Greening the greenwashers – How to push greenwashers towards more sustainable trajectories

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Abstract: While the literature has notably focused on the meanings, conceptualizations, causes, consequences and solutions to greenwashing, we propose a counterintuitive perspective to fill a gap by considering whether and how greenwashing can be leveraged to transform greenwashers into green(er) performers. To address this issue, we overview the literature and use conceptual reasoning to develop four mechanisms by which greenwashers may be pushed toward more environmentally friendly trajectories that would not otherwise have been considered: (1) greenwashing raises awareness and normalizes greenness; (2) a greenwashing faux pas is instrumentalized to hold companies accountable by triggering an irreversible "ratchet effect" (enforcing consistency between discourse and actions without allowing a step backward); (3) greenwashing as an aspirational green talk that can constitute an important resource to inspire and drive change; and (4) the management of greenwashing by regulators allows them to advance their sustainability agenda, notably because of enforcement spillovers. A better understanding of these mechanisms can transform the way greenwashing is managed and help addressing environmental challenges.

1. Introduction

> *"I'm of the strong opinion that greenwashing is less dangerous than silence" (Jesper Brodin, Chief Executive Officer of Ikea, cited in Biekert, 2021)*

Greenwashing—or the misleading of stakeholders about environmental achievements—is usually considered harmful to the environment and society. Greenpeace, a well-known environmental non-governmental organization (NGO), recently stated that "we're living in a golden age of greenwash" (Gelmini, 2021). The problem is not new, as evidenced by several studies reporting that most of the products examined were guilty of greenwashing (Fliegelman, 2010), but this conclusion corresponds to various degrees of seriousness. Given the pervasiveness of greenwashing, we examine whether a greenwashing faux pas (i.e., a case in which a company is found guilty of greenwashing) can be used to push greenwashers onto more sustainable trajectories.

The increase in corporate greenwashing is paralleled by a corresponding increase in scholarly contributions devoted to greenwashing (see the reviews by Lyon & Montgomery, 2011; Gatti et al., 2019, de Freitas Netto et al., 2020). These studies have examined various aspects of greenwashing, such as its definitions and conceptualizations, causes, consequences, and possible solutions to curb it. They have enhanced our understanding of the greenwashing phenomenon, but there are several grey areas and unaddressed issues. In their review, Gatti et al. (2019) identified three themes that are extensively debated in the literature: (i) the meanings and forms of greenwashing, (ii) its main consequences, and (iii) the recent conceptualization of corporate social responsibility as a form of regulation against greenwashing practices. They also stressed that the multidimensional nature of greenwashing has fueled an interdisciplinary dialogue that is likely to produce new and original insights. Nevertheless, the literature is relatively silent on the possibility of harnessing greenwashing to compel identified greenwashers to engage in more environmentally friendly practices.

Promoters of green endeavors are usually disarmed when facing blatant greenwashing. We thus question whether greenwashing can be strategically used to promote environmentally friendly trajectories. While an intuitive and common recommendation inspired by Becker's

(1968) framework is to increase deterrence by raising the probability of being caught and the associated punishments (e.g., fines, imprisonment, naming and shaming), this approach has several limitations. For instance, if greenwashing is unconscious and involuntary, greenwashers are therefore unlikely to correct their behavior, even if the punishment is more severe. Similarly, if the punishment remains too weak compared to its optimal level, it is unlikely to deter greenwashers (Frey, 2011). We adopt a provocative and counterintuitive stance to examine whether a corporate greenwashing faux pas, once committed, can be harnessed to generate green progress. We contend that a green faux pas can offer an opportunity to trigger more environmentally friendly trajectories that would not otherwise have been considered. One such a case is the Volkswagen emissions scandal ("Dieselgate") which led to a settlement with the US Environmental Protection Agency (EPA).[1] In this settlement, the EPA pushed Volkswagen to invest $2 billion in electric vehicle infrastructure. Today, this infrastructure is one of the largest electric vehicle charging networks in the US (Brown et al., 2022). This situation facilitated the shift of the company from traditional engines to electric ones and gives it a strong competitive advantage on the electric vehicle market in the US (Klein, 2022).

Based on this postulate, our research aims to identify the mechanisms that can facilitate this change and encourage promoters of green endeavors to take advantage of corporate greenwashing. Let us mention an important caveat: we are not advocating in favor of greenwashing. Nevertheless, if we accept that greenwashing is unlikely to disappear soon from the corporate landscape, it makes sense to examine whether and how it might be leveraged to generate positive consequences. This research question—identifying mechanisms by which corporate acts of greenwashing lead these corporations (and others) to improve their

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[1] Volkswagen marketed vehicles from 2009 to 2015 with diesel engines that allowed the company to bypass emissions testing. The EPA launched investigations and levied fines against Volkswagen.

green performances—has promising potential. To address this issue, we overview both scholarly and non-academic literature and use conceptual reasoning to develop several arguments and mechanisms by which greenwashers may be pushed toward more environmentally friendly trajectories that would not have been considered otherwise. Although some of these mechanisms have been pointed out in the literature, the analysis was frequently fragmented, cursory, or collateral to other issues. To our knowledge, there is no unified contribution explicitly addressing the various mechanisms that can be used to cause this change in trajectory.

This paper makes three original and valuable contributions. First, by examining the possibility of taking advantage of greenwashing, we fill a knowledge gap in the literature that mainly focuses on the "dark side" of greenwashing, bemoaning its consequences and frequently recommending stronger deterrence. This issue is crucial, given that turning a greenwashing faux pas into a green transition opportunity can contribute to address major environmental challenges. Transforming greenwashers into promoters of green progress could constitute a promising avenue. Second, we identify several mechanisms by which greenwashing can constitute the first step towards a more sustainable trajectory. Third, we equip green influencers and promoters with alternatives to change greenwashers into greener performers. Given the pervasiveness of greenwashing, promoting this switch can help organizations to reach sustainable goals.

The remainder of this article is organized as follows. Section 2 describes the methods used to draw our main insights. Through a literature overview, Section 3 explains the existence of greenwashing and highlights the difficulty of addressing it adequately. Section 4 develops four mechanisms by which greenwashing can be leveraged to propel a greener future, namely (1) raising awareness and normalizing greenness, (2) instrumentalizing a greenwashing faux pas to hold companies accountable and triggering an irreversible "ratchet

effect" (enforcing the consistency between the discourse and actions, without allowing a step backward), (3) transforming aspirational green talks into a resource to inspire change and drive companies toward more sustainable futures, and (4) exploiting enforcement spillovers where the greenwashing faux pas allows regulators to advance their sustainability agenda. Section 5 discusses the findings and delivers two major insights. Section 6 concludes, notably by providing key lessons, implications for theory and practice, limitations and avenues for future research.

2. Methods

Given the conceptual nature of our paper, it does not fit well the traditional organization of most scientific papers (Gilson & Goldberg, 2015; see also Lindebaum, 2022). For instance, the absence of usual data to test some theoretically driven hypotheses can surprise and make readers less comfortable. Gilson and Goldberg (2015, p. 128) argued that conceptual articles "seek to bridge existing theories in interesting ways, link work across disciplines, provide multi-level insights, and broaden the scope of our thinking." They "emphasize evidence based on existing literature, supported by coherent, compelling logic" (Vargo & Koskela-Huotari, 2020). Their added value is sometimes difficult to assess because there is a clear lack of commonly accepted templates for their development (Vargo & Koskela-Huotari, 2020; Jaakkola, 2020). Vargo and Koskela-Huotari (2020) suggested that a typical conceptual contribution can frequently include (1) a background that motivates the addressed problem and an overview of the approach that is adopted to solve it, (2) a review of the literatures/theoretical frameworks used to solve the problem, (3) a reconciliation and synthesis of these literatures into a single theoretical framework, (4) an application of this framework to the problem, and (5) the implications for relevant audiences (e.g., practitioners,

policymakers). A conceptual paper differs from a descriptive review, notably by addressing "what's new" and "what's next" issues (Gilson & Goldberg 2015).

To address our main research question, we proceeded as follows: on one hand, we overviewed the literature and analyzed the greenwashing phenomenon and the approaches adopted to curb it from a conceptual viewpoint. We explored extensively what has been written in scholarly and non-scholarly outlets on how greenwashing can be mobilized to transform greenwashers into green(er) performers. More precisely, we performed several searches on *Google Scholar* to identify scholarly contributions related to our topic. Indeed, this search engine has several advantages over other tools such as *Web of Science* or *Scopus*, especially in social sciences (Martín-Martín et al., 2018). We used the following keywords: "beneficial greenwashing", "greenwashing is [can/could be] good", "benefits of greenwashing", "good side of greenwashing" and similar expressions. At the beginning, we only included articles in economics, management and behavioral sciences. Following the methodological recommendations of Paul et al. (2021), our initial screening excluded working papers, and we did not apply any exclusion criteria regarding the publication date. Nevertheless, due to the very limited number of contributions (less than 5 articles per expressions), we finally did not limit the selection to any specific field and browsed all works. Moreover, even in this subset, several studies were not finally related to our research topic and excluded from the final set. We also extended our search by using similar expressions on *Google*. As a result, we identified several non-scholarly outlets (e.g., newspapers, magazines, blogs, forums) where this counter-intuitive insight has been discussed, frequently with some illustrative examples (see Table 1). Again, we browsed these outlets and assessed whether their reasoning was logical and convincing, although the authors used anecdotal evidence. Interestingly, some of these outlets pointed out academic contributions that can support their reasoning. Without purporting to be exhaustive, we stopped our searches when the arguments

and mechanisms became repetitive. We also used an analytical reasoning to draw arguments that can logically explain how this change in trajectory can be provoked. As a result, we identify several rationales that show that a third way is possible, where greenwashing is neither tolerated without consequences nor fully deterred.

[Insert Table 1 about here]

On the other hand, we also mention illustrative examples, case studies, press articles, statements from experts, and anecdotal evidence to give more flesh to our conceptually based arguments. This eclectic evidence results mainly from the previous searches using *Google Scholar* and especially, *Google*. These supporting and diverse evidence does not have to be representative but has been selected on two main criteria: (i) it shows that the considered rationales make sense, and (ii) it provides some key information on how the trajectory change has been implemented. This approach allows to explore and better understand phenomena that are relatively rare or only nascent, which corresponds to situations in which greenwashing leads to trajectory change and benefits that may more than offset the harm previously created. We argue that this unconventional stance has the potential of generating leading-edge advances (e.g., Earl, 2011; Thaler, 2018) especially when there is an interest in addressing "what", "why" and "how" issues rather than "how many" or "how often" questions (Eisenhardt & Graebner, 2007). Interestingly, such conceptual articles have already made significant contributions to the field of cleaner production (e.g., Durst & Zieba, 2020; Turunen & Halme, 2021).

3. Greenwashing: a literature overview

3.1. Greenwashing: some conceptual elements

Rather than discussing the various definitions of greenwashing, let us stress some important features. Greenwashing is a multifaceted phenomenon based on a discrepancy or inconsistency between what is communicated (talk) and what is really achieved (walk). This umbrella term frequently corresponds to disinformation or practices that seek to convey false impressions such as green imagery, misleading claims and hidden tradeoffs. These practices always involve two agents: (1) a greenwasher (e.g., a company or government) that makes a claim or suggests that it is contributing positively to sustainability while the reality falls short of expectations (e.g., presenting images that communicate an unjustified green impression) and (2) a target audience (e.g., consumers, citizens, investors) that has the potential to be deceived and misled, to form an unjustified positive judgment, and to engage in behaviors that serve the vested interests of the greenwasher (e.g., preferring or purchasing its products). A third agent, which we may label promoters of greenness, such as public regulators (e.g., the Environmental Protection Agency, the Federal Trade Commission), non-governmental actors defending the green cause (e.g., environmental and consumer associations) or other producers disadvantaged by the greenwashing act, can also intervene.

On a more conceptual level, greenwashing has been analyzed as selective disclosure (i.e., only favorable elements are emphasized), as a decoupling strategy between words and actions to deflect attention, and as a questionable way to get and maintain legitimacy (de Freitas Netto et al., 2020). Of course, each of these conceptualizations captures an important part of the problem but not the whole problem, which encourages researchers to adopt a multifaceted and interdisciplinary approach to better understand the phenomenon (see e.g., Gatti et al., 2019).

Greenwashing is possible and attractive because producers can exploit the strong information asymmetry between them and environmentally friendly consumers. The latter have green preferences but cannot check the environmental claims of producers. Indeed, most environmental attributes of products (e.g., percentage of recycled materials, organic production) are credence attributes (Darby & Karni, 1973), which implies that consumers and other stakeholders cannot assess the truthfulness of green claims before or after purchase.

There are many attempts to characterize greenwashing along various dimensions, such as drivers, underlying mechanisms, sophistication degree, intentionality, levels at which the greenwashing is implemented, and legitimacy strategies (see e.g., Delmas & Burbano, 2011; Lyon & Montgomery, 2015; Seele & Gatti, 2017; de Freitas Netto et al., 2020). For instance, greenwashers can make claims ranging from pure lies to vague and unsubstantiated terms or sophisticated euphemisms that are meaningless (Grolleau et al., 2022b). While some basic forms of greenwashing (e.g., pure lies) are diminishing, other more sophisticated forms are rising (de Freitas Netto et al., 2020), making the intention to mislead even more difficult to detect and control. In line with the idea to extract knowledge from the literature, we summarize in Table 2 the recommendations of scholars to tackle greenwashing for different types of stakeholders.

[Insert Table 2 about here]

Some people prefer green alternatives over their conventional counterparts but are not necessarily willing to support collateral consequences in terms of lower performance, higher prices, inconvenience, and so on. For instance, it has been shown that people appreciate green detergents but frequently believe that they are less performing than conventional cleaners (Grolleau et al., 2019). A practical tradeoff can be to select a product that allows reducing the

emotional discomfort caused by conventional products (e.g., green guilt) rather than engaging in a true environmental lifestyle (e.g., reducing consumption). Simply put, this situation generates a broad space for greenwashing tactics.

A common and intuitive result of the literature on greenwashing (de Freitas Netto et al., 2020; see also Zhang et al., 2018) is its harmful character to environmental progress. It prevents companies and consumers from contributing to greener choices and generates a suspicious climate where even genuine environmentally friendly performers are suspected. This greenwashing climate even led some corporations to under-communicate and remain silent about their green achievements, which slows down green progress (Falchi et al., 2022). Rather than causing profound and consistent changes, greenwashing facilitates cosmetic ones and allows to maintain business-as-usual trajectories. Greenwashing blocks, or at least slows down the green transition.

In sum, greenwashing is pervasive in almost all sectors, takes various forms, and develops towards more sophisticated forms. It is generally considered harmful to the green transition.

3.2. Greenwashing is difficult to detect and prove

While some environmental claims are easy to prove, for example, when energy producers replace coal-fired power plants with renewable power plants, most green claims are difficult to assess. Moreover, the line between genuine green marketing and greenwashing is thin and sometimes debatable. To just show how complex these situations may be, a claimed environmental benefit can occult the pollution displacement from a location to another one (e.g., exporting pollution), from an environmental domain to another domain that is potentially less visible or less regulated (e.g., from water eutrophication to palm oil-related deforestation in the case of phosphate-free detergents) or from a step of the product lifecycle

to another one. For instance, the replacement of thermal cars with electric vehicles reduces direct emissions of greenhouse gases (GHG) but may cause higher levels of indirect emissions through electricity consumption and may cause long-term pollution due to battery disposals (Lave et al., 1995; Vaughan, 2019). As a result, reaching a shared classification of green and non-green activities is demanding and complex (Gunningham et al., 2003; Kleiner, 1991; Saha & Darnton, 2005), making the delineation of greenwashing very difficult (Delmas & Burbano, 2011).

A typical example of the difficulty in defining green activities is the European Union's (EU) taxonomy for sustainable activities. The initial aim of the EU taxonomy was to set a science-based classification system establishing sustainable activities (EU, 2020). An initial report produced by the Technical Expert Group, mainly composed of scholars and technical experts in environmental science, set the lines of the EU taxonomy (Alessi et al., 2019). Still, there were difficulties with the classification of nuclear power within this taxonomy (Pogorel, 2021). While nuclear power lifecycle GHG emissions per kWh of electricity produced are way lower than for fossil fuels (Sims et al., 2003), they imply difficulties in disposing of radioactive waste (Brunnengräber & Di Nucci, 2019). After several controversies, nuclear power was finally included in the EU Taxonomy (Stefano, 2022). This classification controversy that even climate experts face, gives a straightforward case of "gray area" where it is difficult to distinguish green from non-green activities.

We posit that the green transition is a constantly evolving journey, not a destination. As such, various trajectories are possible. For instance, there is frequent confusion between greenwashing and real "small wins" that are inappropriately over-emphasized by companies. Indeed, these small wins (Weick, 1984) are real and can be preferable from an environmental viewpoint to no change at all, even if they seem insignificant, relative to the scale of the

challenge. These small steps in the good direction can inspire other organizations to do something and follow a similar path.

Unfortunately, almost every agent can claim some form of greenness, which is frequently difficult to assess at a reasonable cost. Moreover, green can mean different things for different stakeholders, making detecting greenwashing especially challenging.

3.3. Curbing greenwashing: a vexing issue

Since the seminal contribution of Becker (1968), economists have focused on punishment as an instrument for regulating undesirable behavior. In this simple framework, rational would-be greenwashers respond to changes in relative prices. Increasing the expected punishment (either by raising the detection probability or the punishment magnitude), everything else equal, lowers the likelihood of engaging in greenwashing.

Detecting companies that "talk the talk without walking the walk" is an arduous task for various reasons, besides those already mentioned above. First, credible third parties (e.g., environmental watchdogs, and public regulators) do not have easy access to companies' primary information, but must frequently use secondary and sometimes biased information, such as regulatory and voluntary disclosure. Regulatory disclosure, while more difficult to manipulate, may lead to a "box ticking" behavior by firms (Lloyd Owen, 2020). While providing standardized and comparable information to regulators, "box ticking" creates a situation where firms aim to comply with regulations without generating the social and environmental benefits that are expected from really respecting the regulation (Jackson et al., 2020). On the other hand, voluntary disclosure may suffer from a lack of control which could cause biased and misleading disclosures (Callery & Perkins, 2021), selective disclosure (Marquis et al., 2016), and non-standardized information disclosure (Clements, 2022). These

issues lead to difficulties for third parties in evaluating the environmental claims of companies.

Second, detecting greenwashing and enforcing punishment frequently requires environmental literacy and highly qualified human capital. Well-intentioned regulators or environmental watchdogs may lack these resources. This human capital deficit is clear in several real-world situations (Duflo et al., 2018; Mitrano & Wohlleben, 2020). The figure can become even more complex, given the extensive communication channels and high quantity of data used by companies to disclose their environmental credentials. Using advanced technologies, such as artificial intelligence, to detect greenwashing could be an attractive solution, but simultaneously emphasizes the potential deficit of qualified human resources who will be considered as more useful in other domains (e.g., anti-scam, anti-terrorism) (Cojoianu et al., 2020). A complementary pathway to build environmental literacy could be to "green" human resources practices to place employees in control of environmental management (Jose Chiappetta Jabbour, 2011).

4. How greenwashing can promote a more sustainable path

Despite its negative effects and the difficulty of detecting it, greenwashing may be instrumentalized to greening the greenwashers. We document four mechanisms by which promoters of a green transition can direct greenwashers towards more sustainable paths that would not have been considered without greenwashing. We back up our arguments with real-world examples. Without purporting to be exhaustive, Figure 1 summarizes the key processes by which greenwashing can be leveraged to promote a more sustainable path.

[Insert Figure 1 about here]

4.1. Raising awareness and acclimatizing consumers to greenness as the new norm

The literature has raised the importance of green marketing and consumer awareness as a key to promote a sustainable agenda (Awan, 2011; Awan & Raza, 2012). When a company markets a product as green without fully substantiating its claim, it exposes consumers and other stakeholders to green arguments and raises their awareness about green issues (Bowen, 2014). In the beginning, the change is more affordable because the products are greenwashed and the related sacrifices (e.g., price premium, inconvenience) are kept to a low level. Consumers can prefer the greenwashed option because it is an easy-to-use and cheap solution that delivers a kind of "emotional comfort" (i.e., avoiding green guilt and enjoying the impression of contributing positively). Indeed, the genuine green counterparts could appear as unaffordable because they entail more substantial sacrifices. Over time, standards are likely to raise, making environmentally conscious consumers more requiring and pushing companies to adapt upwards accordingly.

It was, for instance, the case of Socially Responsible Investing (SRI) that promises both financial and social or environmental returns, as opposed to conventional investment strategies that focus only on financial benefits. There were no official guidelines when the market emerged in the mid-1980s and SRI was mainly built on specific themes, such as the exclusion of firms from the 'sin' sectors such as alcohol or weapons industry (Sullivan & Mackenzie, 2017). These investments became more and more popular over time. They accounted for 11% of total investments in the US at the end of 2011 and reached 33% in 2020 (GSIA, 2020). Therefore, there is an increasing governmental oversight to define what can be qualified as SRI or not. For instance, the French Ministry of Finance created the SRI fund label that gives clear rules under which a fund can obtain this label (Crifo & Mottis, 2016).

Besides increasing awareness, this increased exposure of consumers to green claims because of greenwashing can contribute to establish a new social norm. Normalizing

greenness can help the environment. Indeed, recent research found that individuals are far more likely to adjust their own behavior if they see convincing examples of other individuals doing it (Sparkman & Walton, 2017). Dynamic norms (i.e., information about how other people's behavior changes over time) can even motivate change despite prevailing static norms (i.e., information about how most people behave). Applied to greenwashing, this reasoning implies that being bombarded with green claims, regardless of their veracity, can persuade people that others are changing and contribute to changing the normative context in a direction that will ultimately support the green transition.

4.2. Using greenwashing to hold companies accountable

Greenwashing practices frequently emphasize supposed achievements of the greenwasher. Using these claimed achievements to force the company to reduce the discrepancy between discourse and actions can enable to build a "ratchet effect" beneficial to informal or formal regulators. Indeed, greenwashing can help these regulators to engage with some firms that would never even consider committing to a green transition in the first place.

An inspiring example is provided by Krombacher, a German beer brewery that engaged in a cause-related marketing initiative with the World Wildlife Fund. The campaign that started in 2002, and was repeated several times, promised that for every sold crate of beer, one square meter of rainforest would be protected. The campaign was heavily criticized and accused of greenwashing (Lütge, 2018). Interestingly, rather than just ignoring these criticisms on the greenness of its activities and pursuing its business-as-usual trajectory, the company made consistent efforts on other environmental aspects to keep its green image. As a result, the company has made substantial progress that was unlikely, absent the initial greenwashing.

Another powerful example of this "ratchet effect" is the case of the green bond market development in the People's Republic of China (PRC). Green bonds are debt instruments used by companies to finance green projects, following international voluntary guidelines. Since 2015, Chinese financial market regulators issued criteria defining activities that can be financed through green bonds. Surprisingly, the first set of criteria issued by Chinese regulators allowed green bond issuers to finance "clean coal" projects. Both scholars (Yang, 2017) and the media (Pearce, 2008) opposed the possibility of "clean coal" being a green activity. Meanwhile, the Chinese green bond market has developed to become the second-largest green bond market in the world (Chen & Zhao, 2021). Finally, Chinese regulators have excluded "clean coal" from green bond eligible projects in 2020 (CICC Global Institute, 2022). This approach, where greenwashing was initially and to some extent officially endorsed, allowed the development of an innovative green financial instrument.

4.3. Greenwashing as a way to inspire and drive change

As a communicative practice, greenwashing can be performative, in line with the Communication as Constitutive of Organization perspective. By the very act of communicating green intentions and ideals even if they are not currently supported by consistent actions, organizations establish a direction, define the standard they will have to respect and create organizational realities (Christensen et al., 2013). As described by Christensen et al. (2013), "differences between words and action are not necessarily a bad thing and such discrepancies have the potential to stimulate CSR [Corporate Social Responsibility] improvements". Indeed, communicating green or CSR intentions to the public as public pledges or commitments that are not backed up by real actions can motivate employees to achieve these intentions which, in turn, will improve the organization's achievements in the concerned dimensions.

Timing can represent an important mediating factor. While the evolution of CSR is usually perceived as a linear relationship (Skrimshire, 2019), a stream of research views CSR as a cyclical routine between CSR talk and CSR practices, with frequent conflicts between words and actions (Christensen et al., 2020; Penttilä, 2020). Although the empirical evidence is still limited, Koep (2015) found that discrepancies between CSR talk and actions may be used as an "aspirational talk" to push CSR objectives.

For instance, Jesper Brodin, the CEO of Ikea emphasized that greenwashing is less dangerous than silence (Biekert, 2021). He notably stated: "we need to bring hope to people, we need to be accountable for the actions we take. And I think what we can do much better is to actually tell what we've done". These arguments can illustrate an aspirational talk. First, the discourse aims at demonstrating that the company is not only seeking a private benefit but also a social benefit, by bringing "hope to people". Second, the CEO intends to show the goodwill of the company towards regulators and other stakeholders by being "accountable for the actions" taken. Finally, the CEO mentions the importance of optimizing communication rather than acts ("what we can do much better is to actually tell what we've done"). This nascent literature and anecdotal evidence suggest that some forms of greenwashing can help organizations to push forward their CSR strategy and further communicate their CSR objectives to stakeholders, triggering a virtuous cycle.

4.4. Greenwashing gives leverage to regulators

Greenwashing allows regulators to use sanctions to enforce environmental laws and to push peer firms to become compliant. McMurry and Ramsey (1986) showed how the US Environmental Protection Agency has developed its criminal actions capacity to produce a powerful deterrent to environmental misconduct. While environmental misconducts leading to a civil action may be considered by some executives as a "necessary cost" for the company to

pursue its operations, criminal action may have direct effects on individuals and influence their daily decisions. The condition for the existence of criminal activity is the detection of "dark level greenwashing" in the sense of Torelli et al. (2020), i.e., a level of greenwashing serious enough to lead to a criminal investigation of environmental misconduct. While "dark level greenwashing" is not desirable, exposure to such greenwashing may, in some instances, push the sustainability agenda of lawmakers.

Greenwashing gives leverage to regulators to create enforcement spillovers where similar companies are motivated to change in the right direction. Large-scale greenwashing when properly treated by regulators (e.g. by exposing it and punishing it) can lead to substantial improvements in the whole concerned industry (Wang et al., 2019). The Volkswagen's Dieselgate scandal offers an insightful example. Following the scandal, US courts ordered Volkswagen to pay \$ 2.8 billion as criminal fines (Rogers & Spector, 2017). An EPA official confirmed that the amount of the fines and the criminal indictment of executives was a "very strong deterrent" against cheating by other carmakers (Shepardson, 2017). Rather than creating a gap between regulators and the car industry, the EPA got the support of the major automakers for its new rules on car emissions (Shepardson, 2022). Once environmental regulations have been tightened – in this case, due to the VW greenwashing scandal – both theoretical (Sun & Zhang, 2019) and empirical work (Mateo-Márquez et al., 2022) found strong evidence of lower engagement in greenwashing.

In short, the existence of serious greenwashing can justify a greater regulatory oversight, generate different relationships between regulators and regulated entities and create a new space to push a whole industry towards more sustainable trajectories.

5. Discussion

We argued that greenwashing can be instrumentalized to push greenwashers towards more sustainable trajectories. This effectual stance, where "bad surprises" can be leveraged to generate new opportunities (Sarasvathy, 2003), is crucial for policy makers and other green transition promoters. Indeed, this perspective offers a refreshing way to go beyond the helpless victim's status and address greenwashing in innovative and somewhat entrepreneurial ways. In other words, we invite stakeholders to reflect ex ante and possibly design a plan on how to create unexpected "green" opportunities thanks to or because of greenwashing. Deterrence remains an important approach, but our analysis suggests to also consider more constructive approaches that can become complements or substitutes. Finding the right balance between these various approaches (e.g., deterrence-based and greenwashing-driven approaches), by taking into account their complex interactions is crucial but beyond the scope of our contribution.

Insight #1: Rather than only considering greenwashing as requiring strong deterrence, promoters of green transition can also consider how to exploit these green faux pas to promote more sustainable trajectories.

We are not naïve and do not endorse that all greenwashers can be transformed into environmentally friendly agents. We believe some greenwashers are more likely to play this constructive game compared to other ones. Several factors can allow us to identify companies or situations where the greenwashing faux pas can lead to more sustainable trajectories. For instance, we posit that (1) companies that have a lot to lose in case of greenwashing exposure, (2) the existence of credible threats, (3) the presence of actors (e.g., NGOs, regulators) that can accompany the involved company towards its green transition, (4) a low degree of

intentionality (no willingness to mislead), and (5) a high likelihood of spillover effects,[2] can constitute circumstances conducive to this change in trajectories.

Insight #2: All greenwashing attempts are not created equal, and some circumstances can facilitate the implementation of the mechanisms discussed above. Among intuitive factors that can ease this green switch, we suggest companies that have a lot to lose in the case of greenwashing exposure, the existence of credible threats and the presence of actors who can accompany a trajectory change among identified greenwashers.

Rather than focusing all their efforts on preventing greenwashing at all costs, we propose to explore how promoters of the green transition can create conditions or a context in which a greenwashing faux pas can be changed into a green opportunity. For instance, a green washer could be offered the choice between a very costly punishment and the opportunity to engage in a green trajectory. Simply giving offenders the choice between trajectories has the potential to change the relationship between the regulated and regulating entities (Grolleau et al., 2022a). In other words, the green promise, once made, must be fulfilled. As an unexpected result, this very misleading claim could motivate corporate changes that would not have been considered otherwise.

6. Conclusion

In the following, we present the key lessons from our conceptual contribution and highlight implications for both theory and practice. We also mention some limitations that could indicate avenues for further theoretical and empirical investigations.

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[2] Other (similar) companies not initially implied in the disclosed greenwashing faux pas will also be scrutinized.

6.1. Key lessons and implications for theory

We do not challenge the commonly accepted view that greenwashing is deceptive and harms the green transition. Again, we caution the reader against a misunderstanding of our arguments. We do not endorse or encourage greenwashing in no way. Nevertheless, given that it seems unrealistic to erase greenwashing from the corporate landscape, at least in the short term, we argued that it makes sense to consider how to exploit it to promote more sustainable trajectories among greenwashers.

We filled an important gap in the literature on how to instrumentalize greenwashing to serve the green transition. This perspective adds value by inviting to consider solutions that exploit the power of greenwashing against greenwashing, by possibly transforming greenwashers into green(er) performers. Interestingly, this radical change would not have been considered without the initial greenwashing, transforming the latter into a necessary condition to reset the trajectory.

We proposed four approaches by which greenwashing can be instrumentalized to lead to a greener future that would not have been considered otherwise, precisely: (1) raising awareness and normalizing greenness, (2) instrumentalizing the greenwashing faux pas to hold companies accountable (enforcing consistency between discourse and actions, without allowing a step backward) and triggering an irreversible "ratchet effect", (3) transforming aspirational green talks into a resource to inspire change and drive companies towards more sustainable futures, and (4) exploiting enforcement spillovers where the greenwashing faux pas allows regulators to push forward their sustainability agenda. While we adopted a provocative stance, we are not naïve and do not suggest that all greenwashing operations can be cured by the above-mentioned mechanisms.

Our findings contribute to the literature on greenwashing practices and regulation (Gunningham et al., 2003; Sun & Zhang, 2019; Mitrano & Wohlleben, 2020). Indeed, we

filled a gap in the literature that is relatively silent on whether and how to use greenwashing to promote more sustainable trajectories. This literature mostly focused on methods to detect and deter greenwashing to limit its detrimental effects. Using a conceptual analysis, we showed that greenwashing can be a tool in the hands of various stakeholders (e.g., citizens, NGOs and regulators) to push businesses towards a more sustainable future. More specifically, we argued that these mechanisms may mostly work for firms for which the cost of greenwashing is the highest, which are exposed to credible threats or which are more sensitive to the influence of stakeholders.

6.2. Implications for practice

Despite their conceptual nature, our findings have a considerable potential and can be applied into a wide range of situations. Indeed, given the pervasiveness of greenwashing, rather than tracking every act (or only the worst ones) to denounce and deter it (them), another approach is possible by also considering greenwashing as offering a 'lever' through which a radical change can occur. Our results, if empirically validated, can enrich the toolbox of policymakers and green promoters by also considering greenwashing as a failure likely to feed a trajectory change.

A powerful takeaway message of our study is that it gives a new tool to regulators. Instead of focusing their resource allocation to increase deterrence, regulators may increase their efficiency in terms of policy implementations. They may, for instance, compare the two approaches and look for an equilibrium between deterrence-based approaches and greenwashing-driven change. This is specifically useful in the context of spillover effects (see the Volkswagen Dieselgate example above). This implication is also important for non-state actors such as environmental and citizen NGOs that can enrich their approaches to deal with

greenwashing by also considering whether they can provoke or accompany a trajectory change.

6.3. Limitations and extensions

Our paper has several limitations. *First*, we developed arguments and mechanisms in a conceptual way, but do not tested them empirically. Our conceptual reasoning is a necessary step before considering quantitative-based assessments in a comparative fashion. Using precise case studies and even more conventional data on the evolution of environmental performances over time to discern how some companies have changed their trajectories because of their initial acts of greenwashing would constitute a necessary step to validate the conceptually derived propositions in real-world circumstances. We also advocate in favor of experimental studies to examine in the lab or in the field whether and how a green faux pas can be instrumentalized to trigger a more sustainable trajectory than without this initial faux pas. *Second,* these mechanisms do not arise in a vacuum. We speculate that some circumstances (e.g., regulatory background, proximity with consumers, timing issues) can either facilitate or impede the emergence and adoption of some trajectories with differentiated outcomes. A better understanding of these circumstances can clearly inform green transition promoters when and where to focus their efforts. *Third*, while we discussed each mechanism separately, they are very likely to interact with possible synergistic (or even antagonistic) effects, reinforcing (diminishing) the likelihood of a sustainable trajectory change. This change is also likely to trigger a demand for innovative solutions respecting the business and environmental imperatives to avoid the greenwashing trap.

Our counterintuitive proposition aimed at opening a new and unexpected "door" to address and exploit greenwashing. More research is needed to understand the conditions leading to a successful implementation and effectiveness. In addition to the extensions

suggested above, we would like to add some avenues for future research. Our four mechanisms assume that a positive trajectory change from greenwashing to real greening can occur. It makes sense to consider how various stakeholders consider a company that has an always-good trajectory compared to a company that has followed a bad-to good trajectory, because of its green faux pas. We speculate that stakeholders with a growth mindset may perceive the company with a bad-to-good trajectory as more deserving because of its higher effort to change compared to an always-good trajectory (see e.g., Septianto, 2020 for a similar rationale in another context).

Another important issue is related to the persistence and scope of these changes over time to avoid one-shot progress, but a proper engagement towards green(er) trajectories. Indeed, the greenwashing can be limited to an inadequate marketing operation, but the subsequent change needs to be more profound than just correcting the green faux (e.g., suppressing the incriminated green acts). In short, there is a clear need to better understand practical approaches to leverage a green faux pas to provoke a real and systemic 'reset' that will transform the DNA of the incriminated company.

Finally, this trajectory change seems very unlikely without a facilitating and encouraging environment. Rather than adopting an oppositional stance when witnessing greenwashing, it makes sense for concerned stakeholders to analyze how they can cause and accompany a trajectory change without "losing their souls". An original way to provoke this change could be to offer greenwashers the choice among several options, with an option where the company engages and is accompanied in a real trajectory change. The attractivity of this option can be reinforced by finding and publicizing successful and inspiring examples and models or making the other options less desirable because of their negative consequences (e.g., increased severity of punishment).

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Table 1. Examples of non-scholarly outlets discussing "beneficial greenwashing"

Author(s) and year	Quote and webpage
John Elkington (2008)	"But there is a positive side to greenwashing. It's very simple. Twenty years ago plus, I did a book called The Green Capitalists and I started to use the green tag, which at that time was really much disliked by the business community in Europe because it was associated with the German green movement. But over two years or so, green became a fashion statement and companies started to mimic that. And once they started to use the language—it was odd—quite a number of times, we saw their thinking change. So what people say often precedes what they think. Some people sometimes say, "I have to hear myself talk before I know what I think." I think language sometimes, because it opens new channels, it opens new doors, is enormously important." (https://www.motherjones.com/environment/2008/10/qa-john-elkington/)
Jim Nicolow (2008)	"The greenwashing is free, but once you hold yourself up as 'green(er)', increased scrutiny follows. Plus, no one likes to be a hypocrite. Once you say you're doing it, there's a tendency to start doing it. In GE's case, Lovins points out that once GE saw their 'eco' products had twice the sales volume of the regular products, "all of a sudden a company without a green bone in its body has one–attached to its wallet."" (https://www.marketplace.org/2008/04/05/greenwashing-gateway-drug/)
Audrey Holmes (2017)	"The best way greenwashing is helping our society change over time is by making sustainability a normality (…) We can change the world one piece of trash at a time, and greenwashing is the catalyst that will lead us to success. The next time you're walking down a shopping aisle and there is an advertisement with blatantly annoying font and text size, claiming this product is the best eco-friendly option, remember to smile and thank that Comic Sans 42-point font for reminding every person that we need to make a change." (https://earth911.com/business-policy/greenwashing-good/)
Milan Maushart and Mischa Snaije (2017)	"Perhaps unexpectedly, this practice of greenwashing through advertising campaigns was quite successful. Constant spamming of advertisements made people aware of environmental issues, and resulted in polarizing opinions. The use of Greenwashing advertisements raised awareness of environmental issues, which strengthened the green movement. On the other hand, many activists claim that the companies' initiatives are creating a misleading perception of the company." (https://www.iynf.org/2017/12/greenwashing-good-bad-ugly/)
Marina Gerner (2020)	"My personal opinion is these little steps are positive because it forces other organisations to do something as opposed to nothing at all," she says. A small percentage change at a large company still has a significant "impact and ripple effect on the rest of the industry to review their approach to business". When cases of greenwashing come to light and are debated, Charles says, "it's actually a positive thing in the sense that some of the startups and SMEs emerging in the fashion industry have to make sure they do responsible business"." (https://www.raconteur.net/sustainability/greenwashing-really-bad/)
Darren Woolley (2020)	"My conclusion was greenwashing is good. Obviously, it was provocative; greenwashing was the first moment when people began to think it is important to be green. We do greenwashing because we don't have other options so it's an easy way to go but that was the first moment when you have the 'prise de conscience', the awareness that this was good. So greenwashing was phase 1. Then phase 2 was purpose and purpose today is still in the area of communications, declaration. It has to be genuine, authentic but it's still about we or a brand believes in. Now there's a 3rd phase that you begin to see (it's about time) which is from declaration or communication to action. Now a brand has a stated purpose and we live with that purpose and do something with it. I have in mind a campaign done by Renault (the French car manufacturer) who called its purpose 'mobility'. They decided to help people who do not have the means to move but who need a car to go and find work. And they started a system of refurbishing cars for people who can't find work if they don't have a car. That's the moment when your purpose becomes something in action." (https://www.trinityp3.com/2020/05/marketing-advertising-doing-good/)

Table 2: Stakeholders and ways to tackle greenwashing in the literature

| Stakeholder	Potential greenwasher, target audience, or promoter of greenness	Recommendations
Citizen	Promoter of greenness	- Corporates should use clear communication towards citizens on social and moral industry values as well as on firms' own interests to create conditions of citizen trust green improvements (Taufik & Dagevos, 2021). - Citizen suit provisions allow citizens to go on court against greenwashers on behalf of the public. These suits are efficient not only to sanction firms that misled citizens, but it also may allow to push regulators into improving their processes (Vos, 2009). - Sustainable business curriculum should focus on de-growth and steady-state economy to improve education of citizens. This would give citizens the tools to identify greenwashing (Kopnina, 2019).
Consumer	Target audience	- Consumers should provide feedback on their perception of firms' greenwashing. This will allow firms to better link their green behavior, green word-of-mouth and consumer perceptions (Zhang et al., 2018). - Consumers need to go beyond esthetic concerns regarding sustainable products. Unlinking esthetic and sustainable properties of products will allow better limiting greenwashing skepticism (Rausch & Kopplin, 2021).
Company	Potential greenwasher	- Businesses should be more vigilant about their environmental words, especially those in high pollution / high exposure industries (Zhang et al., 2018). - Firms with a high environmental performance do not need to use green advertising which leads to unfavorable brand attitudes (Nyilasy et al., 2014).
Government/Regulator	Potential greenwasher / Promoter of greenness	- Building regulations based on sanctions rather than tax subsidies work better to reduce greenwashing incentives by firms (Sun & Zhang, 2019). - Involvement of scholars and leveraging on the advantages of non-governmental organizations will help reducing local government greenwashing (Tang et al., 2020).
Investor	Target audience	- Investors can rely on media coverage or environmental scores as ways to reduce information asymmetry with firms and therefore uncover greenwashing (Du, 2015). - Investors should focus more on firm-level governance characteristics than country-level ones as they are more efficient to deter greenwashing. Cross-listings are also powerful tools to limit greenwashing (Yu et al., 2020).
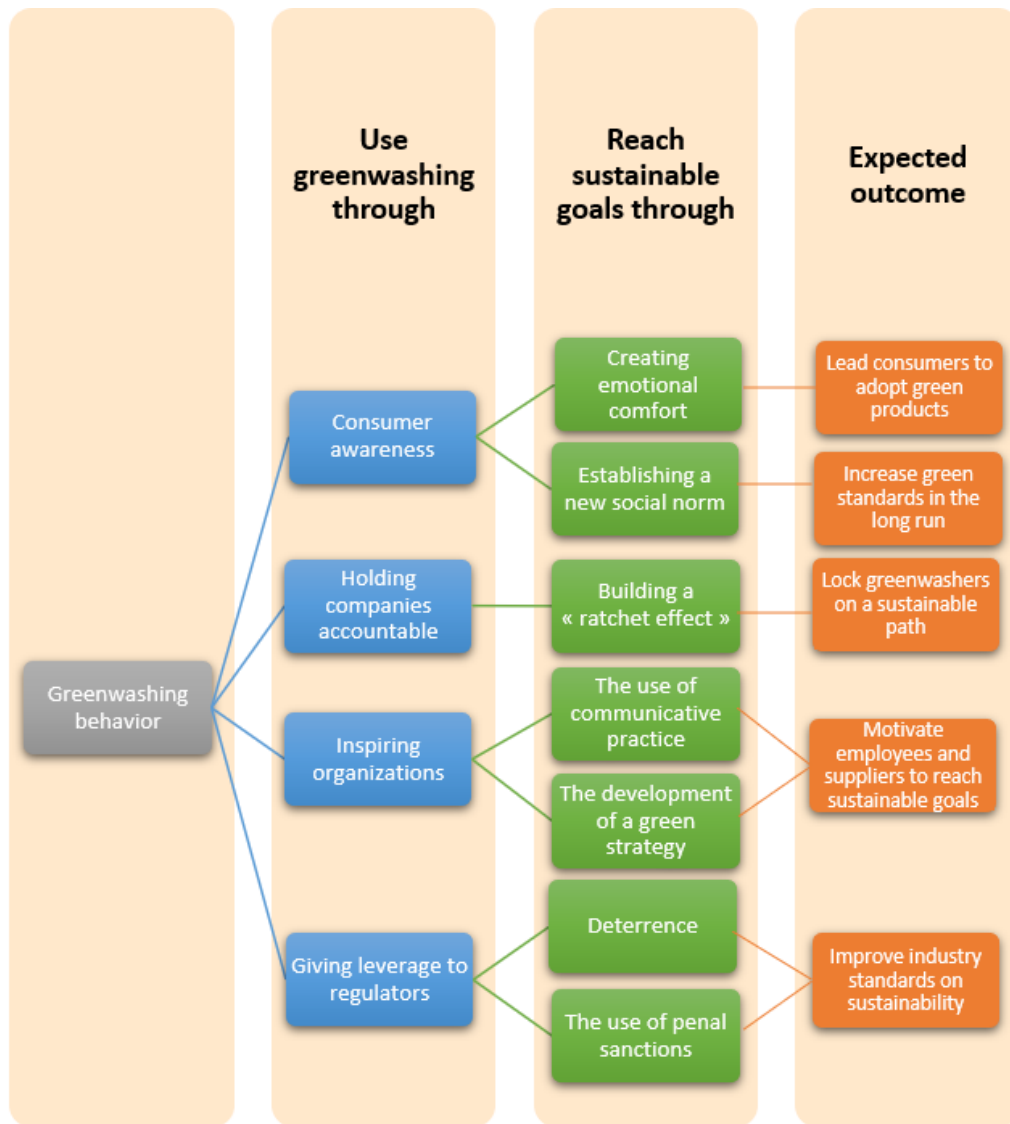
Figure 1. Process to use greenwashing to reach sustainable goals