The Effects of Short-termism on Firm's ESG

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Abstract. This study examines how managerial short-termism shapes corporate Environmental, Social, and Governance (ESG) outcomes. Pressures from career horizons and performance evaluation steer attention toward visible and easily scored outputs, shifting budgets away from engineering upgrades such as energy efficiency retrofits and emissions abatement technologies toward expanded reporting and award seeking. The shift induces resource misallocation, a separation between narrative disclosure and operational performance, financing contracts that place excessive weight on soft indicators, and negative spillovers to supply chains and organizational capabilities. This study proposes redesigning incentives around a small set of hard metrics, measured as improvement relative to a baseline within a unified measurement protocol with independent assurance that links disclosures to auditable operational data. These hard metrics should be written into financing and procurement contracts and supported by cross functional data and project management systems so that ratings become a natural by product of engineering progress rather than a public relations narrative. Under rising carbon prices and tighter regulation this approach lowers the cost of concentrated compliance and reputational risk, builds durable engineering capability and resilience, and better aligns external scores with underlying governance quality.

Keywords: Short-termism, ESG, Firm.

1 Introduction

In recent years the importance of Environmental, Social, and Governance (ESG) has increased significantly for firms and capital markets, yet the visibility of ratings does not match the difficulty of governance. Pressures from career and evaluation cycles pull attention toward outputs that are easy to display.

This shift has three potential consequences. First, resources move from engineering change to outward narrative. The decline in energy and emissions intensity slows, and green capital spending and skill formation fall short. Second, information decouples. Textual commitments rise faster than progress on hard indicators, and ratings are temporarily amplified by scope choices and methodological differences. Third, prices become more sensitive to soft signals. Financing and insurance respond to paper improvements but react slowly to real upgrades, supply chains pursue location shifting compliance to satisfy audits, and organizational learning and front-line improvement routines are diluted. When regulation tightens and carbon prices rise, the deferred costs arrive

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in a lump, combined with credit and reputational risk, and firms struggle to close capability gaps with ad hoc actions.

Starting from the operations floor, this paper sets out a path that re anchors scoring in engineering and grounds governance in process and data. The core is a small set of hard, verifiable, and value relevant metrics to define targets. Progress is measured by improvement from a baseline rather than a one-off level. Measurement scopes remain stable and transparent, and third-party assurance becomes routine. Finance and procurement pay only for real upgrades. Unit energy use and emissions, green capital spending, and safety performance enter into contracts, with failure triggering higher costs or volume adjustments. At the organizational level, cross functional data and project management systems ensure that production, supply chain, health safety and environment, and finance work from the same traceable data. Scenario analysis and stress testing move upstream into budget ranking so that capital flows earlier to projects that shift the cost curve.

The paper also offers a diagnostic for talk heavy and action light behavior. The gap between commitment intensity and improvement in hard indicators serves as an early warning, and this study shows how to link this measure to board oversight, internal incentives, and external communication. The aim is not to chase scores but to make scores reflect engineering progress, so that under tighter regulation and higher carbon prices firms show verifiable resilience and a clearer competitive position.

2 Literature Review

2.1 Managerial Short-termism

Managerial short-termism is typically defined as giving excessive weight to near-term, observable payoffs under the combined pressure of career horizons, performance evaluation cycles, and career concerns, which crowds out investments with long payback periods [1]. In theory it arises in a multitask agency setting with information asymmetry. Capital markets and boards can more readily observe and score current earnings, cash flow, and visible outputs, while they face noise, lags, and externalities when evaluating long-horizon projects. Optimal contracts therefore place more weight on short-term metrics and generate a rational mismatch of horizons [2]. Signaling motives reinforce this tendency, since managers adjust investment and disclosure to influence outside beliefs about firm quality. Dismissal risk and promotion incentives in the managerial labor market push executives toward outcomes that show within their career [3]. Actual or perceived takeover threats and control contests raise the cost of valuation declines, which tilts choices toward decisions that are friendly to current cash flow. Uncertain technological paths and cross-functional frictions increase the verification cost of long-term projects, which makes delay or downsizing more likely.

Executive surveys show a broad willingness to cut R&D, defer capital expenditures, and scale back marketing to "make the numbers," which indicates that near-term earnings thresholds strongly drive behavior [4]. Matched samples of public firms and comparable private firms show that public visibility and opinion pressure raise the sensitiv-

ity of investment to stock prices, so fixed investment and R&D track short-term valuation more closely [5]. Studies on analyst coverage and media attention find that denser coverage and tighter guidance pressure coincide with stronger real-activity manipulation and shorter cycles, while exploratory innovation and long-term learning are suppressed [6]. Research on incentives further shows that when equity awards are close to vesting or when cash pay dominates, firms are more likely to reduce projects that do not pay off within the executive's horizon and to shift toward faster payback investments [7]. Stable block holdings and long-horizon institutional owners that engage on policy issues are associated with more patient capital allocation and can partially mitigate short-termism.

2.2 ESG

Firm-level research asks a plain question, i.e., how does ESG affect cash flows and the cost of capital, and in turn firm value and competitive position. The evidence is consistent. Strong environmental and safety management cuts accidents and fines, smooths cash flows, and raises operating resilience [8]. High quality governance and disclosure reduce information frictions for outside investors, which eases adverse selection and moral hazard and lowers required returns on equity and debt [9]. Sometimes, materiality is uneven. For example, in carbon intensive sectors, in settings with heavy regulation, and in trust dependent industries, improvements are more likely to translate into visible risk reduction or revenue stability.

Recent work grounds ESG in operations. Energy efficiency upgrades and emissions control change the unit cost curve [10]. Internal carbon prices and payback periods enter capital budgeting and influence how funds are allocated [11]. Occupational safety and employee development reduce incident rates and turnover, which stabilizes processes and improves learning. Supplier due diligence and multiple sourcing curb single point failure risk and help preserve market access as green procurement and border measures spread. These shifts also move the top line. Greener product mixes and stronger social trust can support price premia and share gains. Crises and policy turn magnify these effects. Firms with solid foundations are more likely to maintain capacity and delivery during stress and to improve their standing as peers diverge [12].

3 The Impact of Short-termism on ESG

3.1 Shift Resources

Under career pressure and tight evaluation cycles, managers favor outcomes that markets can see and score quickly. Budgets drift toward longer reports, public pledges, award applications, and index inclusion. Capital for engineering work such as energy efficiency upgrades, emissions control, process redesign, and occupational safety systems is large, requires coordination, and has long payback with technological and operational uncertainty. These projects are harder to verify within a typical tenure and are pushed to the margin. Energy and emissions intensity fall more slowly. The share of green capital spending and related talent pipelines stay weak. Structural improvements in safety and compliance stall. Short term reputation and valuation may hold up, but

when carbon prices rise or rules tighten the deferred costs arrive at once. Cash flows face sharp pressure, productivity curves do not shift down, and resilience does not become a durable advantage. Investment ranking then locks in this misallocation and deepens reliance on public relations and outside endorsements. Internal engineering and learning capacity erode over time.

3.2 Disclosure and Scopes

Many rating methods place high weight on disclosure sufficiency and formal policies. Short term managers stack text to shape perception. Common moves include longer reports, detailed policies and processes, and emphasis on training and partnerships, while adjusting Scope 3 boundaries, baseline years, and consolidation scopes to show better trends on paper. Narrative commitments rise while real progress slows. Investors and media receive story rather than engineering progress, and comparability across time declines. When methods tighten or regulators standardize scopes and require third party assurance, earlier paper gains are stripped out. Ratings fall back and credibility suffers, and firms pay higher costs to explain and to remediate. The deeper effect spreads inside the organization. Middle managers spend time on reports and audit prep to hit visible targets. Data work serves disclosure deadlines rather than operating decisions. Technology choices give way to formal compliance moves. Over time a culture forms that favors outward messaging over internal improvement.

3.3 Financing Contracts

Sustainability linked bonds and loans write ESG metrics into contracts and can turn commitments into prices. Short term firms select soft targets such as training coverage or report frequency. Hit rates look high and step ups in coupons are rare, yet real abatement and efficiency paths move little. Because ESG spending first reduces tail risk, creditors benefit earlier through spreads, which dilutes the marginal incentive for shareholders. Management then has less drive to pursue deep upgrades. A double mismatch follows. Financing terms react to soft indicators, while operating results lag on hard indicators. Firms may also use staged packaging and baseline resets to maintain formal compliance and delay real equipment renewal and process change. The pattern is stronger when cash is tight, or earnings are under pressure. Scarce capital goes to projects that support financing terms and ratings rather than to projects that lower unit cost and physical risk over three to five years. Long run competitiveness is slowly eroded.

3.4 Supply Chains and Organizational Capability

To meet disclosure and financing tests, firms may push compliance down the chain. Audit pass rates and complete documentation substitute for total emissions reduction across the chain. Risk moves across locations rather than falling in total. In a world of green tariffs, tighter due diligence, and rising geopolitical uncertainty, this surface optimization increases fragility. A single break can trigger delivery delays and higher penalties. Short-termism also weakens learning and innovation. R and D and process redesign are cut. Data infrastructure is thin. Internal carbon prices and shadow water prices become box ticking. Scenario analysis and stress testing do not reach capital budgeting. Safety culture and front-line improvement lose force, so tail risks in accidents and shutdowns do not step down. Talent paths shift as well. Engineering and operations roles

have unclear advancement, and cross functional project skills do not build. When technology or policy turns, the firm lacks options and continues to fund visible activities to maintain its image. Over time the firm gives up pricing power with customers, patience with investors, and trust with regulators. Scores and formal compliance fail to translate into sustained productivity and cash flow gains.

4 Suggestions

4.1 Rebuild Incentives Around Hard Metrics

Direct attention away from glossy stories and back to engineering that changes cost and risk. Choose a small set of verifiable and value-relevant indicators for annual and multi-year evaluation. Give priority to the year-on-year decline in energy and emissions intensity, sustained reductions in serious incidents and injury rates, delivery of green capital spending, and a steady rise in the share of renewable energy. Judge progress by improvement rather than one-off levels. Set annual targets and a rolling multi-year path to avoid year-end sprints and cosmetic fixes. Use deferred cash and equity with holding periods and clear claw back provisions. Cap the weight given to awards, pledge signings, and other visibility plays. Have the compensation and audit committees maintain a metric dictionary and a scope lock list. Require approval for any scope change and restate history and impact at the same time. If energy or emissions fall short of the path, narrative credits expire. If a major safety event occurs or a regulator requires a restatement, cut the next year's bonuses and extend the vesting horizon. Once incentives are stable, the room for short-termism narrows and the base of any rating becomes sturdier.

4.2 Tie Disclosure and Assurance to Operational Results

Scores need information, but they should track real progress rather than word count. Publish a crosswalk that links each public commitment to hard indicators with clear data boundaries, a base year, and a timetable. Make improvement the spine of the report and keep measurement scopes and consolidation rules stable. When a change is necessary, disclose a quantified restatement. Obtain independent assurance on key indicators, with sources, sampling, and plans to fix control weaknesses spelled out. Show multiple rating outcomes side by side and explain the drivers of differences and the plan to close gaps. Build an internal decoupling monitor that flags the standardized gap between promise intensity and KPI improvement. When the gap widens, launch a targeted audit and rebalance the budget. This loop turns ratings into a projection of engineering progress and moves governance from paper back to data and process.

4.3 Use Organization and Culture so Scores Mirror Engineering Progress

Good governance rests on clear roles, reliable data, and steady execution. A board sustainability committee sets direction and targets. The audit committee owns data quality and internal control. Operations and finance share ownership of process indicators. Create a cross functional project office and data backbone so production, supply chain, health safety and environment, and finance work from consistent and traceable data. Make scenario analysis and stress testing routine. Under higher carbon prices, energy

scarcity, or tighter trade rules, set out cash flow and capacity playbooks in advance. Build early-warning and speak-up channels and protect frontline voices on scope drift and engineering risk. Give engineering and operations clear career paths and incentives. Fold milestone reviews and lessons learned into performance discussions. Engage long-horizon investors on specific topics so outside capital is more patient with short-term noise. Treat the score as an outcome of engineering rather than a standalone goal. With stable processes and a grounded culture, short-termism struggles to take root and ratings, and governance reinforce each other over time.

5 Conclusion

Managerial short-termism changes ESG. This creates a split between disclosure and operating results, tilts financing and ratings toward soft signals, and weakens supply chains and organizational learning. Risk then accumulates and crystallizes when rules tighten, and carbon prices rise. This study recommends a small set of hard and verifiable metrics, progress measured by improvement, stable scopes with independent assurance, and embedding energy, emissions, safety, and green capital spending in financing and procurement, backed by cross functional data, project management, and routine scenario analysis. Add an early warning gap between promises and KPI gains, use deferral and claw backs, and restate when scopes change to keep comparability. Adjust weights by industry exposure, bring risk forward, embed capability in process and data, and convert long term value into durable cash flows and trust.

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