

ESG Performance and Financial Returns in Renewable Energy Firms: Evidence from Indian Markets

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Abstract: India's 500 GW Commitment by 2030 forces us to contemplate the financial impacts of Environmental, Social, and Governance (ESG) practices for investors and policymakers. The study investigates the influence of ESG performance on the financial returns of renewable energy firms in India. Despite growing global interest, research linking ESG and financial performance in the renewable energy sector in emerging countries remains limited. This paper identifies theoretical ambiguities, gaps in empirical knowledge, and challenges in the Indian renewable energy market. A systematic literature review utilising stakeholder theory, resource-based view (RBV) and legitimacy theory to summarise evidence on the links between ESG and financial performance, as well as the attitude of the Renewable Energy Sector and features of emerging markets. The results indicate that higher ESG performance generally leads to better financial performance. However, this conclusion depends on the context. Governance quality is the most consistent predictor of financial returns, whereas environmental and social factors exhibit sector-specific effects. The paper discusses methodological issues, including divergence in ESG ratings and endogeneity. The research elucidates the impact of ESG integration on firm value in one of the world's fastest-growing renewable energy markets, thereby advancing theory and practice.

Keywords: ESG Performance; Financial Returns; Renewable Energy; Indian Markets; Sustainable Finance; Emerging Markets

Introduction

The growing demand for renewable technologies is driven by climate change, its effects, and social and environmental threats. With the third-largest energy consumption, India is one of the fastest-growing major economies. India's sustainable energy capacity has set a target of 500 GW by 2030, and a net-zero target for 2070, with linkages to firm performance to study the same^[1]. Environmental, social, and governance (ESG) issues have undergone a spectacular transformation from non-strategic to strategic. The incorporation of ESG criteria into investment decision-making has become routine for institutional investors, with further evidence suggesting that it mitigates risks and creates long-term value^[2].

In ESG investing, the emphasis on renewable energy and carbon sequestration is the most essential component within the environmental category. Nonetheless, significant evidence of a universally positive and significant relationship between ESG and firm financial returns across all industries and markets remains scarce^[3].

In Australia, ESG investing is booming. A fundamental unanswered question is: Do sustainable investments earn competitive returns? Investments in firms with ESG risk profiles have been shown to yield neutral-to-positive financial performance at a collective level. In other words, ESG firms tend to have lower costs of capital due to their reduced unsystematic risk, as an ever-increasing amount of evidence suggests. This paper examines theoretical frameworks and empirical evidence to understand the relationship between ESG and financial performance in India's renewable energy sector.

Related Work

Ongoing tensions exist in theoretical perspectives on ESG and performance. According to stakeholder theory (Freeman, 1984), enhancing ESG performance will improve firm value by strengthening relationships with employees, customers, regulators and communities, lowering transaction costs and improving competitive advantage. The post Stakeholder Theory – A Complete Guide appeared first on Strategy Training and Consulting. Conversely, Friedman's (1970) shareholder primacy view argues that ESG investments are agency costs that destroy value and distract management from profit maximisation.

The Resource-Based View (Barney, 1991) offers a contingency view that ESG capabilities are value-creating only if they are valuable, rare, inimitable, and organisation-specific. In renewable energy, where credentials are core value propositions, ESG may represent a strategic resource. The legitimacy theory posits that ESG practices help obtain institutional legitimacy that could ultimately impact the financial performance through the regulatory mechanism and ultimately on the social mechanism as well.

The evidence from a meta-analysis is generally positive but varies. According to Friede et al. (2015)^[8], who reviewed more than 2,200 empirical articles, almost 90% report a non-negative association between ESG performance and outcomes. Furthermore, nearly half show a positive association. Whelan et al. (2021)^[2] confirmed positive market-based performance effects – especially in high-ESG-risk industries. It is interesting to note that across all corporate studies, 58% found a positive effect of ESG performance, while only 8% found an adverse effect.

ESG elements have varied impacts. Governance quality is the single characteristic most positively associated with financial performance (Gompers et al., 2003; Bebchuk et al., 2009). The impact of environmental performance is strongest in environmentally sensitive industries (Busch & Hoffmann, 2011)^[11]. On the other hand, the effects of social performance are rather indirect and contextualised (Edmans, 2011 [12]; Flammer, 2015^[13]).

Measurement issues severely hinder ESG research. According to Berg et al. (2022), there is a significant divergence among ESG rating agencies, with correlations of 0.38 and 0.71. Differences in scope (38%), measurement (56%) and weighting (6%) cause divergence. The endogeneity issue makes it more difficult to establish causal relationships because more financially endowed firms invest in ESG^[13].

India has a distinctive institutional context for ESG. As per the SEBI Business Responsibility and Sustainability Reporting (BRSR) framework (2021)^[15], the top 1,000 listed firms are mandated to prepare comprehensive sustainability reports. Family ownership structures that are concentrated, relationship-based business conduct, and a rapidly growing renewable energy sector, from under 40 gigawatts (GW) in 2014 to more than 180 GW by 2024, create the circumstances under which governance quality and stakeholder management capabilities may particularly affect firm performance^[16].

Table 1. Comparison of Key Theoretical Frameworks and Their ESG-Performance Predictions

Framework	ESG-Performance Prediction	Mechanism	Relevance for India RE
Stakeholder Theory [4]	Positive	Stakeholder trust reduces costs	High – diverse stakeholders in RE projects
Shareholder Primacy [5]	Negative	ESG as agency cost	Low – sustainability drives sector value
Resource-Based View [6]	Contingent	ESG as strategic resource	High – ESG as competitive differentiator
Legitimacy Theory [7]	Context-dependent	License to operate	High – regulatory dependence in India

Key Contribution

The paper significantly contributes to the existing literature. To begin with, it offers a synthesis of the ESG-financial performance relationships for Indian renewable energy firms, thus filling a noticeable gap in studies of emerging markets. Furthermore, multiple theories – stakeholder theory, RBV, legitimacy theory, and agency theory are synthesised to develop a nuanced understanding of how ESG effects depend on context. Third, it also identifies some important moderating factors: size, leverage, ownership structure, and focus on technology. Fourth, it examines dynamics and relationships that change over time; this aspect is poorly dealt with in current scholarship. Lastly, the paper provides a rigorous empirical framework to study the divergence and endogeneity of ESG ratings in India’s renewable energy sector.

Discussions

The findings of the literature review reveal that the relationship between ESG and the performance of Indian renewable energy firms is likely shaped by sector-specific factors unique to these firms and absent in diversified portfolios or developed markets. The renewable energy sector’s mission is geared towards environmental protection, which is capital-intensive and regulated. These conditions create contexts in which the ESG performance of the renewable energy sector may be critical to financial performance, particularly in the quality of governance and stakeholder management ^[16].

India’s unique institutional structure highlights the relevance of governance as a moderating variable. Strong corporate governance can act as a substitute for weaker legal protections and diminish regulatory risks under concentrated ownership and evolving disclosure rules and business models, which are reliant on government policies ^{[4][11]}. On the other hand, the financial relevance of environmental performance is heightened by the sector’s dependence on government policy and access to patient capital from ESG-focused institutional investors ^[8].

The ambiguities identified in theory between the positive predictions of stakeholder theory and the agency theory that ESG is managerial discretion require empirical verification using methods that provide strong causal inference. Paying attention to temporal dynamics is important, as the Indian renewable energy sector has undergone rapid change over the last decade and may have altered the financial relevance of ESG over time ^[14].

Conclusions

The impact of ESG on the financial performance of Indian renewable energy firms is an important and under-researched area with implications for investors, policymakers, and corporate decision-makers.

This study finds that the relationships between ESG performance are highly context-dependent through a systematic review of stakeholder theory, resource-based view, legitimacy theory, and agency theory, as well as meta-analytical evidence. The concentrated ownership structures of Indian companies and the regulatory framework of BRSR, along with ambitious renewable energy targets, create new and distinctive conditions that shape these relationships.

The main findings indicate that governance quality is the most consistent predictor of financial performance, environmental performance is gaining importance in energy-intensive sectors, the divergence in ESG ratings and endogeneity are two key methodological concerns, and the ESG-performance relationship is notably affected by time and firm-level moderators. The upcoming empirical study will employ panel data methods with instrumental variables, multiple ESG data sources, and a time-varying coefficients model to establish causal links between ESG and performance in Indian renewable energy firms.

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