



# Green Marketing and Communication Strategy: Navigating the Sustainability Challenges in the Palm Oil Industry

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## Abstract

The palm oil sector stands as one of the world's most essential commodity markets, yet it faces mounting sustainability challenges, including unfair accusations of being the sole cause of deforestation, greenhouse gas emissions, biodiversity loss, and socio-economic issues impacting labour and smallholder communities. The purpose of this study is to deeply examine how sustainable marketing and communication techniques are utilised to confront environmental challenges in the palm oil sector. Through a qualitative review of existing literature, this research compiles knowledge from 80 academic publications, industry documents, and policy records dated from 2013 to 2025, obtained via platforms like Scopus, ScienceDirect, and Google Scholar. Through thematic analysis, the study identifies key patterns and trends related to corporate sustainability commitments, transparency in marketing claims, stakeholder engagement, and the role of certification schemes like RSPO in enhancing brand legitimacy. Findings reveal that approximately 70% of leading palm oil producers incorporate green marketing to highlight sustainable sourcing, smallholder inclusion, and deforestation-free supply chains, leveraging digital platforms to increase consumer awareness and engagement. However, challenges persist, including greenwashing practices and consumer scepticism, which undermine trust and regulatory compliance. The study emphasises the importance of detailed, verifiable communication supported by third-party audits and interactive narratives to strengthen stakeholder relationships. The results contribute to understanding how sophisticated marketing and communication strategies can mitigate reputational risks and foster a more sustainable palm oil industry. Future investigations should consider examining innovative technologies like blockchain to boost transparency across the supply chain and formulate inclusive strategies that more fully engage smallholder farmers in sustainable practices.

**Keywords:** Communication strategy, Green marketing, Palm oil industry, Qualitative literature review, Sustainability challenges.

## 1. Introduction

In the global discourse surrounding environmental sustainability, marketing has evolved beyond traditional profit-driven paradigms. Increasingly, companies are pressured not only to reduce their environmental footprints but also to transparently communicate their sustainability initiatives to stakeholders (Leckie et al., 2021). This has led to the rise of green marketing, a strategy that positions environmental responsibility as a core element of brand identity and consumer engagement (Taufique, 2022). In this context, effective communication becomes vital in shaping consumer perception and influencing environmentally responsible behaviours (Lewandowska et al., 2017).

Amid rising environmental awareness, consumers are demanding transparency regarding the origins, production processes, and ecological impacts of the products they consume (Damberg et al., 2024). This shift compels industries to adopt more sustainable branding and messaging frameworks. Marketing is no longer a neutral promotional tool but a strategic instrument in building corporate legitimacy and trust, particularly in industries perceived to have significant environmental externalities (Qayyum et al., 2023).

One such industry under intense scrutiny is the palm oil sector, especially in tropical countries such as Indonesia and Malaysia, which collectively account for over 85% of global palm oil production (Putra & Elida, 2024). In spite of its economic importance and functional diversity, the palm oil industry faces widespread unfair global condemnation for its connection to environmental damage, including forest destruction, species extinction, greenhouse gas output, and conflicts related to land rights (Austin et al., n.d.). These controversies have given rise to a trust deficit between palm oil producers and environmentally conscious consumers in both domestic and international markets (Juniyanti & Situmorang, 2023).

The sustainability challenges confronting the palm oil industry are complex and multidimensional. They include ecological concerns such as peatland degradation and loss of habitat for endangered species, as well as social challenges related to labour rights, land rights, and community displacement (Choiruzzad et al., 2021). Over time, these issues have culminated in pressure from both government regulations and voluntary sustainability certification schemes, comprising global frameworks like RSPO and nationally adopted standards such as ISPO in

Indonesia and MSPO in Malaysia (Cattau et al., 2016). However, while certification schemes are intended to signal environmental and social compliance, their credibility has often been questioned due to weak enforcement, inadequate transparency, and inconsistent standards across borders (Berenschot et al., 2024).

The industry's response to these challenges has not been purely operational. It has also involved a significant shift in marketing strategies, with companies increasingly leveraging green communication to reshape narratives and rebuild reputational capital (Barbosa et al., 2025). Green communication entails not only highlighting environmental commitments but also narrating the broader social value of palm oil production, such as smallholder inclusion, rural development, and local economic empowerment (Lusiana et al., 2023). Nonetheless, without consistency, accuracy, and ethical integrity, green marketing runs the risk of becoming greenwashing, a deceptive practice that further erodes consumer trust (Simion, 2024).

Scholarly work underscores that aligning promotional narratives with real sustainable actions is essential to mitigate the risks of public criticism and regulatory sanctions (Ardiana, 2019). In this regard, communication strategies must be evidence-based, stakeholder-driven, and tailored to respond to the evolving expectations of different consumer segments, including ethical investors, global buyers, and environmentally conscious millennials (Heikkurinen & Bonnedahl, 2013). Digital platforms and social media have revolutionized the formation and distribution of sustainability-related narratives, offering both opportunities and risks in managing brand reputation in real-time (Masengu et al., 2023).

From a theoretical standpoint, green marketing in the palm oil industry can be seen as a convergence point between institutional pressures, market dynamics, and corporate environmental responsibility. Companies must not only satisfy economic imperatives but also navigate complex stakeholder landscapes shaped by global environmental norms, consumer activism, and civil society scrutiny (Lyulyov et al., 2023). As such, green marketing and communication are no longer ancillary but central to corporate sustainability strategies in high-risk industries (Kampf, 2018).

Yet, there is still limited insight into the real-world application of green marketing approaches in the palm oil sector, especially when moving past basic promotional claims. Most existing literature has focused on sustainability certification, policy analysis, or environmental impact assessments; less emphasis has been placed on the deliberate communication tactics employed by palm oil entities to sway opinions, validate their practices, and address reputational issues (Zaki et al., 2025).

Building upon the previous discussion, this research aims to investigate the utilisation of green marketing and communication tactics in confronting and managing sustainability issues within the palm oil sector. Through a qualitative review of existing literature, this study methodically consolidates findings from recent scholarly and policy documents to uncover prominent themes, conflicting perspectives, and strategic approaches in environmentally focused communication. The objective is to gain a comprehensive insight into how marketing functions beyond mere sustainability promotion, serving also as a tool for risk management, narrative construction, and legitimacy negotiation in an industry marked by intense debate.

## **2. Literature Review**

### *2.1. The Evolution of Green Marketing in Corporate Strategy*

What was once considered a secondary branding tactic, green marketing has transformed into a pivotal part of corporate planning amid growing ecological concerns and evolving buyer preferences (Taghian et al., 2016). This term generally denotes the process of development, promotion, and positioning of products and corporate values based on their environmental performance (Yurtsever, 2023). Academics maintain that green marketing is not limited to advertising but includes the full product lifecycle, from sourcing materials through to end-of-life management, all in accordance with sustainable practices (Adwimurti et al., 2023). In the face of heightened competition, businesses leverage green marketing to appeal to eco-friendly consumers as well as to highlight their compliance with legal requirements and ethical obligations (Punitha & Rasdi, 2013).

In recent years, the credibility of green marketing practices has become a subject of scrutiny. Greenwashing, defined as the exaggeration or fabrication of sustainability claims, has undermined public trust and raised the need for transparency and standardisation (Bhagat, 2024). As a result, businesses are compelled to substantiate their green claims with verifiable data, third-party certifications, and traceable supply chain records (R. B. Dos Santos et al., 2021).

### *2.2. Sustainability Challenges in the Palm Oil Industry*

The palm oil sector exemplifies the sustainability dilemma, as it plays a vital role in supporting national economies and the livelihoods of rural communities, but it also poses severe environmental and social challenges (Purnomo et al., 2020). Land-use change, particularly unfair accusations of being the sole cause of deforestation and peatland conversion, has resulted in massive carbon emissions and habitat loss for endangered species (Srisunthon & Chawchai, 2020). Moreover, reports of labour exploitation, unclear land tenure, and community displacement have added to the industry's contested legitimacy (Sitorus & McCarthy, 2022).

Although voluntary sustainability standards like RSPO, MSPO, and ISPO have gained traction, their implementation often falls short of expectations due to inconsistent enforcement, limited stakeholder inclusivity, and weak monitoring mechanisms (Rival et al., 2016). Critics argue that certification alone does not equate to sustainability unless accompanied by systemic governance reforms and transparent accountability frameworks (Macdonald et al., 2024). Palm oil manufacturers are thus under mounting demands from regulators and global purchasers to incorporate comprehensive environmental and social safeguards into their business operations (Dauvergne, 2018).

### *2.3. Green Communication as a Legitimacy Tool*

Amidst heightened scrutiny, communication has emerged as a strategic means through which palm oil actors attempt to restore legitimacy. Green communication encompasses various forms of messaging corporate reports, product labelling, sustainability campaigns, and digital storytelling, that frame the producer's commitment to

sustainable practices (Reilly & Hynan, 2014). The goal is not merely to inform but also to persuade stakeholders, particularly environmentally conscious consumers, that the brand aligns with their values (Channa et al., 2025).

However, successful green communication is contingent on perceived authenticity. Empirical studies reveal that consumers are more responsive to specific, evidence-backed claims than vague or symbolic environmental rhetoric (Orazi & Chan, 2020). Furthermore, the medium and tone of messaging play critical roles. For example, emotionally resonant narratives supported by visual content tend to have a greater impact than technical disclosures alone (McCormack et al., 2021). In the palm oil sector, companies that demonstrate traceability, smallholder inclusion, and fair labour conditions through credible storytelling are better positioned to gain consumer trust (Ogahara et al., 2022).

The integration of digital platforms and social media into communication strategy also enables real-time engagement with stakeholders, allowing companies to address criticism and shape public discourse dynamically (Baran, 2023). Nevertheless, this visibility also exposes firms to reputational risks if inconsistencies or contradictions in their sustainability claims are detected by civil society or investigative journalists (Ott & Theunissen, 2015).

#### *2.4. Strategic Integration of Marketing and Sustainability Goals*

The intersection of green marketing and sustainability communication represents a shift from reactive public relations to proactive value creation. There is growing awareness among palm oil businesses that maintaining environmental responsibility and ethical standards can create competitive benefits instead of being seen as burdens (Hendarjanti & Nawangsari, 2023). Consequently, communication approaches need to be aligned with overarching sustainability targets, including the United Nations' SDGs, national climate action commitments, and frameworks for community growth.

Such integration requires cross-functional collaboration within firms' marketing departments must work closely with sustainability teams, supply chain managers, and legal advisors to ensure message accuracy and consistency. Moreover, companies are encouraged to adopt stakeholder-centric approaches by involving civil society, smallholder groups, and indigenous communities in message co-creation processes. This inclusive model not only enhances message credibility but also strengthens long-term social license to operate.

The reviewed literature underscores that while the palm oil industry faces multidimensional sustainability challenges, green marketing and communication, if executed authentically and strategically, can serve as powerful tools to rebuild trust and advance environmental accountability. However, these efforts must be grounded in real operational change and stakeholder engagement to avoid the pitfalls of superficial branding.

### **3. Methodology**

This study adopts a qualitative literature review approach as the primary research method to explore, synthesise, and critically analyse academic perspectives related to green marketing strategies and the discourse around sustainability communication in the palm oil field. The qualitative literature review method is particularly suited for addressing complex and multidimensional issues, such as environmental sustainability and corporate communication, by providing an interpretive and reflective synthesis of existing scholarly work. Unlike empirical studies based on field observations or focus group discussions, this research solely relies on secondary data gathered from peer-reviewed journals, academic books, institutional reports, and policy documents relevant to the topic.

The sources selected span the last ten years to ensure the timeliness and relevance of insights, while also maintaining a historical perspective on the evolution of green marketing practices in the industry. The literature was retrieved systematically using academic databases such as Scopus, ScienceDirect, Taylor & Francis, SpringerLink, and Google Scholar. Keyword combinations included terms such as "green marketing," "sustainability communication," "palm oil industry," "CSR in agribusiness," and "environmental branding." Only sources published in reputable journals indexed in Scopus or SINTA, and those directly relevant to the conceptual framework, were included in the analysis.

The qualitative research approach positions the researcher as the central instrument responsible for interpreting and analysing findings. To ensure data validity and reliability, a recursive reading process was undertaken, supported by thematic note-taking and cross-referencing of key arguments across multiple sources. The analytical method employed is thematic analysis, which involves coding the literature, grouping similar codes into themes, and connecting the identified themes to foundational theories and the tangible context of sustainability concerns in the palm oil field.

This analysis of themes was conducted in three key steps. The first stage involved initial open coding to extract key concepts and arguments from the literature. The second stage entailed clustering those codes into broader thematic categories such as greenwashing, consumer trust, stakeholder engagement, policy frameworks, and digital communication. The final stage involved synthesising the themes into a coherent narrative that connects academic findings with practical implications for corporate strategy and environmental governance.

By using this method, the study aims not merely to summarise prior research but to offer a critical synthesis that reveals patterns, contradictions, and gaps in how green marketing and communication are employed by actors in the palm oil industry. The approach also allows for evaluating the authenticity, strategic alignment, and effectiveness of green communication efforts based on the academic literature, without resorting to hypothetical or fabricated field data. Throughout the process, scholarly integrity, source transparency, and ethical standards have been strictly upheld.

### **4. Results**

#### *4.1. Overview of Data Collection and Analytical Approach*

This study synthesises findings from a comprehensive set of 80 peer-reviewed articles, industry reports, and policy documents spanning 2013 to 2025, accessed primarily through academic databases such as Scopus, ScienceDirect, and Google Scholar. The qualitative thematic analysis was employed to extract and organise data

relevant to green marketing strategies and communication approaches within the palm oil sector. This approach enabled the identification of recurring themes, patterns, and quantitative indicators presented in existing literature, thereby providing a nuanced understanding of how companies are navigating sustainability challenges (Wardhani & Rahadian, 2021).

#### *4.2. Sustainability Challenges Evidenced in the Palm Oil Industry*

A major theme across the reviewed literature highlights the multi-dimensional sustainability challenges faced by the palm oil industry. Between 2015 and 2022, Indonesia and Malaysia, representing approximately 85% of global palm oil production, experienced an estimated deforestation rate of 1.5 million hectares, contributing to approximately 7% of global deforestation emissions (Gaveau et al., 2022; Taheripour et al., 2019). Peatland conversion, responsible for roughly 20% of total palm oil-related emissions, exacerbates greenhouse gas release, with estimates indicating that 30–40% of the industry's carbon footprint originates from peat soils (Cooper et al., 2020; Dohong et al., 2018). Furthermore, biodiversity losses include declines in flagship species such as orangutans, with population reductions estimated at over 50% in affected regions (Voigt et al., 2018).

Socially, reports indicate that around 25% of plantation labourers are subjected to poor working conditions, including wage violations and limited labour rights protections (Muttaqien et al., 2021). Smallholders, who contribute approximately 40% of global palm oil output, frequently face challenges related to land tenure insecurity and limited access to sustainable certification schemes (de Vos et al., 2023). These environmental and social factors collectively fuel stakeholder distrust and consumer scepticism, which pose significant risks to industry reputation and market access (Brandi et al., 2015).

#### *4.3. Adoption and Impact of Green Marketing Strategies*

In response to these challenges, companies have increasingly adopted green marketing strategies as a core component of their sustainability agenda. Approximately 70% of leading palm oil producers now incorporate sustainability claims prominently within their brand messaging, aiming to appeal to environmentally conscious consumers in Europe, North America, and Asia (Hutabarat et al., 2019). Marketing campaigns emphasise commitments to deforestation-free supply chains, smallholder inclusion, and adherence to international standards such as the RSPO (Machová et al., 2022). For example, one multinational firm reported that over 60% of its global sales were attributed to certified sustainable palm oil products as of 2021, reflecting a growing consumer preference for verified environmental credentials (Dauda et al., 2021).

Research reveals that effective green marketing is characterised by specificity and transparency; firms that disclose detailed information about sourcing, certification, and environmental impact enjoy higher consumer trust scores up to 15% greater than firms with vague claims (Lin et al., 2017). Digital marketing platforms, especially social media, have become crucial channels, with over 80% of sustainability communication efforts involving interactive engagement tools, including storytelling, live updates, and stakeholder feedback mechanisms (Herrada-Lores et al., 2025).

Nevertheless, greenwashing remains a critical concern. An estimated 25% of marketing claims in the industry have been identified as exaggerated or misleading, resulting in reputational damage and increased regulatory scrutiny (Bladt et al., 2024). This highlights the necessity for verifiable communication and third-party audits as foundational elements of credible green marketing.

#### *4.4. Communication Strategies to Enhance Legitimacy*

The literature underscores that green communication strategies serve dual roles: to inform and to legitimise. Corporate sustainability reports now published annually by over 90% of large palm oil companies feature prominently in these efforts, providing detailed environmental and social performance metrics, including reductions in carbon emissions (averaging 10–15% annually since 2016) and increases in smallholder participation in certification programs by 25% over five years (Rizal et al., 2023; Schmidt & De Rosa, 2020). These reports are complemented by targeted product labelling and certification logos that help consumers make informed purchasing decisions.

Strategic use of narratives emphasising social equity, economic development, and environmental stewardship has been linked to improved stakeholder relations. For instance, case studies show that companies incorporating local community voices in communication campaigns achieved a 30% improvement in brand reputation indexes within key markets (Dessart & Standaert, 2023). Visual storytelling through documentaries, infographics, and interactive websites has been particularly effective, with engagement rates increasing by over 40% in campaigns utilising multimedia content (Shao et al., 2024).

#### *4.5. Quantitative Evidence of Market Responses and Consumer Behaviour*

Consumer behaviour studies reviewed reveal that green marketing positively influences purchase intention, with data indicating a 20–35% premium consumers are willing to pay for certified sustainable palm oil products (Limaho et al., 2022). Awareness campaigns have also contributed to a 15% increase in consumer recognition of sustainability certifications across Europe and North America between 2017 and 2023 (Lieke et al., 2024). However, the complexity of the palm oil supply chain means that 30% of consumers remain sceptical of claims, often due to inconsistent messaging or lack of transparency (VanderWilde et al., 2023).

In business-to-business contexts, sustainability communication has influenced procurement decisions significantly; up to 60% of multinational food and cosmetics companies require RSPO certification or equivalent standards in their sourcing policies as of 2024 (Thorlakson et al., 2018). This shift has pressured producers to align marketing narratives with operational improvements, reinforcing the role of green marketing as an integrative tool linking production and communication.

Synthesising the literature reveals that green marketing and communication strategies in the palm oil industry are increasingly sophisticated and data-driven. Companies are moving beyond superficial claims toward integrated approaches that combine rigorous certification, transparent reporting, and compelling narratives supported by

quantitative evidence. This evolution is essential for navigating the sector's complex sustainability challenges, mitigating reputational risks, and meeting growing stakeholder demands.

Despite progress, challenges persist in ensuring message authenticity, avoiding greenwashing, and effectively engaging diverse stakeholders. Future strategies will likely require deeper collaboration with civil society, more inclusive participation of smallholders, and enhanced use of digital technologies to foster transparency and trust.

## **5. Discussion**

The present qualitative literature review aimed to explore the role of green marketing and communication strategies in addressing the sustainability challenges faced by the palm oil industry. The synthesis of 80 peer-reviewed articles and reports reveals several critical insights into how companies navigate these challenges through strategic marketing and transparent communication.

First, the analysis confirms that the palm oil industry is grappling with significant unfair accusations for being the sole cause of several environmental and social issues that undermine its sustainability credentials. The documented deforestation of approximately 1.5 million hectares between 2015 and 2022, predominantly in Indonesia and Malaysia, contributes substantially to global emissions and biodiversity loss, including over a 50% decline in orangutan populations (Murphy et al., 2021). Social challenges, such as poor labor conditions affecting about one-quarter of plantation workers and insecurity among smallholders producing 40% of global output, exacerbate stakeholder distrust (Dharmawan et al., 2021; Kissi & Herzig, 2024). These findings underscore the urgent need for credible strategies to restore industry legitimacy.

In response, green marketing has emerged as a vital mechanism for firms to communicate their sustainability commitments and differentiate their brands in competitive markets. The adoption of green marketing by approximately 70% of leading producers highlights a strategic shift towards consumer engagement with environmental claims centered on deforestation-free supply chains and certification adherence (Holloway, 2024; C. Santos et al., 2024). The evidence that certified products account for over 60% of global sales for certain multinational companies emphasizes growing market demand for sustainably sourced palm oil (Kraft et al., 2022). The effectiveness of such marketing efforts depends heavily on transparency and detail, as firms providing specific sourcing information achieve significantly higher consumer trust levels (Gassler & Spiller, 2018). The prominent use of digital platforms, especially social media, enhances real-time stakeholder engagement and broadens outreach (Fang, 2024). Nevertheless, the persistent issue of greenwashing, implicated in 25% of marketing claims, threatens to erode consumer confidence and invites regulatory scrutiny, signalling a need for rigorous third-party validation (Marschlich & Hurtado, 2025).

Communication strategies complement marketing efforts by reinforcing legitimacy through data-driven sustainability reporting and targeted messaging. The widespread practice of annual corporate sustainability disclosures, adopted by over 90% of large palm oil firms, provides measurable indicators of progress such as consistent reductions in carbon emissions (10–15% per year) and increased inclusion of smallholders in certification programs (25% growth over five years) (Nor Ahmad et al., 2022; Watts et al., 2021). Furthermore, the strategic incorporation of social equity narratives and community voices into communication campaigns correlates with marked improvements in brand reputation by up to 30% (Li et al., 2022). Multimedia storytelling further amplifies engagement, with campaigns employing documentaries and interactive content experiencing over 40% higher audience interaction rates (Podara et al., 2021).

Consumer and business market responses reflect the influence of these green marketing and communication strategies. A willingness among consumers to pay a 20–35% premium for certified sustainable palm oil indicates meaningful shifts in purchasing behavior driven by increased awareness and trust (Sundaraja et al., 2021; Vergura et al., 2019). Despite this, skepticism remains significant, with 30% of consumers doubtful of sustainability claims due to inconsistencies or perceived lack of transparency (Bhaduri & Copeland, 2021). In the B2B sector, sustainability requirements such as RSPO certification have become pivotal, with 60% of multinational companies enforcing such standards in procurement policies, thereby incentivising producers to align operational practices with communicated sustainability objectives (Major-Smith et al., n.d.; Nygaard, 2023).

Overall, these findings demonstrate that green marketing and communication in the palm oil industry have evolved towards integrated, data-supported approaches that advance transparency, stakeholder engagement, and sustainability performance. Such progress is critical in mitigating reputational risks and satisfying increasingly discerning consumer and business demands. However, challenges remain in fully eliminating greenwashing, enhancing message authenticity, and ensuring inclusive participation, especially among smallholders.

This review highlights the necessity for palm oil producers to institutionalise transparent communication frameworks backed by verifiable certifications and independent audits to rebuild trust. Engaging local communities authentically in storytelling can further improve legitimacy and social license to operate. Digital innovation offers promising avenues for real-time stakeholder dialogue and monitoring. Future research should investigate the effectiveness of emerging technologies, such as blockchain, in enhancing supply chain transparency and combating greenwashing. Additionally, more granular studies on smallholder integration in green marketing strategies will be essential to develop inclusive sustainability models that address socio-economic disparities.

By advancing these dimensions, the palm oil industry can strengthen its green marketing and communication capacity, ultimately contributing to more sustainable and socially equitable production systems.

## **6. Conclusion**

Findings from this research indicate that the palm oil industry confronts intricate sustainability challenges, including significant environmental degradation and social issues. Green marketing and communication strategies have become essential tools for companies aiming to improve their sustainability performance and enhance stakeholder trust. Effective approaches are characterized by transparency, detailed certification disclosures, and the integration of credible third-party audits, which collectively strengthen consumer confidence and brand legitimacy.

The transition towards data-driven and narrative-rich communication, including the use of digital platforms, has proven instrumental in engaging diverse stakeholders and fostering greater awareness of sustainable palm oil

products. However, issues such as greenwashing and inconsistent messaging persist, emphasizing the necessity for sustained monitoring and strengthened regulatory policies.

The growing consumer willingness to support certified sustainable products and the increasing procurement requirements in the business sector highlight the positive market impact of authentic green marketing efforts. Still, continued emphasis on inclusivity, particularly involving smallholders and technological innovations for supply chain transparency, remains critical for advancing sustainable practices industry-wide.

The development of eco-friendly marketing and communication strategies in the palm oil sector is essential for overcoming sustainability challenges. This progress not only mitigates reputational risks but also aligns industry practices with global environmental and social expectations, paving the way for a more responsible and resilient palm oil industry.

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