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Review Article

Environmental Sustainability Reporting and OHSE Performance in Saudi Corporations

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Abstract: Environmental sustainability reporting is increasingly treated as an operational management instrument rather than a public-relations add-on. For Saudi corporations, sustainability disclosures are shaped by Vision 2030's transformation agenda, expanding ESG expectations in capital markets, and intensifying environmental and occupational health, safety and environment (OHSE) requirements across energy, manufacturing, construction, logistics and services. This review synthesises 2020–2025 evidence on how environmental reporting quality and OHSE performance interact in Saudi corporate contexts. We integrate research on sustainability disclosure practices in Saudi listed companies [8], implementation of quality and occupational safety systems in Saudi organisations [15], and Saudi-specific sustainability assessment models that explicitly incorporate occupational health and safety criteria [14]. The review maps (i) reporting standards and regimes relevant to Saudi firms (GRI, ISSB/IFRS S1–S2, and national initiatives); (ii) OHSE performance constructs and metrics (injury rates, near-miss reporting, environmental incidents, emissions, waste, compliance); (iii) the organisational mechanisms that translate disclosure into performance (management systems, leadership routines, data controls, assurance and auditing); and (iv) methodological pitfalls in the literature (selective reporting, weak comparability, and limited causal identification). We propose a Saudi-context methodological blueprint for future studies and for practitioners: taxonomy-aligned environmental disclosure, integrated EMS/OHSMS controls, assured KPI pipelines, and feedback loops that link public reporting to internal improvement. The synthesis supports a central proposition: where reporting is coupled to verifiable measurement systems and governance, environmental disclosures can reinforce OHSE capability and risk control; where disclosures remain narrative-heavy, the link to real performance is fragile.

Keywords: Sustainability Reporting, Environmental Disclosure, OHSE, Occupational Health and Safety, Saudi Arabia, Vision 2030, GRI, ISO Management Systems, Assurance, Corporate Performance.

1. INTRODUCTION

Public sustainability reporting is undergoing a global shift from voluntary narrative toward more standardised, decision-useful disclosure, driven by investors, regulators and supply-chain partners. For Saudi corporations, this shift coincides with national transformation priorities that explicitly include environmental sustainability and quality of life goals [4, 5]. In parallel, international sustainability disclosure frameworks are consolidating. The Global Reporting Initiative (GRI) maintains widely adopted reporting standards and updated its universal

standards for improved consistency and governance disclosure [6]. The International Sustainability Standards Board (ISSB) published IFRS S1 and IFRS S2 in 2023, offering global baseline requirements for sustainability-related and climate-related financial disclosures that are structured around governance, strategy, risk management, and metrics and targets [7]. These developments raise the "bar" for what counts as credible sustainability reporting: it is increasingly expected to be complete, comparable, and linked to measurable performance systems. OHSE performance has also evolved from a compliance focus to a capability lens. In high-risk industries, superior OHSE performance is associated with process discipline, learning systems, and leadership commitment. In Saudi Arabia, large corporations—especially in energy and heavy industry—have formalised OHSE programs and increasingly publish sustainability or ESG reports that include safety and environmental metrics. Yet the empirical relationship between sustainability reporting and actual OHSE outcomes is not straightforward. Reporting may reflect performance (disclosures as signals), drive performance (reporting as governance pressure), or simply create symbolic legitimacy without operational change. Saudi-focused scholarship points to both progress and gaps. A 2024 analysis of sustainability and environmental disclosure in Saudi Arabia found disclosures were often limited in depth and influenced by institutional context and sectoral priorities [8]. At the organisational practice level, Saudi corporations have pursued structured sustainability assessment approaches that integrate environmental, economic and social dimensions; notably, a Saudi manufacturing sustainability indexing model included occupational health and safety criteria among its social indicators, linking environmental compliance and waste management to broader governance and safety practices [14]. These contributions suggest that OHSE and reporting are connected in corporate systems, but they also highlight the need for stronger evaluation designs. This review addresses a practical question for managers and researchers: what does 2020–2025 evidence imply about how environmental sustainability reporting and OHSE performance interact in Saudi corporations, and how should future studies and reporting programs be designed to create measurable improvements?

2. Aim and Objectives of the Study

Aim

To synthesise 2020–2025 literature on environmental sustainability reporting and OHSE performance in Saudi corporations and to develop a review-based framework and methodological blueprint that links disclosure quality to verifiable OHSE outcomes.

Objectives

1) To map the reporting standards, national initiatives and disclosure regimes that shape environmental sustainability reporting in Saudi corporations, including GRI and ISSB frameworks [6, 7].
2) To synthesise how OHSE performance is defined and measured in recent literature, including injury and illness indicators, environmental incident metrics, emissions and waste KPIs, and compliance measures.
3) To identify organisational mechanisms that connect reporting to performance, such as EMS/OHSMS integration, internal controls, leadership routines, learning systems, and external assurance.
4) To critically appraise methodological approaches used in 2020–2025 studies (content analysis, panel data, surveys, case studies) and highlight threats to validity such as selection bias, greenwashing risk, and measurement inconsistency.
5) To propose a Saudi-context research and practice blueprint aligned with Scopus/Q1 operations and logistics journal expectations—clear constructs, transparent methods, managerial relevance, and reproducible measurement pipelines.

3. REVIEW METHODOLOGY

3.1 Review Design and Reporting

This paper is a structured review with narrative synthesis. We align reporting with PRISMA 2020 guidance, adapting its logic (search, screening, extraction, synthesis) to a multidisciplinary domain spanning sustainability accounting, operations management and OHSE [1]. Because the evidence base is heterogeneous (different sectors, outcomes and datasets), we focus on conceptual integration and methodological appraisal rather than a quantitative meta-analysis.

3.2 Search Strategy and Databases

We searched Scopus, Web of Science, Google Scholar and publisher databases for 2020–2025 publications using combinations of: "Saudi Arabia" AND ("sustainability reporting" OR "environmental disclosure" OR "ESG reporting" OR "GRI" OR "sustainability assurance") AND ("occupational health and safety" OR "HSE" OR "OHSE" OR "safety performance" OR "environmental performance"). We also included relevant standards and authoritative reports published within the same period (GRI universal standards update; IFRS/ISSB standards; Vision 2030 progress reporting) [4–7].

3.3 Eligibility Criteria

Inclusion: peer-reviewed journal articles, systematic or narrative reviews, empirical studies

using Saudi corporate data, and high-quality Saudi-relevant standards/policy documents, published 2020–2025, in English. Exclusion: purely descriptive commentary without methods; studies unrelated to corporate reporting or OHSE; publications outside the date window.

3.4 Extraction and Synthesis Approach

We extracted: sector and sample frame, reporting measures (GRI alignment, disclosure indices, assurance), OHSE measures (safety incidents, environmental incidents, emissions, compliance), study design, and key findings about relationships between disclosure and performance. We clustered evidence into five themes: reporting regimes and incentives; measurement and data quality; OHSE performance systems; assurance and governance; and Saudi-specific contextual drivers (Vision 2030, supply-chain requirements, industrial regulation). For methodological appraisal, we noted common design limitations such as cross-sectional inference, unobserved heterogeneity, and selective disclosure.

4. Saudi Context: Environmental Sustainability Reporting and OHSE as Corporate Priorities

Saudi Vision 2030 frames environmental sustainability as a core national responsibility, emphasizing improved waste management, recycling, reduced pollution and resource efficiency [4]. Complementary initiatives, such as the Saudi Green Initiative, operationalize national ambitions toward emissions reduction, land restoration and broader sustainability programs [5]. For corporations, these agendas increase reputational and regulatory salience of environmental performance and create pressure for more visible disclosure. On the capital-market side, ESG reporting in Saudi Arabia is increasingly associated with corporate governance reforms and investor expectations. A policy-oriented analysis published by the Saudi Capital Market Authority (CMA) discussed how governance reforms interact with ESG disclosure and corporate financial sustainability, reinforcing ESG as part of modern governance expectations [9]. At the firm level, many Saudi corporations now publish sustainability or ESG reports—often referencing GRI methodology and materiality analysis—indicating that environmental and OHSE metrics are migrating into mainstream corporate communication. However, the existence of reports does not guarantee comparability or performance relevance. Saudi-focused disclosure research suggests depth and specificity can be limited, with variation by sector and organisational interpretation of stakeholder demands [8]. This makes the reporting-performance link an empirical question rather than an assumption.

5. Environmental Sustainability Reporting: Standards, Indicators, and Quality Dimensions

5.1 Reporting Standards Relevant to Saudi Corporations

Most Saudi corporate sustainability reports align—explicitly or implicitly—with globally recognized frameworks. GRI provides a comprehensive, stakeholder-oriented reporting approach and updated its universal standards to strengthen governance and clarity for reporters [6]. ISSB's IFRS S1 and S2 standards provide investor-focused baseline requirements and have accelerated convergence toward comparable climate and sustainability disclosures [7]. For Saudi firms that raise capital internationally, alignment with such frameworks may reduce information friction and enhance credibility.

5.2 What "Reporting Quality" Means

Reporting quality in the reviewed literature typically includes: completeness (coverage of material topics), specificity (quantified metrics rather than general narratives), consistency (year-to-year comparability and stable boundaries), and verifiability (data controls, external assurance, traceable methodologies). A practical implication is that high-quality reporting requires internal measurement maturity: stable data definitions, reliable collection processes, and governance for corrections.

5.3 Common Environmental KPIs in Saudi Corporate Reporting

Across Saudi corporate reports and Saudi-relevant academic studies, environmental reporting commonly includes energy use, emissions (including greenhouse gases), water use, waste generation and recycling, and environmental compliance incidents. The Saudi manufacturing sustainability indexing model provides an illustrative, structured KPI set designed to support reporting in line with international standards and Vision 2030. It proposes three sustainability dimensions (economic, environmental and social), with environmental criteria including materials, energy, waste disposal and environmental compliance [14]. Importantly for this review, its social dimension includes occupational health and safety criteria (health and safety management systems and incident measures), providing a clear conceptual bridge between reporting and OHSE performance.

5.4 Environmental Reporting in Practice: Materiality, Boundaries, and Comparability

A recurring implementation issue is how Saudi corporations define reporting boundaries. Multisite groups may include wholly owned subsidiaries but exclude joint ventures, contractors, or downstream impacts. For OHSE, boundary choices

can materially change the apparent safety and environmental profile because injury metrics often sit with contractors, while environmental impacts can be embedded in purchased goods and services. Reporting standards encourage clarity on boundaries, but practice varies. From a logistics lens, boundary definition is not merely technical: it determines whether the corporation is accounting for value-chain risks that can disrupt project schedules, shipping reliability, and community relations. Materiality assessment is the second issue. In theory, materiality connects stakeholder concerns to decision-useful metrics and targets. In practice, materiality is often performed as a qualitative workshop and may not be revisited when risk profiles shift. For Saudi firms undergoing rapid expansion or restructuring, materiality needs to be refreshed to reflect operational change (new facilities, higher contractor exposure, new environmental permits). A practical approach is to couple materiality with risk registers and incident data: if safety near-misses spike in a specific activity or environmental deviations increase during ramp-up, the reporting topic should move up in salience and receive targeted disclosure and corrective action.

Comparability remains difficult because organisations use different definitions for "recordable incident," "environmental incident," or "Scope 1/2/3 emissions," and they may report absolute totals without normalising by output or hours worked. For research, comparability can be improved by focusing on intensity metrics (per million hours worked, per unit production, per tonne-km transported) and by documenting conversion assumptions. For practice, comparability is improved when firms publish KPI definitions and calculation rules, which also supports assurance.

6. OHSE Performance in Saudi Corporations: Constructs and Measurement

6.1 OHSE as a Multi-Domain Performance System

OHSE performance is typically treated as a combined system outcome of occupational health and safety (OHS) and environmental management. It includes both lagging indicators (injuries, incidents) and leading indicators (training, audits, near-miss reporting, safety observations, preventive maintenance). In Saudi corporations, OHSE is often embedded in integrated management systems that combine quality (QMS), environment (EMS) and OHS management systems (OHSMS).

6.2 Evidence on Organisational Safety and Health Systems in Saudi Arabia

Recent empirical evidence from Saudi organisations indicates that formal management practices and organisational quality disciplines can be associated with better occupational safety and health outcomes. A 2023 empirical study assessing implementation of total quality management (TQM) and occupational safety and health in Saudi organisations investigated relationships between TQM dimensions and OSH performance, implying that management capability and process discipline matter for safety outcomes [15]. Such findings support a plausible pathway from reporting to performance: if reporting strengthens measurement discipline and leadership attention, it can indirectly support OHSE.

6.3 Indicators Used in 2020–2025 Studies

The OHSE indicators discussed in the reviewed literature include: total recordable incident rate (TRIR), lost time injury frequency rate (LTIFR), near-miss counts, severity rates, work-related illness rates, safety training hours, safety audit completion, environmental incidents/spills, regulatory violations, waste and emissions intensity, and corrective action closure times. Many Saudi corporate reports include at least a subset of these indicators, but definitions and boundaries vary, limiting cross-company comparability. Therefore, rigorous research requires careful operationalisation and sensitivity analysis.

6.4 Integrating EMS and OHSMS: Why the 'E' and 'S' in ESG Interlock

While environmental and occupational safety systems are sometimes managed in separate departments, integrated OHSE thinking is increasingly common because the same operational controls affect both. For example, maintenance quality influences equipment integrity, which affects both process safety and environmental leakage risk; training quality influences safe work practices and spill prevention; and contractor management affects both injury exposure and environmental compliance. Integration is often operationalised through a combined management system with shared audit cycles, corrective action systems, and leadership review forums. Saudi practice-oriented research illustrates the value of structured assessment models that include both environmental and safety criteria. The Saudi manufacturing sustainability indexing model includes environmental criteria (materials, energy, waste, compliance) alongside occupational health and safety sub-criteria (health and safety management system, incidents), enabling organisations to identify weak sub-criteria and treat them as barriers requiring targeted improvement [14]. This logic can be applied beyond manufacturing: for logistics operators, environmental reporting on fuel use and emissions can be integrated with safety reporting on fatigue and road incidents; for construction, environmental waste controls can be aligned with safety housekeeping and hazard control routines. Integration also helps resolve a common

reporting weakness: environmental disclosures may focus on high-level aspirations, while safety disclosures focus on lagging incident rates. A combined OHSE dashboard encourages leading indicators across both domains (audit completion, corrective action closure, hazard observations, preventive maintenance, training coverage). For the reporting-performance link, the key is whether the dashboard is used in routine management cycles rather than only assembled for annual reporting.

7. How Reporting and OHSE Performance Connect: Mechanisms and Hypotheses

The literature suggests at least four mechanisms linking environmental sustainability reporting to OHSE performance.

Mechanism 1: Measurement discipline and internal control. When reporting is structured around standards (GRI/ISSB) and requires quantified KPIs, organisations invest in data pipelines, definitions, and controls. Better data and controls can improve OHSE management by enabling earlier detection of hazards, deviations and weak signals.

Mechanism 2: Governance pressure and accountability. Public disclosure can create accountability to boards, regulators and investors. Where governance structures treat ESG as a risk domain, reporting can strengthen oversight and resource allocation, including investments in safety engineering or emissions controls. CMA-linked ESG governance discussions reinforce this governance framing for Saudi firms [9].

Mechanism 3: Learning loops and continuous improvement. High-quality reports often include targets and progress tracking. This creates a PDCA-like loop that can integrate OHSE corrective actions, audit findings, and performance improvement programs.

Mechanism 4: Symbolic legitimacy and decoupling. Conversely, if reporting incentives prioritize reputation without robust verification, reporting may become decoupled from operational reality. This risk is especially salient where disclosures remain narrative-heavy or where assurance is absent.

These mechanisms lead to a review-based proposition: sustainability reporting is most likely to correlate with improved OHSE performance when disclosures are quantified, assured, and tied to internal management systems; the link is weaker or ambiguous when disclosures are selective or primarily symbolic.

7.1 From Disclosure to Capability: A 'Reporting-as-Operations' View

Many organisations treat sustainability reporting as a communications product produced by a central team. A contrasting view—supported by operations management logic—is "reporting as operations." In this view, reporting is the output of an organisational measurement system, and the quality of reporting reflects the maturity of that system. When reporting is operationalised, each KPI has an owner, a data source, a definition, a control check, and a corrective mechanism for data errors. Reporting then becomes a discipline that improves internal coordination: operations, EHS, finance, and compliance teams align on what is being measured and why.

This perspective clarifies why some firms may show a stronger link between reporting and OHSE outcomes. If reporting is embedded into operational management, it is more likely to influence decisions: where to invest in safety engineering, which suppliers require audits, and which sites need targeted training. Conversely, if reporting is "bolted on," it may increase narrative sophistication without improving controls. This is one reason why assurance and auditing matter: assurance pushes firms toward operationalisation by requiring evidence and traceability.

For Saudi corporations, the reporting-as-operations lens aligns with broader governance and performance reforms that emphasise transparency, accountability, and measurable outcomes under Vision 2030 [4]. It also aligns with stakeholder pressures in global supply chains where clients demand verified environmental and safety performance from contractors and service providers. In logistics networks, such demands can be a prerequisite for contract award, making OHSE reporting a competitive capability rather than a compliance cost.

8. Assurance, Auditing, and Data Governance

External assurance and internal audit play a pivotal role in converting reporting into operational improvement. Assurance can reduce the risk of misstatement and provide confidence that reported OHSE and environmental metrics reflect real processes. In Saudi contexts, the emergence of ESG reporting guidance and governance reform discussions has increased attention to reliability and accountability in ESG disclosures [9].

At the organisational level, assurance readiness requires: clear KPI definitions; data lineage from source systems (EHS incident systems, environmental monitoring, maintenance logs); controls for manual adjustments; and documented calculation methods. Where such controls exist, reporting can serve as a "forcing function" that improves data quality and elevates OHSE issues to senior governance forums. Where controls are weak, assurance processes may expose inconsistencies and

encourage improvement, but they can also reveal fundamental data gaps.

A key research implication is that future studies should measure not only the presence of sustainability reporting but also assurance features—such as third-party verification scope, internal audit involvement, and traceability—to better explain variation in OHSE outcomes.

9. Sectoral Considerations and Supply-Chain Implications

Saudi corporations operate across sectors with different OHSE risk profiles. The energy sector faces process safety and environmental incident risks; manufacturing faces industrial safety and waste/emissions management; construction faces high incident rates; logistics and transport face exposure risks, fatigue, and environmental footprint considerations. Sector-specific risk profiles influence which KPIs are material and how reporting-performance links manifest. Supply-chain dynamics also matter. Large Saudi corporations increasingly impose OHSE and environmental requirements on suppliers and contractors. Reporting can reinforce these requirements by documenting supplier management, training, and compliance processes. From a logistics journal perspective, the managerial relevance lies in understanding how disclosure and governance influence upstream and downstream risk control: contractor safety performance can affect project schedules, asset reliability, and service continuity. Saudi manufacturing sustainability indexing work illustrates how sustainability assessment models can support benchmarking and identify barriers, including those relevant to OHSE, through structured criteria and sub-criteria [14]. Adapted to corporate value chains, such models can support supplier evaluation and targeted capability-building.

10. Methodological Pitfalls and How to Improve Evidence Quality

10.1 Common Limitations in 2020–2025 Evidence

Saudi-focused sustainability reporting studies frequently use content analysis and disclosure indices, which are valuable for mapping practices but limited for causal inference. Key limitations include: (i) selection bias (firms that report may already be higher-performing); (ii) omitted variables (firm size, governance quality, regulatory exposure); (iii) measurement noise (different KPI definitions); and (iv)time-lag ambiguity (performance may change after reporting improvements, not contemporaneously).

Similarly, OHSE performance studies often rely on surveys or single-sector samples, which can limit generalisability. Even when OHSE outcomes are reported, data availability constraints can lead to proxy measures that do not capture process safety or environmental harm severity.

10.2 Recommended Research Designs

To strengthen evidence, future studies should adopt: (a) longitudinal panel designs that exploit within-firm variation; (b) difference-in-differences approaches around reporting regime changes or assurance adoption; (c) matched samples to reduce selection bias; and (d) multi-level models that separate firm, sector and facility effects. Combining disclosure data with objective OHSE metrics from regulatory filings, accident databases, or audited EHS systems can reduce measurement noise.

10.3 Reporting Guidance for Reproducibility

Researchers should publish codebooks for disclosure indices, define OHSE metrics precisely, and document data sources and cleaning steps. Practitioners can support research quality by adopting standardized KPI definitions and maintaining audit trails that enable verification and benchmarking.

10.4 A Practical Measurement Template for Saudi Corporate Studies

To improve evidence quality and comparability, future Saudi studies can use a structured measurement template with three layers.

Layer A: Disclosure quality. Measure (i) standard alignment (GRI/ISSB mapping); (ii) specificity (share of metrics quantified); (iii) boundary clarity; (iv) target setting; and (v) assurance scope. These can be coded using a transparent codebook and inter-rater checks.

Layer B: OHSE process capability. Measure leading indicators such as training hours per employee/contractor, audit completion, corrective action closure time, near-miss reporting rate, and preventive maintenance compliance. These indicators reflect whether the organisation is learning and controlling risk.

Layer C: OHSE outcomes. Measure lagging indicators such as TRIR/LTIFR, severity, environmental incident counts and severity, regulatory noncompliance events, emissions and waste intensity, and recurring deviation rates. When possible, use facility-level data and normalize by exposure (hours worked, production, tonne-km). The template supports stronger causal reasoning: disclosure quality may influence process capability through governance attention and resource allocation, and process capability may influence outcomes through improved hazard control. Researchers can test mediation models using longitudinal data, and practitioners can use the same

template to structure internal dashboards and report disclosures.

11. Proposed Saudi-Context Blueprint for Practice and Research

Drawing on the review, we propose a Saudi-context blueprint that aligns environmental sustainability reporting with OHSE performance improvement:

Step 1: Define a reporting boundary and materiality logic. Use a transparent materiality process and map topics to standards (GRI/ISSB) and national priorities (Vision 2030, Saudi Green Initiative) [4–7].

Step 2: Standardize KPIs and build data controls. Adopt a unified KPI dictionary for emissions, waste, energy, incidents, and leading safety indicators. Implement data lineage from source systems.

Step 3: Integrate management systems. Align environmental management (EMS) and OHS management (OHSMS) routines: audits, corrective actions, training, and preventive controls. The Saudi sustainability indexing model's integration of environmental criteria and OHSE criteria provides a practical conceptual template [14].

Step 4: Implement assurance-ready reporting. Expand internal audit involvement and consider external assurance scope for key OHSE and environmental indicators to improve reliability.

Step 5: Close the loop. Use report targets and variance analysis to drive improvement cycles, with clear accountability for corrective actions and learning.

Step 6: Extend to contractors and suppliers. Embed OHSE expectations in procurement and contractor management and report progress to reinforce accountability across the value chain.

This blueprint is compatible with Q1 logistics and operations standards because it translates disclosure into process capability, risk control and measurable performance improvement.

11.1 Implementation Roadmap for Saudi Corporations

A review-based roadmap helps organisations operationalise the blueprint in realistic phases. Phase 1 (Foundation) focuses on data readiness: define OHSE and environmental KPI dictionaries, assign data owners, and establish controls for source systems (incident reporting tools, environmental monitoring, maintenance logs). Phase 2 (Integration) aligns governance and routines: unify audit schedules across EMS/OHSMS, adopt shared corrective-action workflows, and embed OHSE dashboards into leadership review meetings. Phase 3 (Disclosure maturity) strengthens external credibility: publish boundaries and methods, report intensity metrics alongside totals, and obtain assurance on a small set of high-risk indicators before expanding scope. Phase 4 (Value-chain extension) brings contractors and suppliers into the system: standardize contractor reporting, audit high-risk suppliers, and use procurement incentives to improve compliance and learning. For research, the roadmap clarifies which mechanisms are plausible at each phase. Early-stage programs may show improved disclosure without immediate incident reduction, while integrated programs should show earlier changes in leading indicators, followed by lagging outcomes. Therefore, empirical designs should incorporate time lags and use mixed methods (panel analysis plus case studies) to interpret why some firms translate reporting into capability while others do not. A practical safeguard is to separate "claims" from "evidence." In reporting, each narrative statement about environmental improvement or safety culture should be linked to a measurable KPI trend, an implemented control, or a verified program change. This reduces the risk of overstating progress and improves auditability. It also makes reports more useful internally: managers can see what actions drove which outcomes. In Saudi corporations where rapid growth is common, this discipline helps prevent data drift and ensures that new sites and contractors follow the same rules and controls across the reporting cycle.

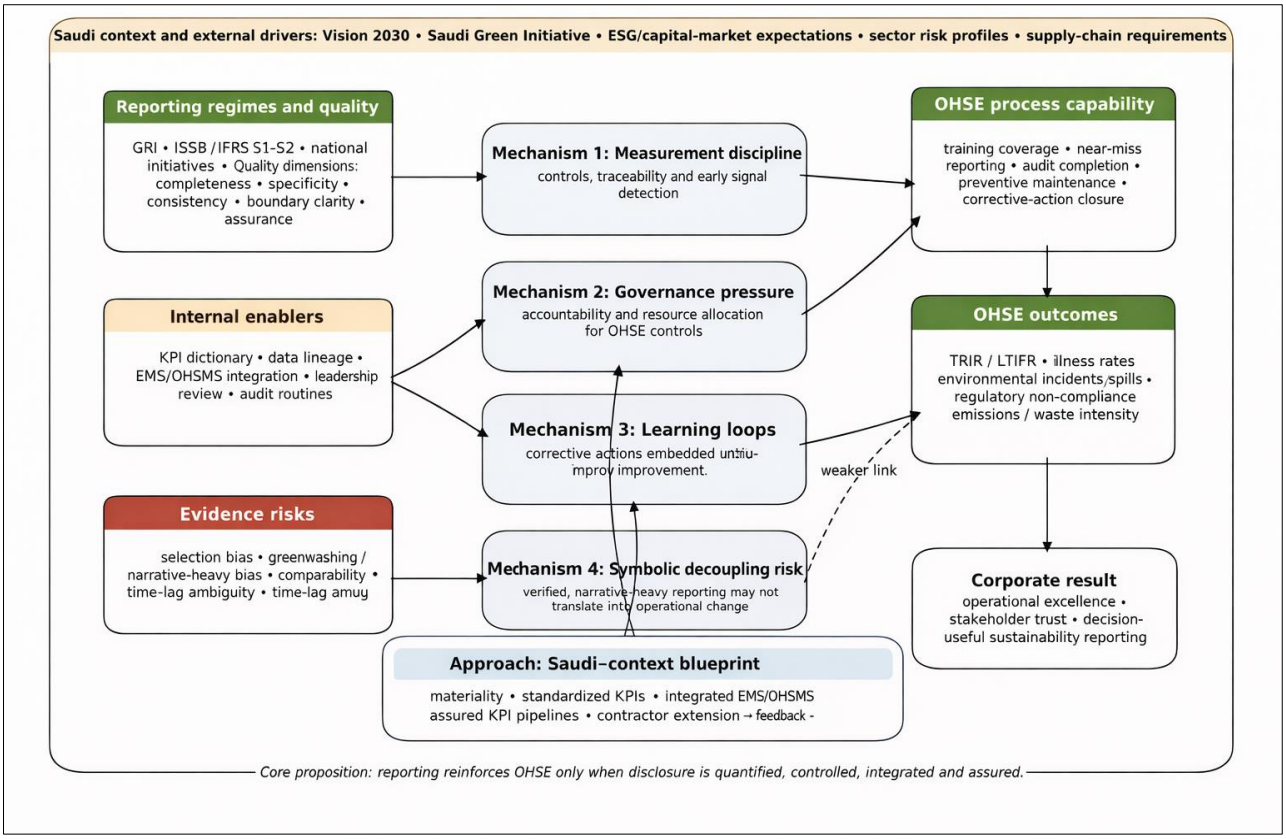

Figure 1: Apple-inspired review framework linking environmental sustainability reporting to OHSE performance mechanisms and outcomes in Saudi corporations (2020–2025).

Table 1: Representative 2020–2025 sources informing the reporting–OHSE performance linkage in Saudi corporate contexts

Source	Saudi context	Focus	Method	Key finding	Implication for OHSE–reporting link
Aladwey & Alsudays (2024)	Saudi listed firms (annual reports)	Environmental disclosure depth	Content analysis	Shows limited depth; sector variation	Highlights need for specificity and comparability
Al-Alqam *et al.*, (2023)	Saudi manufacturing case	Sustainability indexing incl. OHS criteria	Fuzzy multi-criteria model	Integrates environmental + OHSE indicators	Template for KPI dictionaries and barrier analysis
Aichouni *et al.*, (2023)	Saudi organisations (multi-sector)	TQM ↔ OSH performance	Survey + regression	Process discipline associated with OSH	Supports reporting-as-operations mechanism
CMA (2023)	Saudi market governance	ESG disclosure and governance reforms	Policy report	ESG framed as governance and sustainability	Motivates assurance and board oversight variables
GRI (2021)	Global standard	Universal reporting requirements update	Standard	Clarifies governance/reporting principles	Common baseline for disclosure-quality coding
ISSB (2023)	Global standard	IFRS S1/S2 sustainability disclosures	Standard	Investor-focused governance/strategy/risk metrics	Supports structured climate/environment reporting
Vision 2030 report (2024/2025)	Saudi national	Environmental sustainability priorities	Official report	Emphasizes efficiency, waste and pollution reduction	Contextual driver for corporate disclosure

12. Future Research Directions (2025+)

Future work should prioritise (1) Saudi multi-sector datasets linking disclosure practices to verified OHSE metrics; (2) study designs that identify causal pathways and time lags; (3) measurement frameworks that include process safety and severity, not just incident counts; (4) contractor and supply-chain OHSE reporting as a logistics risk-control mechanism; and (5) assurance and governance variables as explanatory factors.

At a methodological level, researchers should compare disclosure quality dimensions (specificity, completeness, assurance) rather than treating "having a report" as a binary variable. At a practice level, Saudi corporations can accelerate progress by harmonising KPI definitions, publishing calculation methods, and investing in integrated EHS data platforms.

13. CONCLUSION

Between 2020 and 2025, environmental sustainability reporting in Saudi corporations has expanded under the combined influence of national transformation priorities and converging global disclosure standards. Evidence suggests that the relationship between reporting and OHSE performance is contingent. Where reporting is embedded in measurement discipline, governance oversight, and assurance, it can strengthen OHSE capability by improving visibility, accountability, and learning. Where reporting remains primarily narrative and weakly verified, the link to real performance is uncertain and may risk decoupling. For Saudi corporations seeking operational excellence and stakeholder trust, the most defensible pathway is to treat sustainability reporting as an extension of OHSE management systems: standardised KPIs, auditable data controls, assured disclosures, and feedback loops that convert transparency into measurable improvement.

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