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EMBRACING SUSTAINABILITY: THE ROLE OF GREEN BANKING IN FOSTERING ENVIRONMENTAL STEWARDSHIP

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Abstract: Green banking has emerged as a pivotal strategy in the financial sector to address pressing environmental challenges while fostering sustainable development. This abstract delves into the concept of green banking, exploring its significance, principles, and impact on both financial institutions and the broader ecosystem. Green banking encompasses a range of practices aimed at integrating environmental considerations into banking operations, investment decisions, and customer relations. Key principles include promoting renewable energy financing, encouraging energy efficiency initiatives, supporting eco-friendly projects, and incorporating environmental risk management strategies. Financial institutions engaging in green banking not only contribute to mitigating climate change but also enhance their resilience to environmental risks. By incorporating environmental criteria into lending and investment decisions, banks can spur innovation in sustainable technologies and industries, facilitating the transition to a low-carbon economy. Moreover, green banking aligns with evolving consumer preferences and regulatory frameworks, fostering trust and loyalty among environmentally conscious customers. Through green products and services such as green loans, savings accounts, and investment portfolios, banks can empower individuals and businesses to make environmentally responsible choices. Furthermore, green banking initiatives promote transparency and accountability, as financial institutions disclose their environmental performance and impact. This transparency not only strengthens stakeholder trust but also facilitates the mobilization of green capital from investors seeking sustainable investment opportunities. In conclusion, green banking represents a transformative approach towards achieving environmental sustainability while fostering economic prosperity. By integrating environmental considerations into their core operations, financial institutions can play a pivotal role in advancing the global transition to a greener, more sustainable future. Further, the study covered the three major districts of Punjab i.e. Amritsar, Jalandhar and Ludhiana. A total of 197 questionnaires were administered to the bank employees developed on 5 point likert scale and out of 197 questionnaires, 174 were found complete and useful for further analysis. Exploratory factor analysis technique has been used to extract the factors and data analysis. In conclusion, by embracing green banking principles and implementing proactive initiatives, financial institutions can play a pivotal role in driving the transition to a more sustainable and resilient economy, benefiting both present and future generations.

Keywords: Green Banking, Sustainable, Development, Banks and Environment.

Introduction: In recent years, the imperative for environmental sustainability has become increasingly evident, prompting a paradigm shift across various sectors, including banking and finance. Green banking has emerged as a pivotal strategy in this transformation, offering a pathway for financial institutions to align their operations with environmental stewardship while driving

sustainable development. The concept of green banking revolves around integrating environmental considerations into banking practices, investment decisions, and customer relations. This proactive approach reflects recognition of the interconnectedness between financial activities and environmental outcomes, emphasizing the role of banks in addressing pressing environmental challenges such as climate change, biodiversity loss, and resource depletion. Green banking activities encompass a diverse range of initiatives undertaken by financial institutions to integrate environmental considerations into their operations, investment decisions, and customer relations. These activities are designed to promote sustainability, mitigate environmental risks, and support the transition to a low-carbon economy. Some common green banking activities include: **Financing Renewable Energy Projects:** Banks provide funding for renewable energy projects such as solar, wind, hydroelectric, and biomass energy generation. By financing these projects, banks contribute to reducing reliance on fossil fuels and lowering greenhouse gas emissions. **Energy Efficiency Financing:** Banks offer loans and financial incentives to individuals and businesses for implementing energy-efficient technologies and practices. This may include funding for energy-efficient building upgrades, appliance replacements, and industrial efficiency measures. **Green Bonds Issuance:** Banks facilitate the issuance of green bonds, which are financial instruments used to raise capital for environmentally sustainable projects. Proceeds from green bonds are earmarked for initiatives such as renewable energy development, sustainable transportation, and climate adaptation projects. **Environmental Risk Assessment:** Banks conduct environmental risk assessments to evaluate the environmental impact of their lending and investment activities. This includes assessing the potential risks associated with financing projects in environmentally sensitive areas or industries with significant environmental footprints. **Sustainable Investment Portfolios:** Banks offer investment products that prioritize environmental sustainability, such as green mutual funds, exchange-traded funds (ETFs), and impact investment portfolios. These portfolios allocate capital to companies and projects with strong environmental performance and positive social impact. **Promotion of Green Products and Services:** Banks develop and promote green financial products and services tailored to environmentally conscious customers. This may include green savings accounts, eco-friendly credit cards, and loans for green home improvements or electric vehicles. **Corporate Sustainability Financing:** Banks provide financing and advisory services to support corporate sustainability initiatives, including carbon reduction strategies, sustainable supply chain management, and environmental certifications. **Community Engagement and Education:** Banks engage with local communities to raise awareness about environmental issues and promote sustainable practices. This may involve sponsoring environmental education programs, organizing community clean-up events, and supporting environmental advocacy initiatives. **Carbon Offsetting Programs:** Some banks offer carbon offsetting programs that allow customers to mitigate their carbon footprint by investing in carbon reduction projects or purchasing carbon credits. **Transparency and Reporting:** Banks disclose their environmental performance and impact through sustainability reporting and transparency initiatives. This includes reporting on greenhouse gas emissions, environmental policies, and progress towards environmental goals.

Overall, green banking activities play a crucial role in promoting environmental sustainability, fostering responsible financial practices, and driving positive change towards a more sustainable future.

Review of Literature: Ivanovic, Zubovic, Mitic (2017) studied review of relationship between Sustainable development and green economy. The paper stated that there are some identical elements namely, stakeholders and economic aspects of their profit; environmental protection; and social matters; and goodwill of socially responsible business. The aim of green economy includes economy; society; and environment. The paper also states green banking and role of equator principles in green economy. **Kumar,Prakash (2017)** determined the status quo of banking sector of India towards adoption of sustainable banking practice. They found out that the regulatory framework pertaining to the banking sector of India needs to be improved even though a set direction has been given by RBI. Further research on the concept of sustainable practices in their sector can be done that are longitudinal and not limited to a set frame of time which will help in deciphering better strategies to be implemented by RBI. **Masud et al. (2017)** recognized that Bangladesh has 29 environmental policies although the country's environ- mental situation is the most sensitive on a global circumstance. BB presented its final simplified version green guidelines in 2013 and affirmed the objective of green reporting globalization by introducing Global Reporting Initiative (GRI) and external confirmation of the report from 2015. GRI guidelines are established on the idea of the triple bottom line while BB's green reporting rules mostly cover an environmental methodology. Furthermore, it is also considered that GIRL guiding principles are the most frequently and extensively used sustainable reporting construction for the assessment, arrangement, and reporting of sustainability performances of both developed and developing countries. **Risal and Joshi (2019)** studied the impact of green banking practices on environmental performance of banks. This study was conducted in Nepal. The study is based on Cross sectional qualitative research. Employees related practices; operation related practices; customer related and policy related practices had been considered as independent variables and bank's environmental performance has been taken as dependent variable. Statistical techniques such as Cronbach alpha; correlation analysis; regression analysis has been used. Data has been collected from 189 commercial bankers and 29 samples were collected for pilot study. The study concluded that there is positive impact of green banking practices on environmental performance of banks. **Assis and Khalam (2020)** conducted the conceptual study on Solar ATM as a green banking tool for State bank of India. This research is totally based on Secondary data. The study states green banking practices and green banking initiatives in in India. Working mechanism of Solar ATM has been also discussed in this study. The study concluded that the installation of Solar ATM may be the safe way of banking transaction for the customer.

Research Methodology: Primary data has been collected with the help of well structured questionnaire from the different banks. The study covered the three major districts of Punjab i.e. Amritsar, Jalandhar and Ludhiana. A total of 197 questionnaires were administered to the bank employees developed on 5 point likert scale from (5=Strongly Disagree (SD); 4= Disagree (D); 3=Neutral (N); 2=Agree (A); 1=Strongly Agree (SA)) and out of 197 questionnaires, 174 were

found complete and useful for further analysis. For the analysis and examination of the data, exploratory factor analysis has been used. The analysis in which invisible or latent factors are calculated for understanding the effect between the existing variables with respect to major factor is known as exploratory factor analysis technique. When multivariable is involved in the study, complexity increases. To reduce this complexity exploratory factor analysis is used in statistics for facilitating conjecture of hidden variables which may beneath the data is responsible for emergence of some pattern which can be correlated to the obvious or visible variables in the study.

Data Analysis and Interpretation:

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.853
Bartlett's Test of Sphericity	Approx. Chi-Square	2935.554
	Df	497
	Sig.	0.000

Source: Compiled from primary data

Results from the above table depicts that significant value of KMO measure of sampling adequacy is 0.853, bartlett's test of sphericity is 0.000, df (497) and value of chi-square test is 2935.554 which represents that satisfactory relationship be present among the variables to carry out factor analysis. It also shows that there was sufficient correlation among all the variables/statements.

Rotated Component Matrix:

Green banking promotes net banking.	.841			
Green banking services are available at any time from any location.	.729			
It is faster than traditional banking.	.723			
It helps to avoid long queue in banking halls.	.770			
Online bill payments are easier to make.		.867		
Various bank branches to be opened to promote green business.		.833		
It does not burden me to use green banking practices.		.826		
It reduces the risk of physical handling of the cash.		.815		
I am concerned about the consequences of making mistakes while using green banking practices.			.853	
Green banking practices provides integrated process in single window of website.			.700	
I have seen other people use green banking practices which inspires me to do the same.			.651	

It does not use additional resources to use green banking practices.			.650	
Green banking practices provides better customer services.				.801
Green banking practices contributes in making our earth green.				.800
Eigen Values	7.685	2.435	2.046	1.841
% Variance	38.425	12.173	10.230	9.204
Cumulative % Variance	38.425	50.598	60.828	70.032
Scale Reliability Cronbach's Alpha Value	.954	.922	.970	.930

Source: Compiled from primary data

Findings, Conclusion and Suggestions:

Results showed that four factors have been extracted from the present study. These factors are given the name of "**Consciousness**", "**Green Banking Image**", "**Banking Actions Philosophy**" and "**Environmental Concern**". Green banking has emerged as a vital strategy for financial institutions to address environmental challenges, mitigate risks, and drive sustainable development. Through a range of proactive initiatives, including financing renewable energy projects, promoting energy efficiency, and offering green financial products, banks have the opportunity to align their operations with environmental stewardship while meeting the evolving needs of customers and investors. The adoption of green banking principles not only enhances the resilience and reputation of financial institutions but also contributes to the broader goal of transitioning towards a low-carbon, sustainable economy. By integrating environmental considerations into their core practices, banks can catalyze innovation, facilitate the deployment of clean technologies, and support the emergence of sustainable industries. Furthermore, green banking aligns with evolving regulatory frameworks and consumer preferences, positioning financial institutions as leaders in sustainability and responsible finance. By embracing transparency, accountability, and stakeholder engagement, banks can build trust and credibility while mobilizing capital towards environmentally beneficial projects and initiatives.

Suggestions for Future Action: Enhanced Collaboration: Financial institutions can collaborate with governments, NGOs, and other stakeholders to develop comprehensive strategies for promoting green banking and scaling up sustainable finance initiatives. **Innovation and Technology:** Banks can leverage technology and innovation to develop new green financial products, streamline environmental risk assessment processes, and enhance the efficiency of sustainable investment strategies. **Capacity Building:** Investing in employee training and development programs focused on environmental sustainability can enhance the expertise and capabilities of bank staff in integrating green banking principles into their daily operations.

Engagement with SMEs: Financial institutions can provide tailored financing solutions and advisory services to support small and medium-sized enterprises (SMEs) in adopting sustainable business practices and accessing green financing opportunities. **Customer Education:** Banks can engage with customers through educational campaigns, workshops, and online resources to raise awareness about the importance of green banking and empower individuals to make environmentally conscious financial decisions. **Long-Term Commitment:** Sustainable finance requires a long-term commitment from financial institutions, policymakers, and society as a whole. Banks should prioritize sustainability as a core value and integrate it into their strategic planning processes for lasting impact.

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