

How Algorithms Amplify Greenwashing - and What We Can Do About It

With the growing emphasis on making products and services 'green' to underscore the pro-environmental identity and messaging of Corporate Social Responsibility (CSR) of companies [2]. However, when the label 'green' is misused by the companies, misleading consumers about the use of green production processes and use of green materials or natural resources to align themselves with sound environmental practices, it leads to 'greenwashing' [2]. Greenwashing is a pejorative term used when organizations exaggerate or misrepresent their environmental efforts, creating a misleading perception of responsibility.

In the digital era, companies increasingly display their sustainability efforts online, aiming to attract consumers and investors seeking environmentally responsible options - leading to amplified greenwashing. While this isn't a new tactic, digital platforms powered by algorithms designed to promote engagement have significantly magnified its reach. Although large-scale sustainability reports may now be analyzed quickly because of advancements in artificial intelligence, no study has looked at the relationship between sustainability reporting, greenwashing, and AI in a comprehensive way [1]. This gap makes it crucial to explore how algorithms play a role in amplifying misleading environmental claims.

Why does it matter?

Algorithms on platforms like Reddit, Twitter, and LinkedIn are designed to promote engaging content [2]. These digital platforms are programmed to optimize for clicks, shares, and time spent on the platform, which means content that sparks emotional reactions such as excitement, hope, or outrage - gets boosted. Content shared on the social media platforms are not generally verified by the algorithms, instead post engagements are captured and are perceived positively which induce amplification of such content on the user's feed. For instance, when a company posts an achievement that it is on the verge of achieving net zero by 2030 or claiming that they use 100% recyclable packaging, such posts are more likely to trend than a delineated critique of the company's supply chain practices.

What are the risks?

"The increasing occurrences of greenwashing pose great risks to environmental protection" [4]. Some of the hidden risks are:

Deceiving Customers: Consumers are misled by brands which follow harmful practices [3]. It is hard to distinguish between brands that follow green practices and brands that claim to follow green practices online while engaging in greenwashing of environmental information reporting and profiting by expansion of their green market.

Investor Deception: Greenwashing incidents might have profound negative impact on investors confidence in environmentally friendly firms, hence damaging socially responsible investing capital market [5]. ESG-focused funds might flow toward companies that look green online but fall short in reality.

Erosion of Trust amongst External Drivers: When greenwashing is exposed, it damages not just one brand but broader public trust in sustainability initiatives.

What is the solution?

AI Transparency: Transparent AI enables the stakeholders to identify biases, demand accountability and most importantly, understand the working of the algorithm and the logic behind its output [6]. Explainability technique and transparency statements are very crucial to ensure trust building, especially in high-stakes contexts involving information dissemination and moderation [7][6]. Further, AI can be part of the solution if used to audit sustainability claims. Natural language processing models, for instance, can scan corporate disclosures and detect inconsistencies between promises and actual practices.

Algorithmic Amplification Regulation: Legal and policy measures require social media platforms to disclose algorithmic decision-making processes, audit amplification effects, and mitigate harmful content's spread [7]. For instance, the EU's Digital Services Act ensures balance of innovation, user protection, and societal wellbeing by imposing transparency obligations and risk management requirements on platform operators [7][8]. Policymakers could require platforms to flag sustainability claims and make engagement-driven promotion of unverified environmental content more transparent.

Empower Watchdogs and Journalists: Empowering watchdogs, fact-checkers and journalists requires facilitating access to platform data, providing investigative tools, and legally protecting their activities [7]. Collaboration between platforms, civil society, and media amplifies transparency and improves detection of manipulative campaigns and misinformation - much like curbing misinformation in health and politics [7].

Educate Consumers: Digital literacy programs can help consumers recognize greenwashing tactics, fostering critical engagement rather than passive consumption of eco-marketing. To promote informed digital citizenship, media literacy programs should teach individuals how algorithms influence content visibility and how to evaluate the credibility of information, thus reducing susceptibility to manipulation and harmful amplification effects [9].

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