

PROCEEDINGS OF THE  
INTERNATIONAL CARBON NEUTRALITY TRAINEESHIP PROGRAM  
Volume.02, Number.1, 2024, 08-16

## **Fighting a Global Scourge: The Rise of Anti - Greenwashing Efforts Across Borders**

**Yanzhuo CHEN**

Northeast Forestry University, Harbin city, Heilongjiang Province, 150040

E-mail: 46454273@qq.com

**\*Corresponding author**

### **Abstract**

Deceptive environmental marketing, also known as “greenwashing,” has prompted governments along with other stakeholders to step up their efforts to counteract it globally. This paper presents a general summary of greenwashing, its effects on consumers and the countermeasures several nations have taken. It cites issues with and weaknesses in existing strategies, including insufficient enforcement mechanisms and consumer awareness. In order to improve anti-greenwashing initiatives, the analysis emphasizes the significance of improving regulatory frameworks, accountability, and transparency, empowering consumers through education and digital technologies, and fostering international cooperation. The most recent studies on responsible business behavior, public policy, and sustainable consumerism have influenced this paper’s conclusions. In light of the urgency of confronting climate change and the global objective of carbon neutrality, this paper highlights the vitality of these findings. The topic of sustainable development and the value of cooperation and creativity in solving this problem continues to go on, and this study contributes to the conversation.

**Keywords:** Carbon neutrality; greenwashing; sustainable consumerism; international cooperation.

## **1. Introduction**

Carbon neutrality has become an increasingly important issue as the world grapples with the effects of climate change. However, some businesses have taken advantage of this trend by engaging in deceptive environmental marketing practices, also known as greenwashing, the practice of deceiving customers about a company’s environmental policies (at the firm level) or the environmental advantages of a product or service (at the product- or service-level) (Delmas et al,2011). In recent years, governments and other stakeholders around the world have stepped up their efforts to counteract greenwashing. The main research question of this paper is: How effective are current anti-greenwashing efforts in countering deceptive environmental marketing practices, and what improvements can be made to strengthen these initiatives? The issue of greenwashing is not only detrimental to consumers who may be misled into

purchasing products that do not meet their environmental standards, but it also undermines efforts towards achieving carbon neutrality.

This paper will explore the rise of anti-greenwashing efforts across borders and discuss the importance of these initiatives in achieving carbon neutrality. It will provide a general overview of greenwashing, its effects on consumers and the environment, and the countermeasures several nations have taken. The paper will then analyze the weaknesses in existing strategies, including insufficient enforcement mechanisms and consumer awareness. The significance of improving regulatory frameworks, accountability, and transparency, empowering consumers through education and digital technologies, and fostering international cooperation will also be discussed. Finally, the paper will conclude by highlighting the vitality of these findings in light of the urgency of confronting climate change and the global objective of carbon neutrality.

## **2. The Rise of greenwashing**

### **2.1. The greenwashing phenomenon**

Due to the increasing environmental issues and the consequent public awareness, many stakeholders have become more conscious of environmental considerations. (Chen Y et al,2012) Over the past decade, stakeholders such as investors, consumers, governments, and corporate clients have been exerting growing pressure on companies to disclose information about their environmental performance and eco-friendly products in green markets. (Polonsky, M. J,1994) The green market has grown rapidly, with consumers, capital markets, products, services, and companies expanding their focus on environmental concerns. However, with the growth of the green market comes the phenomenon of greenwashing. (Majláth M et al,2014) According to Lyon T et al, greenwashing can be seen as a form of selective disclosure: Maintain the withholding of unfavorable information about the company's ecological footprint and highlight advantageous data regarding such. And there are two main types of greenwashing: claim greenwashing and executional greenwashing, as described in de Freitas Netto et al 2020. There is a classification called "the seven sins of greenwashing" created by TerraChoice (2010), which includes:

- (1) Sin of the hidden trade-off: A product is green based on a small number of characteristics without taking into account other significant environmental challenges.
- (2) Sin of no proof: A claim about the environment that isn't supported by reputable third - party certification or by readily available supporting data.
- (3) Sin of vagueness: A claim whose true meaning is likely to be misconstrued by the consumer because it is inadequately defined or overly general.
- (4) Sin of worshipping false labels: A product that, via the use of either words or graphics, suggests third-party endorsement when none exists
- (5) Sin of irrelevance: A claim about the environment that, while it might be true, is meaningless or useless to customers looking for environmentally friendly products.
- (6) Sin of lesser of two evils: A claim that, while perhaps accurate for the product category, runs the risk of diverting attention from the category's broader environmental effects.
- (7) Sin of fibbing: Simple fabrications regarding the environment.

The seven sins of greenwashing, according to Baum, are the primary ways in which a business might deceive customers with environmental claims, and they serve as a foundation for advertising analysis. The goal of the seven sins, according to Antunes et al, is to dissuade businesses from using these green marketing methods by arming consumers with the knowledge they need to be cautious when making purchases.

### **2.2. Effects of greenwashing on consumers**

#### **2.2.1. Green confusion**

Consumer Confusion could be known as a lack of accurate and suitable perception of many characteristics of an

item by consumers. Mitchell, Walsh, and Yamin (2005) identified three different categories of green consumer confusion:

- (1) Unclarity confusion: Characterized by a lack of comprehension that compels customers to rethink their prior opinions of a certain product. Technical complexity, confusing information or dubious product claims, contradicting information, or wrong interpretation may all contribute to this type of perplexity (Mitchell, Walsh, and Yamin, 2005).
- (2) Similarity confusion: The potential adjustment of a consumer's decision or wrong brand evaluation brought on by the apparent physical likeness of items or services(2005) Mitchell, Walsh, and Yamin.
- (3) Overload confusion: Too much information that is relevant to making decisions about the brands to choose from causes overload confusion.

### 2.2.2. Green skepticism

Customers' intents to make green purchases have directly increased as a result of both environmental knowledge and environmental worries. According to Leonidou, C.N. et al (2015), consumers' perceptions of industry standards, corporate social responsibility, and corporate history all play a significant role in explaining why they attribute various motivations to businesses' environmental initiatives. Yet Masayu N.S et al (2021) shows that consumer interest in buying green personal care products is decreased by green skepticism. Customers are prompted to research the products more, spread unfavorable information about them to colleagues and acquaintances, and have their purchasing aspirations dashed ( Leonidou, C.N. et al(2015)).

### 2.2.3. Green perceived pisk

Green perceived risk is the anticipation of unfavorable environmental effects related to purchasing decisions. (Juliana et al (2020)) Several types of perceived risk are categorized by Assae [2004]:

- (1) Financial risk: a proportional relationship between a product's price and the consumer's available budget.
- (2) Social risk: Inability of the purchase to satisfy the requirements of a significant reference group.
- (3) Psychological risk: loss of confidence when a consumer recognizes they've made an oversight.
- (4) Performance risk: The potential for the product to perform differently than expected.
- (5) Physical risk: the potential for physical injury as a result of how a product performs.

## 3. Countermeasures

### 3.1. General measures

#### 3.1.1. Anti-greenwashing framework

##### (1) Regulatory Framework for Environmental Advertising in the US

- 1) *Federal Trade Commission (FTC) Act (1914)*: The FTC Act prohibits "unfair or deceptive acts or practices in commerce," including false or misleading environmental claims.
- 2) *Federal Trade Commission Green Guides (1992, updated in 2012)*: These guidelines provide businesses with recommendations on how to make truthful and non-deceptive environmental claims. They cover specific topics such as certifications and seals, biodegradable claims, and carbon offsets.
- 3) *The National Advertising Division (NAD) (1971)*: NAD is a self-regulatory body that investigates complaints about advertising, including environmental claims. It operates under the Council of Better Business Bureaus.
- 4) *State Laws*: Some states have their own laws governing environmental advertising, such as California's Green Chemistry Initiative (2008).
- 5) *The Sustainable Chemistry Research and Development Act (2020)*: This Act aims to promote research and development of sustainable chemistry, including the development of safer and more sustainable chemicals and materials.

- 6) *The Climate and ESG Task Force (2021).*
- 7) *Environmental Alliance and Regulations (2022).*

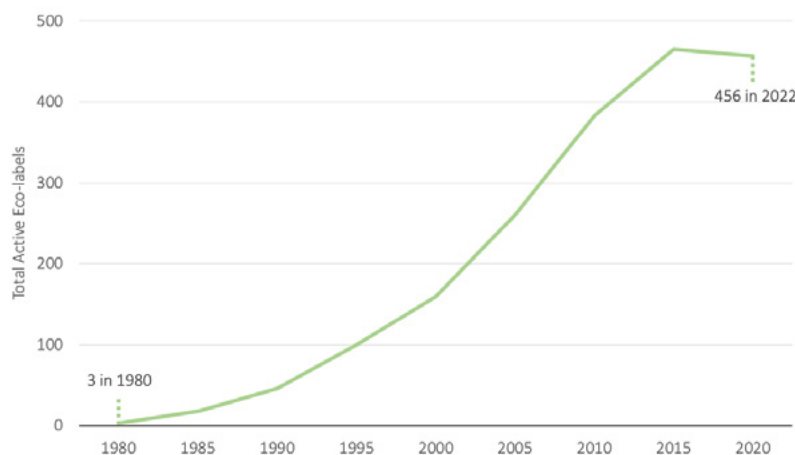
**(2) Regulatory Framework for Environmental Advertising in the EU**

- 1) *The Unfair Commercial Practices Directive (2005):* This Directive prohibits misleading and aggressive commercial practices, including false or deceptive environmental claims.
- 2) *The Consumer Protection Cooperation Regulation (2006):* This Regulation establishes a network of national authorities responsible for enforcing consumer protection laws, including laws related to environmental advertising.
- 3) *The Green Claims Guidance (2018):* This guidance document was developed by the European Commission and provides detailed recommendations on how to make accurate and transparent environmental claims. It covers topics such as the use of eco-labels and the measurement and verification of environmental impacts.
- 4) *The European Advertising Standards Alliance (EASA) (1992):* EASA is a self-regulatory organization that coordinates advertising standards across Europe. It has a specific code of conduct on environmental advertising, which includes requirements for substantiation and clarity.
- 5) *The Product Environmental Footprint (PEF) initiative (2013):* This initiative aims to develop a standardized method for measuring the environmental impact of products.
- 6) *The EU Ecolabel (1992):* The EU Ecolabel is a voluntary label that businesses can use to highlight the environmental performance of their products. It covers a wide range of product categories and has specific criteria for advertising and marketing claims.
- 7) *The General Data Protection Regulation (GDPR) (2018):* Although not specifically related to environmental advertising, the GDPR regulates the collection and use of personal data, which may be relevant to certain types of targeted environmental advertising.
- 8) *Green Claims Directive (GCD)(2023):* The European Commission aims to crack down on greenwashing by regulating how companies substantiate and communicate their green claims.

**3.1.2. Green labels and certifications**

Governments have created certification programs that evaluate the environmental impact of products and services. These certifications allow consumers to easily identify environmentally friendly products and avoid ones that are falsely advertised. Green labels and certifications are third-party verification programs that provide consumers with information about the environmental performance of a product or service. These programs are designed to help consumers make more informed purchasing decisions and to encourage companies to adopt more sustainable practices.

One example of a green label program is the Energy Star program, which is administered by the US Environmental Protection Agency (EPA). The Energy Star label can be found on products such as appliances, electronics, and



*Rise of Eco-labels over the past 4 decades (Data from Eco-label Index)*

lighting, and indicates that the product meets certain energy efficiency criteria.

Another example of a green label program is the Forest Stewardship Council (FSC) certification, which verifies that wood and paper products come from responsibly managed forests. This certification ensures that the forests are not being over-harvested, that wildlife habitats are being protected, and that local communities are being respected.

Green labels and certifications are becoming increasingly important in today's marketplace as consumers become more environmentally conscious. Companies that participate in these programs can use them as a marketing tool to differentiate themselves from competitors and to appeal to environmentally minded consumers.

### **3.1.3. Legal regulations**

In response to the demand of transparency and credibility in companies' environmental claims from customers, governments have enacted legal regulations to protect consumers from greenwashing and ensure that they can make informed choices when purchasing products.

In the United States, regulatory agencies like the Federal Trade Commission (FTC) enforce laws and guidelines that restrict deceptive environmental advertising claims. The FTC has implemented the Green Guides, which outline specific criteria that a product or service must meet to make an environmental claim. For instance, a product claiming to be "eco-friendly" must have a significant environmental benefit compared to similar products in its category.

Legal regulations governing environmental claims vary across different countries and jurisdictions. For example, the European Union established the EU Ecolabel, a certification program that provides a label for products that meet rigorous environmental standards. Other countries have established similar programs, such as Japan's Eco Mark and Taiwan's Green Mark.

Enforcing these regulations is essential to ensure that companies do not engage in deceptive practices that mislead consumers while also damaging the environment. When a company violates environmental advertising regulations, regulatory agencies may take enforcement action against them, including issuing fines, injunctions, and corrective advertising measures.

### **3.1.4. Public awareness campaigns**

Governments have launched public awareness campaigns that educate consumers about greenwashing and how to identify it. These campaigns aim to encourage consumers to make informed choices when purchasing products.

### **3.1.5. Consumer complaint mechanisms**

Governments have set up mechanisms to allow consumers to submit complaints about false or misleading environmental claims. These complaints can lead to investigations and legal action against companies that engage in greenwashing.

### **3.1.6. Corporate disclosure requirements**

Governments have required companies to disclose information about their environmental practices and the impacts of their products. This enables consumers to make more informed decisions and holds companies accountable for their environmental impact.

## **3.2. Specific measures**

### **3.2.1. Environmental audits**

Companies could conduct regular environmental audits to evaluate their performances and identify areas for improvement. Thus, they can make data-driven decisions to reduce waste, conserve resources, and mitigate risks to the ecosystem. Walmart conducts environmental audits and assessments of its suppliers to ensure they comply with the company's sustainability standards. The audits evaluate suppliers' environmental impact, water and energy use, and waste management practices.

### **3.2.2. Life cycle assessments**

The sustainability should be integrated into every aspect of company's business, from product design to end-of-life disposal. Conducting life cycle assessments to evaluate the environmental impact of the products throughout their entire life cycle could reduce environmental footprint, for creating more sustainable products. Patagonia conducted a life cycle assessment of one of its best-selling products, showing that the majority of its environmental impact comes from raw materials production. As a result, the company shifted its focus to using recycled materials in its products.

### **3.2.3. Supply chain management**

The companies could make the management of the flow of goods and services and includes all processes that transform raw materials into final products turn greener. Unilever implemented a Sustainable Living Plan, which includes sustainable sourcing goals and a commitment to reduce the environmental impact of its entire supply chain. Through this plan, the company works with suppliers to reduce greenhouse gas emissions, improve water management, and promote sustainable agriculture.

### **3.2.4. Carbon footprint reduction**

Carbon footprint reduction involves measuring and reducing greenhouse gas emissions associated with a company's operations, products, and services. This can include adopting renewable energy sources, implementing energy-efficient technologies, and offsetting emissions through investment in carbon credits. Google is committed to achieving neutrality and sourcing 100% renewable energy for its operations. The company invests in wind and solar projects and purchases carbon offsets to offset its remaining emissions.

### **3.2.5. Sustainable packaging**

This can include using biodegradable or recyclable materials, minimizing packaging size and weight, and designing packaging that is easy to recycle. The Body Shop introduced refill stations in some of its stores, allowing customers to refill their own containers with the brand's shampoo, conditioner, and shower gel. This reduces the need for single-use plastic bottles and promotes a circular economy.

### **3.2.6. Renewable energy use**

This involves replacing fossil fuels with renewable energy sources such as solar, wind, or hydropower. By transitioning to renewable energy, companies can significantly reduce their carbon emissions and demonstrate their commitment to sustainability. Ikea has installed over 700,000 solar panels on its buildings and owns several wind farms, allowing the company to generate renewable energy and reduce its reliance on fossil fuels.

## **4. Issues with ongoing solutions**

### **4.1. Flawed framework**

#### **4.1.1. The difficulty in enforcing the rules**

The resources available to the law are typically constrained, and it can take time and money to investigate and prosecute businesses for making false or deceptive representations. Furthermore, the penalties for breaking environmental advertising regulations are frequently mild, which might not dissuade businesses from using dishonest tactics. The Volkswagen "Clean Diesel" scandal is an example of the challenge in enforcing environmental advertising rules. The scandal involved the installation of software that allowed cars to cheat on emissions tests and false environmental claims by Volkswagen. It took several years and extensive investigations to uncover the fraud, highlighting the difficulty in detecting and punishing such violations.

## **4.1.2. The lack of clarity**

Several of the guidelines are proposals rather than hard-and-fast standards, which can be confusing for businesses and difficult for consumers to evaluate the veracity of environmental claims. Furthermore, not all areas of environmental advertising are covered by the standards, such as statements about packaging or water consumption. The Fiji Water “Green” campaign is an example of the lack of clarity surrounding environmental advertising standards. The campaign claimed to be “carbon negative” and environmentally friendly, but did not provide clear evidence to support these claims. This lack of clarity can enable companies to make vague or misleading claims about their environmental impact, which can confuse consumers and undermine the credibility of environmental advertising standards.

## **4.1.3. Loopholes and inconsistencies**

The rules and guidelines governing environmental advertising can be complex, with different standards applying to different product categories or types of claims. This can create loopholes or inconsistencies that businesses may exploit, resulting in misleading or confusing messages for consumers. One event that highlights this problem is the case of Walmart’s “Sustainability Index” program. While it covered some aspects of sustainability, such as energy efficiency and waste reduction, it did not address other important issues, such as labor practices or supply chain transparency. Additionally, the index did not apply to all products sold by Walmart, creating loopholes that allowed some products to be marketed as sustainable despite lacking comprehensive sustainability data.

## **4.1.4. Lack of coordination**

The regulatory framework for environmental advertising involves multiple entities, including national authorities, self-regulatory organizations, and industry associations. However, there can be a lack of coordination between these groups, which can result in gaps or overlaps in regulations and enforcement.

## **4.1.5. Limited consumer awareness**

Despite efforts to educate consumers about environmental claims, many people still struggle to understand the meaning behind terms like “sustainable,” “eco-friendly,” or “green.” This can make it difficult for consumers to evaluate the veracity of environmental advertising and make informed purchasing decisions.

## **4.1.6. Limited international scope**

While the EU has developed a comprehensive regulatory framework for environmental advertising, this framework only applies within its borders. This means that businesses operating outside of the EU may not be subject to the same rules and guidelines, creating potential discrepancies in how environmental claims are made and evaluated globally.

## **4.2. The problems of eco-labels**

Due to the abundance of eco-labels, the market is unregulated, oversaturated, and competitive, with eco-labels competing for customers and visibility by lowering their prices as low as possible.

- (1) Not every eco-label is created equal.
- (2) Numerous consumers struggle to perceive and comprehend labels.
- (3) Due to increased label rivalry brought on by the proliferation of eco-labels, obtainability is the deciding factor in whether a business will choose one eco-label over another.

## **4.3. Problematic regulations**

### **4.3.1. More green hushing**

Greenwashing is a result of a low moral intensity that hides potentially harmful effects of perceived lesser competence while shielding businesses from skeptical customers who could view their claims as disingenuous. (Xavier F et al (2015)) Corporate firms are becoming more afraid of being exposed for making false, inflated, or both environmental and sustainability claims as authorities crack down and hold them accountable for greenwashing. Thus, corporate climate objectives become harder to assess and knowledge sharing on decarbonization is restricted. As a result, less aggressive targets may be set, and possibilities for industry collaboration may be lost.

#### **4.3.2. Transition-washing**

Transition-washing is a problem when companies only invest in the green transition in nations where regulations restrict carbon-intensive finance. It occurs when companies provide so-called green finance to bankroll carbon-intensive firms that do not use the capital to change their business models away from fossil fuels. If left unchecked, it will pose long-term concerns and inhibit progress by limiting efficient resource allocation for meaningful climate action - and, in the short term, a loss of public trust.

#### **4.3.3. ESG and Antitrust**

Companies have increasingly incorporated ESG goals into their decision-making and reporting and examine the possible environmental and social implications as part of business or investment choices. Whether directly or through trade groups or other organizations, collaboration among competitors can violate antitrust laws, regardless of how socially, ecologically, or financially beneficial the outcome is.

## **5. Conclusion**

This paper lists the widely accepted concept of greenwashing and its main types that could be found in papers before. Additionally, it provides an summary of how consumers evaluate deceptive corporate green marketing messages that employ greenwashing techniques, as well as how this impacts their impression of the businesses and their desire to buy. By displaying current solutions in anti-greenwashing campaigns, Both governments and corporations need to devote greater focus towards implementing comprehensive green initiatives and making genuine green claims while keeping in mind the possible negative effects of greenwashing. Additionally, they need to look for genuine solutions rather than relying solely on present initiatives like third-party certifications that only require the goods to fulfill specific requirements. While these efforts assist in maintaining legitimacy in the eyes of customers in some ways, they still leave many issues unresolved. I expect that the research findings from this study will be beneficial to managers, practitioners, consumers, and readers from other fields and that it will significantly advance future carbon neutrality actions by acting as a reference.

## **References**

- [1] Delmas, M. A., & Burbano, V. C. (2011). The Drivers of Greenwashing. *California Management Review*, 54(1), 64–87. <https://doi.org/10.1525/cmr.2011.54.1.64>
- [2] Chen, Y. and Chang, C. (2012), «Enhance green purchase intentions: The roles of green perceived value, green perceived risk, and green trust», *Management Decision*, Vol. 50 No. 3, pp. 502-520. <https://doi.org/10.1108/00251741211216250>
- [3] Polonsky, M. J. (1994). An Introduction To Green Marketing. *Electronic Green Journal*, 2. <http://dx.doi.org/10.5070/G31210177>
- [4] Majláth M (2017) The effect of greenwashing information on ad evaluation. *Eur J Sustain Dev*. <https://doi.org/10.14207/ejsd.2017.v6n3p92>
- [5] Lyon T, Maxwell J (2011) Greenwash: corporate environmental disclosure under threat of audit. *J Econ Manag*



- Strategy 20(1):3–41. <https://doi.org/10.1111/j.1530-9134.2010.00282.x>
- [6] de Freitas Netto, S.V., Sobral, M.F.F., Ribeiro, A.R.B. et al. Concepts and forms of greenwashing: a systematic review. *Environ Sci Eur* 32, 19 (2020). <https://doi.org/10.1186/s12302-020-0300-3>
- [7] Baum L (2012) It's Not Easy Being Green ... Or Is It? A content analysis of environmental claims in magazine advertisements from the United States and United Kingdom. *Environ Commun* 6(4):423–440. <https://doi.org/10.1080/17524032.2012.724022>
- [8] Antunes D, Santos A, Hurtado A (2015) The communication of the LCA: the need for guidelines to avoid greenwashing. *Espacios* 36(5):1
- [9] TerraChoice (2010) The sins of greenwashing: home and family edition. <http://sinsofgreenwashing.org/findings/the-seven-sins/>.
- [10] Mitchell VM;G. Walsh; and M Yamin.(2005). Towards a conceptual model of consumer confusion, *Advances in Consumer Research* 32, pp. 143-150.
- [11] Leonidou, C.N., Skarmas, D. Gray Shades of Green: Causes and Consequences of Green Skepticism. *J Bus Ethics* 144, 401–415 (2017). <https://doi.org/10.1007/s10551-015-2829-4>
- [12] Masayu N Syadzwin and Rifelly D Astuti 2021 IOP Conf. Ser.: Earth Environ. Sci. 716 012045
- [13] Juliana, J., Djakasaputra, A., & Pramono, R. (2020). GREEN PERCEIVED RISK, GREEN VIRAL COMMUNICATION, GREEN PERCEIVED VALUE AGAINST GREEN PURCHASE INTENTION THROUGH GREEN SATISFACTION. *Journal of Industrial Engineering & Management Research*, 1(2), 124-139. <https://doi.org/10.7777/jiemar.v1i2.46>
- [14] <https://impakter.com/eco-labels-why-they-matter-and-what-lies-ahead/>
- [15] Federal Trade Commission Act 15 U.S.C. § 45(a)(1) (1914).
- [16] “FTC Issues Revised ‘Green Guides,’” FTC Press Release, Oct. 1, 2012, available at: <https://www.ftc.gov/newsevents/press-releases/2012/10/ftc-issues-revised-green-guides>.
- [17] National Advertising Division, (1971) available at: <https://bbbprograms.org/programs/all-programs/national-advertising-division>.
- [18] Hazardous Materials and Toxic Substances Evaluation and Regulation AB 1879 (Chapter 559, Statutes of 2008): and Toxic Information Clearinghouse, SB 509 (Chapter 560, Statutes of 2008):
- [19] Sustainable Chemistry Research and Development Act, S.999 - 116th Congress (2019-2020)
- [20] Xavier Font, Islam Elgammal & Ian Lamond (2017) Greenhushing: the deliberate under communicating of sustainability practices by tourism businesses, *Journal of Sustainable Tourism*, 25:7, 1007-1023, DOI: 10.1080/09669582.2016.1158829