

Assessment Of Greenwashing In The Building Industry

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ABSTRACT

This review paper critically examines the phenomenon of greenwashing in the building industry, focusing on deceptive practices employed by companies to present false claims of environmental responsibility. The paper begins with an introduction to greenwashing, highlighting its detrimental effects on consumer trust, genuine sustainability efforts, and progress towards a truly sustainable built environment. The review process involves an extensive examination of relevant literature, scholarly articles, and research papers that explore various aspects of greenwashing in the building sector. Methodologically, the paper employs a comprehensive analysis of data and findings to shed light on the prevalence of greenwashing tactics, including misleading language, exaggerated claims, and incomplete information. It also investigates the relationship between green certifications and occupant satisfaction, urging further research in this area. However, the review acknowledges certain limitations, such as the availability of comprehensive data and subjective assessments of green claims. Despite these limitations, the paper concludes with crucial takeaways for stakeholders, emphasizing the necessity of transparency, authentic commitment to sustainability, and informed consumer choices to combat greenwashing effectively and foster a genuinely sustainable building industry.

Key words: Greenwashing, sustainable, green building certificate system, marketing strategies

1. INTRODUCTION

The building industry plays a pivotal role in addressing urgent environmental issues and working towards sustainability objectives. A worrisome trend of "greenwashing" has evolved in the industry as consumer demand for environmentally friendly practices increases. In the building industry, the term "greenwashing" refers to the dishonest practice whereby businesses exaggerate their environmental efforts to give the impression that they are more sustainable than they actually are. In-depth analysis of the frequency and wide-ranging effects of greenwashing in the building industry is provided in this paper.

The review intends to shine light on the crafty strategies used by businesses to maintain a false sense of environmental responsibility by critically analysing a variety of pertinent literature, academic articles, and research papers. This paper aims to offer useful insights into the pervasiveness of greenwashing practices, their detrimental effect on consumer trust, and the difficulties in supporting genuine sustainability efforts through thorough data analysis and insightful findings. (Oğulkan ERDEN, 2019)

2. METHODOLOGY

This review paper on "Greenwashing in the Building Industry" employs a comprehensive research methodology to analyze and synthesize existing literature published between 2015 and 2022. The primary sources of information include preferred journals, conference papers, scholarly articles, and reputable databases such as Scopus, ScienceDirect (ELSEVIER), and other relevant sources. A systematic search strategy is adopted, utilizing keywords such as "greenwashing," "building industry," "environmental claims," and related terms. The selection criteria encompass relevance, credibility, and recency, ensuring the inclusion of authoritative and up-to-date publications. The review process involves the identification of key themes, tactics, and implications of greenwashing practices within the building sector. Through rigorous analysis and synthesis of findings, this research methodology aims to provide a comprehensive understanding of the phenomenon, offering insights into the prevalence, challenges, and potential solutions to address greenwashing practices in the context of sustainable development within the building industry.

3. THE CONCEPT OF SUSTAINABILITY IN ARCHITECTURE

The challenges linked with environmental pollution, the depletion of natural resources, and related economic,

sociocultural, and health issues have given sustainability a lot more significance. Since the 1980s, this idea has had a significant impact on architecture, first as "green design" and then as "green building." Though it spans the physical, economic, and socio-cultural spheres, sustainable architecture incorporates more than just eco-friendly design and construction ideas. A truly sustainable building incorporates usefulness, logic, efficiency, and eco-friendly design while also blending in with the surrounding built environment and fostering socio-cultural activities. Under the headings of resource management, life cycle design, and creating livable settings, the principles of sustainability in architecture cover design, building, use, and maybe deconstruction processes. (Oğulcan ERDEN, 2019)

Resource management involves judicious selection of resources throughout a building's lifecycle, transitioning to renewable energy sources, optimizing energy usage through daylighting and passive systems, and making water-efficient choices. Lifecycle design entails integrating sustainability principles from design through deconstruction, considering pre-construction, construction, and post-construction phases. Sustainable architecture also emphasizes users' well-being, preserving natural and cultural values, and aligning with environmental, economic, and socio-cultural standards. Green building certification systems, exemplified by the World Green Building Council and national councils, play a vital role in promoting and evaluating sustainability in architecture, guiding architects toward environmentally responsible solutions. (Oğulcan ERDEN, 2019)

4. GREEN BUILDINGS & CERTIFICATIONS

Buildings exert a substantial environmental impact due to their resource consumption and energy use throughout their lifecycle. The urgency to address this issue is intensified by the fact that buildings contribute significantly to greenhouse gas emissions. Consequently, there's a growing need for sustainable architecture and construction. Green building practices, also known as environmentally friendly construction, aim to reduce waste and environmental impact by embracing socially responsible design principles. These buildings optimize resource use, enhance occupant well-being, and minimize harm to both the environment and human health. (Schoeman, 2018)

To fully comprehend green buildings, it's crucial to delve into the comprehensive aspects of their design. Parameters like energy and water efficiency, material selection, indoor air quality, occupant comfort, waste management, and pollution control all contribute to their sustainability. Buildings play a pivotal role in energy efficiency policies and climate change mitigation due to their prolonged energy consumption. The construction industry is transitioning to eco-friendly practices, resulting in the emergence of various green building certification systems. These systems guide project development by setting criteria for constructing durable, eco-conscious, and comfortable structures. By evaluating a building's adherence to these standards, certification systems promote environmentally responsible construction practices. (Schoeman, 2018)

Global adoption of these certification programs, developed collaboratively by experts in architecture, engineering, and other relevant fields, underscores their significance. LEED, initiated by the USGBC in 1998, followed by the original BREEAM by BRE in 1990, mark milestones in green building certification. These systems, adapted to local climates, regulations, and construction methodologies, are pivotal in curbing climate change. As sustainability and green building concepts gain traction, scrutinizing certification programs becomes essential to ensure they effectively assess and rank green building initiatives. The intertwining concepts of green building and certification systems collectively drive the construction industry toward a more sustainable and environmentally conscious future. (Kurnaz, 2021)

5. REASONS FOR THE GROWTH OF GREENWASHING IN THE BUILDINGSECTOR

5.1. Market Demand for Sustainable Buildings:

Due to the increasing need for sustainable products, market forces and customer demand encourage businesses to engage in greenwashing. Businesses may overstate or falsify their environmental efforts to conform to perceived expectations when consumers seek out eco-friendly solutions. Companies take advantage of this demand in order to preserve profitability and gain market share, which results in false claims and fake sustainability initiatives. When a result, greenwashing develops when businesses try to seem environmentally conscientious in order to draw in environmentally conscious customers, illuminating the intricate interaction between market dynamics and dishonest business practices. (Kinnunen, 2020)

5.2. Green marketing and financial incentives:

Green marketing uses messages that are supportive of the environment to draw in customers who care about the environment, which could result in greenwashing. Employing this tactic, businesses highlight green aspects while ignoring important sustainable practices. Without a real commitment, financial incentives such as tax rebates or subsidies for sustainable initiatives drive businesses to pursue green marketing strategies. These elements work together to spread "greenwashing" throughout numerous businesses, including the building industry. (Kinnunen, 2020)

5.3. Ambiguity in Green Terminology:

The use of ambiguous phrases in the green community, such as "green," "sustainable," and "eco-friendly," is crucial to

the practice of "greenwashing." Businesses use these vague terms to exaggerate or misrepresent their environmental initiatives. Because there are no agreed-upon definitions, they might present a façade of sustainability while omitting important eco-friendly practices, which encourages the spread of misleading marketing techniques in the construction industry. (Anna Gałęcka-Drozda, 2021)

5.4. Green Certifications and Compliance:

In the practice of "greenwashing," green certifications and compliance requirements serve two purposes. While they intend to encourage true sustainability in the building industry, they may unintentionally aid in greenwashing. Companies may place a higher priority on certifications to look environmentally conscious without actually adopting sustainable practices. As a result, the problem of "greenwashing" may continue to exist and certificates may lose their validity. (Kurnaz, 2021)

5.5. Regulatory Oversight and Enforcement:

These two factors are essential in reducing greenwashing in the construction industry. Effective laws and strict enforcement procedures guarantee that businesses are held responsible for their sustainability promises, deterring dishonest business practices. Businesses may take advantage of regulatory gaps or insufficient enforcement to participate in greenwashing, deceiving customers about the true environmental impact of their construction projects. (Kurnaz, 2021)

5.6. Supply Chain Challenges:

By allowing the spread of unsupported sustainability claims in the construction industry, supply chain issues play a crucial part in greenwashing. Accountability gaps may result from the difficulty of locating goods, confirming their provenance, and guaranteeing adherence to genuine eco-friendly standards. Due to the difficulties' obscurity, businesses are able to take advantage of them, perhaps disguising unsustainable practices and deceiving customers looking for genuinely sustainable construction solutions. (Anna Gałęcka-Drozda, 2021)

5.7. Greenwashing: an advertising strategy in architecture

The growing acceptance of sustainability has quickly made the green movement a dominant trend. However, because of its quick rise to fame, the phenomena is now open to abuse. Many businesses that want to profit from the growing popularity of the green movement use phrases like "environmentalist," "green," "ecological," "natural," and "sustainable" to gain notoriety. While some of these initiatives actually take environmental action, others have turned into ineffective advertisements. Due to this trend, "greenwashing" has emerged, which has damaged the credibility of the green movement and reduced trust in these ideas. (Kurnaz, 2021)

Bowen and Correa's definition of "greenwashing" is the best one. In order to create an excessively optimistic environmental image, they define greenwashing as the practice of giving only positive information while ignoring any negative ones. Instead of really advancing environmental concerns, the main goal of such measures is to improve the actor's commercial reputation. (Kurnaz, 2021)

Modern cultural precepts like "escaping urban life and reconnecting with nature" have made it easier to advertise architectural structures, especially homes and offices, as habitable and environmentally friendly endeavors. The notions of nature, environmentalism, and sustainability can easily be used as instruments for greenwashing given the huge market scope of the building sector. (Kurnaz, 2021)

5.8. Consumer Education and Awareness

Consumer awareness and education are essential for reducing greenwashing. Consumers who are well-informed and aware of real sustainable practices are less likely to be duped by false environmental promises. As a result of increased demand for genuine eco-friendly products and pressure on businesses to uphold transparent and accountable practices, increased awareness makes it possible to evaluate environmental credentials with greater prudence, which lowers the incidence of misleading greenwashing techniques in the market. (Kinnunen, 2020)

5.9. Consumer behavior and environmental concern

The impact of greenwashing on consumer behavior, focusing on its effects on green consumer confusion, perceived risk, and trust. Greenwashing manipulates consumer perceptions through deceptive communication, leading to potential confusion. Environmentally conscious consumers are more inclined to seek eco-friendly products and might fall prey to greenwashing due to reliance on company communication. Detecting greenwashing negatively influences purchase intent and company image, eroding consumer trust. However, research suggests that even weak green cues can positively affect buying intentions, fostering an environmentally friendly brand image. Thus, when consumers trust green claims, greenwashing utilizing nature evoking elements could enhance purchase intent among environmentally aware individuals. This underscores the significance of greenwashing's impact on environmentally conscious consumers driven by strong values. (Kinnunen, 2020)

6. METHODS OF GREENWASHING ASSESMENT

A variety of techniques are used to examine and judge the veracity of environmental claims made by companies in order to assess greenwashing. Here are a few typical ways to detect greenwashing:

6.1. Content Analysis:

Examining marketing materials, commercials, and product labels for potential ambiguous, false, or exaggerated environmental claims is known as content analysis. This approach involves analysing the terminology used and the supporting data offered to support these statements. Examining the content can assist expose instances of "greenwashing" in business communications by revealing differences between the claimed environmental benefits and the actual practices or consequences. (Anna Galecka-Drozda, 2021)

6.2. Life Cycle Analysis (LCA):

In order to determine a product's or services overall environmental impact, life cycle analysis (LCA) evaluates a product's or services whole life cycle, from the extraction of raw materials through disposal. This method is useful in identifying discrepancies between stated and real environmental benefits, exposing potential instances of greenwashing by exposing contradictions in the purported sustainability efforts made over the whole lifecycle of the good or service. (Anna Galecka-Drozda, 2021)

6.3. Comparative Analysis:

Comparative analysis is performed by contrasting a company's environmental claims with accepted industry standards, laws, or reputable certifications like LEED and Energy Star. Variations from accepted benchmarks could be signs of possible greenwashing because they bring to light discrepancies between statements and sincere environmental initiatives. (Anna Galecka-Drozda, 2021)

6.4. Third-Party Verification:

Independent groups or specialists approving a company's environmental claims are known as third-party verification. This approach, which frequently involves certifications or assessments, improves credibility and helps to separate genuine efforts from greenwashing. This external review makes ensuring that declared environmental actions adhere to accepted

standards, fostering transparency and increasing stakeholder and customer trust. (Anna Galecka-Drozda, 2021)

6.5. Transparency Review:

Conduct a transparency study to examine a company's reporting procedures and gauge how transparently they disclose important information about their environmental endeavors, goals, advancements, and challenges. This evaluation tries to ascertain how honestly and transparently the organization portrays its sustainability initiatives and its dedication to real environmental responsibility. (Anna Galecka-Drozda, 2021)

6.6. Consumer Surveys:

Greenwashing can be detected through consumer surveys or focus groups. These methods measure perceptions and awareness of environmental claims by gathering information directly from consumers. They demonstrate whether or not people can discern between genuine sustainability and dishonest greenwashing techniques. Through specific questions and dialogues, these methods provide a clear grasp of how knowledgeable customers are about environmental claims and their capacity to identify sincere efforts in a market overrun with eco-friendly messaging. (Kinnunen, 2020)

6.7. Regulatory Compliance Check:

The regulatory compliance assessment consists of comparing a company's environmental claims to current environmental laws and regulations. The discovery of non-compliance during this procedure may serve as a warning sign for potential greenwashing, indicating that the company's ostensibly eco-friendly practices may not be in line with legal requirements but rather may be motivated by dishonest marketing strategies. (Oğulkan ERDEN, 2019)

6.8. Product Testing:

Product testing entails assessing goods or services to see whether their claimed environmental qualities are true. For example, it evaluates the energy effectiveness of appliances or confirms the biodegradability of substances that are said to be environmentally benign. By ensuring that environmental claims are consistent with empirical data, this approach gives customers concrete proof of a business' dedication to sustainability and empowers them to make decisions based on reliable information. (Anna Galecka-Drozda, 2021)

7. IMPACT OF GREENWASHING ON ENVIRONMENT & BUILDING SECTOR

Greenwashing has a negative effect on the environment and the building sector. False statements undercut sincere sustainability initiatives, weaken customer confidence, and impede the development of a truly sustainable built environment. By encouraging erroneous notions of eco-friendliness and obstructing efficient conservation and sustainable practices, these practices exacerbate environmental damage. (Kurnaz, 2021)

8. CONCLUSION

Green architecture has grown in significance as a result of increased worries about environmental pollution, resource depletion, and related socioeconomic problems. Although the idea of sustainability has had a big impact on architecture since the 1980s, it encompasses more than just environmentally responsible design; it also includes elements of

usability, rationality, efficiency, and harmonious integration. In order to create sustainable architecture, the paper places an emphasis on ideas like resource management, life cycle design, and the building of living settings. However, this industry is having to deal with an increase in "greenwashing," a dishonest practice where businesses take advantage of consumer demand for sustainability by making inflated or fraudulent environmental claims. This problem is exacerbated by market dynamics, hazy terminology, regulatory holes, and supply chain complexity. A crucial defence strategy is effective consumer education and awareness, which empowers informed decision making, promotes real sustainability, and forces companies to uphold openness. The study also looks at the relationship between greenwashing and consumer behavior, highlighting how it affects how people perceive risk, trust, and purchase intentions. To assure genuine and significant sustainability practices in the context of the building sector, greenwashing poses a challenge that calls for thorough understanding and proactive mitigation solutions.

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