CSSN Working Paper

2021:1 An Integrated Framework to Assess Greenwashing[1]

I. INTRODUCTION

Awareness is growing around the world about how companies, nonprofits, and even governments are increasingly engaging in greenwashing. The value for these organizations is that they can gain social acceptance, loyalty, and even profits in the present, while avoiding the sometimes difficult changes necessary to rapidly reduce their impact on the environment. In spite of this growing awareness, greenwashing remains widespread. A recent global review of 500 websites by the UK's Competition and Markets Authority and the Netherlands Authority for Consumers and Markets showed that roughly 40% of green claims fall into the category of greenwash. Most countries have regulations for misleading claims, but all relate only to commercial advertisements. For example, in the USA the Federal Trade Commission produced the FTC Green Guides; the EU has launched the Unfair Commercial Practices Directive and a Guidance Document on its implementation; and in the UK, the Advertising Standards Association Codes have laid down requirements for responsible advertisement. Still, other actors, nonprofits and government activities go unregulated.

The high percentage of greenwashing in advertising suggests that companies feel sufficiently confident that they will not be held accountable for their green claims. Other than piecemeal efforts by NGOs, bloggers and journalists--such as the Guardian's year-long series "tracking the unprecedented efforts to hold the fossil fuel industry to account"--greenwashing beyond selected commercial ads remains largely unmonitored. Furthermore, accountability efforts, as well as national regulations, often leave out non-commercial actors and non-advertisements (e.g., pledges, partnerships, certifications), where greenwashing also occurs.

Significant deception and misleading claims exist in this sphere, with some even embedded in law. A recent example is the EU taxonomy on sustainable finance, which lists controversial activities, among them ethanol and wood biomass, as sustainable. Sustainability certification, when not conducted rigorously, can also be used as green cover for corporations and governments to deepen the assault on ecosystems and social and indigenous rights. These multi-stakeholder initiatives may give false environmental credibility to so-called 'sustainable' or 'more sustainable' products/services, as recently reported by MSI Integrity in 'Not Fit for Purpose'. The several thousand net-zero commitments announced by governments and firms can be interpreted in as many ways as there are actors who have committed to them.

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The problem is that there is no universal definition of greenwashing or standard of behavior to avoid it. The purpose of this working paper is to fill a gap in the recognition and understanding of environmental communication by providing a definition and framework to assess greenwashing by organizations. The main objective of the framework presented here is to develop a science-based assessment tool that can promote discussions around transparency and accountability, alert and inform the public about how they could be misled with false solutions and pledges, and help different actors to avoid greenwashing. The integrated framework that we include in the Appendix is based on a) integrating existing theoretical greenwashing frameworks and the different types, varieties and so-called 'sins' of greenwashing that the literature has presented to date, and b) developing it further to create an actionable framework to assess greenwashing efforts by any actors. Along with the assessment framework, we have developed a working definition of greenwashing, which we understand as an umbrella term for a variety of misleading communications and practices that intentionally or not, induce false positive perceptions of an organization's environmental performance.

II. METHODOLOGY

We conducted an extensive review of the scientific literature to identify the main types or varieties of greenwashing and the different indicators or questions that have been offered as a means to test for its presence. In essence, we were most interested in research that focused on typologies of greenwash and how to detect it. We did not intend to repeat recent systematic academic reviews of the greenwashing literature (e.g., Lyon & Montgomery 2015; Gatti *et al*, 2019; de Freitas *et al*, 2020), but rather build on their discussion and expand the research in the form of a usable tool. Their resultant contributions to the literature formed the nucleus of our overview of the existing research.

In addition to the scholarly articles discussed in these reviews of greenwashing and its identification, we also conducted thorough internet research with the keywords "greenwash checklist", "greenwash indicators" and "greenwashing frameworks" to include consulting firms, environmental organizations, and other non-academic sources that have developed different criteria or checklists to help identify and assess greenwashing and help companies to avoid it. Finally, we also looked into the legal contexts within the EU, the UK, and the US and included in our framework insights from the guidelines that have been established in those governments to help companies to avoid misleading environmental claims in their advertisements and other environmental communications.

II. 1 Systematic literature review

Academics have not yet come up with a widely agreed upon and applicable method of measuring greenwashing objectively. One of the pioneers in identifying and analyzing greenwashing was the Center for Media and Democracy founded by John Stauber in 1993. Their books (Stauber & Rampton, 1995; Rampton & Stauber, 2002) and other efforts (PR Watch, SourceWatch) paved the way for investigative research into greenwashing and related deceptive practices and their effects on consumers. During the last decades, extensive work has been done to categorize and quantify product-level greenwashing. For example, Gillespie (2009) identified "ten signs of greenwash", ranging from "fluffy language," words or terms with no clear meaning such as "eco-friendly," to "outright lying," as in totally fabricated claims or data. The TerraChoice Environmental Marketing (2009) categorized product-level greenwashing into "seven sins". These range from the "sin of the hidden trade-off", committed by suggesting a product is green based on an unreasonably narrow set of attributes without attention to other environmental issues, to the "sin of fibbing", which is committed by making false environmental claims. The other sins are the sin of no proof; sin of vagueness; sin of irrelevance; sin of lesser of two evils; and sin of worshipping false labels.

Greenpeace (2010) defined four greenwashing detection criteria: dirty company, ad bluster, political spin, and "it's the law, stupid!". EnviroMedia Social Marketing in collaboration with the University of Oregon implemented in 2007 the "Greenwashing Index Scoring Criteria" and a tool was made available on the internet (www.greenwashingindex.com – no longer available) which allowed users to assess the amount of greenwashing involved in ads claiming to be green. They used the following criteria in their assessment: the ad misleads with words; the ad misleads with visuals and/or graphics; the ad makes a green claim that is vague or seemingly unprovable; the ad overstates or exaggerates how green the product/company/service actually is; and the ad leaves out or masks important information, making the green claim sound better than it is.

Gallicano (2011) created the first integrated framework based on synthesizing the methods four organizations used for assessing greenwashing claims: Greenpeace (2009), EnviroMedia Social Marketing and the University of Oregon (2009), TerraChoice Environmental Marketing (2009, now Underwriters Laboratory) and the Committee of Advertising Practice (2008). The framework developed by Gallicano consisted of seven main themes: Skeleton in the closet; The Right hand isn't talking to the left hand; Magic Tricks, Larger than Life; May I have the definition please?; Law and order; and Truth and Fiction. In addition a description of the meanings of each of these is provided alongside an explanation of their significance. This framework allowed comparisons and contrasts of the public environmental criticisms using the case of Starbucks' online information and corporate social responsibility reports (see appendix of Gallicano (2011).

Next, focusing on conceptualization and theoretical development, Lyon and Montgomery (2015) synthesized the research on greenwashing and highlighted several varieties of greenwash. Importantly they note that the literature is not yet mature enough to have identified all of its forms: Selective disclosure; Empty green claims and policies; Dubious certifications and labels; Co-opted NGO endorsements/partnerships; Ineffective public voluntary programs; Misleading narrative and discourse; and Misleading visual imagery. In presenting these ideas the authors provide great insight into understanding the many definitions of greenwashing and its various forms, contributing to greater conceptualization and understanding its presence.

Zanasi, Rota, Trerè and Falciatori (2017) took this a step further by developing an analytical tool that includes a list of indicators derived from several different organizations (Greenpeace, EnviroMedia Social Marketing and the University of Oregon, Terrachoice, Futerra) and authors (e.g. Grant, 2009). This work covers a broad range of sustainability dimensions as well as offers communication suggestions in order to avoid greenwashing, focusing on the agrifood sector in particular. The authors suggest a number of indicators for greenwashing assessment including: Analysing the entire product's Life Cycle; Ad contents should be accessible, complete and verifiable; The language should be understandable and non-misleading; Communicate sustainable activities only when they are effective, meaningful and voluntary; Involve/engage; Do not use misleading "green" images; and Choose reliable third party certification schemes. They suggested that further studies should weigh the different greenwashing indicators in order to appreciate their relevance in contributing to the overall level of meaningful communication on the subject.

Taken together, these examples of various evaluation tools and frameworks from both the academic literature and various organizations provide a foundation for the work that we do here. We discuss the integration of these ideas in the section that follows, seeking to build on their work with the development of our assessment framework.

III. GREENWASHING: DEFINITION AND VARIETIES

As a concept, greenwashing has been examined from a number of academic disciplines in addition to being a part of conversations among various government bodies and non-governmental organizations alike. Research contributing to its conceptualization and understanding has come from the fields of business (including advertising, ethics, and marketing), media and communications, environmental studies and management, production engineering, law, and the social sciences (including economics, geography, political science, psychology, and sociology) among others. Given the diversity of perspectives that are a part of the conversation, it should come as no surprise that no single definition of the concept is universally accepted. Furthermore, as greenwashing becomes increasingly important and attracts more attention, definitions continue to evolve, therefore presenting a moving target of sorts as policymakers, practitioners, and scholars discuss the issue.

What has emerged instead is a collection of definitions that are connected through overlapping ideas that reveal a number of core elements of the concept or ways that it manifests itself. Greenwashing can therefore take on multiple forms and reflect a variety of components of interest that present both objective and subjective realities. In this working paper, it is not our intention to resolve debate over what definition is best nor develop what we believe to be the universal standard. We instead can refer the reader to a number of important academic studies that have done this in a far more thorough manner than what we are able to do here including de Freitas Netto et al (2020), Gatti et al (2019), Lyon and Montgomery (2015), or Seele and Gatti (2017). We simply want to enable a basic understanding of the concept and its various manifestations for the reader while presenting a simple definition that can serve as a benchmark for using the framework that we have developed to assess its prevalence.

Table 1 in the Appendix contains a collection of several definitions for greenwashing. Reflecting the larger conversation on the topic, these come from a range of academic analyses (Baum 2012; de Freitas Netto et al 2020; Delmas and Burbano 2011; Lyon and Maxwell 2011; Marquis and Toffel 2011), consumer organizations (Ecolife N.d.; Ethical Consumer 2020), government entities (European Commission 2016; U.S. Environmental Protection Agency n.d), media (Corcione 2020; de Ferrer 2020), and non-governmental organizations (CorpWatch 2001; Sourcewatch n.d.) among others. In addition, definitions of the concept are also quite common from various dictionary or encyclopaedia sources (Oxford English Dictionary 2003), with Becker-Olsen and Potucek (2013) providing a particularly meaningful definition given the corporate social responsibility context in which it appears:

> Greenwashing refers to the practice of falsely promoting an organization's environmental efforts or spending more resources to promote the organization as green than are spent to actually engage in environmentally sound practices. Thus greenwashing is the dissemination of false or deceptive information regarding an organization's environmental strategies, goals, motivations, and actions.

An often-used definition of greenwashing comes from the marketing and consulting organization TerraChoice, which is now a subsidiary of Underwriters Laboratories (n.d): "Greenwashing is the act of misleading consumers regarding the environmental practices of a company or the environmental benefits of a product or service". This definition captures the essence of the core ideas that are central to the many available definitions, thus reflecting the most important themes in its conceptualizations. Furthermore, complementing its "seven sins of greenwashing" and examples used to identify it (see TerraChoice/Underwriters Laboratory 2010) TerraChoice's conceptualization and application connect well with the framework we develop here.

New empirical analyses of greenwashing are constantly emerging in the wake of seemingly expanding consumer demands for corporate accountability and social responsibility alongside concerns about climate change and the environment. Furthermore, theoretical considerations have evolved in a way that

requires a continual reassessment of the definition and forms of the concept. For example, definitions and research on the topic typically has viewed greenwashing as a deliberate corporate action fraught with misleading elements, focused on the deception of stakeholders. More recent literature on greenwashing suggest that it is not necessarily deliberate and furthermore encompasses a range of phenomena that go well beyond simply the disclosure of information (see Lyon and Montgomery 2015; Parguel et al 2015) though of course others (e.g., Corcione 2020; Kenton 2021) may disagree regarding the intentionality dynamic thus indicating the importance of ongoing debate.

In another example of the concept's evolution, the literature also shows that just like corporations, NGOs, and governments can engage in greenwashing: in fact, they may often serve as partners in corporate greenwashing (Lyon and Montgomery 2015) or manage public perception of a specific policy or various programs (de Ferrer 2020; Harlan 2019). Sometimes "greenwashing" is not out of malice, but instead due to ignorance of environmental issues and environmental laws. It can also be a result of poorly conceived public relations efforts, which lead to the promotion of false or misleading environmental claims. In addition, the study of greenwashing is primarily concerned with environmental issues, a notion that Gatti et al (2019:6) reinforce in their finding that 61.6% of the studies they reviewed felt this exclusively to be the case. However, there are far reaching implications, and as this same study further notes, 38.0% believe that the concept relates to social issues as well (Gatti et al 2019:6). For this reason and for purposes of both developing and applying a framework for its assessment, it is essential to consider the consequences that greenwashing has with regard to interface between the environment and society and its connections to additional components that are important to corporate social responsibility (see de Jong et al 2019; Gatti et al 2019).

Finally, building on the emergent literature and for the purpose of framework development and assessment, we have developed the following working definition, which we derive from the sources noted above: **greenwashing is an umbrella term for a variety of misleading communications and practices that intentionally or not, induce false positive perceptions of an organization's environmental performance.** It can be conducted by companies, governments, politicians, research organizations, international organizations, banks and NGOs too and it can range from slight exaggeration to full fabrication, thus there are different shades of greenwashing. Table 2 in the Appendix presents the 14 main varieties/themes of greenwashing. The box below is intended to reflect a sample of definitions that appear in the framework, its indicators and examples.

Greenwashing	An umbrella term for a variety of misleading communications and practices that intentionally or not, induce false positive perceptions of an organization's environmental performance.
Organization	An entity – such as a company, a consultancy, bank or an association (e.g. NGO) – comprising one or more people and having a particular purpose. For the purposes of the framework, governments and sub-national actors are also treated as organizations.
Claim	Evidence that organizations use to prove their point. Claims can take the form of verbal or written statements, pictures, reports, ads, but also collective aspirations by stakeholder groups; pledges; codes of conduct that define specific production or sourcing practices; and sectoral standards including principles, criteria and forms of verification agreed on by several stakeholders within a sector.
Deep decarbonization	Deep decarbonization refers to the phasing out of carbon-emitting fuels in favour of more sustainable alternatives. Deep decarbonization is more than just a temporary measure to combat the climate crisis: it is a long-term strategy (Earth.org, 2020).
Offset	"Offsets are tradable credits for any kind of mitigation effort – direct emissions reduction, carbon removal or sequestration, or avoided emissions, that are sold to a buyer who is not

	actually reducing emissions – just offsetting emissions by paying a seller for reductions or removals elsewhere. Offsets do not create an absolute mitigation benefit from a global carbon budget perspective" (Oxfam, 2021).
Removal	A removal (of carbon) is "the process of capturing carbon dioxide (CO_2) from the atmosphere and locking it away for decades or centuries in plants, soils, oceans, geological features, or long-lived products like cement" (The Institute for Carbon Removal Law and Policy, 2018).
Transparency	A form of public exposure used to display communicative power. Assessments of transparency go beyond mere availability of information (Ball, 2009). They must consider the means of transparency (e.g., self-disclosure versus legal requirement), the context of transparency (e.g., Through whose labor is the transparency achieved? Who controls the timing, scope, and particularities of information distribution?) and the beneficiaries of transparency (e.g., self-branding exercise or civic obligation)? (Wood and Aronczyk, 2020)

IV. INTEGRATING GREENWASHING FRAMEWORKS

Greenwashing frameworks, guidelines and checklists have been developed by several actors, among them academics, NGOs, and business consultants for a variety of reasons. BSR & Futerra (2009) in their practical manual for companies on greenwashing, offered a useful categorisation for avoiding the various types of greenwash: impact (ensuring it's real), alignment (building support internally and externally) and communication (ensuring it is accurate). They advised that when an actor wants to communicate a message about environmental issues, a) it should be based on real, significant impact; b) it should be aligned with multiple functions within the organization and the integrity of claims should be checked by credible third parties; and c) the communication should be focused on clarity and transparency. We have decided to follow these three categories within our framework as they capture all the various types and varieties of greenwashing in a meaningful way.

The resulting framework consists of 14 themes, describing the various types of claims used in greenwashing, all taken from existing literature [See Appendix spreadsheet, column A]. First, we have included themes in our framework that appeared in several research publications. Because some of them have been named differently by the various authors, we use names that best reflect the descriptions of the themes. Second, we included the descriptions of the different themes [column B] and the sources where the themes or their descriptions have been discussed [column C].

Next, we integrated various statements, indicators, and questions that either the scientific literature on greenwashing examined or that non-academic discussions of greenwashing have deemed to be important [column D] regarding the previously described themes. Where the different sources offered some statements that could be changed into the format of a question, we have integrated these, sometimes with modification so that the question is applicable for testing within the framework.

We discovered a large gap in the academic literature. While various authors referred to different forms of greenwashing, in some themes (most noticeably in 'dubious certifications & labels' and 'co-opted endorsement'), we did not find corresponding questions, statements or criteria that could help to assess whether an actor actually engages in greenwashing. For instance, under what circumstances could certification schemes reflect greenwashing? Similarly, when could national agencies or NGOs be accused of supporting a corporate actor in greenwashing? We have not found answers in the literature to these questions. Our framework therefore offers a first attempt to incorporate indicators in the fields where current literature on greenwashing has not included guidance on specific themes, issues, or organizations.

In addition, we have not found any attempts, in the academic literature, to give weights to the different indicators in greenwashing frameworks. One option is to choose core indicators, with a "yes" answer indicating a clear greenwash. In this sense, their weight could be more than other indicators. Another option to avoid weighting (which is prone to subjective judgment) is to give each question a point and include more questions in some themes than in others. In this regard, some themes have greater value in the potential overall score that results by virtue of their multiple assessment dimensions. Finally, another option is to agree on themes having equal weight, meaning that the weight of indicator questions are different depending on the number of questions within one theme. One of the disadvantages of these options is that themes like outright 'lying' do not have a stronger moral weight for instance than simply using 'jargon' or 'misleading symbols' in communication. This makes equal weighting of themes difficult to justify. Yet it is similarly difficult to give more weight to themes with more questions, when for example out-right lying is captured with a single indicator. Thus to avoid over-simplifying this complexity, we have decided to keep this question unanswered in the working paper.

Finally, no literature was found that had proposed methods for accounting for the different degree or severity of the potential impact of greenwash. This is important in that greenwashing can have different impacts depending on the type, scope, and severity of the application. For example, deflecting the serious consequences of fossil fuels on climate change through influence peddling and denial seems far more severe in scope than simply using a green image in a magazine ad. The end results of greenwashing remain the same, however. Our framework will be applied to real cases to pinpoint the obvious and likely greenwash, and to offer a tool that can help an actor to avoid any shade of greenwash.

V. HOW TO USE THE FRAMEWORK?

The framework is intended to be applied, and is not just an academic exercise. It can be used as a tool by organizations as a guide to avoid greenwashing in their own green marketing. It can also be a tool for activists, NGOs, journalists, researchers, policy-makers or others who want to assess an organization's claims for potential greenwashing. Some claims might intuitively seem like greenwashing, but one might not know how to rigorously assess whether they are or not. This framework provides a structured way to ask questions about the different varieties of greenwashing to evaluate whether the organization under assessment could be considered as engaging in greenwashing or not. It is not meant as a framework to benchmark organizations, but simply to analyse whether they are involved in greenwashing.

The way to use this framework is therefore quite straightforward: one needs to find a claim that is potentially a greenwash and check it against the list of indicator questions contained in the framework. Some questions will be irrelevant to the claim, in which case they can be ignored. Others may not be known or publicly available to the person doing the assessment (e.g., the marketing budget of a corporation) and thus these questions can be answered with an 'unknown'. Often, various sources need to be consulted in order to answer questions, including the organization's own website, social media, ads in radio/TV/print, as well as recent sustainability or annual reports and financial statements. In the end, if there is any question answered with a 'yes' in the framework the organization is already to some extent involved in greenwashing. It is important to note that the framework is not meant to analyse the degree of greenwashing - hence if the questions (even if some of them) within a theme/variety of greenwashing is answered affirmatively (so the claim is a greenwash according some indicator questions), the organization already has fallen prey to greenwashing. Finally, some questions cannot be answered with a straightforward yes/no, thus an in-between answer, with the response 'likely greenwash' has been incorporated to better account for such situations and highlight areas needing additional research or scrutiny.

VI. CONCLUSION

This working paper presents an integrated framework to support avoiding greenwashing by actors of any kind, including corporations, governments, and other organizations. The framework collects in one set of greenwashing themes a broader range of indicators linked to possible sources of greenwashing and could support effective sustainability policies and genuine green marketing and communication strategies at the level of any organization. In addition, it may also be used by others wishing to hold various actors accountable for the claims they make. In this regard, the framework can be seen as a monitoring tool of sorts by academics, activists, or consumers, among others, who are interested in better understanding the practice of greenwashing and informing stakeholders of the practice.

Scoring of different greenwashing indicators has so far not been attempted in literature. However, greenwashing can already be identified when an indicator question is answered with a 'yes'. Zanasi *et al* (2017) pointed out that further studies are necessary to weigh the different green marketing and greenwashing indicators in order to understand their relevance in contributing to the overall level of correct communication. Since such studies are currently lacking, this working paper focussed on a) defining the different varieties of greenwashing by different actors that have been mentioned in the academic literature, and b) presenting a tool to support the assessment of diverse green claims by any actor. This framework could potentially become the basis of an analytical method to develop a greenwashing index with scores – used internally or externally - to better understand the degree of greenwashing. Furthermore, the phrasing of the different greenwashing indicator questions, as well as fine tuning the various answers, could be improved by testing the framework on different green claims.

Persistent vigilance, especially of the fossil fuel industries and those relying heavily on the use of fossil fuels (e.g. transport, construction, utilities, mining and processing, manufacturing, agriculture, fashion, etc.) is essential to closely scrutinise messages and call into question blatant misinformation (Scanlan, 2017). In the era of "alternative facts", there is a pressing need for regulation of advertising claims and accountability regarding science versus "fake solutions" on environmental issues. Social movements and NGOs play a role in this, but there is also an important place for the news media and government agencies to contribute. This framework offers a mechanism to develop a solid evidence base for identifying greenwashing not just of corporations, but of ill-designed government policies, of certification schemes giving credibility to business-as-usual practices, and of any other actors claiming exaggerated environmental benefits. Close scrutiny is especially needed now in the rush to tackle the climate and biodiversity crises in which we find ourselves.

APPENDIX - TABLE 1: COLLECTION OF GREENWASHING DEFINITIONS

Source	Definition	Citation
Baum (2012:424)	"The act of disseminating disinformation to consumers regarding the environmental practices of a company or the environmental benefits of a product or service."	Baum, Lauren M. 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." *Environmental Communication* 6(4):423-440.
Becker-Olsen and Potucek (2013)	"Greenwashing refers to the practice of falsely promoting an organization's environmental efforts or spending more resources to promote the organization as green than are spent to actually engage in environmentally sound practices. Thus greenwashing is the dissemination of false or deceptive information regarding an organization's environmental strategies, goals, motivations, and actions."	Becker-Olsen, Karen, and Sean Potucek. 2013. "Greenwashing." In *Encyclopedia of Corporate Social Responsibility* edited by: Samuel O. Idowu, Nicholas Capaldi, Liangrong Zu, and Anada Das Gupta. Heidelberg: Springer Berlin (https://doi.org/10.1007/978-3-642-28036-8_104).
Concise Oxford English Dictionary (2003)	"Disinformation disseminated by an organization so as to present an environmentally responsible public image"	Pearsall, Judy, ed. 2003. Concise Oxford English Dictionary, 10th ed. Oxford, UK.
Corcione (2020)	"Greenwashing is when a company or organization spends more time and money on marketing themselves as environmentally friendly than on minimizing their environmental impact. It is a deceitful advertising gimmick intended to mislead consumers who prefer to buy goods and services from environmentally conscious brands."	Corcione, Adryan. 2020. "What is Greenwashing?" *Business News Daily* (https://www.businessnewsdaily.com/10946-greenwashing.html).
CorpWatch (2001)	"1) The phenomenon of socially and environmentally destructive corporations attempting to preserve and expand their markets by posing as friends of the environment and leaders in the struggle to eradicate poverty. 2) Environmental whitewash. 3) Any attempt to brainwash consumers or policy makers into believing polluting mega-corporations are the key to environmentally sound sustainable development 4) Hogwash.	CorpWatch. 2001. "Greenwash Fact Sheet." (https://www.corpwatch.org/article/greenwash-fact-sheet).

de Ferrer (2020)	"greenwashing is taken to mean two main things. It can be when companies—usually mega corporations and sometimes politicians—try to hide or cover up their less-than-stellar environmental records with a grand, public gesture towards green causes . . . the other type of greenwashing . . . is where companies and brands use words like 'green', 'sustainable', 'eco-friendly', or 'vegan' simply as a marketing ploy, without any deep interrogation over what those terms actually mean. And crucially - without any accountability for their actions."	De Ferrer, Marthe. 2020. "What is Greenwashing and Why Is It a Problem?" *Euronews.* (https://www.euronews.com/green/2020/09/09/what-is-greenwashing-and-why-is-it-a-problem)
de Freitas Netto et al (2020:7, 10)	The authors note two different major classifications of greenwashing, including "product/service level claim greenwashing, which uses textual arguments that explicitly or implicitly refer to the ecological benefits of a product or service to create a misleading environmental claim" (p. 7) while "executional greenwashing . . . suggests nature-evoking elements such as images using colors (e.g., green, blue) or sounds (e.g., sea, birds). Backgrounds representing natural landscapes (e.g., mountains, forests, oceans), or pictures of endangered animal species (e.g., pandas dolphins) or renewable sources of energy (e.g., wind, waterfalls) are examples of executional nature-evoking elements" (p. 10).	De Freitas Netto, Sebastião Vieira, Marcos Felipe Facao Sobrãl, Ana Regina Bezerra Riberio, and Gleibson Robert da Luz Soares. 2020. "Concepts and Forms of Greenwashing: A Systematic Review." *Environmental Sciences Europe* 32(19}: 1-12. (https://doi.org/10.1186/s12302-020-0300-3).
Delmas and Burbano (2011:66)	"the act of misleading consumers regarding the environmental practices of organizations (firm-level greenwashing) or the environmental benefits of a product or service (product-level greenwashing)"	Delmas, M.A., and V.C. Burbano. 2011. "The Drivers of Greenwashing." *California Management Review* 54:64-87.
Ecolife (N.d.)	"Greenwashing is the process by which organizations spread misleading perceptions about their products or services that suggest they are more environmentally responsible than is the reality. The practice of greenwashing is used regularly by corporations, governments, and other entities to deceive the public into believing that they are doing more for the environment than they truly are in order to gain better public perception."	Ecolife. N.d. "What is Greenwashing?" *ecolife dictionary* (http://www.ecolife.com/define/greenwashing.html).
Ethical Consumer (2020)	"Greenwashing is used to describe the practice of companies launching adverts, campaigns, products etc. under the pretense that they are environmentally beneficial, often in contradiction to their environmental and sustainability record in general."	*Ethical Consumer.* 2020. "What is Greenwashing." (https://www.ethicalconsumer.org/transport-travel/what-greenwashing).

European Union Commission (2016:95)	"The expressions 'environmental claims' and 'green claims' refer to the practice of suggesting or otherwise creating the impression (in a commercial communication, marketing or advertising) that a good or a service has a positive or no impact on the environment or is less damaging to the environment than competing goods or services. This may be due to its composition, how it has been manufactured or produced, how it can be disposed of and the reduction in energy or pollution expected from its use. When such claims are not true or cannot be verified, this practice is often called 'greenwashing'. 'Greenwashing' can relate to all forms of business-to-consumer commercial practices concerning the environmental attributes of goods or services. According to the circumstances, this can include all types of statements, information, symbols, logos, graphics and brand names, and their interplay with colours, on packaging, labelling, advertising, in all media (including websites) and made by any organization, if it qualifies as a "trader" and engages in commercial practices towards consumers."	European Commission. 2016. "Guidance on the Implementation/Application of Directive 2005/29/EC Unfair Commercial Practices." *SWD(2016) I63 final.* (https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52016SC0163&from=FR)
Kenton (2021)	"Greenwashing is the process of conveying a false impression or providing misleading information about how a company's products are more environmentally sound. Greenwashing is considered an unsubstantiated claim to deceive consumers into believing that a company's products are environmentally friendly."	Kenton, Will. 2021. "Greenwashing." *Investopedia* (https://www.investopedia.com/terms/g/greenwashing.asp).
Lyon and Maxwell (2011:5)	". . . greenwash can be characterized as the selective disclosure of positive information about a company's environmental or social performance, while withholding negative information on these dimensions."	Lyon, Thomas P. and John W. Maxwell. 2011. "Greenwash: Corporate Environmental Disclosure under Threat of Audit." *Journal of Economics & Management Strategy* 20(1):3-41.
Lyon and Montgomery (2015:226)	"the word greenwash is used to cover any communication that misleads people into adopting overly positive beliefs about an organization's environmental performance, practices, or products . . . the important phenomenon of misleading environmental communication".	Lyon, Thomas P. and A. Wren Montgomery. 2015. "The Means and End of Greenwash." *Organization & Environment* 38:223-249.
Marquis and Toffel (2011:19)	"Greenwashing is the practice of promoting environmentally friendly programs to deflect attention from an organization's environmentally unfriendly or less savory activities."	Marquis, Christopher and Michael W. Toffel. 2011. "The Globalization of Corporate Environmental Disclosure: Accountability or Greenwashing?" *Working Paper 11-115.* Cambridge, MA: Harvard School of Business.

Parguel et al (2015:108)	Focus on "executional greenwashing . . . whereby nature-evoking elements in the ad execution may induce false perceptions of a brand's greenness, whether intentionally or not on the part of the advertiser."	Parguel, Béatrice, Florence Benoit-Moreau, and Cristel Antonia Russell. 2015. "Can Evoking Nature in Advertising Mislead Consumers? The Power of 'Executional Greenwashing.'" *International Journal of Advertising* 34(1):107-134.
Sourcewatch (N.d.)	"Greenwashing is the unjustified appropriation of environmental virtue by a company, an industry, a government, a politician or even a non-government organization to create a pro-environmental image, sell a product or a policy, or to try and rehabilitate their standing with the public and decision makers after being embroiled in controversy."	Sourcewatch. N.d. "Greenwashing." *The Center for Media and Democracy* (https://www.sourcewatch.org/index.php/Greenwashing).
Sustainable Furnishings Council (N.d.)	"The act of misleading consumers regarding the environmental practices of a company or the environmental benefits of a product or service."	Sustainable Furnishings Council. N.d. "Glossary." (https://sustainablefurnishings.org/glossary.)
Tateishi (2018:372-373)	"Communication that misleads people (e.g., consumers and stakeholders) regarding environmental performance/benefits by disclosing negative information and disseminating positive information about an organization, service, or product."	Tateishi, Eigo. 2018. "Craving Gains and Claiming 'Green' by Cutting Greens? An Exploratory Analysis of Greenfield Housing Developments in Iskandar Malaysia." *Journal of Urban Affairs* 40(3):370-393.
TerraChoice/ Underwriters Laboratory (N.d.)	"Greenwashing is the act of misleading consumers regarding the environmental practices of a company or the environmental benefits of a product or service."	TerraChoice/Underwriters Laboratory. N.d. "Sins of Greenwashing." (https://www.ul.com/insights/sins-greenwashing).
U.S. Environmental Protection Agency (N.d.)	"The practice of advertising a product or process as "green" or environmentally friendly, when the product really is not, or does not achieve the advertised marketing claims. A false or misleading picture of environmental friendliness used to conceal or obscure damaging activities."	U.S. EPA. N.d. "Vocabulary Catalog: Top Green Home Terms." (https://sor.epa.gov/sor_internet/registry/termreg/searchandretrieve/glossariesandkeywordlists/search.do?details=&glossaryName=Top%20Green%20Home%20Terms)

APPENDIX - TABLE 2: INTEGRATED FRAMEWORK ON GREENWASHING

Themes, descriptions, indicator questions and possible answers

IMPACT

I. Hidden trade-off / Selective Disclosure

Claim is based on a narrow set of attributes

> I.1 When making/supporting a claim, has the organization failed to a) consider the entire organization/ product/ service's life cycle, including (where applicable) extraction through production, use, and post-use OR b) assess the cumulative environmental impacts of its activities?
> For countries, does the claim cover only territorial emissions/footprints/impacts omitting a) imported ones and b) emissions from international aviation and shipping?

No greenwash: all LCA stages are included; scope 1-2 is entirely covered and scope 3 is as much as feasibly possible. For countries, emissions from international aviation and shipping OR imported emissions are covered OR it is transparently and clearly communicated in the claim that certain emissions are not covered and why.

Likely greenwash: the claim is based on only part of the organization or product's/service's life cycle / large part of scope 3 is excluded, mentioning it in an annual/sustainability report but without clearly communicating it in its claim

Obvious greenwash: a significant part of LCA/scope/impact/imported emission or footprint is excluded, misleading consumers about the organization's/product/service's total environmental impact. For countries, imported emissions OR those from international aviation and shipping are explicitly excluded or not specified in targets.

> I.2 While publishing the claim, has the organization failed to disclose negative information related to its social and/or environmental performance on the specific aspect to which the claim refers?

No greenwash: No

Likely greenwash: negative information is not easily found, e.g. mentioned in a sustainability/CR report, but stays hidden when looking at the claim

Obvious greenwash: Yes

Unknown

> I.3 Has the organization making/supporting a climate-related claim, failed to define and/or disclose separate sub-objectives for emission reductions (including scope 3 emissions) and carbon dioxide removal?
> For countries, have they failed to clearly separate targets for emission reductions from carbon removals in their net-zero emission targets and Nationally Determined Contributions?

No greenwash: No.

Likely greenwash: information about carbon removal assumptions is not easily found by consumers (e.g. may be mentioned in a sustainability/CR report, but stays hidden when looking at the claim). For countries that announced separate targets but did not include them in a policy document or in law.

Obvious greenwash: Yes. For countries, there are no separate targets for emission reductions or removals or it is not specified in law/public document..

Unknown

I.4 Does the claim relate to solutions that are widely regarded as ecologically unacceptable/contentious by science with potentially long-term ecologically harmful consequences or adverse impacts on biodiversity?

No greenwash: No

Obvious greenwash: Yes

Unknown

I.5 In case of a conservation/forest restoration-type claim, a) were forests being conserved actually under threat of deforestation OR b) were forests or other biodiverse ecosystems recently destroyed to make place for tree plantations OR c) have the reforestation/conservation efforts created large scale monocultures OR d) have reforestation/conservation efforts failed to achieve their objectives?

No greenwash: No

Obvious greenwash: Yes (a, b, c or d)

Unknown

II. Core business / Skeleton in the closet

Claim may be truthful, but it distracts consumers from the organization's greater environmental impact as a whole

II.1 Does the claim a) fail to relate to aspects that are significant in terms of the product's/ organization's environmental impact OR b) result in an undue transfer of negative impacts?

No greenwash: No

Obvious greenwash: Yes (a or b)

II.2 Does the claim a) communicate a specific type of product/service/policy as "more green", compared to competitors, even though there is no evidence that the product is "greener" than the usual production/ service/ policy OR b) lead to consumer confusion about the comparison?

No greenwash: No

Obvious greenwash: Yes (a or b)

II.3 Does the organization claim to have net-zero emissions through carbon offsetting aimed at neutralizing ongoing emissions from the use of fossil fuels?
For countries, are ecosystems outside a country's national boundaries included in a nation's accounting as offsets?

No greenwash: Rules out offsets to claim compensation for own emissions, but rather emission reduction projects are supported as contributions elsewhere. Organizations have established deep decarbonization targets and interim targets, including for residual emissions and planned removals, that allow scrutiny with respect to actually achieving their stated net zero target.

Likely greenwash: There are clear limits on compensation offsets which are to be reduced over time./ For countries, in-country offsets are allowed, but sub-national jurisdictions (for example, California) using offsets outside the jurisdiction would be considered likely greenwash.

Obvious greenwash: Does not specify offsets and there is no clarity about whether and how to use and limit offsets while at the same time offsets are used to neutralize the emissions from the continued use of fossil fuels.

III. Ad Bluster/ Empty claims

Making claims/policies that either exaggerate achievements, or fail to live up to them

III.1 Has the claim a) promised some positive improvement (to environment/local communities, etc.) that has not been fulfilled OR b) stated/implied environmental benefits when the benefits are actually negligible?

No greenwash: No

Obvious greenwash: Yes (a or b)

Unknown

III.2 Are there strong indications that the overall marketing budget is larger than set aside for environmental improvement mentioned in the claim?

No greenwash: No, there are no indications/evidence

Obvious greenwash: Yes there are

Unknown

III. 3 Does the claim deflect attention to minor issues or lead to creating 'green talk' a) through statements that overstate the organization's actual commitments OR b) without any concrete action with significant and measurable impact? OR c) does the claim refer to certified products/services, while failing to communicate the ratio of certified versus non certified products/services?

No greenwash: No

Obvious greenwash: Yes (a, b or c)

Unknown

IV. Irrelevant

Proclaiming sustainability accomplishments that are irrelevant or already required by law/competitors

IV. 1 Is the public misled to believe the claim is a result of voluntary sustainable actions when it or much of it is compulsory by law and/or required of most competitors?

No greenwash: No

Obvious greenwash: Yes

V. Lies

Claims are out-right lying

V.1 Based on objective evidence, is the claim false?

No greenwash: No

Obvious greenwash: Yes

VI. Just not credible

Claim touts environmentally friendly attributes of a dangerous/non-achievable target/product/service/policy

VI.1 Does the claim try to make the public feel "green" about a choice that is a) harmful/dangerous (to health/environment) OR b) based on an exaggeration/unachievable?

No greenwash: No

<u>Obvious greenwash</u>: Yes: a or b is true

ALIGNMENT

VII. Corporate responsibility in action

Claim does not require either effective intra-organizational communication or the engagement of stakeholders

> VII.1 Are the products, procurement practices, vision or/and public policy positions of the organization in conflict with the claim?

<u>No greenwash</u>: No

<u>Obvious greenwash</u>: Yes

Unknown

VIII. Dubious certifications & labels

Claim has certifications that are prone to greenwash

> VIII.1 Is it true that the label/seal attached to the claim a) not verified by an independent accredited body AND b) not accompanied with understandable and prominent language clearly conveying the benefits it refers to?

<u>No greenwash</u>: None is true

<u>Likely greenwash</u>: Yes, one of them is true

<u>Obvious greenwash</u>: Yes both are true

> VIII.2 Has the organization failed to clearly define and communicate publicly the a) scope of certification, (i.e., what is and what is not assessed in terms of products and/or processes) AND b) information about standards, inspection guidelines, audit reports, details of complaints including investigation summaries, and contact details of certification bodies?

<u>No greenwash</u>: No

<u>Likely greenwash</u>: Yes, either (a) is true OR at least two of the listed documents in (b) have not been published

<u>Obvious greenwash</u>: Yes either (b) or both are true

> VIII.3 Even if using a voluntary certification scheme, has the organization (e.g. retailer/producer) failed to apply effective due diligence to investigate the product/certification, thus accepting the label at face value (e.g. failing to do more rigorous and truly independent audits of its own)?

<u>No greenwash</u>: No

<u>Obvious greenwash</u>: Yes

> VIII.4 Has the organization responsible for the voluntary certification scheme (i.e. standard owner or NGO helping to set it up) failed to ensure that a) other stakeholders can effectively challenge the standard owner or the certification bodies through adequate and accessible complaint and objection procedure OR b) it is able to meaningfully control, challenge or sanction the certification bodies?

<u>No greenwash</u>: No, it has not failed to ensure either a or b

<u>Obvious greenwash</u>: Yes (a or b)

> VIII.5 Has the organization supporting/responsible for a voluntary certification scheme (e.g. standard/ logo owner) failed to solve the structural conflict of interest in the way certification bodies are financed (i.e. CABs are paid by those whom they need to certify)?

No greenwash: No

Obvious greenwash: Yes

> VIII.6 Is the organization making/supporting the claim associated with/participating in voluntary certification schemes or committed to multi-stakeholder initiatives that a) certify business as usual OR b) certify products that do not meet its standards OR c) certify activities that have been implicated in illegality/environmental destruction/human rights abuse within its scope of certification?

No greenwash: No

Obvious greenwash: Yes (a, b or c)

Unknown

IX. Political spin

Claim boasts of green commitments, while the same organization lobbies against environmental laws

> IX.1 Has the organization that makes the claim or that helps a corporate entity to make a claim a) lobbied for blocking/weakening of pro-environmental laws and regulations OR b) sent any such submissions to politicians/ governmental agencies that contradict the claim?

No greenwash: No

Obvious greenwash: Yes (a or b)

Unknown

> IX.2 Is the organization affiliated with think tanks, trade associations or other industry groups that spread environmental science disinformation and/or block environmental action in contradiction to its claims?

No greenwash: No

Obvious greenwash: Yes

Unknown

X. Co-opted endorsement

Claims that greenwash organization's activities are endorsed by NGOs/national agencies

> X.1 Does the organization a) help publicise/endorse another organization's claim that is a greenwash OR b) make a claim while investing in/ supporting harmful activities of other organizations?

No greenwash: No

Obvious greenwash: Yes (a or b)

Unknown

> X.2 Does the organization receive payment (through partnership, donation or a membership fee for one of its programmes) from another organization whose greenwash claims it helps endorse?

No greenwash: No

Obvious greenwash: Yes

Unknown

<div align="center">

COMMUNICATION

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XI. No proof

Claim cannot be substantiated by easily accessible supporting information

> XI.1 Does the claim contain statements that are not based on robust, independent, verifiable and generally recognised evidence?

No greenwash: No

Obvious greenwash: Yes

XII. Vagueness/ Misleading words

Claim is poorly defined/broad so its real meaning is misunderstood

> XII.1 Has the claim failed to specify whether it refers to the entirety of the product/packaging/service or just a portion?

No greenwash: No

Obvious greenwash: Yes

> XII.2 Do the words of the claim (other than XII.3) have unclear/ambiguous meaning that mislead people about the organization's/ product's/service's environmental footprint?

No greenwash: No, they don't

Obvious greenwash: Yes they do

> XII.3 When making a net-zero/carbon neutrality claim, has the organization:
> a) failed to measure, track and regularly publish its emissions according to the latest IPCC guidance (e.g., scope 1 and 2 emissions and scope 3 emissions to the furthest extent possible); OR
> b) based its claim on an unsubstantiated single point target without a clear strategy, implementation planning process and interim targets; OR
> c) failed to develop long-term strategies with a decarbonization pathway that prioritizes reducing its own emissions?

No greenwash: No

Obvious greenwash: Yes (a or b or c)

XIII. Misleading symbols

Claim uses visuals and symbols that induce a false perception of the organization's greenness

> XIII.1 Does the claim have an overall presentation (i.e. layout, choice of colours, images, pictures, sounds, symbols or labels) designed to evoke an environmental sensitivity that a) overstates the environmental benefit OR b) lacks any clear connection with the product, service or the organization?

No greenwash: No

Obvious greenwash: Yes (a or b)

XIV. Jargon

Claim uses jargon/information that people cannot understand/verify

> XIV.1 Does the claim use technical language/complex scientific jargon that makes it difficult for people to understand?

No greenwash: No

Obvious greenwash: Yes

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This report is being released through the Climate Social Science Network (CSSN.org), a global network of scholars headquartered at the Institute at Brown for Environment and Society. CSSN seeks to coordinate, conduct and support peer-reviewed research into the institutional and cultural dynamics of the political conflict over climate change, and assist scholars in outreach to policymakers and the public.