

# GREEN BANKING PRACTICES OF STATE BANK OF INDIA – SOME INSIGHTS

## *Abstract*

"Green banking" refers to a set of banking procedures that attempts to preserve natural resources and save the environment while taking into consideration all social and environmental concerns. It's also known as ethical banking or sustainable banking. State Bank of India, the largest public sector bank in India is putting its humble efforts in reducing the carbon footprints by eliminating the paper printout work to the maximum extent possible. Deploying solar power systems in the bank as well as ATMs. The present paper is a modest attempt to examine whether customers are aware of green banking products and services or not, whether customers are satisfied with the green banking practices or not. It is also intended to study whether there is significant difference between the satisfaction towards green banking practices with regard to age of the customers. The study has been carried out by administering a structured questionnaire among 400 Hyderabad based customers and analyzed with the help of suitable statistical tools.

**Keywords:** Carbon footprints, Solar power systems, ATM, Environment, Green banking.

## **Introduction**

In its simplest form, green banking is the supply of loans, deposits, and other financial products (mutual funds and other investment products, custodian services, etc.) that would have a favorable influence on the environment. **According to Indian Banks Association (IBA, 2014)** "Green Bank is a typical bank that takes into account all social, environmental, and ecological concerns with a goal to preserve the environment and the natural resources".

Green banking activities are not, by definition, the introduction of paperless statements, electronic client communication, internal initiatives to conserve energy, paper, and toner, various internal campaigns aimed at raising and maintaining staff awareness of environmental issues, or PR and marketing initiatives in this direction. This is so because despite the fact that all of these initiatives represent core banking principles and are used in many other types of businesses that

are not banks but are nonetheless very significant to the organization and to society, they do not.

### **Review of Literature:**

Alexander, Kern (2014) examined the supporting data for the claim that systematic environmental issues and the stability of the banking industry are related. It looked at how Basel III handles systemic environmental hazards at the moment. It also took into account the alternative financial policy choices to Basel III. This involved looking at the effectiveness of a few additional monetary policy actions as well as using cutting-edge financial tools, such as “Green” asset-backed securities (ABS), to increase the flow of bank funding to eco-friendly economic activities. Hossain, Sharif & Kalince, Tanvir Ahmed (2014), conducted a study on “Green Banking: Nexus Bank’s performance”, to find the impact of Green Banking on banks’ performance using cross section data of 45 banks in the year 2012. For this study, six different variables namely; loans and advances, deposits and other accounts, paid-up capital, investments, Green Banking, and profit after tax were considered. The Results found Green Banking has a significant positive impact on Investment and has a significant negative impact on banks’ performance.

Islam, Tamanna and others (2014), has conducted a study on “Adopting Green: from the perspective of Private Commercial Banks in Bangladesh”, in order to know the reasons for adopting Green Banking practices in Bangladesh. They also tried to list out the reasons for adopting “Green” in Private Commercial Banks. Ahmad and others (2013), in their research study, focused on understanding the activities of Bangladeshi commercial banks regarding Green Banking and reasons behind adopting the Green Banking. Bimha, Alfred & Nhamo, Godwell (2013), have conducted a study on “Conceptual framework for carbon footprinting in the South African Banking Sector”, conceptualizing the efforts made by banks in South Africa to put phenomenal efforts to prevent climate change. The study explained how the banks can adopt the green banking practices to avoid carbon wastage. The World Bank’s report (2012), titled “Inclusive Green Growth: the Pathway to Sustainable Development” explored how green growth affects economic strategies and how it affects human or environmental welfare. The report also analyzes how infrastructure development and investment affect the creation of stronger green growth policies. It has also discovered that in order to meet the needs of the world’s poor countries for development, sustainable growth is crucial on a very wide scale.

### **Objectives of the study:**

The basic objective of the study is to examine whether the customers of SBI are aware of green banking or not, what are the green banking products/services are known to them and whether the customers are satisfied with the SBI green banking practices or not. Also it is intended to examine whether there is any significant difference between the satisfaction levels towards green banking practices in respect of age.

For the present study, 400 Hyderabad based SBI customers are taken as sample and a structured questionnaire has been administered. The responses are processed and the inferences are drawn based on the suitable statistical tests.

Table No - 1: Profile of the Respondents.

	<b>Particulars</b>	<b>No. of Respondents</b>	<b>Percentage (%)</b>
GENDER	Male	173	43.3
	Female	227	56.8
	<b>Total</b>	<b>400</b>	<b>100</b>
AGE (Years)	Below 20	45	11.3
	21-30	170	42.5
	31-40	119	29.8
	41-50	43	10.8
	Above 50	23	5.8
	<b>Total</b>	<b>400</b>	<b>100</b>

Source: Primary Data

The above table (table 1) represents the information pertaining to profile of the respondents. Gender wise respondents are: out of the total 400 respondents 173 respondents are male which accounts for 43.3% and remaining 227 respondents are female which constitutes 56.8%.

On the basis of age respondents are as follows: out of 400 respondents, 45 respondents are aged less than 20 years, 170 respondents are in the age group of 21-30 years, 119 respondents are in the age group of 31-40 years, 43 respondents are aged between 41-50 years remaining 23 respondents are aged more than 50 years. From the above table it is clear that 42.5% of the respondents are in the age group of 21 to 30 years. About 30% are in the age bracket of 31 to 40 years.

Table No - 2: Awareness towards Green banking.

Aware of Green Banking	No. of Respondents	Percentage (%)
Yes	345	86.2
No	55	13.8
<b>Total</b>	<b>400</b>	<b>100</b>

Source: Primary Data.

The above table (table 2) reveals the information regarding awareness of the respondents towards green banking practices. The table shows that out of 400 respondents, 345 respondents aware of green banking practices which represents 86.3%, remaining 55 respondents are not aware of green banking which accounts for 13.8%. Hence, it can be drawn that majority of the respondents are aware of green banking practices.

Table No - 3: Awareness towards Green Banking Products.

Green banking Products	Yes		NO		Total	
	F	%	F	%	F	%
ATM	339	84.8%	61	15.3%	400	100.0%
Internet banking	341	85.3%	59	14.8%	400	100.0%
Mobile banking	265	66.3%	135	33.8%	400	100.0%
Telebanking	294	73.5%	106	26.5%	400	100.0%
SMS Banking	306	76.5%	94	23.5%	400	100.0%
E- Statements	309	77.3%	91	22.8%	400	100.0%
Green home loans	298	74.5%	102	25.5%	400	100.0%
Green Mortgage	278	69.5%	122	30.5%	400	100.0%
Green Car loan	290	72.5%	110	27.5%	400	100.0%
Green cards (Deposit cards)	272	68.0%	128	32.0%	400	100.0%
Green Financing	259	64.8%	141	35.3%	400	100.0%
Green Certificate of Deposits (GCDs)	254	63.5%	146	36.5%	400	100.0%
Green Bonds	281	70.3%	119	29.8%	400	100.0%
Green credit cards	298	74.5%	102	25.5%	400	100.0%
Green Home Equity Loans	300	75.0%	100	25.0%	400	100.0%

Source: Primary Data.

The table 3 depicts the information regarding awareness towards various green banking products. The table shows that majority of the respondents are aware of internet banking and ATM. In respect of Green Certificate of Deposits and Green financing only 254 and 259 respondents have responded as they are aware of the products.it indicates that Internet banking, ATMs, E-Statements, SMS banking and Green home equity loans are known to 75% or more than 75% of the respondents.

Table No - 4: Usage of green banking products.

Green Banking Products	Yes		No		Total
	No.	%	No.	%	No.
ATM	400	100.0%	0	0.0%	400
Internet banking	392	98.0%	8	2.0%	400
Mobile banking	354	88.5%	46	11.5%	400
Telebanking	326	81.5%	74	18.5%	400
SMS Banking	360	90.0%	40	10.0%	400
E- Statements	342	85.5%	58	14.5%	400
Green home loans	378	94.5%	22	5.5%	400
Green Mortgage	367	91.8%	33	8.3%	400
Green Car loan	361	90.3%	39	9.8%	400
Green cards (Deposit cards)	330	82.5%	70	17.5%	400
Green Financing	312	78.0%	88	22.0%	400
Green Certificate of Deposits (GCD's)	291	72.8%	109	27.3%	400
Green Bonds	294	73.5%	106	26.5%	400
Green credit cards	319	79.8%	81	20.3%	400
Green Home Equity Loans	315	78.8%	85	21.3%	400

**Source: Primary Data.**

The table 4 reveals usage of green banking products by respondents. There are totally 15 products are available. Out of 400 respondents, surprisingly 400 respondents are using ATM's which equals to 100%. Secondly most used product is internet banking by 392 respondents which holds 98%, followed by 378 respondents is using Green Home loans which carry 94.5%. Some other products like Green Mortgage (91.8%), Green Car loan (90.3%) and SMS banking is

represents 90% of respondents in using. The products which are used less are; firstly 291 respondents are using Green Certificate of Deposits (GCD's) which carries 72.8%. Secondly 294 respondents are using Green Bonds which holds 73.5% and other products like green financing by 312 respondents which equals to 78%. Majority of the respondents expressed that ATM's and Internet banking products are most used and GCD's and Green Bonds less used green banking products.

From the tables 3 & 4, it is observed that there are several customers who are not aware that they products are green banking products but they are using them. For example, 339 respondents have responded that they are aware that ATM is one of the green banking products and rest 61 responded that they are now aware. But when it is coming to use of ATM, all the 400 respondents have responded that they are using ATM. It is also seen in respect of several other products.

Table No - 5: Overall Satisfactions towards Green Banking Practices.

<b>Green Banking Information.</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Rank</b>
Satisfaction of using Green Banking Products offered by SBI	400	3.9117	.66927	4
Green banking Services Provided by SBI	400	3.9709	.59700	3
Waste management and carbon footprints	400	4.0232	.62202	2

Level of satisfaction in deriving the benefits of Green Banking Practices	400	4.1197	.60477	1
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**Source: Primary Data.**

The above table 5 represents the information about the Overall satisfaction towards green banking practices. To measure the satisfaction have incorporated Mean value and ranked accordingly. Based on satisfactory levels Respondents have rated rank wise of green banking Practices in a prioritized way. There are totally 4 green banking key factors are ranked from 1<sup>st</sup> rank to 4<sup>th</sup> rank. Mean value above 2.5 is considered as highly positive and below 2.5 value is understood as negative.

The present table (table 5) depicts the overall satisfaction towards green banking practices. Majority of the respondents have ranked 1<sup>st</sup> to the satisfaction in deriving the benefits of green banking practices with 4.11 mean value which is highly positive. 2<sup>nd</sup> rank is allocated to Waste management and carbon footprints with 4.02 Mean value which also positive. 3<sup>rd</sup> rank is bagged by the Green banking Services Provided by SBI with 3.97 mean value and finally 4<sup>th</sup> rank is allocated to Satisfaction of using Green Banking Products offered by SBI with 3.91 Mean value which is a positive value.

**Null Hypothesis (H0):** “There is no significant difference between the respondents satisfaction towards green banking practices with regard to age”.

Alternative Hypothesis (H1): “There is significant difference between the respondents perception towards green banking practices with regard to age”.

Test tool used: One-way ANOVA. Results are as follows:

Table No - 6: Descriptive Statistics for Customer Satisfaction towards greens banking Practices.

		N	Mean	Std. Deviation	Std. Error
Satisfaction of using Green Banking Products offered by SBI	Below 20	45	3.7569	.55873	.08329
	21-30	170	4.0511	.63968	.04906
	31-40	119	3.8356	.65317	.05988
	41-50	43	3.8590	.63549	.09691

	Above 50	23	3.6766	1.00154	.20883
	Total	400	3.9117	.66927	.03346
Green banking Services Provided by SBI	Below 20	45	3.8361	.62433	.09307
	21-30	170	4.0574	.58268	.04469
	31-40	119	3.9097	.59503	.05455
	41-50	43	3.9651	.57692	.08798
	Above 50	23	3.9239	.65142	.13583
	Total	400	3.9709	.59700	.02985
Waste management and carbon footprints with regard to this kindly express	Below 20	45	3.8254	.71356	.10637
	21-30	170	4.1244	.57345	.04398
	31-40	119	3.9916	.58172	.05333
	41-50	43	3.9701	.63930	.09749
	Above 50	23	3.9255	.83507	.17412
	Total	400	4.0232	.62202	.03110
Level of satisfaction in deriving the benefits of Green Banking Practices	Below 20	45	3.9037	.64944	.09681
	21-30	170	4.2203	.56701	.04349
	31-40	119	4.0962	.61507	.05638
	41-50	43	4.1059	.58642	.08943
	Above 50	23	3.9469	.65295	.13615
	Total	400	4.1197	.60477	.03024

**Source: Primary Data.**

The present table 6 represents the information about customer satisfaction towards green banking practices with regard to Age. There are totally 4 dimensions on which respondents have expressed their opinion towards satisfaction towards green banking practices. To measure the customer opinion has taken Mean value as basis. This states if a mean value is more than 2.5 is highly positive and if it is less than 2.5 value is highly negative. Maximum value is 5.

The above table (table 6) depicts customer satisfaction towards green banking practices with regard to age. Age wise respondents are displayed that out of 400 samples, 45 respondents are having below 20 years with 11.3%, followed by 170 respondents are in the age group of 21-30

years which holds 42.5%. 119 respondents are under the age group of 31-40 years with 29.8%. 43 respondents are from the age group of 41-50 years with 10.8%. Rest 23 respondents are Above 50 years which equals to 5.8%. Here for the purpose of Convenience Mean value is considered on the basis of total respondents.

The first dimension of satisfaction towards green banking Practices which is **“Satisfaction of using Green Banking Products offered by SBI”** on that all the age group respondents have expressed positively with 3.91 Mean Value. Which also highly positive towards satisfactory levels. The Second dimension of satisfaction towards green banking Practices which is **“Green banking Services Provided by SBI”** on that all the age group respondents have expressed positively with 3.97 Mean Value. This talks highly positive towards satisfactory levels.

The Third dimension of satisfaction towards green banking Practices which is **“Waste management and carbon footprints”** on that all the age group respondents have expressed positively with 4.02 Mean Value. They have given positive opinion towards satisfactory levels.

The Fourth dimension of satisfaction towards green banking Practices which is **“Level of satisfaction in deriving the benefits of Green Banking Practices”** on that all the age group respondents have expressed positively with 4.11 Mean Value. Which is also highly positive in terms of satisfactory levels. Overall, satisfaction towards 4 dimensions of Green banking practices is fully positive with regard to Age of the respondents. This is a good sign to move ahead towards sustainable development.

**Table No - 7: ONE-WAY ANOVA**

		Sum of Squares	df	Mean Square	F	Sig.	Hypothesis Result
Satisfaction of using Green Banking Products offered by SBI	Between Groups	6.461	4	1.615	3.704	.006	Null Hypothesis Rejected
	Within Groups	172.262	395	.436			
	Total	178.722	399				
Green banking Services	Between	2.587	4	.647	1.829	.122	Null

Provided by SBI	Groups						Hypothesis Accepted
	Within Groups	139.622	395	.353			
	Total	142.209	399				
Waste management and carbon footprints with regard to this kindly express	Between Groups	3.960	4	.990	2.600	.036	Null Hypothesis Rejected
	Within Groups	150.416	395	.381			
	Total	154.376	399				
Level of satisfaction in deriving the benefits of Green Banking Practices	Between Groups	4.580	4	1.145	3.199	.013	Null Hypothesis Rejected
	Within Groups	141.354	395	.358			
	Total	145.933	399				

**Source: Primary Data.**

The above table 7 is depicting the results of One-Way ANOVA in four dimensions of green banking practices towards satisfaction with regard to Age. Hypothesis is validating on the basis of significance levels. If P value (Significance Value) is less than 0.05 then Null Hypothesis is rejected and alternative Hypothesis is accepted. In other hand if P value is more than 0.05 then Null Hypothesis is accepted and alternative Hypothesis is rejected.

The first dimension is “Satisfaction of using Green Banking Products offered by SBI” showing the ANOVA table value as ( $0.006 < 0.05$ ) which is less than P value so here Null Hypothesis is rejected and Alternative Hypothesis is accepted. Conclusion is there is a significant difference between the respondents perception towards Green banking practices with Regard to age. The second dimension is” Green banking Services Provided by SBI” represents the ANOVA table value as ( $0.122 > 0.05$ ) which is More than P value so here Null Hypothesis is accepted and Alternative Hypothesis is rejected. It is also representing that there is No significant difference between respondents perception towards Green banking practices with regard to age.

The third dimension is “Waste management and carbon footprints” representing the ANOVA table value as ( $0.036 < 0.05$ ) which is less than P value so Null Hypothesis is rejected and Alternative Hypothesis is accepted. This means there is a significant difference between the respondents perception towards Green banking practices with regard to age. The fourth dimension is “Level of satisfaction in deriving the benefits of Green Banking Practices” representing the

ANOVA table value as  $(0.013 > 0.05)$  which is less than P value so Null Hypothesis is rejected and Alternative Hypothesis is accepted. This means there is a significant difference between the respondents perception towards Green banking practices with regard to age.

### **Conclusion:**

The study reveals that majority of the customers are aware of green banking products and services. Out of 400 respondents, 345 respondents responded that they are aware of green banking. Though the study denotes positive sign, there are about 13.75% of the respondents expressed that they are not aware of green banking. To achieve the intended targets it is essential to create awareness amongst the customers in this direction. The study also reiterates that there is significant difference between the customers satisfaction towards green banking with regard to age. It can be concluded that age is one of the influencing factors.

### **References:**

1. Alexander, Kern. (2014). Stability and Sustainability in Banking Reform: Are Environmental Risks Missing in Basel III? A report by Cambridge Institute for Sustainability Leadership (CISL) and United Nations Environment Program Finance Initiative (UNEP FI)'s Banking commission.
2. Hossain, Sharif. & Kalince, Tanvir Ahmed. (2014). Green Banking Nexus Bank's Performance. *Swiss Journal of Research in Business and Social Sciences*. 1(3). pp. 01-16.
3. Islam. Tamanna, Sharmeen, Kashfia. & Rahman, Sadia. (2014). Adopting Green: From the Perspective of Private Commercial Banks in Bangladesh. *Proceedings of Annual Shanghai Business, Economics and Finance Conference*. Shanghai, China. pp. 1-8.
4. Ahmad, Fayez. Zayed, Nurul. & Harun, Ashraf. (2013). Factors Behind the Adoption of Green Banking by Bangladeshi Commercial Banks. *ASA University Review*. 7(2). 241-255.
5. Bimha, Alfred. & Nhamo, Godwell. (2013). Conceptual Framework for Carbon Footprinting in the South African Banking Sector. *Banks & Bank Systems, South Africa*, 8(4), 19-33.
6. *The World Bank's Report*. (2012). Inclusive Green Growth: the pathway to Sustainable Development. Washington, D.C.

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