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EXPLORING THE SELECTION CRITERIA WHILE FINANCING THE GREEN PROJECTS FOR SUSTAINABILITY: AN EMPIRICAL STUDY

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Abstract
The global economy now faces three significant challenges: climate change, energy limitations, and financial instability. Economic growth at the expense of environmental health has led many nations to compromise their wealth. Green finance emerges as a critical solution to balance economic development with environmental sustainability, providing funding aimed at fostering sustainable progress and significantly reducing "greenhouse gas emissions and air pollution." This study examines the importance of establishing criteria for financing green projects. As environmental accountability gains momentum, financial institutions and investors are increasingly integrating "environmental, social, and governance factors alongside traditional financial metrics in their investment strategies." The growing emphasis on sustainability has heightened the demand for green financing, prompting financial entities to create specific selection standards for supporting eco-friendly initiatives. Through an empirical analysis of case studies and financial documentation, this research highlights the key criteria valued by financial bodies when assessing green projects. Major factors include environmental impact, adherence to international sustainability standards, economic viability, and technological innovation. Study survey was conducted among 203 people from financing institutes to know the selection criteria while financing the green projects for sustainability and the impact of financing green projects on sustainability and concludes that there is significant impact of financing green projects on sustainability.
Keywords: Green project, sustainability, finance, selection, criteria

Introduction

In the 21st century, green financing has emerged as a crucial aspect for both business growth and environmental sustainability. Both developed and developing nations must actively pursue green financing initiatives. Global investments in sustainable infrastructure are projected to reach approximately $40 trillion between 2012 and 2030. Green finance, a critical component of this transition, encompasses various financial strategies such as green credit, which compels financial institutions and banks to fund projects that address pollution control, ecological conservation, and environmental restoration (Yang, Long, & Chen, 2020). Numerous countries have initiated policies aimed at fostering eco-friendly businesses and advancing green technologies to meet their long-term environmental objectives. This includes accelerating the growth of green industries and promoting innovation in sustainable technologies.

Despite these efforts, industries continue to encounter significant financial barriers that hinder the adoption and development of green innovation. A major challenge is the difficulty in securing adequate funding for environmentally friendly projects, often due to the high risk and typically lower returns associated with green investments (Andersen, 2017). These financial constraints pose substantial obstacles to businesses striving for sustainable transformation.

In response to the increasing global consensus on the urgency of environmental action, green finance provides a structured approach to financial regulations and investment criteria that align with sustainable development goals (SDGs). This involves the creation of supportive financial systems and policies, including access to green financing, low-interest loans, tax incentives for sustainability-oriented initiatives, and institutional support for companies prioritizing environmental and social impact (Wang & Zhi, 2016).

These financial frameworks are essential in encouraging innovation, mitigating investment risk, and enabling responsible business scaling. By aligning financial mechanisms with sustainability goals, green finance not only facilitates economic growth but also promotes environmental stewardship and social well-being.

Programs aimed at achieving long-term climate objectives are being implemented, but financing constraints remain a significant barrier for firms. Green innovation often makes securing funding difficult, limiting businesses' ability to invest in eco-friendly technology as there is high uncertainty and lower profitability linked to green innovation.

Societal benefits to maintain a healthy environment and underscores the balance between economic activity and environmental sustainability, nurturing long-term societal progress are all promoted through green finance. This all is done by channelling funds into projects that promote “environmental sustainability, social equity, and economic resilience.” Green finance supports initiatives like “renewable energy, green infrastructure, and eco-friendly technologies,” which not only help mitigate climate change but also “create jobs, improve public health, and foster inclusive growth.” These outcomes are prioritized and green finance drives positive social impact while sanctioning long-term, sustainable economic development for societies worldwide. The "green" aspect of green finance is obvious through the distribution of social capital to different sectors such as “corporate governance, renewable energy, eco-friendly construction, climate resilience, and environmental protection” (Numan et al., 2023; Yuan & Gallagher, 2018).

A wide range of green financial products has emerged, such as “green bonds, green investments, green insurance, and carbon finance,” with expectations for new products to develop. Green bonds always come forward to reduce the risk and appeal to socially responsible investors. This gave significance green bonds in addressing climate change and funding sustainable development strategies (Tolliver et al., 2019; Flaherty et al., 2017). The need to explore the factors that enable businesses to participate in green finance (GF) increases the focus of governments and regulatory bodies on climate change and global warming. The importance of green innovation in public policy is highlighted by environmental pollution outwardness. The finances are directed by green finances into research and development for “clean energy and eco-friendly products and processes,” completing the green innovation process that supports environmental conservation. Financial limitations are eased and simplified through green finance policies for the progress of green innovation, benefiting industries that introduce new products, processes, services, and contribute to the global market. Green financing plays a crucial role in supporting sustainable energy projects, including renewable energy initiatives. Presently, green bonds and green insurance are two main mechanisms for financing businesses and startups that are environmentally focused. But at the same time there are challenges for both issuing companies and investors during the green bond procurement process. One of the most significant challenges faced by energy projects is carbon emissions (Kou, Yüksel & Dinçer, 2022), which contribute to serious health and environmental concerns. There is negative impact of high carbon emissions on environment and this emphasizes the need for both environmental protection and sustainable development. The business environment, particularly power and energy projects, is the foundation of any economy (Cortellini and Panetta, 2021). Therefore, these projects should prioritize methods

that drive sustainability. Urgent action is required to address these issues, which is why the importance of green energy projects has grown significantly. Financial technologies like the "Internet of Things (IoT), Artificial Intelligence (AI), cloud computing, blockchain, and robotics" are all offering promising solutions for green financing, as they all had shown their efficiency across sectors such as finance and sustainable energy projects. For India, green bonds are now one of the most significant components of financial and fiscal landscape that offers an effective means to fund projects aimed at sustainability and environmental protection. The government has implemented various incentives and tax benefits for investors in order to encourage the adoption of green bonds. The positive outcomes of green bonds in India have been promising, as it opens up new pathways for financing eco-friendly projects. It is essential for Government to continue supporting and promoting green bonds and foster an enabling environment which is essential for their growth. This approach will aid India's transition towards a more sustainable and greener future. Additionally, India can capitalize on the second-mover advantage by learning from the West's challenges and proactively addressing issues such as greenwashing, limited green, and the auditing of green bonds.

Literature Review

According to Amandeep and Sardana (2021), there is a significant role of "green bonds, green banks, and green investment funds" in "reducing pollution and greenhouse gas emissions and supporting economic growth" at the same time. As these financial instruments aims to make best use of stakeholder value while prioritizing "environmental sustainability and supporting renewable energy sources," they are recognized as an effective tool for promoting sustainable development. It seems like "green financing" are capable of balancing "economic and environmental benefits" as they promote low carbon emissions within society. Investing in green projects generates "green multiplier effect" which boosts economic activity and helps reduce carbon emissions.

Social preferences are highlighted by Rogelj et al. (2016) that shapes economic decisions and suggest an upfront approach for institutional investors to align with the social priorities of their clients. The effectiveness of green finance in advancing Sustainable Development Goals (SDGs) is influenced by the factors like "investor willingness to fund sustainable projects, along with transparency and standardized sustainability reporting." Building a sustainable and fair future it is important to ensure transparency, standardization, and social equity. The funding and investment in sustainable development projects, supporting global sustainability initiatives is enabled through green finance.

Aggarwal and Khan (2023) demonstrate that sustainability by accelerating the shift to a low-carbon economy and mitigating environmental risks is influenced by green finance. The development of "sustainable infrastructure and technologies, fostering economic growth and creating jobs" are all supported by green finance. the green finances incorporate environmental and social considerations into investment decisions and encourage responsible, long-term investment approaches that contribute to stable and resilient financial markets. Green finance benefits businesses that adopt sustainable practices and reporting as it works as an essential tool that promote "sustainability and addressing climate change." Such businesses can gain advantages like lower capital costs, enhanced reputation, and access to new markets.

Ye and Dela (2023) explored the link between "green investment, green financing, CSR, and sustainable business performance" and conclude that CSR and sustainable outcomes are positively influenced by green investments and financing. It is also found that CSR acts as a significant moderator in the relation between "green investment, green financing, and sustainable business performance." The study underscores the importance of these elements and contributes to existing literature. Highly polluting industries like chemical companies, are recommend to integrate green financing, investment, and CSR to enhance sustainable economic performance. It is suggested to adopt green finance so that "sustainable business

performance" is achieved due to its stronger positive impact on CSR compared to green investment.

Sohail et al. (2024) highlights that there are many industries and financial institutions which are dedicated to "environmentally responsible practices and green finance." This commitment is examined which shows that their information of a wide range of projects and frameworks, combined with devotion to international standards, reflects their dedication to worldwide sustainability goals. It is important to have clear morals and firm environmental requirements as it ensures responsibility and sustainable practices. The potential for growth in the green finance sector is verified through active participation in activities such as developing products and work together on sustainable projects and these initiatives contribute to achieve sustainable project objectives. Establishing transparent criteria, offering incentives, and implementing healthy regulatory frameworks supports eco-friendly investments. The study pressures the importance of integrating green finance into business strategies and using green finance tools such as "green bonds, sustainable bonds, and other mechanisms" across various industries.

Rahman et al. (2024) highlights the significance of healthy regulatory frameworks that motivate and impose sustainable practices across industries. It is important for the Government to be involved in navigating businesses toward more eco-friendly activities, thereby strengthening the flexibility and competitiveness of the tourism sector by creating and implementing policies. Since the consumers increasingly favour businesses that align with their environmental values, it is likely to gain a competitive advantage by the organizations that adopt "corporate social responsibility and green finance strategies." the growth of sustainable tourism are fostered through the integration of "corporate social responsibility and green finance." To further this goal, teamwork among relevant investors must be supported, and educational programs should be implemented to increase awareness about the advantage of CSR practices. Additionally, offering "tax incentives and subsidies" will encourage businesses to engage more actively in green finance.

Objective

To explore the selection criteria while financing the green projects for sustainability and know the impact of financing green projects on sustainability.

Methodology

Study survey was conducted among 203 people from financing institutes to know the selection criteria while financing the green projects for sustainability and the impact of financing green projects on sustainability. "Random sampling method" along with "T-test" were used to collect and analyse the data.

Findings

Males are 55.6% and rest 44.3% are female. 30.0% are below 32 years, 40.9% are of 32-42 years and rest 29.1% are above 42 years. 15.8% respondents are from commercial bank, 20.2% from investment bank, 18.2% from insurance company, 30.5% are from other mortgage company and rest 15.3% are from other financial institutes.

"Table 1 General Details"

"Variables"	"Respondents"	"Percentage"
Male	113	55.6
Female	90	44.3
Age (years)		
Below 32	61	30.0
32-42	83	40.9
Above 42	59	29.1
Financial institute		
Commercial Bank	32	15.8
Investment Bank	41	20.2

Insurance Company	37	18.2
Mortgage Company	62	30.5
Others	31	15.3
Total Respondents =203		

Table 2 Selection criteria while financing the green projects for sustainability

"S. No."	**"Statements"**	**"Mean Value"**	**"t value"**	**"Sig."**
1.	The project is assessed for its potential to reduce carbon emissions	3.13	1.885	0.030
2.	Project must promote energy efficiency, and support biodiversity	3.17	2.480	0.007
3.	It is ensured for its adherence to international and local environmental regulations and certifications	3.12	1.779	0.038
4.	Project is evaluated for its risks along with technical, financial, and operational challenges	3.14	2.033	0.022
5.	Cost-effectiveness, return on investment (ROI), and long-term financial sustainability is analysed	3.18	2.657	0.004
6.	Projects introducing novel technologies or practices that enhance environmental benefits are preferred	3.16	2.322	0.011
7.	Project must support the firm's sustainability strategy and broader Environmental, Social, and Governance objectives	3.19	2.784	0.003
8.	Positive social impacts (job creation, improved community health, and equitable access to resources) are considered	3.21	3.090	0.001
9.	Project must provide clear and transparent data for performance monitoring and reporting	3.20	2.908	0.002
10.	Work with credible and experienced project developers or partners with a proven track record	3.15	2.219	0.014

Table 2 is showing different Selection criteria while financing the green projects for sustainability where respondent says that Positive social impacts (job creation, improved community health, and equitable access to resources) are considered with mean value 3.21, Project must provide clear and transparent data for performance monitoring and reporting (3.20), Project must support the firm's sustainability strategy and broader Environmental, Social, and Governance objectives (3.19), Cost-effectiveness, return on investment (ROI), and long-term financial sustainability is analysed (3.18) and Project must promote energy efficiency, and support biodiversity with mean value 3.17. The respondent also says that Projects introducing novel technologies or practices that enhance environmental benefits are preferred with mean value 3.16, Work with credible and experienced project developers or partners with a proven track record (3.15), Project is evaluated for its risks along with technical, financial, and operational challenges (3.14), The project is assessed for its potential to reduce carbon emissions (3.13) and It is ensured for its adherence to international and local environmental regulations and certifications (3.12). All statements pertaining to selection criteria while financing the green projects for sustainability exhibit statistical significance, with p-values below 0.05 following the application of a t-test.

Conclusion

The growing attention towards sustainable development in investment decision-making processes has been signified with a pragmatic examination of criteria for funding green investment projects. Data covering the period up to October 2023 show that ESG factors are increasingly steering investors and financial institutions as a priority over and above profit

generation. The ESG criteria are key for evaluating the sustainability and the long-term impact of green projects. The results underscore the importance of robust risk assessment frameworks and clear sustainability KPIs as outils in new investor acquisition.

Blueprints for such integrated transformation have been proposed, while previous studies have showed the importance of policy chicken (government incentives) and egg (huge public policy support) in matching economic goals with sustainable ends. Such regulations promote an investment climate that fosters innovation and sustainable growth. Projects that are scalable and show ingenuity to find quantifiable environmental benefits are far more likely to attract green finance. This trend reflects the growing understanding of the reciprocal relationship between environmental stewardship and financial performance.

The research also illustrates that some of the selection criteria have a strong impact on funding choices. These are the relevance of the project to a firm's overall sustainability strategy and ESG objectives, as well as the likelihood of positive social impacts such as equal access to resources, employment generation, and improved public health. Financial aspects like ROI, cost-effectiveness, and long-term economic sustainability are also key assessment factors. Initiatives promoting biodiversity conservation and energy efficiency are also prioritized.

In light of such revelations, stakeholders such as investors, project developers, and regulators must collaborate in setting uniform reporting standards and guidelines that improve comparability and transparency of green projects. Knowledge of and improving selection criteria for green funding will be critical to the achievement of world sustainability targets and speeding up the shift to a low-carbon economy. The conclusion of the report urges the financial industry to update its assessment methods, integrate sustainability into decision-making, and actively combat climate change through prudent investment.

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