

Coercive vs. Decoupling Responses: A Comparative Analysis of How Emerging Economy Oil Majors and Western Supermajors Navigated Stakeholder Pressures in Sustainable Supply Chain Integration

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Abstract

The global oil and gas industry faces intensifying stakeholder pressures to integrate sustainability into supply chain operations, yet organizational responses vary significantly between Western supermajors and emerging economy national oil companies. This study conducts a comparative analysis of how these distinct categories of firms navigate coercive, normative, and mimetic institutional pressures in sustainable supply chain integration. Employing a mixed-method research design combining qualitative content analysis of 15 major oil companies' sustainability reports (2016-2025) with quantitative analysis of supply chain performance metrics, the research examines response patterns across 10-year longitudinal data. Findings reveal that Western supermajors predominantly adopt decoupling responses—symbolic policy adoption with substantive implementation gaps—while emerging economy oil majors demonstrate coercive compliance driven by regulatory enforcement and state ownership structures. Quantitative analysis indicates that coercive pressure responsiveness correlates with 78.3% higher supply chain sustainability compliance rates compared to mimetic-driven approaches ($p < 0.01$). The study contributes to institutional theory by identifying contingent factors that determine whether firms engage in substantive integration versus symbolic decoupling. Practical implications include recommendations for stakeholder engagement strategies and regulatory framework design tailored to firm-specific institutional contexts.

Keywords: Institutional Theory, Sustainable Supply Chain Management, Decoupling, Coercive Pressures, Oil and Gas Industry, Stakeholder Engagement

1. Introduction

1.1 Background

The global oil and gas industry operates at the intersection of critical energy supply and escalating environmental and social accountability demands. As one of the highest-emitting industrial sectors, oil and gas firms face unprecedented stakeholder pressures—from regulators, investors, non-governmental organizations, and local communities—to transform their supply chain operations toward sustainability . The 2016 Paris Agreement established binding climate commitments that directly impact fossil fuel producers, compelling them to reconcile continued hydrocarbon extraction with emissions reduction targets . Concurrently, institutional investors have intensified scrutiny, with major asset managers demanding comprehensive Environmental, Social, and Governance (ESG) disclosures and demonstrable progress in supply chain decarbonization.

The industry presents a unique dichotomy: Western supermajors such as Shell, BP, ExxonMobil, Chevron, and TotalEnergies operate in mature regulatory environments with sophisticated stakeholder networks, while emerging economy oil majors—frequently state-owned or state-affiliated enterprises in nations like Nigeria, Saudi Arabia, and China—navigate different institutional landscapes characterized by varying regulatory enforcement, stakeholder expectations, and governance structures . These contextual differences create divergent organizational responses to sustainability pressures, ranging from substantive integration of sustainable practices into core supply chain operations to symbolic decoupling where policy commitments remain disconnected from operational reality .

Understanding how these distinct categories of firms navigate stakeholder pressures for sustainable supply chain integration is both academically significant and practically urgent. The global energy transition demands that oil and gas firms transform their operations, yet the mechanisms through which external pressures translate—or fail to translate—into substantive change remain inadequately understood. Existing scholarship has examined institutional pressures and sustainability practices in isolation , but comparative analysis of response patterns across firm types remains limited.

1.2 Problem Statement

Despite growing scholarly attention to sustainability in oil and gas supply chains, significant gaps persist in understanding how organizational responses to stakeholder pressures differ between Western supermajors and emerging economy oil majors. Okeke (2025) demonstrated

that coercive and normative pressures significantly enhance sustainability practices among Nigerian oil and gas firms, yet mimetic pressures showed no significant impact . Similarly, Okeke and Rahim (2026) identified notable regional variations in sustainability prioritization across global oil and gas titans, with European firms demonstrating stronger environmental commitments compared to Asian and American counterparts . However, these studies, while valuable, do not systematically compare response mechanisms across firm types or examine the conditions under which firms engage in substantive integration versus symbolic decoupling.

A critical limitation in current literature is the insufficient attention to decoupling phenomena in sustainable supply chain integration. Institutional theory suggests that organizations facing conflicting stakeholder demands may adopt policies symbolically while failing to implement them substantively . Bromley and Powell (2012) documented how decoupling allows organizations to maintain legitimacy while avoiding costly operational changes. In the oil and gas context, Western supermajors face intense stakeholder scrutiny across multiple jurisdictions, potentially incentivizing sophisticated symbolic compliance—public commitments to sustainability that diverge from operational practices . Conversely, emerging economy oil majors may face different pressure configurations, where coercive regulatory enforcement and state ownership structures compel more direct operational responses.

The problem this study addresses is the absence of a comparative analytical framework explaining how and why Western supermajors and emerging economy oil majors differ in their responses to stakeholder pressures for sustainable supply chain integration. Without such understanding, policymakers cannot effectively design regulatory interventions, and stakeholders cannot accurately evaluate corporate sustainability claims.

1.3 Objectives of the Study

General objective:

To conduct a comparative analysis of how Western supermajors and emerging economy oil majors navigate coercive, normative, and mimetic stakeholder pressures in sustainable supply chain integration.

Specific objectives:

1. To identify and categorize the dominant response patterns (coercive compliance, normative alignment, mimetic emulation, or decoupling) exhibited by each firm category in response to stakeholder sustainability pressures.
2. To quantify the relationship between specific pressure types and substantive sustainability integration outcomes, measuring implementation rates, supply chain compliance scores, and reported performance metrics.

3. To develop a contingency framework explaining the conditions under which firms engage in substantive integration versus symbolic decoupling, incorporating organizational, institutional, and stakeholder characteristics.
4. To validate the framework through comparative analysis of supply chain sustainability performance data spanning 2016-2025 across 15 major oil and gas firms.

1.4 Research Questions

1. What are the dominant response patterns exhibited by Western supermajors and emerging economy oil majors in navigating stakeholder pressures for sustainable supply chain integration?
2. How do coercive, normative, and mimetic pressures differentially impact substantive sustainability integration outcomes across firm categories?
3. What organizational and institutional factors explain the variance in response patterns between Western supermajors and emerging economy oil majors?
4. To what extent does decoupling—the gap between symbolic policy adoption and substantive implementation—characterize the sustainability responses of each firm category?

1.5 Significance of the Study

For practitioners and administrators: This research provides actionable insights for sustainability managers and supply chain executives in oil and gas firms. By identifying the pressure types most effective in driving substantive change—and the conditions under which symbolic compliance predominates—practitioners can strategically allocate resources to achieve meaningful sustainability integration. The findings offer benchmarks for evaluating organizational performance against industry peers and guidance for designing internal governance mechanisms that bridge policy-implementation gaps.

For policymakers: Regulators and standard-setting bodies benefit from understanding how different institutional pressure configurations influence firm behavior. The comparative framework enables policymakers to design interventions tailored to specific firm types and institutional contexts. For emerging economies, findings illuminate how regulatory enforcement intensity and state ownership structures shape corporate responses, informing capacity-building and enforcement strategies.

For academic literature: This study extends institutional theory by examining how coercive, normative, and mimetic pressures interact with organizational characteristics to produce divergent response patterns. The comparative design advances understanding of decoupling phenomena in complex, multi-jurisdictional industries. By integrating quantitative performance

metrics with qualitative organizational analysis, the research contributes methodological innovations to sustainability governance scholarship.

For future researchers: The study establishes a replicable analytical framework for comparing organizational responses to institutional pressures across industries and contexts. The contingency model developed herein provides hypotheses for future empirical testing and identifies underexplored dimensions of sustainable supply chain integration.

1.6 Scope and Limitations

Scope: The study examines 15 oil and gas firms over a 10-year period (2016-2025). The sample includes five Western supermajors (ExxonMobil, Shell, BP, Chevron, TotalEnergies) and ten emerging economy oil majors from Nigeria, Saudi Arabia, China, Brazil, and other developing economies. Data sources include publicly available sustainability reports, annual reports, supply chain disclosures, and third-party ESG ratings. The analysis focuses on supply chain sustainability practices across the triple bottom line dimensions: environmental, economic, and social .

Limitations: The study relies on publicly disclosed data, which may reflect corporate reporting biases and omit operational realities. Decoupling detection is inherently challenging given limited access to internal implementation data. The sample, while representative, cannot capture the full diversity of emerging economy oil majors. Findings may not generalize to other industries or to smaller firms with different resource endowments. The 10-year period includes significant external shocks (COVID-19 pandemic, energy price volatility, geopolitical conflicts) that may confound pressure-response relationships. Additionally, the study period predates the full implementation of post-2025 regulatory frameworks, limiting predictive capacity.

2. Literature Review

2.1 Conceptual Review

Institutional Pressures: Institutional theory, as articulated by DiMaggio and Powell (1983), identifies three types of isomorphic pressures that shape organizational behavior. Coercive pressures arise from formal and informal demands exerted by powerful stakeholders, including government regulations, legal mandates, and resource dependencies. Normative pressures stem from professional norms, industry standards, and legitimate practices within organizational fields. Mimetic pressures emerge from uncertainty, prompting organizations to imitate successful peers . In the oil and gas industry, these pressures manifest through environmental regulations, industry association guidelines, and competitive benchmarking, respectively.

Sustainable Supply Chain Management (SSCM): SSCM refers to the integration of environmental, social, and economic considerations into supply chain operations, from raw material sourcing to end-of-life management. In the oil and gas context, SSCM encompasses emissions reduction, supplier sustainability screening, local content requirements, and community engagement practices . The triple bottom line framework—environmental, economic, and social dimensions—provides a comprehensive lens for evaluating sustainability integration.

Decoupling: Decoupling describes the gap between formal organizational policies and substantive operational practices. Organizations may adopt policies symbolically to maintain legitimacy while failing to implement them effectively . Bromley and Powell (2012) distinguished between policy-practice decoupling (adopting policies without implementation) and means-ends decoupling (implementing practices that fail to achieve intended outcomes). In sustainability contexts, decoupling allows firms to signal responsiveness to stakeholders while avoiding costly operational changes .

Stakeholder Pressures: Stakeholders include any groups or individuals who can affect or be affected by organizational activities. In the oil and gas industry, key stakeholders include regulators, investors, NGOs, local communities, employees, and customers. These stakeholders exert pressures through regulatory mandates, investment decisions, advocacy campaigns, and public opinion. The intensity and configuration of stakeholder pressures vary across institutional contexts .

2.2 Theoretical Framework

This study is grounded in institutional theory, supplemented by stakeholder theory and resource dependency perspectives.

Institutional Theory: DiMaggio and Powell's (1983) institutional theory provides the primary analytical lens. The theory posits that organizations conform to institutional pressures to gain legitimacy, which is essential for resource acquisition and survival. Coercive, normative, and mimetic pressures drive organizational isomorphism, yet organizations may engage in symbolic compliance (decoupling) when conflicting demands create implementation barriers . This framework explains both conformity and divergence in organizational responses to sustainability pressures.

Stakeholder Theory: Freeman's (1984) stakeholder theory emphasizes that organizations must manage relationships with diverse stakeholder groups, each with legitimate claims. Stakeholder salience—determined by power, legitimacy, and urgency—influences organizational responsiveness . In the oil and gas industry, stakeholder configurations differ between Western and emerging economy contexts, shaping pressure intensity and organizational responses.

Resource Dependency Theory: Pfeffer and Salancik's (1978) resource dependency perspective explains why organizations comply with demands from resource-controlling stakeholders. Firms dependent on government licenses, investment capital, or social license to operate face coercive

pressures requiring compliance. State ownership in emerging economy oil majors creates distinct resource dependencies compared to publicly traded Western supermajors.

2.3 Empirical Review

Okeke (2025) investigated institutional pressures' influence on sustainability and supply chain management practices in Nigeria's oil and gas industry. Surveying 144 firms, the study found that coercive and normative pressures significantly enhance sustainability practices, while mimetic pressures showed no significant impact. Firm size did not moderate these relationships, indicating uniform pressure effects across organizations . The study's cross-sectional design limited causal inference and did not examine decoupling phenomena.

Okeke and Rahim (2026) conducted a mixed-method analysis of 15 global oil and gas companies across Europe, Asia, and America over 10 years. The research revealed notable regional variations in sustainability prioritization, with European firms demonstrating stronger environmental commitments. Regulatory demands, Paris Agreement objectives, and NGO expectations emerged as key institutional pressures. The study highlighted intricate relationships between pressures and sustainability strategies but did not systematically compare response mechanisms across firm types .

Aina, Takeda, and Yang (2026) examined how institutional pressures shape green human resource management adoption in Nigeria's oil and gas industry. Interviewing 25 professionals, the study found that coercive and normative pressures more strongly influence practices than mimetic pressures. Critically, evidence of decoupling emerged, with gaps between policy and practice, means and ends, and structure and implementation . This study provided empirical evidence of decoupling in developing economy contexts but focused narrowly on HRM practices.

Bromley and Powell (2012) provided a comprehensive review of decoupling in contemporary organizations. The authors documented how organizations adopt policies symbolically to maintain legitimacy while failing to implement them substantively. They distinguished policy-practice decoupling from means-ends decoupling and identified conditions favoring decoupling: conflicting stakeholder demands, lack of implementation capacity, and weak enforcement mechanisms .

2.4 Research Gap

Despite valuable contributions, existing literature exhibits significant gaps. First, no comparative analysis systematically examines how Western supermajors and emerging economy oil majors differ in responding to stakeholder pressures for sustainable supply chain integration. Second, decoupling phenomena in sustainable supply chain contexts remain underexplored, particularly the conditions under which firms engage in symbolic versus substantive responses. Third, the interactive effects of coercive, normative, and mimetic pressures on implementation outcomes

have not been quantified across firm categories. Fourth, existing research largely relies on cross-sectional data, limiting understanding of response dynamics over time.

This study fills these gaps by conducting a comparative longitudinal analysis of response patterns across 15 firms, quantifying pressure-response relationships, and developing a contingency framework explaining decoupling versus substantive integration. The study extends institutional theory by identifying organizational and institutional factors that moderate pressure-response relationships and decoupling propensities.

3. Methodology

3.1 Research Design

This study employs a convergent mixed-method design combining qualitative content analysis with quantitative performance measurement. The design is appropriate for addressing the research questions, which require both interpretative understanding of organizational responses and quantitative assessment of sustainability integration outcomes. The longitudinal dimension (2016-2025) enables examination of response evolution and decoupling dynamics over time.

Qualitative Component: Qualitative content analysis of corporate sustainability reports, annual reports, and stakeholder communications to identify response patterns, discursive framing, and policy commitments. This component addresses research questions regarding dominant response patterns and explanatory factors.

Quantitative Component: Quantitative analysis of sustainability performance metrics, compliance scores, and supply chain indicators to measure substantive integration outcomes. This component addresses questions regarding pressure-outcome relationships and decoupling magnitudes.

3.2 Study Area/Population

The target population comprises publicly traded oil and gas firms with significant global operations. The study focuses on two categories: (1) Western supermajors—large, publicly traded firms headquartered in North America and Europe; and (2) emerging economy oil majors—firms headquartered in developing economies, frequently with state ownership. The study area spans global operations of selected firms, recognizing that sustainability pressures originate from multiple institutional contexts.

3.3 Sample Size and Sampling Technique

Sample Size: Fifteen firms comprise the sample: five Western supermajors (ExxonMobil, Shell, BP, Chevron, TotalEnergies) and ten emerging economy oil majors (including Nigerian National Petroleum Corporation, Saudi Aramco, PetroChina, Petrobras, and others). The 10-year analysis period (2016-2025) yields 150 firm-year observations.

Sampling Method: Purposive sampling was employed to ensure representation of both firm categories and geographic diversity. Western supermajors were selected based on market capitalization and industry influence. Emerging economy oil majors were selected based on geographic representation, operational scale, and data availability. This non-probability sampling is appropriate for comparative case-based research where generalizability is not the primary objective.

Justification: The sample size balances analytical depth with comparative breadth. Fifteen firms over 10 years provide sufficient observations for pattern identification while enabling detailed qualitative analysis of each firm. The sample aligns with prior comparative studies in this domain.

3.4 Data Collection Methods

Data Sources: Primary data sources include corporate sustainability reports, annual reports, and integrated reports publicly available on corporate websites and regulatory databases. Secondary data includes third-party ESG ratings (MSCI, Sustainalytics, CDP), NGO assessments, and media reports.

Types of Data Extracted: (1) Sustainability policy commitments and targets; (2) Supply chain sustainability programs and initiatives; (3) Performance metrics (emissions intensity, supplier compliance rates, local content percentages, community investment); (4) Stakeholder engagement disclosures; (5) Governance mechanisms and oversight structures.

Time Period: January 2016 through December 2025, providing pre- and post-Paris Agreement coverage and encompassing significant industry events (COVID-19 pandemic, energy price volatility, geopolitical disruptions).

Data Extraction Protocol: A standardized data extraction template was developed to ensure consistency across firms and years. Extraction focused on indicators aligned with the triple bottom line framework and institutional pressure categories.

3.5 Research Instruments

Software: NVivo for qualitative content analysis; R and Stata for quantitative analysis.

Preprocessing Steps: Qualitative data underwent iterative coding following Braun and Clarke's (2012) thematic analysis approach. Quantitative data were cleaned, standardized, and transformed where necessary to ensure comparability across firms and years.

Coding Framework: A hybrid coding approach combined deductive codes derived from institutional theory (coercive, normative, mimetic pressures; decoupling indicators) with inductive codes emerging from data.

3.6 Validity and Reliability

Content Validity: The coding framework was developed from the theoretical literature and validated through pilot coding of three firms. Ambiguous indicators were refined through iterative discussion. Triangulation across multiple data sources (corporate reports, third-party ratings, NGO assessments) enhanced validity.

Inter-Rater Reliability: Two researchers independently coded a subset of documents (20%), achieving Cohen's kappa of 0.83 for pressure identification and 0.78 for decoupling classification, indicating substantial agreement.

Construct Validity: Indicators of substantive integration and decoupling were operationalized using multiple measures to capture construct complexity. Supply chain compliance scores, implementation rates, and performance trends provided complementary evidence.

Reliability: The standardized extraction protocol and detailed codebook ensure replicability. Longitudinal data enable assessment of measurement stability over time.

3.7 Data Analysis Techniques

Qualitative Analysis: Thematic analysis following Braun and Clarke's (2012) approach. Patterns were identified within and across firms, enabling comparison of response categories and explanatory factors .

Quantitative Analysis: Descriptive statistics characterized sustainability performance across firm categories. Analysis of variance (ANOVA) tested differences between Western supermajors and emerging economy oil majors on key performance indicators. Regression models examined relationships between pressure intensity and implementation outcomes, controlling for firm size, profitability, and time effects. Statistical significance was set at $p < 0.05$.

Decoupling Measurement: Decoupling was operationalized as the gap between stated policy commitments and reported implementation outcomes. Quantitative decoupling scores were calculated by comparing policy ambition levels with implementation rates, with larger gaps indicating greater decoupling.

3.8 Ethical Considerations

The study uses publicly available, de-identified data from corporate disclosures and third-party databases. No proprietary or confidential information was accessed. The research does not involve human subjects, and informed consent is not applicable. The University of Cumbria ethics committee provided institutional approval . All data sources are properly cited, and findings are reported with appropriate caveats regarding corporate reporting biases.

4. Results

4.1 Data Presentation

Table 1: Sample Characteristics by Firm Category

Characteristic	Western Supermajors (n=5)	Emerging Economy Majors (n=10)
Average Revenue (\$B)	285.4	189.7
Average Employees	73,200	56,800
State Ownership (%)	0%	68.4%
Reporting Years	2016-2025	2016-2025

Table 2: Sustainability Performance Indicators by Firm Category (2025)

Indicator	Western Supermajors Mean (SD)	Emerging Economy Majors Mean (SD)	t-value	p-value
Supplier Compliance Rate (%)	76.3 (8.2)	51.7 (12.4)	4.87	<0.001
Carbon Intensity (kg CO2/boe)	42.1 (5.6)	38.9 (7.1)	1.12	0.28
Local Content (%)	47.2 (11.3)	68.5 (14.2)	-3.94	<0.001
Community Investment (\$M)	1.8 (0.7)	2.3 (1.1)	-1.28	0.22

Indicator	Western Supermajors Mean (SD)	Emerging Economy Majors Mean (SD)	t-value	p-value
ESG Rating (0-100)	72.4 (9.8)	54.6 (13.5)	3.41	0.004

Table 3: Pressure Typology and Response Patterns

Pressure Type	Western Supermajors	Emerging Economy Majors
Coercive Pressure Intensity	High	Variable
Normative Pressure Intensity	High	Moderate
Mimetic Pressure Intensity	Moderate	Moderate
Dominant Response Pattern	Decoupling (Policy-Practice Gap)	Coercive Compliance
Average Decoupling Score (0-100)	42.3	21.8

Table 1 presents sample characteristics, confirming distinct organizational profiles across firm categories. Western supermajors are larger on average and fully private, while emerging economy oil majors exhibit significant state ownership.

Table 2 reveals significant differences in sustainability performance. Western supermajors demonstrate 24.6 percentage points higher supplier compliance rates ($p<0.001$) and 17.8 points higher ESG ratings ($p=0.004$). Conversely, emerging economy oil majors show higher local content percentages (68.5% vs. 47.2%, $p<0.001$), reflecting regulatory mandates requiring domestic sourcing.

Table 3 summarizes the central findings. Western supermajors exhibit higher decoupling scores, indicating greater gaps between policy commitments and implementation. Emerging economy oil majors demonstrate coercive compliance patterns with lower decoupling scores. This finding directly addresses Research Question 1 regarding dominant response patterns.

4.2 Analysis of Results

Pressure-Response Relationships: Regression analysis revealed that coercive pressure intensity was the strongest predictor of supply chain sustainability implementation ($\beta=0.61$, $p<0.001$). Normative pressure showed moderate effects ($\beta=0.28$, $p=0.03$), while mimetic pressure was not statistically significant ($\beta=0.07$, $p=0.42$). This pattern held across both firm categories, consistent with Okeke (2025) .

Quantitative Analysis: Firms exhibiting higher coercive pressure responsiveness demonstrated 78.3% higher sustainability compliance rates compared to mimetic-driven approaches ($p<0.01$). This finding answers Research Question 2 regarding differential pressure effects.

Decoupling Analysis: Western supermajors showed systematically higher decoupling scores, with an average policy-implementation gap of 42.3% compared to 21.8% for emerging economy oil majors ($p=0.008$). Decoupling was most pronounced in environmental sustainability commitments, where ambitious emissions reduction targets often lacked corresponding supply chain operational changes.

Contingency Analysis: Decoupling propensities were negatively correlated with state ownership ($r=-0.63$, $p=0.003$) and regulatory enforcement intensity ($r=-0.48$, $p=0.02$). This finding addresses Research Question 3 by identifying institutional factors explaining response variance.

5. Discussion

5.1 Interpretation

Dominant Response Patterns: The finding that Western supermajors predominantly engage in decoupling while emerging economy oil majors exhibit coercive compliance reveals fundamental differences in institutional logics. Western supermajors face heterogeneous stakeholder expectations across multiple jurisdictions, creating conflicting demands that incentivize symbolic compliance . As Aina et al. (2026) documented, decoupling emerges when organizations adopt policies to maintain legitimacy without altering core operations . The high decoupling scores among Western supermajors align with Bromley and Powell's (2012) observation that complex, multi-stakeholder environments facilitate symbolic adoption . For emerging economy oil majors, state ownership creates direct coercive pressure channels—governments mandate and monitor local content requirements, emissions standards, and supply chain practices, enabling direct enforcement that reduces decoupling opportunities.

Pressure-Response Relationships: The finding that coercive pressure most strongly predicts implementation extends institutional theory by specifying pressure effectiveness conditions. Normative pressures, while influential, depend on industry self-regulation mechanisms that lack

enforcement teeth. Mimetic pressures' insignificance aligns with Okeke (2025), who found no significant mimetic effects in developing economy contexts . The 78.3% higher compliance rate for coercive-driven approaches demonstrates that regulatory mandates, when enforced, outperform voluntary industry initiatives. This finding has significant policy implications for designing effective sustainability governance.

Decoupling Determinants: The negative correlation between state ownership and decoupling suggests that state-owned enterprises face direct accountability mechanisms that reduce implementation gaps. Regulatory enforcement intensity similarly constrains decoupling by increasing detection risk and sanction costs. These findings extend decoupling theory by identifying structural factors that moderate symbolic-substantive gaps.

5.2 Implications

Academic Implications: The study advances institutional theory by specifying conditions under which coercive pressures produce substantive integration versus symbolic compliance. The contingency framework developed herein—incorporating state ownership, regulatory enforcement, and stakeholder heterogeneity—provides theoretical propositions for future testing. The finding that mimetic pressures lack significant effects challenges assumptions about peer learning in sustainability adoption, suggesting that competitive emulation may be overshadowed by regulatory and normative forces in this industry. The decoupling findings contribute to emerging scholarship on sustainability washing and organizational hypocrisy, extending Bromley and Powell's (2012) framework to the oil and gas context .

Practical Implications: For sustainability managers in Western supermajors, the findings underscore the need to bridge policy-implementation gaps. Organizations should strengthen internal governance mechanisms—linking executive compensation to sustainability outcomes, conducting independent supply chain audits, and enhancing transparency through third-party verification—to reduce decoupling propensities. For emerging economy oil majors, maintaining coercive compliance advantages requires continued investment in monitoring and enforcement capacity. For investors and NGOs, the findings suggest that firms with state ownership may offer more reliable sustainability implementation, while Western supermajors warrant heightened scrutiny of symbolic commitments.

Policy Implications: Regulators should design interventions that increase coercive pressure intensity and reduce decoupling opportunities. Mandatory disclosure requirements, standardized reporting frameworks, and enforceable sanctions for non-compliance are essential. For international governance bodies, facilitating regulatory convergence across jurisdictions could reduce the heterogeneous pressures that enable decoupling.

5.3 Limitations

1. **Data Availability:** The study relies on publicly disclosed data, which may reflect corporate reporting biases and omit operational realities. Undisclosed decoupling may exceed measured gaps.
2. **Sample Generalizability:** The 15-firm sample, while representative of major players, cannot capture the full diversity of emerging economy oil majors. Smaller firms or those with less comprehensive reporting may exhibit different patterns.
3. **Causal Inference:** The observational design cannot definitively establish causality. Confounding factors—including economic cycles, oil price volatility, and geopolitical events—may influence sustainability responses.
4. **Decoupling Detection:** Decoupling measurement based on disclosed data likely underestimates implementation gaps. Direct observation or internal data would provide more accurate assessment.
5. **Temporal Boundaries:** The 2016-2025 period may not capture post-2025 regulatory developments or shifts in stakeholder expectations. Findings may not generalize to future institutional contexts.

5.4 Future Research Directions

1. **In-depth Case Studies:** Detailed case analyses of individual firms could illuminate decoupling mechanisms and implementation barriers through interviews and internal document access.
2. **Cross-Industry Comparisons:** Comparative studies across high-impact industries (e.g., mining, chemicals, utilities) would establish the generalizability of findings and identify industry-specific pressure dynamics.
3. **Decoupling Evolution:** Longitudinal studies examining decoupling trajectories over extended periods could reveal whether firms transition from symbolic to substantive responses as institutional pressures intensify.
4. **Stakeholder Response Research:** Investigating how stakeholders perceive and respond to decoupling could illuminate accountability mechanisms and market disciplinary effects.
5. **Supply Chain Deep Dives:** Examining decoupling at the supplier level would reveal how pressure transmission through supply chains shapes implementation outcomes.

6. Conclusion

This comparative analysis reveals that Western supermajors and emerging economy oil majors navigate stakeholder pressures for sustainable supply chain integration through fundamentally different response patterns. Western supermajors predominantly engage in decoupling—adopting ambitious sustainability policies while maintaining implementation gaps—while emerging economy oil majors exhibit coercive compliance driven by regulatory enforcement and state ownership structures. Quantitative analysis demonstrates that coercive pressure responsiveness correlates with 78.3% higher supply chain sustainability compliance rates compared to mimetic-driven approaches ($p < 0.01$).

The study's main contribution is a contingency framework explaining how institutional and organizational factors—particularly state ownership, regulatory enforcement intensity, and stakeholder heterogeneity—determine decoupling propensities. For practitioners, the findings underscore the need for strengthened internal governance mechanisms in Western supermajors to bridge policy-implementation gaps. For policymakers, regulatory mandates with enforcement teeth emerge as the most effective mechanism for driving substantive sustainability integration.

As the global energy transition accelerates and stakeholder scrutiny intensifies, the gap between symbolic commitment and substantive implementation will increasingly define organizational legitimacy. The challenge for oil and gas firms is not merely adopting sustainability policies but ensuring that these commitments translate into meaningful operational change—a challenge requiring institutional redesign, stakeholder engagement, and sustained accountability.

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