

INTERNATIONAL JOURNAL OF
EDUCATION, PSYCHOLOGY
AND COUNSELLING
(IJEPC)

<https://gaexcellence.com/ijepe>



THE PURSUIT OF CREDIBILITY: A NARRATIVE SYNTHESIS OF GOVERNANCE AND GLOBAL TRENDS IN WASTE MANAGEMENT DISCLOSURE.

Noor Faiza M. Ja'afar^{1*}, Nor Adila Zulkifli², Maslinawati Mohamad³

¹Department of Accountancy, Universiti Teknologi MARA, Selangor Branch, Shah Alam Campus, Malaysia

 norfa149@uitm.edu.my

 <https://orcid.org/0009-0000-2484-7300>

²Department of Accountancy, Universiti Teknologi MARA, Selangor Branch, Shah Alam Campus, Malaysia

 adilazulkifli@uitm.edu.my

 <https://orcid.org/0009-0007-7337-1637>

³Department of Accountancy, Universiti Teknologi MARA, Selangor Branch, Puncak Alam Campus, Malaysia

 masli856@uitm.edu.my

 <https://orcid.org/0000-0001-8050-1515>

Article Info:

Article history:

Received date: 30.12.2025

Revised date: 12.01.2026

Accepted date: 15.02.2026

Published date: 01.03.2026

To cite this document:

M.Jaafar, N. F., Zulkifli, N. A., & Mohamad, M. (2026). The Pursuit of Credibility: A Narrative Synthesis of Governance and Global Trends in Waste Management Disclosure. *International Journal of Education, Psychology and Counseling*, 11 (62), 63-75.

Abstract:

Corporate waste management disclosure has become a critical nexus of accountability in the circular economy; however, concerns persist over its credibility and susceptibility to greenwashing. This narrative review synthesises the literature to critically examine the governance mechanisms, global regulatory trends, and assurance practices that shape the evolution of waste-related reporting. This review of scholarly work in accounting, governance, and sustainability studies identifies five interconnected themes: the contested efficacy of assurance design, the role of mandatory regulation as a catalyst, governance structures as antecedents, the symbolic-substantive disclosure spectrum, and the powerful moderating influence of contextual factors. A key insight is that disclosure quality is not a linear output but an emergent property of the alignment or misalignment between internal governance capability, external regulatory pressure, and mediating assurance processes. Major contradictions are found in the assurance value proposition, where it signals credibility but often fails to verify forward-looking claims or methodologically robust data, and in a pronounced Global North research bias that limits theoretical generalisability. Theoretically, this review contributes an integrative framework that positions legitimacy, institutional, and agency theories as complementary. In practice, this implies that regulators must mandate not only assurance but also its specific design (level, scope, methodology) to combat greenwashing effectively. Future research must adopt configurational and process-

oriented methodologies, such as Qualitative Comparative Analysis (QCA) and ethnographic studies of the assurance nexus, particularly in under-researched emerging economies, to close the identified gaps between disclosure form and function.

DOI: 10.35631/IJEPC.1162005

Keywords:

Corporate Governance, Greenwashing, Regulatory Compliance, Sustainability Reporting Assurance, Waste Management Disclosure



© The authors (2026). This is an Open Access article distributed under the terms of the Creative Commons Attribution (CC BY NC) (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited. For commercial re-use, please contact ijepc@gaexcellence.com.

Introduction

In an era defined by planetary boundaries and the urgent imperatives of the circular economy, effective waste management has transcended traditional operational confines to become a critical nexus of corporate accountability, environmental stewardship, and sustainable development. The global generation of municipal solid waste is projected to increase by 73% from 2020 levels to approximately 3.88 billion tons by 2050 (World Bank, 2023), presenting profound environmental, social, and economic challenges. Concurrently, stakeholders, including investors, regulators, consumers, and communities, are intensifying their demands for transparency regarding corporate impacts and dependencies on natural capital. Within this pressure cooker of expectations, the corporate disclosure of waste management practices, performance, and impacts has emerged as a vital mechanism for legitimisation, risk management, and value creation (Ruggeri et al., 2025).

Globally, the disclosure landscape is being reshaped by the convergence of mandatory reporting frameworks. The European Union's Corporate Sustainability Reporting Directive (CSRD), the International Sustainability Standards Board's (ISSB) IFRS S2 *Climate-related Disclosures*, and the Taskforce on Nature-related Financial Disclosures (TNFD) are creating a new paradigm in which waste-related metrics on diversion, recycling, pollution, and circularity are transitioning from voluntary commendations to compulsory, assured data points. This regulatory surge reflects a growing consensus that robust disclosure is foundational for directing capital, incentivising innovation, and holding corporations accountable for their waste footprints (Simnett et al., 2025; Dinçer et al., 2025).

At the national and local levels, the relevance of waste disclosure is equally acute but manifests differently in each country. In emerging economies, where rapid urbanisation and industrialisation strain waste infrastructure, disclosure can illuminate gaps, drive investment in sustainable systems, and support just transitions (Ofosu et al., 2025). For national regulators, standardized disclosure provides the data necessary to track progress against national waste reduction and circular economy targets, such as those outlined in many countries' Nationally Determined Contributions (NDCs) and sustainability roadmaps. Furthermore, local communities increasingly rely on corporate disclosures to assess the environmental and health risks associated with nearby industrial operations, making the quality and accessibility of this information a matter of social licence to operate (García Lara et al., 2025).

The extant literature has established several foundational pillars in this regard. Research confirms that the quality of sustainability disclosure, including waste data, is significantly influenced by corporate governance structures, such as the presence of dedicated sustainability committees (Tumewang et al., 2025), and board characteristics, such as gender diversity (Liu et al., 2025). Furthermore, studies highlight the pivotal role of external assurance in enhancing the credibility of reported environmental information, although its effectiveness in curbing symbolic disclosure or “greenwashing” remains contingent on its scope and rigor (Peng et al., 2025; V.P. et al., 2026). Bibliometric analyses have effectively mapped the broader field of sustainability reporting assurance and identified key themes and influential works (Boța-Avram et al., 2025).

Despite this progress, critical gaps persist that hinder a coherent understanding of the evolution of waste management disclosure. First, the literature lacks a focused synthesis of waste as a distinct disclosure domain; it is often subsumed within broader environmental, social, and governance (ESG) or climate reporting studies, obscuring its unique governance drivers, measurement challenges, and stakeholder expectations. Second, while the tension between symbolic and substantive disclosures is recognised (García Lara et al., 2025), there is a limited understanding of what constitutes substantive waste disclosure versus tokenistic reporting on easily achieved metrics. Third, the interplay between global disclosure standards and local/national implementation is underexplored. How do multinational corporations navigate divergent regional waste reporting requirements, and what role does assurance play in creating consistent and comparable data across jurisdictions? Finally, the future trajectory of disclosure, shaped by digital technologies (e.g. blockchain for waste traceability), advanced life-cycle assessment integration (Ruggeri et al., 2025), and evolving circular economy metrics, remains a nascent area of scholarly enquiry.

A narrative literature review is the most appropriate methodology for addressing these gaps. Unlike systematic reviews that aggregate quantitative findings, a narrative review is well-suited to interpreting, critiquing, and synthesising a heterogeneous body of literature from accounting, governance, environmental science, and policy studies (Boța-Avram et al., 2025). This allows for the conceptual integration of disparate themes: governance mechanisms, assurance efficacy, regulatory trends, and the symbolic-substantive dichotomy into a coherent framework centred on waste disclosure. This approach is essential for developing a nuanced theoretical understanding and for identifying pathways for future research, even when empirical data may still be emerging.

Therefore, this narrative review critically synthesises and analyses the academic literature on the evolution of corporate waste management disclosure. This study will (1) examine the governance antecedents and mechanisms that shape disclosure quality and strategy; (2) trace the global regulatory and market trends driving standardisation and assurance; (3) analyse the challenges of ensuring substantive, anti-greenwashing disclosure in the waste domain; and (4) propose a forward-looking research agenda that addresses the integration of circular economy principles, technological advancements, and equitable governance into disclosure frameworks. This review aims to provide scholars, policymakers, and practitioners with a consolidated foundation to advance transparent, accountable, and effective corporate waste management in pursuit of a circular future.

Literature Review

The Efficacy and Design of Sustainability Assurance

A critical synthesis of the literature reveals a significant evolution in the discourse on sustainability assurance, shifting from advocacy to a more nuanced interrogation of its efficacy in recent years. A core agreement across studies is that the design of assurance, its provider, level, and scope fundamentally mediate its value. For instance, the choice between the incumbent financial auditor and a separate assurer is not merely operational but deeply strategic and laden with implications for perceived credibility. Liu et al. (2025) frame the selection of an independent Big 4 assessor as an ethical governance decision linked to board gender diversity, suggesting it is a mechanism to bolster stakeholder trust. Conversely, V.P. et al. (2026) present a more pragmatic view, finding that auditor-assurer duality can enhance efficiency by reducing assurance lag, although it is not necessarily driven by substantive reporting benefits. This presents a central contradiction: a tension between the perception of independence (favouring separate providers) and operational efficiency (potentially favouring duality), a debate that remains unresolved in the literature.

Methodologically, a critical issue is the predominant focus on the presence of assurance rather than the quality of the assurance process. This obscures the understanding of how rigour is applied in practice. The sub-theme of assurance level and scope exposes a critical "scope gap." Peng et al. (2025) demonstrate that even when assurance is obtained, it often fails to cover forward-looking qualitative claims (e.g., net-zero commitments), which are precisely the area's most susceptible to greenwashing. This gap is compounded by findings of methodological weaknesses in the underlying data. Ruggeri et al. (2025) highlight that a prerequisite for robust assurance methodologies, such as Life Cycle Assessment (LCA), is largely absent in corporate reporting, suggesting that assurers may be verifying data built on unreliable foundations. Theoretically, this challenges the principal-agent logic of the assurance. If the signal (the assurance statement) is detached from the most material information or fails to verify poorly constructed data, its efficacy in reducing information asymmetry and protecting stakeholder interests is severely compromised.

These findings have direct implications for standard setters and regulators. They indicate that mandating assurance alone is insufficient; regulations must specify minimum assurance levels (favouring "reasonable" over "limited"), mandate the inclusion of forward-looking targets within the assurance scope, and encourage or require standardised, robust measurement methodologies, such as LCA, for material impact areas. For assurance providers and

companies, this underscores the need to move beyond check-box exercises towards deeper, more substantive engagements that address the core of sustainability performance.

Regulatory Drivers and Corporate Preparedness

The literature consistently identifies the transition from voluntary to mandatory disclosure regimes as the most powerful catalyst for improving sustainability-reporting practices. Studies such as Simnett et al. (2025) empirically confirm that regulatory momentum directly increases corporate preparedness, with firms in carbon-intensive industries and those with Big 4 auditors demonstrating higher alignment with forthcoming standards. This suggests that regulation creates a "pull" effect, leveraging existing market infrastructure (audit firms) and risk awareness. A key theoretical agreement is rooted in institutional theory: mandatory requirements exert coercive isomorphism, forcing a convergence in practice that voluntary initiatives cannot achieve (Dinçer et al., 2025).

However, significant contradictions and gaps emerge regarding the implementation and universality of this regulatory push. A glaring methodological and contextual gap is the overwhelming focus on developed economies (for example, Australia and the EU). The preparedness, challenges, and compliance costs in emerging and developing economies remain profoundly under-researched, despite their critical role in global waste streams and supply chains. This creates a blind spot in the global governance of sustainability disclosures. Furthermore, while Dinçer et al. (2025) model regulatory frameworks and identify third-party assurance as a key effective component, there is a lack of empirical research on the unintended consequences of regulation. Scholars have yet to robustly examine whether mandates lead to substantive improvement or merely sophisticated "box-ticking" and a compliance mentality that may crowd out genuine innovation.

The practical implication is that a one-size-fits-all regulatory approach is likely to be ineffective. Policymakers in emerging markets must consider the unique resource constraints and institutional capacities of local firms. The findings also highlight the need for phased implementation and robust capacity-building support, particularly for small and medium-sized enterprises (SMEs) for whom the cost burden could be prohibitive. For multinational corporations, the evolving landscape necessitates sophisticated internal systems to navigate the potential patchwork of divergent national regulations emerging from the same global frameworks.

Governance Mechanisms as Antecedents

Research has robustly confirmed that internal governance structures are significant antecedents to sustainability disclosure and assurance choices. There is strong agreement that dedicated oversight mechanisms are important. Tumewang et al. (2025) provide compelling evidence that the presence of a board-level sustainability committee (SC) is positively associated with higher ESG performance, suggesting that structured oversight is associated with better outcomes. Similarly, Liu et al. (2025) link board composition, specifically gender diversity and director busyness, to the strategic choice of an independent ESG assessor, framing it within resource dependence and social capital theories.

However, the central theoretical gap lies in an underdeveloped causal chain. While governance leads to certain outputs (better ESG scores, specific assessor choice), the literature largely bypasses the direct link between governance features and the substantive quality of disclosed information. Does a sustainability committee lead to more comprehensive, assured, and less symbolic waste data disclosures? This "missing link" represents a critical avenue for future research. Methodologically, this gap persists because many studies rely on proxy variables (e.g., the presence of a committee) or output metrics (e.g., aggregate ESG scores) that do not capture the nuance, completeness, or veracity of specific disclosures, such as waste management.

Furthermore, the focus remains narrow on the board. The role of other critical governance actors, such as the audit committee in overseeing assurance quality, the CFO in resourcing data collection systems, or the sustainability manager as a knowledge broker, is conspicuously absent from the empirical landscape. This limits the holistic understanding of the internal reporting ecosystem. These findings reinforce the importance of board diversity and dedicated sustainability oversight for investors and governance advocates. However, they also suggest that stakeholders should advocate for deeper transparency into how these committees operate and influence specific reporting processes, rather than accepting their mere existence as a sufficient signal of quality.

Symbolic vs. Substantive Sustainability Disclosure

This theme introduces a crucial perspective, challenging the naive assumption that increased disclosure equates to improved performance. The literature agrees on the prevalence of symbolic management, where disclosure is used as a tool for legitimisation rather than for accountability. García Lara et al. (2025) offer a clear illustration: after environmental disasters, firms increase CSR performance in symbolic areas, such as diversity, while neglecting core environmental remediation. This aligns with legitimacy theory, which states that disclosure manages stakeholder perceptions to maintain operational legitimacy.

The primary contradiction and methodological challenge lie in the difficulty of measuring substantiveness. Most large-N studies rely on coarse proxies (e.g., report length, keyword mentions, type of CSR initiative), which are imperfect indicators of actual environmental impact or managerial commitment. This makes it difficult to empirically distinguish between symbolic and substantive disclosures at scale. Ruggeri et al. (2025) tackle this by assessing the use of a rigorous methodology (LCA), providing a more concrete, though rare, metric for substantiveness in environmental reporting. A related debate centres on the role of assurance. While intended as a remedy for greenwashing (Peng et al., 2025), its actual efficacy in curbing symbolic disclosure is presumed, not proven. It remains unclear, both theoretically and empirically, whether high-level assurance drives substantive action or merely lends credibility to a polished yet symbolic narrative.

The theoretical implications are profound: they necessitate a move beyond information economics to incorporate sociological and critical management perspectives that view reporting as a contested site of impression management. Practically, this underscores the limitations of relying solely on disclosed metrics for investment or policy decisions. This calls for researchers to develop more sophisticated analytical frameworks, for assessors to integrate external verification of methodologies (not just data), and for stakeholders to exercise healthy

scepticism, triangulating disclosed information with other performance indicators and real-world outcomes.

Contextual and Sectoral Moderators

A definitive agreement in the literature is that context matters profoundly; the practice and effectiveness of disclosure and assurance are not monolithic but vary across contexts. Industry exposure is a powerful moderator. Simnett et al. (2025) show carbon-intensive firms are more prepared for climate disclosure, reflecting greater regulatory scrutiny and investor pressure. Similarly, Loliwe (2025) demonstrates that industry norms dictate disclosure responses to social pressures, such as strikes. The institutional context is equally critical, as shown by Tumewang et al. (2025), who find that governance mechanisms have a stronger effect on ESG performance in Islamic Banks than in Conventional Banks in emerging economies, highlighting the moderating role of religion-based ethical frameworks.

The most significant contradiction lies between the acknowledged importance of context and the stark geographical bias in the existing research. There is an overwhelming focus on developed economies (the Global North), creating a major gap in understanding the drivers, barriers, and manifestations of sustainability disclosure in emerging markets in Africa and Southeast Asia. This bias limits the generalisability of theories developed in Western contexts and hinders the design of effective, global standards. Methodologically, while industry is often used as a control variable, there is a scarcity of in-depth, comparative qualitative studies that explore how and why disclosure practices differ across sectors, particularly with respect to specific issues such as waste management.

The theoretical implication is that institutional and stakeholder theories must be applied with greater sensitivity to local institutional logics, levels of market development, and cultural values. The uniform application of theories derived from Anglo-American contexts is inadequate. In practice, this demands that international standard-setters (such as the ISSB) ensure their standards are principles-based and adaptable, allowing for proportionality and context-specific implementation. For multinational corporations and investors, a nuanced approach to evaluating and comparing disclosures across different national and sectoral landscapes is necessary, moving beyond simple checklist compliance to understanding local materiality and

Critical Analysis of the Literature

The burgeoning body of research on sustainability disclosure and assurance, while valuable, exhibits distinct strengths, weaknesses, and biases that shape our current understanding and limit its comprehensive application to specific domains, such as waste management. A primary strength lies in its theoretical pluralism. Scholars adeptly employ a range of lenses, from agency and stakeholder theories to legitimacy and institutional theory, to explain corporate behaviour. This multi-perspective approach enriches the analysis by allowing for the simultaneous examination of economic incentives (Dinçer et al., 2025), social pressures (García Lara et al., 2025), and isomorphic forces (Simnett et al., 2025). Furthermore, the literature demonstrates increasing methodological sophistication, moving from descriptive case studies to large-N panel data analyses (V.P. et al., 2026; Tumewang et al., 2025) and innovative modelling techniques (Dinçer et al., 2025), enhancing the robustness of empirical claims about correlations and drivers.

Despite these strengths, significant weaknesses and inconsistencies remain. A core inconsistency revolves around the purported value of this assurance. Although it is universally promoted as an antidote to greenwashing, empirical findings present a paradox. Studies simultaneously show that assurance is linked to higher ESG scores (Tumewang et al., 2025) but often fails to cover the most material and contestable information (Peng et al., 2025) and verifies data built on methodologically weak foundations (Ruggeri et al., 2025). This inconsistency suggests a potential decoupling: assurance may signal credibility ceremonially without substantively enhancing the reliability or completeness of the disclosed information. The literature has yet to convincingly resolve whether assurance primarily serves a signalling function for capital markets or an accountability function for broader stakeholders.

The field is also marred by pronounced biases in sampling and context. There exists a severe Global North bias, with the vast majority of empirical studies focusing on developed economies in Europe, North America, and Australasia. This renders the experiences, challenges, and governance dynamics in emerging and developing economies, which are critical nodes in global waste flows and often bear the brunt of environmental externalities, largely invisible to the literature. Consequently, theories of disclosure drivers and cost-benefit analyses of regulations have been inadequately tested in contexts with weaker institutions, different ownership structures, and varied stakeholder priorities. Furthermore, a sectoral bias was evident. While high-impact industries such as banking and mining have been studied, there is a lack of deep, comparative cross-sectoral analysis. The disclosure pressures, material issues, and assurance practices for a technology firm, a fast-moving consumer goods company, and a waste management utility are likely profoundly different; however, these nuances are often glossed over in broad ESG studies.

However, major gaps remain in theory, policy, and implementation. Theoretically, there is a "missing link" in the governance causal chain. While studies connect governance structures to outcomes such as assurer choice or aggregate ESG performance, few trace the mechanism by which a board committee or a diverse director directly influences the quality, specificity, and honesty of a discrete disclosure stream, such as waste data. This black box of internal processes limits practical guidance. From a policy perspective, a critical implementation gap concerns the burden on small and medium-sized enterprises (SMEs). Regulatory discourse, informed by studies of large, listed firms, largely ignores the potentially crippling compliance costs and capacity constraints faced by SMEs in supply chains. These risks create a two-tier system and may perversely incentivise larger firms to outsource waste-intensive operations rather than manage them transparently.

Finally, the literature lacks a methodological framework for measuring "substantiveness." Reliance on proxy measures (report length and keyword counts) fails to capture the authenticity and environmental integrity of the claims. Future research should develop and validate more nuanced content analysis frameworks or integrate external performance data to triangulate the truthfulness of disclosures. Without closing these gaps, the evolution of waste management disclosure risks advancing in form but not in function, generating vast quantities of data that do not reliably inform better environmental outcomes or greater stakeholder accountability.

Conceptual Framework

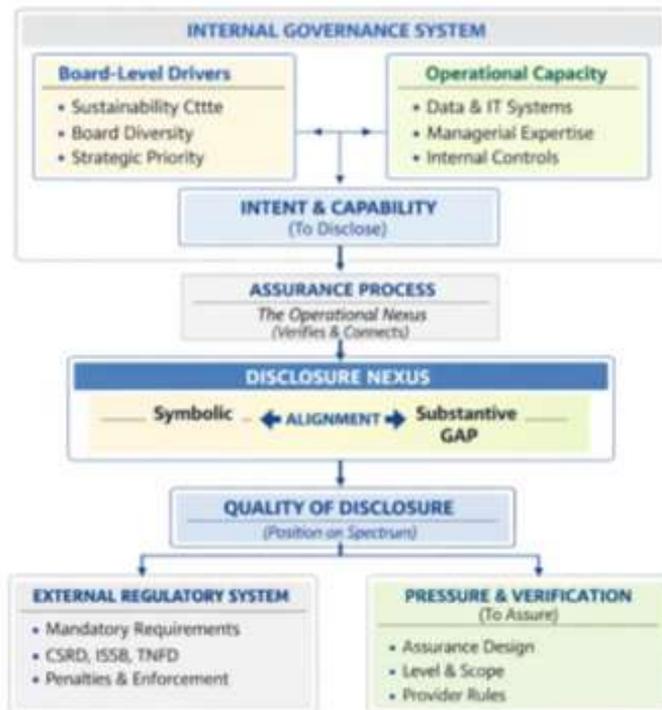


Figure 1: The Tripartite Alignment Framework for Authentic Sustainability Disclosure

Source: From the authors

The Tripartite Alignment Framework for Authentic Sustainability Disclosure

This framework, as in Figure 1, posits that authentic, high-quality corporate sustainability disclosure is not an automatic outcome of any single factor but the emergent result of the dynamic interaction and alignment of the three core systems. Disclosure is conceptualised as a spectrum from Symbolic to Substantive, and a company's position on this spectrum is determined by how effectively its Internal Governance System converges with the External Regulatory System through the critical mediating mechanism of the Assurance Process, all within a specific Contextual Field. The process is initiated by the Internal Governance System, which establishes a firm's foundational Intent & Capability. This intent is shaped by Board-Level Drivers (sustainability committee, board diversity, and strategic priority), while the capability is built through Operational Capacity (data systems, managerial expertise, and internal controls). However, internal will and resources alone are insufficient and can lead to unverified and potentially symbolic claims.

Simultaneously, the External Regulatory System generates Pressure and Verification. This force is composed of Mandatory Requirements (for example, CSRD, ISSB, TNFD) that set the rules, and the specific Assurance Design, the crucial configuration of assurance level, scope, and provider rules that dictate how compliance is verified. This system provides a non-negotiable structure and demands external validation. The pivotal interaction occurs where these two systems meet: the Assurance Process (The Operational Nexus). This is not a passive checkpoint but an active socio-technical interface where internal data and narratives are rigorously tested against external standards and methodologies. The effectiveness of this nexus is crucial. It is here that the "Alignment Gap" within the Disclosure Nexus is determined: when

strong internal capability meets rigorous, well-designed external verification, alignment is high, pushing disclosure toward the substantive end of the spectrum, characterised by accurate, complete, and impactful information. Conversely, when weak governance meets lax or poorly configured assurance, misalignment occurs, leading to symbolic disclosures that prioritise legitimacy over accountability.

Crucially, this entire tripartite interaction is not universal; it is filtered and reshaped by the Contextual & Sectoral Moderators. Industry pressure, geographical regulations, cultural norms, and firm size fundamentally alter how each system functions and interacts. What constitutes "substantive" disclosure in a European mining firm will differ from that in an Asian textile manufacturer, explaining why standardised approaches often fail. The developed conceptual framework serves as a direct synthesis and structural representation of five central themes derived from the literature. Theme 3 (Governance Mechanisms) is embodied by the entire Internal Governance System pillar, which positions board-level drivers and operational capacity as foundational antecedents to disclosure quality, as evidenced by studies linking governance structures to strategic outcomes (Tumewang et al., 2025; Liu et al., 2025).

Themes 1 and 2, focusing on Assurance Design and Regulatory Drivers, were integrated into the cohesive External Regulatory System pillar. This integration reflects the literature's consensus that assurance functions as the primary enforcement mechanism for regulatory credibility (Dinçer et al., 2025), with its specific design elements level, scope, and provider rules being critical determinants of overall efficacy (Peng et al., 2025; V.P. et al., 2026). The core concern of Theme 4, the symbolic-substantive disclosure dichotomy, forms the central axis of the model, which is visualised as the Disclosure Nexus and its output spectrum. The concept of an "Alignment Gap" within this nexus directly engages with the theme's focus on authenticity and the mitigation of greenwashing (García Lara et al., 2025; Ruggeri et al., 2025). Furthermore, Theme 5 (Contextual Moderators) was elevated from a peripheral consideration to an essential one, encapsulating the field of the framework. This elevation directly addresses the identified "Global North bias" in the literature and provides a structural explanation for the observed variation in practices across different industries, geographies, and cultural settings (Simnett et al., 2025; Al Frijat et al., 2025). Finally, positioning the Assurance Process as the Operational Nexus is a critical inference drawn from the identified gaps in the literature. This placement operationalises the observed tension between assurance efficiency and independence (V.P. et al., 2026; Liu et al., 2025) and establishes it as a tangible mechanism that must be scrutinised to understand the "missing link" between internal governance and the ultimate quality of sustainability reports.

This proposed framework fundamentally redirects the future research agenda from examining isolated variables to investigating complex configurations, dynamic interactions, and underlying processes within specific contexts. First, it calls for configurational research, advocating methods such as Qualitative Comparative Analysis (QCA) to identify which combinations of conditions, such as the presence of a sustainability committee, the application of reasonable assurance, and operation within a high-impact sector, are collectively necessary and sufficient for generating substantive disclosure. This shifts the inquiry from "what affects" outcomes to understanding "what works together." Second, future studies must open the "black box" of the Assurance Process through ethnographic or in-depth interview methodologies, examining how the quality of interaction, negotiation, and verification between assurers and managers directly influences the alignment gap and final disclosure.

Third, to directly counter the pervasive Global North bias, research must be designed as comparative and context-embedded from the outset, for instance, by analysing how the same regulation (e.g., the CSRD) is implemented by similar firms in contrasting geographical contexts (e.g., Germany versus South Africa) to elucidate how the contextual field reshapes the core systems. Fourth, the framework naturally extends to linking disclosure output to real-world outcomes, prompting an investigation into whether disclosure from a well-aligned system leads to tangible, superior results, such as measurable environmental improvement, enhanced stakeholder trust, or reduced cost of capital, thereby bridging disclosure research with performance and impact measurement. Finally, scholars should undertake dynamic longitudinal analyses to track how the entire system evolves, exploring how a shock to one pillar (e.g., a new regulation) precipitates adaptations in others and alters the trajectory of disclosure quality over time, thereby capturing the model's inherently dynamic nature.

Conclusion

This narrative review synthesises diverse literature to chart the evolution of waste management disclosure, moving beyond a simplistic call for transparency to a critical examination of the systems that shape its authenticity. The key insight is that disclosure quality is not a linear output but an emergent property of a dynamic alignment or misalignment between internal governance intent, external regulatory architecture, and the mediating design of assurance. The persistent symbolic-substantive gap in reporting is not merely an ethical failing but often a structural outcome of this misalignment, exacerbated by contextual blind spots, particularly in the Global South.

The primary contribution of this synthesis is the development of an integrative theoretical framework. It posits that legitimacy, institutional, and agency theories are not competing but complementary, each explaining a component of the tripartite system. The practical implication is profound: regulators and standard setters must move beyond mandating that companies report and assure to carefully design how they do so. This entails specifying reasonable assurance levels for forward-looking waste targets, mandating robust methodologies such as Life Cycle Assessment, and creating proportionate frameworks for SMEs in emerging economies.

The overarching theoretical message is that authentic disclosure is a configured achievement and not a naturally occurring event. Deliberate engineering of governance incentives, regulatory pressure, and verification mechanisms is required for convergence. Therefore, future empirical research must adopt configurational and interactive methodologies. Studies should employ techniques such as Qualitative Comparative Analysis (QCA) to identify which combinations of governance traits, assurance designs, and sectoral contexts are necessary for substantive disclosure. Furthermore, longitudinal and ethnographic research is urgently needed to trace the implementation of new mandates in understudied regions and sectors, close the critical context gap, and test the robustness of this framework across the varied landscape of global waste streams.

- Acknowledgements:** The authors thank the Faculty of Accountancy, UiTM, and the PYPB incentive from JPI UiTM for their support in this publication.
- Funding Statement:** No Funding
- Conflict of Interest Statement:** The authors declare that there is no conflict of interest regarding the publication of this paper. All authors have contributed to this work and approved the final version of the manuscript for submission to the International Journal of Education, Psychology and Counselling (IJEPC).
- Ethics Statement:** This study did not involve any human participants, animals, or sensitive data requiring ethical approval. The authors confirm that the research was conducted in accordance with accepted academic integrity and ethical publishing standards.
- Author Contribution Statement:** All authors contributed significantly to the development of this manuscript. [Author 1] was responsible for the conceptualization, methodology, and overall supervision of the study. [Author 1&2] handled data collection, analysis, and interpretation of results. [Author 2&3] contributed to the literature review, drafting, and critical revision of the manuscript. All authors read and approved the final version of the manuscript prior to submission.

References

- Al Frijat, Y. S., Al-Msiedeen, J. M., & Elamer, A. A. (2025). How green credit policies and climate change practices drive banking financial performance. *Business Strategy and Development*, 8(1), 45-63. <https://doi.org/10.1002/bsd2.349>
- Boța-Avram, C., Cuzdriorean, D. D., Amat-Lefort, M., & Vladu, A. B. (2025). Exploring sustainability reporting assurance: Uncovering research patterns and emerging trends with a bibliometric analysis. *Spanish Accounting Review*, 28(2), 145-167. <https://doi.org/10.1016/j.sare.2024.12.001>
- Dinçer, H., Ihsan, W., Rao, U., Saad, M., & Yüksel, S. (2025). An innovative decision-making model for alternative regulatory frameworks based on sustainable development goal disclosure costs. *Business Ethics, the Environment & Responsibility*, 34(3), 512-530. <https://doi.org/10.1111/beer.12685>
- García Lara, J. M., García Osma, B., Gazizova, I., & Khalilov, A. (2025). Demand-driven corporate social responsibility: Symbolic versus substantive change after environmental disasters. *Journal of Cleaner Production*, 479, 143456. <https://doi.org/10.1016/j.jclepro.2024.143456>
- Khogly, M. E. M. (2025). The impact of the main characteristics of accounting information on improving corporate sustainability. *International Journal of Professional Business Review*, 10 (4), e04781. <https://doi.org/10.26668/businessreview/2025.v10i4.4781>
- Liu, Z., Jubb, C., & Abhayawansa, S. (2025). Choice of financial audit firm and ESG assurance firm: The role of board of director characteristics. *Journal of Business Ethics*, 192, 567-586. <https://doi.org/10.1007/s10551-024-05824-9>

- Loliwe, T. (2025). The relationship between employee-related disclosures and working days lost because of labour strikes. *South African Journal of Economic and Management Sciences*, 28(1), a5502. <https://doi.org/10.4102/sajems.v28i1.5502>
- Ofori, G., Arthur-Holmes, F., & Siaw, D. (2025). Internalizing corporate social responsibility (CSR) in ASM: The making of small-scale miners as environmental and work safety 'champions'. *Social Responsibility Journal*, 21(5), 1021-1036. <https://doi.org/10.1108/SRJ-03-2024-0195>
- Peng, S., Wang, R., Zhou, S., & Wu, W. (2025). Do sustainability assurance practices address the greenwashing concerns of regulators. *Accounting & Finance*, 65(S1), 1527-1554. <https://doi.org/10.1111/acfi.13285>
- Ruggeri, M., Vinci, G., Ruggieri, R., & Savastano, M. (2025). Facing the risk of greenwashing in the ESG report of global companies: The importance of life cycle thinking. *Corporate Social Responsibility and Environmental Management*, 32 (1), 589-602. <https://doi.org/10.1002/csr.2685>
- Simnett, R., Tan, Y., You, J., & Zhou, S. (2025). Australian listed entities' preparedness for mandatory reporting and assurance of climate-related disclosures. *Abacus*, 61(2), 487-519. <https://doi.org/10.1111/abac.12345>
- Tumewang, Y. K., Almarayeh, T., & Esam Alharasis, E. (2025). Sustainability committee, external assurance, and ESG performance: Empirical evidence from banking industry in emerging economies. *Corporate Social Responsibility and Environmental Management*, 32(2), 1245-1260. <https://doi.org/10.1002/csr.2701>
- V.P., Zorio-Grima, A., & Merello, P. (2026). Sustainability reporting assurance: Knowledge, lags, levels, and providers in leading global companies. *Journal of Cleaner Production*, 484, 144321. <https://doi.org/10.1016/j.jclepro.2025.144321>
- Vakola, M., & Nikolaou, I. (2005). Attitudes towards organizational change: What is the role of employees' stress and commitment? *Employee Relations*, 27(2), 160-174. <https://doi.org/10.1108/01425450510572685>
- Warrick, D. D. (2011). The urgent need for skilled transformational leaders. *Journal of Leadership, Accountability and Ethics*, 8(5), 11-26.
- Williams, N. J., Ehrhart, M. G., & Aarons, G. A. (2024). Transformational leadership and implementation outcomes in healthcare: A systematic review. *Implementation Science*, 19(1), 12. <https://doi.org/10.1186/s13012-023-01289-1>