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ESG Frameworks and Technology Policy: A Critical Review of Innovation Governance in Emerging Economies

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Abstract

Environmental, social and governance (ESG) frameworks and technology policy are theorized in different streams of literature, and there is no one coordinating these elements, despite their acting on the same firms in emerging economies. This critical review looks at their interface, and unpleasantly proposes that ESG frameworks control emerging-economy companies primarily on their ability to do things, not by regulation, and that ability ESG frames consume is the same precious managerial, technical and financial asset that innovation policy aims to create. The evidence for this claim in the review is the governance retrenchment that took place in 2025–2026. The European Union's Omnibus I directive has dramatically reduced the scope of sustainability reporting, reduced disclosure standards and imposed a mandatory value chain limit, while the Indian securities and exchange board has repeatedly postponed efforts to impose mandatory value chain assurance under its reporting framework, despite reports of a shortage of assurance practitioners. They are not mutually exclusive concessions, but the same conclusion twice: Administration capacity was not adequate to handle measurement demand. This review creates two analytical tools, a transmission architecture that identifies the statutory, capital market, contractual and border pathways that enable the transfer of ESG obligations to emerging economy firms, and a governance interface that outlines three dimensions of misalignment with innovation policy (temporal, directional, distributive). It proposes that retrenchment in statutory channels does not alleviate the emerging economy suppliers, but simply shifts the governance to contractual channels with neither proportionality nor de minimis nor representation. This is followed by a typology of four systems and a research agenda. The review has no primary data, no estimates and is conceptual and evaluative.

Keywords: ESG frameworks; technology policy; innovation governance; emerging economies; sustainability disclosure; regulatory capacity

1. Introduction

In a new economy, two governance systems are at work on the same company – and neither was created with the other in mind. The first is the ESG apparatus: disclosure standards, assurance requirements, ratings, and index screens, and lender covenants, which first developed in advanced-economy capital markets and are spreading outward via investment, supply chains and trade rules. The second is technology and innovation policy; the instruments by which the developing states try to

create productive capability subsidies, mission programmes, public research, procurement, conditions for technology transfer, and technological strategy.

There is a considerable literature for each. Accounting and finance scholarship has documented financial materiality (Khan et al., 2016), contested and divergent measurement (Berg et al., 2022) and real but heterogeneous effects of disclosure mandates (Christensen et al., 2021) regarding the extent and impact of disclosure on the financial markets. The field of innovation studies has determined that capability building is a slow and local process (Cohen and Levinthal, 1990; Lee and Malerba, 2017); that absorptive capacity is a precondition for catch-up, but not access to technology; and that policy frames have shifted from R&D support to transformative and directional missions (Mazzucato, 2018; Schot and Steinmueller, 2018).

The two literatures are silent. ESG scholarship sees the firm as discloser, and asks the following: Is disclosure accurate, comparable and is it priced? Innovation scholarship is a look at the firm as a learner and the question of whether it builds capability. Neither asks what the consequences are if the same company with the same limited leadership must perform both tasks, nor if the demands are harmonious. This review maintains that this is often not the case and that recent regulatory history has been a testimony to their incompatibility. In the 2025–26 reporting period, two of the most significant reporting schemes backed off. As of 2026, the EU's Omnibus I Directive will increase the threshold for firms to be subject to sustainability reporting to those having over 1,000 employees and net turnover of more than €450 million, significantly lowered disclosure requirements, eliminated sector-specific thresholds, and implemented a cap on the amount of sustainability information that can be demanded by firms in the in-scope category from smaller value-chain partners (European Union, 2026). The securities regulator in India which mandated reporting of key ESG metrics with guarantees, with value-chain aspects extended into value-chain, postponed on the mandatory value-chain assurance in the backdrop of a recognized lack of practitioners (SEBI, 2023).

The prevailing interpretation is political: competitiveness backlash, a deregulatory shift. This review suggests another interpretation. The two retreats both acknowledge that the measurement and assurance capacity that the frameworks called for did not exist at the scale that the frameworks assumed. That's a statement on ability, not ideology, and it has an immediate significance in the emerging markets, where the constraint is the one that constrains the most, and the release is not happening.

The review has three questions. RQ1: How are ESG frameworks disseminated into firms in the emerging economies and what can be assumed about the firm for each of these channels? RQ2: What are the misalignments of ESG governance and innovation governance axes? RQ3: What insights does the retrenchment of 2025-2026 provide regarding the interface, and who is it for?

Its contributions are: a transmission architecture which delineates four channels of ESG obligation; a governance interface which defines three misalignment axes; and a four-regime typology that positions emerging economies within it.

2. Background and Prior Literature

2.1 The Architecture of ESG Frameworks

Although there are many different variations of contemporary ESG frameworks, they all have the same architecture: they define a reporting entity, they set a materiality filter, they establish a set of metrics, they demand assurance, and they open the results to capital markets. They differ on the filter. The IFRS S1 and S2 (2023) present IFRS financial materiality information that is relevant to investors in enterprise value assessments, and are adopted or formally aligned with by a growing number of jurisdictions (according to different sources, by various amounts published by IFRS Foundation, 2023); adoption of the S2 is not mandatory for the S1. In the EU, until Omnibus I, there were two approaches regarding standards, with double materiality, which means impact as well as financial risk (European Union, 2026). The Business Responsibility and Sustainability Report (BRSR) prescribed for listed

companies and expanded to an assured core subset for large listed companies, superimposes a framework covering nine principles from the national framework on metrics that circulate worldwide (Securities and Exchange Board of India [SEBI], 2021, 2023).
All of these have two design assumptions which are debatable in advanced economies. The first is that the reporting entity has the ability to measure what is requested: that emissions, water, workforce and value-chain data is available and/or can be created at reasonable cost. The second is that they have an assurance profession to verify them. These are not details, they are both assumptions that are the real entry requirement of the framework.

2.2 Innovation Governance in Emerging Economies

Innovation policy in emerging economies is based on a different rationale. It is not purchased, but built up over time, via a process of absorptive capacity that arises from an ongoing investment in people and routines (Cohen & Levinthal, 1990); it is a process of catch up, not access to technology, and is dependent on domestic capability (Fu et al., 2011; Lee & Malerba, 2017). In national systems of innovation, policy is not about fixing market failures, but building institutions (Freeman, 1995). The contemporary frame is directional: it is about missions, or a policy set that sets a trajectory and allows failure in between, rather than about R&D subsidy and systems repair; it is about change, not just transformation, as expressed by Schot and Steinmueller (2018); and it is about green industrial policy as a legitimate development tool, as argued by Rodrik (2014) and Altenburg and Assmann (2017).
Anticipatory, reflexive, inclusive, and responsive innovation (Stilgoe et al., 2013) is the closest to a linkage between the two systems. A true attempt to control the direction of governance – not just its results – and it is significant that it has grown largely in isolation from disclosure apparatus – and from questioning the cost of its own governance requirements.
There are 3 properties of this logic that affect the interface. It's long-term, it's not afraid to fail because if an experiment has never failed, it isn't an experiment, and it's directional—not protective; it points towards a goal, not towards protecting investors from risk.

2.3 What the Literatures Do Not Ask

The instruments of ESG have been rigorously examined by itself: measurement and scope diverge, and so do weighting, ratings diverge, and divergence is not converging (Chatterji et al., 2016); disclosure has real effects, with an uneven distribution (Christensen et al., 2021); disclosure invites selective presentation under scrutiny (Christensen et al., 2011; Delmas & Burbano, 2011). The issue of 'capability' and 'direction' has been equally challenged by innovation scholarship.Capability and direction have been equally questioned by innovation scholarship. Neither has inquired about what the other instrument does to its own object. No literature exists on whether ESG compliance wins or loses at absorptive capacity for a given set of managers, and no literature exists on whether the directionality of innovation policy can be read off a materiality filter based on investor risk. The gap and the streams are outlined below (Table 1).

Table 1. *Literature streams and the identified gap*

Stream	Core contribution	Treats the firm as	Not addressed
ESG measurement and ratings	Divergence is structural, not noise	A discloser to be scored	Capacity cost of disclosure; development trajectory
Mandatory disclosure effects	Real but heterogeneous consequences	A regulated entity	Competition with capability investment
Materiality	Only some issues are	An enterprise	Materiality of

Stream	Core contribution	Treats the firm as	Not addressed
	financially material	valued by investors	developmental direction
Innovation capability and catch-up	Capability accumulates slowly and locally	A learner	Compliance burden as a claim on the same resource
Mission-oriented and transformative policy	Policy can be directional	A recipient of direction	Interaction with risk-based ESG governance
This review	Interface, transmission, retrenchment	A finite organisation subject to both	—

3. Research Methodology

3.1 Review Type and Rationale

This is a critical review, a review that means to evaluate and provide a conceptual reconstruction rather than a thorough aggregation, and a review whose result is a hypothesis or a model, not a summary (Grant & Booth, 2009; Paré et al., 2015). Is it adequate to do identifiable conceptual work here differentiation and delineation, not summary (MacInnis, 2011)? A type is purposefully selected. A systematic review is one that is formulated to address a bounded question for which there is a body of literature that can be assembled; the defining characteristic in this case is that two sets of literature exist that do not overlap, and that aggregating within either will result in the same omitted literature. Critical review allows the evaluative perspective the problem demands, but at the expense of the extent to which it allows the problem to be reproduced, which this review makes explicit, not implicit.

3.2 Corpus and Procedure

A purposive selection of three bodies of materials were created. The scholarly corpus was limited by looking at those areas of accounting, finance and innovation studies, and development economics for which there was a conceptual contribution, and not by an exhaustive search. The regulatory corpus consists of primary instruments the ISSB standards, the EU directives (including Omnibus I) and the Indian reporting circulars, which are read straight, without commentary. All analysis was done by first identifying what the design assumption was for each framework, the process by which the obligation reaches a firm, and then testing both the resulting architecture and the 2025-2026 retrenchment as a natural probe: If the analysis is correct, then the retrenchment should be the result of the capacity constraint, not the political salience of the issue.

3.3 Standards of Evidence and Boundary Conditions

No primary data, no literature estimates, and no counts of literature are reported in the review. Regulatory thresholds are given in the instruments themselves; if a proportion of firms is indicated in secondary sources, this is not repeated here as the methods and source vary. The phrase "emerging economies" is used to refer to economies that have a significant industrial potential, shallow or concentrated capital markets and thin assurance infrastructure, while the argument in this context is weakened by the failure of any of these. The review does not focus on firms with international capital

or exposure to export markets and does not exclude domestic informal sector because their exposure to ESG is very small and their exclusion is a finding.

4. Analysis

4.1 The Transmission Architecture

ESG obligations reach an emerging-economy firm through four channels, each with a different legal character and a different assumption about the firm (Figure 1).

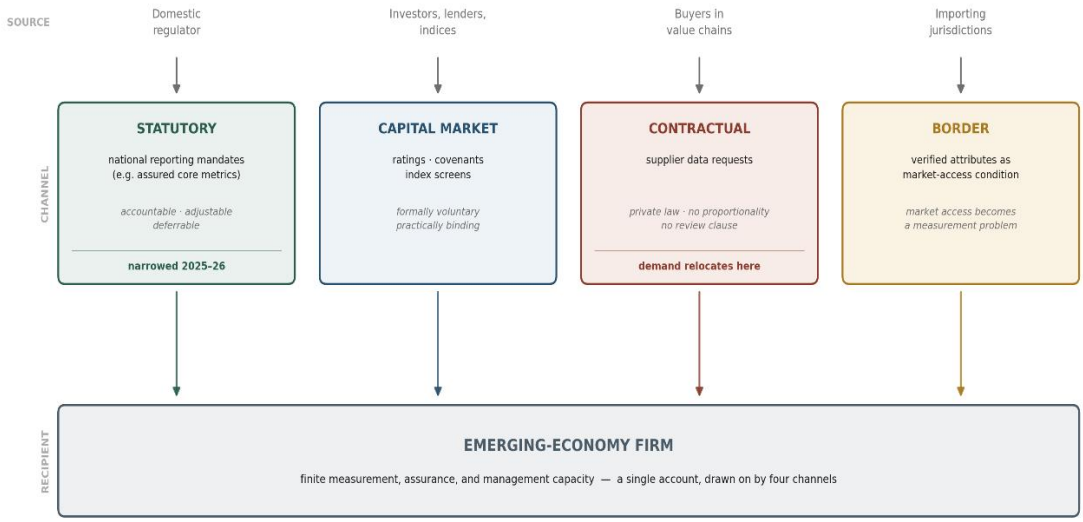


Figure 1. *The transmission architecture: four channels through which ESG obligations reach firms in emerging economies, with the 2025–2026 retrenchment marked.*

The statutory channel. Domestic law: India's BRSR represents a clear-cut example, where the securities regulator has required that large listed companies (with an assured core subset) prepare such reports (SEBI, 2021, 2023). This channel is democratic, adjustable and critically deferrable, which occurred when value-chain assurance was unfeasible.

The capital-market channel. Include index, institutional, lender covenant and ratings. It is obligatory, though formally voluntary, for any firm that wants foreign capital. The instrument for this is the rating, and the rating's structural divergence (Berg et al. 2022) indicates that the firm is not meeting a specific standard, but rather a number of inconsistent ones.

The contractual channel. Passing down buyer requirements along the value chain. This is where most emerging economy companies actually interact with ESG and it is private law – no proportionality, de minimis, consultation, review clause.

The border channel. Trade measures that require buyers to pay for environmental characteristics that have been verified. The assumption is the best of them all that the exporting company will be able to provide data that an importing regulator will accept.
The frameworks in Table 2 are listed with an assumption that is expected.

Table 2. *Major frameworks, their design assumptions, and implications for emerging-economy firms*

Framework	Materiality filter	Core assumption	Implication where the assumption fails
ISSB IFRS S1 / S2	Financial (enterprise value)	Investors price sustainability risk in deep markets	Filter selects for foreign investor concern, not domestic trajectory
EU ESRS under CSRD (post-Omnibus I)	Double, narrowed	Firms above threshold can measure and assure	Below-threshold firms exit statutory scope but not buyer demand
GRI	Impact	Stakeholders use impact data	Reporting without a user; cost without discipline
India BRSR / BRSR Core	National principles + assured core	Assurance capacity exists domestically	Deferral; variable assurance quality
Border carbon measures	Verified embedded attributes	Exporter can produce acceptable data	Market access becomes a measurement problem

4.2 Critique I: Transplanted Materiality

Financial materiality is not a neutral filter. It chooses information relevant to investors who are evaluating enterprise value – an objective information and a parochial one – it encodes the concerns of the capital that does the evaluating. If a firm's marginal investor is foreign, the filter brings the risk model of that investor with it, and the disclosure that comes out of the filter is of the firm's exposure to concerns raised elsewhere. The argument against measurement is not that strong. In a structural transformation economy the answer to the materiality question is different for the material to whom, for what decision. The evidence that only some sustainability issues are economically relevant (Khan et al., 2016) is typically interpreted as a focus on licensing, whereas read in the opposite direction it calls out the more pointed question of what is developmentally relevant and missing from the filter?

4.3 Critique II: The Capacity Constraint

The review's main argument is based on ESG regulation by capacity. The binding input is not the desire to measure but the capacity to measure, document, and assure; these are all areas that depend on trained people, systems, and management attention. In an emerging-economy firm, they are not so abundant and they are the ones that are needed for absorptive capacity (Cohen & Levinthal, 1990). Both for compliance and capability are raised from one account.

This gives rise to the compliance–capability tradeoff, and in this sense it is regressive: cost of compliance is largely fixed and so it has a disproportionate impact on smaller firms, which are the ones most likely to be the innovative capability-building firms aimed at by innovation policy. The mechanism doesn't demand irresponsible behaviour. A competent manager who is dealing with a buyer's data request and a capability investment that has a ten-year time horizon will service the data request, as there is a deadline and customer associated with the data request.

This is not an assumption but an actual fact. Its proof is that both the two regimes looked at here have already accepted the constraint. India did not have enough practitioners to have value-chain assurance (SEBI, 2023). The EU has increased thresholds, lowered standards, eliminated sector requirements and limited value-chain requirements (European Union, 2026). The creators of a framework which shorn it,

after finding compliance impractical in a highly professionalized advanced economy, have said something about its expectations. The need in Jakarta and Coimbatore was not reduced.

4.4 The Governance Interface

Figure 2 specifies where ESG governance and innovation governance misalign.

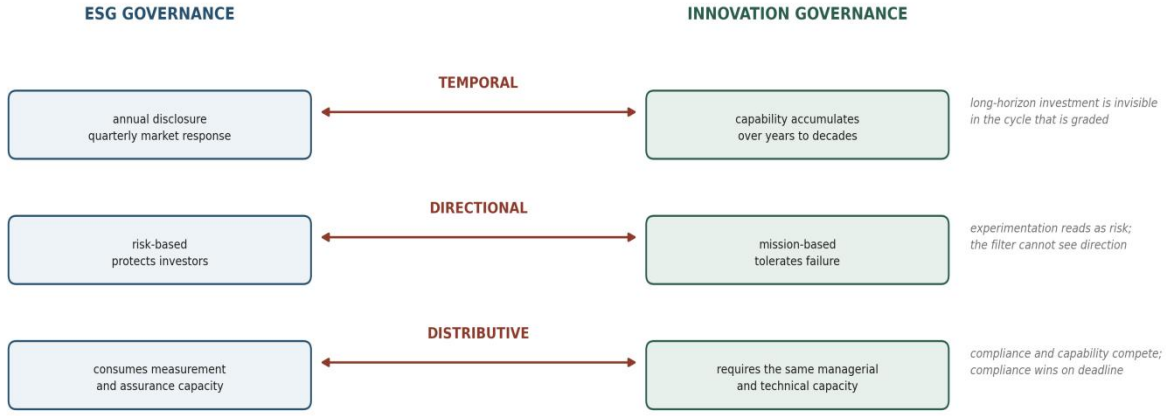


Figure 2. *The governance interface: three axes of misalignment between ESG and innovation governance.*

Table 3. *The three misalignment axes*

Axis	ESG governance	Innovation governance	Consequence at the interface
Temporal	Annual disclosure, quarterly market response	Capability accumulates over years to decades	Long-horizon investment is invisible in the cycle that is graded
Directional	Risk-based; protects investors from exposure	Mission-based; sets a destination and tolerates failure	Experimentation reads as risk; the filter cannot see direction
Distributive	Consumes measurement and assurance capacity	Requires the same managerial and technical capacity	Compliance and capability compete; compliance wins on deadline

The directional axis should be highlighted. Mission-oriented innovation policy is a fail-safe approach, and ESG governance is a risk-management technology (Mazzucato, 2018; Schot & Steinmueller, 2018). A risk filter is an application of a risk filter to a portfolio of developmental experiments, which is not to say that it will assess those experiments. It is not just that the two systems are not coordinated on this axis, but they are actually opposed.

4.5 Critique III: The Retrenchment Paradox

The clear implication of Omnibus I is that the pressure on suppliers subsides. For emerging-economy companies, the answer appears to be the opposite, because of a structural factor, the review suggests.

A narrowing of statutory scope will not extinguish the need for supplier data, it will narrow the scope of the law under which the demand for supplier data is imposed, but the buyer's remaining obligations, investor commitments and reputation exposure will remain. The demand then flows through the contractual channel, which does not have proportionality limits, de minimis thresholds, consultation or review clauses. The EU value-chain cap is interesting for precisely this reason: it first provides the right to refuse requests to exceed a voluntary standard, and it is designed to safeguard undertakings below an employee threshold. Whether, and how, that protection extends to a non-EU supplier whose contractual relationship with the buyer is regulated by commercial contract and the supplier's own law, and not by the directive is an open question for a review like this and one to which scholars and policy makers should pay immediate attention. The imbalance is stark: an SME in Europe has a statutory right to say no; the Indian or Vietnamese SME might have only the commercial freedom to lose the contract. This is the most tangible expression of governance without representation. The rules were enacted in an area where the impacted suppliers are not eligible to vote, and the aid was targeted towards constituents the suppliers are not.

4.6 A Typology of Governance Regimes

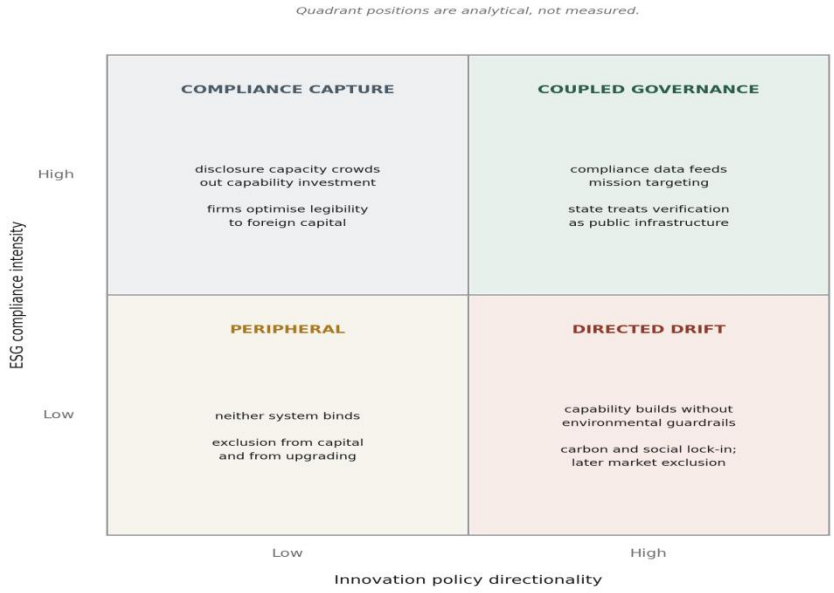


Figure 3. *Governance regime typology: ESG compliance intensity against innovation policy directionality.* Quadrant positions are analytical, not measured.

Table 4. *Regime characteristics*

Regime	Conditions	Characteristic dynamic	Principal risk
Coupled governance	High ESG intensity, high directionality	Compliance data feeds mission targeting; state absorbs measurement cost	Coordination cost; capture by measurable objectives
Compliance capture	High ESG intensity, low directionality	Disclosure capacity crowds out capability investment	Firms optimise legibility to foreign capital; capability

Regime	Conditions	Characteristic dynamic	Principal risk
			stalls
Directed drift	Low ESG intensity, high directionality	Capability builds without environmental or social guardrails	Carbon and social lock-in; later exclusion from markets
Peripheral	Low on both	Neither system binds; informal and domestic-facing firms	Exclusion from capital and from upgrading

Use of the typology is diagnostic. Capital inflows from advanced economies are generated outside the ESG channel and export sectors in emerging economies (EE) exposed to the EESC are in compliance capture because the advanced economies make the capital flows, not the EE states. The two systems reinforce each other in one quadrant (coupled governance) and it is crucial that the state considers the measurement infrastructure to be public infrastructure, which has an obvious cost, and a defensible logic.

5. Discussion

5.1 Implications for Research

The interface is an empirical field without any empirical work. There are three questions that are manageable at this time. Does compliance with ESG requirements take money away from innovation investments within the organization? The design is in place: the exposure to a reporting mandate is different based on the threshold, creating discontinuities that establish the impact on R&D and training expenditure. In a systematic way, does the materiality filter out developmentally material information? This is a comparison of the tasks a framework must perform and the goals of a national innovation strategy. Does retrenchment lead to a change in demand rather than a reduction in demand? There is post Omnibus supplier data requests which are observable and depends on the answer whether anyone in the EU benefited from the simplification.
In the field, there is a high risk that ESG governance will be quantified based on the level of disclosure. Quality of disclosure is a measure of disclosure capacity. That's the confound, and not the variable.

5.2 Implications for Policy

The review suggests that measurement and assurance capacity should be understood by emerging-economy policymakers as an infrastructure for innovation, not an overhead process to be shared, rather than a verification process, and that public infrastructure and assurance training can free up firm-level resources for capacity and capability. It also suggests negotiations on the transmission architecture, not on standards: contesting a metric is not as critical as contesting whether the demand is in the form of a measured metric. If proportionality is the correct principle for a European SME, advanced economy regulators have got a precedent to follow that they will go so far as to extend beyond the EU border – and whether it should, is the question.

5.3 Limitations

The review is conceptual and argumentative, and contains no validations, the propositions in the review are reasoned, not demonstrated. It has regulatory evidence from two jurisdictions and compliance capacities may not extrapolate to countries with different professional infrastructure or

state capacity than India and the EU. This is a reading of retrenchment as a capacity admission that competes with a political-economy reading of pressure for deregulation, and it is also possible to read the mix as a political-economy reading of pressure for deregulation as a capacity admission. The transposition of the retrenchment is a recent development, it is not completed, and the effects of the retrenchment at the supplier level are not observed; the argument in Section 4.5 is a prediction and should be interpreted as such. Lastly, the review does not pose the question of the value of pursuing ESG objectives. It doubts the instruments, the transmission and the incidence.

5.4 Future Research

The agenda has a longer time frame than the three questions listed above. The typology is ripe for testing: are compliance-capture sectors less capable of accumulating capabilities than directed-drift sectors, while acknowledging obvious confounds? The coupled-governance quadrant opens up the opportunity for case identification that is already doing something similar with verification as public infrastructure and what happens there is the most valuable observation of the field. There is a materiality question that requires normative work: the concept was developed for investors and there is no clarity as to whether a development-relevant materiality can be determined without reducing it to everything-is-material. And the interface should be looked at where it is at its best—where a single company gets a mission mandate and a measurement mandate in the same sector, and where the trade off this review describes should be readily apparent.

6. Conclusion

The ESG frameworks and technology policy are both ways to regulate the future that companies use. They come from different sides to the emerging-economy firm, one requiring an explanation of risk on an annual basis, the other requiring the building of capacity over several decades; and they rely on the same pool of scarce organisational capacity. This review has pointed out that there is a governing constraint: capacity, and that the retrenchment of 2025–2026, in Europe, and the deferral in India, are the same admission: the measurement apparatus called for more than the world could provide. Its admission is being followed in cases where the companies have ballots and lobbies. But when they don't, the demand continues and shifts to a new channel – statute to contract, proportionality to non-proportionality. Questions that may be worth debate are not what metrics should be in a standard, but who pays the cost of measuring, who counts, or what is the right to say, “this request exceeds what I can reasonably produce” might look like when it enters the jurisdiction that wrote the rule.

Declarations

Conflict of Interest
The authors declare no conflicts of interest related to this study.

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Ethical Approval
This study did not involve any human or animal subjects and, therefore, did not require ethical approval.

References

Altenburg, T., & Assmann, C. (Eds.). (2017). Green industrial policy: Concept, policies, country experiences. UN Environment; German Development Institute.

Berg, F., Kölbel, J. F., & Rigobon, R. (2022). Aggregate confusion: The divergence of ESG ratings. Review of Finance, 26(6), 1315–1344. https://doi.org/10.1093/rof/rfac033

Chatterji, A. K., Durand, R., Levine, D. I., & Touboul, S. (2016). Do ratings of firms converge? Implications for managers, investors and strategy researchers. Strategic Management Journal, 37(8), 1597–1614. https://doi.org/10.1002/smj.2407

Christensen, H. B., Hail, L., & Leuz, C. (2021). Mandatory CSR and sustainability reporting: Economic analysis and literature review. Review of Accounting Studies, 26(3), 1176–1248. https://doi.org/10.1007/s11142-021-09609-5

Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. Administrative Science Quarterly, 35(1), 128–152. https://doi.org/10.2307/2393553

Delmas, M. A., & Burbano, V. C. (2011). The drivers of greenwashing. California Management Review, 54(1), 64–87. https://doi.org/10.1525/cmr.2011.54.1.64

European Union. (2026). Directive (EU) 2026/470 of the European Parliament and of the Council amending Directives 2006/43/EC, 2013/34/EU, (EU) 2022/2464 and (EU) 2024/1760 as regards sustainability reporting and due diligence requirements. Official Journal of the European Union.

Freeman, C. (1995). The 'National System of Innovation' in historical perspective. Cambridge Journal of Economics, 19(1), 5–24. https://doi.org/10.1093/oxfordjournals.cje.a035309

Fu, X., Pietrobelli, C., & Soete, L. (2011). The role of foreign technology and indigenous innovation in the emerging economies: Technological change and catching-up. World Development, 39(7), 1204–1212. https://doi.org/10.1016/j.worlddev.2010.05.009

Grant, M. J., & Booth, A. (2009). A typology of reviews: An analysis of 14 review types and associated methodologies. Health Information & Libraries Journal, 26(2), 91–108. https://doi.org/10.1111/j.1471-1842.2009.00848.x

IFRS Foundation. (2023). IFRS S1 General requirements for disclosure of sustainability-related financial information; IFRS S2 Climate-related disclosures. International Sustainability Standards Board.

Khan, M., Serafeim, G., & Yoon, A. (2016). Corporate sustainability: First evidence on materiality. The Accounting Review, 91(6), 1697–1724. https://doi.org/10.2308/accr-51383

Lee, K., & Malerba, F. (2017). Catch-up cycles and changes in industrial leadership: Windows of opportunity and responses of firms and countries in the evolution of sectoral systems. Research Policy, 46(2), 338–351. https://doi.org/10.1016/j.respol.2016.09.006

MacInnis, D. J. (2011). A framework for conceptual contributions in marketing. Journal of Marketing, 75(4), 136–154. https://doi.org/10.1509/jmkg.75.4.136

Marquis, C., Toffel, M. W., & Zhou, Y. (2016). Scrutiny, norms, and selective disclosure: A global study of greenwashing. Organization Science, 27(2), 483–504. https://doi.org/10.1287/orsc.2015.1039

Mazzucato, M. (2018). Mission-oriented innovation policies: Challenges and opportunities. Industrial and Corporate Change, 27(5), 803–815. https://doi.org/10.1093/icc/dty034

Paré, G., Trudel, M.-C., Jaana, M., & Kitsiou, S. (2015). Synthesizing information systems knowledge: A typology of literature reviews. Information & Management, 52(2), 183–199. https://doi.org/10.1016/j.im.2014.08.008

Rodrik, D. (2014). Green industrial policy. Oxford Review of Economic Policy, 30(3), 469–491. https://doi.org/10.1093/oxrep/gru025

Schot, J., & Steinmueller, W. E. (2018). Three frames for innovation policy: R&D, systems of innovation and transformative change. Research Policy, 47(9), 1554–1567. https://doi.org/10.1016/j.respol.2018.08.011

Securities and Exchange Board of India. (2021). Business Responsibility and Sustainability Reporting by listed entities (Circular SEBI/HO/CFD/CMD-2/P/CIR/2021/562).

Securities and Exchange Board of India. (2023). BRSR Core Framework for assurance and ESG disclosures for value chain (Circular SEBI/HO/CFD/CFD-SEC-2/P/CIR/2023/122).

Stilgoe, J., Owen, R., & Macnaghten, P. (2013). Developing a framework for responsible innovation. Research Policy, 42(9), 1568–1580. https://doi.org/10.1016/j.respol.2013.05.008