A Trend Analysis of Green Banking Practices in Bangladesh

Abstract:
This paper examines the extent of compliance by the listed banks with the green banking guideline of Bangladesh Bank, the supreme regulator of banking companies in Bangladesh. We have analyzed the contents of published annual reports of thirty listed banks for the period 2011-2015 with respect to twenty-one criteria mentioned in the green banking guideline. The guideline is expected to be implemented in three phases effective from 2011, 2012 and 2013 respectively. We have found that the compliance rate of the policy guideline is increasing over the years. Among three phases, the level of compliance by the banks is highest in phase I, followed by phase II and phase III. This is expected because banks have initiated the process of implementing phase I requirements earlier compared to other two phases. Regarding compliance with the individual element of the twenty-one factors, most of the banks are found to comply with areas such as green banking policy and online banking. The lowest compliance areas are green annual report & verification, green quarterly report, website disclosure, climate change fund, rigorous education and training to customers & employees and rigorous in-house environment management. We recommend that banks should accelerate the speed of compliance with the requirements of the guideline to legitimize their existence and Bangladesh Bank should take necessary persuasive measures to ensure maximum level of compliance with the guideline. It is expected that green banking mechanism, when fully implemented by all the banks in Bangladesh, will contribute towards attaining an eco-friendly and sustainable business environment in Bangladesh.

Keywords: Green Banking, Bangladesh Bank, Green Banking Guideline, Trends.

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Introduction

Climate change has become a major concern in the discourse of sustainable development which has got tremendous attention across the globe in the 21st Century. In order to sustain in the world characterized by increasing global warming, environmental concern must be given utmost priority. Every community is trying to mitigate the detrimental impact of climate change caused by human activity through different initiatives. This environmental concern is often represented by the color of green as evidenced by the “going green” strategies adopted by different sectors of the economy. Green business, green product, green marketing, green financing, green operation etc. are the examples of commitments to save the environment from harmful economic activities. Banking sector of Bangladesh is also endeavoring to go green through the initiative named “green banking”. Although the activities of the banks do not have direct impact on the environment, the indirect impact on the environment through their customers’ activities can be significant. Banks are the major source of finance for large industrial undertakings which are often severely condemned for polluting environment. Therefore, banking sector can play a pivotal role in the protection of environment and conservation of natural resources by promoting environment-friendly and socially-responsible investment through its customers.

Green banking is simply normal banking operation with environmental and social considerations. It is also termed as ethical banking. Every bank should be ethical in its activities. It should not do anything that is harmful for the society as it is utilizing the scarce resources from the society. Therefore, banks should make optimum use of the scarce resources. Online banking will reduce the usage of paper; financing in eco-friendly project will reduce the emission of carbon to the environment, in-house management can reduce the usage of electricity, gas and other natural resources etc. are example of ethical banking. Although banks are not directly responsible for polluting the environment like other sectors i.e. tannery, textile, pharmaceuticals, chemicals etc.; they can contribute to the environment to some extent as a responsible community of the society. As a result the concept of green banking has emerged.

Due to swift industrialization, the whole world is experiencing the adverse repercussion of gradually intensifying global warming, ecological degradation and diminution of scarce resources. Therefore, proactive and timely actions should be taken by different stakeholders including government, regulators, business organizations, non-government organizations and individuals to combat global warming and ecological degradation. Banking sector is the lifeblood of any economy. It is the main source of financing for private sector business enterprises which are often accused of contributing to global warming and environmental degradation.

Financial institutions have reciprocal relationship with Finance, Environment, Social and Governance (FESG). Banking sector as a form of financial institution, can contribute largely to sustainable development by ensuring governance in its activities. Environment is the part and parcel of business activity. Polluting environment means polluting the future of the business. It can affect the asset’s quality and the rate of return of the banks. So, banks should be more concerned about the ecological degradation. Countries around the world are taking necessary steps to combat these challenges.

In this context, ‘Green Banking’ has emerged as a vital strategy to address the challenge. The green efforts will ensure good governance to the activities of the banks and will contribute to green environment. Green banking will ensure it through two forms: one is changing the way of banking business i.e. paper based banking to online banking and the other is investing in green projects. Bangladesh bank is highly interested in green banking strategy and it is taking steps to implement the strategy. In line with that Bangladesh bank has designed a green banking guideline that should be complied with by all the commercial banks of Bangladesh.

Objectives of the Study

The primary objective of this study is to analyze the trends of green banking practices embraced and implemented by the listed commercial banks of Bangladesh over a five-year period. The primary objective is further subdivided into following areas:

a) To examine the different phases of green banking guideline set by Bangladesh Bank.

b) To assess the level of compliance of green banking guideline of Bangladesh Bank by the listed commercial banks for the period 2011-2015.
To help in policy formulation and enforcement through informing the current status of compliance and recommending future courses of action.

**Literature Review and Research Gap**

A large body of studies has been conducted on green banking as it has got popularity and the center of attention is in the policy discussion of environmentalists, regulators, governmental agencies, business organizations and academicians. As a highly discussed topic of present days, various conferences, seminars, symposiums etc. are being arranged on this issue to raise awareness and to glean diverse range of ideas from different experts and researchers.

Bangladesh bank is trying to integrate sustainability into banking activities and thus guiding the banks to comply with the policy guideline from 2011. It has set minimum target of 5% of total loan disbursement or investment for green financing and also instructed the banks to form climate risk fund. About Tk. 503.2 billion has been disbursed by 46 banks for green financing and Tk. 455.7 million was utilized from climate risk fund in 2016. Bangladesh bank is also focusing on green marketing, environmental risk management, and online branches. It has initiated in-house environmental management and refinance scheme for green products/services for itself (Bangladesh bank, 2016).

In order to implement the green banking strategies, commercial banks need to finance from different sources. Ullah (2013) has found that the fund financed by the commercial banks for green activities is highly insufficient. Bangladesh bank has the budgeted amount for the green banking activities. But the commercial banks are not utilizing the fund properly or the utilization rate of the fund is increasing at a slow rate (Chowdhury and Dey, 2016).

Green banking has relationship with firm performance. Hossain and Kalliance (2014) has conducted a study on the relationship of green banking and firm performance based on cross sectional data and have found significant positive relationship between green banking and firm performance. They urge for green initiatives to ensure economy as well as higher profitability.

Singh (2015) added that banking activities have external or indirect effect rather than the direct effect on the environment; thus requires the banks to initiate green initiatives. However, it is challenging to implement the green banking policies and strategies (Lindenberg and Volz, 2016). They also recommended some actions to combat the challenges. Pal and Russel (2015) also addressed the easy way of implementing the green banking guideline of Bangladesh. Jha and Bhome (2013) conducted an empirical study on the steps that can be taken to go green in the banking sector and to check the awareness among bank employees, associates and the general public about green banking concept.

Millet (2012) has found that commercial banks in Bangladesh are complying with Bangladesh Bank guideline on green banking through environment friendly financing. Yadave and Pathak (2013) stated that Indian Banking sector have understood the importance of environmental protection and started taking various initiatives under its green banking approach. Rahman, Ahsan, Hossain, and Hoq (2013) focused on six main spheres through which banks can go green. These are change in investment management, change in deposit management, change house-keeping,change in recruitment process, corporate social responsibility and making consciousness among clients. Malu, Agrawal and Jajoo (2014) have shown the way of ensuring sustainability in the banking sector through green banking.

Green banking is considered as the part of corporate social responsibility. So, banks should comply with the guideline as it is a part of their CSR (Bihari, 2011). Alice Mani (2011) stated that as a Socially Responsible Corporate Citizen (SRCC), banks should play vital role toward building a green economy.

The above-mentioned studies highlight the importance of going green. First of all, green banking is required to have a sound ecological system. Then, green banking is a part of social responsibility of the banks, and finally, green banking can ensure higher profitability of the banks. Considering the importance of hygienic natural environment and substantial contributions that bank scan make to the efforts of maintaining and restoring a better living place for future generations by going green, the question remains as to what extent the commercial banks in Bangladesh are following the policy guidelines of Bangladesh Bank. To the best of our knowledge, no study has been conducted so far on the level of compliance for each of the component from three phases of the green banking policy guideline in the context of Bangladesh. To fill this
gap in the literature, this paper attempts to assess the level of compliance of green banking guideline of Bangladesh bank through phase by phase analysis over the years 2011-2015.

Methodology
For the purpose of this study, we have collected published annual reports of thirty listed banks for the period 2011-2015 from Dhaka Stock Exchange (DSE) library. DSE stores soft copy of annual reports of all listed companies including banking sector companies in digital format. We have begun our sample period from 2011 since green banking guideline is issued for the first time by Bangladesh Bank in that year, and the banks were instructed to follow and implement the requirements of phase I by the end of that year. We have ended our sample period in 2015 because it is the latest year for which annual reports were available either in DSE library or on respective company’s websites. As a result, this study has used secondary data that are collected through analyzing the contents of annual reports presenting information about the green banking practices adopted by the banks. We have identified twenty-one (21) elements from the policy guidelines that are required to be followed by the banks in three phases over time. We have collected data from the green banking disclosure part of the annual report of the banks for each of the contents. For data analysis, we have relied heavily on the descriptive statistics such as mean percentage of banks complied with the requirements identified in each phase. The result of our analysis is presented through charts, graphs and tables.

Green Banking Guidelines of Bangladesh Bank
Recognizing the economic, social and environmental impact of climate changes, governments and regulators of the developing countries are setting strategies to develop green industries, create green jobs, adopt green technologies, and enacting legislations to regulate and monitor the activities of the businesses suspected for contributing to climate change. Acknowledging the detrimental effect of business operations on the environmental vulnerability, and vowing to address and minimize the associated negative externalities, Bangladesh Bank has issued the policy guidelines for green banking on February 27, 2011 (BRPD Circular No.02) through Banking Regulations & Policy Department. The guideline is designed to be adopted and implemented by all the banks in Bangladesh in three phases. Banks are required to implement Phase I within December 31, 2011. The guideline specifies ten (10) criteria in phase I that includes Green Banking Policy, Green Banking Cell/Unit, Environmental Risk Management, In-house Environment Management, Green Financing, Climate Risk Fund, Green Marketing, Online Banking, Employ Training & Other Event and Websites Disclosure. The time frame set for implementation of phase II is December 31, 2012. In phase II, we have identified seven (7) issues including Sector Specific Environmental Policies, Green Strategic Planning, Setting-up Green Branches, Improved In-house Environment Management, Specific Environmental Risk Management Plan and Rigorous Programs to Educate Clients. Finally, Phase III is expected to be implemented by the end of 2013. Under phase III, the four (4) elements that are required to establish within given time period are Environmental Management System, Innovative Products, Green Annual Report & Verification and Green Quarterly Reporting.

Findings of the Study
Content analysis has been used as a tool to collect and analyze the data. Data analysis is done for each of the 21 contents under the three phases. The detailed phase by phase analysis is discussed below:

Phase I
The table below shows the percentage of banks that comply with the ten contents under phase I of green banking guideline from 2011 to 2015. Here, we can find that the compliance rate is increasing over the years. Almost all the banks have green banking policy, green financing and online banking (97%). Banks are also putting more emphasis on green banking cell or unit, environmental risk management, in-house environment management, employee training and other event (more than 80%). The banks should give more emphasis on climate risk fund, green marketing and website disclosure. The least compliance area is the disclosure of information in the company website. So, it is recommended that banks should disclose all the information related to green banking in their respective websites.
Phase I

<table>
<thead>
<tr>
<th>Contents</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
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</thead>
<tbody>
<tr>
<td>Green Banking Policy</td>
<td>87%</td>
<td>93%</td>
<td>93%</td>
<td>97%</td>
<td>97%</td>
</tr>
<tr>
<td>Green Banking Cell/Unit</td>
<td>77%</td>
<td>80%</td>
<td>83%</td>
<td>83%</td>
<td>87%</td>
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<tr>
<td>Environmental Risk management</td>
<td>70%</td>
<td>83%</td>
<td>83%</td>
<td>83%</td>
<td>87%</td>
</tr>
<tr>
<td>In-house Environment Management</td>
<td>57%</td>
<td>87%</td>
<td>90%</td>
<td>93%</td>
<td>93%</td>
</tr>
<tr>
<td>Green Finance</td>
<td>70%</td>
<td>87%</td>
<td>93%</td>
<td>93%</td>
<td>97%</td>
</tr>
<tr>
<td>Climate Risk Fund</td>
<td>30%</td>
<td>50%</td>
<td>53%</td>
<td>53%</td>
<td>50%</td>
</tr>
<tr>
<td>Green Marketing</td>
<td>20%</td>
<td>37%</td>
<td>50%</td>
<td>57%</td>
<td>63%</td>
</tr>
<tr>
<td>Online Banking</td>
<td>77%</td>
<td>93%</td>
<td>97%</td>
<td>97%</td>
<td>97%</td>
</tr>
<tr>
<td>Employ Training &amp; Other Event</td>
<td>57%</td>
<td>67%</td>
<td>73%</td>
<td>87%</td>
<td>87%</td>
</tr>
<tr>
<td>Websites Disclosure</td>
<td>10%</td>
<td>33%</td>
<td>40%</td>
<td>47%</td>
<td>50%</td>
</tr>
</tbody>
</table>

Table 1: Percentage of banks complying with the contents of phase I

The graph below shows the trends of compliance of green banking guideline for each of the content under phase I from 2011 to 2015. Here, we find that the percentage of banks complying with each of the contents of phase I is increasing but at a slow rate. Highest compliance is found in green banking policy, green financing and online banking. Lowest compliance is found in website disclosure and climate risk fund (only 50% bank comply with this).

Phase II

In the second phase, the percentage of bank complying with the contents is increasing over the years. Although this phase is applicable from 2012, the compliance is not as high as phase I. Here, maximum compliance is found in setting green branches and past, present and future initiatives (more than 60%). Banks should focus more on sector specific environmental policy, green strategic planning, and environmental risk management plan. The least compliance is found in in-house environmental management and rigorous program to educate the client.

<table>
<thead>
<tr>
<th>Contents</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sector specific environmental policies</td>
<td>30%</td>
<td>37%</td>
<td>43%</td>
<td>53%</td>
</tr>
<tr>
<td>Green strategic planning</td>
<td>47%</td>
<td>53%</td>
<td>53%</td>
<td>53%</td>
</tr>
<tr>
<td>Setting up green branches</td>
<td>43%</td>
<td>53%</td>
<td>60%</td>
<td>63%</td>
</tr>
<tr>
<td>Improved in-house environment management</td>
<td>37%</td>
<td>40%</td>
<td>43%</td>
<td>43%</td>
</tr>
<tr>
<td>Specific environmental risk management plan</td>
<td>30%</td>
<td>37%</td>
<td>43%</td>
<td>57%</td>
</tr>
<tr>
<td>Rigorous programs to educate clients</td>
<td>20%</td>
<td>30%</td>
<td>37%</td>
<td>50%</td>
</tr>
<tr>
<td>Past performances, current activities, and future initiatives</td>
<td>37%</td>
<td>43%</td>
<td>63%</td>
<td>67%</td>
</tr>
</tbody>
</table>

Table 2: Percentage of banks complying with the contents in Phase II

is higher. We can find 230% increase in website disclosure, 85% increase in green marketing, 67% increase in climate risk fund, 53% increase in in-house environmental management and others areas with a considerable increase in percentage. In 2013, a meaningful increase has happened in green banking cell, green finance, green marketing and employee training. 2014 can be marked with the improvement in green banking policy and employee training and 2015 can be marked with improvement in green banking unit & environmental risk management and demotion in terms of climate risk fund.
The government and Bangladesh Bank should monitor the issue earnestly, and provide necessary assistance. Last but not the least; an all-out effort should come from all the stakeholders to help the banks implement the green banking guideline.
In the table below, we can percentage increase in compliance by the number of banks for the contents under phase III of green banking guideline. From 2013 to 2014, improvement is found only in environmental management system by 89%. In 2015, improvement is found in innovative products, green annual report & verification and green quarterly report.

We can analyze from the perspective of 21 factors in the year 2015. First of all, in phase I, all the ten factors are complied with by the banks at different level. More than 80% of the banks are complying with the guideline regarding green banking policy, green banking cell, environmental risk management, in-house environmental management, green financing, online banking and employee training. Only 50% banks are complying with the policy guideline regarding climate risk fund management and website disclosure regarding green activities. Only 50% banks are complying with the policy guideline regarding climate risk fund management and website disclosure regarding green activities. Only 63% banks are complying with green marketing issues. So, non-complying banks should give special emphasis on managing the climate risk fund, website disclosure and green marketing initiatives.

Overall Compliance
Considering three phases altogether, we present the percentage of banks complying with the guideline over the years. The graph below shows the overall compliance of the guideline from the year 2011 to 2015.

Here, we can find that the percentage of banks complying with the guideline exhibits a declining tendency in the year 2012 and 2013 and then shows an increasing mode. The reason behind this pattern is that in 2011, only phase I was made compulsory to comply and in 2012, phase II was added with the phase I and in 2013, phase III was added with phase I & II implying that all the three phases become applicable from 2013. As a result, up to 2013, the level of compliance is decreasing as new phases are added here and from then onwards, the extent of compliance is increasing. In 2015, only 61% banks are complying with the guideline. That means 39% banks are still lagging behind in terms of compliance with the guideline.

Phase by Phase Compliance in the Latest Year
In the year 2015, we have found that 81%, 55% and 47% banks have complied with Phase I, II & III respectively. Phase I is being applicable for the last five years but full compliance has not been achieved so far. Phase II is applicable for the last four years but here only 55% banks comply. The lowest compliance is found in Phase III which is applicable for the last three years. So, Bangladesh Bank should take appropriate actions to ensure full compliance of the guideline.

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In a nutshell, we can summarize the findings of the study from above discussion and make some recommendations to expedite the process of compliance with the green banking guideline:

1) Over the years, the percentage of banks complying with each of the content of the green banking guideline is increasing but at a slower rate.

2) A few numbers of banks are fully complying with the guideline.

3) Highest compliance is found in phase I where 81% banks comply with the contents of phase I in 2015.

4) Under phase II, the average compliance is only 55% which indicates that 45% banks are not complying with the guideline.

5) The least compliance is found in phase III where more than 50% banks are not complying with the guideline although phase III is applicable for more than three years.

6) Most of the banks have green banking policy, green banking unit, green financing, online banking. But banks are not giving more emphasis on climate risk fund, green marketing, improved in-house environmental management, rigorous program to educate the client, green annual report & quarterly reporting and website disclosure.

7) Most of the banks are not complying with the guideline as the guideline is “comply” basis not “mandatory” basis. No pecuniary punishment is stated in the guideline if non-compliance is found. So, it is recommended that Bangladesh bank should take necessary actions for the non-compliance of the guideline.

8) It is recommended that banks should realize the importance of green environment and accordingly they should comply with the green banking guideline.

9) It is also recommended that Government and Bangladesh Bank should provide necessary assistance and moral support to comply with the guideline fully.

10) The depositors, borrowers, employees, beneficiaries, general public and all other stakeholders of the banks should extend their hands to comply with the guideline.

Conclusion

Green banking is a timely response to the growing public concern about conserving green environment.
which is a spirited precondition for attaining sustainable development. Every social unit should accept this responsibility to save the environment. The banking sector as a financial intermediary between savers and investors can play a significant role by going green in discharging its commitment to protect environment through controlling their customers’ activities. The Bangladesh Bank as a regulatory authority of the money market is pursuing the actors of the banking sector to go green and therefore, it has designed a green banking guideline that must be complied with by the banks. This study finds that most of the banks have taken steps to comply with the guideline but full compliance has not yet been achieved although five years have been passed from the issuance of the guideline. The positive aspect is that over the years, the percentage of banks complying with the guideline is increasing and at least few banks are fully complying with the guideline. Most of the banks are complying with the contents of Phase I (more than 80%). The least compliance is found in phase III where more than 50% of the banks are not complying with the contents of that phase. The overall compliance of the three phases is not satisfactory. The least compliance areas are green annual report, quarterly report and verification, climate risk fund, website disclosure, rigorous training, rigorous in-house management etc. Banks should give special emphasis on the above areas. The fact is that the green banking guideline is issued under comply basis not mandatory basis. That’s why the least compliance is found. Disciplinary and persuasive actions should be taken by the authority for the non-compliance of the guideline. The banks should realize the need for green environment and should act for green banking accordingly. The government and Bangladesh Bank should monitor the issue earnestly, and provide necessary assistance. Last but not the least; an all-out effort should come from all the stakeholders to help the banks implement the green banking guideline.

References