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Rethinking ESG Credibility: Conceptual Gaps, Normative Assumptions, and the Future of Sustainable Capitalism

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Abstract

Environmental, Social, and Governance (ESG) frameworks have become central to sustainable finance and corporate accountability, however, their credibility remains contested. This paper critically examines the conceptual gaps, normative assumptions, and empirical challenges that undermine ESG's capacity to drive substantive sustainability outcomes. Drawing on recent literature, we identify four core credibility challenges: definitional fragmentation across rating providers and regulatory regimes, measurement heterogeneity that prevents meaningful comparability, pervasive greenwashing enabled by disclosure-oriented rather than impact-oriented metrics, and embedded market-centric assumptions that privilege voluntary compliance over mandatory verification. Empirical evidence demonstrates that mandatory reporting requirements significantly reduce deceptive disclosure practices, while rating divergence and symbolic compliance persist under voluntary regimes. We propose a multi-level governance framework integrating harmonized taxonomies, outcome-based metrics, mandatory third-party audits, and ecocentric principles that extend beyond anthropocentric stakeholder models. This

synthesis contributes to ongoing debates about ESG's role in sustainable capitalism by articulating pathways from symbolic to substantive implementation and identifying priority areas for regulatory reform, corporate practice, and future research.

Keywords: *ESG Credibility, Greenwashing, Sustainable Finance, Corporate Governance, Rating Divergence, Mandatory Disclosure, Impact Measurement*

1. Introduction

The proliferation of Environmental, Social, and Governance (ESG) frameworks over the past two decades reflects growing recognition that corporate value creation cannot be divorced from environmental stewardship, social equity, and ethical governance. ESG investing has evolved from a niche concern of socially responsible investors into a mainstream imperative, with global sustainable investment assets exceeding $35 trillion by 2024 (Hassan et al., 2024; Khan, 2024). However, this rapid institutionalization has generated profound tensions. As ESG metrics become embedded in capital allocation decisions, executive compensation, and regulatory compliance, fundamental questions about their credibility, comparability, and capacity to drive real-world impact have intensified. Recent scholarship reveals a troubling paradox: while ESG disclosure has expanded dramatically, evidence of substantive environmental and social improvement remains ambiguous (Lucarelli & Severini, 2024). Rating agencies produce divergent assessments of the same firms, investors struggle to distinguish genuine sustainability leaders from sophisticated greenwashers, and corporations face conflicting demands from fragmented regulatory regimes (Jámbor & Zanócz, 2023; Vasiu, 2024). These challenges are not merely technical; they reflect deeper conceptual ambiguities and normative assumptions embedded in how ESG frameworks define, measure, and incentivize corporate responsibility.

This paper addresses three interrelated research questions: First, what conceptual gaps and definitional ambiguities undermine ESG's capacity to function as a credible accountability mechanism? Second, what normative assumptions about markets, fiduciary duty, and corporate purpose sustain current ESG practices despite mounting evidence of their limitations? Third, what governance innovations and policy reforms can transform ESG from a disclosure exercise into a

driver of substantive sustainability outcomes? Our analysis synthesizes recent empirical and conceptual work to map the landscape of ESG credibility challenges and identify pathways toward more robust frameworks. We argue that addressing ESG's credibility crisis requires moving beyond incremental refinements of existing metrics toward fundamental reconceptualization: from disclosure to impact, from voluntary to mandatory verification, from anthropocentric to ecocentric principles, and from firm-level scores to system-level transformation. The paper proceeds as follows. Section 2 reviews theoretical frameworks that scholars employ to analyze ESG phenomena, highlighting how different lenses yield distinct diagnoses and prescriptions. Section 3 examines conceptual gaps in ESG definitions and measurement systems. Section 4 unpacks normative assumptions about market mechanisms and voluntary governance that shape current practice. Section 5 synthesizes empirical evidence on greenwashing, rating divergence, and the effects of mandatory disclosure. Sections 6 and 7 propose pathways to substantive implementation and multi-level governance reforms. Section 8 discusses implications for research and practice, and Section 9 concludes.

2. Theoretical Background and Literature Review

2.1 Dominant Theoretical Lenses

ESG scholarship draws on multiple theoretical traditions, each illuminating different dimensions of corporate sustainability behavior. Stakeholder theory posits that firms must balance the interests of diverse constituencies, shareholders, employees, communities, and ecosystems, rather than maximizing shareholder value alone (Hong & Rosli, 2024). This framework justifies ESG integration as a mechanism for managing stakeholder relationships and securing social license to operate. However, critics note that stakeholder theory often lacks clear prioritization principles when stakeholder interests conflict, potentially enabling symbolic gestures that satisfy no constituency substantively. Legitimacy theory explains ESG disclosure as a strategic response to social expectations and institutional pressures (Khan, 2024). Firms adopt ESG practices to maintain legitimacy in the eyes of regulators, investors, and civil society, particularly when their activities face scrutiny. This lens predicts that disclosure will be most extensive in high-visibility sectors and following reputational crises, but it also suggests that firms may decouple symbolic reporting from operational reality, a dynamic central to greenwashing phenomena (Tian & Niu,

2024). Institutional theory emphasizes how regulatory environments, industry norms, and professional networks shape ESG adoption patterns (Khan, 2024). Isomorphic pressures, coercive (regulatory mandates), mimetic (peer imitation), and normative (professional standards), drive convergence in ESG practices across organizations. This framework helps explain both the rapid diffusion of ESG frameworks and their persistent heterogeneity across jurisdictions with different regulatory traditions (Vasiu, 2024). The natural resource-based view (NRBV) extends resource-based theory by arguing that environmental capabilities can constitute sources of competitive advantage (Hong & Rosli, 2024). Firms that develop superior pollution prevention, product stewardship, or sustainable supply chain capabilities may achieve cost savings, differentiation, or risk mitigation that enhance long-term performance. This perspective offers a business case for ESG that aligns sustainability with strategic value creation.

2.2 Emerging Integrative Frameworks

Recent work proposes more radical reconceptualizations. Ecocentric frameworks challenge ESG's anthropocentric bias by centering biodiversity, ecosystem integrity, and non-human species rights (Kopnina et al., 2023). These approaches argue that conventional ESG metrics systematically undervalue ecological concerns because they frame environmental issues primarily in terms of human welfare and business risk. Incorporating extinction accounting and planetary boundary metrics would require fundamental shifts in how firms define materiality and success. Circular-ESG models integrate principles from circular economy and regenerative design, proposing that sustainability assessment should evaluate firms' contributions to closing material loops, restoring natural capital, and enabling just transitions (Khan, 2024). Rather than measuring incremental improvements in resource efficiency, these frameworks assess whether business models are compatible with long-term ecological stability and social equity. Just transition governance frameworks emphasize that environmental sustainability cannot be achieved without addressing distributional justice, labor rights, and community participation (Hassan et al, 2024). These approaches critique mainstream ESG for treating social dimensions as secondary to environmental and governance concerns and for failing to center the voices of workers and communities most affected by industrial transitions.

2.3 Methodological Approaches

ESG research employs diverse methodologies. Systematic reviews using PRISMA protocols have mapped the field's evolution and identified research gaps (Hassan et al, 2024; Khan, 2024). Bibliometric analyses reveal citation networks, thematic clusters, and geographic patterns in ESG scholarship (Vasiu, 2024). Experimental designs test how investors respond to ESG information and disclosure formats (Fanning et al., 2024). Quasi-natural experiments leverage regulatory changes to identify causal effects of mandatory reporting on firm behavior (Luu et al., 2024). Mixed-methods approaches combine quantitative performance metrics with qualitative content analysis to assess the gap between disclosure and implementation (Hassan et al, 2024). This methodological diversity reflects ESG's interdisciplinary nature, spanning finance, accounting, management, environmental science, and political economy. However, it also contributes to fragmentation, as studies using different methods, samples, and time periods produce findings that are difficult to synthesize.

3. Conceptual Gaps in ESG Frameworks

3.1 Definitional Ambiguity

A fundamental challenge is that "ESG" lacks a stable, universally accepted definition. Lucarelli and Severini (2024) characterize ESG as a "black box" with divergent constructs across theoretical traditions, regulatory regimes, and corporate disclosure practices. What counts as material ESG information varies dramatically: financial materiality frameworks prioritize issues that affect firm value, while double materiality approaches also consider firms' impacts on society and environment. This definitional pluralism is not merely semantic; it produces inconsistent understandings of what ESG measures and why it matters.

The problem extends to individual pillars. Environmental metrics may emphasize carbon emissions, water use, waste generation, or biodiversity impacts, with no consensus on relative importance. Social metrics range from labor practices and supply chain conditions to community relations and product safety. Governance encompasses board composition, executive compensation, shareholder rights, and anti-corruption measures. Each dimension contains dozens of potential indicators, and different frameworks weight them differently (Sica et al., 2023).

3.2 Measurement Heterogeneity

Sica et al. (2023) document semantic heterogeneity across ESG indicators, identifying 182 distinct metrics in their taxonomy exercise. This proliferation prevents meaningful comparability and aggregation. Firms may report on different indicators, use different measurement protocols, and apply different boundary definitions (e.g., Scope 1 and 2 versus Scope 3 emissions). Even when firms report the same metric, differences in calculation methods and data quality undermine comparability. Rating agencies compound this problem by applying proprietary methodologies that are often opaque. Studies consistently find low correlation among ESG ratings from different providers, with disagreement rates far exceeding those for credit ratings (Jámbor & Zanócz, 2023; Vasiu, 2024). This divergence reflects differences in indicator selection, weighting schemes, and scoring algorithms. For investors seeking to allocate capital based on ESG criteria, rating divergence creates confusion and undermines confidence in ESG as a decision-making tool.

3.3 Anthropocentric and Pillar Biases

Kopnina et al. (2023) argue that mainstream ESG frameworks exhibit anthropocentric bias, privileging human-centric outcomes while underrepresenting biodiversity and deep ecological concerns. Environmental metrics typically focus on pollution and resource use that affect human health and economic productivity, rather than intrinsic ecological values or non-human species welfare. This bias produces an incomplete account of corporate environmental stewardship and may enable firms to achieve high ESG scores while contributing to biodiversity loss and ecosystem degradation. Additionally, empirical analyses reveal systematic imbalances across ESG pillars. Governance metrics tend to be more standardized and widely reported than environmental or social indicators. Within the environmental pillar, climate-related metrics dominate while biodiversity, land use, and chemical pollution receive less attention. Social metrics often emphasize workplace diversity and safety while neglecting supply chain labor conditions, community impacts, and human rights in conflict zones (Jámbor & Zanócz, 2023).

3.4 Disclosure Orientation Over Impact Verification

A critical conceptual gap is ESG's emphasis on disclosure and process rather than verified outcomes. Many frameworks assess whether firms have policies, management systems, and

reporting mechanisms in place, without rigorously evaluating whether these produce measurable environmental or social improvements (Lucarelli & Severini, 2024). This activity-based orientation enables symbolic compliance: firms can achieve high ESG scores by adopting sophisticated reporting systems while their actual environmental footprint and social impacts remain unchanged or even worsen. The problem is structural. ESG rating methodologies typically rely on publicly disclosed information, which firms control. Third-party verification is inconsistent and often limited to specific metrics like greenhouse gas inventories. Outcome data—such as actual emissions reductions, improvements in worker welfare, or community health indicators—are harder to obtain and verify than process indicators. Consequently, ESG scores may reflect disclosure quality and stakeholder engagement processes more than substantive sustainability performance (Jámbor & Zanócz, 2023).

4. Normative Assumptions Underlying ESG

4.1 Market Mechanisms as Sufficient Drivers

Mainstream ESG frameworks rest on the assumption that market mechanisms, investor preferences, reputational incentives, and competitive dynamics, can drive corporate sustainability without extensive regulatory intervention. This market-centric logic holds that as investors increasingly demand ESG performance, capital will flow to sustainable firms, raising their valuations and lowering their cost of capital. Conversely, poor ESG performers will face capital constraints and reputational penalties that incentivize improvement (Kopnina et al, 2023). This assumption is contestable on both empirical and normative grounds. Empirically, evidence that ESG performance consistently predicts financial returns remains mixed, and the mechanisms linking ESG scores to firm value are poorly understood (Hassan et al., 2024). Normatively, relying on market discipline assumes that investors have accurate information, long time horizons, and preferences aligned with broader social welfare, assumptions that often fail in practice. Market-based approaches may be insufficient when sustainability challenges involve public goods, long-term risks, or distributional conflicts that markets systematically undervalue.

4.2 Compatibility of Fiduciary Duty and Sustainability

A related assumption is that fiduciary duty to maximize shareholder value is compatible with, or even requires, attention to ESG factors. Proponents argue that ESG integration is consistent with fiduciary duty because environmental and social risks materially affect long-term firm value (Vasiu, 2024). This framing has been crucial for mainstreaming ESG in institutional investment. However, this compatibility claim is contested. Critics note that it instrumentalizes sustainability, treating environmental and social concerns as relevant only insofar as they affect financial returns. This logic may justify ignoring sustainability issues that do not clearly threaten shareholder value, even when they impose significant externalities on society or ecosystems. Moreover, legal interpretations of fiduciary duty vary across jurisdictions, with some requiring exclusive focus on shareholder interests and others permitting or mandating consideration of broader stakeholder welfare (Vasiu, 2024).

4.3 Voluntarism and Self-Regulation

ESG's historical development has emphasized voluntary standards, industry-led initiatives, and self-regulation. Frameworks like the Global Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB), and Task Force on Climate-related Financial Disclosures (TCFD) provide guidance but generally lack enforcement mechanisms. This voluntarist approach assumes that firms will adopt robust ESG practices when provided with clear standards and stakeholder pressure. (Kopnina et al, 2023) documents a transatlantic regulatory divide, with European jurisdictions increasingly mandating ESG disclosure through instruments like the Corporate Sustainability Reporting Directive (CSRD), while U.S. approaches remain more voluntary. Comparative analysis suggests that mandatory regimes produce more comprehensive and consistent disclosure than voluntary frameworks (Vasiu, 2024). The persistence of voluntarism in many contexts reflects normative commitments to market freedom and skepticism of regulatory intervention, but it may be inadequate for addressing systemic sustainability challenges.

4.4 Firm-Level Metrics for System-Level Problems

ESG frameworks typically assess individual firms, assigning scores or ratings that enable comparison and ranking. This firm-centric approach assumes that aggregating individual firm

improvements will yield system-level sustainability. However, many environmental and social challenges, climate change, biodiversity loss, inequality, are emergent properties of economic systems that cannot be fully addressed through firm-level optimization (Khan, 2024). For example, a firm may improve its energy efficiency and reduce emissions intensity while expanding production, resulting in absolute emissions growth. At the system level, such "relative decoupling" is insufficient if aggregate resource use and pollution continue to exceed planetary boundaries. Addressing this requires frameworks that assess firms' contributions to system-level transitions, not just their performance relative to peers or historical baselines (Khan, 2024; Hassan et al, 2024).

5. Credibility Challenges: Evidence and Implications

5.1 Greenwashing: Prevalence and Mechanisms

Greenwashing, the practice of conveying misleading impressions about environmental performance, has become pervasive as ESG scrutiny intensifies. Montgomery et al. (2023) propose a corporate miscommunication model that captures evolving deception mechanisms, from selective disclosure and vague claims to outright fabrication. Content-analytic studies find widespread greenwashing across sectors, with firms emphasizing positive initiatives while obscuring negative impacts (Tian & Niu, 2024). Greenwashing undermines ESG credibility in multiple ways. It erodes investor trust, making it difficult to distinguish genuine sustainability leaders from sophisticated deceivers. It creates adverse selection problems, as firms with poor actual performance may invest more in impression management than substantive improvement. It also generates regulatory and reputational risks for firms when deception is exposed, potentially triggering backlash against ESG more broadly (Montgomery et al., 2023). The mechanisms enabling greenwashing are structural. Disclosure-oriented frameworks that lack rigorous verification create opportunities for selective reporting. Complex, multi-dimensional ESG scores obscure specific performance weaknesses. Voluntary standards allow firms to choose which frameworks to follow and which metrics to report. And limited regulatory enforcement means that consequences for misleading disclosure are often minimal (Tian & Niu, 2024).

5.2 Rating Divergence and Methodological Opacity

Multiple studies document substantial divergence among ESG ratings from different providers. Vasiu (2024) conducts a bibliometric analysis revealing that methodological fragmentation is a central concern in ESG research. Jámbor and Zanócz (2023) find that rating disagreement stems from differences in indicator selection, measurement approaches, and weighting schemes. Unlike credit ratings, where agencies generally agree on firms' default risk, ESG ratings show correlation coefficients often below 0.5. This divergence has significant implications. For investors, it creates confusion about which ratings to trust and undermines ESG's utility for portfolio construction and risk management. For firms, it generates conflicting signals about which improvements to prioritize. For regulators, it raises questions about whether ESG ratings should be subject to oversight similar to credit rating agencies (Vasiu, 2024).Rating opacity compounds the problem. Many providers treat their methodologies as proprietary, making it difficult for users to understand what ratings measure or why firms receive particular scores. This opacity prevents meaningful evaluation of rating quality and limits accountability when ratings prove inaccurate or misleading (Jámbor & Zanócz, 2023).

5.3 Mandatory Disclosure Reduces Greenwashing

Empirical evidence suggests that mandatory reporting requirements can significantly reduce deceptive disclosure. Luu et al. (2024) analyze the effects of the U.S. Greenhouse Gas Reporting Program (GHGRP) using a quasi-natural experiment with 2,731 firms from 2007 to 2022. Their difference-in-differences analysis shows that mandatory greenhouse gas reporting reduced greenwashing and prompted improvements in actual ESG performance, with larger effects for bigger, more profitable firms. This finding challenges the assumption that voluntary disclosure is sufficient. Mandatory regimes create legal consequences for misreporting, incentivizing firms to invest in accurate measurement and verification systems. They also level the playing field, preventing firms from gaining competitive advantage through selective disclosure. The GHGRP results suggest that well-designed mandatory frameworks can shift corporate behavior from symbolic compliance toward substantive improvement (Luu et al., 2024). However, mandates alone are not sufficient. Their effectiveness depends on metric specificity, verification requirements, and enforcement capacity. Mandates that require disclosure without specifying

measurement protocols or verification standards may simply formalize existing heterogeneity. And mandates without meaningful penalties for non-compliance or misreporting will have limited deterrent effect (Luu et al., 2024).

5.4 Investor Perceptions and Goal Credibility

Fanning et al. (2024) use experimental methods to examine how investors perceive ESG goals and greenwashing. They find that investors view missed quantitative ESG goals as stronger signals of greenwashing than missed qualitative goals, and that mandatory disclosure regimes magnify both negative reactions to goal failures and positive reactions to goal achievement. This suggests that mandates increase accountability but also heighten reputational stakes. These findings have important implications for corporate ESG strategy. Firms that set ambitious quantitative targets under mandatory regimes face significant reputational risk if they fail to achieve them. This may incentivize either conservative goal-setting or robust governance systems to ensure goal attainment. It also suggests that the shift toward mandatory, quantitative disclosure will increase the importance of credible verification and realistic target-setting (Fanning et al., 2024).

5.5 Symbolic Compliance in Public Institutions

Vasiu (2023) examine ESG practices in Greek public and financial institutions using mixed methods combining data envelopment analysis (DEA) and qualitative content scoring. They find that symbolic compliance predominates, with reporting clarity and verifiability predicting technical efficiency better than funding volume. Institutions with clearer, more verifiable disclosures demonstrate higher efficiency and impact orientation, while those with vague or unverifiable claims show lower performance. This study extends credibility concerns beyond private corporations to public institutions, which face different incentive structures. Public entities may adopt ESG frameworks to signal legitimacy to funders and stakeholders without facing market discipline. The finding that verifiability predicts efficiency suggests that even in non-market contexts, credible measurement and accountability mechanisms are essential for translating ESG commitments into substantive outcomes (Hassan et al, 2024).

Figure 1 below synthesizes the major credibility challenges identified in the literature, illustrating how definitional ambiguity, measurement heterogeneity, and weak verification mechanisms interact to enable greenwashing and rating divergence.

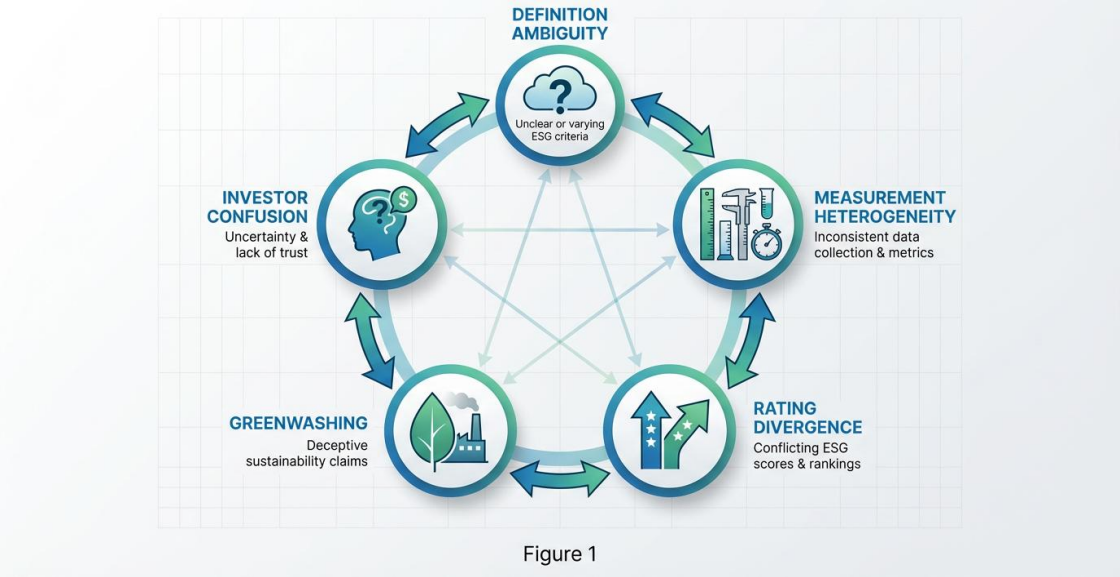

Figure 1. ESG Credibility Challenges Framework

Figure 1. ESG Credibility Challenges Framework. This diagram illustrates the interconnected challenges undermining ESG credibility, including definitional fragmentation, measurement heterogeneity, rating divergence, greenwashing mechanisms, and the gap between disclosure and verified impact. Arrows indicate causal relationships and feedback loops that perpetuate credibility deficits.

6. Pathways to Substantive ESG Implementation

6.1 From Disclosure to Impact Metrics

Addressing ESG's credibility crisis requires shifting from activity-based disclosure to outcome-based impact metrics. Rather than assessing whether firms have environmental management systems or diversity policies, frameworks should measure actual emissions reductions, improvements in worker welfare, or community health outcomes (Lucarelli & Severini, 2024). This shift demands more rigorous data collection and verification, but it aligns assessment with the ultimate goals of sustainability. Kopnina et al. (2023) argue for incorporating biodiversity and

extinction accounting into mainstream ESG frameworks. This would require metrics that track firms' impacts on species populations, habitat integrity, and ecosystem services, moving beyond carbon-centric environmental assessment. Similarly, social metrics should extend beyond workplace diversity to encompass supply chain labor conditions, community displacement, and human rights impacts in conflict zones (Hassan et al, 2024). Impact-oriented frameworks must also address attribution challenges. Many sustainability outcomes result from complex interactions among multiple actors, making it difficult to isolate individual firms' contributions. Methodologies from impact evaluation, such as contribution analysis, theory-based evaluation, and counterfactual estimation—can help attribute outcomes to specific interventions while acknowledging systemic complexity (Khan, 2024).

6.2 Harmonizing Standards and Taxonomies

Sica et al. (2023) propose developing a reference taxonomy that reduces indicator heterogeneity while preserving necessary context-specificity. Their analysis identifies core metrics that should be universally reported, supplemented by sector-specific and jurisdiction-specific indicators. This approach balances the need for comparability with recognition that materiality varies across industries and geographies. Kopnina et al, (2023) documents efforts toward global harmonization, including the International Sustainability Standards Board (ISSB) and convergence between GRI and SASB frameworks. However, significant fragmentation persists, particularly between financial materiality and double materiality approaches. Achieving meaningful harmonization requires political negotiation among jurisdictions with different regulatory philosophies and stakeholder priorities (Vasiu, 2024). Harmonization should extend to rating methodologies. Requiring rating providers to disclose their indicator selection, weighting schemes, and scoring algorithms would enable users to understand what ratings measure and assess their validity. Regulatory oversight of ESG rating agencies, similar to credit rating agency regulation, could establish minimum standards for methodological transparency and quality (Vasiu, 2024).

6.3 Mandatory Verification and Third-Party Audits

Sica et al, (2023) emphasize that sustainability accounting requires independent assurance to ensure credibility. Third-party audits can verify that reported data are accurate, that measurement protocols are appropriate, and that disclosures are complete. However, current assurance practices

vary widely in scope and rigor, with many audits providing only limited assurance on selected metrics. Strengthening verification requires several elements. First, mandatory assurance for material ESG disclosures, comparable to financial statement audits. Second, clear standards for ESG assurance that specify audit scope, evidence requirements, and reporting formats. Third, auditor competence requirements, ensuring that assurance providers have expertise in environmental science, social impact assessment, and governance evaluation. Fourth, liability frameworks that hold auditors accountable for negligent or fraudulent assurance (Sica et al, 2023). Luu et al. (2024) demonstrate that mandatory reporting with verification requirements can reduce greenwashing and improve actual performance. Extending this model to comprehensive ESG disclosure would require significant investment in verification infrastructure, but it would substantially enhance credibility and accountability.

6.4 Integrating Ecocentric and Just Transition Principles

Khan (2024) proposes a circular-ESG model that integrates planetary boundaries and regenerative principles. This framework assesses whether firms' business models are compatible with long-term ecological stability, rather than merely measuring incremental efficiency improvements. It requires metrics that track absolute resource use, waste generation, and ecosystem restoration, not just intensity ratios. Vasiu (2023) argues for embedding just transition principles in ESG governance, ensuring that environmental sustainability efforts do not impose disproportionate costs on workers and communities. This requires metrics that assess labor rights, community participation in decision-making, and distributional impacts of sustainability initiatives. It also demands governance structures that give affected stakeholders meaningful voice in corporate strategy (Hassan et al, 2024). Integrating these principles challenges ESG's market-centric orientation. Ecocentric frameworks prioritize ecological integrity over shareholder value when the two conflict. Just transition frameworks require corporations to internalize social costs and share decision-making power with stakeholders. These are normative commitments that extend beyond conventional corporate governance, but they may be necessary for ESG to contribute meaningfully to sustainable capitalism (Khan, 2024; Hassan et al, 2024).

Figure 2 below illustrates the pathway from symbolic to substantive ESG implementation, showing how reforms in measurement, verification, and governance can transform ESG from a disclosure exercise into a driver of real sustainability outcomes.

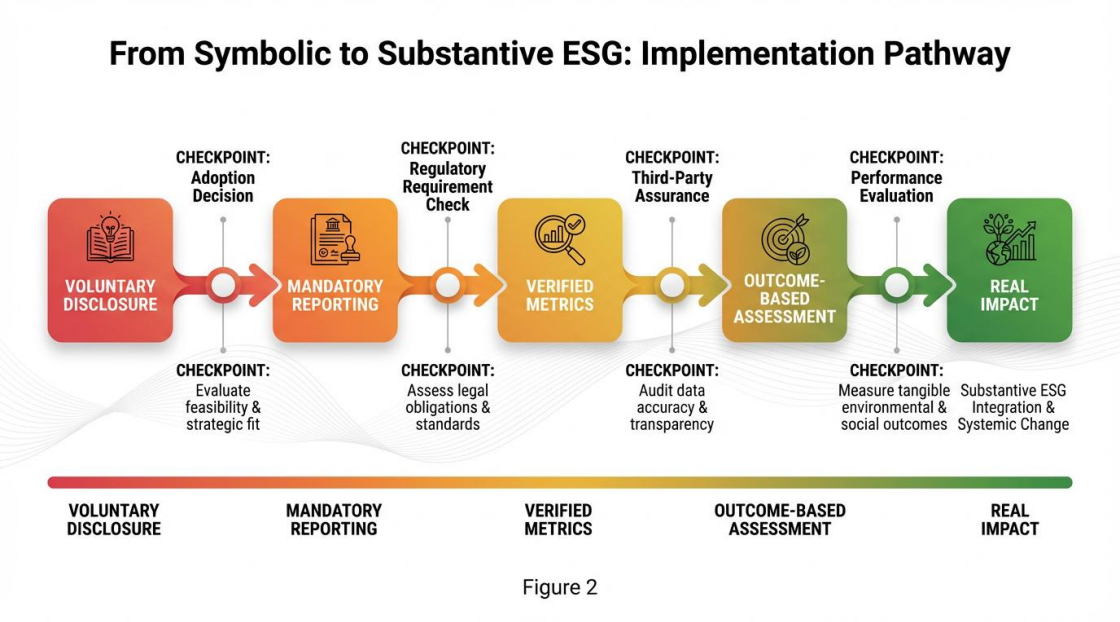

Figure 2. Pathway from Symbolic to Substantive ESG Implementation

Figure 2. Pathway from Symbolic to Substantive ESG Implementation. This flowchart depicts the transition from current disclosure-oriented ESG practices to impact-focused frameworks. Key transition mechanisms include adopting outcome-based metrics, implementing mandatory third-party verification, harmonizing global standards, and integrating ecocentric and just transition principles. The pathway shows how these reforms interact to shift corporate behavior from symbolic compliance to substantive sustainability performance.

7. Governance and Policy Recommendations

7.1 Multi-Level Governance Architecture

Vasiu (2023) proposes a multi-level governance framework that combines regulatory reinforcement, organizational integrity cultivation, and assessment paradigm innovation. This architecture recognizes that ESG credibility requires coordinated action across multiple scales: international standard-setting bodies, national regulators, industry associations, and individual

firms. At the international level, harmonizing core standards and facilitating cross-border enforcement cooperation are priorities. The ISSB and similar initiatives represent progress, but they must navigate tensions between financial materiality and double materiality approaches, and between developed and developing country priorities (Vasiu, 2024). At the national level, regulators should establish mandatory disclosure requirements with clear metrics, verification standards, and enforcement mechanisms. The European Union's CSRD provides a model, requiring comprehensive sustainability reporting with third-party assurance. However, implementation challenges remain, particularly for small and medium enterprises and firms in complex global supply chains (Vasiu, 2024). At the organizational level, firms must develop internal governance systems that integrate ESG into strategy, risk management, and performance evaluation. This includes board-level oversight, executive accountability, and linking compensation to verified sustainability outcomes. Tian and Niu (2024) emphasize that organizational integrity, embedding sustainability values in corporate culture, is essential for moving beyond compliance to genuine commitment.

7.2 Regulatory Mandates and Enforcement

Luu et al. (2024) provide empirical evidence that mandatory reporting reduces greenwashing and improves performance. Building on this, regulators should expand mandatory disclosure to comprehensive ESG metrics, not just greenhouse gas emissions. Mandates should specify measurement protocols to ensure comparability and require third-party verification to ensure accuracy. Enforcement is equally critical. Mandates without meaningful penalties for non-compliance or misreporting will have limited effect. Regulatory agencies need resources and expertise to monitor compliance, investigate suspected violations, and impose sanctions. Civil liability frameworks should enable investors and other stakeholders to seek remedies for material misstatements in ESG disclosures, similar to securities fraud liability (Luu et al., 2024). However, mandates must be designed carefully to avoid unintended consequences. Overly prescriptive requirements may stifle innovation in sustainability practices. Excessive compliance costs may disadvantage smaller firms. And mandates that focus on easily measured metrics may neglect harder-to-quantify but equally important dimensions of sustainability. Regulatory design should

balance standardization with flexibility, and compliance costs with credibility benefits (Vasiu, 2024).

7.3 Investor Stewardship and Engagement

Institutional investors play a crucial role in ESG governance through stewardship activities: voting on shareholder resolutions, engaging with management on sustainability issues, and allocating capital based on ESG criteria. Sica et al, (2023) argues that ESG investing represents an evolving paradigm that integrates sustainability with financial returns, but its effectiveness depends on investors' commitment and capacity. Effective stewardship requires several elements. First, investors need access to credible, comparable ESG information, which depends on the reforms discussed above. Second, investors must have long-term horizons that align with sustainability goals, rather than short-term performance pressures. Third, investors need expertise to evaluate ESG performance and engage meaningfully with firms. Fourth, collective action mechanisms can help investors coordinate engagement and amplify their influence (Kopnina et al, 2023). However, investor-driven governance has limitations. Investors' primary obligation is to beneficiaries, not broader social welfare, which may constrain their willingness to prioritize sustainability over returns. Market-based mechanisms may be insufficient for addressing sustainability challenges that involve public goods or long-term risks that markets systematically undervalue. Investor stewardship should complement, not replace, regulatory governance (Hassan et al., 2024).

7.4 Public Procurement and Conditionality

Vasiu (2023) find that public funding often fails to incentivize substantive ESG performance, with symbolic compliance predominating. Reforming public procurement and funding to condition support on verified sustainability outcomes could leverage government purchasing power to drive corporate behavior. This requires several changes. First, procurement criteria should prioritize verified ESG performance over mere disclosure. Second, funding agreements should include outcome-based conditionality, with continued support contingent on achieving measurable sustainability targets. Third, public institutions should require third-party verification of ESG claims by contractors and grantees. Fourth, procurement processes should incorporate life-cycle assessment and total cost of ownership, rather than focusing solely on upfront price (Hassan et al, 2024). Public procurement reform faces political and administrative challenges. Defining

appropriate ESG criteria without creating barriers to competition requires careful design. Verifying sssssrcompliance across complex supply chains demands administrative capacity. And balancing sustainability goals with other public policy objectives, such as supporting small businesses or domestic industries, requires political negotiation. Nonetheless, public procurement represents a significant lever for promoting substantive ESG implementation (Hassan et al, 2024).

Figure 3 below presents a multi-level governance model integrating regulatory mandates, investor stewardship, organizational integrity, and public procurement reforms to strengthen ESG credibility and drive substantive sustainability outcomes.

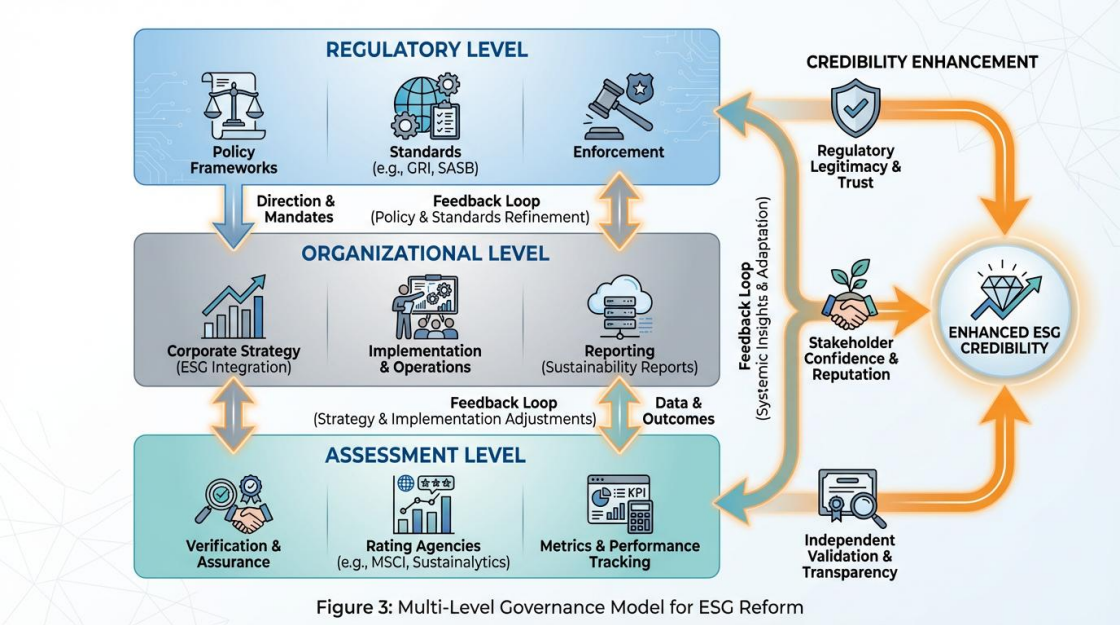

Figure 3. Multi-Level ESG Governance Model

Figure 3. Multi-Level ESG Governance Model. This diagram illustrates a comprehensive governance architecture for enhancing ESG credibility. The model integrates four levels: international standard-setting and harmonization, national regulatory mandates and enforcement, organizational integrity and internal governance systems, and market mechanisms including investor stewardship and public procurement. Arrows indicate information flows, accountability relationships, and feedback loops that enable coordinated action across scales.

8. Discussion and Future Research Directions

8.1 Theoretical Implications

This analysis reveals that ESG's credibility challenges are not merely technical problems of measurement and disclosure, but reflect deeper conceptual ambiguities and normative tensions. Theoretical frameworks that emphasize legitimacy and institutional isomorphism help explain why symbolic compliance persists: firms adopt ESG practices to signal conformity with social expectations, but institutional pressures may reward disclosure over substantive performance (Khan, 2024; Tian & Niu, 2024). Addressing these challenges requires theoretical frameworks that can bridge instrumental and normative perspectives. Stakeholder theory provides a foundation for recognizing multiple constituencies, but it needs clearer prioritization principles and mechanisms for stakeholder voice. Ecocentric and just transition frameworks offer normative alternatives to market-centric ESG, but they require operationalization in governance structures and metrics (Kopnina et al., 2023; Hassan et al, 2024). Future theoretical work should explore how ESG frameworks can be designed to align corporate incentives with system-level sustainability goals. This may require moving beyond firm-level optimization toward frameworks that assess contributions to collective action problems like climate stabilization and biodiversity conservation. It also requires grappling with tensions between shareholder primacy and broader social welfare, and between voluntary market mechanisms and mandatory regulation (Khan, 2024).

8.2 Methodological Priorities

Methodologically, ESG research would benefit from several priorities. First, more causal research designs, experiments, quasi-experiments, and natural experiments, to identify what interventions actually change corporate behavior and sustainability outcomes. Luu et al. (2024) and Fanning et al. (2024) demonstrate the value of such designs for testing policy effects and investor responses. Second, longitudinal studies that track ESG performance and outcomes over extended periods, enabling assessment of whether improvements are sustained and whether they translate into real-world impact. Much existing research relies on cross-sectional data that cannot distinguish temporary symbolic responses from durable changes (Hassan et al, 2024). Third, mixed-methods approaches that combine quantitative performance metrics with qualitative investigation of organizational processes, stakeholder perceptions, and institutional contexts. Vasiu (2023) show

how integrating DEA with content analysis can reveal gaps between reported performance and actual efficiency. Fourth, comparative research across jurisdictions, sectors, and firm types to understand how context shapes ESG adoption and effectiveness. Kopnina et al, (2023) documents significant regulatory variation across countries, but more research is needed on how these differences affect corporate behavior and sustainability outcomes.

8.3 Practical Implications for Corporations

For corporate practitioners, this analysis suggests several priorities. First, move beyond compliance-oriented disclosure toward impact-focused strategy that embeds sustainability in core business models. This requires integrating ESG into capital allocation, product development, and supply chain management, not treating it as a separate reporting function (Khan, 2024). Second, invest in robust measurement and verification systems that can withstand third-party scrutiny. As mandatory disclosure and assurance expand, firms that have developed credible internal systems will be better positioned than those that have relied on selective or superficial reporting (Sica et al, 2023). Third, engage proactively with stakeholders, investors, employees, communities, regulators, to understand their sustainability priorities and build trust. Stakeholder engagement should be substantive, involving meaningful dialogue and shared decision-making, not merely symbolic consultation (Hong & Rosli, 2024). Fourth, set ambitious but realistic ESG targets, recognizing that under mandatory disclosure regimes, missed quantitative goals carry significant reputational risk. Targets should be grounded in science-based methodologies and supported by clear implementation plans and governance accountability (Fanning et al., 2024).

8.4 Policy Implications and Reform Priorities

For policymakers, the evidence supports several reform priorities. First, mandate comprehensive ESG disclosure with clear metrics and third-party verification requirements. The success of the GHGRP in reducing greenwashing suggests that well-designed mandates can shift corporate behavior (Luu et al., 2024). Second, harmonize standards across jurisdictions to reduce fragmentation and compliance costs while preserving necessary context-specificity. International coordination through bodies like the ISSB is essential, but it must navigate tensions between different regulatory philosophies (Vasiu, 2024). Third, regulate ESG rating providers to ensure methodological transparency and quality. Rating divergence undermines ESG’s utility for

investors and firms, and regulatory oversight could establish minimum standards (Vasiu, 2024). Fourth, integrate ESG criteria into public procurement and funding, conditioning government support on verified sustainability performance. This leverages public purchasing power to drive market transformation (Hassan et al, 2024). Fifth, support capacity building for ESG measurement, verification, and governance, particularly in developing countries and among small and medium enterprises. Effective ESG implementation requires technical expertise and administrative infrastructure that many organizations currently lack (Hassan et al, 2024).

8.5 Limitations and Future Research

This analysis has several limitations. First, it synthesizes primarily recent literature (2023-2024), which may not fully capture longer-term trends or foundational debates. Second, the literature reviewed is predominantly from developed country contexts, with limited representation of developing country perspectives and challenges. Third, empirical evidence on the real-world impacts of ESG practices remains limited, with most studies focusing on disclosure and ratings rather than environmental and social outcomes. Future research should address these gaps. Comparative studies across developed and developing countries could illuminate how institutional contexts shape ESG adoption and effectiveness. Longitudinal research tracking environmental and social outcomes, not just ESG scores, could assess whether ESG frameworks actually contribute to sustainability. Sector-specific studies could develop tailored metrics and governance approaches that reflect industry-specific materiality. And interdisciplinary research integrating insights from environmental science, sociology, political economy, and management could enrich understanding of ESG's role in sustainable capitalism (Khan, 2024; Montgomery et al., 2023).

9. Conclusion

ESG frameworks have become central to contemporary capitalism's engagement with sustainability; however, their credibility remains deeply contested. This paper has identified four interconnected challenges: definitional fragmentation that prevents consistent understanding of what ESG measures; measurement heterogeneity that undermines comparability and enables rating divergence; pervasive greenwashing facilitated by disclosure-oriented rather than impact-oriented metrics; and embedded normative assumptions that privilege voluntary market mechanisms over

mandatory verification and system-level transformation. Empirical evidence demonstrates that these are not merely theoretical concerns. Rating agencies produce divergent assessments of the same firms, investors struggle to distinguish genuine sustainability leaders from sophisticated greenwashers, and symbolic compliance predominates in many contexts. However, the evidence also shows that well-designed interventions can improve ESG credibility: mandatory reporting requirements reduce greenwashing, third-party verification enhances accountability, and impact-oriented metrics better align assessment with sustainability goals. Addressing ESG's credibility crisis requires moving beyond incremental refinements toward fundamental reconceptualization. This includes shifting from disclosure to impact metrics that measure actual environmental and social outcomes; harmonizing standards and taxonomies to enable meaningful comparability; implementing mandatory verification and third-party audits to ensure accuracy; and integrating ecocentric and just transition principles that extend beyond anthropocentric stakeholder models and market-centric assumptions. Governance reforms must operate at multiple levels. International bodies should coordinate standard-setting and facilitate cross-border enforcement. National regulators should mandate comprehensive disclosure with clear metrics and verification requirements. Investors should exercise stewardship to hold firms accountable for sustainability performance. Public procurement should condition government support on verified outcomes. And firms should embed sustainability in core strategy and governance, moving from compliance to genuine commitment.

The future of sustainable capitalism depends on whether ESG frameworks can evolve from symbolic disclosure exercises into credible drivers of substantive environmental and social improvement. This requires confronting uncomfortable tensions between shareholder primacy and broader social welfare, between voluntary market mechanisms and mandatory regulation, and between firm-level optimization and system-level transformation. It also requires sustained commitment from multiple actors, investors, corporations, civil society, and researchers to build the institutional infrastructure for credible sustainability governance. The path forward is challenging but not impossible. The evidence reviewed here suggests that meaningful reform is both necessary and achievable. By addressing conceptual gaps, interrogating normative assumptions, and implementing robust governance mechanisms, ESG frameworks can become more credible instruments for aligning corporate behavior with the urgent imperatives of

environmental sustainability and social justice. The stakes, for planetary stability, social equity, and the legitimacy of capitalism itself, could not be higher.

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