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Embedding ESG into Partner Lifecycle Governance in Indonesian Port Operations

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Abstract: This article examines how Environmental, Social, and Governance considerations can be integrated into partner lifecycle governance at PT Pelabuhan Indonesia (Persero). The study responds to the managerial problem that sustainability commitments and management systems already exist at the corporate level, yet they are not consistently translated into partner screening, contractual implementation, and post-selection monitoring. A qualitative case study was conducted using semi-structured interviews with relevant internal functions, internal document review, and benchmarking with selected international ports. Thematic content analysis was applied through open coding, axial coding, and selective interpretation using Resource-Based View, Cynefin Framework, Institutional Theory, Stakeholder Theory, and Legitimacy Theory. The findings identify six implementation gaps: limited formal governance, inconsistent criteria, insufficient partner data and internal capability, lack of operational tools, weak post-contract monitoring, and undefined decision rules for balancing sustainability and commercial considerations. The article proposes an Environmental, Social, and Governance-based partner lifecycle governance framework consisting of control, influence, and monitoring areas supported by disclosure requirements, risk-based scoring, contractual clauses, partner databases, dashboards, and phased implementation.

Keywords: ESG, partner lifecycle governance, partner selection, port sustainability, Pelindo.

INTRODUCTION

Environmental, Social, and Governance (ESG) has developed from a voluntary sustainability disclosure agenda into a governance mechanism that affects investment quality, organizational legitimacy, risk management, and long-term competitiveness. The shift is especially relevant for port and maritime logistics because ports are nodes of trade connectivity while also being sources of energy consumption, greenhouse gas emissions, land use, occupational safety exposure, community interaction, and governance accountability. In the maritime sector, shipping and port-related activities are increasingly evaluated not only from commercial performance, but also from their ability to reduce environmental impacts and strengthen responsible business practices (International Maritime Organization, 2023; Tsatsaronis, Syriopoulos, Karamperidis, & Boura, 2024).

For port operators, ESG performance cannot be separated from the behaviour of external partners. Terminal operators, contractors, logistics providers, investors, tenants, shipping lines, technology providers, and other strategic partners influence how ports use energy, manage emissions, protect workers, comply with permits, interact with communities, and uphold ethical conduct. Therefore, ESG integration should not stop at corporate-level reporting or internal programs. It should also shape partner lifecycle governance, namely how partners are screened, selected, contracted, monitored, evaluated, renewed, improved, or exited.

This issue is important for PT Pelabuhan Indonesia (Persero), hereafter referred to as Pelindo, as the largest state-owned port operator in Indonesia. Since the merger of four port state-owned enterprises in 2021, Pelindo has managed an integrated national port network with diverse regional, operational, commercial, and infrastructure activities. Pelindo has also developed ESG-related initiatives such as decarbonization, equipment electrification, shore power, renewable energy, mangrove restoration, occupational health and safety, governance strengthening, and several management systems related to environment, energy, safety, risk, quality, anti-bribery, and information security. However, the existence of these initiatives does not automatically mean that ESG has been embedded into partner-related decision-making.

The managerial problem addressed in this article is the absence of a fully structured ESG-based partner lifecycle governance mechanism. In practice, ESG considerations may appear in individual projects, but the application is not yet supported by standardized criteria, partner disclosure requirements, due diligence checklists, risk-based scoring, ESG clauses, monitoring dashboards, or cross-functional accountability. This situation may expose Pelindo to environmental, safety, compliance, reputational, and financing risks because partners may create ESG impacts that later become associated with Pelindo's port ecosystem.

Theoretically, this issue can be understood through five complementary lenses. The Resource-Based View explains ESG governance as an organizational capability that may strengthen partner selection and risk management (Barney, 1991; Wernerfelt, 1984). The Cynefin Framework explains why ESG-related partnership decisions involve complex judgment rather than mechanical checklists (Snowden & Boone, 2007). Institutional Theory explains the need to formalize ESG into rules, routines, and procedures (DiMaggio & Powell, 1983). Stakeholder Theory emphasizes the relevance of parties affected by partner behaviour, while Legitimacy Theory explains why weak partner governance may undermine public trust in a state-owned port operator (Freeman, 1984; Suchman, 1995).

This article therefore addresses three research questions: 1) how ESG is currently reflected in Pelindo's partner lifecycle governance and what gaps need to be addressed; 2) which ESG frameworks, standards, and benchmarking approaches are relevant for strengthening ESG integration; and 3) how Pelindo can develop an ESG-based partner lifecycle governance framework that integrates partner selection, contractual implementation, and post-selection monitoring.

METHOD

This study used a qualitative case study design because the research problem concerns a real organizational process, a specific institutional context, and managerial interpretation rather than statistical measurement. Case study research is appropriate when the boundaries between the phenomenon and its organizational context are closely connected (Yin, 2018). The object of the study was ESG integration into Pelindo's partner lifecycle governance at the corporate level, with attention to partner screening, selection, contracting, implementation, monitoring, and renewal.

Primary data were obtained through semi-structured interviews with internal functions related to sustainability, governance and compliance, risk management, strategic planning, business development, legal, finance, operations, and partner governance. Secondary data were

obtained from internal company documents, cooperation guidelines, ESG-related standards, sustainability reports, and benchmarking references from selected international ports. The benchmarking cases included the Port of Rotterdam, Port of Antwerp-Bruges, and PSA International because they provide relevant examples of ESG integration through control, influence, concession assessment, contractual expectations, supply chain initiatives, and sustainability reporting.

Data were analysed using Thematic Content Analysis. The process consisted of open coding to identify recurring statements, axial coding to group related codes into thematic categories, and selective interpretation to connect the findings with the research questions and the proposed business solution. This process follows the logic of qualitative thematic analysis, which seeks to interpret patterns of meaning across qualitative data (Braun & Clarke, 2006; Saldaña, 2021). The trustworthiness of the interpretation was strengthened by triangulating interview findings with documents, ESG frameworks, and port benchmarking references.

Table 1. Data sources and analysis procedure

Data Component	Description	Purpose in the Study
Semi-structured interviews	Internal functions related to sustainability, governance, risk, legal, finance, operations, business development, and partner governance.	To understand current practices, gaps, root causes, and implementation challenges.
Internal documents	Cooperation guidelines, ESG-related internal references, and selected partnership materials.	To compare formal documents with actual governance needs.
ESG standards and frameworks	GRI, SASB, TCFD, IFRS S1/S2, ISO 14001, ISO 45001, ISO 37001, ISO 20400, ISO 31000, and ISO 37301.	To identify reference criteria for disclosure, due diligence, risk, compliance, and monitoring.
Port benchmarking	Selected practices from Port of Rotterdam, Port of Antwerp-Bruges, and PSA International.	To identify how ESG can be embedded through control, influence, contracts, and monitoring.
Thematic analysis	Open coding, axial coding, and selective interpretation.	To synthesize qualitative evidence into gaps and proposed business solution.

Source: Author's synthesis based on thesis research design

RESULTS AND DISCUSSION

Current ESG Adoption and Implementation Gaps

The findings show that Pelindo already has ESG awareness and several ESG-related initiatives, but ESG integration into partner lifecycle governance remains partial. The issue is not the absence of sustainability commitment. Rather, the core issue is the translation of corporate ESG commitments into repeatable partner governance mechanisms. ESG considerations are more visible in selected projects than in standardized corporate workflows. As a result, similar ESG issues may be treated differently across projects, depending on the project team, partner type, maturity of discussion, and level of involvement of sustainability-related functions.

The first major gap concerns formal governance. ESG-related partner decisions are not yet consistently supported by formal procedures that define when ESG assessment must be conducted, which unit owns the assessment, how evidence should be verified, and how ESG results influence approval. This confirms the relevance of Institutional Theory: ESG becomes durable only when it is translated into organizational rules, routines, and accountability structures (DiMaggio & Powell, 1983).

The second gap concerns criteria consistency. Environmental, social, and governance considerations may already appear in project discussions, but they are not yet converted into a common criteria architecture. Environmental issues include emissions, energy efficiency, pollution, waste, and land-use impact. Social issues include occupational health and safety, labor practices, community relations, and stakeholder engagement. Governance issues include anti-bribery, compliance, transparency, data governance, conflict of interest, and business ethics. Without common criteria, ESG cannot be used consistently for partner comparison, decision justification, or post-contract monitoring.

The third gap concerns capability and data readiness. A partner ESG assessment requires evidence such as policies, certifications, incident records, environmental permits, anti-bribery controls, safety performance, reporting capability, and corrective action history. However, the availability of such evidence varies significantly across partner types. This finding is consistent with the Resource-Based View because ESG integration depends on internal capabilities such as data, tools, cross-functional knowledge, and governance routines (Barney, 1991; Dauerer, 2025).

The fourth gap concerns the operationalization of ESG frameworks. Pelindo already has several ESG-related management systems, but the systems are not yet fully converted into practical tools for partner governance. International standards such as ISO 14001, ISO 45001, ISO 37001, ISO 20400, ISO 31000, and ISO 37301 can provide a useful reference, but standards alone are insufficient unless they are translated into checklists, scoring models, evidence requirements, contractual clauses, and dashboards (International Organization for Standardization, 2015, 2016, 2017, 2018a, 2018b, 2021).

The fifth gap concerns post-contract monitoring. ESG commitments may be mentioned during negotiation or contracting, but monitoring after contract signing is not always supported by measurable indicators, periodic reporting, dashboard review, escalation mechanisms, or renewal criteria. This is important because ESG risk may materialize during implementation rather than during partner selection. Therefore, partner lifecycle governance must connect pre-selection due diligence with contractual obligations and post-selection monitoring.

The sixth gap concerns ESG-financial trade-off. Partnership decisions often require balancing sustainability expectations with commercial feasibility, strategic importance, operational urgency, and investment attractiveness. A rigid ESG checklist may be impractical, but a purely discretionary approach may weaken accountability. This indicates the need for a risk-based assessment model that separates mandatory compliance requirements from scored ESG factors and allows decision makers to justify trade-offs transparently.

Table 2. Identified ESG integration gaps in partner lifecycle governance

Key Gap	Evidence from Analysis	Managerial Implication
Formal ESG governance for partner decisions is limited.	ESG involvement depends on project context and informal coordination.	Partner assessment may be inconsistent and difficult to justify.
ESG criteria are not standardized across the lifecycle.	Environmental, social, and governance issues appear differently across projects.	Partners cannot be compared using a common assessment basis.
Partner ESG data and internal capability remain insufficient.	Evidence requirements, partner data, and evaluation capability vary by unit and project.	Due diligence may rely on incomplete information.
Frameworks are not yet operationalized into tools.	Standards and policies exist, but checklists, scorecards, clauses, and dashboards are still limited.	Corporate ESG commitment may not influence actual partner decisions.
Post-contract monitoring is not fully structured.	ESG commitments are not always converted into measurable indicators and periodic review.	ESG risks may become visible only during implementation.

Key Gap	Evidence from Analysis	Managerial Implication
ESG-financial trade-off rules are not defined.	Commercial feasibility and ESG expectations may be balanced case by case.	Decision makers need transparent risk-based rules.

Source: Author's synthesis based on thematic analysis

Benchmarking Insights for Port Partner Governance

Benchmarking indicates that mature ESG implementation in port ecosystems is not limited to sustainability reporting. The Port of Rotterdam illustrates the importance of distinguishing between aspects that can be directly controlled by the port authority and aspects that can only be influenced through contracts, infrastructure, incentives, and collaboration. This distinction is relevant for Pelindo because many ESG impacts in port operations are created by partners rather than by the corporate office alone.

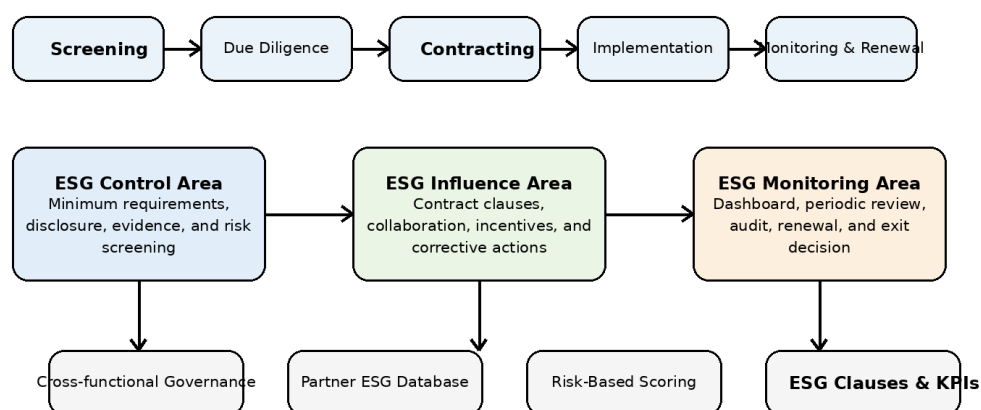
The Port of Antwerp-Bruges demonstrates that sustainability principles can be incorporated into concession assessment, technical requirements, and contractual commitments. This practice shows that partner selection can be designed as a governance instrument, not merely a commercial or administrative activity. PSA International also provides relevant lessons by connecting climate action, sustainable supply chain transformation, green financing, responsible business, and digital logistics solutions with a broader value creation agenda (PSA International, 2023).

The benchmarking results strengthen the argument that Pelindo needs an ESG-based partner lifecycle governance framework. Such a framework should not be limited to rejecting or accepting partners. It should help Pelindo define minimum requirements, identify partner risk levels, negotiate ESG clauses, monitor partner commitments, update partner data, and use ESG performance as input for renewal, improvement, or exit decisions.

Proposed ESG-Based Partner Lifecycle Governance Framework

Based on the findings, this article proposes an ESG-based Partner Lifecycle Governance Framework for Pelindo. The framework consists of three interrelated areas: ESG Control Area, ESG Influence Area, and ESG Monitoring Area. The ESG Control Area covers minimum requirements, disclosure, due diligence, evidence verification, and risk classification before partner approval. The ESG Influence Area covers contractual clauses, collaboration mechanisms, incentives, corrective action plans, and capacity-building for partners. The ESG Monitoring Area covers dashboard monitoring, periodic reporting, audit, renewal assessment, and exit decisions.

ESG-Based Partner Lifecycle Governance Framework



Source: Author's synthesis based on thesis findings

Figure 1. ESG-based Partner Lifecycle Governance Framework

The framework is designed to be risk-based. Not all partners need the same depth of assessment. Infrastructure, investment, tenant, contractor, and operational partners may require more detailed environmental and safety assessment because their activities directly affect emissions, land use, occupational safety, waste, and community relations. Technology partners may require stronger data governance and cybersecurity assessment. Strategic alliance and commercial partners may require stronger governance, reputation, and disclosure assessment. This risk-based design allows ESG integration to remain practical while still protecting Pelindo from material exposure.

A key element of the framework is the separation between mandatory requirements and scored criteria. Mandatory requirements should function as pass-or-fail gates for issues such as legal compliance, critical permits, anti-bribery declarations, severe sanctions, unresolved safety violations, and other non-negotiable matters. Scored criteria can then be used to compare the relative ESG maturity of eligible partners. This approach enables decision makers to avoid treating critical compliance failures as merely low scores that can be offset by commercial benefits.

The framework also requires cross-functional governance. ESG partner assessment should not be owned by a single unit. Corporate Sustainability may define ESG criteria and technical references; Legal may translate commitments into clauses; Risk Management may integrate risk rating; Governance and Compliance may verify ethics and compliance requirements; Business Development and Strategic Alliance may integrate assessment into partner selection; Finance may connect ESG results with investment and financing considerations; and Operations may monitor performance during implementation. This cross-functional design reflects the fact that ESG is both a sustainability issue and a decision governance issue.

The implementation should be phased. In the first phase, Pelindo can standardize ESG criteria, disclosure templates, and minimum requirements for material partner categories. In the second phase, Pelindo can pilot scoring, clauses, and monitoring indicators in selected strategic projects. In the third phase, Pelindo can build a partner ESG database and dashboard. In the fourth phase, ESG performance can become part of renewal, improvement, and exit decisions.

Table 3. ESG integration across partner lifecycle stages

Lifecycle Stage	ESG Requirement	Evidence or Tool	Output
Initial screening	Minimum compliance, reputation, and sanctions check.	Partner disclosure form, exclusion list, legal and compliance verification.	Eligible or non-eligible partner status.
Due diligence	Environmental, social, and governance maturity assessment.	ESG checklist, supporting documents, site or document review, risk matrix.	Risk rating and recommended mitigation.
Selection and approval	Weighted ESG score integrated with commercial and strategic assessment.	Scorecard separating mandatory gates and scored criteria.	Decision note with ESG justification.
Contracting	Binding ESG commitments and reporting obligations.	ESG clauses, performance indicators, corrective action provisions.	Contractual ESG obligations.
Implementation	Performance monitoring and issue escalation.	Periodic report, dashboard, audit, and corrective action plan.	Ongoing compliance and improvement record.

Lifecycle Stage	ESG Requirement	Evidence or Tool	Output
Renewal or exit	ESG performance used in renewal, improvement, or termination decision.	Historical partner ESG database and performance review.	Renewal decision, improvement plan, or exit recommendation.

Source: Author's synthesis

Table 4. Proposed cross-functional roles in ESG partner governance

Function	Main Role in ESG-Based Partner Lifecycle Governance
Corporate Sustainability	Defines ESG criteria, disclosure requirements, technical references, and monitoring indicators.
Strategic Alliance and Business Development	Integrates ESG assessment into partner engagement, selection, and decision documentation.
Legal	Converts ESG requirements into clauses, obligations, representations, warranties, remedies, and termination provisions.
Risk Management	Aligns ESG findings with enterprise risk categories, risk rating, and mitigation planning.
Governance and Compliance	Verifies anti-bribery, conflict of interest, sanctions, compliance, and ethics requirements.
Finance and Investment	Connects ESG results with investment feasibility, financing readiness, and long-term value creation.
Operations and Project Owner	Monitors partner implementation, validates field performance, and escalates corrective actions.

Source: Author's synthesis

Table 5. Phased implementation roadmap

Phase	Main Action	Expected Output
Phase 1: Standardization	Define partner categories, minimum ESG requirements, disclosure forms, and checklist.	Common ESG assessment basis for material partners.
Phase 2: Pilot	Test scorecard, ESG clauses, and monitoring indicators in selected strategic projects.	Validated tools and practical adjustment notes.
Phase 3: Systemization	Develop partner ESG database, dashboard, and reporting workflow.	Accessible evidence base and monitoring history.
Phase 4: Institutionalization	Integrate ESG results into approval, renewal, improvement, and exit decisions.	Formal partner lifecycle governance with ESG accountability.
Phase 5: Improvement	Review criteria periodically against regulations, standards, and benchmarking insights.	Updated framework aligned with ESG developments.

Source: Author's synthesis

CONCLUSION

This article concludes that Pelindo already has important ESG foundations, but ESG has not yet been fully institutionalized into partner lifecycle governance. The current condition reflects a translation gap between corporate sustainability commitment and partner-related decision-making. ESG considerations may already appear in selected projects, but they are not yet consistently supported by common criteria, partner disclosure, due diligence tools, contractual clauses, dashboards, and cross-functional accountability.

The relevant references for strengthening ESG integration include international ESG disclosure frameworks, port sustainability benchmarking, risk and compliance standards, sustainable procurement guidance, and qualitative evidence from Pelindo's internal context.

Benchmarking with international ports suggests that ESG influence in port ecosystems can be exercised through control, contractual influence, partner collaboration, and post-contract monitoring. This insight is especially important because many ESG impacts in port operations are generated by partners rather than by the port operator alone.

The proposed ESG-based Partner Lifecycle Governance Framework provides a practical way to integrate ESG from partner screening to monitoring and renewal. The framework consists of ESG Control Area, ESG Influence Area, and ESG Monitoring Area. It is supported by minimum requirements, disclosure templates, risk-based scoring, ESG clauses, partner databases, dashboards, and phased implementation. Managerially, the framework can help Pelindo improve partner selection quality, reduce ESG risk exposure, strengthen accountability, support financing readiness, and enhance the credibility of its sustainability agenda.

The study is limited by its qualitative design, corporate-level scope, and the absence of long-term field testing of the proposed framework. Future research may test the scoring model quantitatively, compare ESG readiness across partner categories, or evaluate implementation outcomes after the framework is piloted in selected partnership projects.

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