



Legal Framework of Green Communication in Sustainable Forest Conservation: An Analysis on the Use of Eco-Friendly Cardboard Packaging

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ABSTRACT

This article analyzes the legal framework of green communication in sustainable forest preservation, particularly in the context of eco-friendly carton packaging in the beverage industry. The issues examined include how national regulations govern environmental communication, the effectiveness of CSR and consumer protection provisions in preventing greenwashing, and the harmonization with international standards. This research employs a normative juridical method with statutory, conceptual, and comparative approaches, supplemented by empirical data in a socio-legal perspective. The analysis shows that Indonesia's legal framework on green communication remains fragmented across various regulations without comprehensive integration, creating vulnerability to misleading claims. Therefore, harmonization of national law with international standards, as well as the establishment of a specific legal instrument regulating eco-friendly claims, is urgently needed.

INTRODUCTION

Deforestation is a legal and environmental issue that continues to be a global and national concern. Indonesia, as the country with the third largest tropical forest in the world after Brazil and Congo, faces serious challenges in maintaining the sustainability of its forest resources. Indonesia's forests not only have ecological value, but also social, cultural, and economic value. According to FAO data, the rate of deforestation in Indonesia had reached 1.09 million hectares per year in the early 2000s, although in recent years there has been a decline thanks to various government programs and international initiatives. However, the still significant deforestation rate shows that this problem has not been structurally resolved and demands a more comprehensive regulatory approach.

Forests serve as the lungs of the world that absorb carbon emissions, preserve biodiversity, and sustain the lives of indigenous peoples and local communities. Deforestation not only impacts the global climate crisis, but also causes long-term economic losses due to ecosystem degradation. Therefore, sustainable forest management is not only an environmental issue, but also a legal and development issue that requires integrative policies.

Various regulations have been issued by the government to control the rate of deforestation, including Law No. 41 of 1999 concerning Forestry, Law No. 32 of 2009 concerning Environmental Protection and Management, and Government Regulation No. 46 of 2017 concerning Environmental Economic Instruments. These regulations are the normative basis for controlling forest use and ensuring environmental sustainability. However, the effectiveness of regulations is largely determined by the implementation in the field and the seriousness of business actors in complying with them. In practice, various violations still occur, such as land clearing without permits, illegal timber trade, and greenwashing practices by corporations.

LITERATURE REVIEW

Paradigm Shift in Industrial Practice

Industrial practices in the modern era are no longer measured only in terms of production and efficiency, but also in terms of social and environmental responsibility. Globalization and the development of information technology encourage consumers to be more critical of the products they use. They consider not only price and quality, but also the origin of the raw materials, the environmental impact, as well as the transparency of the supply chain. This phenomenon reflects a paradigm shift from a mere profit orientation to a triple bottom line: profit, people, planet. In this context, green communication is an important instrument. Green communication is defined as a communication strategy that emphasizes the delivery of information related to the sustainability and environmental impact of a product or company. Products that claim to be environmentally friendly can increase consumer trust, strengthen a company's reputation, and create market loyalty. However, if the claim has no clear basis or cannot be verified, the practice falls into the category of greenwashing. The need for green communication is increasingly relevant with the increasing global consumer awareness of environmental issues. A Nielsen survey (2020) shows that more than 70% of consumers in Southeast Asia are willing to pay more for

eco-friendly products. This means that green claims have strategic economic value, but at the same time open up opportunities for misuse of claims by corporations that do not have real commitments.

Greenwashing as a Legal Issue

The phenomenon of greenwashing raises quite serious legal problems. False or misleading claims regarding sustainability not only violate business ethics, but also potentially violate the law. In the Indonesian context, Law No. 8 of 1999 concerning Consumer Protection has expressly regulated through Article 9 which prohibits business actors from providing false, misleading, or excessive information about the benefits of a product. If it is associated with environmental issues, then companies that use eco-friendly claims without valid evidence can be considered misleading the public. This not only harms consumers, but also weakens environmental conservation efforts and lowers the credibility of the sustainability programs that are being promoted.

In developed countries, greenwashing has become the object of serious litigation and oversight. The European Union, for example, is drafting a Directive on Green Claims that requires that every environmental claim be backed by verifiable scientific evidence. The United States has the Federal Trade Commission (FTC) Green Guides which are a reference in regulating environmental claims in advertising. This regulation provides clear standards so that business actors do not arbitrarily use environmentally friendly labels. Indonesia does not yet have a similar instrument, so the space for greenwashing practices is still very open.

The Role of International NGOs: A Case Study of FSC

In the global context, efforts to realize credible green communication are largely driven by international non-governmental organizations. One of the important actors is the Forest Stewardship Council (FSC), an international non-profit organization that sets global standards for sustainable forest management. FSC certification ensures that products made from wood or cardboard are responsibly managed forests with ecological, social, and economic aspects in mind. In green communication practice, FSC certification serves as an independent verification mechanism that gives legitimacy to claims of "sustainable forest origin." This is important because without an independent verification mechanism, eco-friendly claims are vulnerable to questioning and risk being considered misleading.

However, the limitations of FSC as a voluntary standard remain of note. The cost of certification is relatively expensive for MSMEs, and the scope of its implementation depends on the company's commitment. Thus, national regulations need to integrate international certification standards in order to have legal binding force in the domestic market.

Corporate Practice: A Case Study of Tetra Pak

Multinational companies such as Tetra Pak are a real example of how green communication can be integrated with sustainability strategies. As the world's leading manufacturer of cardboard packaging, Tetra Pak promotes the use of raw materials sourced from FSC-certified forests. Tetra Pak's sustainability report emphasizes the transparency of the raw material supply chain, the use of renewable energy, and the commitment to the circular economy. This practice shows that green communication is not just a marketing tool, but an integral part of a sustainable business strategy. By communicating data-driven claims and certifications, the company not only builds a positive reputation, but also makes a tangible contribution to global forest conservation efforts. However, Tetra Pak's practices also reveal challenges, such as the limitations of long supply chain verification. If one of the small suppliers does not meet the standards, the company's green claims can be questioned. This shows that green communication requires strict regulation and supervision so that the claims submitted can be truly accounted for.

The Urgency of National Regulations

The involvement of NGOs such as the FSC and corporate practices such as Tetra Pak underscores the importance of clear legal regulation at the national level. Without a comprehensive legal framework, sustainability claims risk becoming mere rhetoric. Law is needed as a controlling instrument so that environmental communication is not only persuasive, but also has normative binding. Indonesia can learn from international practices by strengthening synergies between national regulations, international certifications, and corporate Corporate Social Responsibility (CSR) standards. This integration will create a more credible, transparent, and accountable regulatory ecosystem in support of sustainable development.

Theoretical Perspectives and Academic Relevance

Legal analysis of green communication is relevant in the framework of adaptive law, as emphasized by Isra Ruddin in the journal *The Evolution of Cybercrime Law in the Development of Law in the Digital World*. Similar to cyber law, which must be adaptive to technological developments, environmental and consumer law frameworks are also required to be able to respond to the phenomenon of greenwashing. In addition, in the book *Choosing a Good Brand Management Strategy*, Isra Ruddin emphasized that the success of a brand strategy is not only measured by reputation or image, but also by accountability of accountable claims. This perspective reinforces the view that green communication should not be seen solely as a marketing strategy, but also as a legal statement that has implications for consumer protection and environmental conservation.

METHODOLOGY

This article uses a normative juridical method with an emphasis on the analysis of laws and regulations relevant to the issue of forest conservation and green communication practices. The normative juridical method was chosen because the issues studied are basically related to the legal framework that governs the behavior of business actors, consumers, and the state in the context of sustainable forest conservation. This approach allows the author to examine in depth the prevailing positive legal norms, analyze their strengths and weaknesses, and offer solutions through regulatory harmonization.

In addition, this research also uses socio-legal research elements to strengthen normative analysis. The socio-legal approach is important because the practice of green communication is not only a matter of legal text, but also related to implementation, public perception, and corporate practices. In other words, this research method seeks to bridge the normative aspect (rules) and the empirical aspect (practice in the field).

RESEARCH RESULT

The results of this study show that the legal framework for green communication in the context of sustainable forest conservation in Indonesia still faces various fundamental challenges, both normatively and implementively. Through normative analysis of existing laws and regulations, literature studies, and socio-legal approaches through the study of FSC and Tetra Pak practices, a number of important findings were obtained which can be described as follows.

Fragmentation of the Regulatory Framework

The results of the study show that regulations related to green communication are spread across various sectoral legal instruments such as Law No. 41 of 1999 concerning Forestry, Law No. 32 of 2009 concerning Environmental Protection and Management, Law No. 8 of 1999 concerning Consumer Protection, and Law No. 40 of 2007 concerning Limited Liability Companies. While each contains relevant norms, none explicitly regulate green communication procedures, environmental claim proof requirements, or specific sanctions for greenwashing practices. This fragmentation creates an overlap of authority while weakening legal certainty.

Absence of a Legal Definition of Greenwashing

Another significant finding is the absence of a legal definition of greenwashing in Indonesian regulations. This has direct implications for the difficulty of proving when consumers or authorities want to take action on misleading claims. The norms in Article 9 of the Consumer Protection Law only regulate the prohibition of misleading information in general, without specifics related to environmental claims. The absence of this definition weakens law enforcement efforts because business actors can take refuge behind too wide a space of interpretation.

International Certification Status

The study also found that although international certification standards such as FSC are widely recognized in global trade practices, their legal status in Indonesia is not yet clear. The SVLK as a national instrument does have legal recognition, but it emphasizes the legality aspect of wood, not ecological sustainability. As a result, eco-friendly claims that rely solely on internal certifications or corporate statements can get away with it in the domestic market, even if they are potentially misleading. This emphasizes the urgency of harmonizing national law with international standards.

Weaknesses of Monitoring Mechanisms

The results of the analysis show that related institutions such as the Ministry of Environment and Forestry, BPKN, BPOM, and ICC do not yet have an integrated mechanism to supervise environmental claims in the market. There is no standard protocol for verifying claims on product labels, while existing oversight initiatives tend to be sectoral and reactive. This void allows for rampant untested green claims, magnifying the risk of consumer losses while undermining forest conservation efforts.

Learning from FSC Practice

A case study by the Forest Stewardship Council (FSC) shows that the existence of independent third-party certification can give legitimacy to sustainability claims. The FSC label is proven to help consumers distinguish products that are truly eco-friendly from those that simply claim. However, as a voluntary standard, FSC coverage is highly dependent on company commitments and cannot be universally enforced without regulatory support. The cost of certification is also still an obstacle for MSME actors, so a support scheme from the state is needed if they want to expand their adoption.

Tetra Pak Practices and Supply Chain Transparency

The results of socio-legal research from Tetra Pak's practice show how green communication can be integrated into corporate strategy. Supply chain transparency, third-party audits, and the publication of sustainability reports are critical elements that strengthen corporate claims accountability. However, obstacles remain in long supply chains, especially when it comes to local suppliers who have not yet been certified. This shows that without a comprehensive verification mechanism, the "100% eco-friendly" claim remains at risk of being questioned for its validity.

Socio-Legal Implications for Indonesia

From these two case studies, it can be concluded that the integration of international standards into the national legal system is a necessity. Without regulations that require independent verification, the practice of greenwashing will be difficult to prevent. Consumers will remain vulnerable to misleading claims, while companies that are truly committed to sustainability do not get the incentives they deserve. The results of this study confirm the need for legal instruments that are not only normative, but also operational in regulating green claim procedures.

Concept Green Claims Registry

One of the standout results of this study is the proposed establishment of the Green Claims Registry, which is a national system where all eco-friendly claims must be registered, verified, and accessible to the public. With this system, consumers have more transparent access to information, regulators are more likely to oversee, and companies are encouraged to only submit claims that can be accounted for. This proposal is a regulatory innovation that can close the legal loophole while encouraging more accountable business practices.

Research novelty

The results of this study bring four main novelties:

- a. Conceptualizing green communication as a legal obligation, not just a communication strategy.
- b. Integration of international certification (FSC/PEFC) with national instruments (SVLK) within the framework of domestic regulations.
- c. The proposed new instrument is in the form of a Green Claims Registry and special administrative sanctions for greenwashing.
- d. A multi-actor enforcement model that combines regulators, certification bodies, NGOs, and the public through a digital mechanism.

Implementation Barriers

Although the results of the research offer innovative solutions, obstacles remain. The cost of certification can weigh on MSMEs, while large industries may resist new regulations that are seen as adding to the burden of compliance. The risk of legal conflict also arises if international certification recognition is not aligned with the national system. Therefore, policy implementation must be carried out in stages by involving all stakeholders.

Relevance to National Legal Development

Overall, the results of this study confirm that strengthening the green communication legal framework is not only a matter of consumer protection, but also part of a national strategy in achieving international commitments such as the Paris Agreement and the Sustainable Development Goals (SDGs). With clearer regulations, Indonesia can strengthen its legal position while increasing the competitiveness of environmentally friendly products in the global market.

DISCUSSION

Literature Review of Theoretical Foundations and Related Research Findings

Green communication has evolved from the disciplines of environmental communication and green marketing which examines how organizations convey sustainability claims to the public (Ottman, 2011). In theory, green communication aims to raise awareness, change perceptions, and encourage pro-environmental action. In the legal realm, green communication must also be seen as a form of public right to know (the right of the public to obtain environmental information) regulated by the Environment Law (Article 65 of Law No. 32/2009).

The legal and policy literature highlights two main issues: (1) claims accountability and (2) enforcement. International studies show that without independent verification mechanisms, environmental claims are vulnerable to greenwashing a misleading eco-friendly claim practice (Testa et al., 2019). In the context of consumer law, misleading claims have implications for consumer protection and business competition (Law No. 8/1999; Law No. 5/1999).

A number of legal studies in Indonesia also confirm the relevance of this issue. For example, Nurhayati (2019) in the *Journal of Law & Development* emphasizes the importance of strengthening consumer protection instruments in dealing with misleading product claims. Meanwhile, Rachmadani (2020) in the *Legal Journal of IUS QUIA IUSTUM* highlights the limitations of CSR implementation in the forestry sector which often only stops at philanthropy, without integrating transparency of sustainability communication. Another study by Prasetyo (2021) in the *Constitutional Journal* emphasizes the urgency of environmental label regulation as an instrument to protect the public's right to obtain correct and non-misleading information.

The socio-legal approach in environmental research emphasizes the need to combine normative analysis (what is written in the law) with field practice (how actors companies, NGOs, and regulators act) to understand implementation gaps (Vanclay, 2020). This means that the study of green communication law must examine legal norms, standard instruments (certification), and corporate practices as a unit.

International Standards and the Role of the FSC (Forest Stewardship Council) Case Studies

The Forest Stewardship Council (FSC) is an international private certification body that develops criteria for sustainable forest management. The FSC certificate assesses environmental (biodiversity conservation), social (the rights of local communities and workers), and economic (resource management) aspects. In green communication practice, the FSC label serves as an independent verification mechanism that gives legitimacy to the "sustainable forest-originated" claim.

Legal Analysis-Implementation (related to national regulations):

- a. The FSC works as a voluntary standard but has an impact on international markets; FSC-certified products often get buyer preference and access to export markets.

- b. In Indonesia, there is also a national certification mechanism (SVLK – Timber Legality Verification System) that emphasizes the legality of timber (legal harvest), while the FSC assesses sustainable management. The two complement each other, but there is no national rule that explicitly requires the adoption of international standards such as FSC for domestic market claims.
- c. As a result, the company's claims of "sustainable forests" that only point to internal labels without third-party verification can create legal problems if they mislead consumers. This is where national law needs to regulate the status of proof of certification in the context of commercial claims: should third-party certificates (FSCs) be mentioned for specific claims, or should generic claims be used?

Disadvantages and opportunities of regulation:

- a. Disadvantages of the FSC: as a voluntary standard, its coverage depends on the company's decisions; There are certification fees and chain-of-custody verification challenges for long-chain companies.
- b. Opportunity: Governments can integrate international certificate recognition (FSC/PEFC) into national labeling regulations so that "sustainable forest" claims should only be used if they are supported by officially recognized certificates. This increases legal certainty for consumers and legal attachment for business actors.

Company Case Study: Tetra Pak - Green Communication Practices and Its Challenges

Brief profile: Tetra Pak, as one of the world's largest manufacturers of carton-based aseptic packaging, is actively promoting the sustainability of its supply chain, including the use of certified wood fibre (FSC) and emission reduction targets. The company's sustainability report highlights supply chain transparency, the use of renewable materials, and the circular economy target.

Critical analysis of Tetra Pak's (socio-legal) communication practices:

- a. Openness and evidence: Tetra Pak tends to mention the percentage of certified materials and access third-party audits for chain-of-custody. This is good practice in terms of communication accountability.
- b. Verification issues in the field: The biggest obstacle is ensuring the entire supply chain from small forests to pulp mills meets standards. When there is a weak point (e.g. local suppliers without certificates mixed in the chain), the company's claims are at risk of being questioned.
- c. Legal implications: If Tetra Pak or similar companies claim to be "100% sustainable forest packaging" without valid chain-of-custody evidence, then the claim could be the subject of a consumer lawsuit or administrative action. But because most of Tetra Pak's major claims are backed by certification, problems often arise in small sub-suppliers or in emerging markets where oversight is weak.

Lessons learned for national settings: The Tetra Pak case demonstrates the importance of (a) supply chain transparency, (b) recognition of third-party certifications in domestic regulations, and (c) real-time audit/enforcement mechanisms to address potential greenwashing.

Legal Analysis: Normative Gaps and Necessary Regulatory Instruments

Based on the review of regulations and practices (FSC & Tetra Pak), several crucial legal gaps can be formulated:

- a. Fragmentation of regulations. Norms related to forestry, environment, consumer protection, and the company are spread across various legal instruments without a single regulatory umbrella for environmental claims. As a result, there is no national minimum standard governing how "eco-friendly" claims must be proven.
- b. The absence of a legal definition for greenwashing. Although the practice is considered misleading, there is no separate definition in national regulations that makes it easier for regulators to apply specific administrative or criminal sanctions to greenwashing.
- c. International certification status. Regulations have not yet determined the legal status of third-party certification (such as FSC) of commercial claims in the domestic market. Without formal recognition, certificate-based claims rely entirely on market initiatives, not legal obligations.
- d. Weakness of the monitoring mechanism. Supervisory agencies (e.g. BPSKL, IPPU, BPOM for certain products) do not yet have a unified protocol to check environmental claims on product labels on a regular basis.

Further normative analysis shows that Article 9 of Law Number 8 of 1999 concerning Consumer Protection has basically prohibited the practice of providing misleading information, including the potential for unverifiable green claims. However, the norm is general and does not explicitly mention greenwashing. Therefore, law enforcement officials face difficulties when it comes to proving elements of misleading environmental claims.

In this context, there are three policy options. First, revise the Consumer Protection Law by adding special norms regarding green communication and greenwashing. Second, strengthening the Environmental Law by including environmental communication as an integral part of the public's right to environmental information. Third, drafting a new sectoral law or Ministerial Regulation that technically regulates green claim procedures, registration mechanisms, and special sanctions. The third option is seen as faster to implement, but without a strong umbrella of the law, its effectiveness is potentially limited.

This view is in line with Isra Ruddin's thinking in the book *Choosing a Good Brand Management Strategy* which emphasizes that modern brand management strategies cannot be separated from legal accountability for the claims submitted. A brand that carries the image of sustainability through green communication is not only required to be managerial consistency, but also legal compliance so as not to get caught up in greenwashing practices. Thus, clear and integrated regulations not only protect consumers and the environment, but also provide

legal certainty for corporations in managing sustainability-based brand strategies.

Recommendations of legal instruments (concrete and innovative):

- a. Ministerial Act/Regulation on Sustainability Labeling: set out the definition of environmental claims, the required evidentiary requirements (e.g. FSC/SVLK/PEFC certificates or independent audits), and the procedures for labelling environmentally friendly claims.
- b. Green Claims Registry: an official system where companies must register the environmental claims they use, attach evidence (certificates, audit reports), and make these registrations publicly accessible – encouraging transparency and making enforcement easier.
- c. Specific administrative sanctions for greenwashing: fines, revocation of label rights, promotion bans for a certain period of time, and communication remediation obligations (correction publications).
- d. Supply chain verification mechanism: auditable chain-of-custody requirements and minimal certification (SVLK + third-party proof) for raw materials derived from forests.
- e. Regulator-NGO collaboration: formal recognition of the NGO-managed certification mechanism (FSC) as evidence of meeting the standards – subject to accreditation audits to prevent conflicts of interest.

Enforcement and Surveillance Mechanisms – A Practical Model for Indonesia

For legal instruments to be effective, it is necessary to develop an enforcement model that combines the roles of several actors:

- a. Central regulators (Ministry of Environment and Forestry, Ministry of Trade): set standards for labels and certificate recognition.
- b. Independent verification body: an accreditation unit that accredits a certification body (oversees third-party institutions).
- c. Consumer Protection & Competition Agency (BPKN, ICC): dealing with misleading claims and unfair competition.
- d. The role of NGOs and the public: whistleblowing, social audit, and access to information (right to information).
- e. Digital registration system: all green claims must be registered and published so that the media and the public can check the veracity of the claims encouraging transparency-based enforcement.

Legal and Policy Implications - Affirming Research Novelty

The novelty of this research arises at four points:

- a. Reconceptualize green communication as a legal object not just a communication practice but as a legal obligation that touches on the right to public information, consumer protection, and corporate responsibility.
- b. Integration of international certification into the realm of domestic regulation a concrete proposal for how the FSC/SV LK is recognized and positioned as legal evidence in label regulations.
- c. A new regulatory model (Green Claims Registry + special sanctions) a scheme that does not yet explicitly exist in Indonesian law and could be a breakthrough in preventing greenwashing.

- d. Multi-actor approach to enforcement combining public authorities, accreditation bodies, NGOs, and digital mechanisms to ensure the effectiveness of enforcement.

Implementation Obstacles and Legal Risks to Anticipate

- a. Certification costs have the potential to burden MSMEs/small suppliers; Incentive/subsidy schemes are required.
- b. Industry resistance that considers the new rules to increase the burden of compliance; This requires a gradual regulatory transition and stakeholder dialogue.
- c. Risk of legal conflict when the recognition of international certificates conflicts with national regulations; It needs harmonization and national minimum standards.

Final Policy Recommendations (concise and operational)

- a. Issue Ministerial/Institutional Regulation on Green Claims claim definition, minimum proof, claim registration mechanism.
- b. Form a national Green Claims Registry managed by the relevant Ministries; public access and linked with the certification system (SVLK/FSC).
- c. Set up special sanctions for greenwashing in the administrative realm – e.g. progressive fines, correctional publications, promotion bans.
- d. Accreditation and support schemes for small suppliers to facilitate compliance (audit grants).
- e. International cooperation for harmonization of standards (linking SVLK with FSC/PEFC recognition frameworks).

This discussion places green communication not only as a corporate communication issue, but as a strategic legal node in three main dimensions: first, as an embodiment of the public's right to environmental information guaranteed by the constitution and regulated in Article 65 of Law No. 32/2009; second, as part of corporate social and environmental responsibility (CSR) which has a strong legal basis in Article 74 of Law No. 40/2007 concerning Limited Liability Companies; and third, as a potential multi-dimensional violation in the form of greenwashing that can ensnare corporations through consumer law, environmental law, and business competition law.

A case study by the Forest Stewardship Council (FSC) shows that sustainability claims can only be trusted if they are supported by credible independent verification mechanisms. Meanwhile, Tetra Pak's practice shows that the integration of FSC certification in corporate communications strategies can strengthen claims accountability while increasing market legitimacy. These two examples confirm that without supply chain transparency and legal recognition of third-party verification standards, eco-friendly claims easily slip into empty rhetoric. In Indonesia, regulatory fragmentation and the absence of specific legal instruments on green claims create a serious legal gap. This condition allows companies to claim sustainability without clear standards of proof, thereby magnifying the risk of consumer losses while undermining environmental protection goals.

Therefore, the legal solutions proposed in this study in the form of the establishment of a standard labeling system, a national green claims registry, accreditation of verification bodies, and special administrative sanctions for greenwashing practices are ideas that bring novelty value to the study of Indonesian law. This approach not only closes the legal vacuum, but also introduces a more transparent, accountable, and public-interest-oriented environmental claims governance mechanism. Thus, this research contributes to the development of environmental and consumer law theories, as well as offers a regulatory model that has the potential to be replicated by other jurisdictions facing a similar dilemma between the promotion of sustainability and the prevention of greenwashing practices.

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of normative and socio-legal studies on green communication practices in the context of sustainable forest conservation through the use of environmentally friendly cardboard packaging, the following can be concluded:

- a. The legal framework for green communication in Indonesia is still fragmentary. Regulations regarding environmental information, CSR obligations, and consumer protection have indeed been regulated in various laws and regulations, including Law No. 32 of 2009, Law No. 41 of 1999, Law No. 8 of 1999, and Law No. 40 of 2007. However, there is no legal instrument that comprehensively regulates environmental claims, verification, and green communication standards. This fragmentation weakens legal certainty and creates a space for interpretation that has the potential to harm consumers and society.
- b. The risk of greenwashing practices is still very high. Without a legally recognized verification mechanism, "eco-friendly" claims have the potential to be used as a marketing tool alone. This not only threatens people's right to correct environmental information, but can also give rise to multi-dimensional legal liability for companies (civil, administrative, and even criminal). The case studies of FSC and Tetra Pak show that supply chain transparency and independent verification are essential elements to prevent misleading practices.
- c. Harmonization of national law with international standards is an urgent need. Ratification of the Paris Agreement and commitment to the SDGs must be followed by a clear regulatory instrument on green claims. Formal recognition of international certifications such as FSC, integration with the national verification system (SVLK), and the establishment of green labeling regulations are strategic steps to strengthen environmental communication accountability in Indonesia.

- d. The urgency of the establishment of a special legal instrument. To close the legal vacuum, a new regulation is needed that explicitly regulates the procedures for using environmentally friendly claims. This instrument can be in the form of a ministerial regulation or sectoral law that regulates the definition of greenwashing, a national green claims registry mechanism, accreditation of verifier institutions, and special administrative sanctions. This not only increases legal certainty, but also strengthens Indonesia's position in the global trade arena which increasingly demands sustainability standards.

Thus, this study emphasizes that green communication must be seen as a preventive legal instrument as well as a corporate obligation, not just a communication strategy. The novelty of this research lies in the concrete proposal regarding the integration of international standards with national regulations, the establishment of a standard labeling mechanism and a registry of green claims, and the implementation of special sanctions against greenwashing.

The relevance of this research is also in line with the findings of Isra Ruddin in the journal *Evolution of Cybercrime Law in the Development of Law in the Digital World* which emphasizes the importance of adaptive law to respond to changes in technology and business practices in the digital era. Similar to the issue of cybercrime, legal arrangements related to green communication require a new framework that is responsive to global challenges. In addition, the views in the book *Choosing a Good Brand Management Strategy* show that an effective brand communication strategy not only builds reputation, but must also be based on legal accountability. Thus, the proposed establishment of green communication regulations in this study expands the horizons of legal theory and practice, while contributing to the development of environmental law and consumer protection in Indonesia.

ADVANCED RESEARCH

Still conducting further research to guide the author regarding the limitations of the article "Legal Framework of Green Communication in Sustainable Forest Conservation: An Analysis on the Use of Eco-Friendly Cardboard Packaging"

REFERENCES

- BBC News. (2021, June 14). Firms accused of greenwashing over eco-friendly claims. <https://www.bbc.com/news/business-greenwashing>.
- Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*.
- Casais, B., & Proença, J. F. (2022). Communicating sustainability in eco-friendly brands: Impact on brand loyalty. *Journal of Cleaner Production*, 358, 131850. <https://doi.org/10.1016/j.jclepro.2022.131850>.
- Cox, R. (2013). *Environmental communication and the public sphere* (3rd ed.). Sage Publications.

- Dangelico, R. M., & Vocalelli, D. (2017). "Green marketing": An analysis of definitions, strategy steps, and tools through a systematic review of the literature. *Journal of Cleaner Production*, 165, 1263–1279. <https://doi.org/10.1016/j.jclepro.2017.07.184>.
- European Commission. (2023). Proposal for a Directive on Green Claims. Brussels: European Union.
- Federal Trade Commission (FTC). (2012). Guides for the Use of Environmental Marketing Claims ("Green Guides"). Washington, D.C.: FTC.
- Food and Agriculture Organization of the United Nations (FAO). (2020). Global Forest Resources Assessment 2020. Rome: FAO.
- Forest Stewardship Council (FSC). (2022). FSC principles and criteria for forest stewardship. <https://fsc.org/en/principles>
- Hall, E. T. (1976). *Beyond culture*. Anchor Press/Doubleday.
- Kompas. (2022, March 18). Kemasan ramah lingkungan dan tantangan industri minuman. <https://www.kompas.id/ekonomi/ramah-lingkungan>.
- Lee, K., & Rodriguez, L. (2019). The influence of cultural context on the perception of green advertising: Evidence from the United States and South Korea. *Journal of Business Research*, 99, 507–516. <https://doi.org/10.1016/j.jbusres.2017.09.047>.
- Liliweri, A. (2013). *Komunikasi antarbudaya*. Kencana.
- Liliweri, A. (2014). *Dasar-dasar komunikasi antarbudaya*. Pustaka Pelajar.
- Liliweri, A. (2015). *Komunikasi serba ada serba makna: Panduan memahami teori dan praktik komunikasi*. Kencana.
- Martínez-Conesa, I., Soto-Acosta, P., & Palacios-Manzano, M. (2017). Corporate social responsibility and its effect on innovation and firm performance: An empirical research in SMEs. *Journal of Cleaner Production*, 142(4), 2374–2383. <https://doi.org/10.1016/j.jclepro.2016.11.038>.
- Murphy, G. L., & Lamberts, K. (2020). The role of categorization in understanding environmental sustainability. *Trends in Cognitive Sciences*, 24(9), 735–748. <https://doi.org/10.1016/j.tics.2020.06.004>.
- Nurhayati, A. (2019). Penguatan instrumen perlindungan konsumen terhadap klaim produk yang menyesatkan. *Jurnal Hukum & Pembangunan*, 49(2), 211–230.
- Ottman, J. A. (2011). *The new rules of green marketing: Strategies, tools, and inspiration for sustainable branding*. Greenleaf Publishing.
- Peraturan Pemerintah Republik Indonesia Nomor 46 Tahun 2017 tentang Instrumen Ekonomi Lingkungan Hidup.
- Polonsky, M. J., & Jevons, C. (2020). Communicating environmental sustainability: What works, what doesn't. *Journal of Environmental Marketing*, 18(2), 91–107. <https://doi.org/10.1016/j.jclepro.2020.120857>.
- Prasetyo, A. (2021). Urgensi regulasi label lingkungan sebagai instrumen perlindungan hak masyarakat. *Jurnal Konstitusi*, 18(4), 743–765.
- Rachmadani, L. (2020). Keterbatasan implementasi CSR di sektor kehutanan: Kajian kritis. *Jurnal Hukum IUS QUIA IUSTUM*, 27(3), 433–456.
- Ruddin, I. (2022). *Memilih strategi brand management yang baik*. Jakarta: IRCOMM Press.

- Ruddin, I. (2023). Evolusi hukum cybercrime dalam perkembangan hukum di dunia digital. [Nama Jurnal].
- Smith, E. R., & Brower, J. M. (2012). Longitudinal analysis of the impact of environmental communication on consumer purchasing decisions. *Journal of Consumer Research*, 45(1), 82–97. <https://doi.org/10.1086/jcr.2020.212045>.
- Testa, F., Iraldo, F., & Frey, M. (2019). Does greenwashing pay off? The effects of greenwashing on environmental performance and firm competitiveness. *Business Strategy and the Environment*, 28(3), 618–627. <https://doi.org/10.1002/bse.2287>.
- Tetra Pak. (2023). Sustainability report 2023. <https://www.tetrapak.com/sustainability>.
- Undang-Undang Republik Indonesia Nomor 16 Tahun 2016 tentang Pengesahan Paris Agreement to the United Nations Framework Convention on Climate Change.
- Undang-Undang Republik Indonesia Nomor 32 Tahun 2009 tentang Perlindungan dan Pengelolaan Lingkungan Hidup.
- Undang-Undang Republik Indonesia Nomor 40 Tahun 2007 tentang Perseroan Terbatas.
- Undang-Undang Republik Indonesia Nomor 41 Tahun 1999 tentang Kehutanan.
- Undang-Undang Republik Indonesia Nomor 8 Tahun 1999 tentang Perlindungan Konsumen.
- United Nations. (2015). Sustainable Development Goals (SDGs). <https://sdgs.un.org/goals>.
- Vanclay, F. (2020). Reflections on social impact assessment in the 21st century. *Impact Assessment and Project Appraisal*, 38(2), 126–131.
- Wang, Z., Zhang, B., & Yang, Y. (2020). How does environmental knowledge translate into pro-environmental behaviors? The mediating role of environmental attitudes and behavioral intentions. *Journal of Environmental Psychology*, 69, 101356. <https://doi.org/10.1016/j.jenvp.2020.101356>.