**Project Report**

**On**

**Comparative Analysis of Green Banking activities study on Private Commercial Bank in Bangladesh**

**Submitted to:**

**Controller of Examinations**

**National University**

**Gazipur-1704**

**Supervised by:**

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**Session: 2010-2011**

**Major in Finance**

**Program: BBA**

**Daffodil Institute of IT (DIIT)**



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**National University, Bangladesh**

**Date of Submission: 09th April, 2016**

**Letter of Transmittal**

09th April, 2016

Controller of Examinations

National University

Gazipur-1704,

**Subject: Submission of the Project Report**

**Dear Sir**,

It is a great pleasure and privilege to present the study report titled **Comparative analysis of Green banking activities in private commercial Bank in Bangladesh.**

This is assigned to me as partial requirement for the competition of BBA program. Throughout the study I have tried with the best of my capacity to accommodate as much information and relevant issues as possible and tried to follow the instructions you have suggested. I tried my best to make this report as much informative as possible. I sincerely believe that it will satisfy your requirements. However sincerely I believe that this report will serve the purpose of my project submission program.

I am grateful to you for your guidance and kind co-operation at every step of my endeavor on this report. I will remain deeply grateful if you kindly take some pan to go through the report and evaluate my performance.

HasibHossain

Roll No: 1172450

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Major in Finance

Department of Business Administration

**Certificate of Supervisor**

This is to certify that, Md. HasibHossain, Student of BBA, Roll: 1172450, Reg: 1177107 study report titledComparative analysis of Green Banking activities in private commercial Bank in Bangladesh. Daffodil Institute of IT, Dhaka, Bangladesh, has completed his Internal Study Report. He has completed this project satisfactorily under my supervision as he partial fulfillment for the award of BBA degree.

He has done his job according to my supervision and guidance. He has tried his best to do this successfully. I think his study will help him in future to up build his career.

I wish him every success in life.

………………………

Aminul Haque Russel

Lecturer

Department of Business Administration

Daffodil Institute of IT (DIIT)

**Student’s Declaration**

I hereby declare that the Study Report on Comparative analysis of Green Banking activities in four private commercial Bank in Bangladesh. Includes the result of my own works, pursued under the supervision of Aminul Haque Russel, Lecturer, Department of Business Administration Daffodil institute of IT.

Further affirm that the work presented in this report is original and no part or whole of this report has been submitted to, in any form, any other University or Institution for any degree or any other purpose.

……………

HasibHossain

Roll No: 1172450

Registration No: 1177107

Major in Finance

Department of Business Administration

**Acknowledgement**

At first I would like to thank Almighty ALLAH who gave me to prepare this term paper. This report has created a deal of interest to me.

Preparation of this report received assistance, guidance and too valuable time of many important and prestigious personalities. I would like to express my appreciation to my supervisor Aminul Haque Russel, Lecturer, Department of Business Administration Daffodil institute of IT for providing me the guidance and support I needed mostly.

I would like to thank the authority to the Daffodil Institute of It (DIIT) for allowing me to do my report here.

**Executive Summary**

The present study is an attempt to understand and appreciate the importance of green initiatives for the attainment of goals of sustainable banking and determine the various attempts that have been made by the top public and private sector banks in India in the said direction Sustainable development can best be achieved by allowing markets to work within an appropriate framework of cost efficient regulations and economic instruments. One of the major economic agents influencing overall industrial activity and economic growth is the financial institutions such as banking sector. In a globalized economy, the industries and firms are vulnerable to stringent environmental policies, severe law suits or consumer boycotts. Since banking sector is one of the major stake holders in the Industrial sector, it can find itself faced with credit risk and liability risks. Further, environmental impact might affect the quality of assets and also rate of return of banks in the long-run. Thus the banks should go green and play a pro-active role to take environmental and ecological aspects as part of their lending principle, which would force industries to go for mandated investment for environmental management, use of appropriate technologies and management systems. This paper explores the importance of Green Banking, sites international experiences and highlights important lessons for sustainable banking and development in Bangladesh. However, we find that there has not been much initiative in this regard by the banks and other financial institutions in Bangladesh though they play an active role in Bangladesh emerging economy. Therefore, we suggest possible policy measures and initiative to promote green banking in Bangladesh. This is clear idea about the study on. I have presented this study report on the basis of working knowledge. In this study at first the 1st chapter introduction, objectives of the report, methodology, literature Review and the limitation of the study report. In the 2nd chapter about Green Bank and banking activities. In the 3th chapter comparative analysis of Green banking activities in private commercial bank in Bangladesh. In 4th chapter comparison of green Banking activities, SWOT analysis , in the last chapter calculated findings and Recommendations . Finally finished the Report work mainly on **5 Chapters**

**ACRONYMS**

|  |  |
| --- | --- |
| BB | Bangladesh Bank |
| ATM | Automated Trailer Machine |
| SCB | Slandered Charted Bank |
| BCB | Central Bank of Brazil |
| CBN | Central Bank of Nigeria |
| CBRC | China Banking Regulatory Commission |
| E&S | Environmental and social |
| ERM | Environmental Risk Management |
| ESG | Environmental, social and governance |
| FMO | Dutch Development Bank |
| FSB | Financial Stability Board |
| ICAAP | Internal capital adequacy assessment process |
| IFC | International Finance Corporation |
| IPCC | Intergovernmental Panel on Climate Change |
| MBA | Mongolian Banking Association |
| MEP | Ministry of Environmental Protection |
| NSBP | Nigerian Sustainable Banking Principles |
| PBoC | People’s Bank of China |
| SELP | Socio-Environmental Liability Policy |
| UNEP | United Nations Environment Programme |
| CERCLA | Comprehensive Environmental Response, Compensation and Liability |
| EDD | Environmental due diligence |
| ETP | Effluent Treatment Plant financed |
| VFD | Variable Frequency Devices |
| NGOs | Governmental Organizations |

* 1. **Introduction**

Now a day, the world has considerable focus on economic development and mankind has made giant steps in its journey through time. The side-effects of the development process have, however, also been equally massive–loss of biodiversity, climatic change, environmental damage, etc. Environmental issue such as, renovation of nature’s face of beauty have also become more important as the world has progressed economically. Bangladesh is, a low carbon discharging country even among the developing countries, likely to be one of the worst victims of Global Warming. It I experienced that climate change has already enhanced the frequency and Intensity of floods, droughts and cyclones in Bangladesh, and would have negative impact on water resources, land, crop agriculture and food security, fisheries and livestock, forestry and bio-diversity, and human health as well.

Green Banking means promoting environmental-friendly practices and reducing carbon footprint from banking activities. Green banking is like that of regular banking, which considers all the social and environmental factors. This comes in many forms. It is using online banking instead of branch banking. Paying bills online instead of mailing them and Opening up CDs and money market accounts at online banks, instead of large multi-branch banks. However, setting environmental standards for lending can also be a good idea for green banking. It is also termed a moral bank or a sustainable bank.

Green Banking helps to create effective and far reaching market-based solutions to address a range of environmental problems, including climate change, deforestation, air quality issues and biodiversity loss, while at the same time identifying and securing opportunities that benefit customers. By the practicing of green banking of Bangladesh we get fresh human life.

* 1. **Methodology of the Study**

The methodology consists of a case study based approach ofdescriptive in nature. This report is prepared based on the secondary sources such as:

* Bank websites,
* Annual report of four private’s commercial bank.
* Bangladesh Bank Green report etc.

**Sample size:** Four private’s commercial bank.

* 1. **Objectives of the study**

The main objective of this study to show a comparative scenario of green banking practices of private commercial banks in Bangladesh. There are more specific objectives such as:

* To gives an idea about the green banking activities.
* To identifies the trend of green banking activities in private commercial bank.
* To makes some recommendations.
* To fulfills the partial requirement of BBA program
  1. **Literature Review**

In a wider viewpoint, Green Banking refers to the banking business conducted in selected area and manner that helps the overall reduction of external carbon emission and internal carbon footprint. To aid the reduction of external carbon emission, bank should finance green technology and pollution reducing projects. Defining green banking is relatively easy.

**AtiurRahman (2010)** in his paper focused on the present monetary and credit policy of Bangladesh Bank towards attaining broader financial inclusion. Bangladesh Bank is carry forwarding with technology driven, innovative, environment and low cost banking approach; conveying a qualitative change in banking, preparation of monetary policy, application of advanced banking technology, and use of Information and Communication Technology (ICT) to extend financial services to the door step of common people. To ensure access to financial services for all, various initiatives have been taken like trade finance; digitalization of the financial sector; channeling liquidity into productive and supply augmenting investments including agriculture, SMEs, Green Banking and CSR activities; expected to lead to more broad -based inclusive growth and therefore lessen poverty; required for pushing the country on course to the targeted vision of digital Bangladesh by 2021; the year of Golden Jubilee of their independence.

**Suresh Chandra Bihari (2011)** elucidated that Green Banking includes promoting corporate social responsibility (CSR). It starts with the aim of protecting the environment where banks consider before financing a project whether it is environment friendly and has any implications for the future. A company will be given a loan only when all the environmental safety standards are followed. Green Banking can be efficiently implemented through the use of technology and policy, he emphasized.

**Alice Mani (2011)** indicated that as Socially Responsible Corporate Citizens (SRCC), banks have a major role and responsibility in enhancement of governmental efforts towards substantial reduction in carbon emission. Banks can practices and initiatives of Green Banking for sustainable development. The author examined and compared the green lending policies by banks in India in the light of their compliance and commitment to environment protection and environment friendly projects.

**BASIC Bank Limited, Bangladesh (2011)** was go forwarded in response to increasing consciousness over climate change, environmental degradation, need for urgent measures for sustainable development to be addressed by some of the stakeholders in the world. Banking system holds a unique position in an economy that can affect production, business and other economic activities through their procedure for financing activities which would in turn contribute to protect environment/climate from pollution. Moreover, efficiency in energy use, water consumption and waste reduction may significantly contribute for operating cost for many of the large banks of the country.

**MohmedAminul Islam (2010),** Green banking is also significant issue in recent times. While the banking industry is undergoing computerization, networking and offering of on-line banking is naturally gaining momentum

**1.5. Limitations of the Study**

This study was not free from limitations. It is important to note that these limitations have somehow contributed in developing animpressive and outstanding report. Below these limitations are:

* Major limitation of this report was time constrained.
* The annual report and websites were the main secondary information source that weren’t enough to complete the report.
* There is no experience in such type work. So, this is the core obstacle for preparing the report. Therefore, there is a chance of having some mistake in the report though best effort has been applied to avoid any kind of mistake.

**2.1. Green bank and Green Banking**

**Green bank** means an ethical, a socially responsible and a sustainable bank. A green banker is more than a banker, it is not an individual but a unit or a group or a team.

As a regulator of financial sector, the central bank already proved resounding success to implement the concept of green banking in its regular activities. Besides, it also created congenial atmosphere for the banking sector to ensure profound impact of green banking on socioeconomic landscape of Bangladesh.

Green or sustainable banking is not limited only to in house green activities, but extends to facilitating green financing. Environmental Risk Management (ERM) guidelines is a part of green banking and ERM is for assessing environmental risks and not intended to squeeze investment; rather it is for sustainable finance.

The policy guideline for green banking has been devised on the basis of a green economy, which, in turn, is based on renewable energy (solar, wind, geothermal, marine including wave, bio-gas, and fuel cell), green buildings (green retrofits for energy and water efficiency, residential and commercial assessment, green products and materials, and LEED construction), clean transportation (alternative fuels, public transit, hybrid and electric vehicles, car sharing and carpooling programs), water management (water reclamation, grey water and rainwater systems, low-water landscaping, water purification, storm water management), waste management (recycling, municipal solid waste salvage, brown field land remediation, sustainable packaging), land management (organic agriculture, habitat conservation and restoration, urban forestry and parks, reforestation and afforestation and soil stabilization).

**Green banking** undertakes proactive measures to protect environment and to address climate change challenges while financing along with efficient use of renewable, non-renewable, human and natural resources.

**2.2. Features Green Banking**

**Some important features of green banking operations are as follows:**

* Banks can help environment through automation and online banking.
* Green banking focuses on social safety and security through changing the negative impacts of the society.
* In financing, it always gives priority to investments / loans which consider risk factors regarding environmental conditions.
* It always cares for sustainable and green growth in industrialization and for social purposes. It creates a congenial atmosphere inside and outside the bank.
* It considers the clients as its family members, and as such, guide and supervise the projects to reduce pollution and thus implement scientific methods in the real sense by implementing environmental due diligence (EDD) checklist.
* It reduces cost and energy, thus saving money and increasing GDP of a country.
* It changes the mental faculties of the officials and customers, in line with green sensibilities.
* It helps institutions; men and the nation in general live with dignity.

**2.3. Policy Guidelines for Green Banking**

We are aware that global warming is an issue that calls for a global response. The rapid change in climate will be too great to allow many eco-systems to suitably adapt, since the change have direct impact on biodiversity, agriculture, forestry, dry land, water resources and human health. Due to unusual weather pattern, rising greenhouse gas, declining air quality etc. society demands that business also take responsibility in safeguarding the planet. Green finance as a part of Green Banking makes great contribution to the transition to resource-efficient and low carbon industries i.e. green industry and green economy in general. Green banking is a component of the global initiative by a group of stakeholders to save environment.

**2.3.1. Bangladesh Bank's Earlier Initiatives**

BB is well aware of the environmental degradation situation as mentioned above and has already given time to time directions to all scheduled banks. Commercial Banks are now required to ensure necessary measures to protect environmental pollution while financing a new project or providing working capital to the existing enterprises. Banks have been advised to facilitate their clients with utmost care in opening Letter of Credit (L/C) for installation of Effluent Treatment Plant (ETP) in the industrial units. Banks have been advised to finance in Solar Energy, Bio-gas, ETP and Hybrid Hoffman Kiln (HHK) in brick field under refinance programme of BB.

**2.3.Figure: Policy support for Green Bank**

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**Sources: Bangladesh bank annual report (Green Banking)**

**2.3.2. Adopting Green Banking Policy**

Now it is the high time for the banks to adopt a comprehensive Green Banking Policy in a formal and structured manner in line with global norms so as to protect environmental degradation and ensure sustainable banking practices. Green Banking: Going Green With a view to developing green banking practices in the country, an indicative Green Banking Policy and Strategy framework has been developed for the banks in the following manner: Green Banking Policy needs to be covered through time frame work which will be segregated into 3 phases

**2.4. Phases of Green Banking**

**2.4.1. Phase 1**

Banks are to develop green banking policies and show general commitment on environment through in-house performance. The time lining for the actions to be taken under Phase-I should not exceed December 31, 2011.

**2.4.1.Figure: Phase -1 policy**

Sources: Bangladesh bank annual report 2012

**2.4.1..1 Policy Formulation and Governance**

Bank shall formulate and adopt broad environmental or Green Banking policy and strategy approved by their Board of Directors. A high powered Committee comprises of directors from the Board in case of scheduled Bangladeshi Banks and a high powered committee comprises Regional Chief of Global Office and members from the top management including CEO in case of Foreign Banks should be responsible for reviewing the banks environmental policies, strategies and program. Bank shall approve a considerable fund in their annual budget allocation for green banking. Banks are required to establish a separate Green Banking Unit or Cell having the responsibility of designing, evaluating and administering related green banking issues of the bank. A senior executive should be assigned with the responsibility of heading the unit. The unit will report to the high powered committee time to time.

**2.4.1.2. Incorporation of Environmental Risk in CRM**

Banks shall comply with the instructions stipulated in the detailed guidelines on Environmental Risk Management (ERM) in consideration of a part of the Green Banking Policy. Bank shall incorporate Environmental and Climate Change Risk as part of the existing credit risk methodology prescribed to assess a prospective borrower. This will include integrating environmental risks in the checklists, audit guidelines and reporting formats. All of this will help mainstream Environmental Risk that cover possible sources of Environmental Risk such as Land use, Climate change related events (cyclone, drought), animal diseases/pathogens such as avian influenza, solid waste including waste feed, animal waste, carcasses, sediments, wastewater discharges, hazardous materials, etc will be reviewed under Environmental Due Diligence (EDD) checklists.

**2.4.1.3. Initiating In-house Environment Management**

Banks shall prepare an inventory of the consumption of water, paper, electricity, energy etc. by its offices and branches in different places. Then it should take measures to save electricity, water and paper consumption. A 'Green Office Guide' or at least a set of general instructions should be circulated to the employees for efficient use of electricity, water, paper and reuse of equipments. In place of relying on printed documents, online communication should be extensively used (where possible) for office management and make sure that the printers are defaulted to duplex for double-side printing to save papers. Banks may apply Ecofont in printing to reduce use of ink, use scrap paper as notepads and avoid disposable cups/glasses to become more eco- friendly. Installation of energy efficient electronic equipments and automatic shutdown of computers, fans, lights, air coolers etc. will help reducing electricity consumption. Energy saving bulbs should replace normal bulbs in branches/offices of the banks. Banks should make plan to use solar energy at their premises to save electricity. Bank should take steps to save energy from corporate business travel and encourage employees to purchase energy efficient cars (that consume less fuel) can reduce gas and petroleum consumption

**2.4.1.4. Introducing Green Finance**

Eco friendly business activities and energy efficient industries will be given preference in financing by bank. Environmental infrastructure such as renewable energy project, clean water supply project, wastewater treatment plant, solid & hazardous waste disposal plant, bio-gas plant, bio-fertilizer plant should be encouraged and financed by bank. Consumer loan programs may be applied for promoting environmental practices among clients.

**2.4.1.5. Creation of Climate Risk**

Fund Bank should finance the economic activities of the flood, cyclone and drought prone areas at the regular interest rate without charging additional risk premium. However, banks should assess their environmental risks for financing the sectors in different areas for creating a Climate Change Risk Fund. This will be used in case of emergency. The bank would ensure regular financing flows in these vulnerable areas and sectors. The fund could be created as part of banks’ CSR expenses.

**2.4.1.6. Introducing Green Marketing**

Green marketing is the marketing of products that are presumed to be environmentally safe. Green marketing incorporates a broad range of activities, including product modification, changes to the production process, packaging changes, as well as modifying advertising. It refers to the process of selling products and/or services based on their environmental benefits. Such a product or service may be environmentally friendly in itself or produced and/or packaged in an environmentally friendly way. Banks should use environmental causes for marketing their services to consumer. Green marketing is expected to help awareness development among common people.

**2.4.1.7. Online Banking**

Online banking is the practice of making bank transactions or paying bills via the Internet on a secure website of the respective bank that allows the customers to make deposits, withdrawals and pay bills. Banks should give more emphasis to make the easiest way to help environment by eliminating paper waste, saving gas and carbon emission, reducing printing costs and postage expenses.

**2.4.1.8. Supporting Employee Training, Consumer Awareness and Green Event**

Employee awareness development and training on environmental and social risk and the relevant issues should be a continuous process as part of the bank's Human Recourse Development. Awareness development among consumers and clients would be a continuous job of a bank under its public relation department.

**2.4.1.9. Disclosure and Reporting of Green Banking Activities**

Banks shall report on the initiatives/practices to BB and disclose in their respective websites.

**2.4.2. Phase – 2**

The phase 2, which would not exceed December 31, 2012 sketches a scenario of consolidation of previous initiation with a subsequent bank specific environmental risk management plan and guideline, sector specific environmental policies and green strategic planning. A bank should develop and follow an environmental risk management manual or guidelines in their assessment and monitoring of project and working capital loans. They can also prepare standard and guidelines for themselves for improving green banking practices. Sectors specific policies to be framed for different environmental sensitive sectors such as agriculture and agro based business, construction and housing , engineering, basic metal and chemicals, manufacturing and services sectors, ship-breaking etc.

**Figure: The Second Phase of the Implementation of Green Banking Initiatives**

**Source: Bangladesh Bank Annual Report on Green Banking – 2012**

**2.4.2.1. Sector Specific Environmental Policies**

Banks need to formulate strategies to design specific policies for different environmental sensitive sectors such as Agriculture, Agri-business (Poultry & Dairy), Agro farming, Leather(Tannery), Fisheries, Textile and Apparels, Renewable Energy, Pulp and Paper, Sugar and distilleries, Construction and Housing, Engineering and Basic Metal, Chemicals (Fertilizers, Pesticides and Pharmaceuticals), Rubber and Plastic Industry, Hospital/Clinic, Chemical Trading, Brick Manufacturing, Ship breaking etc. Green Banking: Going Green.

**2.4.2.2. Green Strategic Planning**

A bank should determine green targets to be attained through strategic planning. Bank should determine a set of achievable targets and strategies, and disclose these in their annual reports and websites for green financing and in-house environment management as well. For in-house environment management, the target areas should cover attaining energy efficiency in the form of the use of renewable energy, reduction of electricity, gas, and petrol consumption, reduction of Green House Gas(GHG) emissions, issuance of e-statements, electronic bill pay, saving papers, environment friendly office buildings etc. For Green Financing, the target areas should cover reducing loans for certain environmentally harmful activities, attaining a particular percentage of environmental loans as percentage of total, introducing eco-friendly financial products etc

**2.4.2.3. Setting up Green Branches**

A Green Branch should be featured by the provision of the maximum use of natural light, use of renewable energy, use of energy saving bulbs and other equipments, reduced water and electricity use, use of recycled water etc. Such a branch of a bank would be specifically designated as a ‘Green Branch’. A Green Branch will be entitled to display a special logo approved by Bangladesh Bank. The criteria for certification of a ‘Green Branch’ will be circulated by Bangladesh Bank in due course of time.

**2.4.2.4. Improved In-House Environment Management**

Strategy of reuse, recycling of materials and equipments, and source reduction and waste minimization strategy should be part of in-house environmental management in Phase-II. Banks should increasingly rely on virtual meeting through the use of video conferencing in lieu of physical travel which would help saving cost and energy.

**2.4.2.5. Formulation of Bank Specific Environmental Risk Management Plan and Guidelines**

A bank should develop and follow an environmental risk management manual or guidelines in their assessment and monitoring of project and working capital loans. In addition to the compliance of national regulation the bank may set internationally accepted higher environmental standards. In this connection, Green initiatives by a group of banks will not only be effective but will also offer competitive advantage. Bank alliances may prepare standard and guidelines for themselves for improving Green Banking practices.

**2.4.2.6. Rigorous Programs to Educate Clients**

Clients and business houses should be encouraged and influenced to comply with the environmental regulations and undertake resource efficient and environmental activities. Banks should introduce rigorous programs to educate clients. 6.7. Disclosure and Reporting of Green Banking Activities Banks should start publishing independent Green Banking and Sustainability reports showing past performances, current activities, and future initiatives. Updated and detailed information about banks environmental activities and performances of major clients should be disclosed.

**2.4.3. Phase – 3**

A system of environmental management should be in place in a bank before he initiation of the activities of Phase 3. Bangladesh Bank expects that banks will address the whole eco-system through environment friendly initiatives and introducing innovative products. Standard environmental reporting with external verification should be part of the phase. The time lining for the actions to be taken under Phase – 3

Figure: The Third Phase of the Implementation of Green Banking Initiatives.

Source: Bangladesh Bank Annual Report on Green Banking - 2012

**2.4.3.1. Designing and Introducing Innovative Products**

Alongside avoiding negative impacts on environment through banking activities, banks are expected to introduce environment friendly innovative green products to address the core environmental challenges of the country. International Journal of Economics, Finance and Management Sciences 2015; 3(1): 34-42 39

**2.4.3.2. Reporting in Standard Format with External Verification**

Banks should publish independent Green Annual Report following internationally accepted format like Global Reporting Initiatives (GRI) targeting their stakeholders. There should be arrangement for verification of these publications by an independent agency or acceptable third party.

**2.4.3.3. Reporting Green Banking Practices on Quarterly Basis**

Banks shall report their initiatives/activities under the said program to the Department of Off-site Supervision of Bangladesh Bank on quarterly basis. Banks shall submit their first quarterly report on June 30, 2011 basis within July 15, 2011 and similarly they will be required to continue to submit reports on the subsequent quarters within the next 15 days of the respective quarter end. Banks shall keep their annual report and websites updated with the disclosures on green banking initiatives/activities. 5.

The compliant banks practicing Green Banking will have the following preferential treatments:

1. BB will award points to banks on Management component while computing CAMELS rating where there will ultimately be a positive impact on overall rating of a bank.
2. BB will declare the names of the Top Ten Banks for their overall performance in green banking activities in the BB websites.
3. BB will actively consider green banking activities/practices of a bank while according permission for opening new bank branch.

**2.4.3.4. Being Ethical and Environment Friendly Ethical banks:**

A green bank must be ethically motivated as a social, alternative or sustainable bank concerned with social and environmental impacts of its investments and other matters. Ethical banks are the larger social movement towards social and environmental responsibility in the financial sector. This movement includes ethical investment, socially responsible investment, rendering corporate social responsibility. Thus it shows its separate quality and entity other than the banks not abiding by the special rules. Ethical banks, sometimes, work with lesser profit than the traditional ones. They do not always run on the basis of their interest, rather they think about the overall sustainable growth and development of a country.

**4.0. Analysis of green Banking activities**

In this chapter we discussed about the Green Banking activities from 2012 to 2014 four private commercial Bank in Bangladesh.

The banks are:

* Standard Chartered Bank Limited
* Jamuna Bank Limited
* Dhaka Bank Limited
* Trust Bank Limited

**4.1. Analysis of Environmental Risk Rating**

Environmental risk is not a part of credit risk; rather it is a facilitating element of credit risk. When it is linked with the credit risk due to environmental condition or climate change. Incorporation of environmental risk is required to be incorporated in the Core Risk Management(CRM) that mandates considering EnvRR in the overall credit risk methodology. Incorporation of environmental risk in CRM is also important for computation of adequate capital under Risk Based Capital Adequacy (RBCA) and the CAMELS rating under off-site supervision as well. Banks are now assessing EnvRR following the Environmental Due Diligence (EDD) Checklist of Environmental Risk Management (ERM) guideline.

**4.1. Table: Scenario of Environmental risk rating projectof private commercial Bank**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Banks Name | Jamuna Bank | | | Dhaka Bank | | | Trust Bank | | | Standard Chartered bank | | |
| Number of Rated | **2012** | **2013** | **2014** | **2012** | **2013** | **2014** | **2012** | **2013** | **2014** | **2012** | **2013** | 2014 |
| - | 611 | 296 |  |  | 189 | 60 | 40 |  | 00 | 1420 | 1144 |
| Number of Rated Project Financed | - | 611 | 296 | - | 58 | 180 | 60 | 40 |  | 151 | 1238 | 890 |
| Number of Projects with ETP |  |  |  |  | 25 | 17 | 60 | 40 |  |  | 149 | 75 |

**Source: Annual report from 2012 to 2013 in those banks.**

In above table shows that the Banks are taking the Environmental Risk rating project by completed

Phase 1 to Phase 3 on the basis of Bangladesh Bank rules and regulation. Those Banks are performing the Environmental risk rating project with number of project with ETP.

**4.1.Figure: Comparative analysis of Environmental risk rating project**

**Sources: Annual report from 2012 to 2013 in those banks**

In this figure, Jamuna Bank are rated the environment risk rating project in 2012 the new project, in 2013, there are 611 and in 2014, there are 296 no. of project are established. Trust Bank also in 2012 there are 60. In 2013 there are 40 project are taken for environment risk rating project. Dhaka Bank is also established environment risk rating project in 2012, there are 0 projects, in 2013, there are 58 projects and in 2014 there are 180 projects are established forenvironment risk rating project. Standard Chartered Bank are also financed environment risk rating project in 2012 there are established 151 project. In 2013, there are 1238 no of project and In 2014, there are 890 project are financed.

**4.2. Analysis of Green Finance**

Green finance combines both direct and indirect green finance. Source of Bank’s direct green

Finance may be bank’s own fund or Bangladesh Bank’s fund for renewable energy andEnvironmentfriendly projects. Indirect green finance means financing the projects having ETP or alike system.

4.2. Figure: Area of Green Finance

**Sources : Bangladesh Bank green report**

**Comparative analysis of Green finance in different sector for four privative commercial Bank**.

* By the following of the Bangladesh bank rules and regulation commercial bank are financed for the Green Banking activities are given below:

**4.2.1.Table: Scenario of Green Finance from 2012 to 2014**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Banks name** | **Jamuna Bank** | | | **Dhaka Bank** | | | **Trust Bank** | | | **Standard Chartered bank** | | |
|  | **2012** | **2013** | **2014** | **2012** | **2013** | **2014** | **2012** | **2013** | **2014** | **2012** | **2013** | **2014** |
| **Installation of ETP** | 2121.87 | 3231.16 | 2316.45 | 00 | 7,672.26 | 1,127.06 | 00 | 8,444.05 | 30968.59 | 40,675 | 34906 | 40,510 |
| **Hybrid Hoffman Kiln(HHK)** | 2.16 | 3.71 | 7.50 | 00 | 0.65 | 51.34 | 00 |  |  | 00 | 00 | 00 |
| **Bio-gas Plant** | 00 | 00 |  | 00 | 87.34 | 0.20 | 00 | 143.42 | 489.99 |  | 00 | 00 |
| **Solar Panel \Renewable** | 3.15 | 0.40 |  | 00 | 00 | 00 | 00 | 0.18 | 11.21 |  | 00 | 00 |

**Source: Annual Report from 2012to 2014 by the Bank.**

Comparisons of Green finance in the Jamuna Bank, Dhaka Bank, Trust Bank and Standard Chartered Bank are finance for Green banking under installation of ETP is shown the following Graph:

**4.2.1Figure: Green finance under installation of ETP**

**Source: Annual Report from 2012to 2014 by the Bank**

In the above figure the banks are financed for Green banking under installation of ETP. In 2012, Jamuna Bank and Standard Chartered bank financed BDT 2121.87 and BDT 40675 millions. In 2013,Jamuna Bank financed BDT 3231.16 millions , Trust Bank financed BDT 8444.05 Dhaka Bank financed BDT 7672.26 and Standard Chartered bank financed BDT 34906millions. In 2014, Jamuna Bank financed BDT 2316.16 millions , Trust Bank financed BDT 30968.59 Dhaka Bank financed BDT 1127.06 and Standard Chartered bank financed BDT 40510millions.

**4.3. Analysis of Online Banking Activities**

Online banking is the practice of making bank transactions or paying bills via the Internet on a secure website of the respective bank that allows the customers to make deposits, withdrawals and pay bills. Banks should give more emphasis to make the easiest way to help environment by eliminating paper waste, saving gas and carbon emission, reducing printing costs and postage expenses.

**In 2012** this four (4) Banks are serve the online Banking activities with following of Green Banking rules and regulation:

**4.3.Table: Scenario of Online banking activates - 2012**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Name of banks | Numbers of ATM | | Online banking | | | Internet Banking | | Mobile and SMS Banking | |
| Own | Shared | No. of total branches | | No. of total branches with online coverage | No. of accounts facilitated with internet banking | % of accounts facilitated with internet banking | No. of accounts facilitated with Mobile and SMS banking | % of accounts facilitated with Mobile and SMS banking |
| Dhaka bank | 53 | 3,526 |  | | 81 | 25,352 | (11% of total) | 75,256 | (30% of total) |
| Jamuna Bank | 100 | 925 | 83 | | 83 | 649 |  | 2,749 | (0.59% of total) |
| Standard Chartered Bank | 94 |  |  | | 19 |  | 52% |  | 73%(of total |
| Trust Bank | 81 | 82 | 79 | 79 | |  | 6.68% of total |  | 3.24% of total |

**Source: Annual Report 2012 by the Bank**

**In 2013** this four (4) Banks are serve the online Banking activities with following of Green Banking rules and regulation:

**4.3.2.Table: Scenario of Online banking activities-2013**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Name of banks | | Numbers of ATM | | Online banking | | | Internet Banking | | Mobile and SMS Banking | |
|  | | Own | Shared | No. of total branches | | No. of total branches with online coverage | No. of accounts facilitated with internet banking | % of accounts facilitated with internet banking | No. of accounts facilitated with Mobile and SMS banking | % of accounts facilitated with Mobile and SMS banking |
| Dhaka bank | | 52 | 4080 |  | | 74 | 9,203 | (5% of total) | 84,199 | (47% of total) |
| Jamuna Bank | | 140 | 1070 | 91 | | 91 | 110 | (0.02%of total) | 9,598 | (1.77% of total) |
| Standard Chartered Bank | | 96 |  | 19 | | 19 |  | 63% |  | 73% of total |
| Trust Bank | 119 | | 1,095 | 88 | 88 | |  | 7.28% |  | 5.24% |

**Source: Annual Report 2013 by the Bank**

**In 2014** this four Banks are serve the online Banking activities with following of Green Banking rules and regulation:

**4.3.3.Table: Scenario of Online Banking activates - 2014**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Name of banks | Numbers of ATM | | Online banking | | Internet Banking | | Mobile and SMS Banking | |
| **Own** | **Shared** | **No. of total branches** | **No. of total branches with online coverage** | **No. of accounts facilitated with internet banking** | **% of accounts facilitated with internet banking** | **No. of accounts facilitated with Mobile and SMS banking** | % of accounts facilitated with Mobile and SMS banking |
| Dhaka bank | 53 | 3,526 |  | 81 | 25,352 | (11% of total) | 75,256 | (30% of total) |
| Jamuna Bank | 167 | 1340 | 97 | 97 | 649 | (0.10%of total) | 71,405 | (1.10% of total) |
| Standard Chartered Bank | 96 |  | 19 | 19 |  | 66% |  | 95% |
| Trust Bank | 144 | 1,341 | 97 | 97 | 56,271 | 8.11% | 68106 | 9.81% |

**Source: Annual Report 2014 by the Bank**

**4.3.3.Figure: %of accounted with Mobile and SMS banking**

Source: Annual Report from 2012to 2014 by the Bank.

In above figure the Banks consistently increasing day by day improved the online Banking. In 2012, Jumuna Bank and Trust Bank provided the online Banking under mobile and SMS banking system cumulative no. of accounts 0.59 % and 3.24% of total. Dhaka Bank and Standard Chartered Bank provide 30% and 73% of total no. of accounts.

In 2013,Jumuna Bank and Trust Bank provided the online Banking under mobile and SMS banking system cumulative no. of accounts 1.73% and 5.24% of total. Dhaka Bank and Standard Chartered Bank provide 47% and 73% of total no. of accounts. In 2014, Jumuna Bank and Trust Bank provided the online Banking under mobile and SMS banking system cumulative no. of accounts 1.10 % and 9.80% of total. Dhaka Bank and Standard Chartered Bank provide 30% and 95% of total no. of accounts.

**4.4. Banks In-house Environment activities**

Banks shall prepare an inventory of the consumption of water, paper, electricity, energy etc. by its offices and branches in different places. Then it should take measures to save electricity, water and paper consumption. A 'Green Office Guide' or at least a set of general instructions should be circulated to the employees for efficient use of electricity, water, paper and reuse of equipment’s. In place of relying on printed documents, online communication should be extensively used (where possible) for office management and make sure that the printers are defaulted to duplex for double-side printing to save papers. Banks may apply Eco-font in printing to reduce use of ink, use scrap paper as notepads and avoid disposable cups/glasses to become more eco- friendly. Installation of energy efficient electronic equipment’s and automatic shutdown of computers, fans, lights, air coolers etc. will help reducing electricity consumption. Energy saving bulbs should replace normal bulbs in branches/offices of the banks. Banks should make plan to use solar energy at their premises to save electricity. Bank should take steps to save energy from corporate business travel and encourage employees to purchase energy efficient cars (that consume less fuel) can reduce gas and petroleum consumption. International Journal of Economics, Finance and Management Sciences 2015; 3(1): 34-42 37

**4.4.1. Standard Chartered Bank’s In-house activities:**

In 2009, we had made a global commitment to significantly reduce energy and water use by 2019. Our design standards and operational criteria are starting to transform the built environment. We have made solid progress, but the pace has slowed as we realized quick wins.

The economic imperative to save energy is growing as energy prices continue to rise more sharply. The impact is significant with every one per cent improvement in Group Energy Usage Intensity (“EUI”) equating to USD 600,000 in running costs globally. In line with Global strategy; various continuous processes have been there to minimize the banks direct operational impact to environment in Bangladesh:

**To reduce Paper usage and help save Trees:**

* Green Printing Guideline is being circulated among staffs through internal communication on regular basis
* Soft archival of customer documents for electronic access and retrieval is enabling us to reduce consumption of paper
* Majority of internal memos, process notes and records are in electronic form
* Internal communications are done through emails. All staffs have dedicated email IDs for office use.
* Customer communications are being done through emails, SMS or ATM displays.

**To reduce energy & water consumption:**

* Green cars introduced as part of car pool to save energy and reduce carbon emissions.
* Energy saving T5 lights introduced in all office buildings in Dhaka (Head-office and Monem Business District).
* Renewable energy (Solar Power) introduced for 2 ATM machines as pilot.
* Motion sensors and Day-Light sensors have been installed in our new premises in Monem Business District to optimize power consumption in office lighting.
* Energy usage for central air-conditioning has been reduced by the installation of Variable Frequency Devices (VFD).
* Video conferencing with overseas offices and between offices in Dhaka and Chittagong has reduced the need for physical travel with associated carbon emission.
* Self-closing water taps installed in Dhaka offices (Country HO and Monem Business District) which is saving water.
* Hand-wash towels replaced with Dyson Air-blade equipments which are saving both water and energy usage in our offices in Dhaka.

**4.4.2. Jamuna Bank’s In-house activities:**

In-house environment management has several aspects. It starts from efficient use of organizations like water, paper, electricity and energy to adoption of information and communication technology in every sphere of internal operation. These sorts of greening activities are in fact compensative in nature. Activities surrounding in-house environment performed by JBL are enunciated below:

* An inventory of the consumption of water, paper, electricity and energy is prepared.
* Energy efficient blubs are widely used in its branches and head office.
* Photocopiers are kept in energy saving mode.
* Online communication is used in place of printed documents (where possible) for office management through a dedicated common server namely FTP server.
* Printers are defaulted to duplex for double-side printing to save papers.
* Eco fonts are used in printing to reduce use of ink.
* Scrap papers are utilized as notepads and draft printing.
* Energy efficient equipment’s are increasingly becoming installed such as LED monitors and
* Arrangement is made t use fans, lights, air conditions efficiently.

**4.4.3. Dhaka Bank’s in-house activities**

In light of Green Banking Policy of Dhaka Bank Limited, a general instruction has been issued on the followings green activities/practices as part of in-house environment management and to promote Green Banking within the bank:

**Electricity Consumption**

* Ensure economic use of electricity;
* Use energy saving lights in bank premises;
* Shutdown your computer properly and switch off your computer monitor before leaving office each day;
* Ensure that light, fans, air conditioner have been switched off before leaving office each day; and
* Use energy efficient electronic equipment’s;

**Fuel Consumption**

* Ensure economic use of fuel;
* Buy energy efficient cars to reduce gas and petroleum consumption.

**Paper Consumption**

* Where possible use online communication (e-mail, IP message etc.) instead of printed communication;
* Think twice before taking a print;
* Take print on the both side of paper to save paper consumption;
* Use scrap paper for taking draft print and as note pads;

**Water Consumption**

* Do not misuse drinking water; and
* Ensure economic use of water in all other cases.

**Others:**

* Avoid use of disposable cups/glasses to become more eco-friendly;

**4.4.4. Trust bank in-house activities**

In light of Green Banking Policy of Trust Bank Limited, a general instruction has been issued on the followings greenactivities/practices as part of in-house environment management and to promote Green Banking within the bank:

**Electricity Consumption:**

* Ensure economic use of electricity;
* Use energy saving lights in bank premises;
* Shutdown the computer properly and switch off the computer monitor before leaving office each day;
* Ensure that light, fans, air conditioner have been switched off before leaving office each day; and
* Use energy efficient electronic equipment’s;

**Fuel Consumption:**

* Ensure economic use of fuel;
* Encouraged to use energy efficient cars to reduce gas and petroleum consumption.

**Paper Consumption:**

* Where possible use online communication (e-mail, intra message etc.) instead of printed communication;
* Think twice before taking a print;
* Take print on the both side of paper to save paper consumption;
* Use scrap paper for taking draft print and as note pads;

**Water Consumption:**

* Do not misuse drinking water; and
* Ensure economic use of water in all other cases.
* Avoid use of disposable cups/glasses to become more eco-friendly;

**4.1. Comparision of green Banking activities:**

**4.1.1Table : a comparative senerio among the bank with Phase -1**

|  |  |  |  |
| --- | --- | --- | --- |
| **Banks name** | | | |
| **Policy name** | **Dhaka Bank** | **Jamuna Bank** | **Standered cherted Bank** | **Trust Bank** |
| **Policy Formulation and Governance** | **Yes** | **Yes** | **Yes** | **Yes** |
| **Incorporation of Environmental Risk in CRM** | **No** | **Yes** | **Yes** | **No** |
| **Initiating In-house Environment Management** | **Yes** | **Yes** | **Yes** | **Yes** |
| **Introducing Green Finance** | **Yes** | **Yes** | **Yes** | **Yes** |
| **Creation of Climate Risk** | **No** | **Yes** | **Yes** | **No** |
| **Introducing Green Marketing** | **No** | **Yes** | **Yes** | **Yes** |
| **Online Banking** | **Yes** | **Yes** | **Yes** | **Yes** |
| **Supporting Employee Training, Consumer Awareness and Green Event** | **Yes** | **Yes** | **Yes** | **Yes** |
| **Disclosure and Reporting of Green Banking Activities** | **Yes** | **Yes** | **Yes** | **Yes** |

**Souces: Annual report from 2012 to 2014**

**4.1.2.Table : Comparative senerio among the bank with Phase 2:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Banks name** | | | |
| **Policy name** | **Dhaka Bank** | **Jamuna Bank** | **Standered cherted Bank** | **Trust Bank** |
| **Sector Specific Environmental Policies** | **No** | **No** | **Yes** | **Yes** |
| **Green Strategic Planning** | **Yes** | **Yes** | **Yes** | **Yes** |
| **Setting up Green Branches** | **Yes** | **Yes** | **Yes** | **Yes** |
| **Improved In-House Environment Management** | **Yes** | **Yes** | **Yes** | **Yes** |
| **Formulation of Bank Specific Environmental Risk Management Plan and Guidelines** | **Yes** | **Yes** | **Yes** | **Yes** |
| **Rigorous Programs to Educate Clients** | **No** | **No** | **No** | **No** |
| **Disclosure and Reporting of Green Banking Activities** | **Yes** | **Yes** | **Yes** | **Yes** |

**Souces: Prepared by own (Annual report)**

**4.1.3. Table : a comparative senerio among the bank with Phase 3:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Banks name** | | | |
| **Policy name** | **Dhaka Bank** | **Jamuna Bank** | **Standered cherted Bank** | **Trust Bank** |
| **Designing and introducing innovative products** | **Yes** | **Yes** | **Yes** | **Yes** |
| **Reporting Standard format with External Verification** | **Yes** | **Yes** | **Yes** | **Yes** |

**Souces: Annual report from 2012 to 2014**

**Table : A comparative senerio among the bank with item to item:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Projects name | Banks name | | | |
| Dhaka Bank | Jamuna Bank | Standered cherted Bank | Trust Bank |
| Effluent tement plant | Yes | Yes | Yes | Yes |
| Bio-gas plant | Yes | No | No | Yes |
| Renewable energy plant | No | No | Yes | Yes |
| Bio – furilzer plant | No | No | No | Yes |
| Green reduce interest rate | **No** | **No** | **Yes** | **No** |

**Souces:prepared by own (annual report )**

**4.2. SWOT Analysis**

Here the SWOT analysis of the Jamuna Bank, Standard chartered Bank, rust bank and Dhaka Bank on the Basis of Green banking activities:

**5.1.1. Strength:** This four banks strength is as follow:

|  |  |
| --- | --- |
| **Strength** | |
| **Standard charted bank**   * Strong online banking system * More ATM service * Proper maintaining about green banking. * Most financing in green banking | **Jamuna bank**   * Taken so many project under ETP * More ATM service * Low green reduce interest rate |
| **Trust bank**   * Strong rules for green banking * Good financing | **Dhaka Bank**   * Project are maintain by low , moderate and High * Good financing |

**5.1.2. Weakness:** This four banks weakness is as follows:

|  |  |
| --- | --- |
| **Weakness** | |
| **Standard charted bank**   * Less branches | **Jamuna bank**   * **Low financing** * **Low accounts facilitated eith Mobile/SMS Banking** |
| **Trust bank**   * **Low financing** * **Low accounts facilitated with Mobile/SMS Banking** | **Dhaka Bank**   * **Low financing** * **Low accounts facilitated eith Mobile/SMS Banking** |

**5.1.3. Opportunity:** This four banks opportunity is as follows:

|  |  |
| --- | --- |
| **Opportunity** | |
| **Standard charted bank**   * Increase lots of project * No transaction cost * Number of customer are increasing . | **Jamuna bank**   * **Increase los of project under ETP** * **More financing** |
| **Trust bank**   * **Increase lots of project under ETP** * **More financing** | **Dhaka Bank**   * **Increase lots of project under ETP** * **More financing** |

**5.1.4 Threats:** These four banks threats are as follows:

|  |  |
| --- | --- |
| **Threats** | |
| **Standard charted bank**   * Not sufficient branches | **Jamuna bank**   * Decrease the number of accounts of branches |
| **Trust bank**   * **New accounts are not properly established** | **Dhaka Bank**   * **Customer dissatisfaction.** |

By SWOT analysis , Standard Charted Bank are the most strong financing in Green Banking activities and also now a day’s all banks are attended in Green Banking activities by following Bangladesh Bank rules and regulation.

* 1. **Findings:**

In this study, the findings are as follows:

* Banks are following the Bangladesh Bank rules and regulations for Green Banking.
* Jamuna Bank are installed number of projects with ETP 907 and Dhaka Bank are installed 232 Trust Bank are installed number of projects with ETP 100 and there are the most number of project are installed number of projects with ETP 2564 by standard Charted Bank
* Green banking under installation of ETP. Jamuana Bank are finance total is 7678.8. BDT millions. Dhaka Bank finances 8938.85 BDT millions. Trust Bank fiancé 40057.17 BDT millions and most fiancé in this sector by Standard Charted Bank is 116,081 BDT millions.
* By the following rules and regulation Jamuna Bank, Dhaka Bank and Trust Bank increase the online Banking activities cumulative process, Standard Charted Bank are now perform 95% online Banking activities.
* By the Bangladesh bank rules this banks are lack of reduce interest rate for green banking.
* .The banks lack of foreign branches in the outside of Bangladesh.
* All Banks has taken essential step for Green Banking in-house activities.
* Proper employee training for green financing.
* All banks are playing a cumulative process for the increasing Green Banking Activities.
  1. **Recommendations:**
* Banks should do Environmental Impact Assessment (EIA) in which they design the environmental system to evaluate the risk involved before 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 minimizes risk, saves cost and enhance the bank's reputation
* The banks should change their routine operations through the adoption of paperless banking, online banking, mobile banking, mass transportation system, green cards made up of recycled plastic and efficient use of resources
* Bank should continuously monitor their activities that they follow these rules.
* Management body of the bank strictly maintain all the regulation of the bank when the approved the ETP project.
* Standard Charted Bank, Jamuna Bank, Dhaka bank, Trust bank should try to increase green activities under the rules & regulation by Bangladesh green banking activities.
* There activities are satisfying the bank management try to increase the activities in foreign country.
* Every Banks must be Proper utilization of fund for green banking activities.
* Every Bank should be Proper use and fellow all the rules and regulation for In-house green activities.
  1. **Conclusion**

In these studies,it can be said that green banking practices in Bangladesh are not at a satisfactory level. In line with global development and response to the global warming, Green banking plays significant roles. Government as well as every bank should take initiatives in respect of green banking practices for protecting our environment. Bangladesh bank will emphasize with significance of green banking activities/practices of a bank while according permission for opening new bank branches and approval for launching new bank. Government should also encourage the general people about the green banking practices. The central bank should monitor or supervise commercial banks whether they are practicing green banking or not. So, every bank has to participate and contribute to green banking practices in today’s extreme national and global banking competition.