Corporate Sustainability in India: ESG Practices, Net-Zero Strategies, and the Path to a Green Economy

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Abstract: The context of this study is the incorporation of, Environmental, Social and Governance (ESG) actions and corporate tactics in order to facilitate net-zero emissions in India. With regulators and investors taking increasingly strong regulatory and investor perspectives, ESG adoption has emerged as a key engine of financial resilience, stakeholder trust, and long-term sustainability. However, challenges such as regulatory inconsistencies, capital constraints, and greenwashing risks hinder widespread implementation. Through secondary data from peer-reviewed articles, corporate sustainability reporting and government reports, this work analyzes leading trends in ESG adoption, industry benchmarks and obstacles to carbon neutrality. Results suggest that targeted approaches for sectors, green finance, and improved regulation of corporate sustainability are critical to progress in corporate sustainability. The paper suggests policy recommendations and an action plan to improve ESG compliance and to promote India's low-carbon transition, providing sustainable growth without compromising the country's net-zero ambition towards 2070.

Keywords: Environmental, Social, and Governance (ESG), Corporate Sustainability, Net-Zero Emissions, Green Finance, Sustainable Business Strategies.

1. Introduction

With the growing trend of the sustainability direction of the global economy, companies are facing more pressure to embed Environmental, Social and Governance (ESG) into their work and promise to move towards achieving net-zero emissions. India, being one of the fastest-developing economies in the world, is challenged with achieving ambitious climate targets, such as net-zero target by 2070, in tandem with its sustained economic growth. Corporate sustainability has moved from an optional measure to an essential strategic imperative, driven by investor pressure, statutory obligations, and changing consumer demand. ESG frameworks enable organizations with a roadmap to managing environmental impact, advocating for social equity, and maintaining ethical governance. Evidence-based research has revealed that companies with good ESG (Environmental, Social, Governance) track record have consistently higher investor confidence, better financial resilience, and long-term profitability. However, ESG adoption in India remains inconsistent across industries, with many firms struggling to implement standardized sustainability metrics due to regulatory uncertainty and capital constraints. On the environmental side, achieving net-zero emissions calls for scale-up of all aspects of the corporate operations, such as solar energy adoption, carbon valuation, and decarbonization of the supply chains. As a result, though leading companies across the steel, manufacturing, and IT industries are embracing efforts to achieve carbon neutrality, high infrastructure costs, policy loopholes, and greenwashers all remain obstacles to achieving widespread adoption. The Indian government has implemented policy measures (policy actions), sustainability-linked finance instruments, and corporate reporting requirements (CSR requirements), but compliance enforcement and access to finance continue to be

major challenges. This study seeks to make a holistic examination of trends of ESG adoption, corporate routes to net-zero emissions, and the governance structure of regulatory frameworks in facilitating sustainability transitions in India. Through a synthesis of secondary data sources from peer-reviewed journals, corporate sustainability reports, and government documents, the study outlines best practices for industries, areas of key challenge, and policy action items. With an increasing demand on stakeholders worldwide, including domestic, for greater corporate accountability, the capacity of India to blend ESG standards into the economic agenda will decide the effectiveness of India in the sustainable business arena. This paper aims to add to this debate through data-based understanding of how Indian companies can reconcile corporate sustainability with profit and long-term environmental good.

2. Literature Review

Corporate sustainability processes are characterized by systematic Environmental, Social, and Governance (ESG) strategies. Looking back, the ESG parameters encompass business robustness, ethical behavior, business continuity, and economic strength in the modern world. Alluding to the pillars of the Triple Bottom Line (Elkington 1997) and Stakeholder Theory (Freeman 1984), it is unjust to place commerce in the balance of profit for the sake of maintaining sustainable growth with environmental and social responsibilities. The research highlighted that countries having highly integrated ESG, were at low financial risk, and were relatively better resilient in down economic situations and especially so in the case of a powerfully enforced operating environment (Sastroredjo Suganda, 2025) a configuration where the regulatory environment was hard (Wattanatorn Jantarakolica, 2025). Nonetheless, the trend of taking up ESG continues to be different across markets because of the significant role played by governmental regulation in corporate sustainability activity, and as a major force in emerging economies (ALSakeb et al., 2025). Companies that successfully take action on ESG are better positioned to secure better financing and investor support (Xin et al., 2025), even when ESG is not an automatic guarantee of better-than-normal profits, as is often the case in environments where there is weakness in corporate governance or greenwashing which tends to undermine the legitimacy of ESG actions (Nainggolan et al., 2025).

Under increased scrutiny to address climate change, net-zero strategy implementation by industry is on the agenda. Crucial interventions are Green HRM practices for which the organization makes a commitment to sustainability training, has incentives for its own employees, and adopts a "green" work environment policy, in order to accelerate decarbonization (Kumar Sahoo, 2025). Furthermore, carbon pricing instruments (emissions trading systems and carbon tax) have demonstrated its effectiveness in embedding sustainability into the internal financial decision-making of enterprises (Samuel, 2025). Companies implementing AI-based carbon tracking technologies can measure and optimize emission reductions more accurately, leading to broader environmental performance (Rickling et al., 2025). In addition, industries with abundant carbon footprints, like steel, energy, and manufacturing, are seen increasingly adopting renewable energy options such as green hydrogen solutions and carbon-capture technologies to achieve net-zero ambitions (Purwanto, 2025).

Despite the foregoing developments, there still remain significant obstacles that inhibit the extension of ESG and the move towards net-zero. The lack of standardized reporting mechanisms on ESG makes, at best, the comparison of corporate sustainability activity among different industries a confusing exercise for investors and stakeholders. Short-term pressures for profit are often used to refuse the possibility to invest in long-term sustainability. Expensive transition costs, in turn, will further delay the possibility to decarbonize a company, even more so for companies in emerging markets. With the adoption of a regulatory framework, such as EU Taxonomy for Sustainable Activities (2022) the Environmental, Social and Governance (ESG) compliance framework has become standardized; however, green washing is commonly linked to overstatement of sustainability activities, for marketing purposes, by some firms (Goyibov, 2025). In brief, although the trajectory for corporate adoption of ESG and net-zero is potentially very promiseable, success or failure will depend, inter alia, on rapid technological advances, rapid regulatory roadmaps and sustained corporate commitment to sustainability.

3. Methodology

This study employs a systematic secondary data analysis to investigate Environmental, Social, and Governance (ESG) practices and corporate strategies for achieving net-zero emissions. The study is an

exploratory, qualitative investigation, using a desk-based approach to synthesizing the information from a body of peer-reviewed journal articles, indexed publications, government reports, and corporate sustainability disclosures. This paper, using secondary data mining from high-impact, academic sources and industry reports, guarantees rigour and evidence-based analysis into corporate sustainability trends.

a. Research Design and Approach

Qualitative, exploratory design was utilized to understand the effect of ESG frameworks/ net-zero plan in business. This methodology provides a contextually comparative evaluation corporate sustainability actions between industries and geographic areas. The research takes a non-experimental, descriptive approach which consists in the aggregations and syntheses of extant empirical studies, as opposed to collecting original data.

b. Data Collection Process

Secondary data was systematically gathered from high-quality, peer-reviewed journals and indexed articles in databases such as Scopus, Web of Science, ScienceDirect, MDPI, and Elsevier. Furthermore, government reports and corporate data were searched, such as reports from the European Commission (EU Taxonomy), the United Nations Framework Convention on Climate Change (UNFCCC), the International Energy Agency (IEA) and the World Economic Forum (WEF).

To guarantee the data validity and reliability, sources were chosen according to following include criteria:.

Peer-reviewed and indexed journal articles published in 2020–2025 to guarantee recency.

Industry and government reports that include formal policy guidelines or ESG performance indicators.

Sustainability disclosures from companies with a solid ESG record (e.g., Tesla, Unilever, Microsoft).

Evidence-based research on ESG impact evaluation, net-zero trajectories, and regulatory effects.

Exclusion criteria included non-indexed, opinion-based, or outdated reports that lacked empirical grounding.

c. Data Analysis Method

A thematic content analysis was used to discover emerging trends, theoretical frameworks, and good practices for ESG adoption and net-zero implementation. The analysis focused on:

1. Content Categorization Grouping insights into key themes such as ESG financial performance, decarbonization strategies, and regulatory compliance.

2. Comparative Analysis - Assessing cross-sector differences in ESG implementation and corporate net-zero pledges.

3. Triangulation-Cross-referencing results of work emerging from multiple sources (academic literature, industry reports, and policy reports) for strengthening the credibility and validity of data.

4. Research Validity, Reliability, and Ethical Considerations

This work guarantees construct validity by using, in full, academic literature, policy papers and corporate filings with verifiable data set. These references are validated by the use of indexed sources and cross-validation of findings across multiple references. As no primary human data was obtained, ethical considerations related to participant anonymity and informed consent are not relevant. Yet, academic citation and intellectual property were maintained during the whole research process.

5. Limitations of the Study

As secondary data analysis enables a general and evidence-based appreciation of ESG and net-zero strategies, the secondary data analysis is limited by the data availability and data reproducibility of reported indicators of different organisations. Furthermore, corporate sustainability reports may exhibit bias and selective disclosure, which requires rigorous assessment of source credibility and associated greenwashing risks.

4. Findings and Discussion

This subsection provides major results on ESG implementation for Indian enterprises and corporate mechanisms for the provision of net-zero emissions based on secondary data obtained from indexed journal articles, government documents, and corporate reports. Results point to quantitative data published in top-tier journals including Elsevier, Wiley, Springer, Emerald, ScienceDirect and SAGE Publications.

1. ESG Adoption and Impact on Corporate Performance in India

1. 1 ESG and Financial Performance

A number of studies have found a positive association between adoption of ESG and financial performance in Indian businesses. According to Paridhi Ritika (2025) in Business Strategy Development (Wiley) CGs with high ESG scores experienced, on average, a 7.3% growth in return on assets (ROA), and a 5.8% improvement in stock liquidity. Similarly, Bang (2025) in Vikalpa (SAGE) analyzed 200+ Indian firms and found that non-family firms with strong ESG frameworks outperformed family businesses in financial resilience and market valuation.

1. 2 ESG and Market Value

A study by Sharma et al. (2025) in the Journal of Environmental Management (Elsevier) analyzed 350 listed Indian companies and found that firms integrating Sustainable Development Goals (SDGs) and ESG principles saw a 12% increase in market capitalization over three years. However, Nainggolan et al. (2025) in the Indian Journal of Entrepreneurship warns that ESG integration in the absence of governance disclosure can suffer from greenwashing, eroding investor confidence.

1. 3 ESG in Emerging Markets

A cross-sectional investigation by Dwibedi, Pahi Mishra (2025) on Indian Journal of Finance revealed that ESG disclosures in Indian companies are much lower than their counterparts around the world as only 64% of the companies disclose full reports on ESG. The paper points to the advantage of government mandated ESG disclosures as a way to increase transparency.

2. Corporate Strategies for Achieving Net-Zero Emissions in India

2. 1 Green HRM and Workforce Transformation

Corporate Green HRM (Human Resource Management) policies are essential for the realization of net-zero carbon emissions. Kumar Sahoo (2025) in ResearchGate studied the Indian steel sector and found that firms implementing employee sustainability training programs reduced carbon emissions by 11.2% within two years.

2. 2 Renewable Energy and Carbon Neutrality

Narassimhan et al. (2024) in Climate Policy (Taylor Francis) showed that emissions in India would plateau no later than mid-century on the basis of current policy.

Choudhury, Pratap Pohit (2024)The Indian Journal of Labour Economics (Springer) note that, to switch to fresh energy, India will produce 4.5 million jobs by 2050, but they will require $200 billion in investments in infrastructure.

Gupta (2024) in the Journal for Global Business and Community examined India's power sector and found that balancing economic growth with net-zero strategies requires a 40% increase in clean energy investments.

2. 3 Carbon Pricing and Policy Challenges

Bharatam Varadi (2024) in SSRN analyzed corporate carbon pricing in India and reported that only 32 of the firms use carbon pricing as part of their business model, while the global rate is 58 (SSRNN.org). Sharma, Prashar Sharma (2025) in the International Journal of Productivity and Performance Management (Emerald) used the Grey-DEMATEL methodology to model barriers to net-zero uptake. Results show high regulatory uncertainty and underprovision of tax incentives to be significant barriers to Indian firms.

5. Conclusion

The study highlights the increasing relevance of ESG integration and net-zero frameworks in the Indian corporate world. Although the financial and reputational advantages of sustainable operations are being increasingly recognised by businesses, there remain obstacles in the areas of regulation, financial spending and corporate responsibility. The following key takeaways emerge from the study:

1. ESG Implementation Needs Regulatory Strengthening

However, due to rising levels of voluntary ESG disclosure, standardisation of reporting frameworks still restricts comparability and transparency.

Current ESG regulations in India are still behind global standards like the EU Taxonomy, and stronger regulation of corporate sustainability disclosures is needed.

Government subsidies (e.g., tax breaks for environmentally sustainable firms) may foster wider use.

2. ESG and Net-Zero Strategies Are Industry-Specific
Some sectors like manufacturing and steel are early adopters of net-zero through energy savings and Green HRM, whereas areas like logistics and real estate are late adopters because of infrastructure constraints.
Industry-wide sustainability adoption could be promoted by industry-specific roadmaps containing decarbonization targets.
3. Capital Constraints Slow Down the Net-Zero Transition
Achieving net-zero economy needs the investment of about US $200 billion in renewable energy and infrastructure.
While large corporations are adopting carbon pricing and emissions trading, small and medium enterprises (SMEs) struggle due to high initial costs.
Government green bonds and sustainable finance programs may help fill this funding gap.
4. Greenwashing Remains a Major Risk
Some companies exaggerate their ESG promises without serious action, thereby creating mistrust among investors.
Independent ESG audits and third-party validation should be required to enhance corporate accountability.
5. Workforce Transformation Is Critical for Sustainable Business Practices
Green HRM practices, such as employee sustainability training and performance-based rewards, have demonstrably positive effects on organizational sustainability outcomes.
A uptake of AI-enabled sustainability management applications can complement ESG implementation in a better and more efficient way.
6. A Policy-Driven Approach Is Essential
India's 2070 net-zero emission policy objective calls for a higher-impact policy setting, such as carbon taxation, renewable energy subsidies, and corporate carbon footprint disclosure.
Public-private partnerships can help expedite ESG research and technological innovations.
Final Thoughts
To achieve long-term sustainability and financial stability, Indian businesses must integrate ESG practices into their core strategies, backed by strong regulatory frameworks and financial incentives. With the country moving to a low-carbon-economy the interaction of corporate, policy makers and financial institutions will be essential in advancing ESG and net-zero commitments.

6. Recommendations and Action Plan

According to the results, it is clear that although Indian firms are pushing the adoption of ESG and net-zero emissions, there is still a long way to go. To undo these bottlenecks and speed the pace at which sustainable corporate change takes place, a strategic roadmap is necessary. The following recommendations offer a strategic orienting map for companies, policymakers, and investors so that ESG can be effectively integrated and net-zero can be achieved.
1. Strengthening ESG Regulations and Reporting Standards
Recommendation
Enforce mandatory ESG disclosure principles that are consistent with international guidelines, including the EU Taxonomy, GRI, and SASB.
Formulate sector-specific best practices to maintain reporting coherence between sectors. Impose penalties on greenwashing and implement third-party ESG audits to promote corporate accountability.
Action Plan
Short-Term (0–2 years):
Amend SEBI (Securities and Exchange Board of India) disclosure provisions relating to environmental, social and governance (ESG) risks for all publicly listed companies.
Construct a national ESG compliance index to benchmark corporate sustainability performance.
Medium-Term (3–5 years):
Enforce independent ESG rating systems and third-party verification to prevent greenwashing.
Implement a national carbon disclosure registry for tracking emissions at the corporate level.
Long-Term (5+ years):
Embed ESG performance in corporate tax credit and investment coverage.

2. Accelerating Corporate Net-Zero Strategies
Recommendation
Promote businesses to adopt science-based net-zero targets, consistent with India's 2070 carbon-neutral objective.
Promote renewable energy transition by offering financial incentives for solar, wind, and green hydrogen adoption.
Enhance carbon price mechanisms and incorporate emissions trading systems (ETS) as a stimulus for market-led decarbonization.
Action Plan
Short-Term (0–2 years):
Require carbon footprint inventory for major emission industries (e.g., steel, cement, and logistics).
Implement corporate carbon neutrality certification programs, which would give recognition to companies as they reduce emissions.
Medium-Term (3–5 years):
Design a mandatory carbon credit trading regime in place for big business.
Support SMEs' investment on green technology with subsidizes loan and green bond financing.
Long-Term (5+ years):
Fund large-scale carbon capture and storage (CCS) projects through public-private partnerships.
Legally define net-zero targets for large corporations by 2045 that are earlier than India's 2070 target.
3. Enhancing Sustainable Finance and Green Investments
Recommendation
Support by expanding green finance instruments via green bonds, ESG-conditional loans, and sustainability-oriented venture capital funds.
Offer tax incentives and grants to companies that are implementing energy saving and clean technology.
Action Plan -
Short-Term (0–2 years):
Raise financial incentives for companies that are financially ESG responsible by reducing corporate tax rates and providing subsidized loans.
Form a Green Finance Task Force to design new means of funding sustainability projects.
Medium-Term (3–5 years):
Collaborate with international climate finance institutions to increase the green investment banking portfolio of India.Demand that banks and financial entities incorporate ESG risks into lending and investment appraisals.
Long-Term (5+ years):
Introduce a mandatory corporate green fund allocation for large enterprises, ensuring 5–10% of profits go toward sustainable investments.
4. Developing a Skilled Green Workforce and Corporate Culture
Recommendation
Adopt Green HRM practices and incorporate sustainability training, performance incentives, and leadership accountability.
Promote a culture of innovation in environmentally friendly business practices by way of research partnerships and corporate educational initiatives.
Action Plan -
Short-Term (0–2 years):
Include ESG and sustainability courses in corporate leadership training programs.
Pay employees who are involved in corporate sustainability activities financial rewards.
Medium-Term (3–5 years):
Create ESG leadership development curricula in collaboration with leading business schools.
Enforce (ESG) training for board members and senior management in high priority industry sectors.
Long-Term (5+ years):
Establish government-sponsored sustainability incubators to further early-stage ideas in green technology.
5. Strengthening Public-Private Collaboration for Net-Zero Goals
Recommendations
Promote corporate-NGO partnerships to develop sustainable business models and carbon offset initiatives.

Start up government sponsored innovation centers to grow clean energy solutions.
Action Plan -
Short-Term (0–2 years):
Implement joint government-private initiative funding of climate-resilient projects in risk-prone regions.
Expand corporate carbon offset programs in partnership with reforestation and biodiversity conservation projects.
Medium-Term (3–5 years):
Create state-level sustainability working groups to integrate business-government climate action.
Upscaling climate innovation clusters to scale up the pace of research on carbon-free manufacturing.
Long-Term (5+ years):
Present India as a world exemplar in sustainable business innovation solutions, encouraging international partnerships for net-zero solutions initiatives.
Final Takeaway: A Call for Immediate Action
Businesses, policymakers, and investors will need to move towards a multi-stakeholder, action-based paradigm to achieve India's ESG and net-zero goals. The implementation of unambiguous regulation requirements, responsible finance tools (mechanisms), manpower training, and public-private partnerships (PPP) will play a decisive role in making Indian corporations drivers of the global sustainability shift. Immediate action is necessary—delays will only increase costs and environmental risks.
By following this structured roadmap, Indian businesses can achieve strong ESG performance, financial resilience, and long-term carbon neutrality, positioning the country as a sustainability-driven economic powerhouse.

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