



# Exploring bluewashing practices of alleged sustainability leaders through a counter-accounting analysis

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## ABSTRACT

This paper is aimed at analyzing, through a counter-accounting approach, to what extent companies considered to be sustainability leaders release transparent and balanced information on their commitment to the United Nations Global Compact (UNGC) and Sustainable Development Goals (SDGs). A content analysis was conducted on the sustainability reports of a sample of 28 companies from the UNGC LEAD program, and the results were compared with information disclosed by external sources not controlled by the studied organizations. Corporate disclosure counter-accounting reveals that more than 80% of the significant negative events related to LEAD companies were not reported or were only partially reported in their sustainability reports. Contrary to researchers' initial expectations, the length of the sustainability reports was not positively associated with their completeness or transparency. The findings of this study contribute to the literature on bluewashing and counter-accounting. They question the performance of companies considered to be sustainability leaders and the transparency of their reporting practices. From a managerial standpoint, the analysis of the results points at the necessity to shift the focus from the quantity of reports to their quality and transparency.

## 1. Introduction

The adoption of corporate social responsibility (CSR) practices has gained considerable momentum over the last decade (Carroll and Shabana, 2010; Schaltegger and Hörisch, 2017; Waddock, 2008; Tene et al., 2018). A survey conducted by the United Nations (UN) showed that 89% of CEOs believe that commitment to sustainability has a real impact in their industry, and 90% of them feel a personal responsibility to ensure their company has a clear purpose and role in society (United Nations Global Compact and Accenture Strategy, 2016). Nevertheless, various studies have highlighted that companies' involvement in tackling social and environmental issues is essentially the result of a 'legitimacy seeking' strategy (Boiral et al., 2017; Christmann and Taylor, 2006; Lai and Hamilton, 2020). For example, in their study based on 432 questionnaires completed by large companies in ten developed countries, Schaltegger and Hörisch (2017) showed that the search for social legitimacy is the dominant logic behind corporate sustainability strategies.

In the situation characterized by a governance vacuum around corporate transparency, accountability, and social-environmental

responsibility (Scherer and Palazzo, 2007; Scherer and Smid, 2000), international organizations and NGOs have launched various self-regulatory initiatives and guidelines to both legitimize and encourage corporate sustainability practices (Scherer and Palazzo, 2007; Waddock, 2008; Yuriev and Boiral, 2018). One of the most widely-known initiatives is the United Nations Global Compact (UNGC) with its 10 principles. Launched in 1999, its aim is to define shared principles of ethical business and global standards for sustainable corporate actions (e.g., Perez-Batres et al., 2011; Waddock, 2008). Nevertheless, the actual effects of this initiative on the improvement of CSR practices are disputable due to the general nature of the UNGC principles, the lack of monitoring mechanisms, and the absence of specific targets to be achieved (Rasche et al., 2013; Runhaar and Lafferty, 2009).

To address these deficiencies and focus sustainability commitments on specific goals in line with the 2030 Agenda for Sustainable Development, the UN launched seventeen Sustainable Development Goals (SDGs) in 2015. Corporate progress on SDGs can be measured by specific indicators consistent with the SDGs and main reporting frameworks, particularly the Global Reporting Initiative (Berliner and Prakash, 2015; United Nations Global Compact, 2018c).

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**Table 1**  
List of UNGC principles and SDGs.

	Type <sup>a</sup>	Principle / Goal	Description
UNGC	HR	HR1	Businesses should support and respect the protection of internationally proclaimed human rights.
		HR2	Make sure that they are not complicit in human right abuses.
	LR	LR3	Business should uphold the freedom of association and the effective recognition of the right to collective bargaining.
		LR4	The elimination of all forms of forced and compulsory labour.
		LR5	The effective abolition of child labour.
	ENV	LR6	The elimination of discrimination in respect of employment and occupation.
		ENV7	Business should support a precautionary approach to environmental challenges.
		ENV8	Undertake initiatives to promote greater environmental responsibility.
	AC	ENV9	Encourage the development and diffusion of environmentally friendly technologies.
SDGs <sup>b</sup>	People	AC10	Business should work against corruption in all its forms, including extortion and bribery.
		SDG1	End poverty in all its forms everywhere
		SDG2	End hunger, achieve food security and improved nutrition and promote sustainable agriculture
	Planet	SDG3	Ensure healthy lives and promote well-being for all at all ages
		SDG4	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
		SDG5	Achieve gender equality and empower all women and girls
		SDG6	Ensure availability and sustainable management of water and sanitation for all
		SDG12	Ensure sustainable consumption and production patterns
	Prosperity	SDG13	Take urgent action to combat climate change and its impacts
		SDG14	Conserve and sustainably use the oceans, seas and marine resources for sustainable development
		SDG15	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss
		SDG8	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
		SDG9	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
	Peace	SDG10	Reduce inequality within and among countries
		SDG11	Make cities and human settlements inclusive, safe, resilient and sustainable
		SDG16	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
		SDG17	Strengthen the means of implementation and revitalize the global partnership for sustainable development
	Partnership	SDG7 <sup>b</sup>	Ensure access to affordable, reliable, sustainable, and modern energy for all

<sup>a</sup> HR: Human Rights; LR: Labor; ENV: Environment; AC: Anti-Corruption.

<sup>b</sup> SDG7 is not included in any “P” because it concerns multiple areas at the same time.

The most advanced companies in terms of commitment to sustainability and UNGC principles are included in so-called LEAD group, launched in 2010 (Gitsham and Page, 2014; Junaid et al., 2015). According to the UNGC, LEAD companies belong to an exclusive group of companies that have demonstrated leadership in one or more SDG issues and excellence in communication practices (United Nations Global Compact, 2018d). Although it is tempting to assume that these companies disclose reliable, complete and trustworthy information on sustainability topics, no studies have verified this assumption.

Therefore, the objective of this paper is to analyze, through a counter-accounting approach, to what extent companies considered to be sustainability leaders release transparent and balanced information on their commitment to the United Nations Global Compact (UNGC) and Sustainable Development Goals (SDGs). This analysis is relevant for three reasons.

First, while multiple studies question the reliability and transparency of sustainability reports (Cho et al., 2012; Michelon et al., 2015; Talbot and Boiral, 2015), no previous research, to the best of our knowledge, has investigated this subject among companies that are, rightly or wrongly, considered to be sustainability leaders. Furthermore, the literature in this domain overlooks the ‘bluewashing’ phenomenon, which is defined in this paper as UNGC members ‘paying lip service to the true goals of CSR instead of undertaking substantive but costly changes in their environmental and human rights performance’ (Berliner and Prakash, 2015). The extent to which this phenomenon can be attributed to LEAD companies has yet to be investigated.

Second, counter-accounting is an emerging and relevant approach to analyze the transparency and reliability of sustainability reporting (Boiral, 2013; Gallhofer et al., 2006; Vinnari and Laine, 2017). Among other things, this approach tends to question the dominant, monolithic, and optimistic discourse on corporate sustainability performance through using critical and diversified sources of information (Boiral, 2013; Gallhofer et al., 2006; Vinnari and Laine, 2017). The extent to which such a discourse is found in the UNGC/SDGs disclosures of LEAD

companies remains to be investigated.

Third, although such self-regulatory initiatives as the UNGC principles and SDGs have encouraged political and economic leaders to commit to improving sustainability issues, their adoption and monitoring have not been the object of in-depth empirical studies. The few papers on the SDGs (e.g., Bebbington and Unerman, 2018; Reynolds et al., 2018) have mainly focused on the description, scope, and possible implications of these goals.

The remainder of the paper is organized as follows. First, the theoretical framework, based on the principal foundations of the neo-institutional theory, is explained. Second, the methodological steps, composed of several interconnected and complementary techniques, are described. Third, the results of the study are presented. The article concludes with a general discussion, including contributions and avenues for future research.

## 2. Literature review

### 2.1. Improving legitimacy through sustainability reporting and UNGC membership

Most companies face increasing challenges in maintaining their social license to operate and addressing institutional pressures for more accountability and transparency (Boiral, 2013; 2016; Delmas and Toffel, 2004; Heras-Saizarbitoria et al., 2020). In recent years, these pressures have revolved around sustainability issues, which now play a central role in social and political agendas (Carroll and Shabana, 2010; Schaltegger and Hörisch, 2017; Waddock, 2008). The issues involved and the stakeholders at the source of institutional pressures are highly variable: NGOs, employees, citizens, public authorities, national and international institutions, media, suppliers, etc. (Daddi et al., 2016; Lai and Hamilton, 2020; Testa et al., 2018).

The demands of these stakeholders and the institutional pressures exerted on organizations are diverse and often conflicting (Diouf and

Boiral, 2017; Hahn and Lülfs, 2014). Likewise, the responses of organizations are not monolithic and can vary depending on the type of stakeholders concerned, the objective of sustainability measures, and the level of commitment of managers (Scherer et al., 2013; Sharma, 2000; Testa et al., 2018). Because of the wide range of issues involved in the UN voluntary initiatives, the variety of organizations affected by these issues, and their extensive media coverage, organizations' adherence to the UNGC principles as well as their commitment to the SDGs (see Table 1 for the detailed description of the UNGC principles and the SDGs) appear as efficient vehicles to promote CSR.

Nevertheless, as highlighted by neoinstitutional theory, corporate responses to institutional pressures can be symbolic and intended to improve social legitimacy rather than internal practices (Boiral, 2007; Meyer and Rowan, 1977; Sandholtz, 2012). In this context, although stakeholder pressures for sustainability can increase corporate sustainability commitments, they often result in impression management strategies and the decoupling of external perceptions and real actions (Bansal and Clelland, 2004; Daddi et al., 2016). Such decoupling has been highlighted in studies on sustainability reporting (e.g., Boiral, 2013; Boiral, 2016; Hahn and Kühnen, 2013).

This literature questions the quality, transparency, and balance of information in sustainability reports (Cho et al., 2012; Michelon et al., 2015; Talbot and Boiral, 2015). Companies can distort the perception of stakeholders and improve their legitimacy through various communication tactics that are disconnected from real commitment to sustainability (Boiral, 2016; Diouf and Boiral, 2017; Lai and Hamilton, 2020; Sandberg and Holmlund, 2015; Talbot and Boiral, 2018). Among other things, reporting companies tend to disclose more positive pieces of information than negative ones (Boiral, 2013; Cho et al., 2010; Hahn and Lülfs, 2014). For instance, Cho et al. (2012) investigated the use of graphs in a sample of 120 CSR reports of 20 large European and American firms. The results showed the tendency to provide more graphs showing favorable trends than unfavorable trends. In another study, Cho et al. (2010) investigated the language used in 190 sustainability reports of US companies. Based on a qualitative content analysis, the study concluded that companies with worse environmental performance used more optimistic language to emphasize positive aspects, while biased and complex language was used to disguise negative information. This optimistic rhetoric and obfuscation of negative aspects has been observed in other studies on sustainability reporting, including corporate disclosure on biodiversity and climate change (Boiral, 2016; Heras-Saizarbitoria et al., 2020; Laufer, 2003; Leung et al., 2016; Talbot and Boiral, 2015).

A disconnection between discourse and practices is not limited to environmental aspects of sustainability. In fact, it may be present in communication on all principles of the UNGC and SDGs. Bluewashing practices have been highlighted by several scholars (Berliner and Prakash, 2015; Hamann et al., 2009; Junaid et al., 2015; Rasche et al., 2013), although only a few empirical studies have analyzed such tendencies. For instance, Van der Waal and Thijssens (2020) analyzed the disclosures of the 2000 largest stock-listed corporations worldwide and concluded that involvement in SDGs seems to be primarily motivated by the search for legitimacy. Similarly, the content analysis of the annual sustainability reports of 100 companies with the largest market capitalization on the JSE Securities Exchange demonstrated that UNGC membership had little influence on human rights performance (Hamann et al., 2009). Similarly, using secondary data on social and environmental aspects as dependent variables and UNGC membership as the independent variable, Berliner and Prakash (2015) analyzed the performance of 2950 firms over a ten-year period (2000–2010). Using a differences-in-differences model, they compared the performance of firms before and after joining the UNGC. Obtained results indicate that companies tend to join this initiative for reputational reasons and avoid implementing costly and substantial changes which are necessary to actually improve their sustainability performance.

## 2.2. Employing a counter-accounting approach to observe bluewashing tendencies

Given the search for corporate legitimacy, pressures for institutional isomorphism, and tendency to emulate companies considered to be best in class, such as the members of the LEAD initiative, holding them up as examples could have a ripple effect on corporate commitment to sustainability (Bansal and Roth, 2000; Delmas and Toffel, 2004). This issue is exacerbated by the fact that examples of sustainability initiatives from LEAD organizations are quite specific and are not necessarily representative of their most significant sustainability issues, including those covered by the 17 SDGs. Furthermore, success stories provided on the website of the UNGC may be biased by organizations' tendencies to highlight laudable achievements while concealing negative impacts. Although this tendency has been highlighted in some studies (e.g. Boiral, 2013; 2016; Laufer, 2003; Talbot and Boiral, 2015), it remains difficult to demonstrate due to the lack of reliable information on actual sustainability performance (Boiral and Henri, 2017; Milne et al., 2006) and the managerial capture of disclosures in this area (O'Dwyer, 2003; Smith et al., 2011).

Counter-accounting offers a relevant approach to circumvent the problem of managerial control over sustainability disclosure (Denedo et al., 2017; Tregidga, 2017). Counter-accounting in the area of sustainability reporting has been defined as the verification of the information disclosed by organizations through unofficial external sources not controlled by these organizations. Counter-accounting helps to free data from the managerial capture of sustainability disclosure (Adams, 2004; Boiral, 2013; Tregidga, 2017). The increase in available online information on organizations has also facilitated counter-accounting initiatives by stakeholders (Gallhofer et al., 2006; Sikka, 2006), and corporate sustainability is increasingly scrutinized and analyzed with reference to various sources of information that are not necessarily controlled by these organizations (i.e. newspapers, governmental agencies, NGOs, and extra-financial agencies).

Although not all aspects of sustainability are equally covered by external and unofficial sources, critical and adverse events (i.e. accidental spills, legal actions for violation of human rights, or forced eviction of local populations near mining sites) are likely to be mentioned and debated outside of organizational disclosures. For example, Adams (2004) compared the ethical, social, and environmental disclosures of a company with the information provided by other sources. This case study revealed the gap between the information controlled by organizations and information provided by other sources, particularly in terms of balance and completeness. Similarly, Boiral (2013) applied counter-accounting to analyzed sustainability reports from energy and mining companies, and found that only 10% of significant negative events were reported. Analogously, Rodrigue et al. (2015) analyzed the volume and tone of environmental disclosures on Abitibi-Consolidated by the company and its stakeholders. The results indicate that although the discourse on environmental issues is shaped by competing and biased worldviews rather than a transparent description of reality, stakeholder disclosure appears to provide an alternative to the unbalanced view in corporate reports. Likewise, Apostol's (2015) counter-account of a gold mine project in Romania, which was based on information from civil society, showed that the company failed to provide a balanced account of the sustainability issues related to this project. This study also highlights how counter-accounting can demonstrate the companies' tendencies to emphasize the economic benefits of industrial activities and downplay their social and environmental impacts.

This emerging literature on counter-accounting illustrates the importance of collecting information that is not controlled by organizations to evaluate sustainability performance and greenwashing or bluewashing tendencies. The studies mentioned above have, to a certain degree, confirmed the conclusions of previous critical research on the biased and optimistic rhetoric of sustainability disclosures (e.g., Laufer, 2003; Leung et al., 2016; Milne et al., 2006). However, the

**Table 2**  
Analyzed sustainability reports.

Company	Sector of activity	Country	Joined UNGC on	# of pages
Acciona	Alternative energy	Spain	11/10/2005	233
ARM Holdings	Technology hardware	United Kingdom	04/08/2010	56
Basf	Chemicals	Germany	26/07/2000	262
Bayer	Chemicals	Germany	26/07/2000	361
Braskem	Chemicals	Brazil	22/05/2007	159
Daimler AG	Automotive	Germany	26/07/2000	118
Deutsche Telekom	Telecommunications	Germany	26/07/2000	198
Enel	Energy & energy utilities	Italy	12/03/2004	211
Eni SPA	Energy	Italy	01/07/2001	46
Fuji Xerox	Technology hardware & equipment	Japan	31/08/2002	74
Iberdrola	Energy & energy utilities	Spain	24/06/2002	246
Infosys	Commercial services	India	10/09/2001	118
LafargeHolcim	Construction materials	Switzerland	20/03/2003	50
LG Electronics	Consumer durables	Republic of Korea	29/12/2009	102
Nestlé	Food and Beverage Products	Switzerland	20/02/2001	351
Netafim	Agriculture	Israel	30/06/2008	67
Novozymes	Other (pharmaceuticals & biotechnology)	Denmark	21/12/2001	161
Pirelli	Other (automotive parts)	Italy	07/10/2004	379
PTT Global Chemicals	Chemicals	Thailand	15/10/2010	152
Rosy Blue	Other (diamonds)	Belgium	10/06/2008	44
Sakhalin Energy	Energy	Russian Federation	18/11/2009	176
SK Telecom	Telecommunications	Republic of Korea	14/05/2007	146
Takeda Pharmaceutical	Healthcare products	Japan	31/03/2009	91
Total	Energy	France	07/03/2002	362
Unilever	Food and beverage products	United Kingdom	26/07/2000	169
UPM	Forest & paper products	Finland	03/01/2003	154
Vale	Mining	Brazil	12/09/2007	107
Yara	Agriculture (agricultural products)	Norway	03/02/2006	N.A. (website)

extent to which such rhetoric is present in the disclosures of alleged sustainability leaders needs to be further investigated.

### 3. Methods

#### 3.1. Sample selection

Sustainability reports of 28 LEAD Group companies were analyzed. The length of the combined sustainability reports of the selected companies amounted to 4621 pages (see Table 2 for the complete list of analyzed reports and their respective length). Although at the time when the study was initiated, the LEAD Group had 43 participants, several companies were excluded from the analysis with the purpose of minimizing inconsistencies related to the use of different reporting frameworks. More precisely, sustainability reports of selected companies had to be based on the GRI G4 reporting guidelines and cover the year 2015. This choice was principally dictated by the necessity to be consistent. In fact, it was not possible to conduct the analysis on sustainability reports published after 2015, as the GRI began its transition to a modified version of the guidelines in 2016 (namely the GRI Standards), and thus the reporting patterns for certain companies would have not been comparable. GRI Standards became only mandatory from the 1st of July 2018, meaning that the earliest comparable reports would have been published in 2019. As the majority of the analysis was conducted in the second half of 2018, only reports that cover the year 2015 were considered in this study.

#### 3.2. Data analysis

The data analysis was based on three steps. First, an in-depth content analysis of UNGC LEAD companies' sustainability reports was conducted (Boiral, 2013; Zhang and Wildemuth, 2016). Information related to each GRI indicator was extracted and transferred to a coding grid on an Excel spreadsheet (Schilling, 2006) developed for the purposes of the analysis. A categorization framework based on an updated version of Yadava and Sinha's procedure (2016) was created. The spreadsheet followed the structure of the GRI G4 Guidelines and

included both General Standard Disclosures (GSD) and Specific Standard Disclosures (SSD) indicators (Yadava and Sinha, 2016). Verifying whether reported information was compliant with the GRI G4 Guidelines was necessary for two principal reasons: to understand the topics that were material to chosen organizations, and to ensure the respect of the principle of completeness, meaning that sustainability report is expected to contain information that would be "sufficient to reflect significant economic, environmental and social impacts, and to enable stakeholders to assess the organization's performance in the reporting period" (Global Reporting Initiative, 2013). The assessment was based on a numerical scoring system, in which each indicator is assigned a score from 0 to 3. Coders assigned '0' in the absence of the indicator, '1,' when the indicator was reported through a generic and brief statement; they assigned a '2' when the indicator was fully covered and a '3' when full and systematic coverage was provided for the indicator with comparison over time.

The following example will better illustrate this analytical step. G4 Guidelines include three bullet points for indicator G4-LA6 ('type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender'):

- Report types of injury, injury rate (IR), occupational diseases rate (ODR), lost day rate (LDR), absentee rate (AR) and work-related fatalities, for the total workforce (that is, total employees plus supervised workers), by: Region and Gender.
- Report types of injury, injury rate (IR), occupational diseases rate (ODR), lost day rate (LDR), absentee rate (AR) and work-related fatalities for independent contractors working on-site to whom the organization is liable for the general safety of the working environment, by: Region and Gender.
- Report the system of rules applied in recording and reporting accident statistics.

Hence, sustainability reports of all analyzed companies were screened for the compliance with these bullet points, and scores were assigned accordingly. For instance, with regards to indicator G4-LA6,



**Table 3**  
Percentage of negative events reported in sustainability reports by company.

LEAD Company	Total number of identified events	Non-reported	Partially reported	Clearly reported
Acciona	1	1 (100%)	0%	0%
ARM Holdings	0	–	–	–
Basf	1	1 (100%)	0%	0%
Bayer	10	9 (90%)	1 (10%)	0%
Braskem	1	1 (100%)	0%	0%
Daimler AG	12	6 (50%)	5 (42%)	1 (8%)
Deutsche Telekom	0	–	–	–
Enel	3	1 (33%)	0%	2 (67%)
Eni SPA	8	3 (38%)	2 (25%)	3 (38%)
Fuji Xerox	0	–	–	–
Iberdrola	4	1 (25%)	1 (25%)	2 (50%)
Infosys	3	2 (67%)	1 (33%)	0%
LafargeHolcim	5	3 (60%)	2 (40%)	0%
LG Electronics	8	8 (100%)	0%	0%
Nestlé	13	12 (92%)	0%	1 (8%)
Netafim	0	–	–	–
Novozymes	0	–	–	–
Pirelli	3	1 (33%)	2 (67%)	0%
PTT Global Chemicals	1	1 (100%)	0%	0%
Rosy Blue	3	2 (67%)	0%	1 (33%)
Sakhalin Energy	0	–	–	–
SK Telecom	0	–	–	–
Takeda Pharmaceutical	3	2 (67%)	0%	1 (33%)
Total	10	3 (30%)	4 (40%)	3 (30%)
Unilever	4	2 (50%)	1 (25%)	1 (25%)
UPM	3	1 (33%)	0%	2 (67%)
Vale	8	4 (50%)	1 (13%)	3 (38%)
Yara	1	1 (100%)	0%	0%
<b>TOTAL</b>	<b>105</b>	<b>65 (62%)</b>	<b>20 (19%)</b>	<b>20 (19%)</b>

Note: the sign “–” means that no negative events were identified.

the sustainability report of Iberdrola obtained the score of 2/3 (Bullet point a was completely satisfied. Comparability with one year only. Bullet point b: the report provided only general data. No distinction by gender and region. Data are divided by gender and region just for the number of fatalities but not for the other type of information required. Bullet point c: the rules are reported). Similarly, the sustainability report of Vale obtained the score of 1/3 in the analysis of G4-LA6 (Bullet point a: general data are provided. No data for gender and region. Bullet point b: general data are provided. No data for gender and region. Bullet point c: missing). Analogous screenings were done on over 90 G4 indicators for sustainability reports of all selected companies.

Second, sustainability information related to these companies was collected from various stakeholders to ensure that companies report unbiased information without omissions or unnecessary selections, as stated by the principle of balance (GRI, 2013). Initially, following the approach proposed by Berliner and Prakash (2015), data on the selected companies were extracted from Environmental, Social and Governance (ESG) reports provided by an extra-financial rating agency. This agency, which cannot be named for confidentiality reasons, is considered to be one of the largest research centers on responsible investment and ESG practices. By using NGO reports and media sources, this agency identifies critical ESG matters for each company based on a materiality matrix built with reference to its sector of activity. These ESG issues are then classified by the reputational risk for the company and their impact on stakeholders and the environment. Critical events related to 21 companies from our 28-company sample were extracted from these documents. The database of the agency did not contain any critical information on the other 7 companies. Then, following the approach employed by Boiral (2013), multiple searches were performed on various online sources: newspapers, expert reports, governmental agencies, and NGO websites, among others. To reduce bias, two researchers agreed on a range of keywords related to core sustainability issues (e.g., pollution, emissions, human rights, forced labor,

discrimination, corruption, etc.). These keywords were combined with company names to search Google News for texts published from January 1 to December 31, 2015). Only events related to GRI indicators, SDGs, and UNGC were selected. To ensure the reliability of the extracted information, events reported by less than three different sources were discarded. Any sources with the same wording were considered as one. For linguistic reasons, only events reported in English, Italian, French, or Russian were considered. Overall, 105 negative events were identified and transferred to the coding grid.

Third, data collected in step 1 (GRI indicators) and step 2 (negative events related to sustainability issues reported by multiple sources and various stakeholders) were systematically compared with the purpose of analyzing the level of coverage of the negative events in the companies' sustainability reports. The relationships between these events and the SDGs/UNGC principles were also analyzed. More precisely, the Excel spreadsheet was further elaborated (Schilling, 2006) to include the connection of the negative events to the GRI indicators, SDGs, and UNGC. Based on the analysis of steps 1 and 2, the identified events were classified in one of the following groups: 1) not reported, if absent from the company's report and the related GRI indicator was rated '0' in step 1; 2) partially reported, if the event was mentioned in the report but the description is difficult to understand, regardless of the indicator rating from step 1; 3) clearly reported, if the event was clearly reported and the corresponding GRI indicator obtained a score of '2' or '3' in step 1.

To facilitate the categorization of the data, each category was clearly defined and discussed between researchers. To ensure the consistency of our analysis, two researchers randomly selected 30% of the reports and independently analyzed them following the three steps described above. The calculation of the Cohens' kappa, an indicator frequently used for verifying inter-coder reliability, resulted in value of 0.9, which is an excellent result (McHugh, 2012). The remaining reports were equally divided between the two researchers.

#### 4. Results

This part of the article contains three interconnected sub-sections that provide a detailed overview of the principal findings regarding the transparency and balance of the information disclosed by the LEAD companies in their sustainability reports. The first sub-section presents the scope of the identified negative events. Some representative examples of unreported or poorly reported events are provided, and the unbalanced nature of reporting is explored. The second sub-section explains the impact of unreported events on the UNGC principles. Particular attention is given to the violation of the four main themes of the UNGC principles: human rights, labour, environment, and anti-corruption (see Table 1 for the description of all the 10 principles). Finally, the third sub-section sheds some light on how unreported or partially reported events might have compromised various SDGs.

##### 4.1. The selective and unbalanced disclosure of critical events

The data analysis showed that most critical and negative events were either not reported or only partially reported. As demonstrated in Table 3, of the total negative events identified, 63% were not mentioned in the UNGC LEAD company sustainability reports. In comparison, partially reported events represented 18% of the total number of identified incidents, while clearly reported events accounted for 19%. Interestingly, of the 28 companies included in this study, we were able to identify only seven companies having over eight negative events in the reported period (Bayer, Daimler, Eni, LG, Nestlé, Total, and Vale). This may be partially explained by the fact that these are multinational corporations with worldwide operations. Not only do they have local branches and numerous activities, but they are also regularly monitored by the media. In comparison, no negative events were found for the following companies: ARM Holdings, Deutsche Telekom, Fuji Xerox, Netafim, Novozymes, Sakhalin Energy, and SK Telecom. Most of these

companies operate in the technology hardware and the telecommunications sectors, and, thus, it may be somewhat rare for stakeholders to be significantly affected by the operations of these companies. It is also noteworthy that the majority of not reported events were related to product responsibility issues.

As for non-reported significant negative events, the cases of LafargeHolcim and Vale are particularly representative. In particular, LafargeHolcim did not release information on the fact that their manufacturing plants affected the health of local communities in Colombia. As for Vale, a mining company, it failed to report an important nitrous oxide and nitrogen dioxide leak that occurred in one of its subsidiaries in Ontario. Similarly, eight negative events were found for LG electronics in 2015 (including privacy violations and an accusation of product dumping), but the company did not mention any of these events in its sustainability report.

For most partially reported events, companies attempted to downplay the gravity of negative events by presenting them through vague and unclear statements. For instance, Eni, LafargeHolcim, Pirelli, Total, Vale, and Unilever made only general disclosures regarding the negative aspects of their working conditions. Readers can hardly understand the scope of accidents or what actions will be undertaken to prevent a similar negative event in the near future.

This is particularly the case for some controversial subjects, like forced labor and the right to decent work. For example, after a BBC investigation on dangerous and poor living and working conditions in Unilever's tea manufactures, the company provided the following vague statement:

*In Turkey, we identified excessive working hours in our tea supply chain. In India, we found incidents of poor health and safety practices and a lack of proper process of wage payment at a salt plant. Many of these issues are difficult to remedy. But it is our responsibility to address them. (Unilever, human rights report, p. 21).*

As it can be observed, the company expresses its commitment toward improving working conditions in its supply chain without providing detailed information about its plan or actions that will be implemented to address the problem. Similar examples were found in the report of Vale, which was accused of forced labor in one of its plants. The event was disclosed by Vale in the following manner:

*In 2015, there was one occurrence related to compulsory labor and another one related to child labor involving Vale's suppliers. The company received notice of violation after inspection of MTE for supposed irregular outsourcing and submitting workers of Ouro Verde to working conditions analogous to slavery. The activity on the building site was halted and resumed after Vale notified the provider of finished good transportation in Mina do Pico, Minas Gerais, and the necessary corrections were made. (Vale, sustainability report, p. 23).*

Although Vale admits the existence of forced labor, the company restricts its explanation to a mere indication that the situation was resolved. However, the report contains no details on how similar events will be eradicated in the future.

Another social aspect that seemed to be poorly covered concerned fatalities. In most cases, the data on such accidents were disclosed in an aggregated form, without giving any details on tragedies, thus disregarding the GRI G4 principles on completeness and clarity of information (Global Reporting Initiative, 2013, p. 18). For instance, multiple fatalities took place at installations of LafargeHolcim during the reporting period, and many of such accidents were widely covered by the media. The following statement of the company describes these events:

*In 2015, 33 individuals lost their lives while working for LafargeHolcim. Of these, 28 were indirectly employed through contractors or service providers. A further 17 individuals not connected to LafargeHolcim lost their lives, the majority as a result of traffic accidents with vehicles carrying LafargeHolcim products. Every single fatality is deeply regretted. (LafargeHolcim, sustainability report, p. 14).*

Although the company disclosed the existence of the negative event, it did not provide any further insight on the strategic or operational processes the company will implement to avoid fatalities.

In several cases, companies virtually ignored specific types of negative events. For example, Daimler AG did not report ongoing investigations or issues related to product responsibility despite several accusations about technical problems and safety concerns. For instance, Daimler AG is one of ten automakers who were sued for concealing the risk of carbon monoxide poisoning in five million vehicles equipped with keyless ignitions (Reuters, 2015). Instead, it only provided general statements:

*All of our products are subject to top quality and safety requirements throughout their entire life cycle. (Daimler AG, sustainability report, p. 31).*

*For us, product responsibility requires a combination of three things: the greatest possible customer benefit, the highest safety standards, and maximum eco-friendliness. (Daimler AG, sustainability report, p. 50).*

Nevertheless, although rare, some companies did disclose negative events in a comprehensive manner. In general, only 19% of the events identified in external sources were clearly reported in sustainability reports. Enel, Iberdrola, and UPM clearly reported 67%, 50% and 67%, respectively, of negative incidents. For example, Iberdrola was accused by the World Bank of failing to supervise its Albanian subsidiary, whose executives were in several cases found guilty of bribery. As a consequence, the World Bank temporarily excluded Iberdrola's subsidiary from its projects. In its sustainability report, Iberdrola provides the following concise and complete explanation of the issue:

*During 2015, the Integrity Vice Presidency of the World Bank approved the negotiated resolution agreement signed by Iberdrola Ingeniería y Construcción and Iberdrola S.A. ending the proceeding stemming from the omission by Iberdrola Ingeniería y Construcción of the information relating to a commercial agent in two bids submitted in 2004 and 2005 for projects in Albania, which constitutes a fraudulent practice under World Bank regulations. Under the terms of the Agreement, Iberdrola Ingeniería y Construcción and its subsidiaries (the 'Sanctioned Subsidiaries') are disqualified from participating in projects of the World Bank Group for a 12-month period, until 26 May 2016. (Iberdrola, sustainability report, p. 185).*

Interestingly, the length of reports was not a good indicator of their completeness and transparency. For example, Bayer has the longest report (361 pages) and one of the highest percentages of non-reported incidents (90%). Information was more difficult to find in lengthy documents, and such reports tended to be stuffed with pictures and carefully selected case studies. This finding gives more credence to the interpretation of sustainability reporting as an impression management tool, whatever the quantity of information provided.

#### 4.2. Impacts of negative events on commitment to the UNGC principles

The analysis of the link between occurred negative events and UNGC principles is provided in Table 4. Grey cells indicate events for which no connections could be made.

Of the four thematic areas covered by the UNGC principles, the environmental principles (principles 7, 8, and 9) were the most frequently violated with 9 violations per principle, for a total of 27 events impacting environmental principles. Human rights follow with 18 violations (including 12 violations for principle 1 and 6 for principle 2). Labor principles were violated 14 times (2 for principle 3; 2 for principle 5, and 10 for principle 6). Finally, there were 10 violations related to corruption (principle 10). In total, out of the 105 identified events, 69 incidents (66%) compromised the UNGC principles.

The high number of violations related to **environmental** issues may be due to the number and diversity of environmental aspects, which

**Table 4**  
UNGC principles and SDGs compromised by negative events.

LEAD Company	N° of identified events*	UNGC**										SDGs															
		HR		LR			ENV			AC																	
		1	2	3	5	6	7	8	9	10	1	2	3	4	5	6	8	10	11	12	13	14	15	16			
Acciona	1	✓					✓	✓	✓					✓								✓	✓				
ARM	0																										
Basf	1												✓							✓							
Bayer	10						✓	✓	✓				✓							✓	✓		✓				
Braskem	1									✓	✓							✓									
Daimler AG	12	✓	✓	✓		✓				✓																	
Deutsche Telekom	0																										
Enel	3	✓	✓				✓	✓	✓	✓	✓	✓	✓	✓			✓								✓		
Eni	8	✓				✓	✓	✓	✓	✓						✓	✓			✓		✓	✓	✓			
Fuji Xerox	0																										
Iberdrola	4	✓								✓															✓		
Infosys	3	✓	✓			✓																			✓		
Lafarge-Holcim	5	✓	✓	✓		✓				✓																	
LG Electronics	8					✓							✓				✓	✓	✓								
Nestle	13	✓	✓		✓	✓	✓	✓	✓		✓		✓		✓		✓		✓	✓			✓				
Netafim	0																										
Novozymes	0																										
Pirelli	3	✓				✓							✓				✓								✓		
PTT	1	✓					✓	✓	✓																		
Rosyblue	3									✓															✓		
Sakhalin Energy	0																										
SK Telecom	0																										
Takeda Pharm.	3												✓														
Total	10	✓				✓	✓	✓	✓	✓	✓	✓	✓			✓	✓			✓		✓		✓			
Unilever	4					✓	✓	✓	✓	✓			✓				✓		✓		✓		✓				
UPM	11	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓					✓	✓	✓			
Yara	1									✓									✓	✓							
TOTAL	105**	12	6	2	2	10	9	9	9	10	5	1	10	1	1	4	7	3	4	5	2	4	6	8			

<sup>a</sup> Not all events affected both the UNGC principles and the SDGs. For the number of events that affected UNGC principles and SDGs, please refer to sections 4.2 and 4.3.

<sup>b</sup> HR: Human Rights; LR: Labor; ENV: Environment; AC: Anti-Corruption.

represent 37% of the GRI indicators. Moreover, environmental issues are increasingly covered by the media. This coverage facilitated the identification of negative events, especially for large industrial companies. Identified incidents were mainly related to accidental spills and excessive emissions.

The majority of incidents related to **human rights** issues can be linked to the GRI indicator SO2, 'operations with significant actual or potential negative impacts on local communities' (Global Reporting Initiative, 2013, p. 76). The fact that respecting human rights remains a challenge even for alleged sustainability leaders is quite alarming and deserves further investigation.

In what concerns **labor** issues, most violations were related to the 'Occupational Health and Safety' subcategory of the GRI, particularly indicators LA6 (work-related injuries, diseases, and fatalities) and LA7 (workers with high incidence or risk of diseases). Although there were relatively few labor principle violations compared to environmental and human rights violations, negative labor-related events were most frequently reported only in aggregated tables on the subject. For instance, workplace injuries and fatalities were often grouped together with no further information on company responsibilities or the measures implemented to improve working conditions.

Lastly, identified events related to **corruption** issues can be categorized in three categories: bribery, business ethics incidents, and anti-competitive behaviors. Considering that the 10th UNGC principle states 'businesses should work against corruption in all its forms, including extortion and bribery' (United Nations Global Compact, 2018e), it is surprising that ten corruption violations were found for supposed leaders in UNGC principles and sustainability performance.

#### 4.3. Questionable commitment to the SDGs

Table 4 also provides an overview of the identified negative events in relation to the 17 SDGs. The most affected SDGs are 'good health and well-being' (SDG 3) and 'peace, justice and strong institutions' (SDG 16), followed closely by 'decent work and economic growth' (SDG 8). These SDGs reflect matters of high interest for local and global communities, and the high number of negative events related to them is therefore a concern. Importantly, businesses are considered to play a key role in achieving 'good health and well-being' (SDG 3) and 'decent work and economic growth' (SDG 8); 16 negative events were related to these goals (DNV GL, 2016). Conversely, there were not many negative events related to 'zero hunger' (SDG 2) and 'quality education' (SDG 4). This may be due to the fact that these topics mainly concern governmental agencies and institutions rather than companies. On a positive note, 'partnership for the goals' (SDG 17) and 'Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation' (SDG 9) were not affected by any incidents (reminder: SDG7, 'Ensure access to affordable, reliable, sustainable, and modern energy for all', is not included in any Ps, see Table 1 in section 2.1 for more details). Nevertheless, the absence of negative events related to SDG 17 may be due to the positive and voluntary aspect of partnership development, which is unlikely to be the object of major incidents covered by external sources.

Overall, a relatively high number of negative events affected companies' contributions to the SDGs. Of the 105 identified events, 61 incidents (58%) were found to impact SDG issues. In many cases, the analyzed LEAD companies failed to be transparent about these events,

with most of these events not even being mentioned in sustainability reports. Furthermore, commitment to the SDGs was often only briefly mentioned in company sustainability reports (for example, in the CEO's letter to the stakeholders that is usually found at the very beginning of the report) and was not supported with evidence. For instance, the 2015 Infosys report mentioned SDGs only once: 'as a global corporation that is passionate about sustainable development, we take great pride that our own goals and commitments are in alignment with the SDGs' (Infosys, Sustainability Report 2015–2016, p. 6). However, no further evidence of this commitment was found in the analyzed document.

Some companies (e.g. Nestlé and Total) inserted SDGs graphics into their reports to highlight their commitment, but such commitment was not substantiated in the report and does not seem to be aligned with their day-to-day operations. Other companies (e.g. Acciona and PTT Global Chemicals) used the SDGs to set priorities in their materiality analysis. For example, PTT Global Chemicals' report states the following: 'the company has responded to changes in current situations to remain in compliance with many aspects of the United Nations Sustainable Development Goals' (PTT Global Chemicals, Integrated Sustainability Report, p. 83). This means that issues at the core of the 2030 Agenda contributed to defining the company's priorities, but no concrete action in the report follows up on this initial commitment. In contrast, some companies (e.g. LafargeHolcim and UPM) described their strategic commitment toward the 2030 Agenda (2015–2030) with specific objectives and measurable targets, despite the short period of time since the launch of the program.

## 5. Discussion

The results of our counter-accounting analysis show the low propensity of UNGC LEAD members to disclose information about significant negative events in their sustainability reports. More than 80% of identified events were not reported or were only partially reported. This finding is consistent with the critical literature on greenwashing and bluewashing practices in sustainability reporting, particularly in terms of imbalance and incompleteness of information (e.g., Adams, 2004; Boiral, 2013; Cho et al., 2012; Vinnari and Laine, 2017; Michelon et al., 2015; Talbot and Boiral, 2018; Tregidga, 2017).

However, our sample consists of alleged sustainability leaders and not a cross-section of companies with varying sustainability performance. For example, in the counter-accounting analysis of 23 sustainability reports from energy and mining companies (Boiral, 2013) 54% of the critical negative events were not reported (compared to 63% in our study), 36% of the critical negative events were partially or poorly reported (compared to 18% in our study), and 10% of the negative events were clearly reported (compared to 19% in our study). Overall, the high proportion of non-reported negative events in our study suggests that LEAD companies are not more transparent than other organizations.

Our results conflict with the UNGC's lionization of LEAD companies. Although LEAD companies are assumed to 'inspire others to do the same' through 'spearheading sustainability strategies ranging from board engagement and oversight of sustainability to full integration across business functions' (United Nations Global Compact, 2018f), such inspiring effects seem questionable in view of our results. The fact that LEAD companies are in the spotlight for their sustainability performance and are held up as examples by an international organization could partly explain some of our results. In fact, the disclosure of information on negative events could jeopardize LEAD companies' best-in-class image. Reputational issues do play a key role in corporate commitment to sustainability and related reporting practices (e.g., Michelon, 2011; Robinson et al., 2011), and the lack of transparency does not necessarily mean that LEAD companies have not implemented substantial measures on specific aspects of sustainability. Nevertheless, the importance and number of significant incidents related to UNGC principles and SDGs raises questions on the effectiveness of these

programs and LEAD companies' actual commitment.

### 5.1. Theoretical contributions

This study makes three main contributions to the literature on bluewashing and counter-accounting. First, this research sheds light on the reporting practices of LEAD members that were previously overlooked in the literature on non-financial reporting. Our findings suggest that these companies should not be considered to be free from significant bluewashing or greenwashing tendencies, despite their self-proclaimed leadership with regards to sustainability. Overall, our analysis confirms that firms tend to use sustainability reports as a 'smokescreen' for impression management purposes (Boiral, 2016; Sandberg and Holmlund, 2015; Talbot and Boiral, 2018). Companies often dedicate large sections of their reports to various sustainability awards or recognitions, including the LEAD program, but information regarding litigations or incidents is usually scarce. Although there is nothing wrong with highlighting positive achievements, focusing the bulk of the report on positive outcomes or optimistic statements contradicts various GRI G4 principles, including balance, completeness, reliability, and materiality of information.

Second, this paper contributes to the literature on counter-accounting. With few exceptions (e.g. Apostol, 2015; Boiral, 2013; Rodrigue et al., 2015; Andrew and Baker, 2019), this promising approach has been rarely adopted, probably due to its heavy requirements in terms of time and the volume of information to collect and analyze. Our analysis confirms the relevance of counter-accounting to circumvent the managerial capture of sustainability information, which raises serious questions on the credibility of reporting practices (e.g., Heras-Saizarbitoria et al., 2020; Manetti and Toccafondi, 2012; O'Dwyer and Owen, 2005). The gap between the information on significant events disclosed in corporate sustainability reports and the information on these events provided by external sources confirms the biased and socially constructed nature of statements in this area (Adams, 2004; Rodrigue et al., 2015).

Third, this study contributes to the emerging literature on the UNGC/SDGs (e.g. Berliner and Prakash, 2015; Hamann et al., 2009; Junaid et al., 2015; Rasche et al., 2013) by showing the lack of accountability in the adoption of UN principles by organizations. Although sustainability reporting has been critiqued for its opacity and lack of transparency by many studies (Boiral, 2013; Cho et al., 2012; Hahn and Lülfs, 2014; Talbot and Boiral, 2018), few scholars have focused specifically on UNGC principles and the SDGs (for recent exceptions, see Rosati and Faria, 2019; Van der Waal and Thijssens, 2020). Instead of following the mainstream literature on the subject and analyzing the possible implications of UNGC principles or SDGs (e.g., Bebbington and Unerman, 2018; Reynolds et al., 2018), this study explored the practical side of the reporting practices of companies concerning these self-regulated corporate initiatives.

### 5.2. Managerial implications

From the practical point of view, the findings shed light on the importance of in-depth and consistent monitoring of UNGC and SDG programs. Two important steps have already been accomplished by the UNGC: first, a mandatory reporting requirement was introduced in 2004; second, some participants saw their membership revoked in 2008 for not fulfilling the requirements. The focus should now be shifted from the quantity of reports produced by members to their quality and transparency. UNGC managers should also ensure that members comply with the basic principles of this program. The counter-accounting approach presented in this study could be used on a regular basis to verify such compliance. Due to the resources and time required for counter-accounting, this approach cannot be applied to all UNGC companies. Nevertheless, the sustainability performance and reporting practices of LEAD organizations could be further scrutinized through counter-



accounting. Generally speaking, the UNGC should reassess its list of LEAD companies to ensure that these organizations can actually be considered to be reference models in terms of their integration of UNGC principles, sustainability commitment, and transparency. Moreover, the criteria used to admit those companies in the program should be better specified.

### 5.3. Limitations and avenues for future research

The limitations of this study call for further research on the UNGC and SDGs. First, for methodological reasons, the study focused on the reporting year 2015. Considering that SDGs came into effect in 2015, companies, including UNGC members, may need time to develop the expertise needed to provide reliable and transparent disclosures for these goals. Unclear and vague statements could be partly due to misinterpreting the reporting requirements. The same remark applies to the compliance with the UNGC and the SDGs. In this optimistic perspective, the transparency of reporting practices could improve over time. This is particularly the case with the adoption of the EU-Directive 2014/95/EU that obliges stock-listed companies operating within the EU to disclose non-financial information. New legislative measures in concerned countries have certainly filled in the existing governance vacuum and, on the long run, have a high probability of positively influencing corporate reporting practices. A longitudinal analysis with counter-accounting covering several years would be necessary to measure possible changes over time and verify this assumption.

Second, this study is based on a limited sample of LEAD companies. Further research could focus on a larger sample of UNGC members to analyze their reporting practices. Comparisons between LEAD companies and other organizations could shed more light on possible differences between them, particularly in terms of their coverage of UNGC principles and SDGs.

Third, this study is mainly based on secondary, publicly available data. Further research inside organizations could examine the managerial implications of the UNGC and SDG programs, particularly for companies considered to be exemplary. Interviews with managers and environmental experts from these companies could shed more light on the reasons why certain events are not reported. Opinions of these professionals on the negative events reported by external sources and the impacts of such events on sustainability practices could also be investigated. Likewise, interviews with employees could help evaluate the internalization of sustainability principles and should be further considered in counter-accounting studies.

### CRedit authorship contribution statement

**Margherita Macellari:** Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Project administration, Resources, Writing - original draft. **Alexander Yuriev:** Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Validation, Writing - review & editing. **Francesco Testa:** Conceptualization, Project administration, Validation, Supervision. **Olivier Boiral:** Conceptualization, Validation, Supervision.

### Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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