Driving Sustainability: Exploring Global Green Banking Initiatives for a Greener Future

Rakshitha J.1,2 and Chaya R.1

Abstract

Environmental degradation threatens survival of entire Global system. Global warming has been a national and international issue in recent years. Environmental challenges harm businesses directly and indirectly. Although several regulations to control pollution and protect the environment, they are not enforced, therefore we have failed to prevent environmental damage. So, all business policies focus on environmental issues. In a worldwide economy, regulators, governments, media, judiciaries, civil society organisations, and social activist groups are analysing industry and corporate environmental impacts and pressuring them to become greener. Hence, ethical regard for the environment is transforming global corporate sectors into green, ecologically friendly ones. The banking sector as a business sector is not excluded from this initiative. Consequently, encouraging environmentally friendly initiatives and prudent lending should be one of the financial industry’s obligations. Hence Banks and other financial companies are streamlining carbon emission reduction. Banks worldwide are investing in green strategy. These actions, part of a larger sustainable development plan, have created the concept of Green Banking. In the realm of finance, Green Banking is a relatively recent concept. It varies from conventional banking in that it considers environmental considerations while deciding whether to grant a loan. The green finance movement is young but expanding fast enough to replace fossil fuel investments. So, future demand for green financial products is expected to rise. In light of this, the present study compiled a list of a few global banks that have

Corresponding author:
Rakshitha J., Department of Studies and Research in Commerce, Karnataka State Open University, Mysuru, Karnataka, India
E-mail: rakshithajeevaprakash@gmail.com

1Department of Studies and Research in Commerce, Karnataka State Open University, Mysuru, Karnataka, India
2Department of Commerce, Government First Grade College, Byadagi, Karnataka, India

Creative Commons Non Commercial CC BY-NC: This article is distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 License (http://www.creativecommons.org/licenses/by-nc/4.0/) which permits non-Commercial use, reproduction and distribution of the work without further permission provided the original work is attributed.
implemented Green Banking initiatives. Consumers are able to safeguard the environment and work to mitigate the effects of climate change while also doing their typical banking operations online. This research study is intended to analyse the various Green Banking Initiatives that have been implemented by a selected financial institution worldwide. The focus of the study has been narrowed down to five financial institutions from around the world that were actively engaging in green banking initiatives through their customers’ active participation namely Starling Bank, Treecard, Aspiration, bunq and Tomorrow and Green Banking Initiatives in Indian Scenario. The annual reports of the chosen financial institutions, sustainability reports, official websites of the concerned banks, and other sources are sorted through in great detail for the purpose of gathering data on the green banking activities initiated by these financial institutions.

Keywords
Environmental protection, sustainable development, green initiatives, green banking

Introduction
Existence becomes a challenge factor because of environmental degradation. Consequences that arise from this include serious global warming and pollution. Throughout the previous few years, global warming has grown to be a concern on a national and international level. Our ecological balance has been impacted by global environmental issues such as pollution, population increase, energy shortages, the greenhouse effect, and effluents. Businesses are affected negatively by environmental issues both directly (such as supply chain interruptions) and indirectly (such as health risks that result in lost productivity and man-hours) (First Carbon Solutions, 2015). Despite the fact that numerous laws have been passed to control pollution and safeguard the environment, they are not strictly adhered to, and as a result, we have failed to limit the harm to the environment. So, addressing environmental issues continues to be central to all corporate policies. In a globalised economy, regulators, governments, media, judiciaries, civil society organisations and social activist groups are scrutinising the environmental effects of economic operations by industries and corporations and placing pressure on them to become greener. Currently, environmental preservation and sustainability are extensively recognised. With the practice of reducing, reusing, and recycling an effort is being made to cut down on the need for fossil fuels.

In this line, through ethical consideration for the environment, business sectors of the globe are transforming into green businesses and becoming environmentally friendly. The banking sector as a business sector is not excluded from this initiative. Banking and financial sectors are the major economic agent which not only influences the overall industrial, economic and development process but also imposes conditions as they are the main sources of finance for companies/industries. Consequently, encouraging environmentally friendly initiatives and prudent lending should be one of the financial industry’s obligations (S, 2016).
Hence the process of reducing carbon emissions is being streamlined or improved with the help of banks and other financial institutions. Sustainable Green Banking is a crucial component of the ‘Go Green’ initiative. Globally, banks are making significant investments in green strategy (Evangelinos et al., 2009). Greening a bank means further reducing the carbon footprints that are caused by banking activities; this is advantageous to the banks, as well as to industries and the economy as a whole (Bihari & Pandey, 2015). As a result of these activities, which are a component of the more comprehensive strategy for sustainable development, Green Banking has evolved into a concept.

Green banking is a relatively new concept in the world of finance. It differs from traditional banking in that it takes into account environmental factors while making lending decisions. The adoption of practices that are less harmful to the environment and more beneficial to the world is what is meant by ‘Green Banking’. Green Banks are non-profit, mission-driven financial firms that utilise creative forms of finance to accelerate the shift toward renewable energy sources and reduce their impact on the environment. Addressing climate change is the primary priority of green banking. Green Banking offers a more equitable and inclusive approach to banking. Rather than focusing solely on profit, Green Banking prioritises the well-being of communities and the environment.

The Green Banking movement is new, but it is growing quickly enough to substitute investments in fossil fuels. A decade ago, environmentalists demanded that banks divest from oil, natural gas, shale, and tar. Currently, $14.5 trillion is committed to divestment from fossil fuels. If fossil fuels are stigmatised, less money will go to their companies, which could eventually lead to a rise in the usage of renewable energy. Since the Paris Agreement, sixty of the world’s largest institutions have invested $3.8 trillion in fossil fuels. Thankfully, green finance helps ensure that people’s funds no longer support the fossil fuel industry. These green institutions aim to positively affect their local community, environment, and economy. Consequently, it is projected that there will be a higher demand for environmentally responsible banking products in the years to come. As a result, it is projected that there will be a greater need for environmentally responsible financial products in the years to come. Younger generation are advocate for green initiatives, green products, and green processes with increasing volume. In light of this, the present study compiled a list of a few global banks that have implemented Green Banking Initiatives with active involvement of customers and also discussed about Green Banking Initiatives in Indian Scenario.

**Review of Literature**

Bouteraa et al. (2020) made an attempt with their research study titled ‘Green Banking Practices from Islamic and Western Perspectives’ evaluating critically the concept of Green Banking and comparing the nature of green practices between the leading western and Islamic theories using secondary data. The phrase ‘Green Banking’ often refers to economic, social, and environmental growth that makes it possible for the current generation to also meet the demands
of future generations. However, the analysis revealed that the concept of ‘Green Banking’ is perceived differently in western and Islamic cultures. When viewed from an Islamic point of view, sustainable development is the process of enhancing both the material and the non-material aspects of human happiness in a manner that is both balanced and maintained over time. Furthermore, because an Islamic bank reflects the real essence of Islam, it is expected that it will perform better than its conventional counterparts in terms of Green Banking practices. The study found that there has been very little research on Islamic perspectives on Green Banking practices, and that more study is needed. It is necessary to do additional investigation and empirical research to validate the results.

Johnson et al. (2020) presented a global economic modelling study that assesses the impacts of environmental change on the economy. The authors used modelling techniques to project the economic consequences of environmental issues such as biodiversity loss, climate change or resource depletion. The study aimed to provide insights for policymakers and decision-makers to develop effective policies and strategies to address environmental challenges while supporting economic development.

Green banks are into green banking practices. Green banks are mission-driven. To combat climate change, they deploy innovative funding strategies to accelerate their renewable energy transition (Coalition for Green Capital, 2020). All green banks seek other objectives in addition to their stated mission. Increasing the resilience and/or meeting the needs of low-income populations are among the other objectives. It should be highlighted, however, that green banks use financing rather than grants for this reason. Financing ensures that the borrower will eventually repay the capital to the lender. This payback enables banks to maximise the impact of every rupee lent. Given this backdrop, green banks cater to markets where the potential for payback is high! Put differently, proven, financially and technically viable projects easily qualify for green bank financing. Bank financing might be combined with other market development initiatives.

Heri Setiawan et al. (2018) through their study examined the implementation of green banking in sharia banks. The qualitative descriptive method was employed in this study. The information gathered through observation and interviews with sharia banks’ executives and staff. They emphasised that Islamic values, which serve as the fundamental principles and laws of sharia banking, are also in line with the use of green banking in sharia banks, which is not merely driven by Indonesian government policy. They came to the conclusion that implementing green banking was good for the environment and may save operating expenses and energy expenditures. This type of sustainable development is supported by the economic (profit), environmental (the planet), and social (the people) pillars. In order to implement green banking in sharia banking and save money and energy, the bank has implemented the concepts of green products, loans, cards, and portfolios.

Prakash et al. (2018) attempted to investigate the consolidation activities being performed by the Indian banking sector and analyses the banking sector’s readiness for sustainable development in India in their research paper titled
Consolidation in the Indian banking sector: evaluation of sustainable development readiness of the public sector banks in India. The study relies on the theoretical model of sustainable banking and is based on secondary data. For the purpose of the study, the researcher thoroughly examined the annual reports, business responsibility reports, and the official websites of banks. Despite their substantial exposure to associated hazards, Indian Public Sector Banks have been proven to be unwilling to respond to sustainability challenges. Banks are not yet sufficiently prepared to handle the difficulties that sustainability involves. Regarding the incorporation of sustainability into banking activities, it was established that Indian Public Sector Banks are far behind. However, India needs to enhance the regulatory element as well. In order to meet the difficulties of sustainability, the banking sector may need to be strengthened. To evaluate the success of its policy initiatives for encouraging sustainability in the banking sector, the government may also need to harmonise its regulatory framework in the sector.

Shaumya and Arulrajah (2016) the researchers gave an overview about the four important banks of Sri Lanka regarding green initiatives. The study has included secondary as well as primary survey related to green banking practices in Sri Lanka. Later, they considered creation of Instrument for measuring green banking practices amongst bankers. They identified 98 green banking practices of total four banks in the first step, then scrutiny was done on the basis of similarities and differences, which leaded 16 green banking practices with category of four dimensions- daily operation related practices, customer orientated, employee oriented and bank policy related practices. Later pilot study was accomplished and reliable scale was developed with inputs received. It was concluded from the study that, the scale developed so far is reliable and valid, Bankers get to know about their initiatives comparing others and will be able to improve upon the concerned areas and this will motivate banks and make the bankers more knowledgeable about the green activities.

Tu and Yen (2015) through their study aimed to provide conceptual comprehension of the concept of the general Green Bank and its economic benefits. In addition, the study attempted to provide an overview of international case studies, both successful and unsuccessful, regarding the Green Banking concept, and offered Vietnam’s perspective. This article examines the research literature on Green Banking and the Green bank model. Case studies of developed and developing nations are used to extract the best practices for Green Banking. In-depth interviews with Vietnamese bank officials are also undertaken to understand about their problems and potential as they implement Green Banking practices. The study’s findings indicated that because of the Green Banking is still in its infancy and because the start-up expenses are so high, both banks and businesses need to be fully committed to succeeding. Institutions will initially pay a lot for these promises to the innovative concept, but the model’s long-term success cannot be ignored. Therefore, the Vietnamese banking industry should quickly accept the green bank business model in order to practise sustainable banking.
Ganda and Ngwakwe (2014) reviewed South African institutions’ energy and carbon reduction practices. South African institutions’ sustainability reports were mined for energy and carbon management practices using a desk-based methodology. These practices were contrasted to international regulations governing energy and carbon policies and practices in financial institutions. The collected data were tabulated to demonstrate the diverse energy and carbon reduction practices employed by South African banks. The energy and carbon reduction practices of South African institutions demonstrate growth and potential for achieving the goal of sustainable development. In addition, establishing strong relationships with other banks on energy consumption issues, reviewing sustainability practices in accordance with climate change issues and developing businesses based on climate change issues should be the highest priority for banks. The key finding of the study is that South African banks adopted energy-saving and carbon-reduction techniques in their daily operations.

Rahman et al. (2013) through their study sought to understand the management of environmental risk, identify opportunities for cutting-edge environmentally friendly financial products and study environmental issues and control laws pertaining to green banking in Bangladesh. The article’s major base is secondary data that was gathered from numerous reliable sources. The sources of secondary data include articles relating to the subject matter as well as the annual reports of Bangladesh Bank and several Commercial Banks. According to the study’s conclusion, Bangladesh Bank has periodically released various circulars about the modernisation of green banking practices and their efficient implementation. It will only be feasible to complete the implementation of Green Banking activities in Bangladesh if every bank creates their work plan in accordance with those guidelines and collaborates. The globe will then start to restore its green environment, and our descendants will have a safe place to live. This can only be realised through a coordinated effort between clients and bankers.

Islam and Das (2013) aimed to evaluate Bangladesh’s Green Banking practices, support its potential for Green Banking practices, and provide some recommendations in this regard. The research is based on secondary data collected from the annual reports of the chosen banks. The data were analysed in terms of green finance practices and issues. The study suggests that the government and every bank should implement Green Banking practices in order to safeguard the environment. Government should promote green banking practices to the broad public. The Bangladesh Bank should oversee commercial banks regardless of whether they engage in green finance.

Bhardwaj and Malhotra (2013) entitled ‘Green Banking Strategies: Sustainability through Corporate Entrepreneurship’ studied, investigated how rewards, top management support, risk-taking, and a tolerance for failure influenced the adoption of green banking practices. The research methodology for the study was a case study approach, and it was based on secondary data. The study found that the adoption of green banking practices by banks had an impact on the organisation’s performance. The study recommended that banking and financial organisations create environmental risk and liability criteria for the creation of safety measures and reporting for each project they fund or invest in.
Research Methodology

The research study employed a quantitative methodology to conduct the investigation. In addition, secondary data have been utilised in an effort to conduct a comprehensive analysis of the study. Secondary data were gathered from annual reports of Banks and Financial Institutions, various reports published by international organisations, newspaper articles, and websites. In addition, numerous working papers, journals, and articles were reviewed to strengthen the study’s research base. To assemble published data, intensive desk research was performed. The collected data has been analysed critically from the perspective of gaining an understanding of the few banks worldwide that have initiated Green Banking initiatives with the active participation of their customers.

The focus of the study has been narrowed down to five financial institutions from around the world that were actively engaging in green banking initiatives through their customers’ active participation namely Starling bank, Treecard, Aspiration, bunq and Tomorrow. The annual reports of the chosen financial institutions, sustainability reports, official websites of the concerned banks, and other sources are sorted through in great detail for the purpose of gathering data of the green banking activities initiated by these financial institutions.

Objectives of the Study

The research aims to accomplish the following purposes:

- To comprehend the idea of Green Banking.
- To analyse the various Green Banking Initiatives that have been implemented by a selected financial institution worldwide.
- To analyse about the growth of Green Banking Initiatives in the present Indian scenario.

Statement of the Problem

There is no longer a need for a strategic decision about sustainability in the banking industry. Because of the rising threat posed by climate change, financial institutions all over the world will need to implement environmentally responsible business practices. For financial organisations whose first concern is for the wellbeing of the planet, ‘Green Banking’ should not be considered an option any longer. In response to environmental, social, and governance concerns, numerous institutions have already begun integrating sustainability into their business operations (ESG). The Principles of Responsible Banking have been adopted by roughly half of the global banking industry.

Green banking contributes significantly to assuring sustainable development by focusing on economic growth and environmental protection. Green instruments and green lending necessitate significant resources from banks and financial
organisations. Hence, Green Banking strategies largely depend on the bank’s attributes. Over the next few years, demand for Green Banking products is expected to rise. This study fills a gap in the literature on Green Banking by examining the world-wide initiatives of selected financial institutions regarding green banking activities, the impact of attributes on green banking activities, as well as their assistance for individuals affected by environmental problems. The study discusses about the contribution of Green Banking to environmental sustainability by describing how the few banks worldwide that have implemented green banking initiatives and their customers can safeguard the environment and address climate change while conducting daily digital banking.

**Green Banking Initiatives of Global Financial Institutions**

I. **Starling bank’s**

Starling Bank is a UK-based digital bank that offers personal and business banking services. Founded in 2014, it operates primarily through a mobile app and has a commitment to sustainable finance. The green banking initiatives of the bank includes:

- **Digital-first banking**: The traditional methods that people use to handle their financial matters are being replaced by a system in which Starling Banks operate completely branchless and paperless operations from day one.
- **The greener way to pay**: In March of 2021, the personal and corporate account cards offered by Starling Bank were the first MasterCard debit cards issued in the United Kingdom to be constructed from recycled plastic. Also, the card packaging is completely recyclable, including the use of an environmentally preferable water-based glue.
- **Eco-friendly offices**: The three UK offices of Starling bank, located in London, Southampton, and Cardiff, are powered by renewable energy. In addition, they offer a Cycle to Work program that encourages employees to purchase a new bicycle through ‘salary sacrifice’ and save on taxes.

The other green banking initiatives of the banks are:

- Additionally, the bank has set a target to allocate 20% of its lending to sustainable projects by the end of 2023. This includes projects that have a positive impact on the environment, such as renewable energy and sustainable transportation projects, as well as projects that have a positive impact on society, such as affordable housing and community development projects.
- Starling Bank also has set targets related to its operations and administration. For example, it has set a target to reduce its paper usage by 50% by 2022 and also to achieve a 100% renewable energy supply by 2025.
- Starling Bank has also set several ambitious goals and targets related to sustainable finance such as achieving net-zero carbon emissions by 2030.
and investing £1 billion in sustainable infrastructure and clean energy over the next five years.

- Also, they give the customer the opportunity to take part in the Plant the Seed initiative. In order to offer a referral program, the UK bank has collaborated with Trillion Trees, a non-profit conservation organisation that aims to battle deforestation and replace 1 trillion trees by 2050. According to this strategy, Trillion Trees will plant a new tree when a Starling bank customer suggests a friend who joins the bank.

- Starling Bank also participates in UNEP FI and the Green Finance Taskforce, in addition to these efforts and goals. The bank recently signed the UN Guidelines for Responsible Banking, agreeing to integrate its business strategy with the UN Sustainable Development Goals (SDGs). These initiatives provide a platform for the bank to share knowledge and best practices with other financial institutions and to collaborate on initiatives to promote sustainable finance.

- One of the specific initiatives that Starling Bank has implemented to support sustainable business is its partnership with the Carbon Trust. Through this partnership, the bank offers small and medium-sized enterprises (SMEs) access to the Carbon Trust’s Carbon Management Program, which helps businesses to identify and reduce their carbon emissions. This includes providing businesses with a carbon footprint assessment, as well as guidance on how to implement energy-efficient upgrades and renewable energy projects.

- Additionally, the bank also offers its customers a Green Energy Switch service, which enables customers to switch to a renewable energy supplier and offset their carbon emissions.

- Another initiative that Starling Bank has implemented is its commitment to responsible lending. The bank has implemented a responsible lending policy which includes a thorough assessment of the environmental and social impact of the projects that it finances. This approach can provide access to fair and affordable financial services and create job opportunities, ultimately helping to improve the lives of underserved communities by building wealth and achieving financial stability.

II. Tree Card

Another institution that promises to protect the environment is Tree Card.

- Tree Card is a debit card and mobile app that was launched in 2021 with the aim of helping users to reduce their carbon footprint and support reforestation efforts around the world. It is working with Ecosia, the not for profit search engine that is planting trees to build an ecosystem of responsible alternatives to services like banking and internet search. Ecosia is also behind Treecard’s reforestation projects.

- This bank is committed to reforesting the planet through its digital banking services, while also employing wood-based cards. The bank contributes 80% of its profits to the reforestation initiative.
Ecosia, a Germany-based search engine known for contributing to similar environmental initiatives, has donated $1,000,000 to TreeCard. Ecosia has planted more than 112 million trees based on the number of searches conducted by its users. Every $50 a customer spends on daily payments will result in a new tree being planted, and they will also be eligible for a variety of rewards that prioritise the environment.

Credit and debit cards are created in the billions annually. These plastic cards have a large carbon footprint despite appearing tiny. TreeCard, a fintech startup, is launching wooden debit cards and planting trees to offset this environmental damage. The card is crafted from cherry wood that has been sourced in a manner that does not impact the environment, and it is estimated that one tree can yield up to 300,000 cards. The card is compatible with widely utilised online wallets including Apple Pay, Android Pay, and Samsung Pay. The start-up will also release an app that enables the user to perform basic digital banking tasks as well as monitor the number of trees planted through their spending.

As Ecosia has planted more than 112 million trees based on the number of searches conducted by its users, every $50 a customer spends on daily payments will result in a new tree being planted, and they will also be eligible for a variety of rewards that prioritize the environment.

Credit and debit cards are created in the billions annually. These plastic cards have a large carbon footprint despite appearing tiny. TreeCard, a fintech startup, is launching wooden debit cards and planting trees to offset this environmental damage. The card is crafted from cherry wood that has been sourced in a manner that does not impact the environment, and it is estimated that one tree can yield up to 300,000 cards. The card is compatible with widely utilized online wallets including Apple Pay, Android Pay, and Samsung Pay. The start-up will also release an app that enables the user to perform basic digital banking tasks as well as monitor the number of trees planted through their spending.

Aspiration is a financial services company that assists individuals in putting their money to good use. It is not a bank, but an online-only financial institution that offers a cash management account as opposed to traditional checking and savings accounts. Aspiration seeks to distinguish itself by offering incentives for socially and environmentally responsible expenditure.

With the services offered and sustainable investing techniques by Aspiration, banks are looking up to this leader and are following its footsteps by becoming certified B Corps that focus on 3 Ps, that is, People, Planet, and Profit.

With a mission so unique, Aspiration, a new financial partner, sets out to build a better world by offering socially conscious and sustainable cash management services. They aim to plant trees all around the world, offset carbon emissions and make the planet green again. Aspiration is 100% committed and their customers are assured of mindful saving and eco-friendly spending. It serves customers from all spheres.

With an Aspiration Spend & Save Account, customers of Aspiration can make a difference. All of their deposits are free of fossil fuels, and customers can support Plant Your Change by activating the feature in their accounts.

Aspiration ensures customer deposits will not fund climate change. Although the Aspiration website does not explicitly state how it ensures that deposits do not fund fossil fuels, AltEnergyStocks.com has established that Aspiration deposits ‘are fossil fuel free by all accounts’.

The Plant Your Change feature of Aspiration rounds up debit card purchases to the nearest whole dollar. The rounded-up quantity is donated to a large tree-planting fund. They are deducted from the customer’s card, and the customer is notified of the number of trees that will be planted as a result.
of their contribution. With each client swipe, the bank will plant a tree, and customers will receive monetary rewards for their assistance.

- Aspiration offers a corn-based PLA credit card, the Aspiration Zero Credit Card, in addition to debit cards. They also plant a tree for each purchase made using this card.
- Aspiration also provides a feature known as the Aspiration Impact Measurement (AIM), which notifies customers of their individual sustainability score based on the products they buy as well as the Planet & People scores of shopping points. This lets customers know which companies care about the welfare of the environment as well as the people who work for them.

IV. Bunq

- Another EU-based financial institution that offers environmentally responsible banking options to its customers is bunq, which is headquartered in the Netherlands. Bunq identifies itself as the ‘Freedom Bank’. In addition to providing banking services, Bunq seeks to contribute to climate change by allowing its customers to reduce CO₂ emissions while making routine purchases.
- Bunq, which ranks third in a list of 27 financial institutions for its green initiatives in the Netherlands. The Bunq app provides users with a running commentary on how many trees they have planted and where they have been planted.
- The company’s consumers value its policy of environmental conservation and community building, as evidenced by the fact that between 2018 and 2019, they enhanced the total value of their customer deposit by more than doubling it, from 211 million to 433 million EUR.
- The Bunq Super Green service is unique in its kind. The Netherlands financial service provider reduces the customer’s carbon footprint by planting a tree with its cooperating partner for every 100 euros spent. Bunq claims its services can enable a client with an average expenditure level (€1,000 per month) and lifestyle carbon-free in two years.
- The substance of the bank card linked to the Bunq Super Green service further supports the bank’s dedication to environmental preservation. Unlike the conventional plastic design, the sheet is constructed of sturdy stainless steel, whose recycling puts less strain on the environment.
- Through the Easy green monthly plan, customers can become carbon neutral in two years and qualify for the bank’s eco-friendliest and durable Metal card. Additionally, when they spend 100€ using this card, a tree will be planted with the assistance of their associates, Eden Reforestation Projects, making the world a little bit greener.
- Bunq bank, claims to offer a climate neutral service, and planted a record 1 million trees on behalf of their customers in just four months last year. They also became the first neobank to publish a climate action report. Their
commitments to socially responsible investing and cutting their own carbon emissions (low in comparison to other banks) are considerable.

- By providing a brand-new ‘cashback service’ each time you spend a set amount of money, Bunq Bank is one bank upending the market. For each $100 you spend with their ‘Green Card’ at this bank, the business will plant a tree. The business is officially associated with Eden Reforestation Projects, and together, they are funding reforestation efforts all around the world.

- As a bank leading the charge to make the financial system sustainable, bunq supports aligning financial flows with low greenhouse gas emissions and climate-resilient projects to help achieve temperatures far below 2.0 degrees Celsius. Bunq is setting science-based standards to help reduce the world average temperature increase to 1.5°C. The bank expect that these targets will be set and ready for validation by the Science-Based Targets initiative by the end of 2023. They have committed to several objectives in 2020 Climate Report to maximise bank impact and match measurable objectives with the maximum global temperature increase of 1.5°C. These objectives are as follows:
  - Bunq is dedicated to providing its users with a service that is climate neutral, making it a bank that is genuinely climate neutral.
  - Bunq is devoted to funding initiatives that directly contribute to the reduction of CO₂. Bunq will continue to optimise its investment portfolio by excluding initiatives that have an adverse impact on climate change mitigation.
  - Bunq is dedicated to measuring and disclosing its carbon footprint. Bunq will actively participate in and contribute to Partnership for Carbon Accounting Financials (PCAF) project groups to further enhance the beneficial influence of such on the financial sector.

V. Tomorrow Bank

- The German-based Tomorrow bank gives its clients the option to support climate conservation in addition to offering creative card designs. One square meter of rainforest is preserved for every euro spent using their Tomorrow card. This program has so far saved 61,617,460 trees. A tiny transactional fee known as the ‘Interchange fee’ must be paid by the store owner to their bank whenever a consumer makes a purchase in-person or online. Tomorrow allocates the largest portion of this money to initiatives that promote reforestation.

- In September 2020, Tomorrow became the first European mobile bank to become a certified B Corp, joining the ranks of Bank Australia, Banque Raiffeisen, and many more. The prestigious B Corp certification indicates that a for-profit company uses a portion of its revenue to invest in social projects with a strong focus on sustainability. Although achieving B Corp status in itself cannot guarantee that a company will really uphold its promise to protect people and the environment, it does mean that Tomorrow is beholden to thorough and continuous assessment
• In short, the standout feature of Tomorrow Bank is its rigorous commitment to sustainability and environmentally-friendly projects.
• When choosing a bank, customers rarely know where their savings are being invested, and are often shocked to find that their money is put towards causes that they do not support. By way of example, German banks invested 11.75 billion dollars in nuclear weapons in 2019. Tomorrow Bank hopes to change this by offering full transparency as to which ethical investments customer money is being put into—so far, this approach has had some exciting results. To date, the bank has invested €44,100,000 into renewable energies and €11,000,000 into social housing.
• Tomorrow offers the carbon footprint feature to all customer segments at no additional cost, further boosting its already robust catalogue of sustainability offerings. Customers can also round up their daily payments to the full euro to donate little amounts to climate justice with Tomorrow. Consumers can also track their influence.
• When a customer applies for a card, the bank dedicates a tree with zero CO₂ to them, giving them a direct way to fight climate change. The Flowe card is made of wood and was created to adhere to stringent environmental criteria. When a consumer orders one, a tree is planted in Guatemala in their honour to reduce CO₂ emissions while also contributing to the local economy and family nutrition. They use the Flowe Card Mastercard to assess customers’ CO₂ output from their expenditures in collaboration with climate-impact fintech Doconomy.
• They demonstrate that banks do more than just promise to support climate protection. But they make a conscious effort to include and motivate customers to protect the environment.

**Green Banking Initiatives of Indian Financial Institutions**

The various Green Banking Initiatives offered by Indian Financial Institutions includes the following:

• Electronic banking which includes initiatives like UPI initiative, payment banks, NEFT Transfer, RTGS, etc.
• Green bonds.
• Green car loans.
• Green cards.
• Green CDs.
• Green channel counter.
• Green checking accounts.
• Mobile banking.
• Online banking.
• Power saving appliances.
• Remote deposit (RDC).
• Use of non-renewable energy sources like solar and wind energy.
Guidelines of the RBI Concerning Green Banking

The Reserve Bank of India (RBI), the country’s central banking institution, has actively promoted green banking practices. According to RBI, the purpose of green banking is to reduce the negative effects that traditional banking practices, physical infrastructure, and information technology have on the surrounding environment in order to make them more ecologically friendly. The RBI encouraged banks to consider sustainability factors in their lending decisions by issuing guidelines on environmental and social risk management in the year 2015. The recommendations place a strong emphasis on the requirement that banks assess and manage social and environmental risks associated with their lending activities. The RBI established the Institute for Development and Research in Banking Technology (IDRBT), which has pushed for the adoption of a uniform rating system for environmentally friendly institutions and banking practices among Indian banks.

Growth of Green Banking in India

Green banking financial instruments proceed for investment in environmentally sustainable and climate-suitable projects. In recent years, the growth of green banking in India has gained momentum as the country strives to address environmental challenges and promote sustainable development. Here are some key aspects of the growth of green banking in the Indian scenario:

- Government of India is committed to boosting the volume of digital transactions in the Indian economy thereby focusing on improving the strength of the financial sector, which supports in the sustainable development of the economy. As a result of the government’s collaborative efforts and those of all relevant stakeholders, the number of digital payment transactions which is contributor of the Green banking initiatives, has dramatically expanded, rising from 2,071 crores in FY 2017–2018 to 8,840 crore in FY 2021–2022 (sources: RBI, NPCI, and banks official websites).

- According to the recent data released by the National Payments Corporation of India (NPCI) in the past five years, a number of simple and convenient digital payment methods, such as BHIM-UPI (Bharat Interface for Money-Unified Payments Interface), IMPS (Immediate Payment Service), and NETC (National Electronic Toll Collection), have experienced significant growth and transformed the digital payment ecosystem by increasing P2P (person-to-person) and (P2M person-to-merchant) payments. With 803.6 billion digital payment transactions worth 12.98 lakh crore recorded in January 2023, BHIM UPI has become the citizens’ preferred method of payment. In contrast to September’s 2022 earnings of ₹11.16 lakh crore, the 7.7% increase translated to a total transaction value of ₹12.11 lakh crore in October 2022. The number of IMPS (Immediate Payment Service) transactions for instant interbank fund transfers climbed by 4.3% from
September 2022, whilst the number of NETC FASTag transactions increased by 9.3%. 11.77 crore transactions using the AePS with Aadhaar cards were made, with a total transaction value of ₹31,112.63 crores. The Unified Payment Interface (UPI) will allow anyone with pre-approved credit lines from banks to make payments. Presently, UPI controls 75% of the nation’s total retail digital payment volume. In the month of March 2023, there were almost 8.7 billion transactions.

- Sovereign Green Bonds would be issued by the Indian government to raise funds for environmentally friendly initiatives, the Union Finance Minister declared in the Union Budget for FY 2022–2023. The first sovereign green bond framework for India was developed in this context, and the Green Finance Working Committee (GFWC) was established in accordance with the framework’s regulations to approve major decisions regarding the issuing of sovereign green bonds.

- Indian banks like HSBC, SBI, HDFC, and others that offer green deposit schemes will allow the banks to mobilise domestic resources into green operations and reduce greenwashing. The State Bank of India, Indian Overseas Bank, Indian Bank, and ICICI Bank will enable money transactions between India and Singapore utilising the UPI-PayNow interface. These lenders will help with both inbound and outbound remittances, according to an announcement from the Reserve Bank of India (RBI), however Axis Bank and DBS India will only help with inward remittances.

Overall, the growth of green banking in India is driven by regulatory support, increasing environmental consciousness, and the recognition of the long-term economic benefits of sustainability. The banking sector is gradually aligning its operations with environmental objectives, contributing to India’s efforts towards a more sustainable and greener future.

**Conclusion**

To address the consequences of climate change and other environmental problems, green banks were created. There is a deadline for making the transition to clean energy if we want to avoid worst effects. Strong and economical components, including the quicker adoption of renewable energy by green banks, should be part of a complete climate policy platform. In order to effect change and raise awareness of climate protection, banks play a crucial role. Its goal should not just be ESG compliance; it should also include raising awareness and giving clients the tools they need to take action through their banking. Thus, Bank’s green banking practices are a positive step towards a more equitable and sustainable financial system. By focusing on financial inclusion and responsible lending, the bank is helping to combat the negative effects of traditional banking on underserved communities. As more financial institutions adopt green banking practices, we can hope to see a more just and equitable financial system that
benefits all members of society. Overall, the discussed green banking practices serve as a model for other financial institutions to follow and demonstrate that it is possible to provide high-quality banking services while also prioritising social and environmental responsibility. With this We can hope for more banks worldwide to follow in the footsteps of these banks and launch new green initiatives.

**Declaration of Conflicting Interests**

The authors declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

**Funding**

The authors received no financial support for the research, authorship and/or publication of this article.

**ORCID iD**

Rakshitha J. [https://orcid.org/0009-0006-2877-1167](https://orcid.org/0009-0006-2877-1167)

**References**


**Websites**

- https://www.starlingbank.com/
- https://www.treecard.org/
- https://www.aspiration.com/
- https://www.bunq.com/documents/personal
- https://www.tomorrow.one/en-EU/
- https://www.aspiration.com/blog-big-banks/
- https://coalitionforgreencapital.com/