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Legal Compliance in Green Marketing Strategies in Indonesia's FMCG Industry

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Abstract. Growing global environmental pressure has significantly influenced consumer behavior, with a rising preference for environmentally friendly products and brands. In response, industries—particularly the fast-moving consumer goods (FMCG) sector—have adopted green marketing, not only as a tool for competitive differentiation but also to meet societal and regulatory expectations. However, the proliferation of green marketing in Indonesia faces substantial legal challenges, including the risk of greenwashing—where companies falsely portray themselves as environmentally responsible. This undermines consumer trust and exposes firms to reputational and legal risks. A key barrier to effective legal compliance in Indonesia is the fragmented nature of regulations and the lack of clear, enforceable standards. This study employs qualitative analysis to examine the legal challenges confronting green marketing practices within the Indonesian FMCG industry. It introduces a hierarchical legal compliance framework that maps interrelated layers of legal obligations—spanning consumer protection, environmental law, and advertising ethics—and illustrates how these domains interact. The aim is not only to improve regulatory adherence but also to deepen the understanding of Indonesia's green marketing legal landscape. The study contributes theoretically by developing a structured framework for legal compliance, highlighting interdependencies across legal domains, and offering practical insights for policymakers and businesses to foster more credible and enforceable sustainability practices in the FMCG sector.

1. INTRODUCTION

The growing global desire for environmental sustainability has strongly shaped consumer behavior; people prefer eco-friendly products and brands (White et al., 2019). This has led to the rise of green marketing adopted by industries, especially the fast-moving consumer goods (FMCG) industry, not only for gaining competitive advantage but also in response to the increasing need to meet social and regulatory demands (Prashar, 2023). Although green marketing involves various activities, such as coming up with eco-friendly products, packaging, and promotion (Reddy et al., 2023), its implementation poses severe legal and ethical challenges when companies bossing unsubstantiated environmental claims.

One of the most critical concerns is the spread of greenwashing (misleading or untargeted environmental claims), which has eroded consumer confidence and resulted in reputational and legal risks for companies engaged in such practices (Khan & Hinterhuber, 2025). In developing countries such as Indonesia, where environmentally conscious consumers are on the rise, the legal aspects of green marketing are dynamic. While dedicated legal mechanisms for green marketing are relatively scarce, current laws (e.g., Law No. 8 of 1999 on Consumer Protection and Law No. 32 of 2009 on Environmental Protection and Management) have laid the 'patchy' legal setting (Idris et al., 2024; Pujiningrum et al., 2024).

Despite Indonesian efforts to adopt green marketing, legality is also a major challenge in Indonesia (Ayuningrum & Herari, 2024). The existing regulatory framework is far from clear and uniform in terms of establishing and enforcing requirements for environmental marketing statements. Evidence indicates that Indonesian companies, especially in resource-based sectors,1623253339 frequently partake in cosmetic environmental programs that do not adhere to the use of superficial environmental programs are those that do not meet a credible determinant of environmental quality (Garcia-Torea et al., 2024). For example, Larasatie et al. (2023) frequently found a high level of non-compliance in certification and environmental claim issues in Indonesian wood-based industries–a worrying situation that is also relevant for FMCG. Such legal ambiguities contribute to an uneven competitive playing field, where firms that engage in genuine practices are disadvantaged because they are not penalized for noncompliance (Lucas et al., 2022).

Moreover, the MSME sector, which is essential to Indonesia's FMCG market, is reported to have little knowledge of the laws and institutions to help them deal with the complicated rules on compliance with green marketing (Ngozi Samuel Uzougbo et al., 2024). This chasm prevents offenders and disallows them from becoming part of a solution in the context of sustainability and subjecting them to legal vulnerability. The lack of unambiguous enforceable criteria impedes the effectiveness of regulatory control and allows greenwashing to flourish unchecked (Zervoudi et al., 2025a).

Under such circumstances, there is a strong need to comprehensively clarify and classify legal obstacles faced by compliance with green marketing in Indonesia. Any regulatory reform needs to create clear definitions, strong verification mechanisms, and steady enforcement. Meanwhile, for companies, there is a need for a more explicit direction on how best to

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calibrate their marketing activities with environmental benchmarks and legislative directives (Sokołowski & Taylor, 2023).

This study reports the findings of a qualitative inquiry into these legal complexities and proposes a top-down framework for evaluating legal compliance in green marketing in the FMCG industry in Indonesia. The framework elucidates the various but interrelated levels of legal prescriptions, including product safety, environmental regulation, advertising ethics, and the interconnections between them. With this, the intention is to offer a more detailed perception of the regulations pyramid and promote the existence of credible, clear, and legal green marketing practices.

The novelty of this study lies in.

(1) proposing a theoretically grounded hierarchical framework specific to legal compliance in green marketing.

(2) identifying interrelationships between regulatory challenges.

(3) offering insights that can guide both policymakers and businesses toward more enforceable and trustworthy sustainability practices in Indonesia's FMCG industry.

The remainder of the paper is structured as follows: Section 2 reviews the relevant literature on green marketing and legal compliance; Section 3 outlines the qualitative methodology employed; Section 4 presents the proposed hierarchical framework; Section 5 discusses practical and policy implications; and Section 6 concludes with limitations and suggestions for future research.

2. LITERATURE REVIEW

2.1. Legal Compliance in Green Marketing

Legal compliance in green marketing has become a key subject for academics, considering that both governments and organizations aim to safeguard consumers' deceptive environmental claims (Olson, 2022). It has been pointed out that the prevalence of greenwashing is generally attributed to weak legal enforcement and the inability to monitor effectively (Lashitew, 2021). This challenge is critical in developing countries and access to fisheries management in fragmented by law and poor institutions such as Indonesia, where its fragmented regulatory and limited capacity impedes appropriate wardenship (Paranata, 2025). Some scholars have examined how firms communicate sustainability in marketing while managing legal and ethical constraints. Kumar accentuates the importance of legal compliance in developing credible green brands (P. Kumar et al., 2021), and warns that non-compliance with legal norms may compromise long-term sustainability objectives (Heidtmann & Selck, 2024). Nevertheless, many companies incorporate environmental messages without considering legal aspects, generating a significant gap between communication practices and legal requirements (Forliano et al., 2025).

This misalignment is the driving demand for more coherent systems that combine communication in the environment and legal standards. In the case of Indonesia, while research has observed an increase in environmental claims, there is no organized analysis of how companies must comply with the law when practicing green marketing (D. Kumar & Suthar, 2824). Existing studies have suggested that regulatory institutions play a crucial role in influencing firm behavior, especially in generating credibility and reducing consumer skepticism. For instance, Aliano et al. demonstrated how discontinuous green marketing can produce cynicism and underscore the importance of more robust legal protection and transparency622 (Alia et al., 24). Finally, legal certainty and institutional capacity significantly preside over compliance and corporate conduct . Chen et al. show how appropriate environmental financial regulations can enhance market credibility (Chen et al., 2023) and Keshminder et al. (2021) highlight that a sound supervision in the case of green sukuk is required to manage the risks and ensure the market integrity (Naz et al., 2025).

All these findings mean that legal compliances of green marketing are greater than just obeying the law. It is a multifaceted strategy that includes legal literacy, law enforcement, and institutional consistency. However, integrated education is underdeveloped in Indonesia. This study fills this gap by characterizing legal compliance as a dynamic asset necessary for environmental legitimacy and firm survival.

2.2. Barriers to Legal Compliance in Green Marketing

Laws (A1)(Lee et al., 2025). Uneven enforcement of laws among jurisdictions, particularly when laws at the national and local levels converge, confuses the situation and undermines strategic planning. This is clearly illustrated in areas such as the cannabis sector, in which inconsistent federal and state rules have led to a haphazard regulatory landscape that does not promote corporate efforts to implement holistic green marketing. A2 Another big issue is the risk of greenwashing. In their efforts, companies sometimes end up claiming a 'green' image by inflating or misleading claims (Nisa et al., 2023). In the absence of explicit, binding legal guidelines, this kind of behavior is allowed and even justifiable. Sound legal foundations, including reliable certifications and transparent marketing claims, are required to secure honest and well-founded environmental assertions.

Compliance costs (A3) are also a significant obstacle for small- and medium-sized companies (Lavic, 2023a). Compliance with environmental laws can lead to costly upgrades in infrastructure, monitoring of facilities and the environment, and reporting requirements. Furthermore, this financial risk may discourage the business from participating in environmentally friendly marketing, particularly in a region that is strictly regulated by the EU. Moreover, international trade restrictions (A4) affect firms in developing countries, which are unable to uphold the strict environmental requirements of developed countries (Gereffi et al., 2021). Such measures typically serve as non-tariff trade barriers that restrict access to global markets and impede the uptake of sustainable solutions in less-developed areas. Legal systems are also evolving (A5), resulting in further complexity (Gereffi et al., 2021). Green laws are not carved in stone; they are dynamic and constantly evolving to keep up with new challenges and modern technologies. Businesses must adjust and do so quickly, or be found wanting. However, in the absence of strict implementation and harmonization with ongoing sustainability objectives, these progressive regulations could end up being toothless (Olujobi et al., 2023). Finally, the absence of a legal system (A6) for green financial instruments (e.g., green bonds) is a significant barrier (Sulistiawan et al., 2024). Lack of a clear legal framework and liability and the right to reuse impair trust and introduce inefficiency in the market (Zervoudi et al., 2025b). Strong legal backing is required to provide confidence and attract investment in sustainable projects.

2.3. Proposed Valid Barriers

To evaluate the fragmentation of legal barriers to compliance with green marketing, we can establish certain criteria derived directly from other works and from the references of ours. This factor reflects Variation in a Regulatory Contextual Requirement (C1) In Different Regions, namely, the variation of laws concerning green marketing among different political-legal units, a discrepancy that can lead to confusion and fragmentation for multiple businesses (Kalmenovitz et al., 2025). This variation could influence the effectiveness and consistency of green marketing. Another key criterion is the complexity of the legal requirements (C2) of green marketing (Baldi & Pandimiglio, 2022). The Byzantine rule set requires groups to form the speaker's compliance groups and to spend money to even know which of the various rules they are supposed to comply with.."The more convoluted the compliance landscape, the harder it is for companies to ensure that their marketing activities are within legal norms; thus, there is always the possibility of a legal blockade. C3) Monitoring and Enforcement Mechanisms This dimension assesses the system enforcement mechanisms to monitor compliance and regulate enforcement in relation to green marketing (Roh et al., 2022). The creation of regulatory authorities or boards is necessary to monitor marketing activities. Environmental law integration (C4) evaluates how well environmental legislation is integrated with commercial laws and policies (Hao et al., 2022). Good and efficient sustainable principles need both a good law regarding the environment and the Commerce Law in coherent interaction.

The likelihood of greenwashing as it relates to legal barriers to green marketing compliance can be assessed using the following four benchmarks. The lack of Transparency of Environmental Claims (C5) measures the transparency and ease of understanding environmental claims made by an organization (Marrucci et al., 2025). Stigma and opaqueness can result in consumers not understanding the extent to which the company is sustainable. Consumer Perception and Skepticism (C6) Knowing how customers perceive a brand's green marketing efforts is important in assessing the risk of greenwashing (Szabo & Webster, 2021). Low consumer trust may signal a disjuncture between marketing and an organization's genuinely environmentally responsible practices. Regulatory Compliance and Enforcement Mechanisms (C7) assess the degree to which businesses comply with current regulations on environmental marketing claims (Winter & Davidson, 2022). Companies that violate applicable legal standards are more vulnerable to greenwashing charges. CSR Practice Integration (C8) Corporate genuine CSR practices are crucial for measuring risks of greenwashing (Szabo & Webster, 2021). The more they can prove that sustainable ways are part of their core offer, the less marketing will seem like greenwash.

The 3 following three additional points can be established to measure legal barriers relative to the Community Law on Green Marketing Compliance Costs. Direct Financial Costs (C9): According to (Ning & Shen, 2024) this construct measures the monetary investment made by organizations' Opportunity Costs (C10) and assesses the hypothetical revenue that companies could lose, or benefits that they may cancel out, by spending significant resources on compliance activities (Tabassum et al., 2021). Complexity, Time Complexity, and time considerations in negotiating the regulatory milieu are key factors in determining the cost of compliance (Halima Oluwabunmi Bello et al., 2024). This includes the difficulty of interpreting the regulations, compiling required documentation, and time spent training employees to maintain compliance. The impacts of Legal Changes (C12) account for the costs of changing to comply with revised legal requirements, such as the costs of modifying policies, practices, and marketing materials in the presence of new legislation/regulatory guidance (Halima Oluwabunmi Bello et al., 2024).

Four criteria can be developed to assess legal compliance with international trade barriers associated with green marketing: the Dryness of Environmental Standards (C13) measures the strictness and complexity of environmental legislation, which are required by importing countries (Baylis et al., 2021). 24.03 Compliance Costs of Trade Regulations - C14 The text ascertains how much businesses may lose as a result of complying with different international trade and foreign environmental laws (Halima Oluwabunmi Bello, et al., 2024). Non-Tariff Barriers (NTBs) (C15) refer to the array of non-tariff challenges the business faces when trying to enter a foreign market, especially with environmental rules (SONDERGAARD, 2019). International Compliance Obligations (C16) Criterion C16 focuses on how the impact of bilateral and multilateral trade agreements on companies' capacities to manage environmental regulation, so-called _regulatory management (Gutsch et al., 2024). Those who put in place conditions that are very strict from an environmental standpoint or that encourage sustainable ways of trading could increase trade opportunities but might impose these burdens on compliance.

Four criteria could be set to assess the development of legal systems around legal barriers to compliant green marketing: C17: Adaptability of Regulatory Frameworks C17 evaluates the efficiency and speed in which regulatory frameworks are able to adjust to new sustainability issues and changes in technology (Wu & Tham, 2023). Regulations need to be changed to adapt to new trends in green marketing, including as consumers evolve and the science of the environment evolves. Inclusive Stakeholder Perspectives (C18) Analysing the degree of inclusion of different stakeholder groups – that is, firms, government and non-government sectors, and consumers – in the regulatory process is one central to capturing the development of legal frameworks (Bachev & Ivanov, 2024). C19: The Effectiveness of Enforcement Mechanisms C19 was constructed to evaluate the robustness of enforcement mechanisms in the legal framework of green marketing (Pan, et al., 2022). A strong regulatory control is essential to ensure adherence. The efficiency of regulatory mechanisms has a direct bearing on green marketing activities, as well as green washing. Global standard convergence (C20) examines the extent to which national-level legal frameworks harmonize with international standards and covenants concerning environmental sustainability (Lashitew, 2021).

The following four standards can be developed to assess the absence of a legal environment for green financial products in relation to legal obstacles to green marketing compliance. Comprehensive Regulatory Frameworks (C21) investigate the existence of specific comprehensive regulations for green financial products (e.g., green bonds) in the country (Y. Hu & Jin, 2023). Sound infrastructure needs a clear legal environment to encourage growth and development, based on which issuers and investors will have reasonable guidelines and standards. The clearly Defined and Consistent Criteria and Regulation (C22) C22 of the standards for financial instruments in the ecological environment is fundamental to minimizing uncertainty for investors and issuers (Y. Hu & Jin, 2023). A Supportive Institutional Framework (C23) A supportive institutional framework is needed for the effective adoption of green financial instruments. Institutions should have adequate resources, capacity, and understanding to effectively apply green finance programs effectively (Sulistiawan et al., 2024). Integration of International Standards (C24): It is important to integrate international standards and practices of green finance into national laws and regulations to ensure compatibility and competitiveness in the international market (Liu & Nie, 2022).

Table 1: Aspect and criteria legal compliance in green marketing strategies.

Aspect		Criteria		References
A1	Fragmentation of regulations	C1	Variability of regulatory frameworks across regions	Kalmenovitz et al., 2025
		C2	Complexity of legal requirements	(Baldi & Pandimiglio, 2022)
		C3	Monitoring and enforcement mechanisms	(Roh et al., 2022)
		C4	Integration of environmental laws with commercial laws	(Hao et al., 2022)
A2	Risk of greenwashing	C5	Lack of transparency of environmental claims	(Marrucci et al., 2025)
		C6	Consumer perception and skepticism	(Szabo & Webster, 2021)
		C7	Regulatory compliance and enforcement mechanisms	(Winter & Davidson, 2022)
		C8	Integration of CSR practices	(Szabo & Webster, 2021)
A3	Compliance costs	C9	Direct financial expenditures	(Ning & Shen, 2024)
		C10	Opportunity costs	(Tabassum et al., 2021)
		C11	Complexity and time involved in compliance processes	(Halima Oluwabunmi Bello et al., 2024)
		C12	Impact of regulatory changes	(Halima Oluwabunmi Bello et al., 2024)
A4	International trade barriers	C13	Stringency of environmental standards of importing countries	(Baylis et al., 2021)
		C14	Compliance costs associated with trade regulations	(Halima Oluwabunmi Bello et al., 2024
		C15	Non-tariff barriers (NTBs)	SONDERGAARD, 2019
		C16	International compliance obligations	Gutsch et al., 2024
A5	Evolution of legal frameworks	C17	Adaptability of regulatory frameworks	(Wu & Tham, 2023)
		C18	Inclusivity of stakeholder perspectives	Bachev & Ivanov, 2024
		C19	Effectiveness of enforcement mechanisms	Pan et al., 2022
		C20	International convergence of standards	Lashitew, 2021
A6	Lack of legal infrastructure	C21	Existence of Comprehensive Regulatory Frameworks	Hu & Jin, 2023
		C22	Clarity and consistency of regulations	Hu & Jin, 2023
		C23	Availability of supportive institutional structures	Sulistiawan et al., 2024
		C24	Integration of international standards	(Liu & Nie, 2022)

3. METHOD

3.1. Data Collection

The subsequent survey and online interviews aimed to investigate issues related to legal barriers to green marketing compliance in the Indonesian FMCG industry. The actors included officials at government regulators, marketing agencies with FMCG expertise, FMCG companies making green claims, FMCG manufacturers with sustainability certifications, and frequent environmental lawyers with FMCG. A purposive sampling approach was used, and the informants were chosen because of their professional positions in the FMCG industry, as well as their knowledge of green marketing legislation that is relevant in this industry. A round of 30 stakeholders took part in the research, all of which had experienced no less than five years in the FMCG marketing and/or related fields of industry and a solid grounding in the legal and potential liability aspects of environmental cliams within the FMCG context (Table 2). These criteria sought to validate the authenticity and relevance of the participant responses, which were underpinned by their hands-on experience in the FMCG industry and exposure to legal provisions and challenges in compliance with green marketing for FMCG.

Table 2: Respondent background.

Background	Category	Frequency
Gender	Male	20
	Female	10
Age (Years old)	< 30	3
	30—45	10
	46—60	11
	> 60	6
Profession	Government regulatory	10
	Marketing agencies specializing in FMCG	5
	Environmental law consultants	15

3.2. Fuzzy Decision-Making Trial and Evaluation Laboratory (FDEMATEL)

To investigate the legal compliance factor in green marketing, a strong method called the Fuzzy Decision-Making Trial and Evaluation Laboratory (FDEMATEL) was introduced. The interrelationship of the identified criteria were analyzed using FDEMATEL (Y.-P. Hu et al., 2024). This method allows these relationships to be mapped to a structural model, with the result that the impact of individual factors can be determined and contrasted to show how they interact. The pairwise comparative method allows experts to estimate the influence of one criterion on another, thus leading to an influence matrix that can represent the direct causal relationships of the complexity involved in legal compliance in green marketing. The outcomes provide a graphical image of the interrelatedness, revealing cause-and-effect relationships between them. FDEMATEL is a value-based practical tool that helps stakeholders rank and comprehend laws among other related findings that are in compliance with green market conduct (Y.-P. Hu et al., 2024). This methodological approach can help marketers to adopt better regulatory strategies and improve their responsiveness to compliance in e-commerce marketing.

4. RESULTS AND DISCUSSION

DEMATEL analysis Discovering the tangled relationships among the six legal dimensions that impact the effectiveness of green marketing compliance is the DEMATEL analysis. Among them, we identify the Lack of Legal Infrastructure (A3) as a key factor and core determinant influencing other factors, such as the development of legal institutions, risk of greenwashing, and international trade obstacles. The lack of a well-defined regulatory framework, standards, and enforcement actions reduces the overall credibility of green marketing and restrains the flexibility for businesses to deploy sustainable initiatives securely (Sulistiawan et al., 2024). A3 is the second-most influential influence, swiftly followed by the fragmentation of regulations (A6), which is also a crucial causal antecedent. A lack of consistency within jurisdictions generates uncertainty, particularly for cross-border and companies subject to layered regulations (Lee et al., 2025). This fragmentation impacts the way legal frameworks develop (A1) and generates diverging interpretations, which could potentially help substantiate unfounded environmental claims (A2). This means that companies also find it difficult to create holistic approaches that correspond to both local and global perspectives.

The Compliance Costs (A5) also act as participating drivers on this web. Compliance, as a controllable cost, can create a financial and administrative burden, which is likely to be too high for smaller SMEs and discourage them all the way to market their green products. Expensive investment can decrease firms' ability to invest in compliance systems or receive credible certifications, indirectly creating space for practices such as greenwashing (Lavic, 2023b). However, items such as the Evolution of Legal Frameworks (A1), Risk of Greenwashing (A2), and International Trade Barriers (A4) are mostly classified as outcomes or elements affected by the system. For example, the construction/reconstruction and modernization of legal frameworks (A1) are heavily influenced by external pressures from disarticulated systems and gaps in infrastructure rather than being driven by internal processes. Similarly, greenwashing (A2) is frequently not simply a corporate failing but a result of lax enforcement and vague rules, which facilitate firms taking advantage of regulatory lacunae.

It is remarkable that International Trade Barriers (A4) seem to be the most influential factor, although they have little impact on the other aspects. In other words, trade barriers — for example, the non-tariff environmental barriers confronting businesses operating in developing countries — are symptoms of deeper systemic problems, such as a lack of legal infrastructure and regulatory disharmony across all markets. This analysis suggests that addressing upstream legal drivers is necessary to tackle downstream problems, such as greenwashing and trade disadvantage. Strengthening the legal infrastructure, improving regulatory coherence, and reducing the burden of compliance are important instruments to improve overall legal compliance in green marketing, particularly in emerging markets such as Indonesia.

Using the provided DEMATEL data for the 24 criteria, this study identifies the seven best criteria, in the sense that they have a strong influential effect (D-R is high) and substantial involvement in the system (D+R =high). Interestingly, high D-R values indicate that a criterion is a cause (i.e., it influences customers more than it is influenced), whereas high D+R values indicate overall importance in the system. The DEMATEL results for the 24 criteria identified seven major factors of green marketing compliance that demand strategic priorities. The Stringency of the Environmental Standards of Importing Countries (C13) is the most significant in this regard, showing its strong influence on green marketing decisions, particularly for export-oriented firms. Consumer Perception and Skepticism (C6) are also important factors, stressing the importance of trustworthy and transparent environmental claims.

The Flexibility of Regulation (C1) and Compliance and Enforcement (C7) are the cornerstones of a dynamic environmental policy in which the substance of the policy remains up-to-date and enforceable. Opportunity Costs (C18) are frequently neglected; however, from an economic perspective, they have a significant impact on corporate tolerance for sustainable behaviors.

Reinforcing this last point, Non-Tariff Barriers (C15) and Variability of Regulatory Frameworks Across Regions (C21) point to the challenges for firms doing business in international markets, as regulatory(in-)consistencies and trade-related environmental conditions generate considerable compliance costs.

Collectively, these seven components represent a powerful toolkit for appreciating and confronting the legal dynamics of green marketing in international settings.

5. IMPLICATIONS

5.1. Theoretical Implications

Regarding the direct relationships, the results of the key dimensions in the causal model, especially the Evolution of Legal Frameworks (A1), Greenwashing Risk (A2), and Lack of Legal Infrastructure (A3), bear important theoretical implications. The prevailing influence of the Evolution of Legal Frameworks demonstrates the need to create adaptive legal types in the study of environmental regulations. This is consistent with institutional theory, which proposes that firms are influenced by formal rules and changing structures of their environments (Sulistiawan et al., 2024). Additionally, the relevance of Greenwashing Risk requires an expansion of stakeholder theory. It emphasizes that deceptive environmental advertising not only leads to a loss of consumer confidence, but also undermines the integrity of the market, and holders are accountable to the authorities and society at large (Hariyadi et al., 2025). Meanwhile, the Lack of Legal Infrastructure adds to the ever-expanding literature, which challenges the notion of immature environmental governance systems in many emerging economies. This highlights the urgency of shifting the theoretical focus from the exclusive reliance on the compliance model to models that integrate structural capacity, legal certainty, and institutional maturity at the center. They have implications for the integration of institutional theory, stakeholder theory, and legal pluralism to understand how firms in fragmented and dynamic legal contexts pursue sustainable marketing practices.

5.2. Managerial Implications

In managerial point of view, through examining most significant criteria like Consumer Perception and Skepticism (C6), Adaptability of Regulatory Frameworks (C1), Stringency of Environmental Standards of Importing Countries (C13) and Non-Tariff Barriers (C15), it is possible to provide insights for managers who decide to follow marketing green policies. First, the mounting importance of Consumer Perception and Skepticism confirms the requirement for verifiable and transparent communication of environmental claims. Such cynicism is increasingly pervasive, and prudent lubricant manufacturers will need to invest in trust-building measures such as third-party certifications, standardized eco-labels, and (satisfyingly transparent) sustainability reporting to reverse skepticism and bolster brand credibility. Second, the importance of the Adaptability of Regulatory Frameworks and Variability Across Regions (C21) implies that firms should cultivate adaptive internal compliance systems. Managers must have agility in legal tracking and cross-border regulatory intelligence to accommodate prompt changes in the legal environment. Third, the fact that the effect of the Stringency of Importing Country Standards and Non-Tariff Barriers is of high magnitude and significant means that export preparedness is crucial strategically. Multinational companies are not only subject to local laws, but are also required to plan for and align themselves with external environmental regulations, particularly when entering highly regulated markets, such as the EU. Finally, Opportunity Costs (C18) serve as an economic reminder for managers about trade-offs when complying. Companies need to integrate cost-benefit analysis and scenario planning into their strategic decision-making to ensure that they are not sacrificing competitiveness in the name of sustainability.

6. CONCLUSION

In summary, the results of this study demonstrate the complex legal barriers to green marketing compliance, of which the Evolution of Legal Framework, Greenwashing Risk, and Lack of legal infrastructure are the most influential factors that frame a company’s behavior. On the managerial side, factors such as Anniversary Horizon, Media Exposure, the flexibility of National Systems of Regulation, and the level of Environmental Regulation reinforce the strategic need for companies to establish clear, flexible, and internationally sensitive compliance systems. However, this research is constrained by the use of expert judgment in decision-making involving the DEMATEL model, which is subjected to some level of subjectivity and may not fully account for the sector-specific intricacies of regulation. Other subsequent investigations may include adding performance measures in a quantitative manner or conducting cross-industry comparisons to verify and extend the established causal relationships. Longitudinal studies, in addition to being useful for understanding the evolution of legal and regulatory unfolding processes, would also shed light on how such processes unfold over time to shape green marketing outcomes within varying economic and institutional environments.

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