CHAPTER - 3
REVIEW OF LITERATURE

The LITERATURE REVIEW is a summary of previous research on a topic. The literature review surveys scholarly articles, books, and other sources relevant to a particular area of research or interest. Within the review the researcher provides a description, summary and critical evaluation of each source, i.e. the strengths and weaknesses. The literature review may also identify gaps or controversies in the literature and topics needing further research.

The literature review provides the historical background for your research; describes issues, debates, theories, concepts and related research in the field; and shows how your research will extend these or address a gap.

In this study, total 80 reviews were collected, out of which 35 are reviews of International authors and 45 are of Indian authors. These reviews are mentioned below.

3.1 Review of Literature: International

Ahmad, Tofayel & Uddin, Rahat & Jahan, Munira & Noor, Ayasha (2014), in their research study named “Intranet, A New Approach For Communication - Green Banking Aspects in Bangladesh Bank”, introduced a new secured approach called “Intranet” for intercommunications and other different purposes for the employees of Bangladesh Bank (BB), which is the Central Bank of Bangladesh to propagates the concept of paperless Banking. With a view of collecting right information for right people at the right time, BB is being developed as knowledge management information base by sharing and reusing information. It improves the overall productivity of the organisation by allowing faster information access and helping the management to make quick decisions to take actions. BB intranet is beneficial from different perspectives; mainly it helps in handling day to day activities in very short span of time. Further, it gathers the economic and financial news from various sources and shows the economy of the country in a graphical manner with the help of graphs and charts. It has
organisational phone index, organisational chart, publications and some user interactive flows like survey, question and answer which is done by employees. Some workflows such as leave application, document management system, e-voting system, meeting room booking, transport requisition, mailing facility and all links to in-house running applications and digital version of paper forms which are used by employees. So BB employee could access personal information related to educational, training, transfer, posting, promotion, leave, a loan advance and other official information from the central database through an intranet. After its successful implementation, the central bank has introduced the concept of Green Banking such as paperless banking in banking sectors of Bangladesh thus reducing paper use. This paper concluded by mentioning barrier for using intranet system and remedies for it. It also provides an analysis of the survey results of different public organisations that are currently using intranet system method.

A report presented by Alexander, Kern (2014) has triggered a deeper reflection amongst financial policymakers and regulators concerning the relevance of systemic environmental risks to Banking sector stability. This report explored the evidence relating to the question of whether systemic environmental risks and Banking sector stability are linked. It examined how Basel III currently addresses systemic environmental risks. It also considered what other financial policy options are available outside of Basel III. This included an examination of the utility of certain other monetary policy measures and the use of innovative financial instruments – such as ‘Green’ asset-backed securities (ABS) – to enhance the flow of bank funds to environmentally sustainable economic activity. The report is based on research that involved interviews and written questionnaires for practitioners in the Banking industry, bank regulators from selected developed and emerging-market economies, officials from international organisations, and representatives from non-governmental organisations. On the basis of the analysis presented within the report, it can be stated that banking system and regulatory framework can undergo through lots of changes and improvements. Further bank supervisors faced lots of environmental risks.
Bai, Yunwen & Faure, Micheal & Liu, Jing (2014), in their research article “The role of China’s Banking Sector in providing Green Finance”, the authors have shed light on the policies of China’s Green Banking system and analysis has been done to understand the practices of Chinese banks to make alignment between environmental principles and their financing activities. The role of Chinese banking industry in building a sustainable framework for banking and green finance has also been analysed in the paper. To get knowledge about the green financing in China and environmental preferences of China the authors have made efforts to work on a theoretical framework. At last, the purpose of the article also includes understanding the challenges and opportunities faced by Chinese banks in improving their financial performance.

The research study conducted by Shakil, Hassan & Azam, Kazi Golam & Tasnia, Mashiyat & Munim, Ziaul Haque (2014) is based in Bangladesh and it analysed the Green Banking practices among Private commercial banks and foreign commercial banks along with state-owned commercial banks and specialised development banks. The study was of analytical and theoretical in nature based on secondary data. The study found that 47 banks have adopted the Green Banking policy, formed Green Banking Unit, allocated and utilised budget for Green Banking. It was also found that there is a sharp increase in giving loans to environmentally friendly projects by banks.

The purpose of research study “Green Banking: Nexus Bank’s performance”, conducted by Hossain, Sharif & Kalince, Tanvir Ahmed (2014), was to find the impact of Green Banking on banks’ performance using cross section data of 45 banks in the year 2012. For this study, six different variables namely; loans and advances (LOAN), deposits and other account (DEPO), paid-up capital (PAID), investments INV), Green Banking (GB), and profit after tax (PAT) were considered. From analytical results, it was found that GB has a significant positive impact and INV has significant negative impact on banks’ performance. The Granger F test resulted in VAR model indicated the bidirectional causalities between PAT and INV, between PAT and DEPO. Unidirectional causalities were found from LOAN, and PAID to PAT, from LOAN and DEPO to INV, and from
LOAN to PAID. Thus it was concluded that Bangladesh banks should conduct Green Banking activities more to increase their profitability, which in turn, will create sustainable growth for them in the long run.

The purpose of research paper “Adopting Green: from the perspective of Private Commercial Banks in Bangladesh”, written by Islam, Tamanna & Sharmeena, Kashfia & Rahman, Sadia (2014), was to highlight the reasons for adopting Green Banking practices in the context of a developing country Bangladesh and tried to enlist the rational and motivational grounds elaborately for adopting ‘Green’ in the case of private commercial banks.

Ahmad, Fayez, Zayed, Nurul. & Harun, Ashraf (2013), in their research study, focused on understanding the activities of Bangladeshi commercial banks regarding Green Banking and reasons behind adopting the Green Banking. The sample of the study as the employees of the bank and adopted sampling technique was probability stratified sampling technique. The group of ten commercial banks were chosen to construct the stratum, and the sample size was 300 respondents selected through probabilistic sampling technique. To analyse the data and to draw the findings, Factor analysis is used. There are mainly six factors in factor analysis which act as major influencers, and these include an economic factor, policy guideline, loan demand, stakeholder pressure, environmental interest, and legal factor. These six factors have combined variance of 65.25% of the decision regarding the adoption of Green Banking by the commercial banks to ensure sustainable economic development.

Islam, Tanjimul, Ishak Khan, Abdullah. & Afroz, Farzana (2013), conducted a research study “Green Banking in Bangladesh: Synchronous metamorphosis in Banking action” with the objective of analysing the prospects of Green Banking in Bangladesh. However, the specific Objective of the study was to promote Green Banking among beneficiaries and in the Banking sector. In particular, it was aimed to:
• To identify opportunities for innovative and environment-friendly financial products by the inclusion of studies related to environmental and financial risks.
• To study environmental and control regulations regarding Green Banking in Bangladesh.
• To accommodate investment projects with the proper environmental management system.
• To create financial products and services that support commercial development with environmental benefits.
• Limit profit maximisation and emphasise more on environment conservation.
• To minimise pressure on nature by utilising resources properly
• To build a banking system that would be environment-friendly.

Islam, Shafiqul & Chandra Das, Prahallad (2013), in their research paper, portrayed the prospects of Green Banking practices in Bangladesh. The study conducted by authors include the secondary data like mobile banking, online banking, green financing and regulations and legislative frameworks for the Green Banking practices and Green Banking unit. The study was based on secondary data, and these data were collected from annual reports of the ten commercial banks of Bangladesh. The random sampling technique was used to select the banks. The study concludes that Green Banking practices in Bangladesh are not at satisfactory level. The central bank of Bangladesh should monitor or supervise Green Banking practices in commercial banks. So, every bank has to participate and contribute to Green Banking practices in today’s extreme national and global Banking competition.

The research study “Conceptual framework for carbon footprinting in the South African Banking Sector”, conducted by Bimha, Alfred & Nhamo, Godwell (2013), embarked on conceptualising the efforts made by banks in South Africa to put phenomenal efforts to prevent climate change. The study revealed that how banks adopt such system that promotes Green Banking and avoiding the carbon emissions. A conceptual carbon footprinting framework has been developed by
using the activities like content analysis of the carbon footprint reports, sustainability reports and public literature on bank’s activities. Two indexes, carbon disclosure performance index and carbon disclosure leadership index, were featured in the global 500 carbon disclosure project. These indexes were used to construct the carbon footprint benchmark case. The conceptualised benchmark model was used as a checklist to analyse the carbon footprint process models of South African banks. The findings of the study revealed that an internal carbon footprinting system is being improved among South African banks. The amount of carbon emission in their external systems like products, services, lending and investment portfolios were negligible. On the basis of these findings, it can be stated that there is need of adopting the holistic approach by the national or international banks in order to measure the carbon emissions. Further the national, as well as international climate policies, are also required to be taken into special consideration.

Boon, Hui Tan & Mei-Mei, Patricia Ang & Hee Kim, Rebecca Chung & Khee, Pek Chuen (2013), provided details in their research article on the business potential of ethical Banking, Green Banking and Green loan initiatives by incorporating both the demand and supply perspectives in Malaysia. Participants were senior bankers and stakeholders, managers of 169 corporations, and 203 heads of households. Qualitative and quantitative methods were utilised for this survey. In-depth interviews with senior bankers and stakeholders revealed primary motivations, drivers of sustainability, conceptualization and challenges related to Green and Ethical Banking. This banking system had influenced over 60% of individuals’ and corporate respondents’ banking decisions. Moreover, out of five corporations, two companies were positively interested in adopting the techniques of green loans. These two companies were multinational companies and had sustainable legal practices and policies. The majorly required Green Banking initiatives were online banking, availability of green car loan packages and banks support to the environmental projects and human development projects. The results revealed a strong demand for ethical Banking, Green Banking, and initiatives such as Green loans from both corporations and individuals. Therefore, to promote Green Banking initiatives; banks can create greater public awareness
regarding their ethical practices by introducing and providing leadership in the area of sustainability, as well as, recommending how banks can enhance Green loan schemes.

Choudhury, Tonmoy & Toufic, Salim & Al-Bashir, Mamoon & Saha, Prakash (2013), highlighted the benefits, challenges and strategic aspects of Green Banking with two major objectives. First was to caricature the existing scenario of Green Banking practice in Bangladesh and the second was to accentuate how individual and institutional stakeholder forces such as regulatory, managerial or environment can affect the deliberate environmental behaviour of banks performing in Bangladesh. The findings of the study shed light on the fact that the role of banks is immense in changing the habits of customers. The banks can influence people to adopt Green Banking practices just by educating them. In this way, banks can contribute to environmental improvement initiatives. Furthermore, banks can also get rid of high operational cost just by adopting friendly environmental technologies and management system. In order to suggest some recommendations to the government, customers, whole banking community and business community, both descriptive and inferential statistical analysis has been applied.

Masukujjaman, Md. & Aktar, Serena (2013) in their research study “Green Banking in Bangladesh: A Commitment towards the Global Initiatives”, highlighted the Green Banking road map in Bangladesh by focusing on its implementation status. Further, researchers made an attempt to explore activities of commercial banks in comparison with global Green Banking. The study utilised secondary data available from related websites published reports and articles. The study concluded that Bangladesh is far behind their global counterparts. However, the general picture presented a transition to Green Banking by most of the banks in a consistent manner. Banks are ensuring sustainability for industry and the world as well just by focusing on proper infrastructure development and accelerating its green movements.

Matriano, Donald (2013), in his research paper “Green Banking: Towards a Socially Responsible Banking in the Philippines”, presented an overview of the
Green Banking initiatives in the Philippines and their positive influence on social and financial performance. It also attempted to examine the growing opportunities for Philippine banks to profit through financing a more environmentally sustainable future.

Rahman, Mustafizur & Ahsan, Ali & Hossain, Motahar & Hoq, Meem Rafiul (2013), in their research study “Green Banking Prospects in Bangladesh”, analysed the prospects of Green Banking in Bangladesh. Specifically, the objective of the study was to promote Green Banking practices among various beneficiaries and in the Banking sector. In particular, the study aimed -

- To study and identify opportunities for innovative environment-friendly financial products by managing environmental risk.
- To study environmental and control regulations regarding Green Banking in Bangladesh.
- To prepare investment projects by designing proper environmental management system.
- To supports commercial development with environmental benefits by creating financial products and services.

Ullah, Maruf (2013), has tried to find out the present status of Green Banking practices in Bangladesh. In doing so, a comparative analysis has been initiated among different types of banks [State-own Commercial Banks (SCBs), State-own Specialized Development Banks (SDBs), Public Commercial Banks (PCBs) and Foreign Commercial Banks (FCBs)] in operation in Bangladesh to see whether they adopted Green Banking policy guided by Bangladesh Bank (BB). The study concluded that only PCBs, FCBs have adopted Green Banking guideline and financed some of Green Banking based projects on the other hand SCBs and SDBs initiatives are not remarkable.

Ko, Myung & Mancha, Ruben & Beebe, Nicole & Yoon, Hyun Shik (2012), in their research paper, developed a theoretical model that posited factors influencing Internet Banking use and validated it with a sample of more than 300 respondents using Partial Least Squares (PLS). The results indicated that three factors,
openness to experience from the Five-Factor Model, perceived usefulness, and Green concern from peer pressure, were positively associated with Internet Banking use. Consistent with previous research, security concern was negatively associated with Internet Banking use while perceived ease of use was found to influence perceived usefulness. The results offered valuable insights for bank managers.

Millet, Khondkar & Kanta, Rafeza & Khan, Mahfuzur & Karmaker, Ashok (2012) highlighted the key concept of Green Banking activities by covering almost all the important information regarding Bangladesh Bank’s initiatives, banks’ policy formulation and governance, bank’s annual budget allocation and utilisation for their Green finance in their report. Climate risk fund, marketing and capacity building, Composition of the Green Banking Unit (GBU), Data on Environmental Risk Rating (EnvRR), and Data on Green Finance (amount disbursed for ETP, amount disbursed for the projects having ETP, biogas plant, solar/renewable energy plant, Hybrid Hoffman Kiln, and others are also covered by this report. It also contained information on Online Banking, the Internet and Mobile/SMS Banking, in-house activities covering inventory on utilities and energy, Climate Risk Fund, Green Marketing, capacity-building and disclosure requirements. An effort has been made to grade the top ten banks upon evaluation of their overall Green Banking activities. This report ended with mentioning some major challenges ahead.

Savu, Ioana Florentina (2012), in his research paper “It is time for Green Banking Management in Romania”, defined the ecological behaviour of banks and established the role of non–governmental organisations and Banking products in bank’s ecological management. It focused on projects that banks can undertake in partnership with environmental organisations such as paper recycling, forestation with employees – volunteers from the banks, "canvas bag", building solar panels and "sustainability tour". The author has provided certain solutions that can be adopted by banks in order to promote Green Banking and environmental friendly banking practices. The banks should encourage customers to opt for green cards, online banking, electronic bank statements, green
mortgages, green commercial buildings loans and green car loans. These efforts can generate a huge amount of positive results for the society and environment.

Shen, Bo & Wang, Jian & Michele, Li & Prince Lynn & Zeng Lei (2012), in their research article “China’s Approaches to Financing Sustainable Development: Policies, Practices and Issues”, reviewed China’s recent efforts in financing clean energy. It first reviewed policies for facilitating Green investments. With regard to clean energy financing in China, the types and areas of green investments and activities have been carried out. A discussion was followed examining key barriers to achieving investment potentials in China. The paper concluded with some recommendations for China to increase its efforts to scale up investments in sustainable development.

The World Bank’s report (2012), titled “Inclusive Green Growth: the Pathway to Sustainable Development” examined the impact of green growth on economic policies and its implication on the welfare of people or environment. Further, the role of infrastructure investment and development in designing the better green growth policies has also been analysed within the report. It has also found that the sustainable growth is essential at a very large scale in order to fulfil the development needs of world’s poor countries. Green growth is necessary, efficient and affordable. There is need of improving environmental situations in poor countries by better policies and practices as there are 1 billion people are living in poverty. Social and political factors and lack of financing instruments are the reason behind slow greening growth.

Kaufer, Katrin (2011), in his research project, highlighted the positive impacts banks can have on an economic system by inculcating Green Banking practices in their business operations and organisational capacities. For this, the author has presented a case study of socially responsible and Green Bank, Triodos Bank, based in the Netherlands, and explored the potential role of banks in addressing societal challenges. The case study was based on interviews with Triodos executives and co-workers throughout the organisation, with customers, on participant observation, and on a review of the bank’s work and publications. This study had three parts. Part I outlined Triodos history and product innovation.
process through its different stages. Part II focused on the operating principles of value-based banking that Triodos has developed. Part III discussed what can be learned from Triodos Bank about the role of Banking and the potential of value-based banking in addressing societal issues. This case study of Triodos Bank has identified phases in Triodos’ development, its product innovation process, and how it integrates the triple-bottom line at every level of operation.

Rakic, Slobodan & Mitic, Petar (2010) showed the potential of Green finances, and presented the most important Green financial products, in their research article. Special emphasis was put on Green products of retail banking, such as Green Cards, Green car loans, Green mortgages, etc. These products strengthen environmental causes, such as high fuel efficiency, clean energy and eco-friendly activities. This article also showed the positive impact both on the side of the provider of the products, given that the demand for Green products is constantly increasing, and for the users, as it provides products with lower costs.

Setijawan, Edi (2010) has explained various levels of bank’s involvement in Green project/investment. This paper highlighted basic facts about Green Banking in ASEAN+3. For this, the author has discussed case studies of Green Banking initiatives in 3 different countries, i.e. China, Japan and Indonesia. Lastly, the relevance of Green Banking for a future Green economy and limits of Green Banking for Global Green transformation were discussed.

Thookozani, Dlamini (2010), in his research thesis, studied the response of South African Banking Sector towards the pursuit of environmental sustainability. For this purpose, the study targeted top 9 banks listed in top 200 African Banks Report, 2010. The identified sample size comprised of 9 banks with 2 respondents per organisation, resulting in 18 respondents in total. Judgment sampling technique was used for research. The study focused on counting the types of costs and benefits that were realised by the participating banks. The research was concluded with the following points:
• The growing environmental concerns and credit risks are the primary drivers of pursuing environmental sustainability in South Africa’s Banking sector.

• Sustainability factors should be incorporated into the business evaluation criteria with a truly representative weighting incorporating a long-term viability view.

A research paper was written by Barry, Christine & Murchie, Judsonv (2009), analysed the cash management industry in U.S., and the ways in which financial institutions can help their corporate customers become Greener. It also identified areas in which new opportunities exist for banks to help corporate clients eliminate paper-ridden processes, as well as potential environmental benefits of those initiatives.

The overall objective of research project “Green Banking 4 Life” carried out by Georgiou, Kostantinos (2009), was to promote Green Banking in the beneficiary, Piraeus Bank (Greece), and thus in the Banking sector. In particular, it was aimed to:

• Assess the environmental impact associated with internal operational activities of Piraeus Bank.
• Guide environmental programmes for better resource consumption practices
• Assess environmental impacts on core business resulting from external commercial activities and investigate potential banking products to reduce these impacts.
• Design and launch Green Banking products through lending and investment.
• Spread experience gained from the project beyond the Piraeus Bank.
• Disseminate the results to employees, associates and the general public.

Colby, Charles & Woodall, Gina (2008) in their research paper identified a latent market potential of $104 Billion per year for Green products in U.S. The gap between ownership and interest in a wide variety of products and the cost of
acquiring and retrofitting was the basis of this estimate. Authors have discussed Green financial services specifically and pointed Green products represent a lucrative opportunity for lenders. The present research also examined Green opportunities which are directly related to financial services businesses. It has been identified by researchers that through online transactions it can become easier to convince customers to save paper. The impact of such initiatives was huge that last year 66 percent of adults checked their bank account online and 44 percent people paid their bill online. It was a huge change in the mindset of people. This study also revealed that 58% of consumers indicated they have either shifted some of their financial statements from paper to online, or expressed a high degree of interest in doing so.

Matisoff, Adina (2008), in their report “The Green Evolution: Environmental policies and practices in China’s Banking Sector”, provided Information about the new environmental finance regulations launched by the government along with its implementation strategies in Chinese banks highlighted some specific examples of controversial transactions made by Chinese banks, and identified projected trends for the Chinese Banking sector going forward. This report found that there has been significant progress in the development of sustainable finance in China which includes the creation of influential regulations, internal bank compliance mechanisms, and some public reporting. In the best cases, banks have enhanced bank lending portfolios by established deeper credit risk management systems and adopting international best practices. However, when it comes to developing comprehensive environmental and social management systems and engaging stakeholders, Chinese banks lag behind their international peers. This report shed light on the viewpoint of Chinese banks that the commercial banks in the country viewed environmental issues at their ethical responsibility rather than a core business issue similar to how international banks viewed their environmental responsibility ten years ago.

A report “The Four E’s of Green Banking: Educate, Enable, Make it Easy — and be Earnest”, released by Schwanhausser, Mark (2008), examined Green Banking issues, including consumer habits, Green Banking behaviours and
recommendations for financial institutions seeking to attract environmentally conscious consumers. Researchers have revealed that customers showed their interest in adopting environmental friendly behaviour but still out of four three customers received paper statements. As per the viewpoint of Javelin, by stopping receiving the paper bills and statements by every US households 687,000 tonnes of paper can be saved which is equal to circling the earth for 239 times.

**Steel, Jonathan (2008)**, in his research paper “Energy & Efficiency: The Worldwide drive to Green Banking”, interviewed 400 respondents from enterprise-scale companies across seven countries i.e. US, China, France, Germany, Japan, Russia, and UK on a range of issues around Green IT. This paper examined the responses from the 102 banking industry respondents out of 400 respondents and compared the Banking results with respondents from the other 3 industry sectors – energy/utilities, insurance, and the government sector. This comparison was made to compare the level of opportunities and challenges faced in “Going Green” in these 4 different industries. The author concluded that despite the challenging economic conditions that beset us all today, Green issues are firmly on the agenda for both corporate and public sectors. This report detailed the study results in relation to the Banking sector, and contains a number of key findings:

- 50% of respondents are implementing Green strategies only in a piecemeal or ad hoc fashion, which does not bode well for achieving strong results.

- The main barrier to achieving change for banking respondents is budgetary constraints, although raising awareness in the organisation and obtaining a commitment from employees are also problematic.

- Around 60% of Banking respondents agree that their company does everything possible to be environmentally responsible, but nearly half (45%) agreed that their organisation is only interested in Green projects for PR purposes.
A report by **ICF Consulting Canada (2007)**, named as “Green Financial Products and Services”, examined Information about green products and financial services. Further, the focus is on to gain knowledge about various opportunities and nature and transferability of practices. The authors have revealed that the Green Banking system can increase market share and generate profits for the banks just by enhancing brand recognition and reputation. This report discussed potential options for future environmental Banking products and services for the North American financial sector. The impact of author’s study can be realised at the international market along with North America market. Further, it also includes the evolution of Green Banking in the green product and service development in Europe, Australia and Japan.

The goal of research paper “New direction line of Sustainable Development and Marketing in Green Banking”, written by **Eva, Pinter & Nikolett, Deutsh & Zoltan, Ottmar (2006)**, was to identify the role of financial institutions in achieving sustainable development. The authors also attempted to show, why and how can this sector become the promoter of sustainability. Authors concluded that in order to reach competitive advantages, banks should develop their technological infrastructure, create and enhance their risk management capabilities, generate strong brands, and found the performance-oriented corporate culture. On the way of the Greening process, banks should transform these fundamental dimensions to serve the idea of sustainable development.

**Guo, Hao (2005)**, in his thesis titled “Pathways to Sustainable Banking in China: from Environmental Risk Management to Green Financing”, explored the ways of incorporating Environmental Risk Management (ERM) system in Industrial and Commercial Bank of China (ICBC), which is currently using Credit Risk Management system. Specifically, the author analysed the most appropriate financing system for corporate customers in ICBC in the direction of sustainable development. The reason behind conducting the paper was to increase awareness among the ICBC’s managers about the sustainable banking. It helps in building awareness about the sustainable banking strategies like institutionalised in the near future. It provides benefits of sustainable banking for ICBC and other
Chinese commercial banks. This research also presented suggestions for implementation of Green financing in the near future.

Boyd, James (1996) explained about the rules and regulations responsible for environmental protection and issues and challenges in the implementation of those rules and regulations. In his discussion paper “Banking on ‘Green Money’: Are Environmental Financial Responsibility Rules Fulfilling their Promise?” The paper has put its views regarding the application of responsibilities associated with financial aspects and its role in other kind of environmental regulations. Having laid out the benefits of financial responsibility, in theory, the analysis provided a practical description of rules that currently apply to the owners and operators of regulated facilities under the Resource Conservation and Recovery Act (RCRA).

3.2 Review of Literature: National

The research article, written by M, Ragupathi & S, Sujatha (2015) explored the ways to Go Green through ‘Green Banking’. According to authors, Green Banking means promoting environmental-friendly practices and reducing your carbon footprint from your Banking activities. This comes in following forms:

- Avoiding Branch Banking and using online Banking.
- Paying bills online.
- Instead of opening up accounts at large multi-branch banks, online bank accounts should be opened.
- Finding the local bank which supports local Green initiatives in your area.

The author concluded that the concept of “Green Banking” is mutually beneficial to the banks, industries and the economy. Not only “Green Banking” ensures the Greening of the industries, but it also facilitates in improving the asset quality of the banks in future.

Annadurai, AR (2014), in their research study “Effectiveness of Green Banking Technology of thee Commercial Banks in India”, highlighted the growth of Green
Banking in Indian Banking sector. This paper also presented some options which banks can offer to their customers, as far as Green products and services are concerned and listed Green Banking initiatives by commercial banks in India. Lastly, the author concluded that Green Banking initiatives like Communication through Press, Bank environmental policy, Concession on energy savings, Solar ATMs, Green CDs are not familiar with Green initiatives by the bank as per the customers and the general public. The Government should formulate a Green Banking policy guidelines and financial incentives.

Bihari, Suresh Chandra & Pandey, Bhavna (2014) conducted a research study with following objectives:

- To study “Green Bank” concept.
- To identify and adopt necessary steps for Green Banking.
- To check among bank employees, associates and the general public the awareness of Green Banking.

To achieve these objectives, authors have made an analysis of financial performance and environmental sustainability of 5 public sector banks i.e. SBI, PNB, BOB, IDBI and Central Bank of India, and 4 private sector banks Axis Bank, ICICI, Standard Chartered Bank, Yes Bank.

The research study conducted by Chaurasia, Ashis Kumar (2014) has made an attempt to highlight the major benefits, confronting challenges, strategic aspects of Green Banking. It has also presented the status of Indian banks as far as Green Banking adoption is concerned. Although banks in India play an active role in its economy, still there has been not much initiative taken by them in this regard. Banks should take environmental and ecological aspects as part of their lending principle by going green, which would force industries to go for mandated investment for environmental management, use of appropriate technologies and management systems and also concern about the inherent Green value proposition.
**Ch, Sreesha (2014)**, in her research paper, identified Green Banking activities undertaken by the Banking sector in India. The aim of this paper was to study various models or channels which make the bank branches Green. Author has highlighted the regulatory measures taken by the RBI for promoting Green Banking. This study also gives consideration to the initiatives taken by Indian banks, both private and public, to ensure the environmental sustainability. For the purpose of gathering useful information, the banks like State Bank of India and Canara Bank has been selected. Meanwhile, from the private sector, ICICI and HDFC Bank were selected. The findings revealed that Indian banks are identified the importance of environmental protection and started taking various initiatives under its Green Banking activities. The findings also showed that public sector banks had taken more Green Banking initiatives as compared to private sector banks.

**Gurusamy, S & Vengatesan, C (2014)** in her research article explored the glimpse of Green Banking besides highlighting the various products and services of Green Banking. Further, the paper also attempted to capture the list of Greenest Bank at the Global level and various initiatives taken by RBI towards Green Banking.

**Jaggi, Geetika (2014)** elucidated the concept of Green Banking and explained that how a Public bank like State Bank of India and private banks ICICI Bank has set some high examples in taking green initiatives. The author discussed that SBI had introduced Green Channel Counters and no queue banking in over 5000 branches across India. The banks like ICICI Bank are encouraging the use of such cars, (Maruti 800, Omni and Versa, Santro and Eco, Civic and electric cars, CNG versions of Tata and Mahindra vehicles) that saves energy, by waiving off 50 percent of processing fee. Further banks are providing loans to the companies and investing too that follow the guidelines related to green initiatives or protection of the environment. The most significant finding propounded by the author was that the activities of banks are highly driven by a triple bottom approach that includes people, planet and profit.
Karunakaran, R (2014) in his research article “Green Banking – An Avenue to Safe Environment” focused on imperatives and steps in Green Banking. According to Researcher, Green Banking is like a normal bank, which considers all the social and environmental factors; it is also called as an ethical bank. The importance of Green Banking is immense for both the banks and the economy as a whole, by avoiding credit risk, legal risk and reputation risk involved in the banking sector. The researcher also enlisted various strategies of Green Banking, which are as follows:

- Go Online
- Use Green Checking Accounts
- Use Green Loans for Home Improvements
- Power Savings Equipment
- Use Green Credit Cards
- Paperless Banking
- Use of Solar and Wind Energy
- Mobile Banking

This also highlighted plans for the enforcement of environmental management in banks and role of government in this regard. The financial institutions should encourage projects which take care of following points while financing them viz,

- Adopting sustainable development by using natural renewable resources.
- Use of pollution prevention and waste minimization, pollution controls measured for solid and chemical waste management.
- Protection of human health, biodiversity, occupational health and safety, efficient production, delivery and use of energy.
- To draw a plan for the environmental management plan through third party expert.

The researcher said that to ensure all these work, Government of India should enact legislation to force banks to consider producing a formal environmental
policy statement and making this publicly available. Legislation should be capable enough to enforce the standards along with training and demonstration skills.

**Kaur, Jasdeep (2014),** in his research paper, provided an overview of Green Banking, advantages associated with it and different Green Banking initiatives taken by Indian banks. The study highlighted some of the suggestions which can be taken by banks to increase their societal and environmental contribution.

**Khedekar, Pratiksha (2014) explored the concept of Banking with technology** i.e. “Green Banking”. The author highlighted issues and challenges faced by customers while using E-Banking. This paper provided a glimpse of Green Banking initiatives adopted by Indian banks. Moreover, lastly, the author has given suggestions to banks for creating awareness about Green Banking practices. The author concluded that Indian Banks should expand the use of environmental information in their business operations, credit extension and investment decisions. The endeavour will help them to proactively improve their environmental performance and creating long-term values for their business.

The research paper written by **Laxman, Shilpika (2014),** has discussed the concept of Green Banking and enlisted various benefits associated with it. Paper explored the importance of Green Banking and suggested possible policy measures and initiatives to promote Green Banking in India so as to protect the environment. Potential Green Banking products are also discussed in this paper.

**Mehar, Laxmi (2014) explored the concept of Green Banking and its evolution in India.** The author further discussed Green Banking approaches adopted by Indian banks. The author identified the benefits of Green Banking for the environment as well as for customers. Moreover, finally, the author discussed the steps necessary to create awareness about Green Banking and its customers and bank employees.

**Nagpal, Sonika (2014),** in her research study “Green Banking Strategies and Initiatives in India: A Conceptual Framework” Pointed out at the benefits of green strategy in the banking industry. Furthermore, the guidelines of RBI and the compliance of commercial banks towards those guidelines have also been
discussed within the study. The paper concluded with implications for the bankers and policymakers to speed up the process of effective implementation of Green Banking practices.

**Nath, Vikas & Nayak, Nitin & Goel, Ankit (2014),** in their research study, highlighted World Bank’s environmental and social norms. World Bank had formed Environmental and Social (E&S) norms for financial institutions like commercial banks, investment funds and leasing companies, to define their role in reducing pollution and managing their adverse social and environmental impact on the economy. They had discussed the areas in which E&S impacts should be properly monitored by the banks and their clients. Researchers also discussed various initiatives taken by public and private sector banks in India in the adoption of Green Banking practices and enlisted significant strategies for adoption of Green Banking. They have enlisted the Green Banking initiatives taken by Public Sector Banks, which included State Bank of India (SBI), Punjab National Bank (PNB), Bank of Baroda, Canara Bank, and Private Sector Banks, i.e., ICICI Bank Ltd, HDFC Bank Ltd, Axis Bank Ltd, Kotak Mahindra Bank.

**Rajesh, T. & Dillep, A. S. (2014) conducted a research study with the objective of assessing the role of banks in sustainable economic development through Green Banking activities. Authors also presented Global and Indian scenario of Green Banking Initiatives. This study has mentioned the Green Banking initiatives taken by central bank RBI, 2 public sector banks i.e. PNB and SBI, and 2 private sector banks ICICI and HDFC. Lastly, authors concluded that a framework of incentives for responsible banks and disincentives for pollutants is an essential element for the development of Green Banking.**

**Reshmi, R & Johnson, B (2014),** in their research paper, examined the buying behaviour of Green product among various income level groups. This study was attempted to understand consumers’ Green purchasing intentions and compares the factors influencing the purchase decision of Green products and non-Green products. For this purpose, a sample survey was conducted on 90 respondents based in Calicut city. The respondents were divided into 3 categories, i.e., high-income level group, middle-income level group and low-income level group. The
primary data was collected with the help of an interview schedule. Results indicated that there is no significant difference between buying behaviours and income level and no significant difference between purchase decision and sector (government & private) employees. To the end, health was considered as the most important factor influencing Green products and cost as the most important factor influencing the purchase of non-Green products.

Ritu (2014) highlighted methods, opportunities, challenges and benefits of Green Banking, in her research paper. The author also provided suggestions for the banks to encourage Green Banking. The list of suggestions mentioned by the author includes to communicate the guidelines and requirements through the press for wide coverage and construction of properly navigated websites. Further imparting education through E-learning platforms and in annual reports Green Banking should gain special consideration. Another suggestion is that employees of banks should get proper training and initiatives like green funds should also be launched. Banks may formulate innovative financial solutions to incorporate environmental perspective.

Ruchi (2014), in her research study “Green Banking: A Case Study of IndusInd Bank”, explored the various dimensions attached to the concept of Green Banking. This study highlighted Green Banking scenario in Indian Banking industry and in particular, studied the case study of the IndusInd Bank. This paper was a descriptive study, where the data has been collected from various secondary sources.

Sahitya, Urvashi & Lalwani, Vaibhav (2014) conducted a research study Identify the initiatives taken by top banks to support the motives of Green Banking and further this study also helps in understanding the impact of green initiatives on sustainable banking and environment protection. The research methodology consisted of case study based approach to secondary sources like Bank websites, RBI reports, etc. The finding of the study revealed that the banks are taking huge initiatives just to promote Green Banking like paperless banking and use of solar energy sources in ATM’s are certain examples.
Santosh Raj, Daniel (2014) explained the importance of Green Banking and its emerging trends in management for the sustainable development in his research paper. According to the author, “GO Green” is the mantra going on everywhere today. The impact of global warming is serious today, and people are taking preventive actions on their behalf. This is the reason that people have become aware of their actions and protecting natural resources, so that contribute maximum in saving an environment. In the array of encouraging people towards environment protection, the role of green marketing is immense. It spread important information to the people and in the same series, banks have also launched initiatives related to Green Banking.

The research study based in Mumbai studied the customer awareness about Green Banking, Conducted by Sharma, Neetu & K, Sarika & Gopal, R (2014), aimed to identify the level of awareness of customers regarding “Green Banking Services” in selected public and private sector banks in Mumbai, India. For this purpose, 100 respondents having the sound educational background and with some degree of awareness with respect to Green products were targeted and approached. Among 100 respondents, 42 were Male, and 58 were Female. 59 respondents were mainly from public sector banks, which included SBI, PNB and BOI and 41 from Private Banks i.e. ICICI, HDFC and AXIS bank. The study revealed following conclusions:

<table>
<thead>
<tr>
<th>Bank’s Name</th>
<th>Awareness Level (in %)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Aware</td>
</tr>
<tr>
<td>SBI</td>
<td>77%</td>
</tr>
<tr>
<td>PNB</td>
<td>77%</td>
</tr>
<tr>
<td>BOI</td>
<td>92%</td>
</tr>
<tr>
<td>ICICI</td>
<td>88%</td>
</tr>
<tr>
<td>HDFC</td>
<td>90%</td>
</tr>
<tr>
<td>AXIS</td>
<td>96%</td>
</tr>
</tbody>
</table>
Singhal, Komal & Singhal, Krishna & Arya, Monika (2014), in their paper “Green Banking: An Overview” highlighted the concept of Green Banking, the ways in which banks can “Go Greener” and Green Banking initiatives taken by the various banks in India. The author found following Green programs which can reduce their own impact on the environment.

- Finance in Green Projects,
- Green Mortgages,
- Green Credit Cards,
- Mobile Banking,
- Energy Conservation,
- Online Banking Services.

The author concluded that though Indian banks are making efforts to “Go Green” through various Green products & services and taking initiatives in their day to day business operations of the environmental concerns. It is highly required that banks operating in India should focus on drawing strategies for the launching green initiatives and aligning the operations with Green Banking fundamentals and principles.

Sudhalakshmi, K & Chinnadorai, K M (2014), in their research paper, have tried to shed light on various aspects of Green Banking like issues, benefits and challenges. As far as Green Banking adoption is concerned, the status of Indian banks was also presented. Banks in India did not take many initiatives in this regard, though they play an active role in India’s emerging economy. Banks pro-active role to take environmental and ecological aspects as part of their lending principle by going green and forcing industries to go for mandated investment for environmental management, use of appropriate technologies and management systems. This paper tried to find out the ways to Go Green through 'Green Banking'.
Tara, Kanak & Sing, Saumya & Kumar, Ritesh (2014), in their research paper, studied and showed how the Green marketing concept can be used fruitfully in popularising the Green Banking ideas and concepts before the masses and how such approach helps in the protection of the environment. The paper also showed how the trio i.e. Green marketing, Green Banking and Green environment are related to each other. The author concluded that effective Green marketing could increase consumer awareness towards environment protection and effective Green Banking will definitely leave a positive impression of what a bank can do for the society with the support of its customers. Green marketing with the philosophy of “Reduce, Reuse and Recycle” and Green Banking by promoting investment in the environmentally friendly projects with sustainable development in mind is going to make things move on the right path.

A report on Green Banking (2013) presented by Institute for Development and Research in Banking Technology, IDRBT, (Established by Reserve Bank of India), in their publication, propagated the concept of Green Banking. The Publication explains various possibilities that exist in the Banking arena to increase energy efficiency and thereby to contribute their bit to the ongoing global efforts at ensuring sustainable development. It dwells on environment-friendly practices that banks can adopt with respect to its IT infrastructure and Green products and services. The case studies mentioned in this publication offer insight into what banks can potentially achieve by being environmentally proactive. Considering the nature of Banking processes and infrastructures, the publication offered guidelines for Greening Banking in two levels- i) Greening Processes, Products, Services, and Strategies, and ii) Greening Infrastructure. The report highlighted simple methods in the context of Green Banking which could be adopted by any bank for its building, data centre, internal processes, educating customers on technology-based transactions, saving energy, etc. The publication proposed the introduction of Green Rating Standards, coined the term of as “Green Coin Rating” for Green efficient Banks and Banking practices among Indian Banks. Under this rating system, banks are judged on the basis of carbon emissions from their operations, amount of Green projects financed by them, and on the amount of recycling, rewards or recognitions given to borrowers for
turning their businesses Greener, refurbishment and reuse material being used in their building furnishings and in the systems used by them like servers, computers, printers, networks, etc.

Jha, Nishikahnt & Bhome, Shraddha (2013) did the empirical study on the steps that can be taken for going Green in the Banking sector and to check the awareness among bank employees, associates and the general public about Green Banking concept. They did this study by collecting data from 12 bank managers, 50 bank employees and 50 general customers. The authors were of the opinion that online Banking, Green loans, power saving equipments, Green credit card, use of solar and wind energy and mobile Banking were some of the strategies that should be followed for going Green. The results of the study were

- For implementing Eco friendly business practices, banks should adopt environmental standards of lending, which results in improving the asset quality of banks;
- The rate of interest on loans given for Green projects should comparatively less than the normal rate of interest;
- Companies can increase their profitabillity by reducing or recycling of waste generated and also by adopting sustainable measures to go Green.

Jinwala, Arunkumar Ashvibhai (2013), in his research paper, explored the importance of Green Banking, sited international experiences and highlighted important lessons for sustainable Banking and development in India. However, it was found that here has not been much initiative in this regard by the banks and other financial institutions in India, though they play an active role in India’s emerging economy. Therefore, author suggested possible policy measures and initiatives to promote Green Banking in India. The study concluded that in-spite of a lot of opportunity in Green Banking, RBI notifications; Indian banks are far behind in the implementation of Green Banking only some of banks have initiated towards Green Banking. There is more scope for all banks and they can not only save our earth but can transform the whole world towards energy consciousness.
Banks must literate their customers about Green Banking and adopt all strategies to save earth and build banks image.

Kandavel, D (2013), explained the concept and benefits of Green Banking. Author has used case study approach, wherein banks who have successfully implemented Green Banking practices in their operations are studied. Author has provided cases of 3 public sector banks i.e. SBI, BOB and IDBI, and 3 private sector banks i.e. IndusInd Bank, ICICI and HDFC.

Malu, Sandeep & Agrawal, Rakesh & Jajoo, Dinesh (2013), in their research paper, emphasised the concept of sustainability in Indian Banking sector and suggested the options to improve sustainable Banking in the Indian scenario. Authors concluded that Banks not only need to make direct investments in sustainable development, they also need to leverage their indirect control over investment and management decisions to influence business into fulfilling broader social and environmental goals. There are a plethora of opportunities in the area of environmentally responsible finance, which banks can profitably exploit.

Meena, Ravi (2013) aimed to highlight the means to create awareness in internal as well as external subsystems among target groups and impart education to attain sustainable development through Green Banking in his research paper. Further, the author has enumerated effective methods and benefits of Green Banking. Author has suggested ways which can be adopted by banks to encourage Green Banking activities among customers.

Rajput, Namita & Arora, Simple & Khanna, Akanksha (2013), in their empirical research paper, found the association between established the relationship between environmental and financial performance. For the same purpose, the panel data regression method was put into practice. In order to exhibit the financial performance, the variables were net income, expenses, profitability and other than the variables of Green Banking were also taken. The findings of the study provided some interesting outcome. It suggested that there is no significant relationship between the bank’s profits and implementation of Green Banking. However, there is a significant relationship between net income
and profitability. Thus, it gives an understanding that there is still a huge requirement of promoting the environmental initiatives and Green Banking.

The main objective of the research study conducted by Rajput, Namita & Kaura, Ruchika & Khanna, Akanksha (2013), was to understand how Indian banks are responding to environmental turbulence deeply. The author sheds light on the subject matter like gaps in initiatives, the scope of improvement, awareness level, and the process of Green Banking adoption and so on. For the same purpose, the help of structured questionnaire was taken and further the data was taken from secondary data and published reports. The findings of the study suggested that there were very few banks that actually took initiatives to control carbon prints internally as well as externally. As compared to international standards, Indian banks are not responding well even after an identification of various risks and opportunities. The banks were not aligning with the international environmental protocols. Indian banks faced challenges such as ‘Risk of failure of business to peers’ and ‘Lack of RBI mandates’ as shown by factor analysis and are main barriers to adopting sustainability. Main reasons for employing environmental and sustainable issues were improved brand reputation, social and environmental pressure from society and providing innovative opportunities. Indian Banks identifies main gaps which require directives from regulatory bodies including awareness and consciousness on sustainability issues, international guidelines and framework and sustainability reporting which are formal frameworks for banks to operate in India with lucid and clear policies.

Yadav, Rambalak & Pathak, Govind Swaroop (2013) discussed various ‘Green Banking’ approaches adopted by private and public sector banks in India for environmental sustainability. Further, researchers attempted to categorise the phases of Green Marketing initiatives of the banks on the basis of their Green Banking initiatives. The sample consisted of the top performing banks in the public sector and the private sector, using the case study approach. The findings revealed that with the time the Indian. The Green Banking approach is the result of bank’s understanding about environmental protection and banks took various initiatives to ensure the development of better Green Banking approach. The
findings also showed that Green Banking initiatives are taken more public sector banks as compared to private sector banks with the exception of ICICI bank. Secondly, the findings of the study revealed that most of the banks were going through the second age of environmental green marketing. The actions of these banks were revolving around the benefits of environment and promotion of green marketing (Peattie, 2001). However, in the third phase of Green Marketing- Towards the Third Age: Sustainable Green Marketing, only ICICI Bank Green Banking approach was found suitable to it.

**Bahl, Sarita (2012)**, in her research study “Green Banking: The new Strategic Imperative”, highlighted Green Banking practices adopted by various Indian banks. This empirical study has incorporated the collection of both primary and secondary data for the in-depth investigation. Furthermore, to collect data an intensive desk research were conducted. After the pilot survey, 100 managers of public banks were surveyed, and structure questionnaire has been used to collect primary data. This study also analysed significant strategies for adopting Green Banking. To find out the most significant strategies, Garrett’s ranking technique was used. In this technique, the ranks were assigned by the respondents to the strategies and their outcomes. On the basis of ranking, the outcomes were converted into score value with the help of Garret’s formula.

**Bahl, Sarita (2012)**, in her research study “The role of Green Banking in Sustainable Growth”, highlighted the means to create awareness in internal as well as external sub systems among target groups and impart education to attain sustainable development through Green Banking. For finding out the awareness level about Green Banking, researcher has surveyed 100 managers of public sector banks through structured questionnaire. Further, researcher has enumerated effective strategies for Green Banking. To find out the most significant strategies Garrett’s ranking technique was used. As per the method, respondents have been asked to assign the rank for all the strategies and outcome of such ranking have been converted into score value with the help of Henry Garrett’s formula.
The empirical research study “Green Banking Strategies: Sustainability through Corporate Entrepreneurship” conducted by Bhardwaj, Broto Rauth & Malhotra, Aarushi (2012), suggested possible policy measures and initiatives promote Green Banking practices in India. The contribution of the paper was to develop the competency-destroying environmental innovations to change the present unsustainable patterns and leads to sustainable development. This paper explained the effect of three organisational Rewards, top management support and risk-taking and tolerance for the failure on the adoption of Green Banking practices are three major organisational factors of corporate entrepreneurship. In the current paper, the impact of these three factors has been examined. Adoption of Green Banking practices is itself a bigger challenge for the organisations as it is a new concept. The paper explained about different types of risks faced by banks due to environmental problems and also suggests practice measures mitigate such risks.

A thought paper written by Koshi, Shijo Tom (2012) on Green Banking presented a global scenario of Green Banking. The paper highlighted various opportunities for banks to increase profits by investing in Green ventures and cutting down on existing investments in conventional portfolios. The paper also focused on the regulatory environment and ways to implement Green Banking initiatives.

Nanda, Sibabrata & Bihari, Suresh Chandra (2012), in their research study, “Profitability in Banks of India: An Impact Study of Implementation of Green Banking” empirically checked the association between net income and expenses with the implementation of Green Banking. The profitability of banks in India was tested through fast data panel regression. The study suggested that net income and expenses and profitability are significant to each other whereas implementation of Green Banking and profitability were not very much significant.
Verma, Mukesh Kumar (2012), in his research paper, analysed the evolution of Green Banking concepts in Indian Banking and its developments in Indian banks. Indian Banks are now becoming more conscious on CSR, and one of the main CSR is Green Banking. Banks are the real catalysts, as they have a big hand in the development of the economy so that Indian banks can play a big role in the implementation of Green Banking in India. The study is divided into two parts; one studied the growth of Green Banking among banks, and other studied the awareness about the activities done by selected banks at Jaipur, 10th largest Banking centre in India. The study concluded that only a few of Indian banks have adopted Green Banking and financed some of Green Banking based projects. There is negligible awareness of Green Banking among bank staff and customer. Along with the increase of their Banking business, banks can enhance their overall image and can serve for the community and earth.

Biswas, Nigamananda (2011) has highlighted major benefits, confronting challenges, strategic aspects of Green Banking in his research paper. The researcher has revealed some strategies for the adoption of environmental management in the Banking sector:-

- Banks should do Environmental Impact Assessment (EIA) in which they design the environmental system to evaluate the risk involved in investing in different projects;
- They should adopt the Annual Reporting System (ARS) in which they prepare an annual report on environmental risk guidelines for every project they invest or finance;
- They should adopt environmentally sustainable technologies which minimise risk, saves cost and enhance the bank's reputation;
- Banks should begin implementing procedures like an assessment of environmental risk, environmental audit management and assessment of loan follow up and credit requirement before investing in different projects.
Dharwal, Mridul & Agrawal, Ankur (2011), in their research article on “Green Banking: An Innovative Initiative for Sustainable Development” concluded that Environmental and social guidelines to which banks worldwide are agreeing to, must be fully made aware of the Indian banks. Indian banks are far behind their counterparts from developed countries in Green Banking. The authors had suggested some Green Banking strategies like carbon credit business, Green financial products, Green mortgages, carbon footprint reduction (Paperless Banking, energy consciousness, mass transportation system, Green building), and social responsibility services towards the society.

The study suggested that sustainability in the Banking sector can take two forms-

- Banks can change their routine operations through recycling programs, Paperless Banking, using energy efficient resources, and support for community events for reducing pollution and so on.
- They can adopt lending and investment strategies to promote environmentally responsible projects and can also develop Green products to ensure the sustainability in their core business.

Goyal, KA & Joshi, Vijay (2011), in their study “A Study of Social & Ethical Issues in Banking Industry” highlighted global banking, Green Banking social & ethical issues such as Social Banking, ethical Banking, Rural Banking & Agri-Banking, which facilitate the achievement of sustainable development of Banking & Finance. For this purpose, authors have gone through a series of development that is taking place in the current business scenario. This paper was divided into four parts. The first part discussed the introduction of Banking Industry in India. Second part explained the historical background of Banking and its development. It also discussed the concept of Banks. Third part analysed the review of past studies on the theme. The fourth part highlighted Social and Ethical issues related to Banking Industry. They concluded that Banks could project themselves as a socially and ethically oriented organisation by disbursement of loans merely to those organisations, which has environmental concerns. However, we as humans need to understand the economic and industrial growth at the cost of
environmental depletion have no meaning and sustainability for the longer period of time.

**Mani, Alice (2011)** examined and compared the Green lending policies of Indian banks in the light of their compliance and commitment to environment -protection and environment-friendly projects. The author stated that as Socially Responsible Corporate Citizens (SRCC), banks have a major role and responsibility in supplementing governmental efforts towards a substantial reduction in carbon emission. Bank’s participation in sustainable development takes the form of “Green Banking”.

**Singh, Hardeep & Singh, Bikram Pal (2011)** emphasised on the concept and need of Green Banking in the business process so as to make our environment human-friendly and enrich our economic productivity. The objectives of this research paper were:

- To check among bank employees, associates and the general public the awareness of Green Banking.
- To create among the general public and consumers and bank employees awareness about Green Banking.
- To increase recycling (paper, toners, cartridges and batteries), increase the use of Green products by bank branches and reduce CO2 emissions from electricity consumption and transportation
- To assess core business environmental impacts resulting from external commercial activities and investigate potential Banking products that will reduce these impacts.
- To promote investments and lending in designing and launching Green Banking products.

**Sahoo, Pravakar & Nayak, Bibhu Prasad (2008)** explored the importance of Green Banking, cited international experiences and highlighted important lessons for sustainable Banking and development in India. However, researchers found that being biggest contributors in an Indian economy the banks and other financial institutions have made very few efforts towards Green Banking initiatives.
Therefore, authors suggested possible policy measures and initiative to promote Green Banking in India.

3.3 Research Gap

There are very few studies which are related with customer perception regarding Green Banking Services in selected public and private sector banks in Rajasthan state, as the concept of Green Banking is recent in India. To fulfil the gap of limited number of investigations in the area of Green Banking in Rajasthan State, the present topic is selected.

3.4 Indian Researchers working on Green Banking

- Aarushi mlhotra, New Delhi.
- Ashish Kumar Chaurasia, Varanasi.
- Bhavna Pandey, Hyderabad.
- Broto Rauth bhardwaj, New Delhi.
- C Vengatesan, Chennai.
- D Kandavel, Tamil Nadu.
- Geetika Jaggi, New Delhi.
- Kanak Singh Tara, Dhanbad.
- Mukesh Kumar Verma, Jaipur.
- Nigamananda Biswas, Assam.
- Rambalak Yadav, Dhanbad.
- Sarita Bahl, Haryana.
- Shilpika Laxman, Pune.
- Shraddha Bhome, Rajasthan.
- Suresh Chandra Bihari, Hyderabad.
- Vijay Joshi, Rajasthan.
3.5 Research Journals on Banking and Finance

- Asian Business Review, Bangladesh.
- Banker’s Journal, Malaysia.
- Banks and Banks Systems, South Africa.
- Business Spectrum, India.
- Greener journal of Business and Management Studies, India.
- Indian Journal of research, India.
- International Journal of Research in Commerce and Management, Haryana, India.
- International Journal of Marketing, Financial Service and Management Research, India.
- International Journal of research, India.
- International Journal of research in Commerce and Management, India.
- International Journal of Sustainable Development, India.
- IOSR Journal of Business and management, Bangladesh.
- Journal of Business and Technology Dhaka, Bangladesh.
- Journal of Management and Social Science, India.
- Research Journal of Finance and Accounting, Dhaka, Bangladesh.
- Swiss Journal of Research in Business and Social Sciences, Redwood City, USA.
3.6 Conclusion

As environmental issues gain greater attention, pressure is being placed on all industries, including financial services, to implement “green” initiatives. While green banking is not yet a key reason for most customers to select one financial institution over another, customer demands and greater environmental awareness are driving a number of financial institutions to go green. Green banking is the term used by banks to make them much more responsible to the environment. The term green banking means developing inclusive banking strategies which will ensure sustainable economic development.

In this chapter of the study, 35 international review and 45 national reviews are included. International reviews are taken from researches conducted at various international places i.e. Bangladesh, China, Boston (U.S.), Malaysia, Washington DC, Virginia (US), Milan (Italy), Greece (S.A.), Sweden, Canada, Netherlands, Dhaka, Philippines, Slovakia, Romania and California.

This chapter revealed the internal information related to Green Banking. Various questions like what is Green Banking, why its need was felt, who and where it was invented, scope and future aspects of Green Banking, etc. are answered in this chapter. The implications of Green Banking and how much the customers are happy with the technology is discussed here which decides its future in India. Hence, this chapter also revealed that how Green Banking can become a better option than traditional banking in terms of convenience, time consumed, ease of access, processing time, etc. This chapter determined the key points that influence the banks as well as customers to go in for Green Banking and its various advantages that distinctly identify its importance in the growing environmental crisis.
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• Green Banking. (2013). *A Report by Institute for Development and Research in Banking Technology, IDRBT, (Established by Reserve Bank of India).*


