Effects of Misleading and Deceptive Environmental Claims in Advertising

1Sudeshna Bhushan, 2Yashaswini Shah, 3Ishan Bhandari, 4Sheetal V A

Department of Computer Science and Engineering
B.M.S College of Engineering
Bangalore, Karnataka 560019, India

Abstract- Greenwashing is a practice followed by organizations in which unsubstantiated or misleading claims are made of the environmental and social attributes of a product, service or the company as a brand. Greenwashing practice is adopted to make the company look more environment-friendly than it actually is, by spending more money, time and efforts on marketing its products as ‘green’, rather than actually minimizing its adverse impact on the environment. This paper studies the green marketing practices of certain selected companies belonging to four sectors - Automobile, Electronics, Food & Beverages and Personal Care Sector, through analysis of their advertisements, company websites and sustainability reports. The main objective of the paper is to identify the extent of green washing done by the companies and to rate their environmental claims on the weighted scale of 1 to 5. Further, this paper correlates the greenwashing score with the overall CSR score, along with cross-sector analysis of their greenwashing scores. The paper finds that even the companies with a high overall CSR score are involved in some form of greenwashing practices. The authors also suggest ways and means for companies to avoid greenwashing, for consumers to spot it and for regulators to curb it.

1. INTRODUCTION

Going green means all the activities that are designed to satisfy human needs or wants and satisfaction of these wants have minimal effect on the environment. Green marketing also includes products packaging, advertisement. But, due to increase in the demands of consumers and to meet these demands the companies are engaged in the practice of greenwashing ignoring the environmental consequences. It is not a new concept it has been since the mid-1980s, where greenwashing has gained wide acceptance for describing the practice of making fake, exaggerated claims of eco-friendly products for capturing a large market share. That time people were not much aware of these practices and did not realize the importance of being green. But currently consumers are highly demanding green products without knowing the false claims made by the companies. And, the consumers are not much informed about the reality of these companies. They are being kept in the dark and rely on the products provided by these companies [1].

The demand for green products and services have increased significantly in recent years. In Sweden, the demand for organic food increased by 12 percent in 2013 compared to the previous year (Statistiska centralbyrånen, 2014). Several companies in Sweden are experiencing a significant increase in demand for environmentally friendly products. For example, the demand for organic beer and wine have almost doubled and Sweden’s largest food chain, ICA, has reported a 43 percent sales increase of green products (Forsberg, 2014). Swedish consumers are becoming more environmentally conscious and companies today use both communicational and structural changes in order to appear environmentally friendly in the eyes of consumers (Futerra, 2012) [2]. Green marketing is used as a weapon by companies to compete in the global market. In today’s age of sustainability it is often said that “green is the new black”.

The practice of green marketing is being misused by companies in order to build their false green brand image in the eyes of consumers and investors [3]. This paper aims to explore the phenomenon of greenwashing through a systematic literature review in search of its main concepts and typologies in the past 10 years. This research has followed the proceedings of a systematic review of the literature, based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). We identified a major classification of greenwashing: firm-level executional, firm-level claim, product-level executional, and product-level claim [4]. Our focal point is to analyze corporate greenwashing in MNCs in host emerging markets, particularly in Asia, for two reasons. First, reports of greenwashing have increased around the world since Volkswagen was revealed to have falsified automobile emissions data. Second, MNCs play an important role in expanding market size and their behavior is increasingly unpredictable. The analysis shows that MNCs tend to engage in greenwashing immediately after doing business in host emerging markets characterized by restricted regulations, clear market opportunities and low competitive pressure. When greenwashing occurs, it will harm the interests of not only consumers, but also society as a whole, despite offering significant benefits to existing stakeholders. In this case, the authorities should implement regulations to confront MNCs before attracting them, which should be enforced in practice [5]. Opportunities and firms— and responsible disclosure of business information have been expanding rapidly in the last years (Delmas and Burbano, 2011). The main goal of a responsible disclosure of
business information is to communicate the sustainable practices of a firm to its stakeholders, in order to improve its corporate reputation and, thus, influence the stakeholder’s behavior towards the company and its products or services. The expected outcomes of these practices are improved financial performance and increased societal gain derived from a change of behavior (Font et al., 2017). It is in this context that the phenomenon of greenwashing arises. Considering the potential benefits of having an environmentally concerned image, sustainability communication not accompanied by real practices is becoming increasingly frequent (Lyon and Maxwell, 2011). Starting from the initial formulation of Jay Westervelt in 1986, the term greenwashing has become a standard to describe this kind of practice. There are many definitions of the term, such as the one provided by Tateishi (2017), who affirms that it is a type of “communication that misleads people regarding environmental performance/benefits by disclosing negative information and disseminating positive information about an organization, service, or product”. Along with the social concern about this practice, the academia is paying a growing attention to it, as it raises challenging research opportunities for many academic disciplines [6]. Greenwashing is the act of misleading consumers regarding the environmental practices of a company (firm-level greenwashing) or the environmental benefits of a product or service (product-level greenwashing). An example of firm-level greenwashing is General Electric’s “Ecomagination” campaign, which advertised the company’s work in the environmental arena while it simultaneously lobbied to fight new clean air EPA requirements. An example of product level greenwashing is that of LG Electronics and its mis-certified Energy Star refrigerators. Energy Star, a government-backed third party eco-label indicating that a product meets a set of energy efficiency guidelines, certified many of LG Electronics’ refrigerator models [7]. Environmental issues have become an increasingly popular and interesting topic discussed in academic literature and the industrial sector. Consumers and manufacturers are directing their attention toward an environmentally friendly product which is termed as a ‘green’ product (Bhatia and Jain, 2013), since they (especially consumers) have become more conscious about environmental issues. This growing issue makes manufacturers adopt eco-friendly practices that affect not only the production process but also the resulting product (Kivimaa and Kauto, 2010). Accordingly, they ‘adapt’ by creating an eco-friendly or green claim advertising to target those consumers who lead a green lifestyle (Divine and Lepisto, 2005). Consequently, green marketing is chosen and viewed as the best concept and strategy to respond to market needs and wants [8]. The interest in greenwashing has grown in recent decades. However, comprehensive, and systematic research concentrating on the evolution of this phenomenon, specifically regarding its impacts on stakeholders, is still needed. The main purpose of this study is to provide an overview and synthesis of the existing body of knowledge on greenwashing, through a bibliometric study of articles published up to 2021, identifying the most relevant research in this field. Special attention is given to the latest articles that link greenwashing to stakeholders, identifying gaps and future research opportunities. A bibliometric analysis and literature review was performed on 310 documents obtained from the Web of Science database, using the VOSviewer software program [9]. Sustainability as both a practice and concept is complex, particularly in business. Environmental sustainability implies the stewardship of resources by companies for current and future generations, which in turn involves appropriate measurement and evaluation of such impacts [10]. Voluntary corporate environmental disclosure has increased significantly in the last decade. However, the increase in environmental disclosure has also been accompanied by the social questioning of its veracity. Previous studies have mainly focused on the determinant factors behind corporate decisions to disclose environmental data, with only limited consideration of both carbon performance and the veracity of the information disclosed. Based on an international sample of firms from 12 countries, this paper analyzes the impact of regulative pressures related to climate change on the likelihood of companies engaging in greenwashing. The results show that the number of regulations related to climate change negatively influences the propensity of firms to engage in greenwashing. Furthermore, firms in countries with stringent climate-related regulations are less likely to participate in greenwashing practices. This paper adds to the existing literature concerning greenwashing by demonstrating that institutional theory can deliver further insights into the explanation of corporate green washing behavior. This is the first study to incorporate international climate-related regulations into the analysis of corporate greenwashing. It also provides a new method for identifying greenwashing firms, based on their carbon performance and disclosure [11]. Pressured by shareholders for greater profitability, some organizations may be in doubt whether to keep their image untarnished or fall to the temptation of practicing greenwashing, that is, deceiving consumers intentionally with false propaganda about their environmental practices [12]. A significant problem arising in discursive green marketing practices is the growth of greenwashing; companies providing irrelevant, exaggerated or false information regarding a product’s sustainable qualities. This has given rise to a number of issues yet has so far fallen short of being rigorously investigated. In this study, focus group discussions are used to provide one of the first assessments of the impact of greenwashing on consumers. The aim of the study is to gain an initial understanding of consumers’ evaluation of different corporate green marketing messages both before and after disclosing greenwashing strategies used in the messages, as well as how this affects their perception towards the brands and their purchase intention [13]. Environment protection has become a popular topic since the last couple of decades. Green marketing is the marketing of products that are presumed to be environmentally safe, whereas green washing is the act of misleading consumers regarding the environmental practices of a company or the environmental benefits of a product or service. This research paper exclusively focuses on the alarming emergence of green washing,
forms of greenwashing, reasons for growing greenwashing & signs and signs of greenwashing which may be helpful for our consumers to know about the green wash products. Hopefully this paper will be helpful for awakening our consumers and raising voices against the evils of greenwashing [14]. Today, companies are required to engage in corporate social responsibility (CSR) initiatives to give response to the call for action from their stakeholders and society. However, some companies engage in CSR initiatives with the aim of only achieving or increasing their level of legitimacy. When companies offer misleading communication and then try to influence the perceptions of their stakeholders, they incur the phenomenon known in literature as “greenwashing”. Thus, the aim of this work is to analyze the phenomenon of greenwashing, tracing its evolution in the extant literature. Greenwashing will then be analyzed through the lens of the legitimacy theory and starting from Habermas’s communication theory to define and broaden the relationships between the concepts of disclosure, credibility, legitimacy, perception and greenwashing [15].

II. RELATED WORK
1. Which are the characteristics and forms of greenwashing?
According to Delmas and Burbano greenwashing is the act of misleading consumers regarding the environmental practices of an organization (firm-level) or the environmental benefits of a product or service (product/service-level). An example of firm-level greenwashing is the “Ecomagination” campaign from General Electric which advertised the organization’s environmental practices while at the same time lobbied to fight new clean air EPA requirements. An example of product/service-level greenwashing is the Energy Star certified refrigerators from LG, an eco-label of energy efficiency, which was found that 10 models of LG’s refrigerators were not energy efficient to be certified. We found two different major classifications of greenwashing: Claim greenwashing and Executional greenwashing. The studies on the literature concentrate on product/service-level claim greenwashing, while executional greenwashing was found only on two articles in this revision. Figure 1 shows the main classifications in the phenomenon of greenwashing.

![Fig 1. Major Classifications of Greenwashing](image)

2. The taxonomy of greenwashing
Besides four known types of greenwashing (firm-level executional, firm-level claim, product-level executional, and product-level claim) (De Freitas Netto et al., 2020), this paper identified six types of greenwashing, using academic work as examples. There is no confirmation that the provided list is complete, as previous studies are not developed enough to ensure all variations are recognised. In addition, the list appears to be mutually exclusive because the content of the report published annually by a firm can contain selective disclosure of confirmable information, a story and pictures. Nevertheless, these types of greenwashing are theoretically different.

2.1. Selective disclosure
This type of greenwashing has been the most studied in greenwashing research. Surprisingly, the conflicting outcomes are mainly due to the way a firm discloses information (Fontet al., 2012; Zhang et al., 2018; Nguyen et al., 2019; Wang et al., 2019). Corporations with poor environmental performance based on toxic emissions tended to disclose at higher levels (Patten, 2002). In contrast, few authors indicated that firms disclosed more if they had better environmental performance (Clarkson et al., 2008; Du et al., 2018; Uyar et al., 2020). Philippe and Durand (2011) concluded that a firm’s reputation improved immediately after the publication of a sustainability report, even though it did not come into effect in practice, except in case of environmentally friendly firms whose reputation might be improved if substantial improvements were reported (Philippe & Durand, 2011). Kim and Lyon (2011) pointed out that a firm’s emissions disclosure was a type of greenwashing, as corporations did not disclose a decrease in their carbon footprint, while they usually disclosed an increase in their carbon footprint.

2.2. Decoupling
Meyer and Rowan (1977) extended these early studies by conceptualizing a more institutional account of decoupling. Decoupling occurs when companies claim to meet the expectations of their shareholders, without really changing their
practices. It usually happens when an organization encourages ambitious justifiable projects without the support of sufficient sustainable units or sufficient funds to achieve the desired corporate objectives (Meyer & Rowan, 1977; Bromley & Powell, 2012; Ariztía et al., 2014). Therefore, greenwashing is a decoupling strategy to achieve legitimacy and indicate compliance without strictly conforming (Delmas & Burbano, 2011; Berrone et al., 2015). In addition, in recent studies, Guo et al. (2017) suggested that the term “decoupling” comes from organizational theory.

2.3. Attention deflection
Attention deflection refers to symbolic activities designed to deflect the attention of stakeholders to hide corrupt business actions (Brown & Dacin, 1997; Lightfoot & Burchell, 2004; Marquis & Toffel, 2012; Guo et al., 2018). It involves various communication strategies that include selective and incorrect disclosure (Cho & Patten, 2007; Lyon & Maxwell, 2011; Mc-crory & Langvardt, 2012; Geerts, 2014), as unfinished assessments or vague and incorrect statements (TerraChoice, 2009). In addition, another method of diverting attention in CSR communication is undefined disclosure, which occurs when corporations highlight the importance of a product, without explanation (Snyder, 1989; Relaño, 2011; Gamper-Rabindran & Finger, 2013) or in the absence of detailed information and trustworthy accreditations, approved by a third party (Matejek & Gösslinc, 2014; Yu et al., 2020).

2.4. Deceptive manipulation
The fourth type of greenwashing is also called deceptive handling. It implies misleading conduct in which sustainable communication creates a deliberate operation of business practices to promote the perception that a firm’s products, aims and/or policies are environmentally friendly (Blome et al., 2017; Siano et al., 2017; Pizzetti et al., 2019).

2.5. Dubious authorisations and labels
Authorisation to external parties that define standards is usually considered as greenwashing, replacing the trustworthiness of a third-party authoriser with a firm’s own rights. However, while authorisations at the product and company levels are designed to control greenwashing, they cannot prevent the phenomenon themselves. Firms lobby for the introduction of a third-party eco-labelling system or stricter labeling rules (Smart, 1992). One possible problem is that eco-labels can be susceptible to fraud by dishonest manufacturers (Hamilton & Zilberman, 2006; Stephenson et al., 2012; Chan, 2013; Nguyen et al., 2019). Therefore, under certain conditions, the environmental authorisations of companies can take the form of greenwashing (Kirchhoff, 2000; Brécard, 2017; Lin et al., 2017; De Freitas Netto et al., 2020).

2.6. Inefficient public voluntary programmes
Companies contribute to government-funded voluntary programmes for many reasons, but their contribution alone cannot bring about environmental improvements (Hamann & Kapelus, 2004; Matisoff, 2012; Smith & Font, 2014). For example, early contributors to the Energy Policy Act of the Climate Leaders programme reduced their carbon footprint more than non-contributors, but those who joined later did not (Delmas & Montes-Sancho, 2010). This suggests that those who joined later contributed in the form of greenwashing. The efficiency of public voluntary programmes depends on strict regulations and the imposition of fines on newcomers who do not comply with the standards (Henriques et al., 2013).

3. Drivers of Greenwashing
To simplify our discussion, we treat firm environmental performance as fixed and focus on firm communication about environmental performance. That is, we focus on the determinants of the vertical axis of Figure 2, on which the literature is sparse, and leave out of our analysis determinants of the horizontal axis of Figure 3, on which the management literature is rich. We thus describe the drivers that lead Brown firms to communicate positively about their environmental performance (see Figure 3).

---

Fig 2. A Typology of Firms based on Environmental Performance and Communication
Our framework draws from institutional theory, which emphasizes the importance of regulatory, normative, and cognitive factors in shaping firms’ decisions to adopt specific organizational practices. The regulatory context is a critical external institutional driver of firm greenwashing. Institutional factors alone cannot explain differing strategies among firms, however. Market external factors are important drivers of greenwashing. Key firm characteristics, incentive structure and ethical climate, effectiveness of intra-firm communication, and organizational inertia play important roles in moderating a firm’s reaction to external drivers. In addition, individual-level psychological and cognitive factors influence managers’ decision-making processes and thus influence how external drivers translate into motivation for action. The regulatory context indirectly affects the other drivers of greenwashing by affecting the availability and reliability of information about firm greenwashing and environmental performance accessed by consumers, investors, and managers themselves, and by contributing to an environment of uncertainty surrounding implications for engaging in greenwashing.

III. RESULTS AND DISCUSSIONS

The following analysis comprises the 310 articles related to greenwashing that were published up to 2021. These records can be found in 171 different journals, written by 739 different authors, affiliated with 442 institutions, based in 56 different countries and the articles had 8,308 citations (7,332 without self-citation).

Analysis of the Overall Growth Trend

Figure 4 illustrates the evolution of greenwashing publications and annual citations. The first article was reported in 2000, in Environmental & Resource Economics Journal, with the title “Green business and blue angels – A model of voluntary overcompliance with asymmetric information”, written by Kirchhoff (2000). The number of studies was limited, however, since 2011 and largely since 2017, there is a significant increase in studies. It is possible to identify three stages in greenwashing literature (2000–2010; 2011–2016 and 2017–2021). In fact, 69% of the total publications occurred in the last 5 years (i.e., 2017–2021), which reflects the increasing interest in greenwashing studies. This interest may be related to the growing awareness of environmental issues and social practices embraced by corporations (Musgrove et al., 2018).
Subsequently, we tabulated firms’ carbon intensity data by quartiles (see Table 1) in order to compare their data with the mean of their sector-quartile. Therefore, in line with Delmas and Burbano (2011), the dependent variable (Greenwashing) takes a value of one when a company reports a positive communication and has poor environmental performance, i.e., it has a CDP disclosure score greater than 94 points and its carbon intensity is situated in quartiles 3 or 4 depending on its sector. Conversely, the Greenwashing variable is equal to zero when a firm reports positive communication and has good environmental performance, i.e., it received a CDP score greater than 94 points and its carbon intensity is situated in quartiles 1 or 2 (meaning that the company is one of the least carbon intensive in its sector, see Table 1). Consistent with previous studies (Hsueh, 2019; Luo, 2019), the sectors with the highest mean of carbon intensity are Utilities, Energy and Materials. Conversely, the least carbon intensive sectors are Telecommunication Services, Information Technology and Health Care.

Table 1. Breakdown of average carbon intensity by sector

<table>
<thead>
<tr>
<th>Sector</th>
<th>Quartile 1</th>
<th>Quartile 2</th>
<th>Quartile 3</th>
<th>Quartile 4</th>
<th>Total Mean</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Durability</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>3.6</td>
<td>0.8</td>
</tr>
<tr>
<td>Consumer Higher</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>3.8</td>
<td>0.6</td>
</tr>
<tr>
<td>Energy</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Health Care</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>2.4</td>
<td>1.2</td>
</tr>
<tr>
<td>Information Technology</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>2.1</td>
<td>1.3</td>
</tr>
<tr>
<td>Retail</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3.3</td>
<td>0.3</td>
</tr>
<tr>
<td>Utilities</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3.3</td>
<td>0.3</td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3.3</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Note: The average carbon intensity is calculated in terms of the total CO2 emissions divided by their total revenue (in thousands of US dollars).

IV. HYPOTHESES

The issue of greenwashing has not been adequately addressed by the existing regulatory framework. There are no specific globally applicable standards for preventing and curbing greenwashing practices. In the absence of any such regulations, the practice of greenwashing is growing exponentially and this trend if continued will gradually undermine the trust of consumers and cause them to become distrustful and suspicious about any green advertisement broadcasted by companies. The industry today is in an urgent need of extensive guidelines on environmental communications.

We provide here some recommendations for the consumers, marketers, companies and regulatory bodies to deal with this menace of greenwashing.

For Consumers:
- Watch out for words like pure, natural, earth-friendly, eco-friendly, organic, green, reduced emissions, sustainable development, carbon neutral, plant based, etc. as they may be deceptive.
- Look for supporting evidence on the corporate websites and sustainability reports in order to verify the green claims.
- It is good to look for eco-labels and third party certifications but it’s also important to check their authenticity and reliability.
● To get more information about the company’s environmental performance, go for Google search.
● Life-cycle assessment (LCA) of the product helps in identifying true green products.

For Companies/Marketers:
● Be transparent and ethical, as it does pay in the long term.
● Communicate right in the right way, i.e. communicate only significant and material environmental achievements in a clear & understandable manner.
● Be honest and fair to your stakeholders.
● Disclose not just your positive environmental impacts, but also the negative ones.
● Before claiming to be green, the firms should go for Life cycle assessment and analyze the environmental impacts of all their products over the entire life-cycle.
● Back-up all your claims with relevant data and true eco labels and certifications.
● Go for independent verification of environmental claims from credible third parties.

For Regulatory and Enforcement Bodies:
● The Public-Private Partnership (PPP) model can be adopted in which government and private bodies jointly frame comprehensive and stringent standards and regulations to curb greenwashing.
● Issue specific and uniform guidelines to discourage deceptive environmental marketing.
● Ensure strict enforcement and compliance of regulations.
● Penalize the defaulters and impose ban on violators for a certain period of time.
● The environment protection and consumer protection bodies should increase awareness about greenwashing among companies, consumers and marketers.

VI. CONCLUSION
From the study conducted it is inferred that consumers are environmentally conscious and prefer green products but are not much informed about the green claims made for the products which turns out to be greenwashing. It is used to gain trust of consumers and take competitive advantage to earn more money. It is about over emphasizing what is being done and hiding what should be done. These products are being sold and purchased without going in detail about the ingredients. Consumers end up buying misleading products at high prices seeing the labeling and words like natural, herbal, organic etc. Consumers rely on such products without taking much information and research about the products. These misleading claims may become very risky for the companies after their claims are discovered and also lose trust of their customers which may not be possible to gain again. So, Companies should stop using these techniques to earn higher profit and wrongfully gain consumers' trust. Sometimes people don’t realize their involvement in greenwashing which can be harmful to everyone including the environment. New and strict laws should be implemented for companies misleading the public. The government should conduct campaigns, training for companies to understand the importance of green marketing and contribute to the betterment of society. The greenwashing should become a punishable offense and these companies should be charged a huge amount of penalty and they should be boycotted from the market if found in greenwashing. Limited information about the firm's environmental performance with irregular and ignorant punishment for greenwashing contributes to work for environment deterioration and exploitation of natural resources. Stakeholders, NGO can take action to decrease the working of these firms and help them change their cognitive thinking of adopting greenwashing and increase transparency of company’s performance and their working. Regulators, Stakeholders, NGOs can give incentives to work as responsible for the environment and join hands together to save our mother earth.

REFERENCES:
[5]. Greenwashing behaviours: Causes, taxonomy and consequences based on a ... (n.d.). Retrieved May 3, 2023, from https://www.researchgate.net/publication/345844645_Greenwashing_behaviours_Causes_taxonomy_and_consequences_based_on_a...
quences_based_on_a_systematic_literature_review


