

UNMASKING GREENWASHING: THE QUEST FOR AUTHENTIC
ECO-CREDIBILITY IN THE CONSUMER-PACKAGED GOODS
INDUSTRY

by

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In a time when environmental awareness is on the rise, consumers are more likely to look for goods and companies that not only satisfy their need for sustainability but also live up to their rising standards for environmental friendliness. However, with this upsurge in sustainability-focused marketing initiatives, a worrying problem has emerged: the prevalence of false sustainability claims, known as "greenwashing." This thesis aims to inform consumers about greenwashing tactics, shedding light on their effects, and examining the strategies employed by companies to deceive consumers into perceiving their products or services as more environmentally friendly than they are. Through a comprehensive investigation, this study seeks to contribute to a better understanding of the challenges posed by greenwashing and the potential solutions that can safeguard consumer trust and genuine sustainability efforts within the CPG industry.

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Table of Contents

Research Question	5
History of Greenwashing and Current Values	5
Firm vs Product Level	6
The Four Primary Types	7
Lesser of Two Evils: Fiji Water	11
Why Do Businesses Greenwash?	13
The Concept of Sustainability	15
Sustainability Frameworks & Reporting	15
Regulations and Claims	17
Comparing Regulations in Other Countries vs the US	19
Indication of a Viable Certification Label	20
How We Are Taken Advantage Of	22
Marketing Claims vs Food Labels	23
Halo Effect	24
Life Cycle Analysis and its Role in Sustainability	25
Global Concern and the CPG Industry's Role	25
Future Regulations for Greenwashing Around the World	26
The Future of Sustainability in the CPG Industry	27
Methods for Conducting Thesis	29
Appendix	30
Bibliography	33

Research Question

What are the key factors contributing to greenwashing in the CPG industry, and how do these factors manifest in marketing strategies and product labeling?

History of Greenwashing and Current Values

The term "greenwashing" was coined in the 1980s by environmentalist Jay Westerveld. It emerged as a critique of deceptive marketing practices that companies use to present themselves as environmentally friendly, even when their actual practices are harmful to the environment (Spunj, 2020). The concept gained attention after Westerveld's 1986 essay on the irony of a hotel's "save the towel" campaign, which was promoted as an eco-friendly initiative but primarily aimed at reducing laundry costs rather than genuinely protecting the environment (The Guardian). Since then, greenwashing has become a significant concern, as many companies have adopted superficial environmental claims to appeal to increasingly eco-conscious consumers while continuing to engage in unsustainable practices.

The historical significance of greenwashing played a pivotal role in shaping heightened consumer expectations for sustainable products today. As consumers increasingly value sustainability, they are more committed than ever to seeking products that align with their environmental values, indicating a burgeoning interest in eco-friendly goods. This shift is evidenced by a study conducted by Capgemini Research Institute in 2020, which found that a staggering 79% of consumers reported changing their purchase preferences based on the social and environmental impact of their purchases (Capgemini, 2020). This statistic underscores a fundamental shift in consumer behavior towards greater consciousness of sustainability and ethical consumption practices. Additionally, a 2020 McKinsey US consumer sentiment survey

revealed that more than 60 percent of respondents were willing to pay more for products with sustainable packaging (Am, 2023).

In response to the growing emphasis on sustainability, the marketplace has swiftly embraced these principles. The sustainable packaging market is projected to reach a value of US\$ 266.4 billion in 2024, highlighting a substantial shift toward sustainability initiatives (Sustainable, 2023). Major players in the Consumer-Packaged Goods (CPG) industry, such as Coca-Cola, General Mills, Proctor and Gamble, and PepsiCo, have made significant strides toward sustainability. However, greenwashing remains a prevalent issue in the CPG industry. This deceptive practice can take various forms, including misleading packaging that features eco-friendly imagery, exaggerated claims of recyclability, or the use of vague buzzwords like "green," "natural," and "eco-friendly" without substantial evidence to support them.

Firm vs Product Level

Greenwashing can occur at two distinct levels: the product level and the firm level. At the product level, greenwashing typically involves deceptive marketing tactics that mislead consumers about the environmental attributes of a specific product or service. This could include exaggerated claims about recyclability, eco-friendly materials, or environmental certifications that may not be substantiated. Consumers may be swayed by these misleading claims and make purchasing decisions based on false perceptions of a product's environmental impact. On the other hand, firm-level greenwashing pertains to misleading consumers about the overall environmental practices and commitments of a company or brand. This could involve overstating the company's sustainability initiatives, exaggerating the extent of their environmental efforts, or presenting a misleading image of their overall environmental impact. Firm-level greenwashing

can be more insidious as it can affect consumer perceptions of the entire brand, influencing purchasing decisions across a range of products.

Understanding the distinction between product and firm-level greenwashing is crucial for consumers because it enables them to make more informed choices. By scrutinizing both the individual products they purchase and the broader practices of the companies behind those products, consumers can ensure that their consumption aligns with their values and support genuinely sustainable businesses. Moreover, being aware of firm-level greenwashing allows consumers to hold companies accountable for their environmental claims and encourages greater transparency and authenticity in corporate sustainability efforts. Overall, being vigilant about greenwashing at both levels empowers consumers to make more responsible and ethical purchasing decisions, contributing to positive environmental outcomes.

The Four Primary Types

Greenwashing manifests in four primary types that are designed to mislead consumers. These categories are imagery, clickbait, red herring, and no receipts. Among them, imagery stands out as the most visually impactful, employing aesthetics to create an illusion of environmental friendliness. A classic instance of imagery is the Coca-Cola Life bottle and campaign created in 2014, where the green packaging and eco-conscious imagery divert attention from the company's contribution to plastic pollution. Coca-Cola, despite holding the disconcerting title of the world's second-largest plastic polluter for the fourth consecutive year, has positioned itself as a champion of environmental responsibility with the launch of Coca-Cola Life (Chalabi, 2019). Amidst claims of commitment to retrieving every bottle by 2030, the company faces a lawsuit in June 2021, organized by the Earth Island Institute for allegedly greenwashing its contribution to global plastic pollution (Earth, 2021). Coca-Cola Life,

introduced as a healthier, low-calorie alternative to traditional Coke, is marketed with a veneer of eco-friendliness. The drink, featuring a 60% reduction in calories and a shift to a mix of sugar and a stevia-based sweetener substitute, comes packaged in the award-winning “Plant bottle” —a bottle supposedly made with 30% plant material and fully recyclable (GreenBiz, 2021).

However, the green imagery associated with Coca-Cola Life, including its vibrant packaging adorned with leaf artwork, raises concerns of greenwashing. This strategic use of visual cues may mislead consumers into perceiving the product as a healthy and environmentally responsible choice, despite the underlying controversies surrounding Coca-Cola's environmental impact.

Transitioning from the deceptive imagery of Coca-Cola Life, another prevalent form of greenwashing is vagueness, also known to consumers as clickbait, where companies or individuals attempt to profit from customers through misleading claims. In the realm of greenwashing, clickbait involves labeling products with terms like 'organic,' 'all-natural', 'eco-friendly', 'recyclable,' 'biodegradable,' 'green', or 'certified,' creating a false impression of environmental responsibility. A case in point is the Keurig Green Mountain settlement, where Keurig faced a class-action lawsuit and agreed to pay \$10 million over its misleading claims about the recyclability of its coffee pods. Keurig in 2019 marketed its K-Cups as recyclable, providing instructions to consumers on separating components for proper disposal. However, consumers filed a lawsuit, arguing that most materials recycling facilities (MRFs) could not process the K-Cups, leading to their disposal or contamination of other recyclables. The court sided with the consumers, prompting Keurig to settle and add new language to its packaging, cautioning consumers about the limited recycling availability in many communities (Provenace, 2022). The Keurig case emphasizes the importance of understanding the recyclability of packaging in the communities where products are sold. While Keurig took a step toward

transparency in instructing consumers on proper disposal, it failed to address the processing challenges K-Cups posed in MRFs. This settlement underscores the significance of accurate and transparent information to avoid misleading consumers about the environmental impact of products.

Another example of clickbait is in 2017, Clorox found itself embroiled in a legal battle when consumers who purchased Green Works Products filed a lawsuit. The buyers had been led to believe that these cleaning products contained no synthetic ingredients, as marketed by Clorox. However, upon closer examination, it was revealed that the products contained boric acid, typically used as an insecticide, antiseptic, and flame retardant, as well as calcium chloride, a preservative commonly used for de-icing roads. Despite Clorox's claims that its products were "naturally derived" cleaning products, the vagueness of this term left consumers confused about the actual ingredients and their environmental impact. This ambiguity was further exacerbated by the endorsement of these products by the Sierra Club, leading consumers to trust in their supposed eco-friendliness. Clorox's marketing efforts aimed to bring natural products to the mainstream, resulting in impressive sales of \$100 million in the first year alone. However, the lawsuit shed light on the deceptive marketing tactics employed by Clorox, highlighting the dangers of vague claims and greenwashing in the consumer products industry.

Another insidious form of greenwashing is the red herring, a strategy that frustrates consumers by showcasing a small component of a product as eco-friendly while the main product remains environmentally destructive. This deceptive tactic allows companies to capitalize on the positive aspects of a product while diverting attention from its overall negative impact on the environment. An example of red herring in the greenwashing landscape is Burger King's attempt to address concerns about the environmental impact of its burgers in 2022. In this

case, Burger King introduced a diet for cattle featuring dried lemongrass to reduce methane emissions by up to 33% (Greenwash, 2022). While the use of lemongrass is presented as an eco-friendly solution, the broader context is critical. The fast-food giant, under pressure to address the climate impact of its beef production, focuses on the reduction of methane emissions without addressing the larger environmental concerns associated with cattle farming. The use of lemongrass becomes a red herring, diverting attention from the broader issues of the beef industry's contribution to greenhouse gas emissions. This tactic exemplifies how companies can use seemingly eco-friendly components to overshadow the true environmental impact of their products, contributing to the deceptive practice of greenwashing.

The last greenwashing type is called 'no receipts', akin to clickbait but characterized by unverifiable claims made by companies in their labels or advertising campaigns. This form of greenwashing occurs when companies assert environmentally friendly attributes without providing evidence or verification. Essentially, these companies make claims that cannot be backed up or proved, creating a fraudulent impression of environmental responsibility. A prominent example of 'no receipts' greenwashing is observed in the case of SC Johnson, a company with a history of environmental initiatives. The company faced a class-action lawsuit in 2015 filed by Wayne Koh of California, who alleged that SC Johnson's "Greenlist" logo on Windex misled him into believing the product was certified by an independent third party. (Lyon, 2015). The settlement of the lawsuit, for an undisclosed sum, revealed that the Greenlist logo did not clearly indicate an internal process rather than a third-party seal, creating the impression that the products were made with environmentally friendly ingredients. SC Johnson's use of the Greenlist certification, created in-house instead of being verified by a third party, prompted accusations of greenwashing.

Despite the settlement, the company defended the Greenlist process, which received a U.S. Presidential Green Chemistry Challenge Award. However, the lawsuits highlighted the need for clarity in how such certifications are portrayed on products, especially in light of proposed changes to guidelines from the U.S. Federal Trade Commission (Jonathan, 2011). The proposed changes suggest that falsely implying third-party endorsement or certification is deceptive. They also discourage the use of general environmental benefit claims, such as logos lacking specific qualifications about product attributes. Regardless of the legal outcomes, SC Johnson recognized the importance of transparency and consumer understanding, expressing a desire for consistent standards grounded in science to combat the prevailing confusion and distrust surrounding various green labels and certifications. In the face of these challenges, SC Johnson aims to move towards a more credible and scientifically based approach to communicate the environmental attributes of its products.

Lesser of Two Evils: Fiji Water

The "lesser of two evils" form of greenwashing occurs when a company makes true claims about certain environmentally friendly practices to distract from its overall negative environmental impact. This tactic involves emphasizing minor positive actions while ignoring larger, more significant environmental harms. Fiji Water is a prime example of this. The brand uses slogans like “bottled at the source, untouched by man” and “every drop is green” to highlight their environmentally friendly practices. However, these claims mask the significant carbon footprint associated with producing and distributing their bottled water. In July 2008, Fiji Water faced significant backlash from environmental protests highlighting the substantial carbon footprint of bottled water, particularly targeting the brand for its impact in the United States, United Kingdom, and other developed nations. In response, Fiji Water launched a promotional

campaign with the slogan “every drop is green,” which was swiftly criticized by environmental groups for engaging in greenwashing.

Fiji Water marketed itself as a unique and exotic product, aiming to capture international market opportunities as a premium brand. The company targeted health-conscious markets, such as the baby boomer generation in North America and Australia, leveraging their proximity to Fiji. Despite these strategic moves, Fiji Water struggled to penetrate the UK market, where the environmental impact of bottled water sparked significant debate. Critics pointed out that bottled water could be up to 1000 times more expensive than high-quality tap water available in the UK (BBC, 2018). Amidst the criticism, Fiji Water launched a “carbon negative” PR campaign, claiming to be the first bottled water company to disclose its carbon footprint. The company joined the Carbon Disclosure Project (CDP) and implemented measures to reduce carbon emissions, such as optimizing logistics, redesigning packaging, and using more fuel-efficient trucks. However, these efforts were perceived by some as insufficient and primarily aimed at mitigating public relations damage rather than achieving genuine environmental sustainability.

The company’s greenwashing practices came under legal scrutiny when a class-action lawsuit was filed by Desiree Worthington, who alleged that she paid a premium for Fiji Water based on its misleading “carbon-negative” claims (Mother Jones, 2011). Worthington argued that she believed the product was genuinely sustainable, but the company's use of forward crediting—projected future carbon offsets—failed to meet current environmental standards. This lawsuit exemplifies how greenwashing can backfire, leading to legal and reputational consequences for companies. Fiji Water’s situation underscores the importance of transparency and accountability in corporate environmental claims. Consumers, increasingly aware of greenwashing tactics, demand verifiable and immediate environmental actions rather than future

promises. Similar instances of greenwashing can lead to consumer distrust, legal challenges, and negative publicity, ultimately harming the brand's reputation and market position.

As consumers, it is crucial to critically evaluate environmental claims and seek out companies with a proven track record of sustainability. The Fiji Water case serves as a reminder that genuine environmental commitment requires substantial investment and transparency. By holding companies accountable and supporting those that demonstrate real sustainability efforts, consumers can drive positive change and discourage misleading greenwashing practices.

In the world of greenwashing, subtlety reigns as companies employ seemingly innocent tactics to create an illusion of environmental responsibility. From Coca-Cola's eco-friendly packaging to Keurig's green initiatives and SC Johnson's internal certifications, these examples showcase the art of subtle deception. Whether through imagery, clickbait, red herring, the absence of verifiable evidence, or the lesser of two evils, the line between genuine eco-friendliness and deceptive practices becomes increasingly blurred.

Why Do Businesses Greenwash?

Despite numerous examples of companies facing repercussions for greenwashing, the question arises: why do businesses continue to engage in this deceptive practice despite the potential for scandal and public backlash? Surprisingly, there are four main reasons driving companies to greenwash. These include strong incentives and market pressures to portray a green image, a lack of control over supply chains, inadequate expertise and resources within marketing departments, and an inherent optimism bias in evaluating their environmental impact (DNV, 2023). Understanding these motivations is crucial for consumers to navigate the marketplace and make informed decisions, shedding light on the complexities and challenges businesses face in their pursuit of sustainability goals.

Despite these difficulties, strong incentives and market pressures exist to portray a green image, prompting companies to engage in greenwashing to meet consumer expectations. Customers often struggle to discern between genuine sustainability efforts and deceptive marketing tactics, further complicating the situation (TerraChoice, 2010). Additionally, businesses frequently lack full control over every aspect of their supply chain. For instance, winemakers may not produce the bottles or grow all the grapes used in their wine, leading to unintentional or deliberate greenwashing (Garnett, 2011). This lack of control over certain components of production can contribute to greenwashing practices, as companies may not be fully aware of the environmental impact of all aspects of their products.

Moreover, marketers within companies may lack the expertise or resources to thoroughly research and verify the environmental claims of products. Internal inconsistencies and ineffective communication within companies may also contribute to disjointed sustainability efforts and, in some cases, resorting to greenwashing (Delmas & Burbano, 2011). This lack of coordination and understanding of environmental issues at the marketing level can lead to misleading claims being made to consumers.

Lastly, human nature's tendency towards optimism leads marketers to overestimate the positive impact of their actions and underestimate potential negative consequences, fostering a false sense of confidence in green marketing campaigns based on misleading or incomplete information (Nunes & Park, 2020). Understanding these motivations is essential for consumers to navigate the marketplace and make informed decisions, as it sheds light on the complexities and challenges faced by businesses in their pursuit of sustainability goals.

The Concept of Sustainability

However, despite the industry's efforts to embrace sustainability, a critical challenge arises from the absence of a universally agreed-upon definition for what constitutes a "sustainable" business. This lack of clarity, combined with the proliferation of products and services marketed as sustainable, has given rise to accusations of "greenwashing." In essence, this ambiguity exposes businesses to claims of misleading practices, as consumers struggle to distinguish genuine sustainability from mere marketing claims.

The concept of sustainability has gained paramount importance within the business world, driven by evolving consumer preferences that prioritize the sustainability of their purchases. This shift in consumer behavior has led businesses to promote a diverse array of products and services under the banner of "sustainability." These offerings range from eco-friendly packaging to commitments to reduce carbon footprints, conserve water resources, minimize paper consumption, and reduce waste generation (Ioannou, 2022). Nevertheless, the absence of a universally accepted definition for "sustainability" or a "sustainable business practice" complicates the assessment of a company's commitment to sustainability.

Sustainability Frameworks & Reporting

The current state of sustainability reporting presents a significant challenge due to the absence of standardization and limited access for consumers. Companies employ various reporting methods, but the lack of a standardized methodology allows them to selectively report or withhold information based on the framework they choose. This inconsistency makes it difficult for consumers to comprehend and access sustainability data effectively. Common reporting frameworks utilized by businesses to communicate with investors and consumers include Corporate Social Responsibility (CSR), Sustainability Accounting Standards Board

(SASB), Environmental, Social, and Governance (ESG), and Carbon Disclosure Project (CDP) (Novisto, 2023). However, without uniformity across these frameworks, the reliability and comparability of sustainability information remain elusive for consumers. Each framework has its distinct focus and methodology, but they all face challenges related to transparency and potential greenwashing.

CSR involves a company's self-regulation integrated into its business model, aiming to ensure compliance with ethical standards, social norms, and environmental laws (Investopedia). CSR reports often highlight a company's commitment to sustainable practices and community engagement. However, the voluntary nature of CSR allows companies to cherry-pick positive initiatives while omitting less favorable practices, potentially leading to greenwashing. This selective disclosure can create a misleadingly positive image that doesn't fully reflect the company's overall sustainability performance.

Similarly, SASB develops industry-specific standards to guide the disclosure of financially material sustainability information to investors (SASB, 2022). These standards are designed to enhance the comparability and reliability of sustainability data. While SASB aims to provide a more standardized and investor-focused reporting framework, companies can still engage in greenwashing by focusing on metrics that paint them in a favorable light or by manipulating the interpretation of SASB metrics to downplay negative aspects.

ESG criteria assess a company's impact on the environment, its social responsibility, and the quality of its governance. ESG reporting has gained traction among investors seeking to evaluate the long-term sustainability and ethical impact of their investments (Mintz, 2024). Despite its comprehensive approach, the lack of a unified reporting standard across ESG frameworks allows companies to selectively report ESG metrics, potentially leading to

greenwashing. Inconsistent definitions and methodologies across ESG frameworks can obscure true performance, making it challenging for consumers to accurately assess and compare companies.

The CDP focuses on companies' environmental impacts, specifically in areas like carbon emissions, water usage, and deforestation. By collecting and analyzing self-reported environmental data, CDP aims to drive transparency and accountability (CDP, 2021). However, the reliance on self-reported data can be a significant weakness, as companies might underreport negative impacts or overstate positive actions, thus engaging in greenwashing. Additionally, participation in CDP is voluntary, allowing companies with poor environmental records to opt out, skewing the overall picture of industry sustainability.

Despite their differences, all these frameworks share a common vulnerability to greenwashing due to the lack of standardization and the potential for selective reporting. This inconsistency makes it difficult for consumers to comprehend and access sustainability data effectively, undermining the reliability and comparability of the information provided.

Regulations and Claims

This growing emphasis on sustainability has led many companies across diverse sectors to recognize the benefits of promoting their environmental initiatives in advertisements, resulting in a proliferation of products making green claims. TerraChoice, an environmental marketing firm, released a report in 2007 that studied the environmental claims of 1,018 products sold in “big box” retailers in the United States and Canada (TerraChoice, 2007). The report concluded that all but one of the products made claims that were demonstrably false or risked misleading consumers. A follow-up study in 2009 found many more products that made environmental claims and that 98% of the 2,219 products making such claims committed at least one of the

“Seven Sins of Greenwashing” (TerraChoice, 2009). This marks a 79% increase over their initial report just two years earlier. However, this exponential growth is compounded by the fact that environmental advertising, particularly in the United States, is not tightly regulated. The Federal Trade Commission (FTC), is responsible for safeguarding the public from unsubstantiated or unscrupulous advertising, has established environmental marketing guidelines known as the Green Guides, published under Title 16 of the Code of Federal Regulations (Dahl, 2010). These guides were created in 1992 and most recently updated in 2012. However, it's worth noting that the proliferation of green claims in the marketplace often includes claims that are not currently addressed in the Green Guides. As a response to this evolving landscape, updated guidance is currently being developed by regulatory authorities.

In the absence of a robust regulatory framework, consumer and environmental groups have stepped into the vacuum to keep a vigilant eye on corporate use of greenwashing. Notably, Greenpeace was one of the first groups to do so, creating a separate anti-greenwash group, stopgreenwash.org. This platform is dedicated to monitoring alleged greenwash advertisements and provides valuable information on identifying and combating greenwashing.

Furthermore, the University of Oregon School of Journalism and Communication, in collaboration with EnviroMedia Social Marketing, operates greenwashingindex.com. Here, individuals can post suspected greenwash print or electronic advertisements and rate them on a scale from 1 (authentic) to 5 (bogus). These initiatives serve as essential checks and balances in the world of environmental advertising, helping to ensure transparency and honesty in marketing claims.

Comparing Regulations in Other Countries vs the US

Greenwashing regulations, which are designed to prevent companies from making misleading claims about the environmental benefits of their products or practices, vary significantly across the UK, US, and EU, reflecting differing approaches to consumer protection and environmental policy.

In the European Union, greenwashing is addressed through stringent regulatory frameworks aimed at protecting consumers and promoting genuine sustainability. The EU has adopted the Unfair Commercial Practices Directive (UCPD), which prohibits businesses from misleading consumers through false environmental claims (European Commission, 2024). Additionally, the EU's Taxonomy Regulation sets out criteria for determining whether an economic activity is environmentally sustainable, providing a clear benchmark for what constitutes a "green" activity (European Commission, 2024). This regulation is part of a broader strategy to integrate sustainability considerations into the financial sector, ensuring that investors can make informed decisions about the environmental impact of their investments.

In contrast, the United States has a more fragmented approach to regulating greenwashing. The Federal Trade Commission (FTC) plays a central role through its Green Guides, which offer guidelines on how businesses can make truthful and non-deceptive environmental marketing claims (Environmental Leader, 2023). However, these guides are not legally binding, and enforcement relies on the FTC acting against companies that violate these principles. The US lacks a comprehensive federal framework equivalent to the EU's Taxonomy Regulation, leading to variability in how greenwashing is regulated across different states and sectors. This patchwork approach can make it challenging for consumers to navigate environmental claims and for businesses to comply with consistent standards.

The United Kingdom, following its departure from the EU, has started to chart its own course in regulating greenwashing. The UK's Competition and Markets Authority (CMA) has developed guidelines similar to the EU's UCPD, focusing on preventing misleading environmental claims (Competition and Markets Authority, 2022). The CMA's "Green Claims Code" is designed to ensure that any environmental claims are clear, accurate, and substantiated. While the UK's approach is influenced by previous EU regulations, it is increasingly developing its own regulatory identity, which includes plans to address greenwashing more comprehensively as part of its broader environmental strategy.

Despite these differences, there are common threads in the approach to greenwashing regulations across the UK, US, and EU. All three regions emphasize the importance of clear, accurate, and substantiated claims in environmental marketing. They also share a commitment to consumer protection, ensuring that consumers are not misled by false or exaggerated environmental claims. Moreover, there is a growing recognition of the need to integrate sustainability considerations into broader economic and financial policies, as seen in the EU's Taxonomy Regulation and emerging initiatives in the UK and US (European Commission, 2024). However, the level of regulatory enforcement and the comprehensiveness of the frameworks differ, reflecting each region's unique regulatory culture and priorities.

Indication of a Viable Certification Label

A viable certification label serves as an indication that a product or company meets certain environmental, or sustainability standards set by an independent, credible organization. Legitimate certification labels provide assurance to consumers that the claims made about a product's environmental benefits have been thoroughly vetted and verified. For instance, labels like Fair Trade and USDA Organic are well-recognized and trusted because they are backed by

rigorous certification processes and regular audits (Fair Trade USA). These certifications often have transparent criteria and are managed by reputable third-party organizations, which ensures their credibility.

Consumers can discern between legitimate certification labels and instances of greenwashing by looking for a few key indicators. They should verify whether the certifying body is an independent third party and not directly associated with the company. Credible certifications are usually backed by detailed standards and undergo regular, unbiased audits. Additionally, consumers can research the certifying body to ensure it has a strong reputation and established credibility within the industry (Ecolabel Index). Websites like the Ecolabel Index can be useful resources for checking the validity of various eco-labels. Consumers should also be wary of vague claims such as “eco-friendly” or “green” without any specific certification or detailed information to back them up. Genuine certifications often provide a clear and specific explanation of the standards met and the benefits of those standards.

Moreover, shared governance ensures the legitimacy of certification labels. Look for certifications that involve multiple stakeholders, including industry experts, environmental organizations, and consumer advocates, in the certification process. This shared governance model helps ensure transparency and accountability. For instance, the Marine Stewardship Council (MSC) certification for sustainable seafood involves collaboration between scientists, industry representatives, and environmental groups to establish and maintain rigorous sustainability standards (Marine Stewardship Council). Next, consider the stringency of the certification standard. Legitimate certification labels adhere to rigorous standards and criteria, demonstrating a commitment to environmental sustainability or ethical practices. Assess the credibility of the certification process itself. Look for certifications that undergo independent

verification and accreditation, ensuring that the certification process is credible and trustworthy. An example of this is the Rainforest Alliance certification, which undergoes regular audits by third-party certifiers to ensure compliance with strict environmental, social, and economic criteria (Rainforest Alliance).

Consumers can identify a credible certification label by considering a few key aspects. Begin by checking for transparency in the certification criteria and whether detailed information about the standards is publicly available. Ensure the certification is backed by an independent, reputable organization with a history of credible work in the field. Look for evidence of regular, unbiased audits and assessments. **Also, be cautious of certifications that lack third-party validation or those created by the company itself, as these are often less rigorous and reliable.**

How We Are Taken Advantage Of

Consumers are often taken advantage of by marketers through both psychological and sociological tactics, especially when it comes to purchasing sustainable products.

Psychologically, marketers exploit consumers' desire to feel good about their purchases by using terms like "eco-friendly," "green," and "sustainable" without providing concrete evidence or certifications. This leverages the emotional appeal of doing something beneficial for the environment, prompting impulsive decisions based on the perceived virtue of the product.

Sociologically, marketers tap into social norms and pressures, promoting sustainable products as a status symbol or a way to belong to a community that values environmental responsibility. This creates a bandwagon effect, where consumers feel compelled to buy these products to align with their social group, often overlooking the actual environmental impact of their choices.

As a result of these psychological and sociological tactics, consumers frequently fall victim to greenwashing. They believe they are making environmentally responsible choices,

while they might be supporting companies with unsustainable practices. This deceptive marketing undermines genuine sustainability efforts and perpetuates a cycle where companies prioritize appearance over substance. Consequently, true environmental benefits are diluted, and consumer trust is eroded. To avoid falling for these tactics, consumers can take several proactive steps. Look for third-party certifications and labels that verify environmental claims, such as Fair Trade or USDA Organic. Make sure to research companies behind the products, checking for transparency in their business practices and sustainability reports. Engaging in critical thinking and questioning vague claims can also help; for example, asking what specific actions a company is taking to be "green" can reveal the depth of their commitment. Support companies with a proven track record of sustainability and environmental advocacy. By becoming more informed and skeptical, consumers can make responsible choices and contribute to a market that rewards true sustainability.

Marketing Claims vs Food Labels

Marketing claims and food labels play a crucial role in shaping consumer perceptions and influencing purchasing decisions in the food industry. While both serve as tools for companies to communicate information about their products, there exists a significant difference between the two. Food labels, ideally, should provide accurate and verifiable information about the product's contents, sourcing, and production methods. Labels such as "USDA Organic," "Certified Humane," "Non-GMO Project Verified," and "Certified Fairtrade International" are examples of certifications that undergo independent verification, providing consumers with a level of assurance regarding specific attributes of the food product (Erickson, 2020). These labels are tied to established standards and regulations, contributing to transparency and accountability in the industry.

On the other hand, marketing claims are often strategic messages crafted by companies to appeal to consumers' desires, values, and preferences. Terms like "all-natural," "farm-fresh," and "eco-friendly" are examples of marketing claims that may lack a standardized definition or independent verification (Erickson, 2020). This opens the door to greenwashing, where companies exaggerate or mislead consumers about the environmental friendliness or healthiness of their products. Key factors contributing to greenwashing in the Consumer-Packaged Goods (CPG) industry include the absence of clear, enforceable rules for certain claims, the lack of consistent verification processes, and the potential for subjective or misleading language in marketing. Companies may exploit these gaps to create an illusion of sustainability or healthiness without adhering to rigorous standards.

Halo Effect

Another well-known phenomenon in marketing is the "halo effect," in which consumers grant products broad images or evaluations that fail to reflect granular variation in specific attributes (Szabo, 2020). In the context of greenwashing, this cognitive bias is strategically utilized by companies to create a positive and environmentally friendly image for their products. For instance, if a product is labeled as "organic," consumers may extend this positivity to assume that the company must also employ sustainable practices in other areas, such as energy use or packaging. This broad assumption, fueled by the halo effect, can be misleading as specific environmental claims may lack independent verification. Studies commissioned by the FTC show that the halo effect is important for product-level green claims, and thus an integral part of greenwashing (U.S. FTC, 2012).

Life Cycle Analysis and its Role in Sustainability

Life Cycle Analysis (LCA) is a comprehensive methodology used to evaluate the environmental impacts associated with every stage of a product's life—from material extraction, production, and distribution, to use, end-of-use, and disposal (RIT, 2020). By systematically analyzing these stages, LCA provides valuable data on resource consumption and emissions, offering a detailed picture of a product's environmental footprint. This information is crucial for businesses and policymakers to make informed decisions aimed at improving sustainability. LCA helps in identifying hotspots, or stages in the life cycle with significant environmental impacts, thus guiding efforts to mitigate these impacts (RIT, 2020). It also enables the design of more sustainable products and processes, supporting claims of environmental benefits with objective, scientific data.

LCA plays a critical role in advancing sustainability by promoting a systems-level perspective that helps avoid burden shifting—solving one environmental issue only to create another. For example, an LCA can reveal whether a bio-based material is truly more sustainable than its nonrenewable counterpart by evaluating various impact categories such as greenhouse gas emissions, water use, and energy consumption. This holistic approach ensures that sustainability initiatives are based on comprehensive and accurate assessments, leading to more effective policies and practices that genuinely reduce environmental harm.

Global Concern and the CPG Industry's Role

The importance of Life Cycle Assessment (LCA) is recognized worldwide as countries and industries strive to meet sustainability goals and reduce their environmental footprints. The Consumer-Packaged Goods (CPG) industry, in particular, has embraced LCA to address the growing demand for sustainable products from eco-conscious consumers. Companies in the CPG

sector use LCA to substantiate claims about the environmental benefits of their products, such as reduced carbon footprints, lower water usage, and the incorporation of recycled materials. This approach not only helps in meeting regulatory requirements but also in building consumer trust and enhancing brand reputation.

Globally, governments and organizations are increasingly incorporating LCA into their sustainability strategies. The European Union, for instance, mandates the use of LCA in policymaking to ensure that environmental benefits are not simply shifted from one area to another. In the United States, agencies like the Environmental Protection Agency (EPA) promote LCA to inform regulatory frameworks and support the transition to a circular economy. Thus, LCA serves as a vital tool for driving global sustainability efforts, helping both the private and public sectors to create more sustainable and resilient systems.

Future Regulations for Greenwashing Around the World

As the global focus on environmental sustainability intensifies, regions worldwide are tightening regulations to combat greenwashing, ensuring companies make genuine and verifiable sustainability claims.

The European Union is leading the charge with stringent new regulations set to take effect in 2024. These regulations mandate that companies substantiate their environmental claims with credible, clear, and detailed evidence. The EU's Green Claims Directive, expected to be enforced by mid-2024, will require businesses to provide proof for any environmental claims, focusing on preventing misleading information and ensuring transparency (Europarl Europa).

In the UK, a phased introduction of new disclosure and labeling regimes will begin in July 2024. These measures are designed to enhance transparency among asset managers and distributors. Additionally, a new anti-greenwashing rule will be enforced from May 2024,

applying a "fair, clear, and not misleading" standard to sustainability statements (Smith, 2024). The Financial Conduct Authority (FCA) will oversee the enforcement of these rules, ensuring companies adhere to their sustainability claims.

In the US, the Securities and Exchange Commission (SEC) is anticipated to finalize its climate risk disclosure rule, which has been under consideration since 2022. This rule will require publicly listed companies to report their greenhouse gas emissions and other climate-related risks. Although its implementation has faced delays and potential litigation, it represents a significant step towards more rigorous oversight of corporate environmental claims. Meanwhile, states like California have enacted their own laws requiring detailed climate risk disclosures from businesses operating within the state (KPMG).

These initiatives reflect a global trend towards increasing scrutiny of environmental claims, aiming to build consumer trust and ensure that sustainability efforts are genuine. As consumers become more environmentally conscious, these regulations will help them make informed decisions, reducing the prevalence of misleading "green" claims in the market.

The Future of Sustainability in the CPG Industry

This thesis has aimed to shed light on the complexities of greenwashing, from misleading packaging and vague claims to the intricate frameworks intended to define and measure sustainability. Now, armed with this knowledge, it's time to take action. Hold brands accountable for their environmental claims, demand transparency, and support companies that are genuinely committed to sustainability. Use your voice as a consumer to push for change and challenge deceptive practices. By doing so, we can collectively drive the industry towards a future where greenwashing is no longer tolerated, and genuine environmental stewardship is the norm. Let's turn our understanding into action and work towards a more sustainable future for all. As we

navigate the path toward a more sustainable future, it is imperative to remember the power we hold as consumers. Every purchase we make contributes to the world we leave for future generations. By demanding transparency, accountability, and true environmental stewardship, we can drive positive change within the CPG industry and ensure a more sustainable future for our planet.

Methods for Conducting Thesis

In conducting this thesis, a meticulous approach was employed, focusing on the utilization of credible sources to ensure the reliability and depth of the research. The chosen methodology encompassed an extensive array of resources, including scholarly articles, published research, informational interviews, insights from faculty, relevant books, and consumer reports. To streamline the search process and target specific aspects of the research, carefully selected keywords were employed. The primary keywords included 'Greenwashing' in conjunction with 'CPG industry,' 'Product labels,' 'Purchasing decisions,' and 'Government.'

The inclusion criteria were designed to ensure the relevance and timeliness of the gathered information. Articles were considered if they specifically addressed greenwashing within the Consumer-Packaged Goods (CPG) industry. Additionally, the focus extended to articles shedding light on the contemporary landscape of greenwashing and its direct implications on the CPG sector. Articles exploring the main factors contributing to greenwashing practices were also included in the selection process.

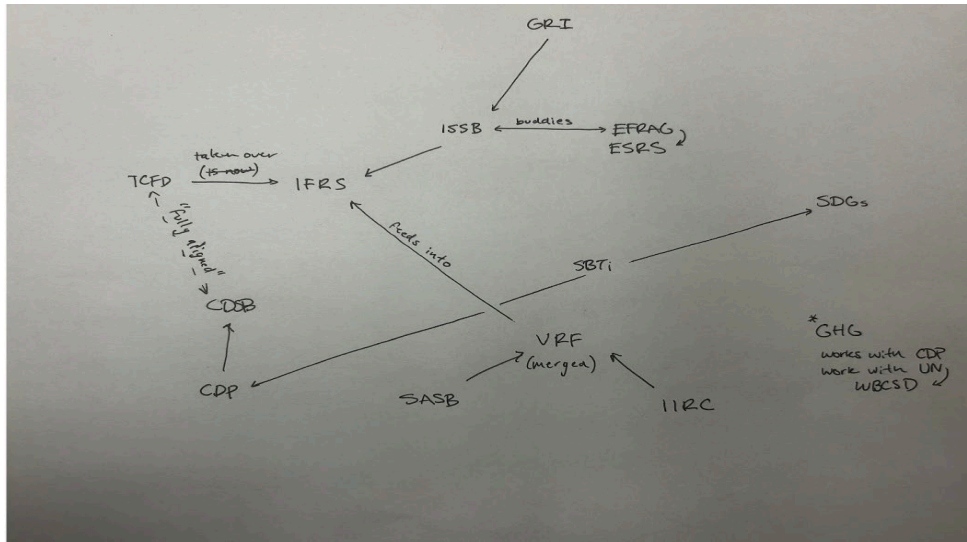
On the flip side, exclusion criteria were established to maintain the quality and relevance of the selected articles. Articles were excluded if they lacked a sufficient description of greenwashing, as a comprehensive understanding of the phenomenon was deemed essential. Moreover, articles without clear information on the sources used to draw conclusions were excluded to ensure the transparency and reliability of the research findings.

Appendix

An Overview of ESG Reporting Initiatives

Initiative	Name	Description
<u>GRI</u>	Global Reporting Initiative	Sector-overarching sustainability reporting standards aiming to inform all stakeholders.
<u>SASB</u>	Sustainability Accounting Standards Board	Sector-specific reporting framework focused on financial materiality and geared towards investors and capital providers.
<u>UN SDG</u>	United Nations Sustainable Development Goals	A pact signed by businesses pledging to adopt sustainable business practices aligned with the Sustainable Development Goals.
<u>CDP</u>	Carbon Disclosure Project	Non-profit with a focus on data collection and content for climate reporting.
<u>CDSB</u>	Climate Disclosure Standards Board	Non-profit global environment disclosure framework geared towards investors and financial markets.
<u>TCFD</u>	Task Force on Climate-Related Financial Disclosures	Climate-related risk disclosure focused on financial impacts of ESG risks.
<u>GHG Protocol</u>	Greenhouse Gas Protocol	Greenhouse gas accounting standards and comprehensive calculation guides.
<u>SBTi</u>	Science Based Targets Initiative	Association approving emission targets in line with the Paris Agreement

Sustainability Frameworks Relationships



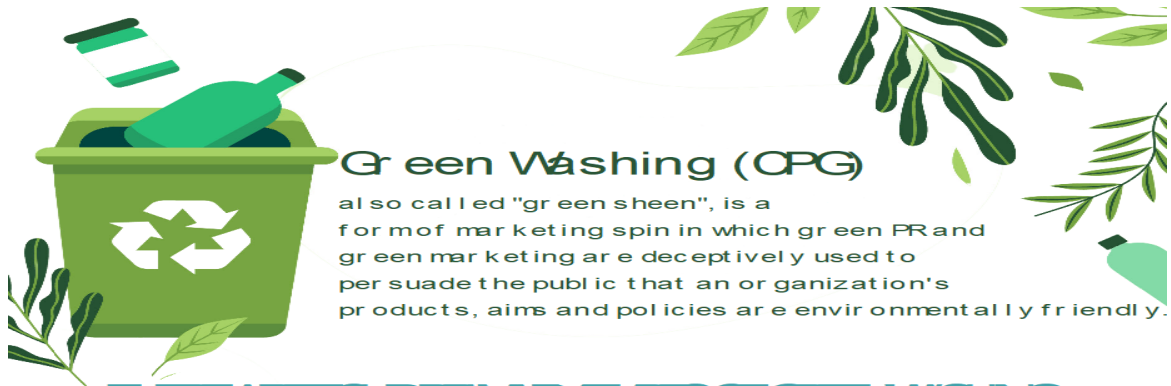
This drawing is a visual representation of how the sustainability frameworks are related to one another along the dimension of breadth. Here is also an explanation of the visual:

The IFRS is the international financial reporting standard. It is connected to the ISSB, TCFD, the VRF. The IFRS will take over TCFD as early as June 2024, shifting responsibility to the IFRS. The ISSB was established as a part of the IFRS in response to a global consultation in 2020, and the VRF was consolidated in 2022 to flow into the IFRS. The TCFD is responsible for keeping investors better informed about companies' climate-related risks.

The CDSB is fully aligned with the TCFD's sustainable reporting practices. The CDSB's function is to integrate climate change-related disclosure into mainstream financial reports. The CDP report directly feeds into the CBSD, which collects data and information from companies using SBTi as one of its founding partners. The ISSB is a collaborator with the GRI and works with EFRAG, which made the ESRS draft.

The ISSB was originally built off an investor-focused initiative which is similar to TCFD and CDSB. The VRF is a merger of the SASB and IIRC, which feeds into the IFRS. GHG Protocol works with the CDP, as the CDP uses their standards. SDG's uses are related to SBTi as the SDG goals are formulated based on science-based targets.

All of this to say, sustainability is complicated and messy.



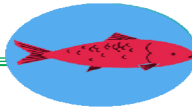
THESE ARE FOUR PRIMARY TYPES OF GREEN WASHING



IMAGERY:
Making things look greener than they are.



CLICKBAIT:
When products use vague labels like "recyclable" without context.



RED HERRING:
Focusing on one "sustainable" aspect of a product but will ignore its unsustainable characteristics



NO RECEIPTS:
Companies put claims on their labels and ads that cannot be proven/backed up.

FJI WATER AS FRIENDLY AS IT SEEMS?

Fiji Water was sued in 2011 for deceptively marketing itself as "carbon-negative". The plaintiff argued that she paid more for Fiji Water specifically because it advertised itself as a carbon-negative product. They were accused of Forward Crediting and as a result the company has to stop using the label on their products.



Fiji Water is an emotionally appealing brand and has gained a foothold in the American mind as a premium, health-conscious product. However, the brand's indifference to the actual country for which it was named should give consumers some pause. 12% of Fijians do not have clean drinking water despite FIJI Water comfortably extracting \$43.01 million in water sales per year from the country.

GREEN WASHING IS REGULATED BY THE FEDERAL TRADE COMMISSION (FTC). THEIR JOB IS TO PROTECT CONSUMERS AGAINST UNLAWFUL & UNETHICAL BUSINESS PRACTICES



The rapid growth of green claims in product advertising is not closely monitored, especially in the United States. Part of the issue is the lack of regulation. The one thing that has been established at the governmental level is marketing guidelines known as the Green Guides. While it is great this is in place, they were created in 1992 and the most recent update was in 1998. With increasing claims not covered by current guidelines, more companies are allowed to get away with making green claims without consequences.



Figure a: Creative Version of Thesis

Bibliography

- Am, Jordan Bar, et al. “Consumers Care about Sustainability-and Back It up with Their Wallets.” *McKinsey & Company*, McKinsey & Company, 6 Feb. 2023, www.mckinsey.com/industries/consumer-packaged-goods/our-insights/consumers-care-about-sustainability-and-back-it-up-with-their-wallets.
- Authority, Competition and Markets. “Green Claims Code: Making Environmental Claims.” GOV.UK, GOV.UK, 20 Sept. 2021, www.gov.uk/government/publications/green-claims-code-making-environmental-claims.
- BBC, www.bbc.co.uk/. Accessed 21 May 2024.
- “CDP Homepage.” CDP, www.cdp.net/en. Accessed 21 May 2024.
- Chalabi, Mona. “Coca-Cola Is World’s Biggest Plastics Polluter – Again | Mona Chalabi.” *The Guardian*, Guardian News and Media, 9 Nov. 2019, www.theguardian.com/news/datablog/2019/nov/09/coca-cola-world-biggest-plastics-polluter-again-datablog.
- Dahl, Richard. “Green washing.” *Environmental Health Perspectives*, vol. 118, no. 6, 2010, <https://doi.org/10.1289/ehp.118-a246>.
- “Earth Island Institute v. Coca-Cola Co.” *Climate Change Litigation*, 3 Nov. 2023, climatecasechart.com/case/earth-island-institute-v-coca-cola-co/#:~:text=Coca%2DCola%20Co.,-Filing%20Date%3A%202021&text=Description%3A%20Lawsuit%20alleging%20that%20Coca,largest%20contributors%20to%20plastic%20pollution.
- Environmental Management – *Environment+Energy Leader*, www.environmentenergyleader.com/category/environmental-management/. Accessed 22 May 2024.
- Erickson, Melissa. “Food Labels vs. Marketing Claims.” *Record*, Times Herald-Record, 21 Jan. 2020, www.recordonline.com/story/news/2020/01/21/food-labels-vs-marketing-claims/111714266/.
- “ESG – Disclosure, Reporting, Labelling, Anti-Greenwashing Requirements and Beyond.” Herbert Smith Freehills | Global Law Firm, 30 Jan. 2024, www.herbertsmithfreehills.com/insights/reports/fsr-outlook-2024/esg-disclosure-reporting-labelling-anti-greenwashing-requirements-and-beyond.
- Fernando, Jason. “What Is CSR? Corporate Social Responsibility Explained.” Investopedia, Investopedia, www.investopedia.com/terms/c/corp-social-responsibility.asp. Accessed 21 May 2024.
- “Find Industry Topics.” SASB, 13 June 2023, www.sasb.org/standards/materiality-finder/find/.

- “GreenWash.” *Greenwash*, 11 Aug. 2022, greenwash.com/.
- “Greenwashing: 6 Reasons Why Businesses Do It.” *DNV*, www.dnv.us/article/greenwashing-6-reasons-why-businesses-do-it-238555/. Accessed 21 May 2024.
- Hutchins, Bob. “The Optimism Bias: A Human Blind Spot with Real Consequences in Business and Personal Life.” *Medium*, Medium, 8 Jan. 2024, bobhutchins.medium.com/the-optimism-bias-a-human-blind-spot-with-real-consequences-in-business-and-personal-life-6658cbbc313c.
- Ioannou, Ioannis, et al. “The Impact of Perceived Greenwashing on Customer Satisfaction and the Contingent Role of Capability Reputation - Journal of Business Ethics.” *SpringerLink*, Springer Netherlands, 3 June 2022, link.springer.com/article/10.1007/s10551-022-05151-9.
- Jacob H. Hupart, David G. Adams. “Understanding ESG Ratings: Legal Insights & Perspectives.” *Mintz*, www.mintz.com/insights-center/viewpoints/2151/2024-05-20-understanding-esg-ratings-legal-insights-perspectives#:~:text=With%20environmental%2C%20social%2C%20and%20governance,that%20evaluate%20companies%20ESG%20performance. Accessed 21 May 2024.
- Jonathan Bardelline `googletag.cmd.push(function() { googletag.display('div-gpt-ad-1588639347976-0'); });`; `googletag.cmd.push(function() { googletag.display('div-gpt-ad-1602704827724-0'); });`); and Jonathan Bardelline. “SC Johnson Settles Lawsuits over Greenlist Logo.” *GreenBiz*, www.greenbiz.com/article/sc-johnson-settles-lawsuits-over-greenlist-logo. Accessed 18 Nov. 2023.
- Loannou, Loannis. “How Greenwashing Affects the Bottom Line.” *Harvard Business Review*, 21 July 2022, hbr.org/2022/07/how-greenwashing-affects-the-bottom-line.
- Lyon, Thomas P., and A. Wren Montgomery. “The means and end of greenwash.” *Organization & Environment*, vol. 28, no. 2, 2015, pp. 223–249, <https://doi.org/10.1177/1086026615575332>.
- Novisto. “Four Popular ESG Reporting Schemes That Complement Each Other.” Novisto, 22 Aug. 2023, novisto.com/four-popular-esg-reporting-schemes-that-complement-each-other/.
- “Overview.” *Ending Coke’s Greenwashing* :: *Earth Island Institute*, www.earthisland.org/index.php/advocates/suit/coca-cola-plastic. Accessed 21 May 2024.
- “Press Room: News: European Parliament.” Press Room | News | European Parliament, 31 Dec. 1969, www.europarl.europa.eu/news/en.

- Provenance. “Greenwashing Examples by Food and Drink Brands 2022-23: Provenance.” *RSS*, www.provenance.org/news-insights/5-food-and-drink-brands-called-out-for-greenwashing-and-the-lessons-we-can-learn#:~:text=1.-,Keurig%20K%2DCup%20Drama%20Leads%20to%20%2410%20Million%20Settlement,its%20coffee%20pod%20recyclability%20claims. Accessed 18 Nov. 2023.
- Quraishi, Jen. “Fiji Water Sued for Greenwashing.” *Mother Jones*, 7 Jan. 2011, www.motherjones.com/politics/2011/01/fiji-water-sued-greenwashing/.
- Spunj. “Greenwashing.” *SPUNJ Sustainability*, 7 Oct. 2020, www.spunj.co/glossary/greenwashing/.
- “Sustainable Finance.” *European Commission*, commission.europa.eu/business-economy-euro/banking-and-finance/sustainable-finance_en. Accessed 21 May 2024.
- “Sustainable Packaging Market.” *Future Market Insights*, www.futuremarketinsights.com/reports/sustainable-packaging-market. Accessed 18 Nov. 2023.
- Szabo, Szerena, and Jane Webster. “Perceived Greenwashing: The Effects of Green Marketing on Environmental and Product Perceptions - Journal of Business Ethics.” *SpringerLink*, Springer Netherlands, 28 Feb. 2020, link.springer.com/article/10.1007/s10551-020-04461-0.
- TerraChoice. “TERRACHOICE 2010 Sins of Greenwashing Study Finds Misleading Green Claims on 95 per Cent of Home and Family Products.” *PR Newswire: Press Release Distribution, Targeting, Monitoring and Marketing*, 30 June 2018, www.prnewswire.com/news-releases/terrachoice-2010-sins-of-greenwashing-study-finds-misleading-green-claims-on-95-per-cent-of-home-and-family-products-105757733.html.
- “The Crackdown on Greenwashing.” KPMG, kpmg.com/xx/en/home/insights/2023/04/the-crackdown-on-greenwashing.html. Accessed 21 May 2024.
- The Drivers of Greenwashing - Magali A. Delmas, Vanessa Cuerel Burbano, 2011, journals.sagepub.com/doi/10.1525/cmr.2011.54.1.64. Accessed 22 May 2024.
- “The 17 Goals | Sustainable Development.” United Nations, United Nations, sdgs.un.org/goals. Accessed 21 May 2024.
- “The Troubling Evolution of Corporate Greenwashing.” *The Guardian*, Guardian News and Media, 20 Aug. 2016, www.theguardian.com/sustainable-business/2016/aug/20/greenwashing-environmentalism-lies-companies.
- The Quest for Sustainability: Wine’s “Yes, and” Moment*, tablascreek.typepad.com/tablas/2024/02/the-quest-for-sustainability-wines-yes-and-moment.html. Accessed 22 May 2024.

“What Is Life Cycle Assessment (LCA)?” RIT, www.rit.edu/sustainabilityinstitute/blog/what-life-cycle-assessment-lca. Accessed 21 May 2024.

U.S. Federal Trade Commission. (2012, October 11). Guides for the use of environmental marketing claims; final rule (16 CFR Part 260). *Federal Register*, 77(197).