

The Role of Green Financing in the Banking Section of Bangladesh: Current Trends and Threats

Abu Tarek¹, Md. Aynul Islam Kajal², & Sharmin Nusrat Jahan³

1,2 Department of Business Administration, Port City International University, Chattogram, Bangladesh

3 Department of Computer Science & Engineering, IBAIS University, Bangladesh

Abstract

Green finance is a burgeoning aspect in the banking sector that indicates eco-friendly investment that encompasses the environmental conservation of financial growth and executes the monetary transaction in the financial sector with a special highlight on environmental conscious behavior, social and ecological factors, sustainable growth, and protection of nature and natural resources. The qualitative study provides a comprehensive investigation of the role of green financing in the banking industry of Bangladesh. This paper probes to bring out the present trends and threats of green finance for green banking in Bangladesh based on an evaluation of published data such as research articles, sustainability reports of Sustainable Finance Department of Bangladesh Bank.

Keywords: Green Financing, Green Banking, Challenges, Bangladesh

1. INTRODUCTION

Green Finance is a term which refers to financial investments for those projects that support sustainable development. Green investments include investments in biodiversity protection, water sanitation, industrial pollution control, energy efficiency, climate change adaptation, renewable energies, etc. Green finance should be highlighted as a specific category of financial service and product used in environmental loan decision-making, monitoring, and risk management, as well as promoting environmentally friendly investment and deployment of low-carbon technologies, projects, industries, and enterprises (Lindberg, 2014). Green finance, also known as environmentally friendly finance, is a recently developed financial tool that stresses environmental advantages, low carbon economies, sustainable aims, and economic rewards in ways that are advantageous to the organization and its stakeholders (Farzana & Azmat, 2023).

'Green Banking' is the operation of the financial sector with special focus on the environmental, ecological and social factors, targeting conservation of nature and natural resources. The term broadly encompasses awareness creation and promotion of environment friendly projects and practices, and reduction of the overall carbon footprint from both its financing and in-house operations. Sustainable banking projects that support clean energy and fight climate change are the focus of these financial firms. It gained popularity among banks after the Paris Climate Agreement and has subsequently encouraged investments in carbon offsets, reforestation initiatives, and renewable energy. Banks and Finance Companies hold a unique position in an economic system that can affect production, business and other economic activities through their financing activities, and thus also influence environmental risk management in real economy, and sustainable growth. Green banking practices integrate of using of climate funds, putting bank branches online, boosting corporate social responsibility initiatives, encouraging mobile banking, and funding green projects. Green finance has been promoted in Bangladesh by offering loans with financial concessions for environmentally friendly projects and products. Green banking aims to save customers time and money by incorporating sustainable practices, ethical financing, conservation, and energy efficiency into decisions that consider sustainability. It is sometimes referred to as eco-friendly banking.

1.1. Objectives of the Study

The main objective of the study is to find out the role of green financing in Bangladesh's banking section. Based on the significance of the research, the following objectives are investigated as part of the generic objective.

i) To identify the green financing role on banking sector in Bangladesh.



- ii) To evaluate the present trends of green financing on banking sector in Bangladesh.
- iii) To assess the future threats of green financing on banking sector in Bangladesh.

2. REVIEW OF LITERATURE

2.1. Green Financing

Green financing refers to a loan or investment that encourages eco-friendly practices, including making environmentally friendly purchases of goods and services or constructing eco-friendly infrastructure. Green finance aims to boost the amount of money flowing from the public, private, and non-profit sectors to sustainable development initiatives through banking, microcredit, insurance, and investment. Green finance or green investments means making investment in projects and/or enterprises that use eco-friendly technologies such as clean power generation, clean brick production, energy efficient and low-carbon emitting industries etc. (Hohne et al., 2012). Green finance indicates the positive transformation of global economy's into sustainable development through the financing of private and public green investments and public rules, regulations, and policies that support environmentally friendly investments (Rashid & Ullah 2023).

Green finance is a convergence between harmless to the ecosystem conduct and the monetary and business world. Green finance and low-carbon economies are an important part of the national environment (Guild (2020), Mohsin et al. (2021), and Mohsin et al. (2018a). Increasing environmental degradation has forced to implement the sustainable and environment friendly economic growth. Green financing and a low-carbon economy has greatly impacted on eco-finance and viable economic growth. Therefore, natural finance/supportable finance is the best method to decrease ecological debasement.

2.2. Green Banking

Green banking is an emerging idea in Bangladesh to employ the finance for developing an eco-friendly environmental financial organization and new sustainable business strategies. Green banking is the application of environmentally friendly principles to all banking operations and the prioritization of investments in environmentally friendly companies and initiatives that are also lessening the environmental impact of other ongoing operations. Green Banking was formally developed in the western countries in 2003 with a view to shielding the environment. The banking industry can act as a bridge between environmental preservation and economic growth by encouraging socially and environmentally conscious investment. In order to support and encourage environmentally responsible financing, Bangladesh Bank has been implementing a comprehensive green banking initiative since 2011. Among other things, the bank has issued guidelines for evaluating the environmental risk of lending proposals and for greening internal processes and practices within banks and finance companies. Additionally, the bank has been instructed to publish sustainability reporting by December 2013 to its stakeholders using an internationally recognized format such as Global Reporting Initiatives (GRI).

According to a study by Sarita Bahl (2012) on the role of green banking in sustainable growth, green banking significantly contributes to the shift to low-carbon and resource-efficient industries, such as green finance and green industry in general. This article also aimed to show how to educate target groups on internal and external subsystems and raise awareness in order to achieve sustainable growth through green banking. The term "green banking" refers to the integration of environmental concerns into a variety of banking operations, including client communications, marketing, service delivery, internal operations, and project financing choices. Green banking undoubtedly improves the environment directly, but its advantages extend well beyond that, extending to cost and security. Green finance makes a great contribution in the transition to resource-efficient and low-carbon industries, i.e. green industry and green economy in general (Gao, 2009).

Green banking practices include integrating online banking, cutting back on energy and paper use in daily operations, functioning in environmentally friendly facilities, taking environmental risks into account when assessing projects to fund, and more. The government of Bangladesh is encouraging all industry sectors to adopt green operational practices. In the banking sector of Bangladesh, Bangladesh Bank has developed the comprehensive policy guidelines for green banking (GB) to ensure sustainability. Bangladesh Bank has provided directive that all Banks in the country should gradually adopt these green banking policy guidelines. The banking sector has a significant impact on the environment, as it provides financing support to high impact environmentally sensitive sectors (Bank Track, 2010). Green initiatives and corporate environmental performances demonstrate positive impact on firm financial performance (Ganda et al., 2015; Iwata & Okada,



2011; King & Lenox, 2001) we explored literature focusing on the impact of green banking and/or finance on financial performance of banks.

2.3. Role of Green Financing on Banking Section

Bangladesh is dedicated to achieving low-carbon green development while maintaining the need for quicker social and economic advancement. In order to undertake environmentally friendly banking operations in the nation, all active banks and financial institutions must implement the green banking policy guidelines that the central bank of Bangladesh released in February 2011. Banks and other financial organizations now routinely provide Bangladesh Bank with a quarterly report on how well their green banking initiatives are performing.

One of the most significant players in the banking industry is the central bank, which has the power to influence and pressure commercial banks and other financial institutions to follow established guidelines and regulations so they can conduct their operations in an environmentally responsible way (Volz, 2017). Many central banks across the world have begun to include climate risk in macro-prudential frameworks or have already enacted sustainability policies to control or direct bank operations (IFC, 2020; McDaniels & Robins, 2018). In 2017, the Networking for Greening the Financial System was established by a consortium of central banks and supervisors to encourage mainstream finance to support the shift to a sustainable economy and to help analyze and manage climate and environmental risks in the financial sector (NGFS, 2020). Central banks are in a strong position to encourage the growth of green practices and ensure that financial institutions appropriately price environmental and carbon risk because of their regulatory control over money, credit, and the financial system (Volz, 2017).

Climate change and other environmental risks pose a great threat to the financial stability and to the overall financial system (BEPRA, 2020; Carney, 2020; Dikau & Ryan-Collins, 2020). These efforts include increasing access to financing for green projects, developing sustainability-related principles and guidance to shape frameworks as well as enhancing financial reporting and disclosure (IOSC, 2020). Hence, to tackle climate-related financial issues and potential disruptions and to promote green and sustainable finance, a growing number of central banks and regulators around the world are becoming aware of their role and addressing climate change and environment risks in their mandate (Volz, 2017; Sachs, et al., 2019).

3. METHODOLOGY AND PROCEDURE

The study is primarily based on secondary data and is descriptive in nature. It highlights the central banks' financial and nonfinancial regulatory and policy activities pertaining to green financing. To acquire more information, we also looked into Bangladesh's quarterly reports on green banking, the websites of commercial banks and other organizations like the World Bank and UNEP, as well as pieces that were published in reputable newspapers and journals. The study has been followed a qualitative approach and the research design involves organizing, collecting, and assessing these data samples for valid research conclusions. The study's focus is restricted to green banking in Bangladesh; non-banking financial institutions (NBFIs) and other financial organizations, including brokerage houses, insurance companies, and investment firms, are not included. Simple tabular presentations, charts, and graphs may be used to describe the green financing information in banking sector. Statistical analyses are not practical alternatives since green financing in the financial industry is still a relatively new idea and websites do not currently have the necessary data.

4. RESEARCH FINDINGS AND DISCUSSION

4.1. Performance of Green Finance

On the table 1 show that the last five years performance of green finance in Bangladesh from 2020 to 2024. In 2024 the green financing performance is 1,52,110.72 (in million BDT), it was 14.67% in green finance of total term loan disbursement. That was 102.35% higher than the previous year FY 2023 and 270.46% higher than the year of FY2020 for total term loan disbursement in green financing.

Table 1: Year Wise Performance of Green Finance

Issue	2020	2021	2022	2023	2024
Green Finance (in million BDT)	1,19,299.26	72,328.50	1,22,264.65	1,93,043.08	1,52,110.72
Green Finance as % of Total Term Loan	3.96%	3.06%	4.97%	7.25%	14.67%



Disbursement

Source: Sustainable Finance Department, Bangladesh Bank.

4.2. Leading Banks Achievement in Green Finance

Table 2 shows that the most leading banks in Bangladesh have attained the target of green finance. The State Bank of India attained the 99.53% target of finance which is the highest attainment among listed commercial banks in Bangladesh. 31 banks out of 61 have had exposure to green finance to attain their target in the reporting semi-annually. The lowest target attainment was 5.15% by Standard Bank PLC and the target attainment of all other banks is shown in the following table 2.

Table 2: Green Finance (Period: January - June, 2024)

S.L	Name of the Banks	Target	S.L	Name of the Banks	Target
•		Attainmen			Attainme
		t			nt
1	State Bank of India	99.53%	16	BASIC Bank Ltd	16.08%
2	United Commercial Bank PLC	49.83%	17	AB Bank PLC	15.56%
3	Mutual Trust Bank PLC	44.74%	18	Bank Asia PLC	14.61%
4	Eastern Bank PLC	36.57%	19	Shahjalal Islami Bank PLC	13.87%
5	Prime Bank PLC	36.18%	20	Dhaka Bank PLC	11.79%
6	Jamuna Bank PLC	33.43%	21	Rupali Bank PLC	11.55%
7	Al-Arafah Islami Bank PLC	30.14%	22	Uttara Bank PLC	10.29%
8	City Bank PLC	29.76%	23	Social Islami Bank PLC	9.05%
9	Islami Bank Bangladesh PLC	23.00%	24	Union Bank PLC	8.82%
10	BRAC Bank PLC	20.95%	25	Trust Bank Ltd	8.36%
11	Midland Bank Ltd	19.85%	26	Bank Alfalah	6.91%
12	Global Islami Bank PLC	19.45%	27	NCC Bank PLC	6.86%
13	The Hong Kong and Shanghai	19.42%	28	Southeast Bank PLC	6.85%
	Banking Corporation. Ltd.				
14	The Premier Bank PLC	19.37%	29	Standard Chartered Bank Ltd	6.81%
15	Shimanto Bank PLC	17.64%	30	Bengal Commercial Bank PLC	6.31%
			31	Standard Bank PLC	5.15%

Source: Sustainable Finance Department, Bangladesh Bank

4.3. Graphical Representation of Green Finance by Banks and FIs

In April-June, 2024 period Banks and Finance Companies total contribution of Green Finance is 79,715.39 million taka which is 7,320.07 million taka greater than January-March, 2024 period.



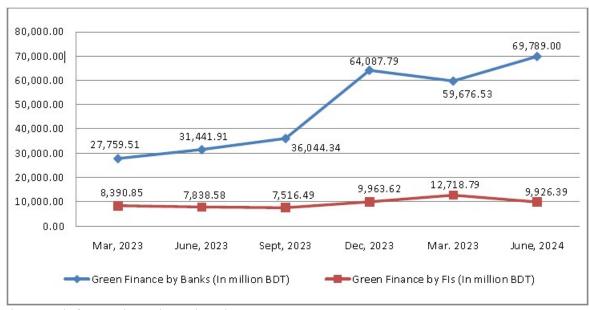


Fig 1: Trend of Green Finance by Banks and FIs Source: Sustainable Finance Department, Bangladesh Bank

4.4. In-house Green Banking Activities of Banks

The total number of 11,363 banking branches is executed and followed the green banking activities to conduct their banking functions, which is shown in Table 3. There are a total of 11,097 online banking branches and 568 solar-powered branches that actively participate in green banking activities. The following table shows that the total number of 11,742 ATM booths and the total number of 24,825 agent outlets are fully employed in the green banking activities to run their ongoing tasks, and the total number of 15,362,967 accounts using internet banking and total 2,76,21,628 accounts using smart-phone app-based banking are followed by the green banking activities.

Table 3: Green Banking Activities of Banks

Green Banking Activities	SOCBs	SDBs	PCBs	FCBs	ISBs	Bank's Total
Number of Branches	3,845	1,543	4,235	63	1,677	11,363
Number of Online Branches	3,845	1,421	4,121	66	1,644	11,097
Number of Solar-Powered Branches	49	0	344	9	166	568
No. of Branches with Rainwater Harvesting	0	0	4	1	1	6
No. of Branches with Solid Waste Management	0	0	1565	6	1	1572
Number of BB accredited Green Branches	0	0	0	0	0	0
Number of ATM Booths	474	0	6,731	100	4,437	11,742
Number of Solar-Powered ATM Booths	4	0	153	5	0	162
Number of Agent Outlets	792	0	19,861	0	4,172	24,825
No. of Solar-Powered Agent Outlets	0	0	36	0	1	37
No. of Accounts using Internet Banking	98,38,022	4,90,726	29,16,377	3,22,529	17,95,313	15,362,967
No. of Accounts using Smart- Phone App-based Banking	4,12,588	4,88,736	2,15,95,153	3,32,530	47,92,621	2,76,21,628



Total number of MFS Accounts	0	0	12,92,31,063	0	18,34,700	13,10,65,763
------------------------------	---	---	--------------	---	-----------	--------------

Source: Sustainable Finance Department, Bangladesh Bank

4.5. Challenges of Green Banking

The banking industry of Bangladesh uses low-cost refinance facilities of the Bangladesh Bank to finance green projects, which is inadequate considering the demand in the market. Although green banking is the blessing for the environment friendly investment but it may face some complexities to conduct the business activity. There are various challenges of green finance in banking sector of Bangladesh to mansion in below:

- 1. Lack of awareness and adoption is one of the main barriers to implementing a green financing system in banking sector of Bangladesh.
- 2. Insufficient customer awareness about the green banking activities in Bangladesh.
- 3. There is an absence of standardized green banking frameworks to smoothly run the banking activities of our country.
- 4. The lack of capacities of banks and financial institutions to follow and employ the green banking rules and regulation in Bangladesh.
- 5. The lack of a proper understanding of the risks and returns of green projects of banking sector in developing country and the underdeveloped equity and bond markets hamper the expected growth of green projects in Bangladesh.
- 6. Green banking requires the high operating cost for hunting talented, experienced staff to provide proper services to customers.

5. RECOMMENDATIONS AND CONCLUSION

The study is based on exploring the current trend of green financing in green banking practices and future impediments of green finance in the banking industry of Bangladesh as well as its prospective impact on environment-friendly development and socio-economic growth in our country. Bangladesh Bank (BB) is working to improve the overall situation by implementing the necessary legislative measures. Additionally, BB's refinance assistance is crucial in encouraging green banking practices. It is anticipated that as a result of these efforts, banks and financial institutions will gradually show beneficial effects in the trend of sustainable financing. This study suggests to the green loan that means funding with a lower interest rate, longer tenure, and higher grace period. Bangladesh Bank and the government should take the required actions to increase the effectiveness of green credit finance and popular green equity finance, as well as to get access to worldwide green financing finances.

References

Bahl Sarita 2012, 'Role of Green Banking in Sustainable Growth', *International Journal of Marketing*, *Financial Services and Management Research*, 1 (2).

Bank Track (2006) Shaping the Future of Sustainable Finance: Moving from paper Promises to Performance, World Wildlife Fund.

Bank of England Prudential Regulation Authority (2020). The Impact of Climate Change on the UK Insurance Sector; A Climate Change Adaptation Report; Bank of England: London, UK, 2015. Available online: https://www.bankofengland.co.uk/-/media/boe/files/ prudential-regulation/publication/impact-of-climate-change-on-the-uk-insurance-sector.pdf. (accessed on 23 December 2020).

Carney, M. (2020). Breaking the Tragedy of the Horizon–Climate Change and Financial Stability; Speech given at Lloyd's of London; Bank of England: London, UK, 2015. Available online:



https://www.bankofengland.co.uk/speech/2015/breaking-the-tragedy-of-thehorizon-financial-stability.

Dikau, S.; Ryan-Collins, J. (2020). Green Central Banking in Emerging Market and Developing Country Economies; New Economies Foundation: London, UK, 2017; pp. 18–22.

Farzana Rashid, Azmat Ullah (2023). Practices of Green Financing and Sustainable Development: Scope and Complexity. *International Journal of Sustainable and Green Energy*, Vol. 12, No. 1, pp. 6-12, ISSN (Print) 2575-2189, ISSN (Online) 2575-1549, doi: 10.11648/j.ijrse.20231201.12.

Financial Performance? Evidence from Japanese Manufacturing Firms. Ecological Economics, 70(9).

Ganda, F., Ngwakwe, C., & Ambe, C. (2015). Profitability as a Factor That Spurs Corporate Green Investment Practices in Johannesburg Stock Exchange (JSE) Listed Firms. *Managing global transitions,* 13, 231-252.

Gao, X. (2009). 'Potential impacts of land-use on climate variability and extremes', *Advances in Atmospheric Sciences*, Vol. 26, No. 5, pp.840–854.

Guild, J. (2020). The political and institutional constraints on green finance in Indonesia. J. Sustain Financ Invest. https:// doi. org/ 10. 1080/ 20430 795. 2019. 17063 12

Hohne, N., Khosla, S., Fekete, H., & Gilbert, A. (2012). *Mapping of green finance delivered by IDFC members in 2011*. Retrieved September 22, 2020, from www. MultiLink: https://www.cbd.int/financial/gcf/definition-greenfinance.pdf

International Finance Corporation (2020). Green Finance: A Bottom-up Approach to Track Existing Flows; International Finance Corporation: Washington, DC, USA, 2016. Available online: https://www.ifc.org/wps/wcm/connect/3218ea9e-e479-4ddd-b6 c7-d51de1f73d16/Green+Finance_Bottom+up+approach_ConsultDraft.pdf?MOD=AJPERE S&CVID=lyS6ShT. (accessed on 23 December 2020).

International Organization of Securities Commissions (IOSC, 2020). Annual Report; International Organization of Securities Commissions: Madrid, Spain, 2019. Available online: https://www.iosco.org/annual_reports/2019/pdf/annualReport2019.pdf (accessed on 23 December 2020).

King, A. A., & Lenox, M. J. (2001). Does It Really Pay to be Green? An Empirical Study of Environmental and Financial Performance. *Journal of Industrial Ecology*, 5(1), 1- 27.

Lindberg, N. (2014). Definition of Green Finance (German Development Institute). https://www.diegdi.de/uploads/media/Lindenberg_Definition_green_finance.pdf

McDaniels, J.; Robins, N. (2018). Greening the Rules of the Game: How Sustainability Factors Are Being Incorporated into Financial Policy and Regulation; UNEP Inquiry into the Design of a Sustainable Financial System: Geneva, Switzerland.

Mohsin, M., Ullah, H., Iqbal, N. (2021). How external debt led to economic growth in South perspective analysis from quantile regression. Econ Anal Policy 72:423— 437. https:// doi. org/ 10. 1016/J. EAP. 2021. 09. 012

Mohsin, M.; Zhou, P.; Iqbal, N.; Shah, SAA. (2018a). Assessing oil supply security of South Asia. Energy 155:438–447. https://doi.org/10.1016/j.energy.2018.04.116

Network for Greening the Financial System (2020). Climate Scenarios for Central Banks and Supervisors; Network for Greening the Financial System, Banc De France: Paris, France, 2020. Available online: https://www.ngfs.net/sites/default/files/medias/ documents/820184_ngfs_scenarios_final_version_v6.pdf (accessed on 24 December 2020).



Rashid, F.; Ullah, A. (2023). Practices of Green Financing and Sustainable Development: Scope and Complexity. *International Journal of Sustainable and Green Energy*, Vol. 12, No. 1, pp. 6-12, ISSN (Print) 2575-2189, ISSN (Online) 2575-1549, doi: 10.11648/j.ijrse.20231201.12.

Sachs, J.; Woo, W.T.; Yoshino, N.; Taghizadeh-Hesary, F. (2019). Handbook of Green Finance: Energy Security and Sustainable Development; Springer: Singapore.

Volz, U (2017). On the role of central banks in enhancing green finance. Inquiry Working Paper; United Nations Environment Programme: Nairobi, Kenya.