

Green Banking Practices and Strategies for Sustainable

By

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Abstract

The new global economy has paved way for a more dramatic conditions that has led to the ecological imbalances in the country. The changing society has recognized the need for more sustainable ecological balance so that the coming generations can survive in a better environment. Keeping this in view, the business are also focusing on environmental sustainability and striving for eco-friendly production methods and techniques .Banking sector being an integral part of Indian economy providing services to businesses and the individuals is also taking a major step to change its banking practices to adopt environmental sustainability practices by adopting green banking strategies and pave way for green financing .The aim of Green banking is to implement environmentally friendly practices in offering banking services through promotion of digital transactions thereby reducing carbon footprints in its operations. Hence, environmental concern which is gaining prominence has become the core crux for the banks to adopt green banking strategies to make contributions for green economy. The study attempted to addresses the latest sustainability developments in Indian banks by appropriate green banking practices and strategies and the challenges they face during implementation. The analysis is purely based on the secondary data source. In conclusion, the study also stresses upon the significance of awareness among clients and customers, the core values that the green banks deliver to develop green image as a part of environmental responsibility.

Keywords: Green Banking, Sustainable Development, Environmental responsibility, Green Financing, Digital Transactions.

1.0 Introduction

The financial sector is undoubtedly the viable sector as it provides financial resources for the growth of the economy. The banks, as a part of financial sector are functioning as major agents in providing credit and investment needs of the people. Environmental concern is gaining greater importance and this concern had made the banks to reshape and restructure their policies and procedures to blow up the ecological imbalances caused due to rapid industrialization. Keeping this perspective in view, banks had to consider the economic issues as well as ecological concerns while financing the projects for sustainability development. Moreover, the act of corporate social responsibility which is not only confined to corporate firms, but also had laid stress on the banks as contribution to green economy. World today is demanding for ecological sustainability and hence banks tend to transform themselves to inculcate green practices in internal processes as well as developing green financial products to strengthen banks' environmental image and profitability. Green initiatives in banks have become the core objectives for Banks to reduce carbon footprints in banking activities and financial

products thereby discharging environmental responsibility. Creating encompassing banking policies that would promote sustainable economic development is referred to as "green banking." Adopting green strategies and initiatives have created value addition for the financial sector. They created a synergy for development of green trust and green reputation in the banking field.

Green Banking entails banks to encourage environment friendly investments and give lending priority to those industries which have already turned green or are trying to go green and, thereby, help to restore the natural environment. Green banking means combining operational improvements, technology and changing client habits in banking business. It means promoting environmental friendly practices. This comes in many forms such as –using online banking instead of branch banking; paying bills online instead of mailing them; opening up CDs and money market accounts at online banks, instead of large multi branch banks; or finding the local bank in the area that is taking the biggest steps to support local green initiatives. Foreign banks are practicing green banking on a much serious note. Indian banks are still taking the first steps in this form of banking. However, many of them actively pursue this strategy. Green banking means promoting environmentally sound practices and reducing a bank's carbon footprint. It comes in several forms. Using online banking instead of bank branches, paying bills online instead of mail, opening commercial deposits and money market accounts at online banks, etc.

The focus of Green Banks is

- To promote environmentally friendly practices
- To minimize carbon foot prints in the operations inside the banks and promotion of green financial products
- To develop sustainable banking and ethical banking
- For aiming and promoting environmental concerns.

1.1 Statement of the Problem

Climate change is happening right now. These climate changes are causing global warming to continue to increase temperatures and affect environmental factors and the resilience of the economy and people. The global industrial scenario caused huge environmental degradation and industrialization being the major cause for greater environmental threats resulted in global warming. If this continues the world might be at hazardous risk situation. Hence, environmental protection and sustainability development is of prime concern today to protect future generations. The business environment both inside the country and around the world had awakened to respond to the environmental threats and hazards caused in the business world. Environmental sustainability is being demand in all the sectors and banking sector is no way an exception. Environmental sustainability started way back in 1960s when the National Environmental Policy Act (NEPA, 2014) was formulated in the United States .The main objectives of the policy are to advance the common good, preserve a fruitful balance between people and environment, and ensure the economic and social well-being of upcoming generations. As a part of environmental protection initiative, the concept of Green banking was initiated by the banks to ensure environmental hazard free banking activities to create reputation and enhance performance of the banks. In order to enhance investment patterns and stimulate economic growth, banks need to encourage financial markets to invest in clean energy and also aim at providing low-cost financial support to low-carbon clean energy projects.

1.2 Green Banking

Green banking, widely known as an ethical bank, is similar to regular banking in that it takes into account all social and environmental factors. Environmental regulation was the initial focus of ethical banking. These banks function similarly to typical banks in that they also seek to safeguard the environment, and they are overseen by the same authorities. Green banking and conventional banking are very different from one another. Green banks place more emphasis on environmental considerations and strive to promote ethical business practises that are also socially responsible whereas in a conventional banking system only financial activities are carried out without any concern for the ecology. Before granting a loan, green banks carefully consider whether the project will have any long-term effects on the environment. Only then will a loan be granted if the project adheres to all environmental safety regulations. Green banking can be simply defined as Green banking is encouraging eco-friendly behaviour and lowering a bank's carbon footprint. These practices include:

1. Switching to internet banking from branch banking.
2. Payment of invoices electronically rather than through mail.
3. Opening an online bank account rather than one with a big network of branches.
4. Identifying the regional banks that are making the most efforts to aid neighbourhood environmental initiatives.

Green Banking Products

- i) Green Loans:*** Giving funds to a project or company that is thought to be environmentally beneficial is referred to as a "green loan."
- ii) Green mortgages:*** These mortgages offer a financial reduction or a larger loan than is typically allowed in exchange for making energy-efficient upgrades or purchasing a home that complies with specific energy efficiency standards
- iii) Green Credit Cards:*** Credit cards are becoming green, whether these are through the use of eco-friendly rewards, the adoption of biodegradable credit card materials, or the promotion of paperless banking.
- iv) Green Channel Counters (GCC):*** Commercial banks took an innovative step using Green Channel Counters (GCC) to transition from traditional paper-based banking to card-based green banking. GCC wants to speed up transactions. The quickest, easiest, and safest way to handle daily banking transactions. Customers don't need to remember an 11-digit account number, carry a wallet, fill out a withdrawal form, or pay with a receipt. A debit card and a PIN that identifies the customer and his bank account are the only prerequisites. It is connected to a terminal and has a point-of-sale (POS) machine appearance. This number contains characters from the transaction processing unit (TPD). Customers swipe their ATM debit card, choose a particular transaction, enter their PIN, and then enter the desired amount. The client receives a printed check produced by TDP after the transaction has been completed. Cash deposits, fund transfers, and cash withdrawals are the three types of transactions that customers can carry out using GCC
- v) Green Savings Account:*** In the case of Green Savings, the bank makes a donation based on the amount saved by the customer. The more you save, the greater the environmental benefit in the form of donations or donations by the bank.
- vi) Mobile Banking and Online Banking:*** These next-generation forms of banking include less paperwork, less mail and fewer visits to bank customer branches, all of which have a positive impact on the environment.

- vii) **Solar ATM:** ATMs are now a crucial component of the payment system. In remote isolated places with little electricity, ATM problems are fairly common. The issue of ATM inoperation brought on by power interruptions can be resolved with solar ATMs. Approximately 250 crores was funded by NABARD to Commercial and regional rural banks to provide around 5000 ATMS throughout the country. 2.5 million rural residents who lack access to electricity and the internet will profit from this. Solar ATMs use less than 100 watts of power and can operate effectively up to 50 degrees. Conventional ATMs use 500 to 600 watts of power and may stop working at temperatures above 35 degrees. Additionally, the cost of solar-powered ATMs is 30% less than the cost of a traditional ATM, and its operational cost is also considerably reduced.
- viii) **Green Bonds:** The main distinction between a green bond and a regular bond is that money is being raised to support "green" projects. This is a novel method of funding renewable energy initiatives. India's first green bonds denominated in dollars were issued by EXIM Bank. 500 million dollars of green bonds were issued by the bank in March 2017 to finance projects with environmental concerns in countries like Bangladesh and Sri Lanka. 100 billion rupees were also raised by Yes Bank through 10-year bonds. An analyst at Bloomberg New Energy Finance named Shantanu Jaiswal claims that green bonds frequently have lower interest rates than loans provided by traditional banks. Consequently, green bonds provide independent power producers with better yields than conventional types of debt.

1.3 Objectives of the Study

- 1) To understand the impact of green banking practices on sustainable development
- 2) To analyze the adoption of green banking strategies by Indian Banks
- 3) To study the role of green banking transactions to reduce carbon footprints
- 4) To find out the effect of green banking practices on changing habits of the society

2. Review of Literature

The first to introduce green banking is the state of Florida in the year 2009. In India, Green Banking initiative was laid down by SBI (state bank of India) which is the oldest and the largest multinational public sector bank by inaugurating the wind farm project in Coimbatore.

Green banks are those banks which take up practices that does not cause harm to the environment in conducting its day-to-day operations and implementing green financial products which are environmental protective and which reduce carbon emissions thereby promoting environmental development and sustainability (Hossain et al., 2020; Zhixia et al., 2018).

The green banks seek to perform their banking operations using renewable technologies. The impact of regulatory guidelines and other parameters on green banking strategies were studied and how corporate governance favourably affects the level of transparency were explored in commercial banks in Bangladesh. (Bose et al., 2017). The green banking strategies really develops competitive advantage to the banks and hence the growth of the economy and the environment can be boosted through initiating green financial products. Banks are crucial performers as they act as a link between people and the society . Due to their function as an economic middleman, banks have a huge potential impact on sustainable development. They are responsible for creation of novel products, such as investment funds that support the environment. (Jeucken & Bouma, 1999; UNEP FI, 2016). Green banks are

aiming toward sustainable operations and incorporating socioeconomic factors into their strategy. (UNEP FI, 2011, 2017).

The adoption rate of sustainable financial techniques was researched by Kumar and Prakash (2018), who divided 40 criteria into five heads and found that the application of green banking in Indian banking is still in its infancy stage and lot of developments had to be made to make green banking a success in Indian banking system.

Indian banks are currently viewed as favourable for accessing international markets. (Laskowska, 2018; Nuryakin & Maryati, 2020; Paramesswari, 2018), environmental and social responsibility is the prime need of the hour in every financial institution (Prasanth et al., 2018; Sahi & Pahuja, 2020; Zhixia et al., 2018). As a result, green strategies have become prevalent, not only amongst smaller alternative and cooperative banks, but also amongst diversified financial service providers, asset management firms and insurance companies (Allen & Craig, 2016; Gopalakrishnan & Priya, 2020; Hossain et al., 2020; Kapoor et al, 2016).

Environmentalists have identified environmental protection as a major concern by developing polices for protecting the environment. The banks have to play their role in environmental protection by promoting paperless banking and internet banking and strictly following to the non-materialization and non-carbonization and non-mobilization in the operations of the banks. Only this can contribute for environmental sustainability. (Hossen et al., 2014).

Jaggi (2014) attempted to study the reputed public sector bank that is SBI and the most effective functioning private sector bank ICICI and their banking practices for environmental upgradation. The study findings revealed that ICICI adopted initiatives such as green financing to Eco -Vehicles, green communication which uses online mode to interact and reach the customers through emails. The initiatives adopted by SBI were employing green building standards for new construction of buildings, recycling water and utilizing natural lighting, and introduction of Green Channel Counters and no physical presence of customer in more than 5000 branches across India. The banks also established measures to attain carbon neutrality.

Nath, Nayak et al. (2014) in their paper mentioned that environmental management for sustainability development is mandatory for not only to the industrialists engaged in manufacturing but also to those financial intermediaries who offer financial assistance to the industries. The study aimed to find out the standards specified by RBI regarding green procedures to be followed in investments and banking procedures. Future sustainability can be actively achieved through green banking. Indian banks must understand their obligations as global corporate citizens if they hope to enter western markets or the global economy. The study revealed that banks ought to adopt the principles of LEED-certified green buildings, such as the use of renewable energy produced by solar power plants, energy-efficient lighting, motion sensors, sewage treatment facilities for recycling wastewater, urinal and wash basin sensors, rainwater collection systems, recycling of dry waste, etc. Additionally, it will boost staff morale and public relations, which lowers the attrition rate of workers. Before investing in various initiatives, such as an Environmental Impact Assessment (EIA), Annual Reporting System (ARS), Environmental Audit Management (EAM), etc., they need build the environmental system to evaluate the risk associated.

Jha and Bhome (2013), conducted a survey through structured questionnaire on consumer knowledge on green banking and mentioned certain specific banking procedures that banks have to follow to take up green banking .These included Internet Banking, adopting

ATM machines which consume less power or use solar energy or which emit less polluted gases, (ATM, Special Touch Screens), Green loans (low rates to those who wish to buy solar equipment) for supporting environment friendly residential projects, low energy consumption equipment, Green Credit Cards, Paperless transactions for sustainability.

Bahl (2012) highlights the usage of green banking strategies for sustainable growth. To study this, Garrett's ranking method is employed. He viewed that sustainable development, can only be done through raising awareness and providing education. Publications and newsletters should be prioritized among internal subsystems in order to raise awareness. Event meetings, media, and websites must be organized for efficient communication channels for spreading the information and awareness on green banking methods. Effective green banking requires a well-crafted green policy guideline.

Goyal KA and Vijay Joshi (2011) in their writings focused on social and ethical issues related to banking industry and viewed that environmental concerns and ethical issues has to be considered in the light of Industrialization. The world has to be protected against global warming caused by industrialization and adoption of technology may help banking industry to reduce global warming by reducing carbon footprints in their banking activities. One side bankers are expecting more business through customer satisfaction but on the other side, the technology effect makes the customers not coming to the bank but bank is going to the doorstep of the customers.

Alice Mani (2011) indicated that as Banks that are Socially Conscious Corporate Citizens have a significant role and obligation to support governmental efforts to significantly reduce carbon emissions. Green Banking represents the Bank's contribution to sustainable development. In light of their adherence to and commitment to environmental protection and environmentally friendly initiatives, the green financing practises of Indian banks were reflected in the writings and the author suggested that Green lending can be initiated in Indian banks to promote sustainability.

Ela Sen (2010), in his writings viewed that, businesses should focus on going paperless aiming for waste management, eco-friendliness, and pollution control, though computerization provides numerous benefits such as speed, accuracy, comfort, and effectively managing large amounts of business.

3. Methodology

As this is a preliminary study, the methodology was constructed based on review of the literature and the source of data is secondary source. This study was conducted in two stages. The first step was an updated review of the literature on the sustainability of green banking and the banking sector, in particular green banks, to confirm the results and suggest directions for moving forward. The second step was to collect data on Indian banks from secondary publication sources. The Green Bank Report and other pertinent data provided on banks and other websites were the second public sources.

4. Scope of Green Banking in India:

The efficiency of banks has significantly improved in terms of lowering costs, boosting output, boosting profitability, controlling and managing non-performing assets (NPAs), managing risks, performing asset liability management, managing changes in interest rates, handling fluctuations in foreign exchange rates, adhering to regulatory requirements, and, finally, improving customer service to the extent possible. In order to provide us with green

credit cards and green mortgages, green banking uses as little paper as possible and relies on online and electronic transactions for processing. Less paperwork results in lower deforestation. It also entails educating banking professionals about social and environmental responsibility so they can conduct environmentally friendly business practices.

Benefits towards the banks: Green banking is very important in mitigating the following risks involving the banking sector:

- i) ***Credit Risk:*** Global warming and climate change have cost banks money in direct and indirect ways. Extreme weather has been seen to influence the economic assets financed by banks as a result of global warming, which has been linked to a high incidence of credit default. Credit risk can also develop unexpectedly when banks connect firms with those whose operations are negatively impacted by changes in environmental regulations.
- ii) ***Legal risk:*** Legal repercussions have to be faced by banks just like other commercial businesses if they violate pertinent environmental regulations. Additionally, they run the possibility of being held directly liable for cleanup expenses or damage claims if they really acquire assets that cause pollution.
- iii) ***Reputational risk:*** Greater reputational risk for banks arises from rising environmental consciousness if their direct or indirect acts are perceived as being detrimental to society and the environment. Environmentally unfavourable project financing carries a reputational risk.

Benefits of Green Banking in India:

- i. ***Avoid Paperwork:*** Reduction of paper in banking operations and switching to electronic mode for conducting banking transactions even helps to curb forestation hence leading to environmental sustainability and reduction in global warming
- ii. ***Creating Awareness to Business People about Environment:*** By setting up awareness programmes, hosting seminars, and other activities, a large number of NGOs and environmentalists are promoting environmental consciousness among the general people. Banks may collaborate with these organisations to create awareness about the social and ethical responsibility towards the environment. Additionally, other corporate entities are putting together programmes similar to these in their own fields of expertise, such as the "free pollution check programme" that are run by an automobile manufacturer. Banks, if collaborated with these companies can strengthen their reputation and increase their operations nationally and globally.
- iii. ***Loans at relatively low interest rates:*** Banks can also offer green credit facilities with financial advantages for environmentally friendly goods and projects, such as loans for solar energy system installation in homes and businesses, green building projects, and fuel-efficient vehicles
- iv. ***Environmental Standards for Lending:*** It's a good idea for banks to adhere to environmental criteria when making loans, and this will encourage business owners to adapt their operations to be more environmentally friendly for the benefit of future generations.

Other Benefits:

- Service Standard Improvement
- Manual Automation
- Staff Retention and Retention

- Increased Profitability and Sales
- Reduced Cycle Time
- Increased Customer Loyalty
- Reduced Maintenance and Selling Costs
- Reduced Administrative Burden

5. Indian Banking Sector -Green Banking Strategies for Sustainable Development:

Indian banks have access to green banking as a viable business strategy (Verma, 2012). The following tactics could be used by banks or have little to no effect on banking.

- Carbon Credit Business:** All nations are required to cut carbon emissions and greenhouse gas emissions under the Kyoto Protocol in order to safeguard the environment. The Certified Emission Reduction (CER), often known as carbon credits, is required for these emissions. Banks of India can start this business because the London carbon credit market is estimated to be worth 30 billion euros.
- Green Bank Financial Products:** Banks can create cutting-edge green products or provide low-interest green loans. Due to the fact that they account for the majority of all banks' portfolios, the home loan and vehicle loan segments use a "green" lending process. Loans for small business should be based on ISO 14000 certification and national environmental policies.
- Paperless Banking:** All banks now offer e-banking goods and services in addition to switching to CBS or ATM platforms. Banks now have plenty of opportunities to implement paperless or paper-based banking, PSU banks continue to utilise a significant amount of paper whereas private and foreign banks have started employing electronics for office correspondence.
- Energy Awareness:** Banks are required to utilise compact fluorescent lighting, install energy-efficient equipment in their offices, and guard against equipment misuse. The hardware, office waste management, and energy-efficient technology items that banks should produce as a result of green banking. Banks can donate hospitals, schools, and other institutions energy-saving technology as a part of corporate social responsibility.
- Use of public transportation systems:** Banks must provide shared transportation for groups of officials in the same office.
- Green Buildings:** Banks can incorporate green buildings to safeguard the environment as they have possess their own homes, branches, or ATMs.
- Social Responsibility Services:** The Bank of India may introduce a range of social responsibility initiatives as part of the Green Banking agenda, including camps for tree planting, park upkeep, and pollution testing.

6. Environmental Management by Banking Institutions for Sustainable Development:

Financial institutions should support projects that consider the following factors when seeking funding: (a) sustainable development and use of renewable natural resources; (b) human health, biodiversity, occupational health, and energy use; (c) community prevention and waste minimization; and (d) the need for an environment management plan to be reviewed by a third-party professional.

Financial Institutions need to keep under the aspects in their view while process financing to any projects:

1. While funding the real estate industry, the worth of real estate and any potential environmental liabilities attached to it must be assessed by banking institutions.

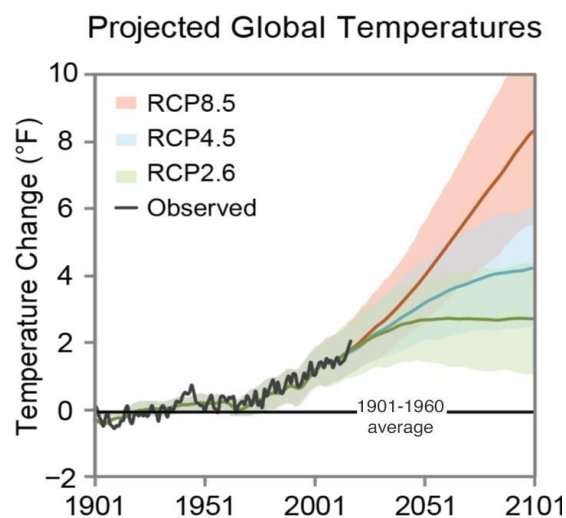
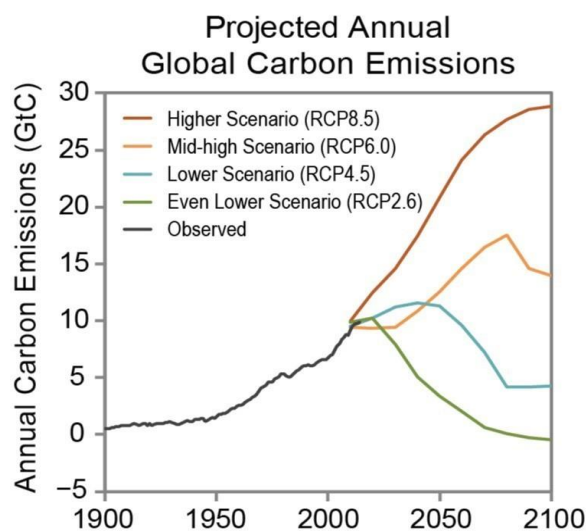
Therefore, throughout the life of a loan, banks should have the right to visit the property or request that an environmental audit be performed.

2. Any project funded by the banks had to be evaluated on the basis of nature and magnitude of environmental perspective and make an attempt to identify the positive and negative influence on the environment and must be approved finally.
3. In order to create and operate the best environmental risk management programme, banks also need to monitor post-transaction activities. A physical examination of production, resources, auditing programmes, etc. need to be examined.
4. Financial institutions should be able to access sensitive issues such as vulnerable groups and forced displacement when investing in or raising funds for projects, and projects should be evaluated in environmentally important areas such as wetlands, forests, and pastures.
5. The following assessments include loan structuring, loan approval, and loan management. In addition, the bank is audited annually and receives quarterly environmental certifications from the government as well as independent third parties.

7. Sustainable Development by Green Financing:

Climate change's impacts are no longer undetectable. Every kind of life is in danger due to the Earth's recent rise in temperature, which also puts businesses and economies at risk. Although climate changes can happen naturally, from the beginning of the 19th century, anthropogenic emissions of greenhouse gases (GHG) by people have accelerated this change. The global temperatures could increase by more than 3°C this century as per the survey of the United Nations Environment Program projects. An increase in temperature of this magnitude has the power to impair economies, obstruct trade and progress, and drive more people into poverty.

- The impacts of climate change are damaging the environment and damaging the global economy.
- India hopes to have no carbon emissions by 2070, however the country faces significant obstacles due to the anticipated economic expansion.
- Through green finance, the banking industry can significantly contribute to India's climate ambitions.



The Swiss Re Institute estimates that by 2050, it will face a loss of around 10% of total economic value and up to 18% of global GDP. The scale of this loss of economic value is not

a good sign for a country like India. The government aims to nearly quadruple the size of the economy from about \$2.75 trillion today to \$10 trillion by 2030. Achieving this goal is a difficult task, but the path becomes more difficult given the climate change promises.

i) How India can achieve its net-zero ambitions?

Prime Minister Narendra Modi pledged to achieve zero carbon emissions by 2070 during a COP26 brainstorming session in Glasgow last year. He also described India's ambitious objective of producing 500 GW of energy from non-fossil sources as part of Panchamrit's five-party promise. By 2030, cut carbon intensity and emissions by up to 45%.

Additionally, between 2021 and 2030, the prime minister vowed to reduce carbon emissions by 1 billion tonnes. Until 2070. These investments will assist India's industrial, transportation, and energy sectors in decarbonizing. India may have a substantial \$3.5 trillion investment gap as a result of its zero objectives, according to CEEW estimates.

Subsequently, Banks are willing to play a significant part in achieving these investment goals or bridging any gaps. Since the financial services sector is thought to be responsible for 72% of the potential financial impact of change, the banking sector is also leading the way in addressing its effects.

ii) Tackling climatic changes by banks in India:

India's commercial activity has been supported by the banking industry throughout the country's development as a significant economic force. Even if various other channels, such as the bond and equities markets, have expanded enormously alongside it, it is still a significant source of finance for industries. Therefore, it must be considered as a key factor in reducing the effects of climate change. Financial institutions must keep working to finance the nation's green infrastructure in order to support the transition to NetZero emissions. Although banks don't directly contribute much to climate change, they do it indirectly through financing many businesses.

In many industries today, the shift to zero is being aided by technology, which is rapidly developing. Transportation electrification, developing energy-efficient structures, lowering greenhouse gas emissions in the industrial and agricultural sectors, changing energy infrastructure to produce clean electricity, and advancing hydrogen fuel cells and carbon capture are a few examples. Both use and storage call for significant cost outlays. for a quick transition to NetZero, increased to \$2 trillion.

iii) Importance of Green Finance:

The banking sector is being guided by the Sustainable Markets Initiative's Financial Services Taskforce (FSTF) for suggestions regarding redefining the definition on sustainable financing for future investments and measures were suggested for effective financing mechanisms for reducing carbon emissions. Green finance philosophy was accorded in India in the year 2007. The Reserve Bank of India then developed measures to encourage banks to support sustainability objectives. Small-scale renewable energy projects were included by the central bank in 2015 as part of the Priority Sector Lending programme. Indian banks developed internal policies to cut back on lending to industries with high carbon emissions and switch to a green finance philosophy for loans in response. In addition, some carbon-intensive industries have rethought their business models and switched to environmentally friendly production

methods. According to data released by the Central Bank of India, cumulative outstanding bank loans to the non-traditional energy sector amounted to around Rs 365.43 billion (about \$4.8 billion), accounting for 7.9% of outstanding bank loans to the energy sector as of March 2020.

Bank Credit Outstanding to the Non-conventional Energy as on March, 2020

	Public Sector Banks	Private Sector Banks	Foreign Banks	All Banks
Amount outstanding (₹ Cr.)	21.655	12.302	2.586	36.543
As per cent of power sector credit	6.2	11.9	27.1	7.9
As per cent of total bank credit (excluding personal loans)	0.5	0.5	0.7	0.5

Note: Excludes Regional Rural Banks and Small Finance Banks.
Source: BSR, RBI, Authors' calculations.

The bank also issues “green” bonds to facilitate work on eco-protective projects. However, the value of these bonds is insignificant compared to the total issuance of Indian bonds. Since January 2018, the country has issued approximately \$8 billion worth of green bonds, or 0.7% of all bonds. For example, Among the first institutions to offer green bonds in 2015–16 were Yes Bank and Axis Bank.

iv) The Green Finance Road to 2070

The banks in their transition from conventional banking to green banking faces great challenges as they have to take up measures which are not habituated to the customers. For this purpose, banks have to collaborate with international financial institutions for funding to develop novel financing models that are pertinent to and specific to Indian challenges and utilise technology to accelerate the sustainability process could very well be the solution to these problems.

In order to adopt the sustainable eco- system, the policy framework is crucial because it will help banks function and build this sustainable environment. Tax incentives for green finance are only one example of a fiscal move that will assist lower transaction costs and encourage better lending. In order to expand the green bond market and develop new green financial instruments, India also requires a green infrastructure investment fund. Ultimately, there is a shared desire for change that will be beneficial and sustainable. The entire sector must be active for this to operate. Since every industry is interconnected, a single push might not be sufficient to turn a corner. The major change ought to be in focus. Making a significant difference will be made possible through increasing public awareness, disseminating information, and sustaining research and development.

8. Suggestions

The following suggestions can be adopted by the banks to make more sustainable development of India by implementation of green banking.

- i.*** Banks need to promote more digital transactions in order to avoid paperwork and save energy.

- ii. Keep pace on promoting different ways of electronic banking services
- iii. Banks should more appropriately aim at practicing green financing for sustainable development by encouraging greenhouse projects.
- iv. Digitalization of banking transactions has to be enhanced thereby reducing Carbon footprint.
- v. Approving projects that are eco -protective help in building long term Environmental sustainability.
- vi. Socio-ethical consciousness need to be strengthened by the banks for environmentally friendly approach.
- vii. A clear policy is needed to change the existing management system to include sustainability issues.

9. Conclusion

Green banking contributes to environmental improvement and economic growth. Most traditional banks did not aggressively pursue investment opportunities or engage in green banking until a few years ago. in the green sector or companies. The growth of Indian banks is substantially low when compared to the banks in the developed countries. The global markets are looking for social and ethical banking system with environmental conscious and Indian banks have to strive for green banking if they desire to compete in the global markets. This strategy has only recently become common among small alternative and cooperative banks, as well as service providers of various financial products, venture capital companies and insurance companies.

Furthermore, banks should prioritise lending to those sectors of the economy that have already made significant strides toward being green and those that are doing so. The banks, businesses, and economy will all profit from this "Green Banking" idea. In addition to ensuring the greening of sectors, "green banking" will make it easier to raise the asset quality of banks in the future. The adoption of "Green Banking" as a successful company presents both many potentials and difficulties for Indian banks. If done honestly, green banking will serve as a powerful ex ante deterrent for the polluting sectors that ignore the other institutional regulatory systems. Indian banks must therefore employ green technologies to ensure a sustainable banking industry.

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