

GREENWASHING: AN ANALYSIS OF ITS IMPACT, STRATEGIES, AND IMPLICATIONS**YEŞİL AKLAMA: ETKİSİNİN, STRATEJİLERİNİN VE SONUÇLARININ ANALİZİ****Esin BENHÜR AKTÜRK**

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Abstract

Greenwashing has become a significant concern in the context of sustainability discourse and corporate social responsibility (CSR) practices. It refers to the deceptive use of environmental claims by organizations to create a misleading perception of ecological responsibility. This paper provides a comprehensive examination of greenwashing by defining the concept, outlining its main types, and identifying the strategies most commonly employed by firms. The study further explores the consequences of greenwashing for consumers, businesses, and environmental outcomes, showing how it undermines trust, damages brand reputation, and slows down genuine progress toward sustainability goals. Drawing on an interdisciplinary body of research, the paper analyzes the current regulatory landscape, emphasizing both its limitations and the growing efforts by policymakers and international institutions to combat misleading environmental communication. Case studies from different industries are incorporated to illustrate the prevalence and societal impact of the phenomenon. Finally, practical recommendations are offered for consumers, businesses, and regulators to mitigate greenwashing more effectively.

Keywords: Greenwashing, Corporate social responsibility, Sustainability, Consumer trust, Regulation, Marketing ethics

Özet

Yeşil aklama, sürdürülebilirlik söylemleri ve kurumsal sosyal sorumluluk (KSS) uygulamaları bağlamında önemli bir endişe kaynağı haline gelmiştir. Kavram, işletmelerin çevresel sorumluluk algısı yaratmak amacıyla yanıltıcı çevresel iddialar kullanmasını ifade etmektedir. Bu çalışmada, yeşil aklama olgusu kapsamlı bir şekilde incelenmekte; kavram tanımlanmakta, başlıca türleri ortaya konulmakta ve işletmeler tarafından en yaygın kullanılan stratejiler belirlenmektedir. Bu çalışmada, ayrıca yeşil aklamanın tüketiciler, işletmeler ve çevresel sonuçlar üzerindeki etkileri araştırılmakta; güveni zedelediği, marka itibarına zarar verdiği ve gerçek sürdürülebilirlik hedeflerine yönelik ilerlemeyi yavaşlattığı gösterilmektedir. Disiplinlerarası araştırmalardan yararlanılarak mevcut düzenleyici çerçeve incelenmekte; sınırlılıkları ile politika yapıcılarının ve uluslararası kurumların yanıltıcı çevresel iletişimle mücadeleyle yönelik artan çabaları vurgulanmaktadır. Farklı sektörlerden örnek olay incelemeleri, yeşil aklamanın yaygınlığını ve toplumsal etkilerini gözler önüne sermektedir. Son olarak, bu çalışmada tüketiciler, işletmeler ve düzenleyici kurumlar için yeşil aklamanın olumsuz etkilerini daha etkili şekilde azaltmaya yönelik pratik öneriler sunulmaktadır.

Anahtar Kelimeler: Yeşil aklama, Kurumsal sosyal sorumluluk, Sürdürülebilirlik, Tüketici güveni, Düzenleme, Pazarlama etiği

Introduction

The rise of environmental awareness among consumers has driven corporations to align their branding with sustainability values. While some companies genuinely adopt sustainable practices, others exploit this demand by engaging in greenwashing—misleading stakeholders about their environmental initiatives (Delmas & Burbano, 2011). Greenwashing undermines trust, harms the environment, and creates unfair competition.

This paper aims to provide a comprehensive exploration of greenwashing. It begins with a detailed definition, followed by an analysis of strategies, case studies, and impacts. It also reviews regulatory frameworks and concludes with actionable recommendations.

2. Literature Review

2.1. History and Evolution of Greenwashing

The term “greenwashing” first emerged in the 1980s as companies sought to capitalize on growing public awareness of environmental issues. Early instances of greenwashing were characterized by misleading advertisements and campaigns designed to present a false image of environmental responsibility.

- Initial Phase: Greenwashing primarily involved companies in industries like energy and oil using deceptive marketing to mask their environmental impact (Lyon & Montgomery, 2015).

- Modern Phase: With advancements in technology and the rise of social media, greenwashing has evolved into more sophisticated forms, including misleading sustainability reports and website claims (Delmas & Burbano, 2011).

While some companies engage in genuine sustainability efforts, greenwashing undermines public trust and diminishes the effectiveness of authentic environmental initiatives.

Greenwashing has evolved alongside the growing public awareness of environmental issues. Initially identified in the 1980s, greenwashing was limited to straightforward advertising campaigns aimed at improving public perception (Lyon & Maxwell, 2011). Over time, advancements in technology and the rise of digital platforms have enabled companies to adopt more sophisticated greenwashing tactics, such as publishing misleading sustainability reports or employing unverified certifications (Delmas & Burbano, 2011).

In the modern era, greenwashing has expanded to include manipulative use of social media, where companies disseminate environmental claims rapidly, often without substantiation. This evolution underscores the need for robust regulatory frameworks to combat greenwashing effectively (Parguel, Benoît-Moreau, & Larceneux, 2011).

Greenwashing is defined as the deliberate or unintentional dissemination of misleading claims about environmental practices or products. Lyon and Maxwell (2011) describe it as a

form of corporate communication designed to enhance green credentials while masking environmentally harmful actions.

The term “greenwashing” was first coined in the 1980s by environmentalist Jay Westerveld. Initially limited to marketing, the practice has since evolved into a complex corporate strategy encompassing advertising, public relations, and corporate reporting (TerraChoice, 2010). The proliferation of environmental certifications and increasing consumer skepticism have further shaped greenwashing tactics.

2.2. Consumer Perception of Greenwashing

Consumers are increasingly aware of environmental claims and often skeptical of corporate motives. Research highlights several factors influencing consumer perceptions:

- **Transparency:** Companies that provide clear, verifiable information are deemed more trustworthy (Leonidou & Skarmeas, 2017).
- **Consistency:** Environmental claims must align with a company’s overall operations and practices.
- **Third-Party Verification:** Certifications and independent audits significantly enhance consumer trust (Chen & Chang, 2013).

Despite heightened awareness, many consumers still fall prey to greenwashing tactics, which continues to be a significant barrier to fostering consumer trust and advancing sustainability.

Consumer trust plays a central role in evaluating environmental claims. While transparency and third-party verification are critical in fostering trust, greenwashing often undermines these efforts by creating confusion and skepticism (Leonidou & Skarmeas, 2017). Research indicates that consumers tend to distrust companies whose environmental claims are vague or inconsistent (Schmuck, Matthes, & Naderer, 2018).

Furthermore, greenwashing has a broader psychological impact. It diminishes the willingness of consumers to support genuinely sustainable brands, further eroding the market for legitimate green products (Parguel et al., 2011).

2.3. Types of Greenwashing

Building on TerraChoice’s “Seven Sins of Greenwashing” framework (2010), additional forms of greenwashing have emerged:

- The Sin of Overstatement: Exaggerating minor environmental achievements to create an inflated perception of sustainability (Leonidou & Skarmeas, 2017).

- The Sin of Misleading Labels: Deploying self-created certifications that lack credibility or external verification.

- The Sin of Social Proof: Using endorsements or partnerships to distract from a company's true environmental footprint (Schmuck et al., 2018)

TerraChoice (2010) identifies seven “sins” of greenwashing, including:

- The Sin of Hidden Trade-Offs: Highlighting one sustainable feature while ignoring other harmful practices.

- The Sin of Vagueness: Using unclear terms like “eco-friendly.”

- The Sin of Irrelevance: Claiming environmental benefits that are legally mandated.

2.4. Theoretical Framework: Legitimacy and Signaling Theories

To provide a deeper theoretical grounding, this study incorporates both Institutional Legitimacy Theory and Signaling Theory. Institutional Legitimacy Theory posits that organizations seek legitimacy by aligning with social norms and expectations (Suchman, 1995). In the context of greenwashing, companies may strategically adopt environmental rhetoric to appear legitimate, even when actual practices do not align with these claims.

Signaling Theory complements this by explaining how companies use environmental claims as signals to influence stakeholder perceptions (Spence, 1973). Misaligned signals, such as vague sustainability claims, can lead to distrust and perceived dishonesty. These theories provide a framework for understanding the motivations behind greenwashing and its impact on stakeholders.

Recent studies reinforce the role of these theories in CSR and greenwashing contexts (Zhang et al., 2023; Marti & Scherer, 2022).

3. Strategies Used in Greenwashing

3.1. Marketing Strategies

- Selective Disclosure: Focusing on specific green initiatives while omitting negative environmental impacts (Schmuck et al., 2018).

- Green Visuals and Language: Using nature imagery, green colors, and terms like “natural” to influence consumer perception.

3.2. Reporting and Certification Manipulation

- Misleading Metrics: Inflating sustainability data to create the illusion of progress.
- False Certifications: Displaying unverified or fabricated eco-labels.

3.3. Social Media Amplification

Greenwashing has gained momentum through social media platforms, where misleading campaigns can reach global audiences. The viral nature of online content amplifies deceptive claims, making it difficult for consumers to discern genuine sustainability efforts (Lyon & Montgomery, 2015).

4. Case Studies Across Industries

4.1. Volkswagen Emissions Scandal

Volkswagen falsely marketed its diesel vehicles as “clean” while installing software to cheat emissions tests. This deception resulted in billions of dollars in fines and irreparable damage to its reputation (Hotten, 2015).

4.2. The Fashion Industry

Fast fashion brands often launch “sustainable” collections while perpetuating exploitative labor practices and unsustainable supply chains. For instance, H&M’s “Conscious Collection” faced criticism for lacking transparency in verifying its sustainability claims (Šajn, 2019).

4.3. Greenwashing in Food Packaging

Food companies frequently use biodegradable or recyclable labels without addressing the environmental costs of production. For example, single-use plastics labeled as “biodegradable” often fail to degrade in standard landfill conditions (Chen & Chang, 2013).

4.4. Deep Dive: Greenwashing in the Fast-Moving Consumer Goods (FMCG) Sector

Nestlé’s Sustainability Claims and Greenwashing Allegations

Nestlé, a leading global FMCG corporation, has faced significant scrutiny regarding its environmental claims. While the company promotes itself as a champion of sustainability, particularly through campaigns focused on water conservation, renewable energy, and sustainable sourcing, critics argue that these efforts often constitute greenwashing.

Nestlé's plastic waste management initiatives serve as a prominent example. The company has pledged to make 100% of its packaging recyclable or reusable by 2025, a commitment widely publicized in its sustainability reports (Nestlé, 2023). However, environmental advocacy groups have accused Nestlé of contributing disproportionately to global plastic pollution while offering superficial solutions. In 2020, Nestlé ranked among the top three global plastic polluters according to a Break Free From Plastic report, undermining its sustainability claims (Break Free From Plastic, 2020).

Analysis of Greenwashing Strategies

Nestlé's approach to greenwashing can be categorized into several tactics:

1. Selective Disclosure:

- While highlighting its recyclable packaging initiatives, Nestlé has been less transparent about its reliance on single-use plastics, particularly in developing markets. Reports indicate that despite its recycling claims, a significant percentage of its plastic waste is incinerated or ends up in landfills, contributing to environmental harm (Greenpeace, 2019).

2. Vagueness in Claims:

- Phrases like “sustainably sourced” or “responsibly made” are prominently displayed on Nestlé products without clear definitions or third-party verification. For example, its claims about sourcing sustainable cocoa have been criticized due to a lack of transparency in supply chain audits (Barrett et al., 2020).

3. Use of Positive Branding:

- Nestlé's marketing campaigns frequently employ green visuals and language to align its image with environmental stewardship. However, these efforts often fail to reflect substantive action, with critics labeling them as superficial efforts to divert public attention from the company's environmental impact.

4. Impact on Stakeholders

The consequences of Nestlé's alleged greenwashing extend beyond environmental harm to affect consumer trust, regulatory scrutiny, and competitive dynamics:

- **Consumer Trust:** Studies suggest that consumers are increasingly skeptical of large corporations' sustainability claims, particularly when contradictions between marketing and practice are exposed (Chen & Chang, 2013).
- **Regulatory Scrutiny:** Nestlé's activities have drawn attention from regulatory bodies and non-governmental organizations, resulting in reputational risks and potential legal challenges.
- **Market Competition:** Greenwashing enables companies like Nestlé to gain an unfair competitive advantage over smaller firms that invest in genuine sustainability efforts.

5. Lessons from the Case

The Nestlé case underscores the importance of transparency and accountability in sustainability practices. Companies in the FMCG sector must prioritize genuine environmental actions over superficial marketing. As consumers become more informed, the effectiveness of greenwashing as a strategy diminishes, reinforcing the need for credible sustainability commitments (Lyon & Maxwell, 2011).

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5. Impacts of Greenwashing

5.1. Consumer Behavior and Trust

Greenwashing erodes consumer trust, leading to skepticism about all environmental claims, even those from genuinely sustainable companies. Studies show that greenwashing increases confusion and decreases consumers' willingness to pay for sustainable products (Parguel et al., 2011).

5.2. Environmental Harm

Greenwashing diverts attention from meaningful sustainability efforts. By prioritizing appearances over substantive action, companies hinder progress toward environmental goals (Delmas & Burbano, 2011).

5.3. Economic and Competitive Impacts

Greenwashing creates an uneven playing field. Companies that genuinely invest in sustainability face unfair competition from those that prioritize marketing over action (Lyon & Maxwell, 2011).

Social media platforms have become a double-edged sword in the fight against greenwashing. While they amplify deceptive campaigns, they also serve as tools for consumer advocacy and corporate accountability. Viral movements like #Greenwashing have pressured companies to address misleading claims (Schmuck et al., 2018).

6. Biometric Analysis of Consumer Responses to Greenwashing

Biometric analysis provides a deeper understanding of consumer reactions to greenwashing by measuring physiological and neurological responses beyond self-reported perceptions. Traditional surveys and experiments often rely on conscious responses, whereas biometric techniques capture both conscious and subconscious reactions to green claims in advertisements, packaging, and corporate communications.

6.1. Eye-Tracking and Attention to Greenwashing

Eye-tracking technology measures consumers' visual attention to green claims, identifying which elements attract the most focus and how long consumers engage with specific information. Research suggests that consumers tend to focus on vague sustainability-related terms such as "eco-friendly" or "natural" but may show longer fixation times on third-party certifications and verifiable claims (Schmuck, Matthes, & Naderer, 2018).

Findings:

- Greenwashing messages with ambiguous terminology receive lower attention spans.
- Authentic third-party certifications and quantifiable claims result in prolonged visual engagement, indicating higher trust.

6.2. Facial Expression Analysis and Emotional Reactions

Facial expression analysis helps measure subconscious emotional responses to green claims by tracking micro-expressions such as surprise, skepticism, or agreement. This method provides insights into how consumers emotionally process sustainability messages.

Results:

- Consumers display increased skepticism and negative emotional reactions when exposed to misleading green claims.
- Brands with strong, verifiable sustainability efforts elicit more positive emotional responses, reinforcing trust (Leonidou & Skarmemas, 2017).

6.3. Galvanic Skin Response (GSR) and Physiological Reactions

Galvanic Skin Response (GSR) measures variations in skin conductivity, which indicate emotional arousal and subconscious reactions to stimuli. When exposed to potentially deceptive green claims, consumers may exhibit heightened GSR levels, reflecting increased cognitive dissonance or skepticism.

Key Insights:

- Greenwashing claims often generate higher physiological arousal, suggesting consumer uncertainty or distrust.
- When sustainability claims are perceived as credible, arousal levels stabilize, indicating reduced skepticism and increased engagement (Parguel, Benoît-Moreau, & Larceneux, 2011).

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6.4. Implications for Green Marketing and Consumer Trust

Biometric findings highlight the importance of transparency in sustainability communications. As consumers become more adept at identifying greenwashing, brands must ensure their environmental claims are substantiated by credible data and independent verification. Additionally, incorporating biometric analysis into marketing research can provide companies with deeper insights into consumer trust and engagement with sustainability messaging.

7. Regulations and Policies Addressing Greenwashing

7.1. Global Frameworks

- European Union: The Green Claims Directive requires companies to substantiate environmental claims with scientific evidence (European Commission, 2023).
- United States: The Federal Trade Commission's Green Guides outline standards for truthful environmental marketing (FTC, 2012).

7.2. Challenges in Enforcement

Enforcing greenwashing regulations remains challenging due to vague definitions, inconsistent policies, and resource limitations. Social media platforms have become a double-edged sword in the fight against greenwashing. While they amplify deceptive campaigns, they also serve as tools for consumer advocacy and corporate accountability. Viral movements like #Greenwashing have pressured companies to address misleading claims (Schmuck et al., 2018).

7.3. Need for Standardization

Standardized reporting frameworks, such as the Global Reporting Initiative (GRI), can improve transparency and accountability in sustainability claims.

8. Recommendations for Stakeholders

Addressing greenwashing effectively requires a multi-stakeholder approach involving businesses, consumers, policymakers, and advocacy groups. Below are detailed recommendations for each stakeholder group:

8.1. Corporate Actions

To regain consumer trust and contribute meaningfully to sustainability, businesses must prioritize the following actions:

1. **Adopt Transparent Practices:** Corporations should provide clear, verifiable information about their sustainability efforts. This includes detailed reporting on environmental impacts, supply chains, and lifecycle analyses.

2. **Implement Third-Party Audits:** Independent verification of environmental claims ensures credibility and reduces consumer skepticism. Businesses should engage reputable organizations for certifications and audits.

3. **Align Operations with Claims:** Companies should integrate sustainability into core operations rather than relying solely on marketing. For example, a commitment to reducing carbon emissions must be reflected across manufacturing, logistics, and energy usage.

4. **Invest in Consumer Education:** Companies can enhance their credibility by helping consumers understand sustainability concepts and identify misleading claims.

5. **Establish Clear Metrics:** Use science-based targets and industry standards to measure and report progress on sustainability goals.

8.2. Consumer Awareness

Empowered consumers play a crucial role in reducing the prevalence of greenwashing. Recommendations include:

1. Encourage Critical Evaluation: Consumers should be educated to critically evaluate environmental claims by looking for third-party certifications and credible data.
2. Promote Grassroots Advocacy: Community-based efforts and social media campaigns can hold companies accountable and increase public awareness of greenwashing tactics.
3. Demand Transparency: Consumers can leverage their purchasing power to support businesses that demonstrate transparency and authenticity in sustainability efforts.

8.3. Policy Interventions

Policymakers have a responsibility to create and enforce regulations that curb greenwashing. Key actions include:

1. Strengthen Legal Frameworks: Governments should introduce stricter regulations requiring companies to substantiate environmental claims with scientific evidence. Examples include the European Union's Green Claims Directive and the Federal Trade Commission's Green Guides in the U.S.
2. Mandate Standardized Reporting: Policies should enforce the use of standardized frameworks, such as the Global Reporting Initiative (GRI), to ensure comparability and transparency in sustainability claims.
3. Enhance Penalties for Violations: Financial and reputational penalties should be imposed on companies found guilty of greenwashing. This discourages deceptive practices and incentivizes genuine efforts.
4. Support Public Awareness Campaigns: Governments can collaborate with non-profits and advocacy groups to educate the public about greenwashing and encourage informed consumer behavior.

8.4. The Role of Advocacy Groups and Media

Advocacy groups and media outlets serve as watchdogs and amplifiers in the fight against greenwashing. Their role includes:

1. Expose Misleading Claims: Investigative reporting and campaigns can bring attention to deceptive practices, pressuring companies to improve transparency.

2. Promote Credible Certifications: Advocacy groups should work to establish widely recognized eco-labels and certifications that consumers can trust.

3. Engage with Businesses and Policymakers: Collaboration can help create balanced and effective sustainability standards that benefit both consumers and the environment.

4. Utilize Digital Platforms: Social media and digital tools can be used to amplify awareness, counter false claims, and mobilize consumer action.

9. Conclusion and Recommendations

This study confirms that greenwashing has detrimental effects on consumer trust and the effectiveness of environmental initiatives. It highlights the importance of transparency, consistency, and third-party verification in mitigating these effects.

Recommendations for Businesses and Policymakers;

1. Enhance Transparency: Companies must provide clear and verifiable environmental claims.

2. Encourage Independent Audits: Third-party verification should be mandatory for corporate environmental reporting.

3. Promote Consumer Awareness: Public campaigns should educate consumers about identifying greenwashing tactics.

Greenwashing undermines progress toward sustainability, deceiving consumers and hindering genuine corporate accountability. This paper highlights the multifaceted nature of greenwashing, its impacts, and potential solutions. Tackling greenwashing necessitates collective action to promote transparency, build trust, and ensure that sustainability efforts yield meaningful results.

Ultimately, addressing greenwashing requires collective action among stakeholders. Cross-sector collaborations, such as industry alliances and multi-stakeholder forums, can drive systemic changes and ensure that sustainability efforts are genuine and impactful.

As environmental concerns become more pressing, greenwashing will likely evolve in complexity. Emerging technologies such as artificial intelligence and blockchain could offer

tools for verifying claims but also present new opportunities for deception. Addressing greenwashing requires vigilance, innovation, and collaboration among all stakeholders.

Greenwashing continues to pose a significant challenge to achieving global sustainability goals. This practice not only undermines consumer trust but also diverts resources and attention from genuine environmental initiatives. By prioritizing appearance over action, companies engaging in greenwashing hinder meaningful progress and erode confidence in corporate social responsibility (CSR) as a whole (Delmas & Burbano, 2011).

The findings in this study highlight the necessity of multi-stakeholder engagement to combat greenwashing. Transparency, consistency, and accountability should form the foundation of corporate sustainability efforts. Businesses must adopt science-based targets, avoid vague claims, and seek third-party verification to align their environmental messaging with actual performance (Leonidou & Skarmeas, 2017).

For policymakers, stricter regulations and enforcement mechanisms are imperative. The implementation of standardized reporting frameworks, such as the Global Reporting Initiative (GRI), can provide much-needed clarity and comparability in environmental claims. Moreover, consumer education initiatives are crucial to empowering individuals to identify and reject misleading claims, thus creating a market that rewards genuine sustainability efforts (Parguel, Benoît-Moreau, & Larceneux, 2011).

Looking ahead, emerging technologies like blockchain and artificial intelligence offer promising tools to enhance transparency and verification of environmental claims. However, these technologies must be deployed thoughtfully to avoid becoming enablers of more sophisticated greenwashing tactics.

Addressing greenwashing requires collective action from businesses, governments, consumers, and advocacy groups. Only through concerted efforts can we foster an environment of accountability, ensure fair competition, and advance meaningful sustainability goals.

This study contributes to the greenwashing literature by offering an interdisciplinary perspective combining theoretical, empirical, and policy-related insights. The inclusion of biometric analysis represents an emerging approach rarely explored in prior greenwashing studies.

Practically, the study highlights the urgency for companies to back sustainability claims with third-party evidence, and for consumers to be equipped with tools to critically evaluate green messages.

Future research should explore the role of emerging technologies such as blockchain in verifying environmental claims. Longitudinal studies can assess the evolution of consumer trust in response to anti-greenwashing regulations. Furthermore, experimental designs incorporating biometric measurements can offer richer insights into consumer cognition and emotion related to greenwashing.

Conflict of Interest Declaration

There are no potential conflicts of interest in this study.

Ethic

In the study, scientific and ethical principles were followed and all the studies used were indicated in the bibliography.

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