

**JOURNAL OF
GENERAL MANAGEMENT RESEARCH**

**DO BANKS' EMPLOYEES HAVE DIFFERENT ATTITUDES IN
THE PUBLIC- VS PRIVATE-SECTOR TOWARDS GREEN
BANKING?**

**Megha Garg
Parveen Kumar**

**Department of Management Studies, J.C.
Bose University of Science and
Technology, YMCA, Faridabad, Haryana,
India**

Abstract

Due to widespread calls for environmental protection and opposition to the effects of climate change, the term "green" is widely used and has entered into the public discourse. Given that the economy is transitioning to a "green economy," banks must consider the environment in all facets of their operations. However, the objective of this paper is to investigate the attitude of public and private sector bank employees towards this eco-friendly approach in the Delhi region. This study is based on primary data and 100 bank employees from Delhi served as the sample population. The samples were selected based on quota and convenience sampling and the Likert scale approach was used to assess the attitude on a five-point scale and T- test has been used for the measurement of inferential statistics. Our findings demonstrated invariably, that bankers' perceptions do not significantly differ across sectors, and bank staff exhibit positive perceptions towards an environmentally conscious approach. This positive perception will raise awareness, reduce carbon footprint and combat climate change. We look ahead to see the bank's role as both the mediator and a guardian of economic change; building a foundation that will open up numerous prospects for finance and investment policies and aid in the development of a low-carbon economy.

Keywords: *Perception, green financing, attitude, public and private banks, green initiatives, sustainable banking*



INTRODUCTION

Earth is a special planet with mountains, oceans, a large forest, and life—it is also the only place where the human race can exist. Global warming hazards are being brought on by increasing urbanization, excessive fossil fuel usage, high carbon emissions, and ongoing competition to clear forests for daily use (Islam and Hasan, 2015). So, this is high time to think green and follow the Mantra “GO GREEN” in our lives. Being green is a major component of modern business and organizations use it to increase their market share and have an impact on society. Even the biggest corporations, like Apple and Amazon, are making significant progress toward being green (Chitra and Gokilavani, 2020).

Given that the economy is transitioning to a "green economy," banks must consider the environment in all the facets of their operations, one of which is green banking (GB) (Ahuja, 2015). Under this, banks alter their investment strategy to focus on green initiatives and sustainable technologies. These financial institutions are dedicated to environmentally friendly banking initiatives that promote renewable energy sources and mitigate global warming. It focuses on the environment as well as resource sustainability (Jayabal and Soudarya, 2017). Banks that can position themselves as pioneers and industry leaders are more likely to improve their reputation which can then help them draw in new customers (Park and Kim, 2020). Green banking can take various forms, such as switching from branch banking to internet banking or paying bills electronically instead of mail, opening money market and CD accounts with smaller regional banks rather than with large multi-branch institutions, and so on. It may also entail locating the neighborhood bank in your area that is contributing the most to local green initiatives (Dipika, 2015).

The banking industry has shown a lot of interest in CSR, green marketing, and a green brand image according to (Lymperopoulos *et al.*, 2012) and they statistically proved that there is a positive effect of green bank marketing on their green image. They have implemented numerous measures to mitigate the pollution-causing factors in their internal operations, including the use of

mass transit, energy-efficient lighting, environmentally friendly building practices, and more (Rajan and Raj, 2017). Although the banking industry is not directly connected to the environment, its customers' actions have a significant external impact (Nath *et al.*, 2014).

Even though global concern for green banking practices is growing but numerous studies have revealed that customers know less about the green banking policies which their banks have implemented and their favorable perceptions of the green banking idea (Rai *et al.*, 2019). There is still much to learn about green banking as just 178 articles could be found across several portals. Since 2011, academic exploration around green banking has increased and the average annual growth rate of studies on it is 25.44 percent. Studies on green banking that are theoretical in nature outnumber empirical ones. Analysis of research sources showed that mainstream finance journals have not yet published many articles on green banking (Sarma and Roy, 2021).

Firstly, to promote green banking in India, there has not been much awareness and initiatives taken up by banks and financial institutions (N Biswas, 2011; Sahoo and Nayak, 2007). Secondly, the outcomes of green banking are not delivering the expected results due to the Communication gap between the regulatory bodies, banks or financial institutions, and the customers (Sharma and Choubey, 2021). This communication obstacle acts as a foremost hurdle in creating consciousness in society. For fulfilling this gap, it is worth knowing to understand the key initiatives of prominent banks of India and the attitude of banks' employees towards this sustainable approach as they are directly involved in service delivery. Along with this, it is also necessary to find out whether the attitude of bank employees of public sector banks and private sector banks is significantly different for this initiative. A proper analysis is needed to explore these issues. Therefore, our research endeavors to address the aforementioned gap by framing suitable objectives.

Green Banking

Green banking is a contemporary financial innovation. The advancement of overall sustainable development

depends on the role played by banks in financing economic and developmental activities (Dipika, 2018). Due to widespread calls for environmental protection and opposition to the effects of climate change, the term "green" is widely used and has entered public discourse (Barua, 2020). However, Green banking is the attempt of banks to invest in or disburse loans to environmentally beneficial projects because it cares about the environment. Simply put, green banking is green financing activities (Hasan and Hossain, 2022). Whereas "Green finance refers to the financial arrangements that are specific to the use of projects that are environmentally sustainable or projects that adopt the aspects of climate change" according to the Reserve Bank of India bulletin (RBI, 2021). Moreover, it strengthens a bank's position in the market by enticing it to make investments in low-carbon, long-term profitable sectors like renewable energy that also appeal to investors who care about the environment (Engelen, 2022).

The following dangers affecting the banking industry can be minimized with the help of green banking (Islami Bank, 2017):

i) Credit Risk: Extreme weather has been seen to influence the economic assets financed by banks as a result of global warming which has been linked to a high incidence of credit default. Credit risk may also develop inadvertently when banks connect clients with businesses that are negatively impacted by changes in environmental regulations.

ii) Legal risk: If banks disregard pertinent environmental regulations, they could be held legally liable just like other commercial companies. If they take care of the assets that cause the pollution, then they may also be subject to direct lender liability for remediation expenses or claims for damages.

iii) Reputation Risk: The funding of environmentally unacceptable projects carries reputational consequences.

Green Financing

When the G-20 nations met for the eleventh time in Hangzhou, China, green finance attained a pinnacle of prominence where it received extensive publicity and discussion in 2016 (Akomea-Frimpong *et al.*, 2022; Liu *et al.*, 2019; Schäfer, 2017). A loan or investment can be categorized as "green finance" if it funds environmentally beneficial activities like the procurement of eco-friendly goods and services or the construction of green infrastructure (Shinde, 2023) to promote long-term development by striking a balance between the emergence of financial events, environmental stability, and ecological preservation (Zhang *et al.*, 2022; Zhou *et al.*, 2020). However, it is becoming increasingly ubiquitous as the risks associated with ecologically harmful goods and services are a rising trend and it comes in several forms including green mortgagees, green credit cards, green bonds, and green car loans. Green finance is exclusively focused on environmental aims in contrast to sustainable finance which refers to financial instruments that support social and environmental goals (Shinde, 2023).

Green financing is gaining prominence in the financial industry because of its capability to protect the society at large against unanticipated future economic issues (Akomea-Frimpong *et al.*, 2022; Ziolo *et al.*, 2019) and unforeseen global financial events, the climate catastrophe, societal upheaval, and corporate scandals.

Green Banking Initiatives in India

Banks should take the initiatives to incorporate ecological and environmental considerations into their lending policies, obliging companies to make required expenditures in environmental management, and the usage of pertinent technologies and management systems. In this regard, Table 1 represents banks' major efforts toward the direction of GB. We have shortlisted three major banks each from the public and private sectors for this rationale.

Table 1: Green banking initiatives

Bank	Source	Implementation year	Initiatives
State Bank of India (SBI)	(SBI, 2022)	2007	<ul style="list-style-type: none"> Planted more than 6.45 lakh trees. 15 new food waste composting facilities and 22 Sewage Treatment Plants (STP) have been built. Collaboration with a Mumbai-based NGO to carry out the “EcoBricks Collection Drive” to gather non-recyclable plastic debris in plastic bottles. Reduced paper waste by over 2,503.83 megatonnes. More than 3000 solar-powered ATMs. 18 certifications for green buildings.
Punjab National Bank (PNB)	(Dipika, 2018)	2009	<ul style="list-style-type: none"> Office electricity audit as an aspect of discourse about energy. Distinct audit form for evaluating the results of their green projects. Had signed an agreement “Green Pledge” with the Ministry of New and Renewable Energy. Nine wind energy projects totaling 185.81 crores were been approved. Making every effort to collect rainwater from existing structures and promote environmentally friendly future developments.
Bank of Baroda	(Sharifi and Hossein, 2015; Vydhyam et al., 2022)	2008	<ul style="list-style-type: none"> Priority to green initiatives like windmills, biomass, and solar power projects that contribute to obtaining carbon credits. Promotes paperless banking. Obligatory for enterprises to get a "No Objection Certificate" from the pollution control board that generates toxic pollutants. Major modifications in desktop and server visualization.
HDFC	(HDFC Bank, 2021)	2008	<ul style="list-style-type: none"> Outlined plans to achieve carbon neutrality by 2031–2022. Emphasis on lowering interest rates on loans for green products and incorporating ESG scores into its credit choices. Reduction of 30% water consumption. Increasing the capacity of rooftop solar for large offices. Overall, 50% of the electricity is sourced from renewable energy.
ICICI	(ICICI Bank,	2007	<ul style="list-style-type: none"> To use a “3R” strategy to decrease our carbon

	2021)		<p>footprint.</p> <ul style="list-style-type: none"> • Focus on building green offices as a means of encouraging sustainability. • Solar energy supplied 7% of the Bank's overall electrical needs. • Energy auditing of premises, investment in cutting-edge technology, embracing green values, and increased reliance on renewable energy sources. • Preventing the disposal of electronic trash in landfills and instead ensuring that it is recycled or given to the appropriate organizations.
Axis Bank	(Telang, 2015)	2010	<ul style="list-style-type: none"> • Motivates its clients to sign up for electronic statements and other electronic forms of communication to trim down the use of paper. • Constructed “Green Building” • Makes use of furniture largely constructed of recycled materials. • 3,688 Crores have been allocated to green initiatives projects involving clean technology and sustainable infrastructure.

Source: Authors' Compilation

REVIEW OF LITERATURE

The author (Biswas, N. 2011) has highlighted the main advantages, potential challenges, and strategic elements of green banking and provides information on the status of Indian banks on the execution of green banking. However, (Masukujjaman et al., 2015) determine how bankers view several aspects of green banking such as the benefits of GB and the challenges in its implementation. This empirical study is based on a structured questionnaire survey of Islamic bankers in four historical divisions of Bangladesh and the study suggested that even though green banking has a high implementation cost nevertheless the respective bankers believe that a green banker is a socially conscious banker while green banking is an environmental banking that helps to preserve the environment.

According (Dewi and Dewi, 2017), the author looked into how the adoption of green banking impacts the link between corporate social responsibility and ongoing business operations for banks listed on the Indonesia

Stock Exchange and evidence from the studies revealed that green banking has strengthened the relationship between those two. Likewise, (Tu and Dung, 2017) attempted to examine the variables influencing GB practices in Vietnam and the contribution of GB to the country's economy's long-term sustainability which is supported by a large-scale survey that was done in Vietnam between May and July 2016 with 329 questionnaire forms collected from 32 banks and financial institutions by using EFA analysis and the regression model. Consequently, results uncovered that the targeted sectors have a positive association whereas the barriers have negative relationships with the willingness of Vietnamese banks to use green banking services.

However, (Arumugam and Chirute, 2018) recommended that the application of green banking is influenced by all the elements such as environmental concern, stakeholder pressure, policy direction, economic component, and loan demand. On the other hand, the author (Malsha *et al.*, 2020) critically analyses

the relationship between the sustainable performance of banks (SPB), employee green behavior (EGB), and green banking practices (GBP) in the Sri Lankan context and the results supported the partial mediation role of EGB in the relationship between GBP to SPB. (Sharma and Choubey, 2022) proposed a conceptual model of green banking and initiatives and studied the influence of three green banking initiatives viz. green corporate social responsibility, green products development, and green internal process on two possible outcomes, viz. green brand image and green trust. Whereas (Chen *et al.*, 2022) tried to comprehend the influence of GB practices on private commercial banks' green finance sources and environmental performance in Bangladesh. Meanwhile, (Malik and Singh, 2022) the authors of this study examined how people's personalities affect their adoption of and adherence to green banking channels. With an eye on the products and determinants of green finance, the author (Akomea-Frimpong *et al.*, 2022) tried to evaluate previous studies within the framework of the banking industry and the content analysis method has been utilized to evaluate and synthesize 46 pertinent studies. Even though Indian banks are actively involved in the country's expansion, authors (Sharifi and Hossein, 2015) discovered that banks haven't made significant measures in the direction of GB. Nonetheless, it fulfills the bank's commercial target along with corporate social obligation (Tara *et al.*, 2015).

RESEARCH METHODOLOGY

Firstly, our objective is to delve into the notion of GB. Secondly, to assess the attitude of bank employees towards green banking practices in the public and private sectors and finally, to determine whether there are any discernible variations between the attitudes of bank employees for these two sectors towards this effort. It is based on the primary data collection method that was gathered by creating an online questionnaire that was sent to 100 bank employees in the Delhi area from both the public and private sectors. The samples were selected through Quota and Convenience sampling and data analysis and tabulation were performed using descriptive statistics and the tabulation by SPSS software. Likert

scale and Rating is used to examine the attitude of employees on a five-point scale and T-test has been used to find out significant difference.

Alternate hypothesis (H1): *There is a significant difference between bank employees' attitudes toward the public and private sectors concerning green banking.*

RESULTS AND FINDINGS

An analysis of the data and data interpretation has been comprised in this section.

Reliability test

Cronbach's alpha ratings were employed to assess the internal consistency of the research construct and a value of 0.70 or higher is generally regarded as satisfactory (Taber, 2018). Results of reliability statistics from Table 2 indicated that the value of Cronbach's alpha is 0.913. The scale is credible since Cronbach alpha has a greater value than 0.70.

Table 2: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.913	0.923	22

Source: Author's Compilation

Demographic Information

Table 3 provides the demographic data of the examined bankers. The outcome revealed that 72 percent of respondents were males whereas 28 percent were females only. Public banks surpass private banks in terms of the number of clerk positions whereas private banks have more managers and assistant managers. The vast majority of bankers are enthusiastic and young as most of their age is below 30 and a small number of respondents lie between the age group 40-49 and more than 50. However, no employee at public banks is older than 50.

Table 3: Demographic profile of bank employees

Gender	Private sector	Public sector	Grand Total
Male	38	34	72
Female	12	16	28
Grand Total	50	50	100
Working position			
Assistant Manager	22	20	42
Clerk	4	10	14
Manager	14	12	26
Other	6	4	10
Probationary Officer	4	4	8
Grand Total	50	50	100
Age (In years)			
Below 30	42	31	73
30-39	6	16	22
40-49	0	3	3
More than 50	2	0	2
Grand Total	50	50	100

Source: Author's Compilation

Survey Response

The results of survey responses regarding green banking indicated that 80 percent of public sector and 92 percent of private sector bank employees are aware of this concept. Likewise, 52 percent of employees of both private and public-sector banks have the same outlook that green banking is useful as it would likely save costs, speed up service, boost the market size, and enhance all-around customer care. Overall, 42 percent of employees concur that using green banking is simple and effective since it is simple to use, requires little mental work, completes bank operations tasks, and is also effortless for employees to understand. Nevertheless, it is worth mentioning that 36 percent of employees are neutral about the handling mechanism of this concept. Around 58 percent of respondents admit that it is due to competition pressure while 28 percent are neutral about the government pressure. However, responses vary greatly and make it challenging to generalize about staff behavior. Despite this, past studies have shown that the adoption of green practices has a positive correlation with

competitive forces (Asim Ali Bukhari *et al.*, 2019; Lee *et al.*, 2013). Just 58 percent of employees receive support from top management, demonstrating the necessity for top-level management to encourage and support employees. Nevertheless, they are getting uninterrupted technological assistance from banks to execute green activities.

The survey findings showed that the majority of the banks are employing environmentally friendly practices like E-mails, online approval systems, E-statements, etc. in their daily routine operation. GB helps a nation develop in terms of its social, economic and environmental pillars sustainably (Zhang *et al.*, 2022) as we can witness that 86 percent of bank staff responded that it helps in reducing the stationary cost of banks by filling online account opening form, opening fixed deposits through mobile or online banking and many more. While bank employees are directly involved in the service delivery and believe in enticing clients to engage in ecologically friendly activities, banks must organize and provide training sessions and workshops on environmental issues to the qualified personnel and increase their commitment to environmentally responsible practices, (Reinhardt, 1999; Wang *et al.*, 2021) as 30 percent of employees are neutral about this. Nonetheless, 44 percent of employees have shown disagreement over the workload that GB is likely to increase as it helps in decreasing the stress of record keeping and the occurrence of errors in the workplace, thereby reducing the workload (Dixit, 2020). Surprisingly, respondents have given scattered response over their reward for promoting green activities as 30 percent of bankers are denying for not having any recognition from the bank, 24 percent are neutral and 46 percent has shown conformity for this.

Around 74 percent of bankers are aware of many green products and services they may provide to their customers such as green vehicle loans. Although, before sanctioning any green loans, they may visit the client's website to review their environmental record according to survey findings. In addition, bank personnel educate their co-workers about environmental issues and they also question practices at work that they assume will be

harmful to the environment since they believe it will help the bank to manage its resources more effectively. Roughly, 24 percent of public and 20 percent of private sector employees strongly feel that they are encouraged to be keenly involved in formulating green policies and these green policies improve the green brand image of banks (Sharma and Choubey, 2022b; Trott, 2020). Respondents have concluded that "Going Green" ought to be the catchphrase for all banks in the future but keep in mind that for a whole bank to be green, it will take time.

Descriptive Statistics

Following the assessment of the mean and standard deviation, we identified a few statements that contributed to employees' favorable opinions toward GB. For the public banks, (i) awareness (mean=4.44 and SD=.644), (ii) usefulness (mean=4.32 and SD=.978), (iii) encourages customers (mean=4.24 and SD=.960), (iv) green brand image (mean= 4.32 and SD=.935) statements are forming the favorable perception towards GB.

Nevertheless, for private sector, (i) reduces stationary cost (mean=4.44 and SD= .760), (ii) encourages customers (mean= 4.36 and SD=.802), (iii) usefulness (mean=4.36 and SD=.802), (iv) shares my knowledge (mean=4.24 and SD=.822) (v) buzzword in future (mean=4.24 and SD=.716) responsible for generating favorable opinion towards GB. However, for the following statements, (i) increases workload (mean=2.84 and SD=1.503), (ii) rewards for green projects (mean=2.96 and SD=1.470), (iii) Clients' environmental report (mean=2.92 and SD=1.397) public sector banks employees have shown disagreement and for private sector (i) government pressure (mean=3.36 and SD=1.241), (ii) increases workload (mean=3.04 and SD=1.442).

Last but not least, the study found that the staff members of private banks had better attitudes than those of public sector banks, as shown in Table 4, which demonstrates that the overall mean of private employees is higher than that of public staff.

Table 4: Descriptive Analysis

S. No	Statements	Public banks		Private banks	
		Mean ¹	Standard deviation	Mean	Standard deviation
1	Awareness	4.44	.644	4.08	1.140
2	Usefulness	4.32	.978	4.36	0.802
3	Easy to handle	3.92	1.066	4.00	0.990
4	Competitor pressure	3.56	1.280	3.56	1.146
5	Government pressure	3.28	1.386	3.36	1.241
6	Sufficient management support	3.28	1.294	3.84	1.131
7	Environmentally friendly practices	3.92	1.209	4.28	1.051
8	Reduces stationary cost	4.32	1.019	4.44	0.760
9	Arranges seminars and workshops	3.28	1.386	3.64	0.985
10	Increases workload	2.84	1.503	3.04	1.442
11	Rewards for green projects	2.96	1.470	3.56	1.280
12	Technical support	3.48	1.432	3.96	0.880
13	Encourages customers	4.24	0.960	4.36	0.802
14	Suggestions for formulating green policies	4.20	0.756	4.20	0.904
15	Know about green products	3.96	1.124	3.96	0.968
16	Visit the sites	3.76	1.117	3.96	1.049
17	Clients environmental report	2.92	1.397	3.96	0.925

¹Higher mean and lesser standard deviation indicate favourable attitude for green banking and vice-versa and SD=standard deviation.

18	Shares my knowledge	4.12	0.918	4.24	0.822
19	Ask questions	3.52	1.282	3.92	0.944
20	Resource management efficiency	4.16	1.017	4.28	0.730
21	Green brand image	4.32	0.935	4.12	0.918
22	Buzzword in future	4.00	1.370	4.24	0.716

Source: Author's Compilation

Hypothesis Testing

Table 5: Mean and Standard deviation

Overall				't' value
Banks	N	Mean	Standard deviation	
Public	50	3.7636	0.50354	-1.577
Private	50	3.9709	.35546	

Source: Author's Calculation

According to the derived analysis, t- value = -1.577, p-value = 0.123 at a 5 percent level of significance for a two-tailed test which is greater than 0.05 i.e., $0.123 > 0.05$, we will reject the alternate hypothesis on that basis stating "There is significance difference between bank employees' attitude of the public and private sector concerning Green banking". Therefore, we can conclude that there is no discernible difference in the attitudes of employees in the public and private sectors towards the GB.

DISCUSSION AND CONCLUSION

This study used a structured survey made up of several statements to examine how bank employees see various aspects of green banking. We discovered that not every employee interprets this notion the same way. In addition, 30 percent of bankers all around feel ambivalent about the conferences and seminars that their banks host to educate them. Likewise, 36 percent of respondents believe that managing GB activities is difficult because extensive technical assistance is needed to complete them. Contrarily, 86 percent said it reduces operational costs, giving a competitive edge to the banks and improving their green brand image. Overall, bank employees exhibit positive behavior towards an environmentally conscious approach. Our findings demonstrate unequivocally that bankers' perception does not vary much concerning sectors. As a result of this

study, the knowledge base on green banking is being enhanced.

Our paper attempted to find out the level of agreement or disagreement by bankers of the public and private sectors. Our research impacts society in numerous ways. Firstly, the findings of this study have implications for practitioners and regulators that have to deal with framing policies related to sustainability and digital transformation processes. Secondly, policymakers can actively involve employees due to their positive perception towards green transition so that they can give their suggestions to higher executives for developing sustainable financial products. Third, as bank employees are directly involved in the provision of services, our findings have significant policy and regulatory ramifications for the Indian financial industry because their positive behavior will raise awareness, reduce carbon footprint and combat climate change. Lastly, we look forward to seeing the banks' role as both the mediator and a guardian of economic change, building a foundation that will open up numerous prospects for finance and investment policies and aid in the development of a low-carbon economy (Zhixia *et al.*, 2018).

SUGGESTIONS AND RECOMMENDATIONS

According to our study, 24 percent of bankers are indifferent and 30 percent of bankers denied receiving any recognition from the bank side for supporting green activities. They should be acknowledged appropriately for the proper implementation of green practices. Secondly, banks can use their websites to increase customer awareness about GB. In addition, any project that received funding from the banks should undergo evaluation based on the type and scope of environmental

considerations to identify both positive and negative environmental impacts, before being finally approved. Banks should be subject to yearly audits and supposed to receive quarterly environmental certifications from both the government and independent bodies. Moreover, Banks may push borrowers to take environmental sustainability into account for their projects. Henceforth, banks can allocate some funds for environmental sustainability and make sure that such funds are used effectively.

LIMITATIONS AND FUTURE SCOPE OF THE STUDY

It is challenging to generalize the findings across India because data has only been collected from the Delhi region. Some bank employees have exhibited reluctance to disclose their true attitudes, which could have an impact on the findings of our study. Due to the low

participation rate of female respondents (28 percent), we were unable to determine how they feel about this sustainable approach. The fact that our study only included 100 bank employees as a sample size is its primary flaw. Given the abundance of green goods and services being offered continually, the green banking industry appears to have a bright future. Future research in this area could examine whether green banks can perform more effectively than non-green banks in respect of financial and operational performance as well as environmental performance. However, it is worthwhile to emphasize that to evaluate banks' environmental and climatic performance, appropriate indicators and parameters must be established which is quite challenging. Moreover, we can compare the GB activities of different countries to arrive at an integrated approach and how their policies vary from one another.

REFERENCES

- Ahuja, N. (2015). Green banking in India: A Review of Literature. *International Journal for Research in Management and Pharmacy*, 4(1), 11–16.
- Akomea-Frimpong, I., Adeabah, D., Ofori, D., and Tenakwah, E. J. (2022). A review of studies on green finance of banks, research gaps, and future directions. *Journal of Sustainable Finance and Investment*, 12(4), 1241–1264. <https://doi.org/10.1080/20430795.2020.1870202>
- Arumugam, D., and Chirute, T. (2018). Factors determining the adoption of green banking amongst commercial banks in Malaysia. *Electronic Journal of Business and Management*, 2, 50–62.
- Asim Ali Bukhari, S., Hashim, F., and Amran, A. (2019). Determinants of Green Banking Adoption: A Theoretical Framework. *KnE Social Sciences*. <https://doi.org/10.18502/KSS.V3I22.5041>
- Barua, S. (2020). Chapter 4. The Meaning of Green Banking. In *Principles of Green Banking: Managing Environmental Risk and Sustainability*. De Gruyter. <https://doi.org/10.1515/9783110664317-004/PDF>
- Chen, J., Siddik, A. B., Zheng, G. W., Masukujjaman, M., and Bekhzod, S. (2022). The Effect of Green Banking Practices on Banks' Environmental Performance and Green Financing: An Empirical Study. *Energies*, 15(4). <https://doi.org/10.3390/en15041292>
- Chitra, V., and Gokilavani, R. (2020). Green Banking Trends: Customer Knowledge and Awareness in India. *Shanlax International Journal of Management*, 8(1), 54–60. <https://doi.org/10.34293/management.v8i1.2486>
- Dewi, I. G. A. A. O., and Dewi, I. G. A. A. P. (2017). Corporate social responsibility, green banking, and going concern on banking company in Indonesia stock exchange. *International Journal of Social Sciences and Humanities*, 1(3), 118–134. <https://doi.org/10.29332/ijssh.v1n3.65>
- Dipika. (2015). Green Banking in India: A Study of Various Strategies Adopt by Banks for Sustainable Development. *International Journal of Engineering Research and Technology (IJERT)*, 3(10), 1–10.

10. Dipika. (2018). Green Banking in India: A Study of Various Strategies Adopted by Banks for Sustainable Development. *International Journal of Engineering Research and Technology*, 3(10). <https://doi.org/10.17577/IJERTCONV3IS10062>
11. Dixit, M. S. (2020). *Green Banking Practices in India: A theoretical View*. 8(12), 232–240.
12. Engelen, N. (2022). *Green Banking: What is an Eco-Friendly Bank? | Aspiration*. <https://makechange.aspiration.com/green-banking/>
13. Hasan, Md. B., and Hossain, Md. N. (2022). Green Finance and Sustainable Development: A Case of the Bangladesh Economy. In and J. G. P. Ordóñez de Pablos, X. Zhang, M. Almunawar (Ed.), *Handbook of Research on Big Data, Green Growth, and Technology Disruption in Asian Companies and Societies* (pp. 58–81). IGI Global. <https://doi.org/10.4018/978-1-7998-8524-5.CH004>
14. HDFC bank. (2021). *HDFC Bank Commits to Becoming Carbon Neutral By 2031-32*.
15. ICICI Bank. (2021). *Supporting India's Sustainability Journey*.
16. Islam, M. S., and Hasan, M. M. (2015). Reasons behind the Practices of Green Banking by Commercial Banks: A case study on Bangladesh. *European Journal of Business and Management* www.iiste.org ISSN, 7(22), 51–59.
17. Islami bank. (2017). *Green Banking: An Approach for Sustainable Banking*.
18. Jayabal, G., and Soudarya, M. (2017). Customer Satisfaction Regarding Green Banking in Public Sector Banks in Sivagangai District. *International Journal of Management Research and Review*, 7(2), 2249–7196.
19. Lee, C. H., Wahid, N. A., and Goh, Y. N. (2013). Perceived Drivers of Green Practices Adoption: A Conceptual Framework. *Journal of Applied Business Research*, 29(2), 351–360. <https://doi.org/10.19030/JABR.V29I2.7643>
20. Liu, R., Wang, D., Zhang, L., and Zhang, L. (2019). Can green financial development promote regional ecological efficiency? A case study of China. *Natural Hazards*, 95(1–2), 325–341. <https://doi.org/10.1007/S11069-018-3502-X/TABLES/4>
21. Lymperopoulos, C., Chaniotakis, I. E., and Soureli, M. (2012). A model of green bank marketing. *Journal of Financial Services Marketing*, 17(2), 177–186. <https://doi.org/10.1057/fsm.2012.10>
22. Malik, G., and Singh, D. (2022). Personality matters: does an individual's personality affect the adoption and continued use of green banking channels? *International Journal of Bank Marketing*, 40(4), 746–772. <https://doi.org/10.1108/IJBM-04-2021-0133>
23. Malsha, K. P. P. H. G. N., Anton Arulrajah, A., and Senthilnathan, S. (2020). The mediating role of employee green behavior towards sustainability performance of banks. *Journal of Governance and Regulation*, 9(2), 92–102. <https://doi.org/10.22495/jgrv9i2art7>
24. Masukujjaman, M., Chamhuri, S., and Alam, S. S. (2015). Banker's Perception on Green Banking—an Empirical Study on Islamic Banks in Bangladesh. *Management and Marketing*, 2, 295–310.
25. N Biswas. (2011). Sustainable Green Banking Approach: The Need of The Hour. *Business Spectrum*, 1(1), 14.
26. Nath, V., Nayak, N., and Goel, A. (2014). Green Banking Practices – a Review. *International Journal of Research in Business Management*, 2(4), 2321–2886.
27. Rai, R., Kharel, S., Devkota, N., and Paudel, U. R. (2019). Customers Perception on Green Banking Practices: A Desk Review. *The Journal of Economic Concerns*, 10(1), 82–95.

28. Rajan, P., and Raj, P. (2017). a Study on the Customer Awareness of Green Banking. *Intercontinental Journal of Finance Research Review*, 5(July), 54–65.
29. RBI. (2021). *Green Finance in India: Progress and Challenges*.
https://www.rbi.org.in/scripts/BS_ViewBulletin.aspx?Id=20022
30. Reinhardt, F. L. (1999). Bringing the environment down to earth. *Harvard Business Review*, 77(4).
31. Sahoo, P., and Nayak, B. P. (2007). Green Banking in India. *The Indian Economic Journal*, 55(3), 82–98. <https://doi.org/10.1177/0019466220070306>
32. Sarma, P., and Roy, A. (2021). Scientometric analysis of literature on Green Banking (1995-March 2019). *Journal of Sustainable Finance and Investment*, 11(2), 143–162. <https://doi.org/10.1080/20430795.2020.1711500>
33. SBI. (2022). *SBI-Sustainability Report (SR) 2021-22*.
34. Schäfer, H. (2017). Germany: The ‘Greenhorn’ in the Green Finance Revolution. <https://doi.org/10.1080/00139157.2018.1397472>, 60(1), 19–27. <https://doi.org/10.1080/00139157.2018.1397472>
35. Sharifi, O., and Hossein, B. K. (2015). Green Banking and Environment Sustainability by Commercial Banks in. *International Journal of Science Technology and Management*, 4(11), pp294-304.
36. Sharma, M., and Choubey, A. (2022a). Green banking initiatives: a qualitative study on the Indian banking sector. *Environment, Development and Sustainability*, 24(1), 293–319. <https://doi.org/10.1007/s10668-021-01426-9>
37. Sharma, M., and Choubey, A. (2022b). Green banking initiatives: a qualitative study on the Indian banking sector. *Environment, Development and Sustainability*, 24(1), 293–319. <https://doi.org/10.1007/s10668-021-01426-9>
38. Shinde, S. (2023). *What is Green Finance and What are its Benefits?* Emeritus. <https://emeritus.org/blog/finance-what-is-green-finance/>
39. Taber, K. S. (2018). The Use of Cronbach’s Alpha When Developing and Reporting Research Instruments in Science Education. *Research in Science Education*, 48(6), 1273–1296. <https://doi.org/10.1007/S11165-016-9602-2/TABLES/1>
40. Tara, K., Singh, S., and Kumar, R. (2015). Green Banking for Environmental Management: A Paradigm Shift. *Current World Environment*, 10(3), 1029–1038. <https://doi.org/10.12944/cwe.10.3.36>
41. Telang, S. (2015). *Green Banking Initiatives by Axis Bank - Green Clean Guide*. <https://greencleanguide.com/green-banking-initiatives-by-axis-bank/>
42. Trott, S. (2020). The impact of green banking initiatives on green brand equity of banks in India. *International Journal of Business Forecasting and Marketing Intelligence*, 6(2), 79. <https://doi.org/10.1504/IJBFMI.2020.109877>
43. Tu, T. T. T., and Dung, N. T. P. (2017). Factors affecting green banking practices: Exploratory factor analysis on Vietnamese banks. *Journal of Economic Development*, 24(2), 04–30. <https://doi.org/10.24311/JABES/2017.24.2.05>
44. Vydhyam, K., Pradesh, A., and Pradesh, A. (2022). *A study on green banking initiatives by public and private sector banks in Andhra Pradesh*. 9(3), 1–10.
45. Wang, H., Khan, M. A. S., Anwar, F., Shahzad, F., Adu, D., and Murad, M. (2021). Green Innovation Practices and Its Impacts on Environmental and Organizational Performance. *Frontiers in Psychology*, 11(January), 1–15. <https://doi.org/10.3389/fpsyg.2020.553625>

46. Zhang, X., Wang, Z., Zhong, X., Yang, S., and Siddik, A. B. (2022). Do Green Banking Activities Improve the Banks' Environmental Performance? The Mediating Effect of Green Financing. *Sustainability (Switzerland)*, *14*(2). <https://doi.org/10.3390/su14020989>
47. Zhixia, C., Hossen, M. M., Muzafary, S. S., and Begum, M. (2018). Green banking for environmental sustainability-present status and future agenda: Experience from Bangladesh. *Asian Economic and Financial Review*, *8*(5), 571–585. <https://doi.org/10.18488/journal.aefr.2018.85.571.585>
48. Zhou, X., Tang, X., and Zhang, R. (2020). Impact of green finance on economic development and environmental quality: a study based on provincial panel data from China. *Environmental Science and Pollution Research International*, *27*(16), 19915–19932. <https://doi.org/10.1007/S11356-020-08383-2>
49. Ziolo, M., Filipiak, B. Z., Bak, I., and Cheba, K. (2019). How to design more sustainable financial systems: The roles of environmental, social, and governance factors in the decision-making process. *Sustainability (Switzerland)*, *11*(20). <https://doi.org/10.3390/su11205604>