

GREEN INITIATIVES BY BANKING SECTOR IN INDIA

Dr. Krishnendu Ghosh¹

¹Department of Finance, ICFAI Business School, Kolkata. Plot # Y1, Block-EP, Sector-V, Salt Lake, Kolkata-700091. India

Correspondence: Dr. Krishnendu Ghosh, Department of Finance, ICFAI Business School, Kolkata. Plot # Y1, Block-EP, Sector-V, Salt Lake, Kolkata-700091. India

Email: kghosh.fin@gmail.com

Doi: 10.23918/ejmss.v1i4p38

Abstract

'Go Green' has become the new mantra across the globe. To implement the mantra successfully a huge amount of funding as well as awareness is very important. Financial industry can play a pivotal role. Green Finance has evolved as an emerging field of study in the 21st century. Green Banking has become one of the main elements of Green Finance. Green initiatives by banking sector have emerged as a paradigm shift in the traditional banking worldwide towards sustainable development. The purpose of this paper is to highlight the Green Banking practices adopted in India and their significance towards environmental protection and sustainable ecological balance. The methodology used for the article is mainly the theoretical framework build based on the various secondary sources like published articles, websites, government reports, etc. This study could benefit policymakers and researchers in understanding the various green initiatives taken by the banking sector in India as well as the challenges and way forward.

Keywords: Green finance; Green banking; Green initiatives; sustainable development; environmental protection; sustainable ecological balance.

JEL Classification: O19, Q01, Q5, Q56

Introduction

Over the past few decades the concern for several environmental issues such as environmental degradation; destruction of ecosystems, etc. are increasing rapidly. It has become the most important need of the hour associated with every sphere of the globe such as socio, economic, environmental, ecological and political to give a serious thought on green bandwagon such as environmental protection and sustainable ecological balance towards sustainable development. Proper awareness across the world towards sustainability and enormous support from both government as well as private sector can help in achieving economic and social welfare in a sustainable manner. To implement the green movement towards sustainability massive funding is required. Financial sector can play a pivotal role in this funding. Bihari (2010) in his study has mentioned that for corporate social responsibility and to achieve sustainability financial institutions can take lot of responsibilities. A new concept has emerged in the name of Green Finance. It is also known as sustainable finance or environmental finance. Bank as the main economic agent of financial sector need to boost up towards their contribution in this green movement to adopt green strategies into their operations headed for promoting a sustainable environment. Green Banking, a paradigm shift for the banking industry, has become one of the main elements of Green Finance. Raj & Rajan (2017) has stated that though banking sector do not have any direct role in environmental degradation but indirectly they are also involve in creating environmental problems. Because of rapid industrialization and urbanization worldwide the globe is facing environmental degradation; destruction of ecosystems, etc. over the past few decades. Most of the industrial sectors are mainly financed by banks. Hence banks should take major initiatives to ensure the wellbeing of the environment, ecology and society. Integrating Environmental, Social and Governance (ESG) risks are the key challenges at present for the sustainability of banking business (Nițescu & Cristea, 2020). Not only government banks but the private banks are also indulged in making an innovative evolution towards the green initiatives to maintain the sustainability and to create a green economy. The purpose of this paper is to highlight the different green practices

adopted by the banks in India and their significance towards environmental protection and sustainable ecological balance based on the various secondary sources like published articles, websites, government reports, etc. This study could help the policymakers and researchers in understanding the various green initiatives taken by the banking sector in India as well as the challenges and way forward.

Objectives

- (a) To discuss the Green Banking practices adopted in India.
- (b) To understand the significance of Green Banking towards environmental protection and sustainable ecological balance.
- (c) To elucidate the challenges of Green Banking practices in India.
- (d) To enumerate the future Green Banking practices in India.

Concept of Green Banking

Green Banking, a new innovative financial strategy in banking sector, is also known as ethical banking or sustainable banking or socially responsible banking (Ahmed, 2012). Green banking is associated with environmental, social, and governance (ESG), corporate social responsibility (CSR), and sustainable banking (Barua, 2020). Yadav & Pathak, (2013) has mentioned that the concept of Green Banking started by Triodos bank from Dutch origin. The bank have started the environmental sustainability in the banking sector starting from 1980s. There is still dearth of any specific definition of green banking. Many researchers and practitioners have tried to define the term Green Finance in their own way which has again got some variations with respect to the country based on which the study or the work has been conducted. The most common accepted concept of Green Banking is the promotion of banking practices which are environment friendly and aims to reduce carbon footprint with the help of various banking activities as well as develop a sustainable business. As an innovative strategy for sustainable development, Green Banking is an initiative taken by banks to make the industries to grow green to save the environment aiding sustainable economic growth. The Institute for Development and Research in Banking Technology (IDRBT) has referred Green Banking as an umbrella, the highly digitized, green and eco-friendly practices with zero or minimal impact on the environment and guidelines of banks that help banks to sustain in the long run in economic, environment, and social dimensions. The report has also talked about 'Greening Infrastructure' such as establishing IT infrastructure and physical infrastructure of banks in such a manner so that they can generate the electricity for their own consumption. According to IDRBT, "*Green Banking is a multi-stakeholders' endeavour where banks have to work closely with government, NGOs, regulator, consumers, and business communities to reach the goal*" (IDRBT, 2013). The United Nations Environment Program Finance Initiative (UNEP FI) and the Equator Principles (EPs) are the two key initiatives taken internationally to create a common protocol to manage environmental worries. These initiatives are mainly applicable for financial sector to set their green goals, cultivate their green strategies and perform their greening activities by integrating the environmental and social dimensions to financial performance and risk associated with it in financial sector (Trehan, 2015).

IDRBT has identified processes, products and services, strategies and other activities, as the major avenues of Green Banking. The green processes of banks comprises of implementation of techniques and plans that reduce inventory, wasted freight, etc. and acceptance of networked design using a carbon footprint as a part of supply chain management activities; to enable paperless transactions and embracing of techniques for workforce, parts optimization and intelligent device management as a part of enterprise resource management activities; using electronic means to keep contact with and correspond with customers and minimization of paper-based correspondences in customer relationship management activities; based on the sustainability rating of products, services and operations, selection of vendors; as a part of product life cycle management introduction of banking products and services which consume less resources and energy and also reduce carbon footprint. IDRBT has also talked about setting of SMART (Specific, Measurable, Attainable, Realistic, and Timely) green goals as the internal targets to reduce your carbon footprint along with timelines (IDRBT, 2013).

Menon, Sreelakshmi & Shivdas (2017) has explained Green Bank as those banks in which their internal operations as well as the external operations which are eco-friendly and fulfill the social responsibilities attached to the society, customers and stakeholders by encouraging the online transfer of funds, online account balance checking, reduce paper usage of business and clients operations, green loans, green cards, green education, green transport etc. The

Indian Renewable Energy Development Agency (IREDA) decided in May 2016 to explore becoming the first green bank in the country (Sarangi, 2018).

Ministry of Environment, Forest & Climate Change (MoEFCC), Government of India has launched a nationwide campaign to sensitize people on the importance of environment conservation called 'Green Good Deeds' on February 15, 2018.

Electronic banking, internet banking, mobile phone banking, SMS banking, automatic transaction system such as ECS, NACH, auto debit, auto credit, etc., ATMs, Core Banking Solution, paperless e-statements, debit cards, credit cards, sharing electronic files, voice mail and e-mails, providing financial assistance to green events and green projects, eco-friendly IT-enabled environment, etc. are few examples of various green products and services offered by several banks in India.

Shershneva & Kondyukova (2020) has identified the elements of Green Banking based on the characteristics as internal elements and external elements as depicted below,

Table 1: Elements of Green Banking

Internal elements	External elements
1. Resource-saving equipment and separate garbage collection	1. "Green" lending and investment
2. Paperless document flow	2. Operations on "green" securities market
3. Remote forms of customer service	3. "Green" banking products for citizens (payments, affinity cards, deposits)
4. Creation of "green" offices	4. Eco-oriented sponsorship or charity
5. Transportation of employees by corporate transport	5. "Green" crowdfunding

Source: Shershneva, E. G., & Kondyukova, E. S. (2020, February). *Green Banking as a Progressive Format of Financial Activity in Transition to Sustainable Economy. In IOP Conference Series: Materials Science and Engineering (Vol. 753, No. 7, p. 072003). IOP Publishing*

Green Banking Practices Adopted in India

Banking sector as one of the major stakeholders in the industrial sector play an active role in India's emerging economy. According to Bihari (2010) banks have started realizing their environmental and social responsibility. Banks need to introspect the environmental and ecological aspects of their lending and investment decisions. Sahoo & Nayak, (2007) has state that primary metallurgical industries namely zinc, copper, steel etc., paper & pulp, pesticides/insecticides, refineries, fertilizers, tanneries, sugar, textiles, chemicals/pharmaceuticals etc. are the most polluting industries in India. These industries are mainly financed by banking sector and other financial institutions. Hence before lending or investing it is the responsibility of the banks and other financial institutions to ensure that the industries will not going to involve with any kind of activities or operations which will create harm to the environment as well as society. As per the second schedule of Reserve Bank of India Act, 1934, Indian banking systems is divided in Scheduled Commercial Banks and Scheduled Co-operative Banks. Scheduled Commercial Banks consist of Public sector banks, Private Banks, Foreign Banks and Regional Rural Banks (Yadav & Pathak, 2013).

Volz (2018) in his study has mentioned about few countries including India where the tangible footsteps to align the financial system or parts of it with sustainable development has already started. Though Kumar and Prakash (2019) has mentioned in their study, the implementation of the international sustainability code of conduct is still in its emerging stage in Indian banking sector. 20th December, 2007, Reserve Bank of India (RBI), the Central Bank of India, issued a notification on "Corporate Social Responsibility, Sustainable Development and Nonfinancial Reporting – Role of Banks" for all scheduled commercial banks emphasizing the significance of global warming and climate change in the context of sustainable development and also tried to explore the concept of green banking. This notification considered as a major landmark towards implementing Green Finance initiatives in India (Ghosh, Nath, & Ranjan, 2021). National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business (NVGs) was issued by Ministry of Corporate Affairs in the year 2011 which was revised in the year 2019 and formulated the National Guidelines on Responsible Business Conduct (NGRBC) to fulfil the Sustainable Development Goals (SDGs). In 2012 the Annual Business Responsibility Reporting, in 2014 the Infrastructure

Investment Trusts (InvIT) Regulations, in 2016 the Guidelines for the Issuance and Listing of Green Bonds, in 2017 the Disclosure Requirements for Issuance and Listing of Green Bonds, etc. issued by Securities and Exchange Board of India (SEBI) have impacted the Indian banking sector as well. In 2015 Indian Banking Association's National Voluntary Guidelines on Responsible Finance, a five-year USD500 million green bond issued by Exim Bank of India, the Priority Sector Lending (PSL) – Targets and Classification Indian Banks Association: National Voluntary Guidelines for Responsible Financing issued by RBI in the year 2017 are some notable initiatives taken by Indian banking sector. YES Bank, a private bank, issued the first INR-denominated green bond in February 2015 (Roy, 2016). Introduction of Green Rating Standard termed as “Green Coin Rating” is the standard rating for green efficient banks and banking practices among Indian Banks which was proposed by IDRBT based to the infrastructure and operations of the banks. The rating system will consider several aspects of banks such as the rate of carbon emission out due to the operations, the amount of reuse, refurbish and recycling in building furnishings, green investment, zero paperwork, green rewards and use of computers, servers, networks, printers, etc. (Agrawal, 2014). Digitisation brings the paradigm shift of conventional business models, especially in the Banking and Financial Services sector in India.

The Indian banking system consists of 12 public sector banks, 22 private sector banks, 46 foreign banks, 56 regional rural banks, 1485 urban cooperative banks and 96,000 rural cooperative banks in addition to cooperative credit institutions (IBEF, 2021). Let me discuss about some specific initiatives taken by few banks in India as a part of their Green Banking initiatives.

The oldest and the largest public sector commercial bank in India, State Bank of India (SBI), has taken several strategic initiatives to becoming carbon neutral by 2030. SBI is the first bank in the country to take initiatives into generation of green power by installing windmills in partnership with Suzlon Energy. SBI launched its Green Home Loan scheme in 2009. In 2010 SBI had launched Green Channel Counter (GCC) at 57 selected branches spread across the country aiming at reduction in paper usage as well as transaction time saving. In 2011 the GCC facility has been made available at 5000+ branches across the country. SBI won the “Best Customer Initiative” Award at the IBA Banking Technology Awards – 2010 for GCC. As per the Sustainability Report of SBI 2019-20 all the branches are using GCC in the form of cash withdrawal, cash deposit, internal funds transfer, balance enquiry, Green PIN generation and change, and mini statement. As per the report on an average, 7.62 lakh transactions were directed through GCC each day during the year 2019-20 which has indirectly save approximately 445 MT of paper, in so doing saving an estimated 11,700 trees from being cut, this is estimated to have reduced water consumption by 39,746 m³, waste generation by around 262 tonnes and carbon emissions by 4,000 tCO₂e. An amount of ₹1,413.12 crore has been spent on energy consumption during 2019 - 20. The Bank has installed rooftop solar panels across several offices which has helped the Bank reduce its dependency on fossil fuels. A substantial volume of wind power is also consumed by SBI's Global IT Centre (GITC) in Mumbai. SBI has installed IPM+, an intelligent power management utility software for power optimization and also took the initiative of the Branch Server Consolidation (BSC) project envisioned to consolidate all physical servers to a centralized location in a secured virtual environment. For the purpose of carbon neutrality and mitigating climate change, as on 31st March 2020, a total of 68 waste management units have been setup across the Bank's various branches, offices and other establishments and 248 rainwater harvesting systems set up across its branches, offices and other establishments. SBI has also introduced its app called YONO, which not only used to open but also enables swift processing of pre-approved personal loans (PAPLs). SBI Green Remit Card is a simple magnetic stripe based card without a PIN which are used for deposit of cash using GCC/Cash Deposit Machines (CDMs)/ Automated Deposit and Withdrawal Machines (ADWMs) to the designated beneficiary's SBI account. Green PIN is another initiative towards reducing use of papers. SBI has adopted the Green Bond Framework, a guideline regarding Green Bond issuance and the use of proceeds for projects creating a positive impact on the environment. Under this framework SBI has raised a Green Bond worth USD 100 million to finance its green projects and utilized the proceeds towards projects in the renewable energy, solar power and sustainable mobility space. SBI has also targeted to spend 5% of total CSR expenditure specifically on climate change mitigation and adaptation project as their short term goals and at least 30% of total CSR expenditure to be spent specifically on climate change mitigation and adaptation projects as their long term goals. SBI has recently started a Green Home Loan scheme to support environment-friendly residential projects that are rated by the Indian Green Building Council (IGBC). As on 31st March 2020, the Bank has a portfolio of 55 cars and 994 e-rickshaws financed under its Green Car Loan and e-rickshaw loan schemes respectively. At present SBI has 58,555 Automated Teller Machines (ATMs) across all over India (SBI, 2020).

As per the annual report 2019 – 20 published by Punjab National Bank (PNB), the bank believes in sustainable growth incorporates environment protection. As a part of their Green Banking initiatives they have emphasized on utilizing energy efficient electrical fixtures, LED Lights, etc. in offices & residential premises, adopted solar energy

driven ATMs, Solar PV cell based sources of power and Solar Water Heating System in its new buildings and installing Solar PV based Rooftop Solar Power Projects and Solar Water Heating System in its existing buildings wherever possible, adopted energy efficient equipments for office buildings and residential premises, 100% electricity audit of all the offices, etc. PNB's State of the Art Head Office Building at Dwarka is a certified Green Building having 5 Star Green Rating for Integrated Habitat Assessment (GRIHA) Rating for best efficiency of resources such as Rain Water Harvesting, Segmentation, Targeting and Positioning (STP) model, Energy efficient electrical equipments and Modern amenities. PNB has adopted "Green Building" initiatives to reduce wastage of resources and energy such as utilizing laminated glass to reduce the infrared & UV light inside building, conserving electricity by usage of energy efficient electrical equipments, LED lights, sensors, etc. The Bank has been sanctioned a line of credit of \$500 million from Asian Development Bank, for financing Rooftop Photovoltaic Solar Power Projects. Bank has introduced 'Green PNB' initiatives to address environmental concerns, to help mitigate wastage of energy, conserving electricity, etc. 229 saplings were planted in 23 Tree Plantation Camps organized during the year 2019 – 20. (PNB, 2020). PNB Bank has signed "Green Pledge" of the Ministry of New and Renewable Energy (MNRE) (Menon, Sreelakshmi & Shivdas, 2017). PNB has launched Green e-vigilance which involves paperless dealings in complaint and vigilance procedures through e-network, cuts down cost and time (Soumya, 2019).

IDBI Bank, came into being on October 1, 2004, is a member of the Council of National Action Plan on Climate Change (NAPCC) (Bihari, 2010). IDBI Bank is one of the few Public Sector Banks/ FIs who are signatory to Carbon Disclosure Project (CDP). In Corporate Governance also they have started their initiatives in the year 2013 by going paperless and sending documents to shareholders through electronic mode. The Bank has taken initiatives for funding all potential Clean Development Mechanism (CDM) projects based on clean technologies like renewables, solar cell/module projects, co-generation, energy efficiency equipments projects, etc. A project on "Initiative for Low-carbon Business Sustainability through Environmental Banking" by IDBI Bank won ADFIAP's Outstanding Development Project Award 2014 under the Environmental Development Category (ADFIAP, 2016). IDBI is the first commercial state-owned bank to raise \$350 million via selling green bonds and they have also decided to issue Green Bonds to fund new and existing projects with environmental benefits following the Green Bond Principles, 2015.

ICICI Bank has supported various ecological projects across the country. ICICI Bank offered financial support to the Indian Army from 2006 to 2011 to assist 25 resource conservation and biodiversity protection projects across the country aimed at improving biodiversity conservation measures across various establishments such as cantonments, depots, maneuver areas, military farms and command areas. ICICI Bank launched 'Go Green' - an organization-wide initiative to reduce its own carbon footprint. ICICI Bank has installed solar power facilities at 522 Gramin branches across 7 states of India. In association with state govt. and few NGOs, ICICI Bank led a tree plantation drive in Chhattisgarh and Maharashtra to enhance the green cover in these states. to reduce its carbon footprint as part of its environmental sustainability drive. Insta Banking is a new feature in the iMobile App initiated by ICICI Bank which aims at branch transaction anytime, anywhere. The main objective behind digitization for customers is saving paper. At present ICICI is having 14,136 ATMs across all over the country. As per the Sustainability Report of ICICI Bank 2019 – 20, 11 premises of ICICI Bank have been certified with the highest possible 'Platinum' rating by IGBC. 554 rural branches and 200 ATMs of ICICI Bank are powered using solar energy. ICICI Rural Self-Employment Training Institute (RSETI) at Jodhpur is India's first IGBC rated 'Net Zero Energy Platinum' new building. ICICI Bank's data centre is the first IGBC 'Platinum' rated data centre in India and the first Uptime Tier-3 certified data centre in the Indian banking industry. The Bank's continuous rigorous efforts have led to a steady decline in per capita energy consumption across the operations. Energy Performance Index (EPI) for the large offices reduced by 21.35% and Energy Performance Metric (EPM) for branches reduced by 27.74% over the last five financial years. ICICI Bank had undertaken a detailed energy audit in fiscal 2014. ICICI Bank allocates a specific budget every year to continuously improve our energy efficiency. Lithium-ion battery storage systems were deployed at two branches of ICICI Bank. At present 7% of ICICI Bank's total electricity consumption was sourced from renewable sources. At March 31, 2020, the total renewable power capacity installed by the Bank at its premises were 2.8 MWp. ICICI Bank has signed Power Purchase Agreements (PPA) to purchase solar and wind energy for three of their large offices. ICICI Bank have undertaken initiatives in water management and conservation also by installing water efficient plumbing fixtures in all large offices, recycle and reuse wastewater at three large offices in Mumbai, Chennai and Hyderabad, rainwater harvesting. Over the years, the Bank had also financed projects related to pollution reduction and recycling. ICICI Bank provided a grant to setting up of oxygen generation plant at Siachen in Ladakh (ICICI Bank, 2020).

HDFC Bank is known for its efforts in reducing greenhouse gas (GHG) emissions each year. Every year the Bank publishes its annual GHG emissions through sustainability disclosures. As per the Sustainability Report 2019-20 the Bank has achieved 12% reduction in power consumption through Energy Management System (ENMS) adopted at 600 branches as of March 31, 2020. HDFC Bank is the second top constituent of the NIFTY enhanced ESG Index. The Centre of Digital Excellence (CODE) was set up by the Bank for driving digital innovation. The Bank do not lend to businesses that produce ozone depleting substances. The Bank follow a Social & Environmental Management System (SEMS) framework that assesses and considers parameters like social impact, resettlement and rehabilitation, CSR initiatives, emissions and negative environment impacts of the proposed project before financing any project. In about 600 branches, HDFC has installed sensors to monitor HVAC, lights and signages, which reduce human intervention and time. These sensors resulted in a saving of 10% of the average energy consumption. Variable Refrigerant Flow (VRF) ACs are being used instead of conventional ACs in all new back-offices. In branches, we are installing inverter-based star rated ACs, as per ISEER standards. 17.23 lakh KWH Energy savings recorded in FY 2019-20. HDFC Bank collaborated with Energy Efficiency Services Limited (EESL), an energy service company (ESCO) of the Government of India and the world's largest public ESCO, to use their super-efficient ACs at its branches and ATM premises. The Multi-Functional Devices (MFD) installed at large offices of HDFC Bank also measures and monitors department-wise paper consumption. 261.92 MT E-waste disposed of through authorized recyclers in FY 2019-20 (HDFC Bank, 2020).

Axis Bank is the third largest private sector bank in India. The motto of Axis Bank is to “*promote environmental sustainability and equitable growth through sustainable lending practices; reduce impact on the environment on account of our own operations by actively managing our environmental footprint and supporting customers to make ‘green banking’ choices*”. Based on international frameworks such as Equator Principles, IFC Performance Standards Framework for Environmental and Social Sustainability, the World Bank Group General Environment, Health & Safety (EHS) Guidelines and Sector Specific Guidelines AXIS Bank has developed ‘Sustainable Lending Policy and Procedures’ (SLPP), managed by the Environmental and Social Monitoring Group (ESMG) to assess environmental and social risks in our lending decisions. SLPP came into action from 1st April, 2016. In 2019 Axis Bank has decided a guidelines parameters ‘Growth, Profitability, Sustainability’ (GPS) which will guide them in their operations. As on 31 March 2020, the Bank’s overall exposure to ‘sustainable’ sectors including renewable energy (including hydro), urban mass transport, and green buildings, stood at ₹6,446.58 Crores. In 2016, Axis Bank has launched India’s first certified, dollar denominated green bond by an Asian bank that raised USD 500 million. The total funded green exposure under the Green bond issuance was ₹3228.37 Crores as on 31 March, 2020. The Bank’s digitalization efforts help to reduce resource requirements such as printed forms and sheets, receipts, etc. The Bank has a Policy on Environmental Management and Centralized Energy Management System (CEMS) was implemented to 1,493 branches from 893 branches to monitor and control energy consumption which guides its environment-related actions across all its operational locations in India. As on 31 March 2020 the overall installed renewable energy capacity at the Bank was 7.05 MW, generating approximately 102,484 GJ of electricity. By taking initiatives such as solar power generation, procurement of wheat straw- based paper, the digital Saksham initiative, e-statements & e-welcome kits and digital lending the Bank has avoided 12,046.39 MT of GHG emissions in FY 2019-20. Conversion of 40MT Food/ Wet waste at Axis House, Mumbai, into compost through composting machine, re-cycling of 78 MT of dry waste such as newspapers, shredded documents, dry paper cups and tissues collected annually at Axis House, Mumbai, into stationery items like notepads, daily re-cycling of 150 KL of water through Sewage Treatment Plant at Axis House, Mumbai, Rain Water Harvesting of around 2000 KL of water yearly at Axis House, Mumbai, replacement of conventional lighting to LED lights, installation of Motion sensors for workstations and common area lighting at large offices, etc. are some notable green initiatives taken by Axis Bank (Axis Bank, 2020).

YES BANK is the first Indian signatory to the UNEP FI. YES BANK issued India’s first ever Green Bonds (AA+ by CARE) in February, 2015 which has raised an amount of INR 10 billion, in accordance with Green Bond Principles. YES BANK was awarded as the Green Bond Pioneer for being the “Pioneers in Emerging Markets-India” by the Climate Bonds Initiative for its first issuance of green bonds in February, 2015. In August 2015 the bank’s second issuance of 10-year green bond raised INR 3.15 billion on a private placement basis with IFC, the first ever investment by IFC in an emerging markets green bond issue in the world. The second issuance of green bond by YES BANK in August, 2015 won the Special Award for Innovation (Structure) by Environmental Finance. On the occasion of Conference of Parties (COP) 21 climate summit in Paris, the bank has targeted to mobilize USD 5 Billion from 2015 to 2020 for climate action through lending, investing and raising capital towards mitigation, adaptation and resilience which ultimately impact and aid India’s target of meeting its Nationally Determined Contributions (NDCs). YES BANK has a membership with the Natural Capital Finance Alliance (NCFA) and also

associated with the Green Bonds Principles (GBP). YES BANK has introduced Green Good Deeds campaign on World Water Day on March 22, 2018. In 2017, YES BANK successfully completed ISO 14001:2015 recertification for 444 metro urban branch locations by implementing the globally recognized Environmental Management System and became the first bank globally to migrate to the latest environment management system. YES BANK is the only Indian Bank amongst the 30 Founding Banks of the Principles for Responsible Banking. The Bank was also the only Indian bank to be accorded 'Prime' status by OEKOM AG, a leading ESG ratings agency in Europe & was the only Indian Bank to be selected in Dow Jones Sustainability Indices (DJSI) in the emerging market index. In February 2016 The Bank signed an agreement with the Indian Renewable Energy Development Agency (IREDA) to foster renewable energy (RE) development in India to boost up green energy financing. In October, 2015 YES BANK has signed a charter with the Ministry of Power and Bureau of Energy Efficiency (BEE) for empanelment of Participating Financial Institutions (PFIs) under Partial Risk Guarantee Fund for Energy Efficiency (PRGFEE) to contribute in promoting Energy Efficiency in India. YES BANK is the only Indian Bank to be a signatory to the Collective Commitment on Climate Action (CCCA), a pledge taken to bring into line their services and lending with the objectives of the Paris Agreement to limit global warming to well-below 2, striving for 1.5 degrees Celsius (YES BANK, 2021).

Bandhan Bank, being a new bank in the Indian Banking Sector has also started taking several initiatives towards Green Banking such as Conversion of statements into e-statements, Five Star rated and energy efficient ACs and Diesel Gensets, Replacement with LED lights in the office, replacement of old chillers, Automated server and desktop shutdown to reduce consumption of energy, 30,000 KiloLitre of rainwater harvesting potential has been created, 20 Hectares of mangrove plantation has been created, 4,400 tonnes of CO₂ sequestered, etc. Its headquarter is located in a IGBC-Gold rated green building and uses energy and water efficiency, resource recycling and other green building sustainable practices.

To control the increasing pollution in India the need for e-vehicles (EVs) are increasing rapidly. Many banks as a part of their Green Banking initiatives started providing financial support to encourage the use of EVs at an increasing rate. IndusInd Bank partnered with OEM Lohia Auto Industries, in March 2017, offers retail vehicle finance for three-wheeler electric models across 11 Indian states. Bank of India and Punjab National Bank offer e-rickshaw financing Micro Units Development and Refinance Agency (MUDRA) loans were designed to support microenterprises in India. E-rickshaws are eligible for MUDRA loans. SBI started the Green Car Loan, the only specialized product for electric cars, in April 2019 (NITI Aayog and Rocky Mountain Institute, 2021). Axis Bank offers up to 85% of the on-road price of the EV car as a loan.

Apart from all these leading banks there are many other banks are also taking active participation towards Green Banking in India.

Conclusion

As stated by Sahoo, & Nayak (2007), in comparison to global trends in Green Banking, the banking and financial institutions in India are running behind the schedules. Though from the above discussion it has become very clear that the banking sector in India playing an important role by taking continuous innovative efforts for reducing carbon footprint, addressing environmental concerns, maintaining ecological balance, etc., towards achieving sustainability by adopting various national and international environmental practices and initiatives. Yadav & Pathak (2013) has commented that the Indian banking sector is still at the initial stage of green banking initiatives. As a regulatory authority both the Government of India and RBI are showing proactive initiatives in Green Banking. The focus of the new generation banks has shifted to 'planet, people and profit' instead of 'profit, profit and profit' (Bihari, 2010). 'Reduce', 'Reuse' and 'Recycle' has become the new mantra. Increasing awareness amongst the customers, be it individuals or corporates, will expedite the process. Unless the customers are ready to accept the Green Products banks alone cannot do anything to promote Green Banking initiatives towards achieving Green Economy. Indian banks should take more strict measures while funding or investing in various projects to ensure the protection of environment and ecological balance. More financial support should provide by the banks to encourage the green building, green vehicles, etc., initiatives. Continuous innovation and increased awareness towards sustainability issues can create a future path way for the Indian banking sector to significantly contribute towards sustainability and also to convert one of the biggest economy of the world to a Green Economy.

Reference

- ADFIAP. (2016, September 14). IDBI Bank takes the lead in green banking in India. Retrieved April 15, 2021, from ADFIAP: <https://www.adfiap.org/resources/idbi-bank-takes-lead-green-banking-india/>
- Agrawal, S. (2014). Green banking in India: An empirical study of commercial banks. *Voice of Research*, 2(4), 58-60.
- Ahmed, S. U. (2012). Green banking: advancement and opportunities. *Keiei to Keizai*, 92.
- Annual Reports. (n.d.). Retrieved April 2021, from AXIS BANK: <https://www.axisbank.com/shareholders-corner/shareholders-information/annual-reports> .
- Annual Reports. (n.d.). Retrieved April 2021, from ICICI Bank: <https://www.icicibank.com/aboutus/annual.page?> .
- Bank, Axis. (2020). Axis of Trust - Sustainability Report, 2019 - 2020. Axis Bank. Retrieved April 15, 2021, from <https://www.axisbank.com/docs/default-source/csr-reports-and-disclosures/axis-bank-sustainability-report-fy-2019-20.pdf> .
- Bank, Bandhan. (2020). Integrated Report, 2019 - 2020. Bandhan Bank. Retrieved April 15, 2021, from <https://www.bandhanbank.com/sites/default/files/2021-01/Bandhan-Bank-Integrated-Report-2020.pdf> .
- Bank, HDFC. (2020). Leading responsibly - Sustainability Report, 2019 - 2020. HDFC Bank. Retrieved April 15, 2021, from <https://v1.hdfcbank.com/csr/pdf/Sustainability%20Report%20FY-2019-20.pdf> .
- Bank, ICICI. (2020). Building A Sustainable Future - Environmental, Social And Governance Report 2019-2020. ICICI Bank. Retrieved April 15, 2021, from <https://www.icicibank.com/managed-assets/docs/investor/annual-reports/2020/ICICI-Bank-Environmental-Social-Governance-Report.pdf> .
- Barua, S. (2020). The Meaning of Green Banking. In *Principles of Green Banking* (pp. 39-50). De Gruyter.
- Bihari, S. C. (2010). Green banking-towards socially responsible banking in India. *International Journal of Business Insights & Transformation*, 4(1).
- Corporate Social Responsibility. (n.d.). Retrieved April 2021, from IDBI Bank: <https://www.idbibank.in/corporate-social-responsibility.aspx> .
- Corporate Governance Report. (n.d.). Retrieved April 2021, from Punjab National Bank: <https://www.pnbindia.in/corporate-governance-reports.html> .
- Corporate Governance. (n.d.). Retrieved April 2021, from SBI: <https://sbi.co.in/web/corporate-governance/annual-report>.
- Ghosh, S., Nath, S., & Ranjan, A. (2021). Green Finance in India: Progress and Challenges. *RBI Bulletin*, 61 - 72.
- Green Banking for Indian Banking Sector, Institute of Development and Research in Banking Technology. Publications: IDRBT (2013). Retrieved from [https://www.idrbt.ac.in/assets/publications/Best%20Practices/Green%20Banking%20Framework%20\(2013\).pdf](https://www.idrbt.ac.in/assets/publications/Best%20Practices/Green%20Banking%20Framework%20(2013).pdf) (Last accessed on 13th April, 2021).

HDFC Bank Annual Reports. (n.d.). Retrieved April 2021, from HDFC BANK:
<https://www.hdfcbank.com/personal/about-us/investor-relations/annual-reports> .

IBEF. (2021, March 22). Banking Sector in India. Retrieved April 15, 2021, from IBEF:
<https://www.ibef.org/industry/banking-india.aspx> .

Kumar, K. and Prakash, A. (2019), "Developing a framework for assessing sustainable banking performance of the Indian banking sector", *Social Responsibility Journal*, Vol. 15 No. 5, pp. 689-709. <https://doi.org/10.1108/SRJ-07-2018-0162>.

Menon, D. G., Sreelakshmi, S. G., & Shivdas, A. (2017, December). Green banking initiatives: A review of Indian banking sector. In 2017 International Conference on Technological Advancements in Power and Energy (TAP Energy) (pp. 1-7). IEEE.

Nițescu, D. C., & Cristea, M. A. (2020). Environmental, Social and Governance Risks–New Challenges for the Banking Business Sustainability. *Amfiteatru Economic*, 22(55), 692-706.

NITI Aayog and Rocky Mountain Institute, Mobilising Finance for EVs in India: A Toolkit of Solutions to Mitigate Risks and Address Market Barriers, January 2021. Retrieved April 15, 2021, from https://niti.gov.in/sites/default/files/2021-01/RMI-EVreport-VF_28_1_21.pdf .

PNB. (2020). Annual Report 2019 - 20. PNB. Retrieved April 15, 2021, from <https://www.pnbindia.in/annual-reports.html> .

Raj, D. G. P., & Rajan, D. A. P. (2017). A Study on the Customer Awareness on Green Banking Initiatives. *Intercontinental Journal of Finance Research Review*, 5(7), 54-65.

Roy, R. (2016). Financial System for Sustainable Development in India. *Journal of Responsible Finance*, 1 - 15.

Sahoo, P., & Nayak, B. P. (2007). Green banking in India. *The Indian Economic Journal*, 55(3), 82-98.

Sarangi, G. K. (2018). Green energy finance in India: Challenges and solutions (No. 863). ADBI Working Paper.

SBI. (2020). Responsible Finance – Sustainable Growth. SBI. Retrieved from https://bank.sbi/documents/17826/24027/2007201345-SBI+Sustainability+Report+V37+20_07_2020_Spread_layout.pdf/801cc0de-a47d-c860-f5c3-fc57efb58339?t=1595232977158 (Last accessed on 14th April, 2021).

Shershneva, E. G., & Kondyukova, E. S. (2020, February). Green Banking as a Progressive Format of Financial Activity in Transition to Sustainable Economy. In *IOP Conference Series: Materials Science and Engineering* (Vol. 753, No. 7, p. 072003). IOP Publishing.

Soumya, S. (2019). GREEN BANKING: A SUSTAINABLE BANKING FOR ENVIRONMENTAL SUSTAINABILITY. *CLEAR International Journal of Research in Commerce & Management*, 10(7).

SUSTAINABILITY AT YES BANK. (n.d.). Retrieved April 2021, from YES BANK:
<https://www.yesbank.in/about-us/sustainability-at-yes-bank> .

Trehan, R. (2015). Green banking in India. *Journal of Poverty, Investment and Development*, 14(2), 27-32.

Volz, U. (2018). Fostering green finance for sustainable development in Asia.

Yadav, R., & Pathak, G. (2013). Environmental sustainability through green banking: A study on private and public sector banks in India. *OIDA International Journal of Sustainable Development*, 6(08), 37-48.