative initiative for Sustainable Development" concluded that Indian banks need to be made fully aware of the environmental and social guidelines to which banks worldwide are agreeing to. As far as green banking is concerned, Indian banks are far behind their counterparts from developed countries. If Indian banks desire to enter global markets, it is important that they recognize their environmental and social responsibilities.

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Bahl, Sarita (2012), conducted an empirical study "Green Banking- The new Strategic Imperative" on public sector banks and collected manager's views on green banking financial products, carbon footprint reduction by paperless banking, carbon footprint reduction by energy consciousness, carbon footprint reduction by using mass transportation system, carbon footprint reduction by green building and social responsibility services.

Jha & Bhome (2013) try to find out the ways to go green through green banking. Paper is based on primary and secondary data. Researcher has interviewed 12 bank managers, 50 bank employees and bank customers. Further Paper highlights on steps in green banking.

Ravi Meena (2013) covered the various aspects of green banking such as benefits of green banking, methods adopting green banking, initiatives taken by Indian banks and finally make suggestions for banks to encourage green banking.

D. Kandavel (2013) reviewed the banks those are successfully implementing green banking practices. Green banking in rural branches, financing for green projects, organizing seminars, green loans etc. some of the suggestions are given by the researcher.

Saleena T. A. (2014) compared green banking initiatives by SBI and ICICI bank also emphasize on opportunities and challenges of green banking in India.

Jaggi Geetika (2014) evaluated the green banking initiatives taken by SBI and ICICI bank.

Nath, Nayak & Goel (2014) analyzed the green banking practices of top four public and private sector banks in India and come to conclusion that if Indian banks want to penetrate global economy, it is important for them to recognize their responsibilities as a global corporate citizen.

Garg (2015) focused on the strategies for green banking and need of it.

Omid Sharifi & Bentolhoda K. Hossein (2015) made SWOC analysis of four (SBI, PNB, BOB, Canara bank) public sector banks green initiatives. Study concludes that there is a vast range of green banking opportunities for financial sector.

Objectives of the Study

Following are the objectives of the study:

- To study the environment friendly practices adopted under green banking approach by state banks of India.
- To find out the challenges faced by SBI in implementation of green banking.
- To find out the necessary steps required for proper implementation of green banking in India.

Methodology

This is an exploratory research thus methodology was based on literature review and secondary data. The research took place in two phases: The first phase was an up-to-date literature review on Green Banking and sustainable development in the banking sector and particularly in green banking that identified results, and suggested future steps. The second phase included data collection about Indian banks in general and SBI in particular through secondary published sources . Secondary published sources were the reports on Green Banking and other relative information published on the banks and other internet sites.

Green Banking in India

The Reserve Bank of India document titled 'Policy Environment' dated 8th November, 2010 includes on Pages No. 56 and 57 a reference to Green Banking and Green IT initiatives for banks in India. Like any other business organisations, banks in India too are adopting the principle of Corporate Social Responsibility (CSR) and are concerned about the environment. The computerisation of banks and facilities like on-line banking are helping the banks to promote the green banking concept. Paper work is being reduced considerably at all levels by bankers and customers. Some banks have gone ahead with innovative ideas like installing Bio-metric ATMs, Solar-based ATMs, White-labelled ATMs, Brown ATMs, SMS alerts, Mobile Banking etc. for the convenience of their customers. Besides reducing any environmental pollution, these initiatives are helping the banks in reduction in their cost of operations and delays which results in increased customer satisfaction too. While offering several simple suggestions for practicing green banking arrangements, the specific initiatives taken by banks in India are as follows.

- **IndusInd Bank:** Solar powered ATMs
- **SBI:** green banking policy and offering green home loans
- **Union Bank of India:** energy efficiency measures
- **ICICI Bank:** Corporate Environmental Stewardship initiatives
- **YES Bank:** community development initiatives

ABN Amro Bank's (now Royal Bank of Scotland) -launching of Indian Sustainable Development Fund

Green Banking goes a long way it serving its objectives. The incorporation of social and environmental strategies into the development goals of the banks helps them in arriving effective environmental management system. According to Krebsbach (2005), the banks, which adopted socially and environmentally responsible lending and investing strategies were altering their processes of bond underwriting, investment banking and corporate lending. These banks were enjoying a competitive advantage over others as society is aware about the environmental issues.

Green Banking by State Bank of India

SBI's green banking approach can be studied in two broad categories, i.e., internal and external.

SBI's Internal Environmental Impact

The strategy adopted by the bank to enhance its sustainability performance has been incremental in nature since it has started its journey just five years ago. The Bank has focused on key improvements to be made on an annual basis. Some of the important highlights are:

- It has established a Board which approves the Sustainability Policy that will govern the Bank's sustainability practices across all its operations, including subsidiaries and Joint Ventures (JVs). The areas covered by the policy includes minimising SBI's environmental footprint, reducing water consumption, managing the quantity of waste generated, investing in renewable energy as well as creating awareness on the importance of environmental sustainability.
- It has enhanced the level of disclosure on GHG footprint and mitigation strategies leading to a better score on CDP compared to the previous year.
- Continuing with its significant investments in renewable energy
- Issuing Green Bonds
- Implementing processes and controls to achieve the objectives of carbon neutrality strategy for 2030.
- It has Joined the initiative to transition to 100% electric vehicles in its operations by 2030.

Energy Consumption and Management

The main source of energy consumed by the Bank is electricity purchased from grid, which contributes largely to its carbon footprint. In order to reduce the carbon footprint the Bank has increased its dependency on renewable energy by installing several roof top solar panels across several offices including the corporate centre and local head offices. The total installed capacity of renewable energy at the Bank's offices, branches and ATMs stood at 35 MW as on 31st March 2020. In FY 2019-20, the bank has spent approximately. ₹1413.12 cr. towards energy consumption. This constituted of approximately 4.63 million GJ of electricity and 0.88 million GJ of DG set fuel consumption.

Steps Taken by the Bank for Carbon Neutrality

- The bank has committed to achieve carbon neutrality status by 2030.
- It has developed phase wise roadmap for carbon neutrality
- It is the only Indian bank to join the EV-100 group.
- Inaugurated electric vehicle "E-VERITO" at corporate centre
- Replaced generators on pilot basis at few rural & semi urban branches with solar backup batteries
- Captive windmills of 15mw capacity and solar rooftop capacity of 17mw

Natural Resource Management through Digital Innovation

The bank has committed to preserve natural resources by adopting some digital innovation which are as follows.

- **Innovations in IT Infrastructure**

SBI commissioned its 1st advanced 'TIER- 3' data centre at a safe seismic zone in Hyderabad. It has been designed using the Green Building concept. For establishing paperless offices, the Bank has introduced 'Easy Approve'- a customised solution for note approval, on cloud. Through this solution, the bank has tried to replicate all the user-friendly features of the current paper-based system in addition to some new features. This paper savings initiative results in cost reduction and improvement of operational efficiency.

Table 1: Year Wise Internet Banking Users

Year	Internet Banking Users (in Lakhs)
2013	130
2014	177
2015	220
2016	263
2017	327
2018	479
2019	604
2020	735

Source: Sustainability Report 2018-19 &2019-20

- **Green Remit Cards (GRCs)**

Under this facility one can remit money using a specified account of SBI. This is especially useful for the migrant depositors. On an average, over one lakh transactions were routed through GRCs each day in FY 2019-20.

- **Green Channel Counters (GCCs)**

The bank has installed GCC at all its retail branches across India. The services provided through GCCs include cash withdrawal, cash deposit, fund transfer within SBI, balance enquiry and the provision of mini statements. On an average, 7.62 lakh transactions were routed through GCCs per day.

- **Green Banking Channels**

The bank has discontinued the printing of transaction slips for 43 types of unsuccessful transactions. The Bank has also installed solar panels on approximately 2,000 ATM sites. Further, SBI has established over 2,200 e-Corners, across the country where customers can avail of a broad range of services. In FY 2019-20, the Bank was able to indirectly save approximately 300 tonnes of paper through the opening of 69 lakh accounts and 6,43,889 pre-approved personal loans (PAPLs), thereby saving an estimated 7,900 trees from being cut. Considering the life-cycle of paper sheets, this is estimated to have consequently reduced water consumption by 26,800 m3, waste generation by around 177 tonnes and carbon emissions by 2,700 tCO2e. The increased use of the YONO app for these activities compared to last year has effectively increased paper savings by 1014%.

- **Green PINs**

Traditional PIN generation is successfully replaced by Green PINs which enables customers an easy and convenient way to generate their debit card or credit card PIN. Deploying channels like internet banking, ATM, SMS, and IVR has led to considerable paper and cost savings. More than 9.4 crore Green PINs were generated in FY 2018-19. In FY 2019-20, SBI was able to indirectly save approximately 307 tonnes of paper through generation of over 6.41 crore Green PINs, thereby saving an estimated 8,000 trees from being cut. Considering the life cycle of paper, this is estimated to have reduced over 27,400 m3 in water consumption, and lowered waste generation and carbon emissions by around 180 tonnes and 2,767 tCO2e, respectively.

Table 2: Year Wise Green Pin Generation

Year	No. of Green Pin Generation (in Cr)
2016-17	1.67
2017-18	5.15
2018-19	9.40
2019-20	6.41

Source: Sustainability Reports 2016-17, 2017-18, 2018-19&2019-20

SBI's External Environmental Impact

The strategies adopted by the bank having external environmental impacts are as follows.

- **Investment in Renewable Energy**

The Bank has supported the Government of India to fund viable renewable energy projects over a phase of five years from 2015 to 2020. As on 31st March 2020, the Bank's RE portfolio consists of 608 renewable energy projects totalling 11,488.48 MW capacity with ₹25,914.82 crore sanctioned. As on 31st March 2020, the Bank has drawn USD 422.7 million from the World Bank Group's line of credit for supporting grid-connected rooftop solar PV in India. Further, the Bank utilised USD 30 million for a solar

energy project as on 31st March 2020 under KfW German Development Bank's line of credit. Additionally, by January 2020, the Bank had fully utilised the European Investment Bank's line of credit to support three projects with aggregate installed capacity of 493 MW. These supplementary lines of credit are enabling the Bank to strengthen its commitment to the development of renewable energy.

- **Green Bond Issuance**

A 'Green Bond Framework' has been prepared by the bank which defines the use of proceeds, process for selection and evaluation of projects, monitoring and tracking of proceeds and reporting for green bonds. Two green bonds has been issued by the bank so far under this framework to re-finance its green projects. Pre-issuance assurance of Ÿ USD 50 million and post-issuance assurance of Ÿ USD 650 million for both the bonds have been provided by KPMG, and certified by the Climate Bonds Initiative to be in compliance with their standards.

- **Use of Proceeds:** As per the Green Bond framework all the proceeds from the green bond have been fully allocated towards re-financing the eligible projects i.e. solar power projects and sustainable transportation projects.
- **Process for monitoring and tracking of Proceeds:** A Green Bond Committee has set up by the bank to decide the eligibility of a project under the Green Bond Framework and for monitoring the portfolio there under. All green projects are cleared by this committee and are tracked in the Core Banking Solution platform for monitoring and tracking on a quarterly basis. The system provides real time information on green portfolio including loan account number, borrower name, use of proceeds, sanctioned amount, amount of loan drawn, outstanding amount and other necessary information with respect to the bond proceeds.
- **Impacts from the Projects:** Green Bonds proceeds have been utilised in augmenting solar energy capacities, leading to avoidance of Co emissions as well as other air pollutants associated with energy generation. Further, proceeds have also been allocated to the Hyderabad Metro Rail Project, which is offering a eco-friendly mode of transportation and reducing emissions through regenerative braking technology and a modal shift from high emission road transport.

Table 3: Impact of SBI Projects

S. No.	Project Description	Project Blocation	Projected Emission Reductions (tCO /Year)
1	50 MW solar energy project	Tamilnadu	77924
2	50 MW solar energy project	Tamilnadu	72710
3	49 MW solar energy project	Tamilnadu	85827
4	50 MW solar energy project	Karnataka	83505
5	34 MW solar energy project	Karnataka	48418
6	16 MW solar energy project	Karnataka	25405
7	70 MW solar energy project	Andhrapradesh	108524
8	30 MW solar energy project	Andhrapradesh	51545
9	1 MW solar energy project	Uttarpradesh	1107
10	1 MW solar energy project	Rajastan	1107
11	216 MW solar energy project	Tamilnadu	334345
12	72 MW solar energy project	Tamilnadu	111448
13	72 MW solar energy project	Tamilnadu	111448
14	216 MW solar energy project	Tamilnadu	334345
15	72 MW solar energy project	Tamilnadu	111448
16	Metro rail project	Hyderabad	15000
		Total	1574105

Source: Grid emission factors from CO Baseline Database for the Indian Power Sector User Guide Version 14.0 and Plant Load 2 Factors referred from loan documentation and state utility tariff orders.
Source: https://www.ltmetro.com/green-metro/

Challenges

- **Diversification Matters:** Due to the adoption of Green banking strategies the banks are limiting and restricting their business to those entities that qualify. With a smaller pool of customers, they'll automatically have a smaller profit base to support them.

- **Higher Operating Expenses:** Green banks have to spend more as they require specialized talent, skills and expertise as well, due to the kind of customers they are servicing. Employees, such as loan officers, need to have additional background and experience in dealing with green businesses and consumers.
- **Reputation Risk:** Banking institutions are more prone to lose their reputations if they are involved in big projects related to environmental safety, which are viewed as socially and environmentally damaging.
- **Proper Legislation is not yet Framed**: Proper legislation of environmental rules for banks needs to be framed and its enforcement is to be ensured. The problems in India are the legislation is not yet framed
- **Lack of Environmental Audits:** Environmental audits are required to determine the environmental status of a facility, property, and operation and to identify regulatory compliance status, past present problems and potential environmental risks and liabilities associated with the project. These should be done by an independent body or by any environment investigation team.
- **Lack of Clear Policies:** In order to incorporate sustainability issues, clear policies are required to altering the present management systems.
- **Unavailability of Skilled Employees:** Skilled employees are required to implement the green banking strategies properly.

Suggestions

- Customer awareness about green banking must be done through their website.
- Banks need to promote different forms of electronic banking.
- Using media to create customer's awareness.
- Carbon footprint reduction by saving energy and paper.
- Providing environment friendly rewards to customers.
- By financing more and more environment-friendly projects
- Social Responsibility services done by banks.
- Clear policies are required to altering the present management systems to incorporate sustainability issues.
- Training and development of relevant skills within bank employees so that they can use.

Conclusion

In order to promote green banking in India appropriate policy measures need to be taken. In this rapidly changing LPG era, for attaining a competitive edge, banks should play a pro-active role to introduce environmental and ecological aspects as part of their lending principle which would force industries to go for use of appropriate technologies and management systems. The banking and financial sector should be made to work for sustainable development. As far as green banking in concerned, India's banks are running behind time and it is the need of the hour to think it seriously for the sustainable growth of the nation. Indian banks should adopt green banking as a business model without any further delay.

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