

## Status of Green Banking in Islamic and Traditional Banks of Pakistan

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**Abstract:** The emergence of green banking has greatly increased the fierce competition between Islamic and traditional banks in Pakistan. Therefore, this study explores the current status of green banking in Islamic and traditional banks of Pakistan and the underlying reasons behind that status. A survey with semi-structured interviews was conducted between November 2019 and March 2020 among twenty banks. Overall, the findings reveal that the current level of green banking is low, but that Islamic banks still lead in green initiatives among banks in Pakistan. However, in certain sub-issues of green banking, there exist differences between the two groups of banks in terms of most and least implemented sub-issues. These differences arise from various factors, including the lack of awareness of the need for change, lack of knowledge and skills in green banking, lack of customer and institutional pressure for change, lack of incentives for change, lack of legal power to enforce change, banking culture in general, the culture of resistance to change, and the relative lack of malleability of the existing infrastructure. Further, this study is the first in the literature that describes the level of green banking for Islamic and traditional banks of Pakistan through the green banking index.

**Keywords:** green banking, Islamic banks, Pakistan, traditional banks.

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## INTRODUCTION

The introduction of green banking has opened a new era in the banking industry, particularly for Islamic banks. Green banking is all about the welfare and environment's preservation for life's protection and sustainable usage of world resources. The same is the first and foremost objective of Shariah that is the protection of life and wealth and intellect. Therefore, green banking's objective and Shariah's objective are interlinked. Hence, the implementation of green banking is inexorable for banks, and particularly for Islamic banks. Globally green banking initiatives have been taken by many countries. For example, in Bangladesh, the central bank of Bangladesh had introduced green banking guidelines (GBG) in 2011 (Bangladesh Bank, 2011). In China, the green credit policy was introduced in 2011 by the ministry of environmental preservation (Aizawa, 2011). In 2015, the United Arab Emirates (UAE) decided to implement a green agenda (Ryszawska, 2016). Similarly, in the United



States (US) green banking act was introduced in 2009 to introduce green banking (Alam et al., 2017). Also, Malaysia is following a green technology financing scheme under government supervision (Chua & Oh, 2011). In response to the above initiatives across the world, in 2017, the central bank of Pakistan had circulated green banking guidelines.

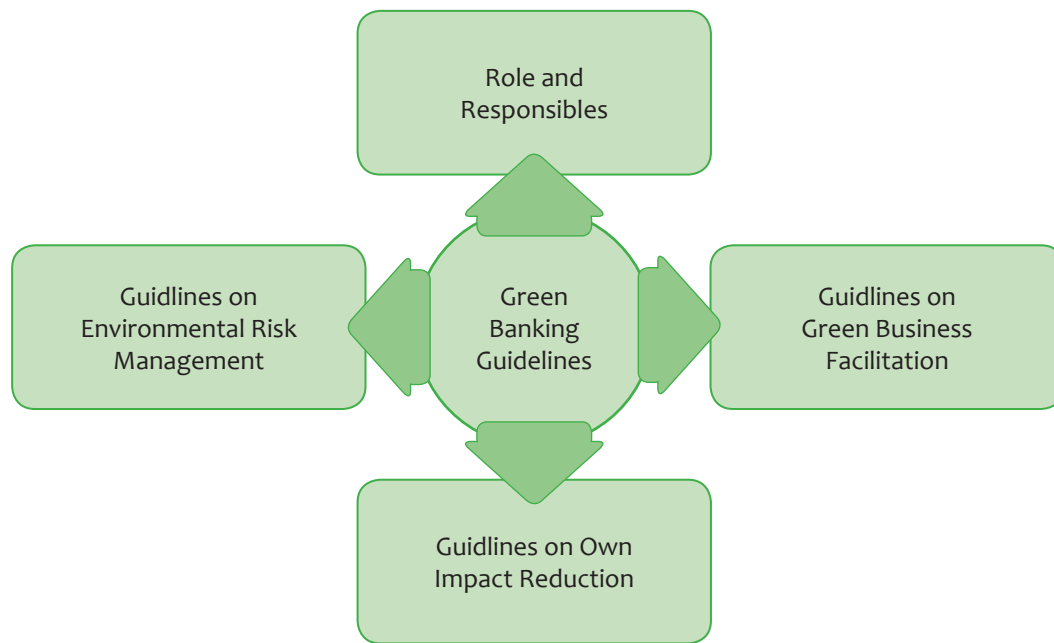
The objectives of these guidelines are multiple, the first objective is to reduce the exposures of banks from environmental risk, the second objective is to fulfill the responsibility of preservation of the environment and the third objective is to provide finance for the transformation of the economy into a resource-efficient and climate resilience one. The guidelines have to be implemented within twelve months from the issuance. SBP has divided the guidelines into four areas, the first area deals with the role and responsibilities, the second area deals with environmental risk management, the third area deals with green banking business facilitation, and the fourth area deals with own impact reduction. These broad categories are shown in Figure 1.

Guidelines related to each area discussed above have also been provided in detail. For example, in the area of role and responsibilities, the role and responsibilities of the board of directors, management, and organization are described separately. In the area of environmental risk management, the policy statement, customers' compliance assurance, rating of non-compliance customers, environmental risk management system, environmental risk management manuals, earmarking of financing, the establishment of provisions, environmental risk avoidance list, and procedures have discussed. Similarly, in the guidelines on green business facilitation, policy and strategy, product development, green advisory service, financing portfolio, etc. are discussed. In the last area, i.e guidelines own impact reduction, the areas such as policy statement on own impact reduction, targets of impact reduction, green branches, and offices, etc. have been discussed.

In 1987, the World Commission on Environmental Development commonly known as the "Brundtland Commission" officially launched the sustainable development movement. The movement was initiated by describing the definition of sustainable development. As per this commission, sustainable development is termed as "meeting the needs of the present in such a way that capabilities of coming generations are not compromised in meeting their own needs" (United Nations, 1987). After a few years in 1992, the movement further manifested in the UN (United Nation) conference on development and environment commonly known as "Earth Summit Brazil". Soon after the earth summit, many world leaders have been seen in conferences, programs, and activities showing their efforts to reduce the carbon footprint<sup>1</sup> and reducing the temperature of the earth. However, the movement got prime attention in the year 2015, when 195 nations of the world have joined their hands at Paris Climate Conference (COP21), this conference is also known as the first legally binding climate agreement (European Commission, 2015). After one year of the conference, the movement gained focal popularity, when 175 nations have signed the agreement to make this movement binding until the year 2020 (United Nations, 2016).

Pakistan is among the 195 countries that have participated in the environment conference held in Paris (United Nations, 2016). But the movement of green initiatives has flourished in a gradual process, started with the implementation of the Federal Environmental Preservation Act in 1997 (Mahar et al., 2007). Then in 2002, the Securities and Exchange Commission of Pakistan (SECP) issued a code related to corporate governance and social responsibility (SECP, 2002). Then after a few years in 2012, the government of Pakistan has publicized the National Climate Change Policy (NCCP) (Ministry of Climate Change, 2012) and most recently the Green banking Guidelines issuance by SBP in 2017 (State Bank of Pakistan, 2017).

<sup>1</sup> As per Wiedmann, T. & Minx, J. (2008). A Definition of 'Carbon Footprint'. In *Ecological Economics Research Trends* (pp. 1-11). carbon footprint can be defined as "a measure of the exclusive total amount of carbon dioxide emissions that is directly and indirectly caused by an activity or is accumulated over the life stages of a product"



**Figure 1 Structure of Green banking Guidelines (GBG)**

The literature related to green banking is limited, especially the literature relevant to the green banking status and the green banking index's development, and the implications non-existed. In early studies on the comparison of green banking between Jordan and UAE, Jahamani (2003) claimed that although there is a certain degree of awareness for ecological issues, however, the reaction toward protecting the environment is low. The research also claims the absence of difference between the UAE and Jordan in terms of ecological awareness, reporting, and participation. Later in India, Sahoo & Nayak (2007) found that due to the industrial sector's major stakeholder, many banks have facing controlling risks related to credit and liability, low assets' quality, and long-run return rates. To tackle these issues, banks need to be proactive in adopting green practices. Banks need to add ecological characteristics in lending criteria. This may force businesses to take necessary actions in managing the environment, appropriate technologies' adoption, and administration systems. The research also shows green banking's significance and highlights some global green and sustainable practices.

The research also found not very inspiring green banking's status in the Indian banking sector, consequently, effective implementation needs policy and guidelines. After three years in China, Aizawa & Yang (2010) claimed that the green credit policy success of implementation depends on the environmental data's collection and dissemination, technical assistance, and banks' financial incentives. Continuance effective execution may provide banks with capabilities and confidence to face novel challenges e.g the societal and ecological manner of conducting their foreign businesses. Soon after one year in India, Biswas (2011) claimed for banks adopting green activities is inevitable, although this method in the banking sector is not very active. Similar to Sahoo & Nayak (2007) the researcher highlighted that banks' lending process should cover ecological aspects and environmental preservation. Next year again in India, it was claimed that the focus on profit, profit, and only profit is now shifting towards people, the planet, and profit (Verma, 2012). In Bangladesh, Fayez et al. (2013) claimed that policy guidelines, the need for loans, investors' influence, ecological, economic, and legitimate aspects affect the enactment of environment-friendly banking. In the next year, Bal et al. (2014) found some significant facts related to China's green credit. Number one, a few small in size banks are adopting green principles which are accepted worldwide. Secondly, there is a lack of inclusive risk management systems,

clear environment-related data disclosure, checking, and capability building. On contrary, Lalon (2015) found some banks' opportunities in green banking practices adoption, e.g brand image improvement, and central bank's practical support. Hossain et al. (2016) claimed that despite reporting guidelines' lack, Bangladesh's banks report the green banking activities in annual audited reports. However, lacking standardized reporting guidelines is an obstacle to consistent reporting. Talking about the policy statement Hoshen et al. (2017) found that type of bank is also playing a role in the adoption of green banking. For example, private commercial banks are maintaining some extra funds for eco-friendly projects, and the propensity to finance these projects is also growing. However, to accelerate sustainable development's goals a revision in green banking policy is required. Again in Bangladesh Ghosh et al. (2018) claimed that compulsory rather than voluntary green banking can create a difference. In Singapore, Sachs et al. (2019) claim, for sustainable development goals achievement, the creation of green projects' opportunities is necessary. There is a need to promote green products, bonds, banks, green fiscal policies, and green central banking. Most recently, Grassa et al. (2020) found that the nonperformance of fiduciary responsibilities creates reputational risk. Further, Rahman et al. (2020) claimed that sustainability disclosures positively effect on equity values of banks.

In this regard, previous studies mainly concentrated only on a few green banking's aspects e.g. paperless operations and services in banks, green credit policy, reporting issues of green banking and sustainability, sustainability reporting quality, policies and strategies for financing green projects, and determinants of environmental performance for example (Miah & Rahman, 2017; Cui et al., 2018; Ghosh et al., 2018; Sachs et al., 2019; Permatasari et al., 2020; Rahman et al., 2020). Besides, previous studies mainly concentrated on traditional banks. However, this study is different from previous studies in many ways. First, this study is based on the green banking guidelines of Pakistan which were issued in 2017. Second, this study develops a green banking index which was not done previously. Thirdly, this study focuses mainly on Islamic banks. Fourthly, this research is real-time data based as opposed to previous researches that mainly relied on literature reviews such as (Sahoo & Nayak, 2007; Biswas, 2011; Ullah, 2013; Alam et al., 2017; Ghosh et al., 2018). Fifthly this study not only explores the status of green banking but also provides the reasons behind the current status of green banking. Therefore, the objectives of the study are: 1) To know the status of green banking in Islamic and traditional banks of Pakistan. 2) To know the most and least implemented areas and sub-areas of green banking in Islamic and traditional banks of Pakistan. 3) To know which group of banks (Islamic or traditional) is leading in the implementation of green banking, and why? 4) To know the reasons behind the current status of green banking in Islamic and traditional banks of Pakistan.

Since Sharia's objective, objectives of Islamic banks, and green banking's objective are interlinking, the score of the green banking index (GBI) may assist in determining the green banking guidelines' usefulness, the level of green banking, and the level of protection of life, wealth, and intellect in Islamic banks. This may further help in identifying the level up to which Islamic banks are achieving Maqasid-e-Shariah through real-time data. This may aid in finding the challenges for the adoption of green banking. The results may help in the development of a green banking framework that may additionally be beneficial in establishing a green banking regulatory framework<sup>2</sup>. Another motivation to conduct this research on Islamic banks is the lack of specific instructions for Islamic banks in the guidelines, however, Islamic banks have a different business model (Hussain et al., 2020). Therefore, this research may also deliver a theoretical base that how Islamic banks are applying these guidelines and what problems they are facing in the application process that may finally help in developing a *Maqasid-e-Shariah*<sup>3</sup>- based green banking framework for Islamic banks.

<sup>2</sup> According to GBG the next level is the issuance of green banking regulations.

<sup>3</sup> Protection of life, wealth, intellect, family, and din.

Sustainable development is all about the welfare of humanity and the environment (Meutia et al., 2020), therefore, this study may help achieve the goals of sustainable development. The study may also help increasing Islamic banking customers' confidence because the concept of sustainable development is very much in line with the teachings of Islam (Muhmad et al., 2021). Additionally, the study may support in discovering the untouched areas of financing. The result may help develop products, for example, Ijarah, Murabaha, with green banking aspects for Islamic banks especially green Musharakah because this mode also creates social benefit (Arshed et al., 2017).

## METHODS

The primary data has been collected via survey questionnaires. The survey has been conducted through emails between November 2019 to March 2020. All the survey questions are constructed according to the areas and sub-areas of the green banking guidelines of SBP. A total of 56 questions are formed for data collection to develop GBI. Each question is given a weight of (1) in case the answer is 'YES' and (0) in case the answer is 'NO'. The total of all 'YES' answers has been calculated and divided by the total number of questions to get the score for the overall status of green banking. Similarly, scores for each area of green banking have been derived.

At current, a total of 26 banks<sup>4</sup> are operating in Pakistan. For the current study, all 26 banks are considered for investigation. Therefore, a survey questionnaire is sent to all banks, out of which surveys are received from 5 full-fledged Islamic banks and 15 traditional banks. In addition, reasons behind the status of green banking, and the status of green banking in each area and sub-area have been obtained through email interviewing and telephonic recorded semi-structured interviews. The interviewees were the shariah scholars and green banking officers of sample banks. A total of 26<sup>5</sup> interviewees have conducted between November 2019 to March 2020.

Before initiating interviews, written consent was obtained through telephonic calls and via email services from all the interviewees who gave their consent to record the interviews. All interviewees are provided with the research's objectives and preliminary introduction in advance. Besides, all the interviewees were also assured that their names will remain anonymous.

## RESULTS AND DISCUSSION

### Status of Green banking (Overall and Each Area)

This section represents the level up to which the sample banks in Pakistan are implementing green banking. Al Mutawaa & Hewaidy (2010) and Samaha & Stapleton (2008) claimed that sample banks are considered to be in high implementation if the score is 80% or more. Moderate level of implementation if the score is between 60% and 79%, low level of implementation if the score is between 40% and 59%, and below 40% reflects a considerable gap between banks regarding green banking implementation.

Table 1 represents the implementation level of green banking in 20 sample banks (5 Islamic banks and 15 traditional banks). The mean value is 27.85 (49.73%), which represents that, on average, the sample banks have a low implementation of green banking. The standard deviation is 10.19, which indicates that the scores of some banks are away from the average green banking index. The range 41 suggests that the allocation is probable to have stemmed from an extensive difference in green banking qualities maximum score is 48 (85.71%), whereas the minimum is 7 (12.50%) in sample banks. In the overall industry, the level of implementation in each area of green banking is also low. However, the highest level of implementation is in role and responsibility (55%), and own impact reduction (54.54%), and the lowest level of implementation is in environmental risk management (46.75%).

<sup>4</sup> The Full-Fledged Islamic banks 5, and Traditional banks 21

<sup>5</sup> Traditional Banks, 14, Islamic Banks 5, and Shariah Scholars, 7.



**Table 1 Descriptive Statistics for the GBI of Sample Banks**

	N	Range	Maximum	Minimum	Mean	Std. Deviation	Variance	Skewness
GBI	20	41	48	7	27.85	10.19	103.92	0.05
Role and Responsibilities	20				2.20 (55%)			
Green Business Facilitation	20				10.30 (49.05%)			
Environmental Risk Management	20				9.35 (46.75%)			
Own Impact Reduction	20				6 (54.54%)			

Table 2 represents a distribution of the sample banks according to their GBI. The table indicates that 40% of the sample banks have a GBI between and 40% to 59%, therefore being not close to the mean score. However, (33%) of the sample banks fall at a moderate level.

**Table 2 Distribution of the sample banks**

Row Labels	Count of Banks
<40	6
40-60	8
60-80	5
>80	1
Grand Total	20

### **Status of Green Banking Between Different Banks (Overall and Each Area)**

Table 3 demonstrates the GBI between Islamic Banks and traditional banks. The traditional banks are selected based on the size in terms of total assets as done by Qureshi & Kalim (2018). These results also help in understanding which banking group is falling behind in implementation and which is leading and why.

The results indicate that Islamic banks exhibit a relatively higher level of green banking as compared to traditional banks. The average score of Islamic banks is 33 (58.92%), and the average score of traditional banks is 26.13 (46.66%). However, as compared to 5 equal size traditional banks, the average score of Islamic banks is 33 (58.92%), and the average score of traditional banks is 28.20 (50.36%). Further results indicate that in all four areas of green banking Islamic banks are leading.

**Table 3 Difference between Areas of Green Banking**

Sr.	Types	Islamic Banks	Traditional Banks	Difference
1	GBI	33	26.13	
2	GBI	33	28.20	
1	Role and Responsibilities	2.80	1.80	1.00
2	Green Business Facilitation	12	10.60	1.40
3	Environmental Risk Management	10.40	9.20	1.20
4	Own Impact Reduction	7.80	6.60	1.20

### The Status of Green banking in Different Sub-Areas of Green banking

To strengthen this investigation, first, the level of implementation of each sub-area of green banking included is analyzed. Then the most and least implemented sub-area of green banking is identified to know the reasons for current status.

### Role and Responsibility

Table 4 presents the implementation status of different sub-areas of role and responsibility. The status in green audit is substantially low (10%). Further, 80% of sample banks focused on green awareness sessions.

**Table 4 Role and Responsibilities**

No.	Questions	N	Implementation Status in Percentage	N	Islamic Banks Percentage	Traditional Banks Percentage
1.	Does the Bank have a Green banking Policy?	20	75	5	100	80
2.	Does the bank report Green banking activities in the annual audited report?	20	55	5	60	20
3.	Does the bank conduct green awareness sessions?	20	80	5	80	80
4.	Does the bank conduct green audits?	20	10	5	40	0

In all four sub-areas of role and responsibility, Islamic banks are leading except in green awareness sessions in which both types of banks have the same score. Further, 100% of Islamic banks have developed green banking policies, and only 40% of Islamic banks are conducting green audits. On the contrary, 80% of the traditional banks have developed the green banking policy, while none of the same size traditional banks are conducting green audits.

### Green Business Facilitation

Table 5 presents the implementation status of different sub-areas of green business facilitation. The level is varying from low to high level except in sub-area 6, 7, 8, 17, 20, and 21 in which the level of implementation is substantially low. 80% of the sample banks are focusing on exploring environment-friendly activities in the corporate sector and the optimal use of renewable water resources. However, only 15% of the sample banks are exploring the international funding options for developing green financing portfolios.

Out of 21 sub-areas of green business facilitation, Islamic banks are leading in 10 sub-areas, in only 6 sub-areas traditional banks are leading, in the rest of the 5 sub-areas, both types of banks are equal. The results indicate that 100% of Islamic banks have developed a green business facilitation policy, exploring green financing opportunities in SMEs, and encouraging optimal use of renewable water resources. In contrast, only 20% of Islamic banks are exploring international funding options for green financings and investments. On the contrary, 100% of the traditional banks encouraging optimal use of renewable water resources, and none of the same size traditional banks are maintaining separate financing portfolios, earmark the funds for green investment, and exploring international funding options for the development of green financing portfolio.

Table 5 Green Business Facilitation

No.	Questions	N	Implementation Status in Percentage	N	Islamic Banks Percentage	Traditional Banks Percentage
1.	Is there any green business facilitation policy statement for the bank?	20	70	5	100	80
2.	Does the bank develop <i>Green banking</i> products?	20	40	5	20	60
3.	Does the bank provide <i>Green banking</i> services?	20	50	5	40	60
4.	Does the bank customize products according to the need of the customers to facilitate green financing?	20	70	5	80	60
5.	Does the bank customize services according to the need of the customers to facilitate green financing?	20	45	5	80	40
6.	Does the bank provide green advisory services?	20	25	5	20	60
7.	Does the bank set the financing targets for green financing?	20	30	5	60	20
8.	Does the bank maintain a separate financing portfolio for green financing?	20	20	5	60	0
9.	Does the bank explore opportunities to finance environment-friendly activities in agriculture?	20	65	5	80	80
10.	Does the bank explore opportunities to finance environment-friendly activities in consumers finance?	20	55	5	40	60
11.	Does the bank explore opportunities to finance environment-friendly activities in SMEs?	20	75	5	100	60
12.	Does the bank explore opportunities to finance environment-friendly activities in corporates?	20	80	5	80	60
13.	Does the bank encourage optimal use of renewable water resources?	20	80	5	100	100
14.	Does the bank encourage the adoption of modern and efficient Agri water management techniques through working capital?	20	55	5	40	80
15.	Does the bank encourage the adoption of modern and efficient Agri water management techniques through term financing facilities to the farm sector?	20	55	5	60	60
16.	Does the bank encourage the adoption of modern and efficient Agri water management techniques through term financing facilities to the non-farm sector?	20	55	5	60	40
17.	Does the bank earmark the funds for green investments?	20	20	5	40	0
18.	Does the bank highlight the environmental causes of marketing of the products designed for environment-friendly businesses?	20	55	5	60	60
19.	Does the bank highlight the environmental causes of marketing of the services designed for environment-friendly businesses?	20	40	5	40	40
20.	Does the bank explore international funding options for investment in green projects? (other than the UN's green climate fund)	20	30	5	20	40
21.	Does the bank explore international funding options for the development of a green financing portfolio? (other than the UN's green climate fund)	20	15	5	20	0



### Environmental Risk Management

Table 6 presents the implementation status of different sub-areas of environmental risk management. The level is varying from low to the high level, except in sub-area 11,12,17,18,19, and 20 in which the level of implementation is substantially low. The results indicate that 80% of the sample banks have developed the policy statement for environmental risk management and ensuring the compliance of the customer with legal and regulatory requirements. However, only 10% of the sample banks are part of any financial consortium.

**Table 6 Environmental Risk Management**

No.	Questions	Yes	Implementation Status in Percentage	N	Islamic Banks Percentage	Traditional Banks Percentage
1.	Is there any policy statement on environmental risk management for the bank?	20	80	5	100	80
2.	Does the bank forward-look and incorporate anticipating stringency due to environmental law and regulation during the life of financing transaction?	20	55	5	60	40
3.	Does the bank apply environmental risk management to new exposures?	20	65	5	100	40
4.	Does the bank apply environmental risk management to extensions of existing exposures?	20	60	5	80	40
5.	Does the bank ensure the compliance of customers with legal and regulatory requirements?	20	80	5	80	80
6.	Does the bank deal with customers who are unwilling to provide climate-related information?	20	45	5	40	20
7.	The bank has developed an internal environmental risk management system?	20	60	5	60	60
8.	The bank has developed internal environmental risk management manual?	20	45	5	60	60
9.	Does the bank earmark the financing on which environmental risk management has applied?	20	50	5	60	60
10.	Does the bank make provision to capture the environmental risk of their exposures in environmental activity prone to geographic and sectors?	20	50	5	60	60
11.	Is the bank part of the financial consortium? If No, then skip # 12	20	10	5	20	0
12.	Are the members sharing the environmental risk assessment?	20	10	5	20	0
13.	Is there any environmental risk avoidance list for the bank?	20	45	5	60	60
14.	Is there any environmental risk management procedure developed for the bank?	20	45	5	60	60
15.	Does the bank follow environmental due-diligence procedures with environmental checklists and sector-specific guidelines?	20	65	5	80	60

16. Is the bank developed environmental risk rating (ERR)/risk categorization model? If No, then Skip # 17	20	45	5	20	60
17. Does the bank implement environmental risk rating (ERR)/risk categorization model?	20	30	5	0	40
18. Is the bank developed environmental risk monitoring (EnvRM) procedures? if No, then Skip # 19	20	35	5	20	40
19. Does the bank implement environmental risk monitoring (EnvRM) procedures?	20	35	5	20	40
20. Does the bank maintain a database of non-performing loans due to environment-related issues?	20	25	5	40	20

Out of 20 sub-areas of environmental risk management, Islamic banks are leading in 9, in 4 sub-areas traditional banks are leading, in the rest of the 7 sub-areas, both types of banks are equal. The results indicate that 100% of the sample banks have developed the policy statement for environmental risk management, but none of the sample banks is categorizing risk. On the contrary, 80% of the same size traditional banks have a policy statement on environmental risk management and ensuring the compliance of the customers with legal and regulatory requirements. However, none of the same-size sample banks is part of any financial consortium.

### Own Impact Reduction

Table 7 presents the implementation status of different sub-areas of own impact reduction. The level is also varying from low to high level except in sub-areas 3 and 9, which are showing a substantially low level of implementation. The results indicate that 85% of the sample banks are adopting resource efficiency measures, and only 15% of the sample banks have green branches.

**Table 7 Own Impact Reduction**

No.	Questions	Yes	Implementation Status in Percentage	N	Islamic Banks Percentage	Traditional Banks Percentage
1.	Is there any own impact reduction policy statement for the bank?	20	65	5	100	80
2.	Does the bank set target for "Own Impact Reduction"?	20	45	5	60	20
3.	Is there any green branch of the bank?	20	15	5	20	20
4.	Is there any green office in the bank?	20	45	5	40	60
5.	Does the bank use paperless banking operations?	20	75	5	100	80
6.	Does the bank offer paperless banking services?	20	75	5	100	80
7.	Does the bank utilize green information technology infrastructure?	20	55	5	60	60
8.	Does the bank have renewable energy-based ATMs?	20	40	5	40	40
9.	Does the bank have renewable energy-based branches?	20	35	5	60	60
10.	Does the bank adopt resource efficiency measures?	20	85	5	100	80
11.	Does the bank adopt waste reduction measures?	20	65	5	100	80

Out of 11 sub-areas of own impact reduction, Islamic banks are leading in 6 sub-areas, and in 1 sub-area traditional banks are leading. In the rest of the 4 sub-areas, both types of banks are equal. The results indicate that 100% of the Islamic banks and 80% of traditional banks have developed the policy statement for their own impact reduction, implementing paperless banking operations and services, and implementing resource efficiency and waste reduction measures. However, only 20% of the sample banks have any green branch.

This section described why a particular group of banks is leading in the implementation of green banking and the reasons behind the current status of green banking. For this purpose, 26 interviews with green banking officers and Shariah scholars of sample banks are conducted.

### Overall Level of Green Banking

The results indicate that at the industry level the green banking is low. The findings support Jeucken's model of green banking because banks are behaving defensively and considering all environmental laws as a threat and cost to banks' businesses (Jeucken, 2004). Further, a recent study in Pakistan indicates that regulators' pressure is among the major determinants of compliance (Padda & Asim, 2019). The interviewees agreed with these claims and stated that their green banking initiatives would be easy to adopt if they have little legal power to curb green practices. Comment from an interviewee in support is worth mentioning:

"..... again because of no pressure from the regulator. No one is asking, a circular of green banking came in 2017, and then there is silence. From the government side if we see practically, then we have not seen anything in this regard from the government unless there will be no pressure work will not be done on it." (SSTB-20).

"... .. But the policy that comes from the government or regulator, its implementation will be on a very vast level, and its impact will come as the same." (Bank 18-I).

Similar findings emerged from some recent studies on Pakistan (Samad et al., 2015) where it was found that the penalty effect is stronger in Pakistan in ensuring environmental compliance. In addition, many studies argue that the influence of culture has a huge impact on the level of compliance such as (Mazzi et al., 2018; AlKalbani et al., 2019; Bussmann & Niemeczek, 2019; Vitolla et al., 2019). The same has been highlighted by many interviewees for example an interviewee opined as:

"Generally, there is no such trend that people associate their lifestyle with these things. If people go towards green or renewable sources of energy, then they will not go towards this for the sake of the protection of the environment. Peoples think about it from the economic perspective if it is less costly, then they will go for it. So, there is a lack of awareness and mindset, due to which green banking will remain challenging." (SSIB-21).

### Level in Each Area of Green Banking

Especially, about the least implemented area that is environmental risk management interviewees agreed and reported such claims in their comments that unawareness and cultural effects causing difficulties in obtaining documents from customers and convincing the borrowers. Besides, lack of pressure, the nonexistence of legal power, and insufficient incentives create a lack of benchmarking. Further higher standards set by regulatory authorities are not compatible with the infrastructure of the country. However, the involvement of different stakeholders may lead to power and interest influence identified by Scholes et al. (2002), the lack of legal power and different interest of stakeholders is one of the reasons for low implementation. Two comments in this regard are worth mentioning here:

“... due to unawareness of the clients, sometimes clients asked, why you are asking us to reduce the risk or what is your concern if we are working on risk. So, we are facing the difficulty of convincing clients to comply with the environmental rule so their rating can be improved, and they become eligible for financing. Further, there are difficulties in making procedures, manuals, and general checklist and factors internal rating. Our risk managers are developing these on their own, as every bank is developing these as per their requirements.” (Bank 15-I)

“... But in environmental risk management, there involved many authorities, regulatory bodies, and some government agencies for controlling different things and multiple external stakeholders’ involvement, so, it is difficult to adopt.” (Bank 14-T).

On the other side, in sub-areas, role and responsibility, and own impact reduction, the level of implementation is higher. When were interviewees asked why it is so? They have opined that because these areas are related to inside actions and hence relatively easy to implement and provide incentives such as saving of cost, and a better image of the bank. Especially, banks need to create and maintain a bank brand image to enhance customers’ satisfaction and loyalty (Onyancha, 2013). The most notifying comments are:

“Own impact reduction is a controlled area for a bank because it is an inside action, a bank, its employees, there are some rules and regulations, some dos and dons, it is a culture creating thing and comparatively easier.” (Bank 14-T).

“See, the benefits if we see from our perspective, and in the long run from the second pillar that is the own impact reduction. In that pillar, the long-term benefit is in the form of cost-saving, and it can be achieved in the sense that if you employed efficient energy resources, and you have to spend a one-time cost, and after that if it is sustainable then it will reduce your running cost. Secondly, if we go to a paperless environment, then the expenditure of banks on paper will also be reduced.” (Bank 08-T).

However, in Islamic banks, the level of implementation of green banking is higher than in traditional banks. The results support Chapra’s model of Islamic banking which states that the objective of Islamic banks is not solely profit-driven, rather endorsing Islamic norms, values, and welfare of all stakeholders must be at a priority of Islamic banks (Chapra, 2016). The interviewees also identified a specific factor for Islamic banks that is the fulfillment of SCR and Shariah requirements. Complying with Shariah requirements is an essential obligation that must be fulfilled by Islamic financial institutions (Ningsih, 2020). Two comments from interviewees further support the arguments and worth mentioning here:

“For example, I have mentioned that compliance with the regulatory requirement is similar to fulfilling the shariah requirements. Allah says,

أَطِيعُوا اللَّهَ وَأَطِيعُوا الرَّسُولَ وَأُولَى الْأَمْرِ مِنْكُمْ

Follow the permissible rules of the ruler. On one side, you are doing compliance with regulatory and shariah requirements. On the other side, the element of Maqasid-e-Shariah that is the protection of life is also violating if you are polluting the environment. So, it is also against our Maqasid-e-Shariah. Thirdly, when you utilize the resources efficiently, then you can also gain profit maximization. If you follow the green banking guidelines, then your resources will be efficiently utilized. So, “not wasting resources” is also the requirement of Shariah, even it is not allowed to waste the water in ablution, then how in other things “ISRAF” will be allowed. So, it is also a shariah requirement. Secondly, profit will also be maximized, when your resources will efficiently be utilized, then it will result in cost-cutting, and profit will be maximized.” (SSTB-22).

“Many people who have no understating of Islamic banking, but they want to do work in the name of ethical banking, they want to do work with an environmentally friendly bank. If Islamic banks adopt it, then not only the customer of Islamic banks will come, but they will be happy that their bank is Islamic as well as ethical, and environmentally friendly too. And the people who have no interest in Islam, but like the ethics and have thought of being environment friendly, will also attract by this and came towards Islamic banking. For us, it is a double bottom line if we do good work from an environment-friendly perspective then it is a

صدقة از جاریه

if we plant a tree and start the campaign of planting trees then it is a

صدقة از جاریه

So, we have a double reward. It is a double bottom line. It will reward not only in this world but also in the hereafter. So, there should be a double bottom line approach in Islamic banks.” (SSIB-25).

### Level in Each Sub-Area of Green Banking

In sub-areas related to role and responsibility, there is a lack of implementation in green audits, among the identified factors the lack of knowledge and skills leads to the lack of skilled persons in the areas of green banking. A recent study by Qureshi & Hussain (2020) also underpins the importance of skills and knowledge which leads to the lack of green products, the arguments of this study are further supported by the current survey where overall 40% of banks are focusing on green products. The comment of an interviewee is worth mentioning here:

“You have seen that in green, ISP has launched some educational projects now. Otherwise, there is no green educational system here, no degree programs here. So, when there are programs here, and people will get the education from these programs, as well as the implementation side, then it will perform, and there will be new products. So, education should be there, even there is no syllabus system, and you are watching it in your Ph.D. program.” (Bank 13-T)

In green business facilitation, due to lack of pressure on banks and lack of legal power, there is less compliance in exploring the international funding options for green investment and financing and developing the green portfolio. The lack of funding options is another reason for the low implementation of green banking. The same has been demanded by a green banking officer as:

“..... So, such incentives should be there, so that this thing takes some shape, or structure, at this point, it is not forming any shape.” (Bank 03-T)

Especially, Islamic banks are less focusing on exploring international funding options for green financing and investment, green products, services, and advisory. The less focus is due to the non-availability of demand for such products which is due to the lack of awareness because lack of awareness and environmental knowledge is one factor hindering the sustainability of renewable energy resources (Yadav et al., 2020) and had a significant impact on green purchase intentions (Lavuri & Susandy, 2020). Also, Islamic banks are suffering from higher costs, and as per Jeuken’s model of green banking being in the defensive phase, they see these all initiatives as cost due to lack of demand. The comment of an interviewee in support is worth mentioning here:

“There are two things, either there will be demand, or there will be incentive. You can see the market if there is some work in the market, then I can participate, but if there is no work, or there is no such demand in the market, and under these circumstances, if there is no such demand in the market yet and if I do it, then it is such that I have to do it at my own.” (Bank 03-T)



Further, due to a lack of skills and knowledge Islamic banks are not categorizing risk. Besides, Islamic banks are suffering from higher costs, and it is observed in many studies e.g. (Beck et al., 2010; Salman & Nawaz, 2018). This may be another reason that despite a higher level of implementation in own impact reduction the least implemented area is the development of green branch due to initial high-level cost.

## CONCLUSION

The implementation at the industry level in all areas of green banking is low due to lack of awareness, knowledge, and skills, lack of pressure on banks, lack of incentives, lack of legal power, culture, the culture of adopting new things, and infrastructure. Except in the area of role and responsibility and own impact reductions, due to being an inside action and initiatives, and hence easy to implement, and offer saving of cost, soft image of the bank, and fulfillment of SCR and Shariah requirements. The higher level of green banking in Islamic banks overall and in all four areas of green banking is due to the objective theory of Islamic banking because that they see green banking not as a regulatory requirement rather than they take it as a matter of fulfilling Shariah requirements and reducing reputational risk. Similarly, in different sub-areas related to role and responsibility, green business facilitation, environmental risk management, and own impact reduction, although, Islamic banks are leading in all areas, however, the most and least implemented area is the same for both types of banks except for green business facilitation and environmental risk management due to lack of benchmarking, higher standards sets by regulatory authorities, obtaining documents from customers, convincing the borrowers, lack of skilled persons, non-availability of demand and involvement of different stakeholders. The identified factors and their aftereffects need immediate and serious attention from regulators. A wider policy framework with revised guidelines needs to be devised at the earliest to strengthen the smooth operation of the Islamic banking industry of Pakistan because the level of green banking is the level of Maqasid-e-Shariah in Islamic banks. However, being a matter of fiduciary responsibility, the fulfillment of Maqasid-e-Shariah, and saving the reputation, faster and effective measurements are required from Islamic banks to maintain and enhance the achieved level before the arrival of the policy framework.

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