



MINISTÉRIO DA EDUCAÇÃO  
Universidade Federal de Ouro Preto  
Programa de Pós-Graduação em Engenharia Ambiental



BIANCA ALVES ALMEIDA MACHADO

THE IMPLEMENTATION OF THE MATERIALITY PRINCIPLE IN GRI-BASED  
SUSTAINABILITY REPORTING: PATTERNS OF AN INCIPIENT PRACTICE

OURO PRETO

2020



MINISTÉRIO DA EDUCAÇÃO  
Universidade Federal de Ouro Preto  
Programa de Pós-Graduação em Engenharia Ambiental



BIANCA ALVES ALMEIDA MACHADO

THE IMPLEMENTATION OF THE MATERIALITY PRINCIPLE IN GRI-BASED  
SUSTAINABILITY REPORTING: PATTERNS OF AN INCIPIENT PRACTICE

Masters Dissertation presented to the Post-Graduate Program in Environmental Engineering - PROAMB at Universidade Federal de Ouro Preto as a requirement to obtain the title of Master in Environmental Engineering in the sub-area of Environment.

Supervisor: Prof. Dr. Alberto Fonseca

Co-supervisor: Prof. Dr. Lívia C. P. Dias

OURO PRETO

2020

## SISBIN - SISTEMA DE BIBLIOTECAS E INFORMAÇÃO

M149t Machado, Bianca Alves Almeida .

The implementation of the materiality principle in gri-based sustainability reporting [manuscrito]: patterns of an incipient practice. / Bianca Alves Almeida Machado. - 2020.

124 f.: il.: gráf., tab., mapa.

Orientador: Prof. Dr. Alberto de Freitas Castro Fonseca.

Coorientadora: Profa. Dra. Lívia Cristina Pinto Dias.

Dissertação (Mestrado Acadêmico). Universidade Federal de Ouro Preto. Programa de Pós-graduação em Engenharia Ambiental. Programa de Pós-Graduação em Engenharia Ambiental.

Área de Concentração: Meio Ambiente.

1. Sustentabilidade e meio ambiente - Matriz de materialidade. 2. Inteligência competitiva (Administração) - Stakeholder. 3. Global Reporting Initiative (GRI). 4. Sustentabilidade - Relatórios técnicos. I. Dias, Lívia Cristina Pinto. II. Fonseca, Alberto de Freitas Castro. III. Universidade Federal de Ouro Preto. IV. Título.

CDU 502

Bibliotecário(a) Responsável: Maristela Sanches Lima Mesquita - CRB: 1716



MINISTÉRIO DA EDUCAÇÃO  
UNIVERSIDADE FEDERAL DE OURO PRETO  
REITORIA  
ESCOLA DE MINAS  
PROGRAMA DE POS-GRADUACAO EM ENGENHARIA  
AMBIENTAL



**FOLHA DE APROVAÇÃO**

**Bianca Alves Almeida Machado**

**A implementação do Princípio da Materialidade em relatórios de sustentabilidade baseados nas diretrizes da DRI: padrões de uma prática incipiente**

Dissertação apresentada ao Programa de Pós-graduação em Engenharia Ambiental da Universidade Federal de Ouro Preto como requisito parcial para obtenção do título de mestre.

Aprovada em 06 de abril de 2020

**Membros da banca**

Dr. Alberto de Freitas Castro Fonseca - Orientador - Universidade Federal de Ouro Preto  
Dra. Livia Cristina Pinto Dias - Coorientadora - Universidade Federal de Ouro Preto  
Dra. Yara Consuelo Cintra - Examinadora - Universidade Federal do Rio de Janeiro  
Dr. Roberth Andres Villazon Montalvan - Examinador - Universidade Federal de Santa Catarina  
Dr. Antônio Santos Sánchez - Examinador - Universidade Federal de Ouro Preto

Dr. Alberto de Freitas Castro Fonseca, orientador do trabalho, aprovou a versão final e autorizou seu depósito no Repositório Institucional da UFOP em 04/06/2020



Documento assinado eletronicamente por **Alberto de Freitas Castro Fonseca, CHEFE DO DEPARTAMENTO DE ENGENHARIA AMBIENTAL/EM**, em 08/02/2021, às 12:11, conforme horário oficial de Brasília, com fundamento no art. 6º, § 1º, do [Decreto nº 8.539, de 8 de outubro de 2015](#).



A autenticidade deste documento pode ser conferida no site [http://sei.ufop.br/sei/controlador\\_externo.php?acao=documento\\_conferir&id\\_orgao\\_acesso\\_externo=0](http://sei.ufop.br/sei/controlador_externo.php?acao=documento_conferir&id_orgao_acesso_externo=0), informando o código verificador **0133579** e o código CRC **326E09B9**.

## ACKNOWLEDGMENTS

*First, to God, for giving me strength when I thought it would no longer be possible.*

*To my parents and sisters Pedro and Rosa, Júlia and Isabella, for their unconditional support for all my decisions. Always.*

*To my dearest André, for the many valid suggestions and all the support.*

*To all my friends (in a very special way, thanks to Daiana, Pati, Thiago, Michelle, Isabela and Mari) who gave me words of comfort and encouragement during this journey.*

*To my advisors who brought me to the end of this work.*

*To CAPES, for financing this dream.*

*Thank you!*

*Life finds its way when you work hard and believe something,  
bigger than you, exists.*

## **ABSTRACT**

The principle of materiality has long been emphasized by accounting organizations and the Global Reporting Initiative (GRI) as a fundamental requirement of sustainability reporting. This principle requires companies to report 'material' issues, that is, information perceived as relevant by stakeholders. However, despite generic guidelines, there is no global standard or detailed methodology to test or evaluate materiality in the context of sustainability reporting. Organizations' approach to addressing this principle is very diverse. The purpose of this study was to investigate how GRI reports, across different countries and sectors, disclose information in connection with the materiality principle and to explore patterns of information disclosure related to stakeholder management. More specifically, this dissertation measured the extent to which companies' reports disclose information related to six materiality-related indicators (which was called as transparency in this study) and explored patterns of report contents related to stakeholder management and materiality. The sample included 140 GRI reports published by large-sized and multinational organizations from 2017 or 2018 that had GRI's organizational mark for materiality disclosure. The methodology was based on a content analysis of the sample. Overall, findings suggested that organizations, while complying with the GRI standards, do not disclose comprehensive, detailed information about their approaches to identifying material topics. About 22% of the evaluated contents were not found in the sample of GRI reports. The results suggested that the presence of third-party verifications, the headquarter countries' income, and the GRI version (G4 or Standards) do not influence the degree of transparency. This study has also identified the main groups of stakeholders engaged by organizations and respective

techniques of engagement. In this work, the mean number of stakeholder groups engaged was found to be around 8 per company. However, the literature does not describe what should be considered the ideal number of groups to be engaged. Descriptive statistics suggested that these groups and techniques were not associated with country income, GRI version and third-party assurance. However, it is difficult, if not inappropriate, to judge the quality of such disclosures using the results of this study. Without thorough methods and protocols of the materiality analysis, transparency will only expose how incipient the field of sustainability accounting is.

**Keywords:** Materiality analysis. Stakeholder engagement. GRI reporting. Sustainability reporting.

## RESUMO

O princípio da materialidade é enfatizado, há tempos, pelas organizações contábeis e pela Global Reporting Initiative (GRI) como requisito fundamental dos relatórios de sustentabilidade. Esse princípio exige que as empresas relatem problemas "materiais", ou seja, informações percebidas como relevantes pelas partes interessadas. No entanto, apesar das diretrizes genéricas, não existe um padrão global nem metodologia detalhada para se testar ou avaliar a materialidade no contexto dos relatórios de sustentabilidade. A abordagem das organizações acerca deste princípio é muito diversa. O objetivo deste estudo foi investigar como os relatórios nos padrões GRI, em diferentes países e setores, divulgam informações relacionadas ao princípio da materialidade e explorar padrões de divulgação de informação relacionada ao engajamento das partes interessadas. Mais especificamente, esta dissertação avaliou em que medida os relatórios das empresas divulgam informações relacionadas a ocorrência de cada um dos seis indicadores relacionados à materialidade (que é chamada de transparência neste estudo) e explorou padrões de conteúdo de relatórios relacionados ao gerenciamento e à materialidade das partes interessadas. A amostra incluiu 140 relatórios produzidos nos padrões GRI, publicados por organizações multinacionais e de grande porte em 2017 ou 2018, que tinham o selo da GRI para divulgação de materialidade. A metodologia foi baseada na análise de conteúdo da amostra.. Os resultados sugeriram que as organizações, embora cumpram os padrões da GRI, não divulgam informações abrangentes e detalhadas sobre suas abordagens para identificar tópicos materiais. Cerca de 22% do conteúdo avaliado não foi encontrado na amostra dos relatórios da GRI. Os resultados sugeriram que a presença de verificações externas, a renda dos



países sede dessas companhias e a versão da GRI (G4 ou Normas) não influenciam o grau de transparência. Este estudo também identificou os principais grupos de stakeholders engajados pelas organizações e respectivas técnicas de engajamento. Neste trabalho, o número médio de grupos de stakeholders envolvidos encontrado foi cerca de 8 por empresa. No entanto, a literatura não descreve o que deve ser considerado o número ideal de grupos a serem engajados. As estatísticas descritivas sugeriram que esses grupos e técnicas não estão associados à renda do país, versão GRI e auditorias externas. Contudo, é difícil, se não inadequado, julgar a qualidade de tais divulgações a partir dos resultados deste estudo. Sem métodos e protocolos completos de análise de materialidade, a transparência apenas expõe o quão incipiente é o campo dos relatórios de sustentabilidade.

**Palavras-chave:** Análise de materialidade. Engajamento das partes interessadas. Relatórios GRI. Relatórios de sustentabilidade.

## **LIST OF FIGURES**

Figure 1: GRI's organizational mark for materiality disclosure.....	19
Figure 2: Countries with reports available in the sample .....	32
Figure 3: Degree of Transparency of Materiality Disclosures in Reports with and Without Third-party Verification .....	41
Figure 4: Degree of Transparency of Materiality Disclosures across Headquarters' Levels of Income and Versions of the GRI guidelines .....	42
Figure 5: Most frequently cited groups of stakeholders with which organizations engaged during the preparation of their respective sustainability reports.....	44
Figure 6: Boxplots of the number of stakeholder groups engaged in GRI reports across GRI G4 and GRI Standards and income levels of the headquarters .....	45
Figure 7: Most frequently cited engagement techniques used by reporting organizations .....	46
Figure8: Boxplots of quantity of engagement techniques in GRI reports across GRI G4 and GRI Standards and income levels of the headquarters.....	46

## **LIST OF TABLES**

Table 1: Sectors and organization sizes.....	31
Table 2: List and description of variables from checklist .....	34
Table 3: Degree of transparency of six key materiality-related indicators in the whole sample (N-140).....	38
Table 4: Descriptive statistics of the quantity of stakeholder groups engaged in the reporting process.....	44
Table 5: Descriptive statistics of the quantity of engagement techniques adopted in sustainability reporting (N=140).....	47
table 6: GRI Guidelines .....	66
Table 7: Six key indicators .....	70
Table 8: Stakeholder groups .....	94
Table 9: Engagement techniques.....	110

## **LIST OF ACRONYMS**

AHP - Analytic hierarchy process

CERES - Coalition environmentally responsible economies

CSR - Corporate social responsibility

DDT - dichloro-diphenyl-trichloethane

ESG - Environmental, social and governance

GRI - Global reporting initiative

IFAC - International Federation of accountants

IIRC - International integrated reporting council

ISA – International standard on auditing

KPI -Key Performance Indicators

SE – Stakeholder engagement

SEAAR - Social and ethical accounting, auditing and reporting

SES - Social and environmental standards

SME – Small and medium sized enterprises

## **TABLE OF CONTENTS**

<b>1. INTRODUCTION AND JUSTIFICATION.....</b>	<b>13</b>
<b>2. LITERATURE REVIEW .....</b>	<b>16</b>
2.1 <i>Understanding the concept of “sustainability reports” .....</i>	<i>16</i>
2.2 <i>The principle of materiality in GRI reports .....</i>	<i>17</i>
2.3 <i>The principle of materiality and Stakeholder Engagement in the accounting and CSR fields .....</i>	<i>23</i>
<b>3. OBJECTIVES .....</b>	<b>27</b>
3.1 <i>General objective .....</i>	<i>27</i>
3.2 <i>Specific objectives .....</i>	<i>27</i>
<b>4. RESEARCH METHODS.....</b>	<b>28</b>
4.1 <i>Data and sample organization .....</i>	<i>28</i>
4.2 <i>Defining the term “transparency” in materiality disclosure.....</i>	<i>32</i>
4.3 <i>Quantitative analysis against checklist.....</i>	<i>33</i>
4.4 <i>Evaluating the disclosure of information related to six key indicators and investigating patterns related to materiality and SE reporting .....</i>	<i>35</i>
<b>5. RESULTS AND DISCUSSIONS.....</b>	<b>38</b>
5.1 <i>Transparency of six key materiality-related indicators disclosure in GRI reports.....</i>	<i>38</i>
5.2 <i>Stakeholder engagement in the materiality building process .....</i>	<i>42</i>
5.3 <i>Engagement Techniques .....</i>	<i>45</i>
5.4 <i>General discussions.....</i>	<i>48</i>
<b>6. CONCLUSIONS .....</b>	<b>53</b>
<b>7. LIMITATIONS AND FUTURE WORK .....</b>	<b>56</b>
<b>8. REFERENCES .....</b>	<b>57</b>
<b>ANNEX 1 .....</b>	<b>66</b>
<b>ANNEX 2.....</b>	<b>70</b>
<b>ANNEX 3.....</b>	<b>94</b>
<b>ANNEX 4.....</b>	<b>110</b>

## 1. INTRODUCTION AND JUSTIFICATION

The World Wildlife Fund (2014) reported, years ago, that humanity was using one and a half times the Earth's capacity to supply resources to its population. If this scenario is not rapidly changed, society is likely to experience profound conflicts in a not so distant future related to natural resources use.

From this concern with natural resources use, ideas emerged on how to combine development and progress while preserving nature, which has been called, since the 1970s, "sustainable development". To understand the concept of sustainable development, it is necessary to understand the history of environmentalism.

The event that is often considered the starting point of environmentalism is the publication of the book "Silent Spring", by Rachel Carson in 1962. In this book, the author meticulously explained – in an unprecedented way – how the dichloro-diphenyl-trichloroethane (DDT) and other pesticides impacted the food chain and accumulated in animals' tissues including humans', thus, causing cancer and genetic damage (NRDC, 1997).

After this, the United Nations Conference on the Human Environment (also known as the Stockholm Conference) was held in 1972. This event is considered a historic landmark since it was the first environmental conference in the world to discuss the world's growing environmental problems. The Stockholm Declaration emerged from this conference, in which the main points included fauna and flora preservation, reduction of toxic waste use, and the need to finance underdeveloped countries (de Passos, 2009). Ten years later, the United Nations General Assembly realized that, despite the economic development worldwide, social inequality persisted and that the environment was increasingly deteriorating. Then, the World Commission on Environment and Development, better known as Brundtland Commission, in 1987,

proposed a strategy that would unite development and environmental conservation – popularizing the term “sustainable development”.

Since then, the concept of sustainable development has been debated and increasingly recognized by public and private organizations, becoming part of the global discussions around society and nature. Such debates are mirrored in massive world conferences, such as Rio-92 (which resulted in the creation of Agenda 21 in 1992), Rio +10 (in 2002) and Rio +20 (2012).

At the company level, sustainable development has been sought by companies from different sector, as groups of stakeholders are increasingly expecting companies to be socially and environmentally responsible, in addition to facing increasing pressure for transparency and accountability (Hooghiemstra, 2000).

One of the main ways to demonstrate environmental responsibility is through the (often annual) releases of sustainability reports. Social and environmental reports have been debated for a long time in the academia (Carroll, 1979). It often indicates society’s growing expectation of non-financial performance (Byrc et al, 2007; Dahlsrud, 2008), that is, that society needs to know the impacts of companies' activities on the environment, the economy, and society.

Over the years, different types of non-financial reports emerged, including broad-scope ones, trying to address performance related to human rights, biodiversity, water, wastes, among many other issues. Such reports are often described as ‘sustainability reports’. But how different types of sustainability reports can help companies? First, this information may help organizations to improve their processes and have more impacts that are positive in those three areas. In this way, companies have the power to reduce and optimize their energy consumption and revise their disposal and disposal cycles, which often led to the development of new products,

innovation, and opportunities for the circular economy. Second, these reports aim to communicate externally with your stakeholders, making the process more transparent (Robinson, 2004).

In the late 1990s, the Global Reporting Initiative (GRI) was created to ensure that companies follow the Coalition for Environmentally Responsible Economies (CERES) Principles for responsible environmental conduct, which also give guidelines for the disclosure of social and environmental information. The most recent versions of GRI guidelines point to the need to apply the Materiality Principle to ensure that relevant problems are reported by the various groups directly and indirectly affected by companies. However, there are very few studies have evaluated the actual practice of materiality analysis in the context of sustainability reporting, which is very different from materiality in the accounting sector.

To explore the underdeveloped field of materiality analysis in sustainability reporting, this dissertation, analyzed this practice in a sample of reports published in 2017 and 2018. The objective was to investigate the disclosure of information related to the materiality principle and the patterns of information, related mainly to stakeholder engagement. This dissertation also investigated evidences of what could be potentially considered best practice in materiality in sustainability reporting and the factors that may be associated with such best practice. This research is, in a sense, a reaction to the scarcity of empirical analysis of materiality in sustainability reports.



## 2. LITERATURE REVIEW

### 2.1 *Understanding the concept of “sustainability reports”*

The publication of sustainability reports has become a mainstream practice among large corporations in the last 20 years, especially GRI launched guidelines to foster more comparable and reliable disclosures of social and environmental issues (KPMG, 2017). Companies are increasingly disclosing sustainability reports to simplify the way by which stakeholders receive access to a range of material issues (Bellucci *et al*, 2019).

According to Michelin *et al* (2015), the practice of GRI reporting can be seen as a symbolic practice that companies use to influence stakeholder's perceptions of the corporate commitment. The information disclosed in GRI reports can affect the decisions of investors, shareholders, communities and many others stakeholders. Ensuring sound GRI reporting is, therefore, an important means to foster social and environmental quality on the ground.

According to the GRI Standards, the GRI organization has grown to become what is arguably the world's most known and powerful standard-setting organization in the field of sustainability reporting and, as Michelin *et al* (2015) states, “GRI Sustainability Guidelines” is already a established way for reporting. GRI's reporting guidelines, first released in 1999, reached its fifth version (The GRI Standards) in 2016. Since its dawn, GRI has been guiding reporters to observe the materiality principle, to ensure that disclosures “reflect the reporting organization's significant economic, environmental, and social impacts, or substantively influence the assessments and decisions of stakeholders” (GRI, 2018a, p. 10).

## **2.2 The principle of materiality in GRI reports**

According to Beske *et al.* (2019), companies tend to select topics for their sustainability reports that have high relevance for the media, an example given in their study regards the perceived community concerns, which leads to the engagement of stakeholders. However, Beske *et al.* (2019) also stated, considering the legitimacy theory perspective, that one can assume that companies release a large range of topics regarding reputation related issues without considering the interests of stakeholders. Manetti (2011) uses the same argument to explain why the majority of stakeholder engagement (SE) objectives in their study were to promote a positive company image that included stakeholder consultation. GRI guidelines explicitly describe that stakeholders should also take part in business management by reporting issues that can have both a positive or negative effect on corporations, influencing decisions taking (Rodrigues *et al.*, 2013). Thus, according to Etzion & Ferraro (2010), GRI's emphasis on materiality has been a growing one:

*In the 1999 GRI Draft Guidelines, the materiality of sustainability reports is mentioned only twice, in passing. In the first official Guidelines, in 2000, a one-page section is devoted to the elaboration of "the materiality principle," and in 2002, materiality is incorporated into the Transparency, Completeness, and Timeliness principles. (...).GRI, in its G3 (2006) Guidelines, strongly emphasized the issue of materiality, dedicating a two-page section to definition, explanation, and possible methodology for assessing materiality, conceptually identical to materiality matrices (...)*

For years, materiality has been one of GRI's four reporting principles for defining report content, which includes: (i) stakeholder inclusiveness; (ii) sustainability context; (iii) materiality; and (iv) completeness. While the principles for defining report quality, which is directly related to the transparency concept, involves balance, comparability, accuracy, timeliness, clarity, and reliability. The materiality principle helps reporters to determine "which relevant topics are sufficiently important that it is essential to report on them, not all material topics are of equal importance, and the emphasis within a

report is expected to reflect their relative priority”. (GRI, 2018a, p. 10). As described by GRI guidelines:

*Materiality is the threshold at which Aspects become sufficiently important that they should be reported. Organizations are faced with a wide range of topics on which they could report. Relevant topics are those that may reasonably be considered important for reflecting the organization’s economic, environmental and social impacts, or influencing the decisions of stakeholders, and, therefore, potentially merit inclusion in the report ( G4 Sustainability Reporting guidelines. Part 1 p. 17, adapted).*

Materiality is, therefore, fundamental to either prevent or remedy the old problem of ‘cherry-picking’ positive information in GRI reporting, which can lead to the camouflage of unsustainable practices (Moneva, Archel & Correa, 2006).

GRI has been increasingly pressuring reporters to address the principle of materiality. For example, at the end of 2013, GRI launched the Materiality Disclosure Service. Since then, for a specific fee, reporters can hire GRI to check whether their draft or final reports are correctly addressing GRI’s guidance on indicators G4-17 to G4-27 (required by the former GRI G4 version) or indicators 102-40,42-49 and 103-1 (required by the newest 2016 GRI Standards) (GRI, 2013). All indicators mentioned are available in Annex 1.

Companies that complete the GRI Materiality Disclosure receive a customized GRI Alignment Service to place on the first page of their GRI content index, as illustrated in Figure 1. However, as explicitly mentioned in a GRI disclaimer, the Materiality Disclosure Service “(...) does not verify, check or pass judgment on the quality of the disclosures within a report neither does on the process of preparing the disclosures”. Instead of it, it merely “(...) indicates whether or not the organization has addressed the information requests in the GRI Standards”. The quality of the disclosure is responsibility of reporting organizations.

Figure 1: GRI's organizational mark for materiality disclosure



Source: GRI (2019b)

The principle of materiality has its roots in the financial accounting field, which is profoundly different from the emerging field of sustainability accounting (Heitzman, Wasley, & Zimmerman, 2010). In 2015, GRI collaborated with an external organization, RobecoSAM – which is an investment specialist focused exclusively on Sustainability Investing – to conduct empirical research to understand the extent to which reporters across different sectors were embracing the principle of materiality. Publications resulting from this collaboration revealed that there was room for improvements, particularly concerning the depth and detailing of materiality analysis (GRI, 2015, 2016).

Despite growing guidance, requirements, and services in connection with stakeholder engagement and materiality, the quality of materiality analysis in GRI reporting is open for debate. While studies about GRI reporting abound in the literature (e.g. Aras & Crowther, 2008; Fonseca, 2010; Fonseca, McAllister, & Fitzpatrick, 2014; Lenzen, Dey, & Murray, 2004; Moneva *et al.*, 2006), very few of them have addressed the specific challenges of materiality. The process of materiality determination enables companies to define the report content in a structured way to ensure the report addresses topics and aspects of relevance (i.e., the material topics to the relevant stakeholders) (Hsu *et al.*, 2013). Even though the concept of materiality is not commonly an understood definition and has both quantitative and qualitative aspects, researches used to follow definitions provided by regulatory bodies (Eccles *et al.*, 2012). In 2014, KPMG defined materiality as:

*“the process of identifying, refining, and assessing numerous potential environmental, social and governance issues that could affect your business, and/or your stakeholders, and condensing them into a short-list of topics that inform company strategy, targets, and reporting” KPMG, 2014.*

Non-financial disclosures encompass a wide range of issues that can be perceived in different ways by different stakeholders. The ‘science’ of capturing perceptions of materiality in such a dynamic and diverse context is a new and contested one, particularly among large corporations that operate in different locations and affect a wide range of constituencies.

SE has been concisely defined as “(...) the process used by an organization to engage relevant stakeholders for a purpose to achieve agreed outcomes” (AccountAbility, 2015, p. 34). The main purpose of stakeholder engagement is not the mere involvement of stakeholders to manage or even mitigate the expectations but, instead, the creation of a network of mutual responsibility (Andriof *et al.*, 2002). As defined by GRI (2007), stakeholders are “entities or individuals that can reasonably be expected to be significantly affected by the organizations’ activities, products, and services and whose actions can reasonably be expected to affect the organizations’ ability to successfully implement its strategy and achieve its objectives”.

Manetti (2011) demonstrated that, in the majority of his sample, SE is considered an essential element of reporting by international literature. However, his study indicates that no empirical analyses have yet verified the quality of this process. The outcomes of both preparing and interpreting sustainability reports are intimately linked to this process. Not surprisingly, GRI has ‘stakeholder inclusiveness’, along with materiality, as one of its key principles. Many direct and indirect indicators of the GRI framework are related to stakeholder engagement processes. Under the GRI Standard, for example, organizations are required to disclose their approaches to identifying, listing, and selecting stakeholders and their respective issues of concern

(GRI, 2018a). Nonetheless, burgeoning empirical evidence of this practice indicates reasons for concern, particularly in connection with materiality analysis.

Owen, Swift & Hunt (2001) suggested that, while endorsing active stakeholder engagement, sustainability reporting practice “amounts to little more than corporate spin”. As the authors explain, “the ‘business case’ orientated approach underpinning SEAR (earlier terminology for non-financial reporting) leads to, at best, a ‘soft’ form of accountability, whereby organizations engage in stakeholder dialogue for voluntary self-reporting on their trustworthiness as part of a reputation building process” (p. 275). This finding is aligned with the conclusion of Manetti (2011) in his empirical analysis of the quality of stakeholder engagement in 174 GRI reports. According to the author, “management adopts a decidedly rhetorical type of language, lacking in concrete indications on negative externalities produced, in an attempt to pursue its aims of self-legitimization”. The author continues to argue that for “SE objectives, the principal aim was to involve stakeholders in company management to placate or mitigate their requests, but without delegating any decisional power” (p. 119). Similar findings have long been found in the literature (Belal, 2002; Perrini & Tencati, 2006).

Studies addressing stakeholder engagement as it relates to materiality analysis are way less abundant, and arguably more worrisome. One of the key side-effects of stakeholder engagement in materiality analysis is that it might lead to the identification of a wide range of issues, translating into lengthy reports, with voluminous, and distracting information for decision-makers (Zhou, 2011). It is also technically hard to identify what stakeholders expect from organizations. Font, Guix, & Bonilla-Priego (2016) in their analysis of materiality in the cruise industry compared stakeholder concerns/demands with both the relevant literature and existing CSR reports and concluded that “cruise companies tend to both over-report immaterial issues and

underreport material issues, without responding to stakeholders' requests" (p. 175). Jones, Comfort, & Hillier (2016) analysis of the UK's top ten retailers' sustainability reports revealed significant variations in the extent to which these retailers were embracing materiality. Moreover, the authors were skeptical as to the degree to which stakeholder engagement was helping retailers to find 'material issues. As they put it, "whether the leading retailers can realistically and comprehensively elicit and represent the views of all their stakeholders remains to be seen" (p. 87).

The causes of the ineffective and diverse approaches to materiality analysis in integrated financial and non-financial reporting were recently addressed by Fasan and Mio (2017). These authors found that materiality, to a certain extent, was associated with industry and some board characteristics (namely size and diversity). This finding corroborates the study by Eccles *et al* (2012), which argues that "developing sector-specific guidelines on what sustainability issues are material to that sector and the Key Performance Indicators (KPIs) for reporting on them would significantly improve the ability of companies to report on their ESG (environmental, social and governance) performance" (p. 70).

The challenges of showing transparency in the materiality building process in sustainability reporting are pressuring for more structured and quantitative approaches and, since materiality remains an opaque concept (Edgeley, 2014), researchers focus on different perspectives to develop guidance for companies. Hsu, Lee, & Chao (2013) proposed and tested the 'failure modes and effects analysis', which first emerged in studies conducted by NASA in 1963. It states that, from the risk perspective, if the information disclosed in sustainability reports is not aligned with stakeholder aspirations, then the definition of communication in this study fails. To construct a model of materiality analysis that is arguably less vulnerable to subjectivity. More

recently, Bellantuono, Pontrandolfo, & Scozzi (2016) proposed a novel approach to engaging stakeholders in the identification of material issues to reporting organizations, which is strict and quantitative to lessen the degree of subjectivity and manipulation of the whole process. Similarly, Calabrese *et al.* (2016) proposed a structured technique, based on the analytic hierarchy process (AHP), to help companies prioritize sustainability aspects and indicators.

Accompanying these burgeoning academic studies, standard-setters and multi-stakeholder initiatives have been publishing guidance documents on materiality. For example, in addition to GRI, Accountability (AccountAbility, 2018) and the International Integrated Reporting Council (IIRC) (IIRC, 2013) have published relevant documents to guide materiality analysis in sustainability reporting. Nonetheless, existing guides tend to be generic and insufficient for overcoming current challenges. Moreover, there is a sheer lack of empirical data about materiality analysis in GRI reporting, that hinders organizational learning. Very few studies have tried to understand the drivers, shortcomings, sector variations, and best practices associated with this practice.

### ***2.3 The principle of materiality and Stakeholder Engagement in the accounting and CSR fields***

Michelon *et al.* (2015) states that, on average, companies that provide their stakeholders with CSR regular reports do not provide a high quality of information, which can be interpreted as evidence of a symbolic use of such practices. In addition, according to Manetti *et al.* (2011), the term SE has been used in the accounting literature as a legitimating tool to manage the expectations of stakeholders.



In the field of accounting for sustainability, Ferreira and Otley (2009), have proposed that difficulties to make significant progress partially derive from the compartmentalized approach typically conducted by empirical research. The authors mention that there is a tendency to either deal with broad themes regarding sustainability in the role of accounting or to focus only on specific aspects of particular accounting tools not always related to sustainability reporting but to mainly to material flow cost accounting.

As for materiality matter, Chong (2015) makes it clear that “there is no known systematic review on the evolution of materiality and the reasons for the evolution” of the term. In accounting, definitions for materiality have undergone many changes intending for business and legal environments.

Materiality has been described by the International Federation of Accounting Commission (IFAC) (2009) when revising its ISA 320 for ‘Materiality in planning and performing an audit’:

*“the amount or amounts set by the auditor at less than materiality for the financial statements as a whole to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements exceeds materiality for the financial statements as a whole. If applicable, performance materiality also refers to the amount or amounts set by the auditor at less than the materiality level or levels for particular classes of transactions, account balances or disclosures”*

However, as yet stated by Chong (2015), such definition fails to state expressly the extent or context of misstatements or omissions of items that would constitute material.

Michelon et al. (2015) affirms that CSR practices are used to point an effective commitment to CSR, and they are, for this reason, associated with enhanced disclosure quality. It may also represent an attempt to construct an image of commitment, which is generally designed to positively influence stakeholders’ perceptions regarding the company.

In 1954, the Committee on Concepts and Standards of the American Accounting Association sold to the world the first definition for the materiality term as “an item should be regarded as material if there is a reason to believe that knowledge of it would influence the decisions or attitude of the informed investor.” Later, the Institute of Chartered Accountants in England and Wales (1968) released ‘The interpretation of ‘material’ to accounts’ which defines materiality as “a matter is material if its non-disclosure, misstatement or omission would be likely to distort the view given by the accounts” (Chong , 2015)

In 2004, the International Federation of Accountants in its Glossary of terms placed another definition to materiality in the field:

*Information is material if its omission or misstatement could influence the economic decisions of users taken based on the financial statements. Materiality depends on the size of the item or error judged in the particular circumstances of its omission or misstatement. Thus, materiality provides a threshold or cut-off point rather than being a primary qualitative characteristic which information must have if it is to be useful.*

As described in the literature, a practical definition of materiality, in terms of accounting, should help set the benchmarks (Porter *et al.*, 1996). It is necessary to set a mechanism for teaching and educating the stakeholders, besides standardizing the approach to the accounting and auditing procedures (Chong, 1992). Finally, materiality guidelines should include both the quantitative and qualitative variables.

In the field of CSR, the materiality analysis is the process by which a company determines and prioritizes its relevant aspects and topics to derive its materiality matrix (Bellantuono *et al.*, 2016).

As part of the research, discovering that materiality has a great impact on CSR reports should unfold relevance because it distinguishes between important and not important issues when considering topics worth or not to be disclosed in sustainability reports Unerman & Zappettini (2014).

Companies are increasingly becoming powerful a means for addressing the sustainability issues throughout annual reports. Recently, the United Nations (UN) has recognized that “socially responsible and accountable private business activity, investment, and innovation are major drivers of productivity, employment and economic growth” (UN, 2017). The materiality term has changed the way information has been disclosed in sustainability reports, it has been considered as a threshold to influence the economic decisions of stakeholders. As a result, to reduce the information asymmetry among companies and their stakeholders, every year companies are increasingly and voluntarily reporting sustainability information. These companies are using the concept of materiality described in different frameworks, such as the Global Reporting Initiative.

To identify such matters, GRI – G4 informs that materiality analysis should be performed through stakeholder engagement and strategic consideration of opportunities and risk related to sustainability aspects. GRI guidelines suggest building a materiality matrix to place diverse aspects according to their significance for the engaged stakeholders. The matrix approach is proposed to prioritize aspects and determine a materiality threshold at which aspects are *sufficiently significant to be reported*.

However, according to Calabrese *et al.*, (2017), the main perception is that the guidelines do not provide any structured approach to perform this task. Consequently, companies face difficulties in making materiality analysis work in practice and, as a result, fill the gaps required by GRI guidelines in a very superficial way.

### **3. OBJECTIVES**

#### **3.1 *General objective***

To evaluate the extent to which GRI reports, across different countries and sectors, disclose information related to the materiality principle, and to explore patterns of information disclosure related to stakeholder management.

#### **3.2 *Specific objectives***

- To investigate the extent to which companies reports disclose information related to six key materiality indicators - which was called transparency in this study.
- To investigate if the presence/absence of third-party verifications influence the degree of transparency.
- To investigate if the degree of transparency was linked to the countries' income and also to the GRI version (G4 or Standards).
- To investigate what are the most frequent stakeholder engagement and engagement techniques disclosures and potential determinants.
- To investigate the relationship among countries' incomes, GRI version, and the number of stakeholder groups engaged or engagement techniques that had been used by the companies.

## 4. RESEARCH METHODS

This study is based on a quantitative content analysis of GRI reports' data. The main method of data collection and analysis to be used here is 'content analysis'. This method was defined by Julien (2008) as the

*(...) the intellectual process of categorizing qualitative textual data into clusters of similar entities, or conceptual categories, to identify consistent patterns and relationships between variables or themes. (...) This analytic method is a way of reducing data and making sense of them - of deriving meaning (p. 120).*

Content analysis has long been a common methodological choice in empirical analyzes of sustainability reports (e.g. Chen, Feldmann, & Tang, 2015; Jean, 2007; Perez & Sanchez, 2009; Tate, Ellram, & Kirchoff, 2010). There are various approaches to content analysis. The content analysis used here was designed to meet the quality criteria highlighted by Neuendorf (2002), such as objectivity, reliability, validity, and replicability. The analysis followed two key steps: Data and sample organization and quantitative analysis against a checklist.

### 4.1 **Data and sample organization**

GRI Service Team, on January 15th (2019), provided the authors with a list of the organizations and their report characteristics. This list was an overview of all centrally collected data points presented in the GRI Sustainability Disclosure Database for reports published from 1999 to 2019. Then, the reports were selected from a complete list of all reports available under the GRI guidelines.

In January 2019, more than 50 thousand reports were registered in the database, from which about 30 thousand were GRI-based. This study did not try to analyze this vast amount of information, as it would demand time and resources that

were not available. Therefore, the study targeted a type of sample that Babbie (2013) calls "nonprobability and purposive sample" as the researchers purposively selected the sample because of its specific traits. The heterogeneous sample used in this work regarding company size, sectors and geographic locations, is in line with previous studies that deal with stakeholder engagement and sustainability reporting, using samples that feature different types of companies from several different countries (Sierra-García et al., 2015; Manetti and Bellucci, 2016).

Initially, this study selected all companies that had applied to the Materiality Disclosure Service provided by GRI that released reports in 2017/2018. The choice for the 2017/2018 biennium was an attempt to analyze the most recent scenario. From this first sample, a second sample was selected by reports produced under the GRI-G4 or GRI-Standards guidelines. A total of 299 organizations posted their sustainability reports in the GRI database under the criterion of submitting their report to the Materiality Disclosure Service, reports published in 2017/2018, under GRI-G4 and GRI-Standards versions.

Then, from the second sample (with 299 reports), only the reports of multinational and large companies were selected (third sample). Only 13 companies were classified as small and medium sized enterprises (SME) and, for this reason, they did not take parte in this third sample. The choice for multinational and large corporations is justified by the fact that such groups have long been pressured to disclose sustainability in sophisticated ways. The number of reports after theses two phases were 286 reports.

The final sample was formed containing only those reports written in the English language. To perform this sampling step, reports available on GRI's Sustainability Disclosure Database were either downloaded or verified through the web-links from

April 04<sup>th</sup> to October 29<sup>th</sup>, 2019. A total of 18 organizations did not have their reports downloaded and analyzed due to unavailable reports on hyperlinks from GRI database website. This step was crucial to look for reports in the English language.

The final sample reached the number of 140 reports. The final choice for the reports written in English was the way the authors found to minimize the bias of privileging certain countries.

The final sample included GRI reports that were expected to mirror 'best practice' reports. The idea was that, by analyzing reports that tend to be best practice regarding Materiality as well as SE, one can infer that the broader population of GRI reports is unlikely to reflect better qualities than the ones found here. Therefore, countries and sectors were considered as consequences from the characteristics chosen to select the sample. The sectors and organization sizes from 24 reports analyzed are displayed in Table 1.

The final sample had following characteristics:

- 140 reports under the GRI-G4 and GRI-Standards guidelines from large and multinational companies and written in English and 2017/2018;
- 38 different countries and 24 different sectors plus the ones classified as 'others' by the GRI database;
- 103 under the GRI-G4 guidelines and 37 under GRI-Standards;
- 94 reports published in 2017 from which 90 in reference of 2016, 2 for 2015/2016 and other 2 for 2016/2017;
- 46 reports published in 2018 from which 44 in reference of 2017, 1 for 2017/2018 and another one regarding 2018.

Table 1: Sectors and organization sizes

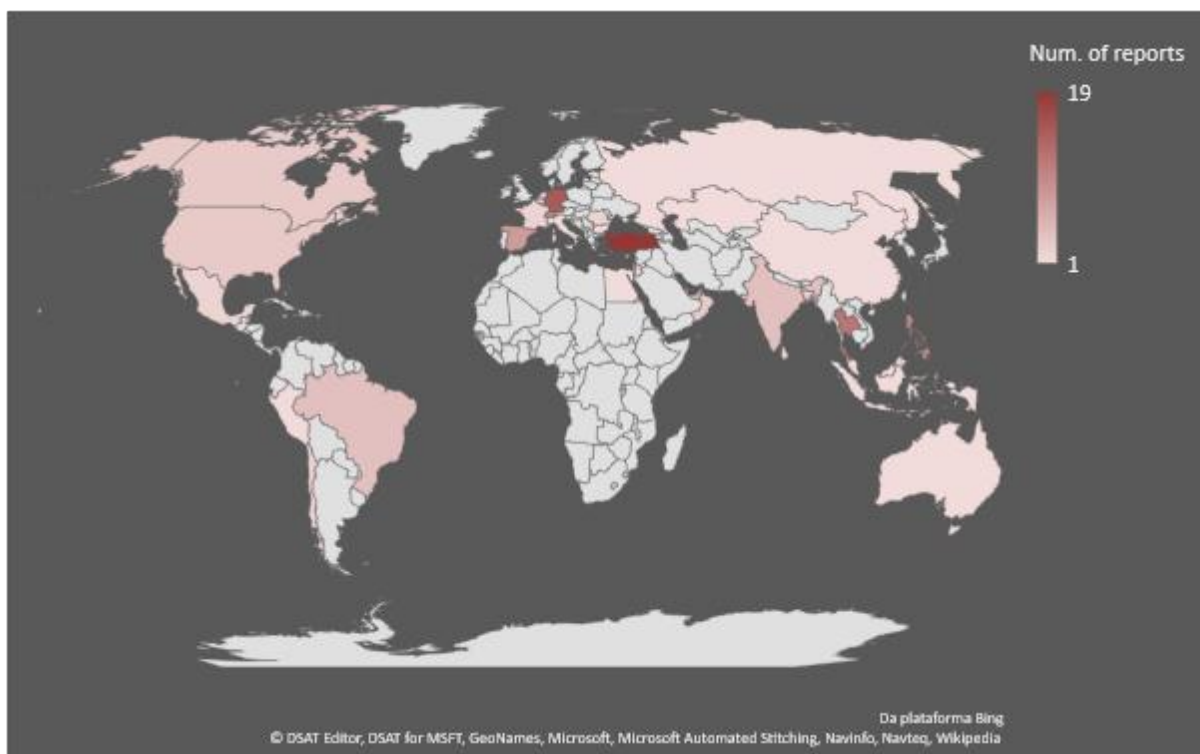
Sector	Size		Total
	MNE	Large	
Agriculture	2	0	2
Automotive	1	6	7
Aviation	1	3	4
Chemicals	3	6	9
Commercial Services	3	1	4
Conglomerates	0	6	6
Construction	0	2	2
Construction Materials	2	2	4
Energy	2	14	16
Energy Utilities	0	3	3
Equipment	0	1	1
Financial Services	6	22	28
Food and Beverage Products	2	1	3
Logistics	0	4	4
Media	0	1	1
Metal products	1	2	3
Mining	0	4	4
Public Agency	0	4	4
Real Estate	2	5	7
Retailers	0	1	1
Technology Hardware	1	1	2
Telecommunications	1	7	8
Textile and apparel	1	3	4
Tourism/Leisure	0	1	1
University	0	1	1
Water Utilities	0	1	1
Other	6	4	10
Total	34	106	140

The countries with corporations that filled those prerequisites are presented in Figure 2, which refers to the following countries and respective number of reports: Australia (1 report), Bahrain (1), Bangladesh (2), Brazil (4), Bulgaria (1), Canada (3), Chile (2), Croatia (1), Egypt (1), France (2), Germany (15), Hong Kong (6), India (4), Indonesia (1), Israel (1), Italy (1), Jordan (2), Kazakhstan (1), Kuwait (1), Liechtenstein (1), Luxembourg (2), Mainland China (1), Malaysia (1), Mexico (2), Oman (3), Peru



(1), Philippines (10), Qatar (2), Romania (2), Russia (1), Singapore (4), Spain (8), Sri Lanka (2), Switzerland (10), Thailand (12), Turkey (19), United Arab Emirates (6) and United States of America (3), Figure 2 presents a choropleth map with the countries containing the countries with reports available in the sample.

Figure 2: Countries with reports available in the sample



#### 4.2 Defining the term “transparency” in materiality disclosure

To understand how good the information in connection with materiality and stakeholder engagement is, this study evaluated the report extent. The method used during the manual evaluation of the report extent was based on the Reporting Principles available on the GRI website in the section *See all GRI Standards* (available in [database.globalreporting.org](http://database.globalreporting.org)).

According to Michelin *et al.* (2015), it is unarguable that the concept of transparency is granted through a long-term relationship built with stakeholders.

Therefore, transparency can be improved by providing stakeholders with information on results and outcomes on a variety of information channels. GRI Reporting Principles and Standards disclosure states that the principles for defining report quality are fundamental to achieving transparency. In accountability, transparency is generally associated with the sharing of information and the quality of the information that is shared (Albu & Flyverbom 2019).

In this work, special attention was devoted to the methodological aspects of materiality analysis and its transparency, which is defined in the work of Albu & Flyverbom (2019) as being predominately based on information sharing and only dependent on increased disclosure of information. To understand potential trends or limitations of current practice. This part of the study was based on the quantification of the indicators' disclosure. The 'logic' used was to identify patterns, and then discuss and contextualize them in light of the literature. The term "transparency" was used to represent the rate of disclosure regarding the six indicators investigated i.e. the number of appearances for each indicator.

The indicators investigated were: G4-18 or 102-46 (Defining report content), G4-19 or 102-47 (List of material topics identified), G4-24 or 102-40 (List of stakeholders engaged by the organization), G4-25 or 102-42 (Base for identification of stakeholders), G4-26 or 102-43 (Approach to stakeholders including the frequency of engagement and whether the engagement was taken specifically as part of the report), G4-27 or 102-44 (Measures taken regarding the result of stakeholder engagement).

### **4.3 Quantitative analysis against checklist**

A checklist was created to help evaluate the degree to which reports are meeting GRI's requirements in connection with the materiality principle. The checklist was designed to evaluate whether reports disclose information in connection with each of GRI's G4 or Standards Materiality and Stakeholder Engagement indicators and it is presented in Table 2.

Table 2: List and description of variables from checklist

GRI-related indicator	Evaluation issues	Description
<i>General information</i>		
G4-5 or 102-3	Country	Indicates where the business headquarter is located
	Year of publication	When the report was published
	Year of reference	Temporal scope of reporting
	Standard/guideline version	Whether GRI-G4 or GRI-Standards
	Availability of report format in PDF/HTML	Report format available on the day of research
G4-32b or 102-55	Content index	Report provides GRI index?
G4-33 or 102-56	Third Party verification	Not only verifies if the organization has hired external assurance but also if the Stakeholder engagement and Materiality-related information has been verified in the assurance process
<i>Materiality</i>		
G4-18 or 102-46	Defining report content	Evaluates if the report presents both topic/aspect boundaries and reporting principles or if it only mentions whether the report was written under the specific GRI guidelines
G4-19 or 102-47	List of material topics identified	e.g. Product responsibility, Fuel consumption and CO2 emissions
<i>Stakeholder engagement</i>		
G4-24 or 102-40	List of stakeholders engaged by the organization	e.g. Academic institutions, business partners, community
G4-25 or 102-42	Base for identification of stakeholders	e.g. Interviews, community panels, events

G4-26 or 102-43	Approach to stakeholders including the frequency of engagement and whether the engagement was taken specifically as part of the report	e.g. monthly, annually, twice a year
G4-27 or 102-44	Measures taken regarding the result of stakeholder engagement	How the organization responded to the topics and concerns raised

The report pages considered in the analyses were the ones indicated in the GRI Content Index. Information placed in pages different from the ones pointed on the GRI Content index were not considered as for the ones not specifically mentioned in the sections analyzed.

Reports were analyzed when disclosed in PDF, HTML, or a combination of PDF and HTML formats. This study evaluated whatever format was available. The checklist was designed to be answered as “yes” or “no” which later was replaced by one’s (yes) and zero’s (no) to facilitate counting and quantification (see Annexes 2, 3 and 4).

#### ***4.4 Evaluating the disclosure of information related to six key indicators and investigating patterns related to materiality and SE reporting***

Data were analyzed in Excel and SPSS Statistics software. The analysis calculated means, medians, minimum, and maximum values to explore the checklist data.

To investigate the extent to which companies reports discloses information related to six key materiality indicators, it was accounted how many reports contained at least one reference to each of the six indicators.

Then graphics were built to investigate whether the presence/absence of third-party verifications influenced the degree of transparency. This transparency was defined by the number of appearances of each one of the six indicators analysed in the work. The distribution of the data is summarized and presented in a box plot format.

The same process was conducted to investigate whether the degree of transparency was linked to the countries' income and also to the GRI version (G4 or Standards). The results are presented in terms of the mean degree of transparency (and the corresponding standard deviation). The reports were grouped by countries' incomes according to the "Classification of income based on 2020 data from the World Bank, which are, in turn, based on GNI per capita in US\$" where countries are divided into four groups: Low income, lower-middle income, upper-middle income, and high income.

In this study the countries under the *High income* classification were: Australia, Bahrain, Canada, Chile, Croatia, France, Germany, Hong Kong, Israel, Italy, Kuwait, Liechtenstein, Luxembourg, Oman, Qatar, Singapore, Spain, Switzerland, United Arab Emirates, and United States of America. For the *Upper middle income*: Brazil, Bulgaria, Jordan, Kazakhstan, Mainland China, Malaysia, Mexico, Peru, Romania, Russian Federation, Sri Lanka, Thailand, Turkey. And for the *Lower middle income* classifications: Bangladesh, Egypt, India, Indonesia, Philippines. The final sample of reports analysed in this study did not include any report from the *low-income* group.

To investigate what are the most frequent stakeholder engagement disclosures, it was accounted how many groups of stakeholders each organization engaged during the preparation of their respective sustainability reports. It was also investigated the relationship among countries' incomes, the GRI version, and the relation among these

variables with number of groups of stakeholders engaged by each company. The distribution of the data is summarized and presented in a box plot format.

The same research methods used to quantify the stakeholder groups engaged in the reporting process was used to quantify the engagement techniques.

## 5. RESULTS AND DISCUSSIONS

### 5.1 *Transparency of six key materiality-related indicators disclosure in GRI reports*

Transparency requires companies to disclose information regarding the way they conduct their business and how they listen and react to criticism. (Eccles and Krzus, 2010). It is stated by Tapscott & Williams (2006) that companies that fail to communicate with their stakeholder groups risk damaging their image and reputations and this can lead to a failure in the long term.

The analysis of the six indicators regarding materiality and stakeholder engagement is present in Table 3. Considering that the sample of 140 reports addressed here included only organizations that hired Materiality Disclosures Services from GRI (i.e. organizations that received GRI's Organization Mark for Materiality Disclosures), this study found surprising results. About 22% of the contents were not found in the sample. By definition, a GRI report with GRI's Organization Mark for Materiality Disclosures should have 100% transparency in connection with those six indicators.

Table 3: Degree of transparency of six key materiality-related indicators in the whole sample (N-140)

<b>GRI-related Indicator</b>	<b>Driving Questions of the Content Analysis</b>	<b>Number of reports with explicit content</b>	<b>Percentage of the 140 reports with explicit content</b>
G4-18 or 102-46	Explained the process for defining the report content and the topic/aspect <u>Boundaries</u> ?	75	53.6%
G4-19 or 102-47	Listed material topics?	133	95.0%
G4-24 or 102-40	Provided a list of stakeholder groups engaged by the organization?	137	97.9%

G4-25 or 102-42	Reported the basis for the identification and selection of stakeholders with whom to engage?	138	98.6%
G4-26 or 102-43	Reported the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group (regularly)	43	30.7%
G4-27 or 102-44	Reported key topics and concerns that have been raised through stakeholder engagement?	128	91.4%
Average		109	77.9%

The discrepancies between what GRI found and what this study found have some potential reasons. Such discrepancies can be simply a matter of conflicting interpretation. Some indicators, such as the ones related to explanations of boundaries (G4-18 or 102-46) and engagement approaches (G4-26 or 102-43), are not straightforward. Different people might have different understandings around the extent to which an organization explained such complicated issues. The indicator related to the stakeholder engagement approach, for example, asks for disclosures of frequency, type, and category of the stakeholder group. GRI uses terminology which is unclear about whether the disclosure should fully address those issues or, at least, one of them. Some companies do mention the frequency of one type of engagement or another. However, none of the 140 reports disclosed information related to the frequency of engagement within all categories of stakeholders.

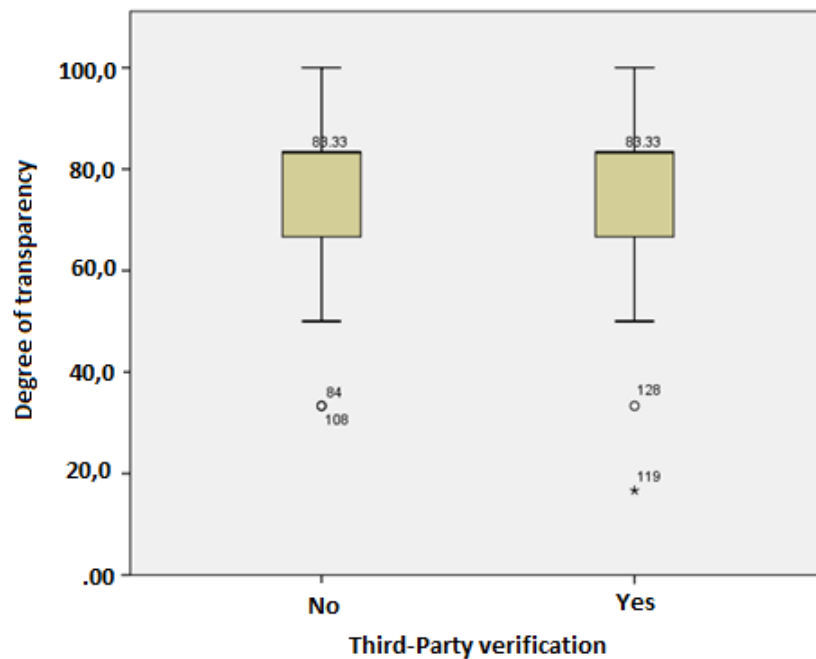
One could argue that the discrepancies are also a result of an inherent vagueness in GRI's indicators related to explanations of boundaries and engagement approaches. However, such an explanation does not make sense in the case of more straightforward indicators, such as the ones that ask organizations to list material topics (G4-19 or 102-47) and to list stakeholders (G4-25 or 102-42). The lack of disclosures in connection with these indicators found here suggests, more clearly, that



GRI's Materiality Disclosure Services is not perfect. Further studies, addressing a larger sample and cross-checking findings between authors, could clarify this issue.

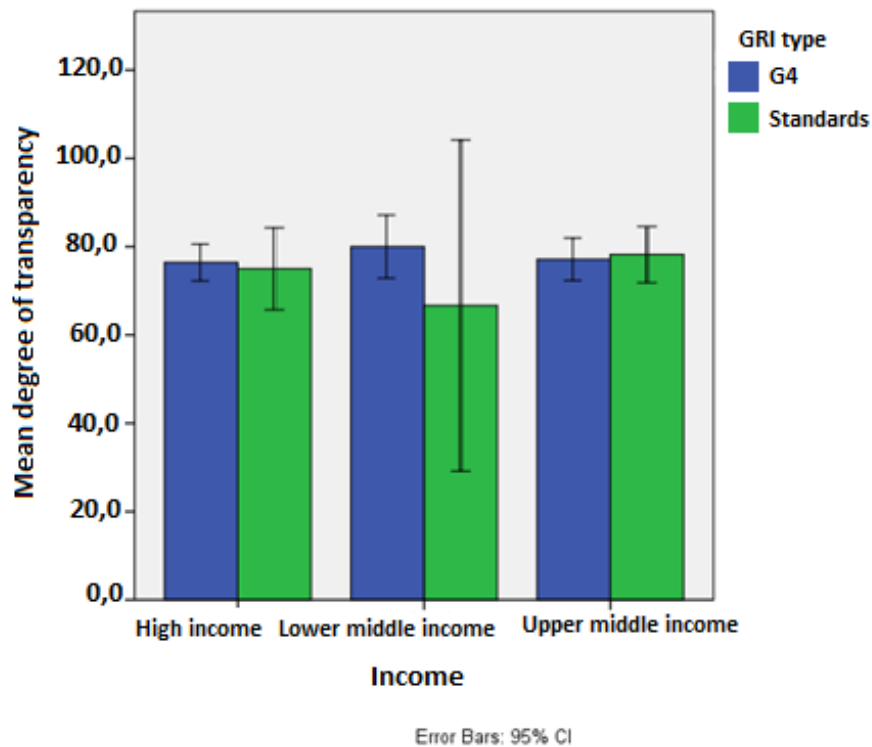
As shown in Figure 3, the boxplots comparing degrees of transparency in the two sub-groups (with and without the third-party verification) were almost identical: a fact that suggests that external verification, at least in the sample, is unlikely to have affected the disclosure of materiality-related indicators.

Figure 3: Degree of Transparency of Materiality Disclosures in Reports with and Without Third-party Verification



This study also explored variations of transparency across sub-groups of headquarters' levels of income and sub-groups of versions of the GRI guidelines. As shown in Figure 4, the bars across these groups are unclear about a potential association of transparency with income and the GRI version. While the bars for the GRI standards were lower across the three levels of income, the error margins were also greater. Therefore, no conclusion can be drawn about such associations. From a visual standpoint, findings suggest that the extent to which organizations disclose materiality-related indicators are neither dependent on the location of headquarters nor the type of GRI guidelines. However, such speculation needs to be further tested with larger samples and more specific inferential statistical tests.

Figure 4: Degree of Transparency of Materiality Disclosures across Headquarters' Levels of Income and Versions of the GRI guidelines



Source: Classification of income was based on 2020 data from the World Bank, which are, in turn, based on GNI per capita in US\$ (Atlas methodology).

## 5.2 Stakeholder engagement in the materiality building process

This study explored the contents of many GRI indicators, particularly of those related to stakeholder management. One of the main outcomes of such an evaluation was the identification of the stakeholder groups that are disclosed in the 140 GRI reports.

GRI G4-26 or 102-46 requires:

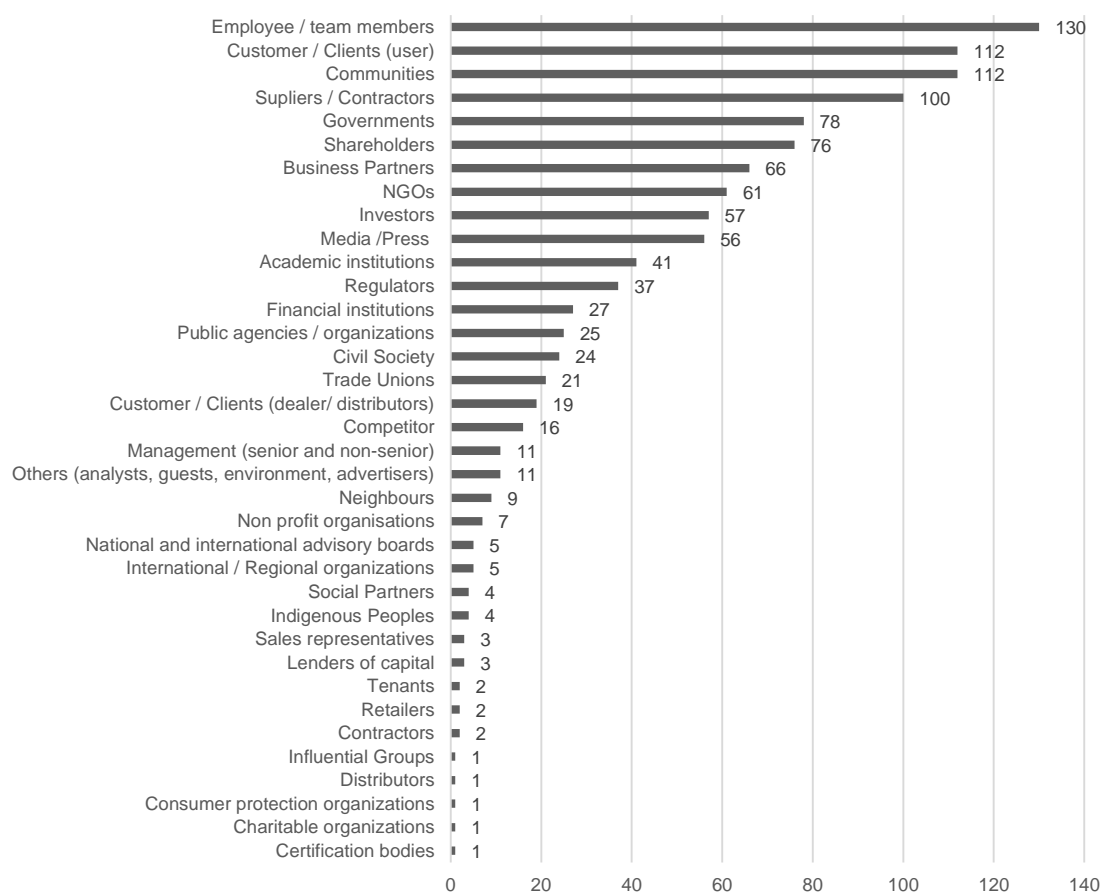
“Report the organization’s approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process.” (*G4 Sustainability Reporting guidelines. Part 1, p.30*)

Manetti *et al.* (2011) conclude that as companies tend to see stakeholders playing the role of only having their satisfaction with ambitions and expectations fulfilled, there is a lack of information on the strategic objectives and the stakeholder needs and opinions while performing the process of building the report. The results of this study corroborate this affirmation since one of the biggest discrepancies found regards the G4-26 or 102-43 indicator that requires a report on the organization's approach to stakeholder engagement where this study found only 30.7% of the reports fulfilling the expectation.

Figure 5 shows the most frequently cited stakeholder groups engaged by reporting organizations. There are some overlapping categories of stakeholder groups, given that the terminologies for stakeholders are not standardized across the world, even within English-speaking countries.

As expected, the most frequently engaged groups were those directly related to the organizations' main products and services, such as employees, customers, local communities, suppliers, governments, and shareholders. One could argue that the closer stakeholder groups are to the reporting organization, the more likely they are to be engaged due to the easier handling of such groups. Some sectors have specific types of stakeholders, a fact that explains the small number of stakeholder groups presented in Figure 5.

Figure 5: Most frequently cited groups of stakeholders with which organizations engaged during the preparation of their respective sustainability reports



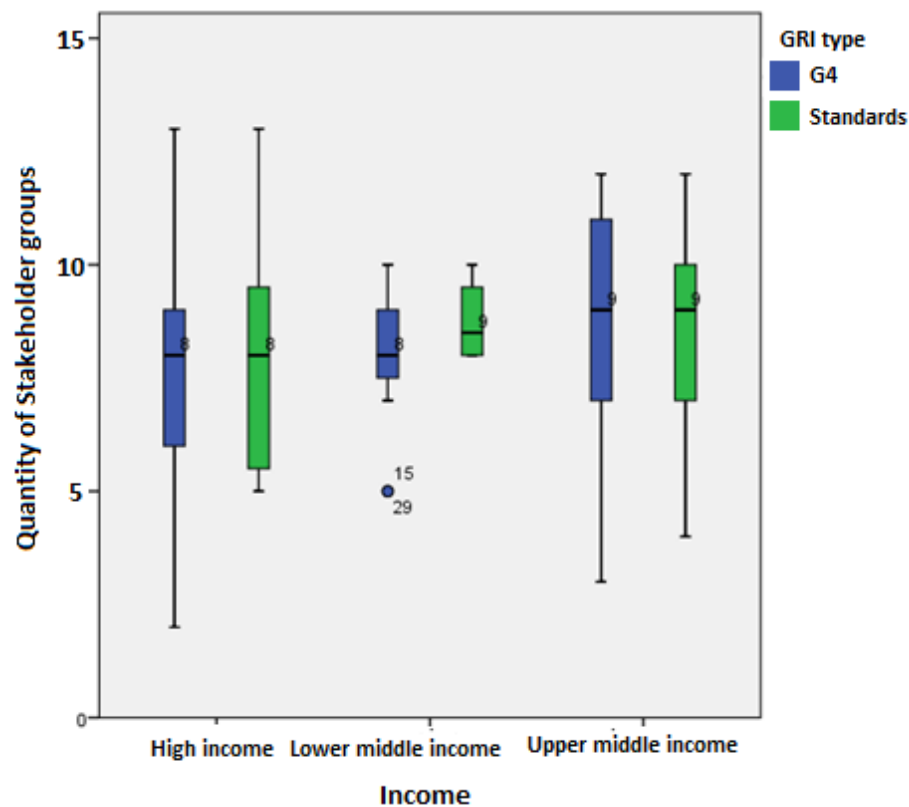
Overall, each reporting organization engaged an average of eight stakeholder groups during the reporting process. As shown in Table 4,  $8 \pm 2.286$  was also the mean and median number of engaged groups across the whole sample.

Table 4: Descriptive statistics of the quantity of stakeholder groups engaged in the reporting process

Mean	8.08
Median	8.00
Mode	8
Std. Deviation	2.286
Minimum	2
Maximum	13

As shown in Figure 6, the quantity of groups, at least from a visual standpoint, do not appear to be affected by the type of GRI standards and the income of country where the reporting organizations' headquarters are based. Those boxplots suggest that the number of engaged groups depends on other, still unknown, factors.

Figure 6: Boxplots of the number of stakeholder groups engaged in GRI reports across GRI G4 and GRI Standards and income levels of the headquarters



Source: Classification of income was based on 2020 data from the World Bank, which are, in turn, based on GNI per capita in US\$ (Atlas methodology).

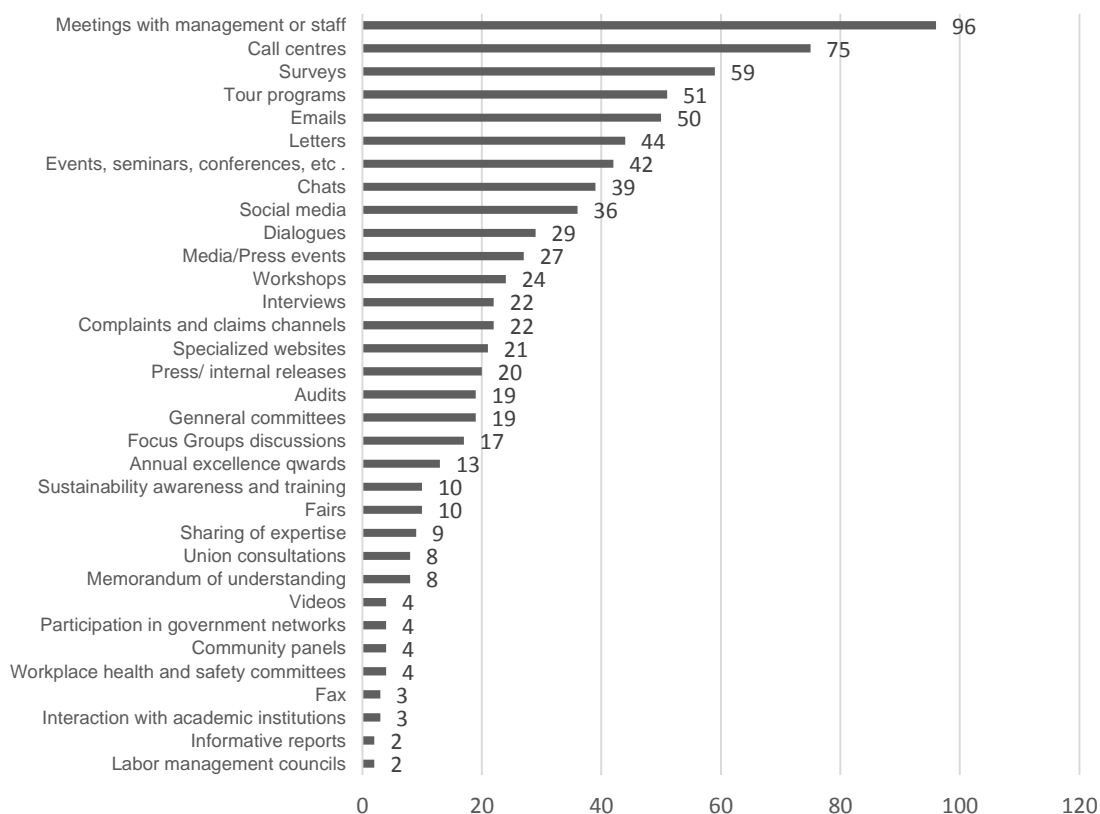
### 5.3 Engagement Techniques

In addition to exploring types and quantity of stakeholder groups, this study explored engagement techniques. Figure 7 shows the most frequently cited engagement techniques by reporting organizations. Given that there is not an official,

standardized taxonomy of engagement techniques, the categories presented in Figure 6 mirror the author's interpretation of the content found in GRI reports. Other categories are likely to be found if one considers other approaches to conceptualizing such techniques.

The most frequently cited techniques target both internal and external audiences, and also include passive and active engagement approaches. Overall, reports are unclear about the specific of such techniques, that is, how frequently they are used, under which conditions. Most importantly, reports are also largely unclear about how the outcomes of the engagement process are considered in the preparation of GRI reports. Therefore, it is very difficult (if not, inappropriate) to conclude about how good those techniques are in GRI reports.

Figure 7: Most frequently cited engagement techniques used by reporting organizations



Interestingly, as shown in Table 5, across the sample of 140 reports, organizations adopted an average of almost  $6 \pm 3.047$  types of engagement techniques. Whether this is good or bad remains an open question, as there is not any sort of consensus about what types of engagement techniques should underpin sustainability reporting.

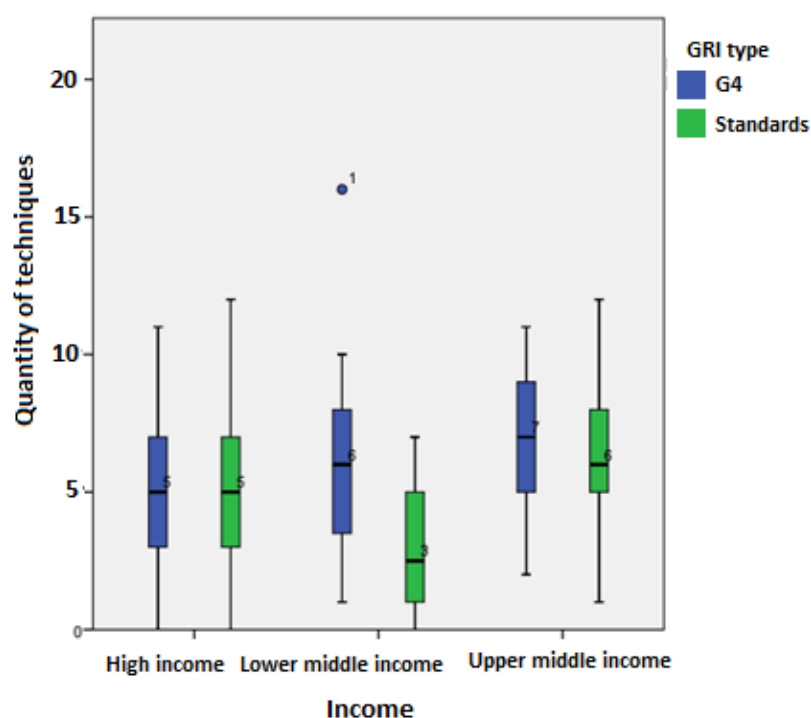
Table 5: Descriptive statistics of the quantity of engagement techniques adopted in sustainability reporting (N=140)

Mean	5.69
Median	6
Mode	7
Std. Deviation	3.047
Minimum	0
Maximum	16

As shown in Figure 8, the number of engagement techniques, at least from a visual standpoint, appears to be affected neither by the type of GRI standards and nor by the income of the country where the reporting organizations' headquarters are based. Those boxplots suggest that the number of engaged techniques depends on other, still unknown, factors.



Figure 8: Boxplots of quantity of engagement techniques in GRI reports across GRI G4 and GRI Standards and income levels of the headquarters.



Source: Classification of income was based on 2020 data from the World Bank, which are, in turn, based on GNI per capita in US\$ (Atlas methodology).

#### 5.4 General discussions

This study seeks to contribute to a better understanding of how companies were able to report materiality assessment in the GRI sustainability reporting standards and to investigate the extent to which GRI reports, across different countries and sectors, disclose information related to the materiality principle. This study also explores patterns of information disclosure related to the materiality building process and stakeholder management.

In the world, the concept of sustainable business emerged so that companies could be “in peace” with society. For stakeholders, it is necessary to have a sustainable company that is interested in their needs and aspirations. As a result, several reporting

standards have emerged over the years to standardize this practice so that stakeholders can know what and where to look when opening a sustainability report.

The main standards and models for managing sustainability and social responsibility reporting include the ISO 26000 for Social Responsibility of Organizations, it manages the interest of stakeholders, acts of responsibility and irresponsibility in relation to the environment, ethical and social situations (Deus et al, 2014). Another example is AA1000 which ensures credibility and quality of performance of sustainability reporting and promote the stakeholder engagement (Andrade & Bizzo, 2018). The choice for GRI relies on the fact that it is arguably the world's largest database of GRI reports (GRI, 2018c) and the GRI being known worldwide as an independent institution that concerns international standards on how to produce sustainability reports (Sierra-García et al., 2015).

While the work of Beske et al, 2019 stick to research the disclosure on materiality analysis in sustainability reports through the lenses of legitimacy theory, this work aimed at finding the potential determinants related to the higher rate on materiality disclosure. According to the results found in this work, one can infer that neither third-party verification, nor GRI guidelines version, or countries' incomes have influenced the higher or lower rate of disclosure. Both works understand that companies have put effort into the determination of material topics and stakeholder engagement. However, it seems that the reporting on materiality is used as a means of fulfilling topics inside the guidelines without showing detailed commitment to stakeholders.

Most businesses have designated their methods for identifying topics and aspects, but only a few demonstrate how relevant stakeholder groups are identified. These companies tend to choose groups of closest stakeholders to get involved. Bellucci et al.(2019) found that 81.49 percent of the organizations used the method of

meeting to engage their stakeholders while this work presented a total of 68.57% as the method mostly used by companies. Manetti (2011) and Manetti and Bellucci, (2016) argued that researchers have found evidence of uncommon levels of stakeholder participation in stakeholder engagement reporting, or that engagement and dialogue with stakeholders are increasingly recognized as crucial elements of stakeholder engagement reporting, even though these activities are hardly included in corporate reports.

This work found the average of  $8 \pm 2.286$  groups of stakeholders engaged by companies, however, there is no such information in the literature regarding the ideal number of groups that should be engaged by each company. Almost all companies mentioned different interest groups, but there is a lack of detailed information on why some particular stakeholders are of relevance in most cases. Beske *et al* (2019) state that it seems that companies tend to use their CSR reporting more like an attempt to seem sustainable through the release of certain topics than to report on materiality.

Without clear standards, it is difficult for companies to know exactly how to measure and report on some dimensions of sustainability performance without compromising or failing to meet the demands of their stakeholders.

Another point evaluated in this work is the influence of external verification onto the higher or lower rate of disclosing information regarding the six indicators previously selected. While the work of Sierra-García *et al.*, (2015) states that it had been an increasing trend of the assurance of CSR reports over the years, this work adds that such action has not shown to be linked to the higher or lower rate of information disclosure.

According to Eccles *et al.* (2012), besides knowing which group to engage or the bestway to engage each group, another challenge that regards materiality itself is

the reporting of information that addresses environmental, social, and governance issues that are directly and indirectly more relevant to companies and their stakeholders.

To alleviate this impasse, the term “materiality” was used and its definitions and interpretations have been evolving for several decades. After that, other international organizations published similar rules and regulations for the definition of material aspects. They are all reasonably general and “based on principles” – in the sense that they do not provide specific information or numerical guidance on how to determine whether an item is a material (Gelmini *et al.* 2015). GRI defines materiality as the limit at which aspects become important enough for them to be reported, and thus, determines several indicators related to the materiality theme.

The perception obtained after analyzing 140 reports that contained the mark of materiality disclosure service employed by GRI is that, although the indicators were present as indicated by the content index in the GRI standards, they were presented in an incipient way. Although the mark of materiality disclosure certifies that such a report meets the requirements of the materiality indicators, these study results show a fragility of the Disclose Service as well as the verification process hired by the company and provided by GRI.

Another flawed point in the identification of material aspects appeared when the stakeholders were consulted. For example, only a few reports presented the number of people involved in the surveys (one of the main engagement methods) as well as reported what was changed to give use to the results of those surveys. Manetti (2011) had already mentioned a similar inference when only 20% of his sample suggested that the main objective of stakeholders’ involvement was to decide the content of the report or not only to decide the report content but also to decide the information

considered relevant to the stakeholders and to elaborate (or to review) strategic objectives for the company.

Beske *et al.* (2019) demonstrated that the majority of companies' report, at least to some extent, do not provide detailed information in most cases in their materiality analyzes. This was a fact also identified in the construction of this work, noticed that the pattern of incipency used by companies, leads to some indications that companies rely mainly on fulfilling the indicators required by GRI. These situations maybe related to GRI standards possibly presenting vague definitions of their indicators and, this way, letting one imply that companies tend to use their CSR reporting for the transmission of sustainability-related topics instead of reporting on materiality.

As explained by Clarkson *et al.* (2008), such "difficult to verify" standards are in line with the existing literature on legitimacy strategies in corporate disclosure: companies have simply found communication methods in sustainability reports. Such practice demonstrates the companies' commitment to the environment, to the financial area

In accordance with the work of Beske *et al* (2019) this work concluded that companies have found a way to minimize transparency that shows compliance with these voluntary sets of standards, but the materiality process is not being comprehensively communicated.

## 6. CONCLUSIONS

Defining material topics is an important part of sustainability reports produced under GRI guidelines. Even though the practice of reporting sustainability is increasing, there is little empirical information on how companies should conduct such analyses and how they present their efforts. The results of this dissertation show that companies tend to present their results in a diverse way without patterns, since the patterns proposed by GRI are broad and not very well supervised. Thus, it seems to have no definition in the literature of what should be considered the best practice of materiality reporting.

The term transparency was used to represent the rate of disclosure regarding the six indicators investigated. Since the GRI's organizational mark for materiality disclosure was present in all reports analyzed, it was expected that all materiality indicators would be found explicitly on the pages mentioned in the GRI content index. However, the level of transparency of the six materiality indicators analyzed was not 100% satisfactory. An average level of 22% of content regarding materiality was missing from the reports analyzed, this may show a weakness of the organization mark for materiality.

First, to better understand variations in the transparency of materiality disclosures, this study explored two sub-groups in the sample: (i) organizations that had not hired third-party verification; and that (ii) had hired third-party verification. The results demonstrated a lack of relationship between the presence or absence of an external audit in relation to the level of work found. Secondly, the results also demonstrated a lack of relationship between the level of the countries' incomes, type of GRI Guidelines adopted, and the so-called transparency.

However, transparency in the materiality reporting process only makes sense if it is known how to report materiality satisfactorily in the context of sustainability reports. This work found that the average number of stakeholder groups engaged is around  $8 \pm 2.286$  per company, but, there is not any description in the literature of what should be considered the ideal number of groups to be engaged. Moreover, it is also absent in the literature the information regarding the relevant groups for each company to consider a stakeholder. As it neither found the discussions regarding the most efficient ways to engage stakeholders. This study found that the average engagement techniques are  $6 \pm 3.047$  per company, the information on what should be considered the ideal number is also an absent topic in the literature regarding sustainability reports.

This dissertation helped to demonstrate that the problem of materiality reporting is not only transparency but also the lack of a standardized methodology. It is necessary to advance knowledge in relation to materiality analysis methodologies, which, in the case of sustainability, require techniques that are very different from the accounting area. Therefore, broader samples should be compared and statistical analysis should be applied.

Still for the stakeholder engagement, the most recurrent groups were employees or team members (over 92%) followed by customers and clients/users (80%), letting one conclude that the most engaged groups are the ones directly related to the organizations' main products and services. As for the means of engagement, meeting with management staff and call centres were both present in more than 50% of the reports. However, there is no information in the literature of what should be considered the best groups to be engaged by certain company and sector. There is also no information regarding the best ways to interact with each different group of stakeholder.

The limitations found throughout this work rely on the small number of reports from the same category and the same countries, sector, and other variables that could lead to the identification of a better pattern when reporting materiality. Private sector standard setters (such as GRI in this case) indicate how their guidelines are adhered to. It must, however, provide interesting managerial and social implications. It seems possible that these results are due to the guidelines presenting to be incipient and the discrepancy found in the results could be attributed to the materiality service disclosure's not devoting attention to detailed information on how to perform the materiality identification process.

Managers should be encouraged to devote great importance to the practice of reporting materiality assessments as well as the means to achieve it. Otherwise, concerns and complaints about the overall reliability of the information presented may arise among stakeholders. As Calabrese *et al.* (2017) states, poor reporting on materiality matters might also lead to potential conflicts with stakeholders since they are expected to see their important topics not sufficiently added into the sustainability or integrated report or even the results taken in favor of them.



## **7. LIMITATIONS AND FUTURE WORK**

The choice of a purposive sample exposed some limitations: The analysis did not contemplate many countries and sectors since, countries and sectors were a consequence from the characteristics firstly selected. If a broader group of researchers were available, a representative sample of different countries and sectors could be used to identify whether the country or the sector was related to the transparency of the reports..

The extent analysis is a method used based on the author's interpretation. A broader group of researchers could also be useful when suggesting different points of view of the reports' interpretation.

In the future, the use of a more sophisticated software for the statistical analysis could lead to a numerical interpretation that would prove the visual standpoint used in the work. An extent analysis software could be used in comparison to the manual extent analysis accomplished here.

A suggestion for future work also relies on gathering a bigger group of analysts with the ability of reading different languages. This would enlarge the sample and make it possible to have representative analyses of reports from different countries and sectors. Representativeness would probably allow analyses of different determinants that may be related to the best practices of materiality reporting. (i.e. countries and sectors).

## 8. REFERENCES

- AccountAbility. (2015). *AA1000 Stakeholder Engagement Standard 2015*. London: AccountAbility.
- AccountAbility. (2018). *AA1000 Accountability Principle 2018*. London: AccountAbility.
- Albu, Oana Brindusa; Flyverbom, Mikkel. Organizational transparency: Conceptualizations, conditions, and consequences. *Business & Society*, v. 58, n. 2, p. 268-297, 2019.
- Andrade, Valdelis Fernandes de; Bizzo, Waldir Antonio. Análise comparativa das normas de gestão de responsabilidade social e sua abrangência. *Gestão & Produção*, v. 25, n. 4, p. 807-825, 2018.
- Andriof, J., Waddock, S., Husted, B. and Rahman, S. (2002), *Unfolding Stakeholder Thinking: Theory, Responsibility and Engagement*, Greenleag Publishing, Sheffield, pp. 9-16.
- Aras, G., & Crowther, D. (2008). Corporate Sustainability Reporting: A Study in Disingenuity? *Journal of Business Ethics*, 87, 279-288.
- Babbie, E. (2013). *The Practice of Social Research*. Wadsworth: Cengage Learning.
- Belal, A. R. (2002). Stakeholder Accountability or Stakeholder Management: A Review of UK Firms' Social and Ethical Accounting, Auditing and Reporting (SEAAR) Practices. *Corporate Social Responsibility and Environmental Management*, 9, 8-25.
- Bellantuono, N., Pontrandolfo, P., & Scozzi, B. (2016). Capturing the stakeholders' view in sustainability reporting: A novel approach. *Sustainability (Switzerland)*, 8(4). doi:10.3390/su8040379

- Bellucci, M., Simoni, L., Acuti, D., Manetti, G. (2019). Stakeholder engagement and dialog accounting: Empirical evidence in sustainability reporting. *Accounting, Auditing & Accountability Journal*. Vol. 32. No. 5, pp. 1467-1499
- BERCHIN, Issa Ibrahim; CARVALHO, Andréia de Simas Cunha. O papel das conferências internacionais sobre o meio ambiente para o desenvolvimento dos regimes internacionais ambientais: de Estocolmo à Rio+ 20. *DEBATESVII*, p. 167, 2016.
- Beske, F., Haustein, E., & Lorson, P. C. (2019). Materiality analysis in sustainability and integrated reports. *Sustainability Accounting, Management and Policy Journal*.
- Calabrese, A., Costa, R., Levialdi, N., & Menichini, T. (2016). A fuzzy analytic hierarchy process method to support materiality assessment in sustainability reporting. *Journal of Cleaner Production*, 121, 248-264. doi:<https://doi.org/10.1016/j.jclepro.2015.12.005>
- Calabrese, A., Costa, R., Ghiron, N. L., & Menichini, T. (2017). Materiality analysis in sustainability reporting: a method for making it work in practice. *European Journal of Sustainable Development*, 6(3), 439-439.
- Carroll, A. B. (1979). A Three-Dimensional Conceptual Model of Corporate Performance. *The Academy of Management Review*, 4(4), 497-505.
- Chen, L., Feldmann, A., & Tang, O. (2015). The relationship between disclosures of corporate social performance and financial performance: Evidences from GRI reports in manufacturing industry. *International Journal of Production Economics*, 170, 445-456. doi:<https://doi.org/10.1016/j.ijpe.2015.04.004>

- Chong, H.G. (1992) 'Auditors and materiality', *Managerial Auditing Journal*, September, Vol. 7, No. 5, pp.8–17.
- Chong, H. G. (2015). A review on the evolution of the definitions of materiality. *International Journal of Economics and Accounting*, 6(1), 15-32.
- Clarkson, P.M., Li, Y., Richardson, G.D. and Vasvari, F.P. (2008), "Revisiting the relation between environmental performance and environmental disclosure: an empirical analysis", *Accounting, Organisation and Society*, Vol. 33 Nos 4/5, pp. 303-327
- Creswell, J. W. (2009). *Research Design: Qualitative, quantitative, and mixed methods approaches* (3 ed.). Thousand Oaks, CA: SAGE Publications, Inc.
- Dahlsrud, A. (2008). How Corporate Social Responsibility is Defined: an Analysis of 37 Definitions. *Corporate Social Responsibility and Environmental Management*, 15, 1-13.
- DE PASSOS, Priscilla Nogueira Calmon. A conferência de Estocolmo como ponto de partida para a proteção internacional do meio ambiente. *Revista Direitos Fundamentais & Democracia*, v. 6, 2009.
- Deegan, C. and Ranking, M. (1997), "The materiality of environmental information to users of annual reports", *Accounting, Auditing and Accountability Journal*, Vol. 10 No. 4, pp. 562 -583.
- DEUS, Rafael Mattos de; SELES, Bruno Michel Roman Pais; VIEIRA, Karina Rabelo Ogasawara. As organizações e a ISO 26000: revisão dos conceitos, dos motivadores e das barreiras de implementação. *Gestão & Produção*, v. 21, n. 4, p. 793-809, 2014.
- Eccles, R.G. and Krzus, M.P. (2010) *One Report: Integrated Reporting for a Sustainable Strategy*, John Wiley & Sons, New Jersey.

- Eccles, R. G., Krzus, M. P., Krzus, M., & Serafeim, G. (2012). The Need for Sector-Specific Materiality and Sustainability Reporting Standards. *Journal of Applied Corporate Finance*, 24(2), 65-71.
- Edgeley, C. (2014), "A genealogy of accounting materiality", *Critical Perspectives on Accounting*, Vol. 25 No. 2014, pp. 255-271.
- Elkington J. 1998. *Cannibals with Forks*. Gabriola Island: BC (Canada): New Society Publishers.
- Etzion, D., & Ferraro, F. (2010). The Role of Analogy in the Institutionalization of Sustainability Reporting. *Organization Science*, 21(5), 1092-1107.
- Fasan, M., & Mio, C. (2017). Fostering Stakeholder Engagement: The Role of Materiality Disclosure in Integrated Reporting. *Business Strategy and the Environment*, 23, 288-305.
- Ferreira, A., Otley, D., 2009. The design and use of performance management systems: An extended framework for analysis. *Management Accounting Research*
- Fonseca, A. (2010). How Credible are Mining Corporations' Sustainability Reports? A Critical Analysis of External Assurance under the Requirements of the International Council on Mining and Metals. *Corporate Social Responsibility and Environmental Management*, 17, 355-370.
- Fonseca, A., McAllister, M. L., & Fitzpatrick, P. (2014). Sustainability reporting among mining corporations: a constructive critique of the GRI approach. *Journal of Cleaner Production*, 84, 70-83.  
doi:<http://dx.doi.org/10.1016/j.jclepro.2012.11.050>

- Font, X., Guix, M., & Bonilla-Priego, M. J. (2016). Corporate social responsibility in cruising: Using materiality analysis to create shared value. *Tourism Management*, 53, 175-186.
- Gelmini, L., Bavagnoli, F., Comoli, M., & Riva, P. (2015). Waiting for materiality in the context of integrated reporting: Theoretical challenges and preliminary empirical findings. *Sustainability disclosure: State of the art and new directions. Studies in managerial and financial accounting*, 30, 135-163.
- GRI (2007) Pathways – The GRI sustainability reporting cycle:
- GRI. (2013). G4 Sustainability Reporting guidelines. Part 1. Retrieved from <https://www2.globalreporting.org/standards/g4/Pages/default.aspx>
- GRI. (2013). Materiality Matters: GRI's new check service. Retrieved from <https://www.globalreporting.org/information/news-and-press-center/Pages/Materiality-Matters-GRIs-new-check-service-.aspx>
- GRI. (2015). *Defining Materiality: What Matters to Reporters and Investors - Do investors and reporters agree on what's material in the Technology hardware & Equipment and Banks & Diverse financials sectors?* Amsterdam: Global Reporting Initiative (GRI) and RobecoSam.
- GRI. (2016). *Defining What Matters: Do companies and investors agree on what is material?* Amsterdam: Global Reporting Initiative (GRI).
- GRI. (2018a). *Consolidated Set of GRI Sustainability Reporting Standards*. Amsterdam: Global Reporting Initiative (GRI).
- GRI. (2018b). *GRI Disclosure Review Service - Methodology (Stakeholder Engagement and Materiality Disclosure Review - Management Approach Disclosure Review)*. Amsterdam: Global Reporting Initiative (GRI).

- GRI. (2018c). Sustainability Disclosure Database. Retrieved from <http://database.globalreporting.org/>
- GRI. (2019a). *GRI Standards Alignment Check Services - Methodology*. Amsterdam: Global Reporting Initiative (GRI).
- GRI. (2019b). Organizational Marks. Retrieved from <https://www.globalreporting.org/trademarks-and-copyright/Pages/GRI-Organizational-Marks-Guidance.aspx>
- Heitzman, S., Wasley, C., & Zimmerman, J. (2010). The joint effects of materiality thresholds and voluntary disclosure incentives on firms' disclosure decisions. *Journal of Accounting and Economics*, 49, 109-132.
- Hooghiemstra, R. (2000). Corporate communication and impression management—new perspectives why companies engage in corporate social reporting. *Journal of business ethics*, 27(1-2), 55-68.
- Hsu, C.-W., Lee, W.-H., & Chao, W.-C. (2013). Materiality analysis model in sustainability reporting: a case study at Lite-On Technology Corporation. *Journal of Cleaner Production*, 57, 142-151. doi:<https://doi.org/10.1016/j.jclepro.2013.05.040>
- IIRC. (2013). *Materiality Background paper for <IR>*: International Integrated Reporting Council (IIRC).
- Jean, R. (2007). Reported social and environmental taxonomies: a longer-term glimpse. *Managerial Auditing Journal*, 22(8), 840 - 860.
- Jones, P., Comfort, D., & Hillier, D. (2016). Materiality in corporate sustainability reporting within UK retailing. *Journal of Public Affairs*, 16(1), 81-90. doi:10.1002/pa.1570

- Jorgensen, M., & Phillips, L. J. (2002). *Discourse Analysis as Theory and Method*. London: SAGE Publications.
- Julien, H. (2008). Content Analysis. In L. M. Given (Ed.), *The SAGE Encyclopedia of Qualitative Research Methods: Volumes 1 & 2* (pp. 120-122). Thousand Oaks: SAGE Publications.
- KPMG. The essentials of materiality assessment. 2014.
- KPMG. (2017). *The KPMG Survey of Corporate Responsibility Reporting 2017*. Amstelveen: KPMG.
- Lenzen, M., Dey, C. J., & Murray, S. A. (2004). Historical accountability and cumulative impacts: the treatment of time in corporate sustainability reporting. *Ecological Economics*, 51(3-4), 237-250.
- Manetti, G. (2011). The quality of stakeholder engagement in sustainability reporting: Empirical evidence and critical points. *Corporate Social Responsibility and Environmental Management*, 18(2), 110-122. doi:10.1002/csr.255
- Manetti, G. and Bellucci, M. (2016), "The use of social media for engaging stakeholders in sustainability reporting", *Accounting, Auditing and Accountability Journal*, Vol. 29 No. 6, pp. 985-1011, doi: 10.1108/AAAJ-08-2014-1797
- Michelon, Giovanna; Pilonato, Silvia; Ricceri, Federica. CSR reporting practices and the quality of disclosure: An empirical analysis. *Critical perspectives on accounting*, v. 33, p. 59-78, 2015.
- Moneva, J. M., Archel, P., & Correa, C. (2006). GRI and the camouflaging of corporate unsustainability. *Accounting Forum*, 30(2), 121-137.
- Neuendorf, K. A. (2002). Defining Content Analysis. In K. A. Neuendorf (Ed.), *The Content Analysis Guidebook*. Thousand Oaks: Sage Publications, Inc.



- Natural Resource Defense Council (1997) *The Story of Silent Spring* How a courageous woman took on the chemical industry and raised important questions about humankind's impact on nature: <https://www.nrdc.org/stories/story-silent-spring>
- Owen, D. L., Swift, T., & Hunt, K. (2001). Questioning the role of stakeholder engagement in social and ethical accounting, auditing and reporting. *Accountability Forum*, 25(3), 264-282.
- Perez, F., & Sanchez, L. E. (2009). Assessing the Evolution of Sustainability Reporting in the Mining Sector. *Environmental Management*, 43, 949-961.
- Perrini, F., & Tencati, A. (2006). Sustainability and stakeholder management: the need for new corporate performance evaluation and reporting systems. *Business Strategy and the Environment*, 15(5), 296-308.
- Porter, B., Simon, J. and Hatherly, D. (1996) *Principles of External Auditing*, Wiley, West Sussex, UK.
- Rodrigues, M., Michel Magnan, M. and Boulianne, E. (2013), "Stakeholders' influence on environmental strategy and performance indicators: a managerial perspective", *Management Accounting Research*, Vol. 24 No. 4, pp. 301-316.
- Sierra-García, L., Zorio-Grima, A., & García-Benau, M. A. (2013). Stakeholder Engagement, Corporate Social Responsibility and Integrated Reporting: An Exploratory Study. *Corporate Social Responsibility and Environmental Management*, 22(5), 286–304. doi:10.1002/csr.1345
- Tapscott, D. and Williams, A.D. (2006) *Wikinomics: How Mass Collaboration Changes Everything*, Penguin Group, London.

- Tate, W. L., Ellram, L. M., & Kirchoff, J. F. (2010). Corporate Social Responsibility reports: a thematic analysis related to supply chain management. *Journal of Supply Chain Management*, 46(1), 19-44.
- Unerman, J. and Zappettini, F. (2014), "Incorporating materiality considerations into analysis of absence from sustainability reporting", *Social and Environmental Accountability Journal*, Vol. 34 No. 3, pp. 172-186.
- WWF. (2014). Living Planet Report 2014: Species and spaces, people and places.
- Zhou, Y. (2011). Materiality Approach in Sustainability Reporting: Applications, Dilemmas, and Challenges. *1st World Sustainability Forum*, 1-11.

## ANNEX 1

table 6: GRI Guidelines

<i>GRI Sustainability reporting Principle</i>	<i>Definition according to GRI guidelines (G4-Part 1)</i>
<i>Identified Material Aspects and Boundaries</i>	
<i>G4-17 or 102-45</i>	<i>(i) List all entities included in the organization's consolidated financial statements or equivalent documents. (ii) Report whether any entity included in the organization's consolidated financial statements or equivalent documents is not covered by the report. The organization can report on this Standard Disclosure by referencing the information in publicly available consolidated financial statements or equivalent documents.</i>
<i>G4-18 or 102-46</i>	<i>(i) Explain the process for defining the report content and the Aspect Boundaries. (ii) Explain how the organization has implemented the Reporting Principles for Defining Report Content.</i>
<i>G4-19 or 102-47</i>	<i>List all the material Aspects identified in the process for defining report content.</i>
<i>G4-20 or 103-1</i>	<i>For each material Aspect, report the Aspect Boundary within the organization, as follows: (i) Report whether the Aspect is material within the organization (ii) If the Aspect is not material for all entities within the organization (as described in G4-17), select one of the following two approaches and report either: (i) The list of entities or groups of entities included in G4-17 for which the Aspect is not material or (ii) The list of entities or groups of entities included in G4-17 for which the Aspects is material (iii) Report any specific limitation regarding the Aspect Boundary within the organization</i>
<i>G4-21 or 103-1</i>	<i>For each material Aspect, report the Aspect Boundary outside the organization, as follows: (i) Report whether the Aspect is material outside of the organization (ii) If the Aspect is material outside of the organization, identify the entities, groups of entities or elements for which the Aspect is material. In addition, describe the geographical location where the Aspect is material for the entities identified (iii) Report any specific limitation regarding the Aspect Boundary outside the organization</i>
<i>G4-22 or 102-48</i>	<i>Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements.</i>

*G4-23 or 102-49 Report significant changes from previous reporting periods in the Scope and Aspect Boundaries.*

*Stakeholder Engagement*

*G4-24 or 102-40 Provide a list of stakeholder groups engaged by the organization.*

*G4-25 or 102-42 Report the basis for identification and selection of stakeholders with whom to engage.*

*G4-26 or 102-43 Report the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process.*

*G4-27 or 102-44 Report key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting. Report the stakeholder groups that raised each of the key topics and concerns.*

*G4-2 or 102-15 Provide a description of key impacts, risks, and opportunities. The organization should provide two concise narrative sections on key impacts, risks, and opportunities. Section One should focus on the organization's key impacts on sustainability and effects on stakeholders, including rights as defined by national laws and relevant internationally recognized standards. This should take into account the range of reasonable expectations and interests of the organization's stakeholders. This section should include:*

- A description of the significant economic, environmental and social impacts of the organization, and associated challenges and opportunities. This includes the effect on stakeholders' rights as defined by national laws and the expectations in internationally recognized standards and norms*
- An explanation of the approach to prioritizing these challenges and opportunities*
- Key conclusions about progress in addressing these topics and related performance in the reporting period. This includes an assessment of reasons for underperformance or over-performance*
- A description of the main processes in place to address performance and relevant changes*
- Section Two should focus on the impact of sustainability trends, risks, and opportunities on the long-term prospects and financial performance of the organization. This should concentrate specifically on information relevant to financial stakeholders or that could become so in the future. Section Two should include the following:*

- A description of the most important risks and opportunities for the organization arising from sustainability trends
- Prioritization of key sustainability topics as risks and opportunities according to their relevance for long-term organizational strategy, competitive position, qualitative, and (if possible) quantitative financial value drivers

Table(s) summarizing:

- Targets, performance against targets, and lessons learned for the current reporting period
- Targets for the next reporting period and medium term objectives and goals (that is, 3–5 years) related to key risks and opportunities
- Concise description of governance mechanisms in place specifically to manage these risks and opportunities, and identification of other related risks and opportunities

G4-5 or 102-3	Report the location of the organization's headquarters.
<i>GRI Content Index</i>	
G4-32a or 102-54	Report the 'in accordance' option the organization has chosen.
G4-32b or 102-55	Report the GRI Content Index for the chosen option
G4-32c or 102-23	Report the reference to the External Assurance Report, if the report has been externally assured. GRI recommends the use of external assurance but it is not a requirement to be 'in accordance' with the Guidelines.
<i>Assurance</i>	
G4-33 or 102-56	(i) Report the organization's policy and current practice with regard to seeking external assurance for the report. (ii) If not included in the assurance report accompanying the sustainability report, report the scope and basis of any external assurance provided. (iii) Report the relationship between the organization and the assurance providers. (iv) Report whether the highest governance body or senior executives are involved in seeking assurance for the organization's sustainability report.
G4-DMA-a or 103-1	Report why the Aspect is material. Report the impacts that make this Aspect material.
G4-DMA-b or 103-2	Report how the organization manages the material Aspect or its impacts.
G4-DMA-c or 103-3	Report the evaluation of the management approach, including: <ul style="list-style-type: none"> <li>• The mechanisms for evaluating the effectiveness of the management approach</li> </ul>

---

- *The results of the evaluation of the management approach*
  - *Any related adjustments to the management approach*
- 

Source: GRI Sustainability reporting Guidelines. Part 1

## ANNEX 2

Table 7: Six key indicators

5	4	3	2	1	Evaluation issues / report n°
Turkey	Turkey	Thailand	Philippines	Thailand	Country
Energy	Financial Services	Telecommunications	Conglomerates	Automotive	Sector
Large	Large	Large	Large	Large	Size
2018	2017	2017	2017	2017	Year of publication
2017	2016	2016	2016	2016	Year of reference
Standards	G4	G4	G4	G4	Report type
0	0	1	1	0	Hired third-party Verification?
1	1	1	1	1	Explained the process for defining the report content and the topic/aspect <u>Boundaries?</u>
1	1	1	1	1	Listed material topics?
1	1	1	1	1	Provided a list of stakeholder groups engaged by the organization?
1	1	1	1	1	Reported the basis for the identification and selection of stakeholders with whom to engage?
0	1	0	0	0	Reported the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group (regularly)
1	1	1	0	1	Reported key topics and concerns that have been raised through stakeholder engagement?
83%	100%	83%	67%	83%	Total

Materiality

Stakeholder Engagement

11	10	9	8	7	6	Evaluation issues / report n°	
Jordan	Egypt	Peru	Brazil	United Arab Emirates	Turkey	Country	
Financial Services	Financial Services	Mining	Mining	Conglomerates	Textiles and Apparel	Sector	
MNE	Large	Large	Large	Large	Large	Size	
2018	2017	2017	2017	2018	2017	Year of publication	
2017	2016	2016	2016	2017	2016	Year of reference	
Standards	G4	G4	G4	Standard	G4	Report type	
0	0	0	1	0	0	Hired third-party Verification?	G4-33 or 102-56
1	1	0	1	0	0	Explained the process for defining the report content and the topic/aspect <u>Boundaries?</u>	G4-18 or 102-46
1	1	1	1	1	1	Listed material topics?	G4-19 or 102-47
1	1	1	0	1	1	Provided a list of stakeholder groups engaged by the organization?	G4-24 or 102-40
1	1	1	1	1	1	Reported the basis for the identification and selection of stakeholders with whom to engage?	G4-25 or 102-42
1	0	0	0	0	0	Reported the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group (regularly)	G4-26 or 102-43
1	1	1	1	1	1	Reported key topics and concerns that have been raised through stakeholder engagement?	G4-27 or 102-44
100%	83%	67%	67%	67%	67%	Total	



17	16	15	14	13	12	Evaluation issues / report n°
Bangladesh	Thailand	Philippines	Malaysia	Spain	Jordan	Country
Financial Services	Energy	Conglomerates	Telecommunications	Media	Logistics	Sector
MNE	Large	Large	MNE	Large	Large	Size
2017	2017	2017	2017	2017	2018	Year of publication
2016	2016	2016	2016	2016	2017	Year of reference
G4	G4	G4	G4	G4	Standards	Report type
0	1	1	1	1	1	Hired third-party Verification? G4-33 or 102-56
1	0	1	1	0	1	Explained the process for defining the report content and the topic/aspect <u>Boundaries</u> ? G4-18 or 102-46
1	1	1	1	1	1	Listed material topics? G4-19 or 102-47
1	1	1	1	1	1	Provided a list of stakeholder groups engaged by the organization? G4-24 or 102-40
1	1	1	1	1	1	Reported the basis for the identification and selection of stakeholders with whom to engage? G4-25 or 102-42
1	0	0	1	0	0	Reported the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group (regularly) G4-26 or 102-43
1	1	1	1	0	1	Reported key topics and concerns that have been raised through stakeholder engagement? G4-27 or 102-44
100%	67%	83%	100%	50%	83%	Total

23	22	21	20	19	18	Evaluation issues / report n°	
Turkey	Hong Kong	Thailand	Spain	Philippines	Israel	Country	
Automotive	Financial Services	Energy	Financial Services	Financial Services	Financial Services	Sector	
Large	Large	Large	Large	Large	MNE	Size	
2017	2017	2017	2017	2017	2017	Year of publication	
2016	2016	2016	2016	2016	2016	Year of reference	
G4	G4	Standards	G4	G4	G4	Report type	
1	0	1	1	0	0	Hired third-party Verification?	G4-33 or 102-56
0	1	1	1	1	1	Explained the process for defining the report content and the topic/aspect <u>Boundaries?</u>	G4-18 or 102-46
1	1	1	1	1	1	Listed material topics?	G4-19 or 102-47
1	1	1	1	0	1	Provided a list of stakeholder groups engaged by the organization?	G4-24 or 102-40
1	1	1	1	1	1	Reported the basis for the identification and selection of stakeholders with whom to engage?	G4-25 or 102-42
0	0	0	0	0	1	Reported the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group (regularly)	G4-26 or 102-43
1	1	1	1	1	1	Reported key topics and concerns that have been raised through stakeholder engagement?	G4-27 or 102-44
67%	83%	83%	83%	67%	100%	Total	



35	34	33	32	31	30	Evaluation issues / report n°
Hong Kong	United States	Mainland China	United Arab Emirates	Mexico	Philippines	Country
Energy	Financial Service	Aviation	Retailers	Construction Materials	Real Estate	Sector
Large	MNE	Large	Large	Large	Large	Size
2017	2017	2017	2017	2017	2017	Year of publication
2016	2016	2016	2016	2016	2016	Year of reference
G4	G4	G4	G4	G4	G4	Report type
1	1	1	0	1	0	Hired third-party Verification?
0	0	1	1	1	1	Explained the process for defining the report content and the topic/aspect <u>Boundaries?</u>
1	1	1	1	1	1	Listed material topics?
1	1	1	1	1	1	Provided a list of stakeholder groups engaged by the organization?
1	1	1	1	1	1	Reported the basis for the identification and selection of stakeholders with whom to engage?
0	1	0	0	0	0	Reported the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group (regularly)
1	1	1	1	1	1	Reported key topics and concerns that have been raised through stakeholder engagement?
67%	83%	83%	83%	83%	83%	Total
						Materiality
						G4-33 or 102-56
						G4-18 or 102-46
						G4-19 or 102-47
						G4-24 or 102-40
						G4-25 or 102-42
						G4-26 or 102-43
						G4-27 or 102-44

41	40	39	38	37	36	Evaluation issues / report n°
Switzerland	Romania	Sri lanka	Germany	France	Germany	Country
Technology Hardware	Energy Utilities	Telecommunications	Automotive	Real Estate	Financial Services	Sector
MNE	Large	Large	Large	Large	Large	Size
2017	2017	2017	2017	2017	2017	Year of publication
2016/2017	2016	2016	2016	2016	2016	Year of reference
G4	G4	G4	G4	G4	G4	Report type
0	0	1	1	1	0	Hired third-party Verification?
0	0	0	0	1	1	Explained the process for defining the report content and the topic/aspect <u>Boundaries?</u>
1	1	1	1	1	1	Listed material topics?
1	1	1	1	1	1	Provided a list of stakeholder groups engaged by the organization?
1	1	1	1	1	1	Reported the basis for the identification and selection of stakeholders with whom to engage?
1	0	0	0	0	0	Reported the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group (regularly)
1	1	1	1	1	1	Reported key topics and concerns that have been raised through stakeholder engagement?
83%	67%	67%	67%	83%	83%	Total

Materiality

G4-33 or 102-56

G4-18 or 102-46

G4-19 or 102-47

G4-24 or 102-40

G4-25 or 102-42

G4-26 or 102-43

G4-27 or 102-44

Stakeholder Engagement

Evaluation issues / report n°		42	43	44	45	46	47
Country	United Arab Emirates	United Arab Emirates	Spain	Germany	United Arab Emirates	United Arab Emirates	
Sector	Telecommunications	Public Agency	Energy Utilities	Metal products	Energy	Logistics	
Size	Large	Large	Large	Large	Large	Large	
Year of publication	2017	2017	2017	2018	2017	2018	
Year of reference	2016	2016	2016	2017	2016	2017	
Report type	G4	G4	G4	G4	G4	G4	
Materiality	Hired third-party Verification?	0	1	1	0	0	1
	Explained the process for defining the report content and the topic/aspect <u>Boundaries?</u>	0	0	1	1	0	0
	Listed material topics?	1	1	1	1	1	1
Stakeholder Engagement	Provided a list of stakeholder groups engaged by the organization?	1	1	1	1	1	1
	Reported the basis for the identification and selection of stakeholders with whom to engage?	1	1	1	1	1	1
	Reported the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group (regularly)	0	0	1	0	0	0
	Reported key topics and concerns that have been raised through stakeholder engagement?	1	1	1	0	1	1
Total		67%	67%	100%	67%	67%	67%

53	52	51	50	49	48	Evaluation issues / report n°	
Luxembourg	Switzerland	Kuwait	Turkey	Chile	Chile	Country	
Financial Services	Universities	Chemicals	Construction	Energy	Energy	Sector	
Large	Large	Large	Large	Large	Large	Size	
2018	2017	2017	2018	2017	2018	Year of publication	
2017	215/2016	215/2016	2017	2016	2017	Year of reference	
Standards	G4	G4	Standards	G4	G4	Report type	
1	0	0	0	1	1	Hired third-party Verification?	G4-33 or 102-56
1	0	1	0	1	1	Explained the process for defining the report content and the topic/aspect <u>Boundaries?</u>	G4-18 or 102-46
0	1	1	1	1	1	Listed material topics?	G4-19 or 102-47
1	1	1	1	1	1	Provided a list of stakeholder groups engaged by the organization?	G4-24 or 102-40
1	1	1	1	1	1	Reported the basis for the identification and selection of stakeholders with whom to engage?	G4-25 or 102-42
0	1	0	0	0	0	Reported the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group (regularly)	G4-26 or 102-43
0	1	1	1	1	1	Reported key topics and concerns that have been raised through stakeholder engagement?	G4-27 or 102-44
50%	83%	83%	67%	83%	83%	Total	

59	58	57	56	55	54	Evaluation issues / report n°
Hong Kong	Turkey	Philippines	Spain	Germany	Spain	Country
Other	Financial Services	Financial Services	Construction	Chemicals	Public Agency	Sector
Large	MNE	Large	Large	Large	Large	Size
2017	2018	2018	2018	2018	2018	Year of publication
2016	2017	2017	2017/2018	2017	2017	Year of reference
G4	G4	Standards	Standards	Standards	Standards	Report type
1	1	1	1	1	1	Hired third-party Verification?
1	1	1	1	1	0	Explained the process for defining the report content and the topic/aspect <u>Boundaries?</u>
1	1	1	1	0	1	Listed material topics?
1	1	1	1	1	1	Provided a list of stakeholder groups engaged by the organization?
1	1	1	1	1	1	Reported the basis for the identification and selection of stakeholders with whom to engage?
0	1	0	0	0	0	Reported the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group (regularly)
1	1	1	1	1	1	Reported key topics and concerns that have been raised through stakeholder engagement?
83%	100%	83%	83%	67%	67%	Total

Materiality

Stakeholder Engagement





71	70	69	68	67	66	Evaluation issues / report n°
India	Turkey	United States of America	Singapore	Croatia	Canada	Country
Agriculture	Commercial Services	Commercial Services	Agriculture	Energy	Energy Utilities	Sector
MNE	MNE	Large	MNE	Large	Large	Size
2017	2017	2017	2017	2017	2017	Year of publication
2016	2016	2016	2016	2016	2016	Year of reference
G4	G4	G4	G4	G4	G4	Report type
1	1	0	0	1	1	Hired third-party Verification?
1	1	0	0	0	0	Explained the process for defining the report content and the topic/aspect <u>Boundaries?</u>
1	1	1	0	1	1	Listed material topics?
1	1	1	1	1	1	Provided a list of stakeholder groups engaged by the organization?
1	1	1	1	1	1	Reported the basis for the identification and selection of stakeholders with whom to engage?
1	1	0	1	0	0	Reported the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group (regularly)
1	1	1	0	1	1	Reported key topics and concerns that have been raised through stakeholder engagement?
100%	100%	67%	50%	67%	67%	Total
						Materiality
						G4-33 or 102-56
						G4-18 or 102-46
						G4-19 or 102-47
						G4-24 or 102-40
						G4-25 or 102-42
						G4-26 or 102-43
						G4-27 or 102-44

77	76	75	74	73	72	Evaluation issues / report n°
Australia	Germany	Germany	Thailand	Kazakhstan	United States of America	Country
Public Agency	Other	Equipment	Financial Services	Energy	Construction Materials	Sector
Large	Large	Large	Large	Large	Large	Size
2018	2017	2018	2017	2018	2018	Year of publication
2017	2016	2017	2016	2017	2017	Year of reference
Standards	Standards	G4	G4	Standards	G4	Report type
0	1	1	1	0	0	Hired third-party Verification?
1	1	1	1	1	0	Explained the process for defining the report content and the topic/aspect <u>Boundaries?</u>
1	1	1	1	1	1	Listed material topics?
1	1	1	1	1	1	Provided a list of stakeholder groups engaged by the organization?
1	1	1	1	1	1	Reported the basis for the identification and selection of stakeholders with whom to engage?
0	0	0	0	0	0	Reported the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group (regularly)
1	1	1	1	1	1	Reported key topics and concerns that have been raised through stakeholder engagement?
83%	83%	83%	83%	83%	67%	Total

Materiality

G4-33 or 102-56

G4-18 or 102-46

G4-19 or 102-47

G4-24 or 102-40

G4-25 or 102-42

G4-26 or 102-43

G4-27 or 102-44

Stakeholder Engagement

83	82	81	80	79	78	Evaluation issues / report n°
Spain	India	India	Mexico	Turkey	Liechtenstein	Country
Finance Services	Automotive	Financial Services	Tourism/Leisure	Conglomerates	Financial Services	Sector
Large	Large	Large	Large	Large	Large	Size
2018	2017	2017	2018	2018	2017	Year of publication
2017	2016-2017	2016	2017	2017	2016	Year of reference
Standards	G4	G4	Standards	Standards	G4	Report type
1	1	1	0	0	0	Hired third-party Verification?
0	1	0	1	0	0	Explained the process for defining the report content and the topic/aspect <u>Boundaries?</u>
1	1	1	1	1	1	Listed material topics?
1	1	1	1	1	1	Provided a list of stakeholder groups engaged by the organization?
1	1	1	1	1	1	Reported the basis for the identification and selection of stakeholders with whom to engage?
0	0	0	0	1	0	Reported the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group (regularly)
1	1	1	1	1	1	Reported key topics and concerns that have been raised through stakeholder engagement?
67%	83%	67%	83%	83%	67%	Total
						Materiality
						G4-33 or 102-56
						G4-18 or 102-46
						G4-19 or 102-47
						G4-24 or 102-40
						G4-25 or 102-42
						G4-26 or 102-43
						G4-27 or 102-44

89	88	87	86	85	84	Evaluation issues / report n°	
Russian Federation	Hong Kong	Brazil	Singapore	Philippines	Germany	Country	
Energy	Conglomerates	Food and Beverage Products	Public Agency	Water Utilities	Other	Sector	
Large	Large	Large	Large	Large	MNE	Size	
2017	2018	2017	2017	2018	2017	Year of publication	
2016	2017	2016	2016	2017	2016	Year of reference	
G4	Standards	G4	G4	Standards	G4	Report type	
1	1	1	0	1	0	Hired third-party Verification?	G4-33 or 102-56
1	1	0	0	1	0	Explained the process for defining the report content and the topic/aspect <u>Boundaries?</u>	G4-18 or 102-46
1	1	1	1	1	0	Listed material topics?	G4-19 or 102-47
1	1	1	1	1	1	Provided a list of stakeholder groups engaged by the organization?	G4-24 or 102-40
1	1	1	1	1	1	Reported the basis for the identification and selection of stakeholders with whom to engage?	G4-25 or 102-42
0	0	0	0	0	0	Reported the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group (regularly)	G4-26 or 102-43
1	1	1	1	1	0	Reported key topics and concerns that have been raised through stakeholder engagement?	G4-27 or 102-44
83%	83%	67%	67%	83%	33%	Total	



101	100	99	98	97	96	Evaluation issues / report n°
Germany	Thailand	Indonesia	Thailand	Bangladesh	Luxembourg	Country
Textile and apparel	Energy	Energy	Real Estate	Financial Services	Financial Services	Sector
MNE	Large	Large	Large	Large	MNE	Size
2017	2018	2018	2017	2018	2018	Year of publication
2016	2017	2017	2016	2017	2017	Year of reference
G4	G4	G4	Standards	G4	Standards	Report type
1	1	0	1	0	0	Hired third-party Verification?
1	0	0	1	1	1	Explained the process for defining the report content and the topic/aspect <u>Boundaries?</u>
1	1	1	1	1	1	Listed material topics?
1	1	1	1	1	1	Provided a list of stakeholder groups engaged by the organization?
1	1	1	1	1	1	Reported the basis for the identification and selection of stakeholders with whom to engage?
0	0	0	0	0	1	Reported the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group (regularly)
1	1	1	1	1	1	Reported key topics and concerns that have been raised through stakeholder engagement?
83%	67%	67%	83%	83%	100%	Total

Materiality

G4-33 or 102-56

G4-18 or 102-46

G4-19 or 102-47

G4-24 or 102-40

G4-25 or 102-42

G4-26 or 102-43

G4-27 or 102-44

Stakeholder Engagement





113	112	111	110	109	108	Evaluation issues / report n°	
Turkey	Turkey	Turkey	Philippines	Germany	Turkey	Country	
Other	Chemicals	Other	Financial Services	Automotive	Conglomerates	Sector	
MNE	MNE	Large	Large	Large	Large	Size	
2017	2017	2017	2017	2017	2017	Year of publication	
2016	2016	2016	2016	2016	2016	Year of reference	
G4	G4	G4	G4	G4	G4	Report type	
0	0	0	0	1	0	Hired third-party Verification?	G4-33 or 102-56
0	0	0	0	0	0	Explained the process for defining the report content and the topic/aspect <u>Boundaries?</u>	G4-18 or 102-46
1	1	1	1	1	0	Listed material topics?	G4-19 or 102-47
1	1	1	1	1	1	Provided a list of stakeholder groups engaged by the organization?	G4-24 or 102-40
1	1	1	1	1	1	Reported the basis for the identification and selection of stakeholders with whom to engage?	G4-25 or 102-42
1	1	0	0	0	0	Reported the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group (regularly)	G4-26 or 102-43
1	1	1	1	1	0	Reported key topics and concerns that have been raised through stakeholder engagement?	G4-27 or 102-44
83%	83%	67%	67%	67%	33%	Total	

119	118	117	116	115	114	Evaluation issues / report n°	
Germany	Switzerland	Switzerland	Oman	Romania	Turkey	Country	
Commercial Services	Logistics	Technology Hardware	Mining	Other	Other	Sector	
MNE	Large	Large	Large	Large	MNE	Size	
2018	2018	2017	2018	2017	2017	Year of publication	
2017	2018	2016	2017	2016	2016	Year of reference	
Standards	G4	G4	Standards	G4	G4	Report type	
1	1	0	0	0	0	Hired third-party Verification?	G4-33 or 102-56
0	0	0	0	1	0	Explained the process for defining the report content and the topic/aspect <u>Boundaries?</u>	G4-18 or 102-46
0	1	1	1	1	1	Listed material topics?	G4-19 or 102-47
1	1	1	1	1	1	Provided a list of stakeholder groups engaged by the organization?	G4-24 or 102-40
0	1	1	1	1	1	Reported the basis for the identification and selection of stakeholders with whom to engage?	G4-25 or 102-42
0	0	0	0	0	1	Reported the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group (regularly)	G4-26 or 102-43
0	1	1	1	1	1	Reported key topics and concerns that have been raised through stakeholder engagement?	G4-27 or 102-44
17%	67%	67%	67%	83%	83%	Total	

125	124	123	122	121	120	Evaluation issues / report n°
Thailand	Thailand	Canada	Thailand	Thailand	Germany	Country
Telecommunications	Financial Services	Financial Services	Food and Beverage Products	Aviation	Telecommunications	Sector
Large	Large	Large	MNE	MNE	Large	Size
2017	2017	2018	2018	2018	2018	Year of publication
2016	2016	2017	2017	2017	2017	Year of reference
G4	G4	Standards	G4	G4	Standards	Report type
0	0	1	0	0	1	Hired third-party Verification?
1	0	1	1	0	0	Explained the process for defining the report content and the topic/aspect <u>Boundaries?</u>
1	1	1	1	1	1	Listed material topics?
1	1	1	1	1	1	Provided a list of stakeholder groups engaged by the organization?
1	1	1	1	1	1	Reported the basis for the identification and selection of stakeholders with whom to engage?
0	0	0	0	1	0	Reported the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group (regularly)
1	1	1	1	1	1	Reported key topics and concerns that have been raised through stakeholder engagement?
83%	67%	83%	83%	83%	67%	Total

Materiality

Stakeholder Engagement

131	130	129	128	127	126	Evaluation issues / report n°
Canada	Brazil	Singapore	Philippines	Sri lanka	Turkey	Country
Financial Services	Mining	Real Estate	Financial Services	Financial Services	Aviation	Sector
Large	Large	MNE	Large	Large	Large	Size
2018	2017	2017	2017	2017	2017	Year of publication
2017	2016	2016	2016	2016	2016	Year of reference
Standards	G4	G4	Standards	G4	G4	Report type
1	1	0	1	1	0	Hired third-party Verification?
1	0	0	1	1	1	Explained the process for defining the report content and the topic/aspect <u>Boundaries?</u>
1	1	1	1	1	1	Listed material topics?
1	1	1	0	1	1	Provided a list of stakeholder groups engaged by the organization?
1	1	1	0	1	1	Reported the basis for the identification and selection of stakeholders with whom to engage?
0	0	1	0	0	0	Reported the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group (regularly)
1	0	1	0	1	1	Reported key topics and concerns that have been raised through stakeholder engagement?
83%	50%	83%	33%	83%	83%	Total
						Materiality
						G4-33 or 102-56
						G4-18 or 102-46
						G4-19 or 102-47
						G4-24 or 102-40
						G4-25 or 102-42
						G4-26 or 102-43
						G4-27 or 102-44

137	136	135	134	133	132	Evaluation issues / report n°
Switzerland	Germany	Turkey	Bulgaria	France	Switzerland	Country
Financial Services	Automotive	Telecommunications	Telecommunications	Other	Other	Sector
Large	Large	Large	Large	MNE	MNE	Size
2017	2017	2017	2018	2017	2018	Year of publication
2016	2016	2016	2017	2016	2017	Year of reference
G4	G4	Standards	G4	G4	G4	Report type
0	1	1	0	1	0	Hired third-party Verification?
0	1	1	1	1	0	Explained the process for defining the report content and the topic/aspect <u>Boundaries?</u>
1	1	1	1	1	1	Listed material topics?
1	1	1	1	1	1	Provided a list of stakeholder groups engaged by the organization?
1	1	1	1	1	1	Reported the basis for the identification and selection of stakeholders with whom to engage?
0	0	0	0	1	1	Reported the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group (regularly)
1	1	0	1	1	1	Reported key topics and concerns that have been raised through stakeholder engagement?
67%	83%	67%	83%	100%	83%	Total
						Materiality
						G4-33 or 102-56
						G4-18 or 102-46
						G4-19 or 102-47
						G4-24 or 102-40
						G4-25 or 102-42
						G4-26 or 102-43
						G4-27 or 102-44

140	139	138	Evaluation issues / report n°	
Germany	Germany	India	Country	
Automotive	Other	Financial Services	Sector	
MNE	MNE	Large	Size	
2017	2018	2018	Year of publication	
2016	2017	2017	Year of reference	
G4	Standards	Standards	Report type	
0	0	1	Hired third-party Verification?	G4-33 or 102-56
1	1	0	Explained the process for defining the report content and the topic/aspect <u>Boundaries?</u>	G4-18 or 102-46
1	1	1	Listed material topics?	G4-19 or 102-47
1	1	1	Provided a list of stakeholder groups engaged by the organization?	G4-24 or 102-40
1	1	1	Reported the basis for the identification and selection of stakeholders with whom to engage?	G4-25 or 102-42
1	1	0	Reported the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group (regularly)	G4-26 or 102-43
1	1	1	Reported key topics and concerns that have been raised through stakeholder engagement?	G4-27 or 102-44
100%	100%	67%	Total	

Stakeholder  
Engagement

Materiality

## ANNEX 3

Table 8: Stakeholder groups

7	6	5	4	3	2	1	Stakeholder Groups
0	1	0	0	0	0	0	Academic institutions
1	1	0	0	1	0	1	Business Partners
0	0	0	0	0	0	0	Certification bodies
0	0	0	0	0	0	0	Charitable organizations
0	0	1	0	0	0	0	Civil Society
1	1	1	1	1	1	1	Communities
0	1	0	0	0	0	1	Competitor
0	0	0	0	0	0	0	Consumer protection organizations
0	0	0	0	0	1	0	Contractors
0	0	0	0	0	0	1	Customer / Clients (dealer/ distributors)
1	1	1	1	1	0	1	Customer / Clients (user)
0	0	0	0	0	0	0	Distributors
1	1	1	1	1	1	1	Employee / team members
0	0	0	0	0	1	0	Financial institutions
1	1	1	0	1	1	1	Governments
0	0	0	0	0	0	0	Indigenous Peoples
0	0	0	0	0	0	0	Influential Groups
0	0	0	1	0	0	0	International / Regional organizations
0	1	1	1	0	0	0	Investors
0	0	0	0	0	0	0	Lenders of capital
0	0	0	0	0	0	0	Management (senior and non-senior)
0	1	1	1	1	0	1	Media / Press
0	0	0	0	0	0	0	National and international advisory boards
0	0	0	0	0	0	0	Neighbours
0	1	0	1	0	0	1	NGOs
0	0	0	0	0	0	0	Non profit organisations
0	0	0	1	0	0	0	Others (analysts, guests, environment, advertisers)
0	1	0	0	0	1	0	Public agencies / organizations
0	0	0	1	0	0	0	Regulators
0	0	0	0	0	0	0	Retailers
0	0	0	0	0	0	0	Sales representatives
0	0	0	1	1	1	1	Shareholders
0	0	0	0	0	0	0	Social Partners
1	1	1	1	0	1	0	Suppliers / Contractors
0	0	0	0	0	0	0	Tenants
0	0	1	0	0	0	0	Trade Unions

16	15	14	13	12	11	10	9	8	Stakeholder Groups
0	0	0	0	0	0	0	0	0	Academic institutions
0	1	0	0	0	0	1	1	1	Business Partners
0	0	0	0	0	0	0	0	0	Certification bodies
0	0	0	0	0	0	0	0	0	Charitable organizations
0	0	0	1	0	0	0	0	0	Civil Society
1	1	1	1	1	1	1	1	1	Communities
0	0	0	1	0	0	1	0	0	Competitor
0	0	0	0	0	0	0	0	0	Consumer protection organizations
0	0	0	0	0	0	0	0	0	Contractors
1	0	0	0	0	0	0	0	0	Customer / Clients (dealer/ distributors)
1	1	1	0	1	1	1	0	0	Customer / Clients (user)
0	0	0	0	0	0	0	0	0	Distributors
1	0	1	1	1	1	1	0	1	Employee / team members
0	0	0	0	0	0	0	0	1	Financial institutions
0	1	1	0	1	1	0	1	1	Governments
0	0	0	0	0	0	0	0	0	Indigenous Peoples
0	0	0	0	0	0	0	0	0	Influential Groups
0	0	0	0	0	0	0	0	0	International / Regional organizations
0	0	0	0	0	0	0	0	1	Investors
0	0	0	0	0	0	0	0	0	Lenders of capital
0	0	0	0	0	0	0	0	0	Management (senior and non-senior)
0	0	1	0	0	0	0	0	1	Media /Press
0	0	0	0	0	0	0	0	0	National and international advisory boards
0	0	0	0	0	0	0	0	0	Neighbours
0	0	0	0	1	1	0	0	1	NGOs
0	0	0	0	0	0	0	0	0	Non profit organisations
0	0	0	1	0	0	1	1	0	Others (analysts, guests, environment, advertisers)
0	0	0	0	0	0	0	0	0	Public agencies / organizations
0	0	1	1	0	0	0	0	1	Regulators
0	0	0	0	0	0	0	0	0	Retailers
0	0	0	0	0	0	0	0	0	Sales representatives
1	0	1	1	0	1	1	1	1	Shareholders
0	0	0	0	0	0	0	0	0	Social Partners
1	1	0	1	1	1	0	0	1	Suppliers / Contractors
0	0	0	0	0	0	0	0	0	Tenants
0	0	0	0	0	0	0	1	0	Trade Unions







43	42	41	40	39	38	37	36	35	Stakeholder Groups
0	1	0	0	0	0	0	1	1	Academic institutions
1	1	1	0	0	0	0	0	0	Business Partners
0	0	0	0	0	0	0	0	0	Certification bodies
0	0	0	0	0	0	0	0	0	Charitable organizations
1	0	0	0	1	0	0	1	0	Civil Society
1	0	0	0	1	0	0	1	1	Communities
0	0	0	0	0	0	1	1	0	Competitor
0	0	0	0	0	0	0	0	0	Consumer protection organizations
0	0	0	0	0	0	0	0	0	Contractors
1	1	1	0	0	1	0	0	0	Customer / Clients (dealer/ distributors)
1	0	0	0	0	0	0	1	1	Customer / Clients (user)
0	0	0	0	0	0	0	0	0	Distributors
1	1	1	1	1	1	1	1	1	Employee / team members
0	0	0	0	0	0	1	1	0	Financial institutions
1	0	1	1	0	1	1	1	1	Governments
0	0	0	0	0	0	0	0	0	Indigenous Peoples
0	0	0	0	0	0	0	0	0	Influential Groups
0	0	0	0	0	0	0	0	0	International / Regional organizations
0	1	1	1	0	1	0	1	1	Investors
0	0	0	0	0	0	0	0	1	Lenders of capital
0	0	0	0	0	0	1	0	0	Management (senior and non-senior)
0	1	0	1	1	1	0	1	1	Media / Press
0	0	0	0	0	0	0	0	0	National and international advisory boards
0	0	0	1	0	1	0	0	0	Neighbours
0	1	0	0	0	1	1	1	1	NGOs
0	0	0	0	0	0	0	0	0	Non profit organisations
0	0	0	0	0	0	0	0	0	Others (analysts, guests, environment, advertisers)
0	0	0	0	0	0	0	0	1	Public agencies / organizations
0	0	0	0	1	0	0	0	1	Regulators
0	0	0	0	1	0	0	0	0	Retailers
0	0	0	0	0	0	0	0	0	Sales representatives
0	0	0	0	0	1	0	1	1	Shareholders
0	0	1	0	0	0	0	0	0	Social Partners
0	0	0	1	1	1	1	1	1	Suppliers / Contractors
0	0	0	0	0	0	1	0	0	Tenants
0	0	0	1	0	1	1	0	0	Trade Unions

52	51	50	49	48	47	46	45	44	Stakeholder Groups
1	0	0	0	0	0	1	0	1	Academic institutions
1	1	1	0	0	1	1	0	0	Business Partners
0	0	0	0	0	0	0	0	0	Certification bodies
0	0	0	0	0	0	0	0	0	Charitable organizations
0	0	0	1	1	0	0	0	0	Civil Society
0	1	1	1	1	1	1	0	1	Communities
0	0	0	0	0	1	0	0	1	Competitor
0	0	0	0	0	0	0	0	0	Consumer protection organizations
0	0	0	0	0	0	0	0	0	Contractors
0	0	0	0	0	0	0	0	0	Customer / Clients (dealer/ distributors)
0	1	1	1	1	1	0	1	1	Customer / Clients (user)
0	0	0	0	0	0	0	0	0	Distributors
1	1	1	1	1	1	1	1	1	Employee / team members
0	0	0	1	1	0	1	1	0	Financial institutions
0	1	0	0	0	1	1	0	1	Governments
0	0	0	0	0	0	0	0	0	Indigenous Peoples
0	0	0	0	0	0	0	0	0	Influential Groups
0	0	0	0	0	0	0	0	0	International / Regional organizations
0	0	0	0	0	0	0	0	0	Investors
0	0	0	0	0	0	0	0	0	Lenders of capital
0	0	0	0	0	0	0	0	0	Management (senior and non-senior)
1	0	0	1	1	0	1	0	1	Media /Press
0	0	0	0	0	1	1	0	0	National and international advisory boards
0	0	0	0	0	0	0	0	1	Neighbours
1	0	1	0	0	0	1	0	0	NGOs
0	0	0	0	0	0	0	0	0	Non profit organisations
0	0	0	0	0	0	0	0	0	Others (analysts, guests, environment, advertisers)
0	0	1	0	0	0	0	0	0	Public agencies / organizations
0	0	0	0	0	0	0	0	0	Regulators
0	0	0	0	0	0	0	0	0	Retailers
1	0	1	0	0	0	0	0	0	Sales representatives
0	1	1	0	0	0	0	0	0	Shareholders
0	0	0	0	0	0	0	0	0	Social Partners
0	1	1	1	1	1	1	1	1	Suppliers / Contractors
0	0	0	0	0	0	0	0	0	Tenants
0	0	0	0	0	0	0	0	0	Trade Unions

61	60	59	58	57	56	55	54	53	Stakeholder Groups
1	0	0	0	0	0	1	0	0	Academic institutions
0	0	1	0	0	1	0	0	1	Business Partners
0	0	0	0	0	0	0	0	0	Certification bodies
0	0	0	0	0	0	0	0	0	Charitable organizations
0	0	0	0	0	0	0	1	0	Civil Society
1	1	1	0	1	1	1	1	0	Communities
1	0	0	0	0	0	1	0	0	Competitor
0	0	0	0	0	0	0	0	0	Consumer protection organizations
0	0	0	0	0	0	0	0	0	Contractors
0	0	0	0	0	0	0	0	1	Customer / Clients (dealer/ distributors)
1	1	0	1	0	1	1	1	1	Customer / Clients (user)
0	0	0	0	0	0	0	0	0	Distributors
1	1	1	1	1	1	1	1	1	Employee / team members
0	0	0	1	1	0	0	1	0	Financial institutions
1	1	1	0	1	1	1	0	0	Governments
0	0	0	0	1	0	0	0	0	Indigenous Peoples
0	0	0	0	0	0	0	0	0	Influential Groups
0	0	0	0	0	0	0	0	0	International / Regional organizations
0	0	0	0	0	0	0	0	1	Investors
0	0	0	0	0	0	1	0	0	Lenders of capital
0	0	0	0	0	0	0	0	0	Management (senior and non-senior)
0	1	1	0	1	0	1	0	1	Media / Press
0	0	0	0	0	0	0	0	0	National and international advisory boards
0	0	0	0	0	0	0	0	1	Neighbours
0	0	0	1	1	1	1	0	1	NGOs
0	1	0	0	0	0	0	0	0	Non profit organisations
0	0	0	0	0	0	0	0	0	Others (analysts, guests, environment, advertisers)
0	0	0	1	0	0	1	0	1	Public agencies / organizations
1	0	0	0	0	0	1	0	0	Regulators
0	0	0	0	0	0	0	0	0	Retailers
0	1	0	0	0	0	0	0	0	Sales representatives
0	0	1	0	1	1	1	0	1	Shareholders
0	1	0	0	0	0	0	0	0	Social Partners
1	0	0	0	1	1	1	0	0	Suppliers / Contractors
0	0	0	0	0	0	0	0	0	Tenants
0	0	0	0	1	1	0	0	0	Trade Unions

70	69	68	67	66	65	64	63	62	Stakeholder Groups
1	0	0	1	1	0	0	0	0	Academic institutions
0	1	0	0	0	0	0	0	0	Business Partners
0	0	0	0	0	0	0	0	0	Certification bodies
0	0	0	0	0	0	0	0	0	Charitable organizations
0	0	0	0	0	0	0	0	0	Civil Society
1	0	1	1	1	1	1	1	1	Communities
0	0	0	0	0	0	0	0	0	Competitor
0	0	0	0	0	0	0	0	0	Consumer protection organizations
0	0	0	0	0	0	0	0	0	Contractors
1	0	0	0	0	0	0	0	1	Customer / Clients (dealer/ distributors)
1	1	1	1	1	1	1	1	1	Customer / Clients (user)
0	0	0	0	0	0	0	0	0	Distributors
1	0	1	1	1	1	1	1	1	Employee / team members
0	0	0	0	0	0	1	0	0	Financial institutions
0	0	1	1	1	0	1	1	0	Governments
0	0	0	0	1	0	0	0	0	Indigenous Peoples
0	0	0	0	0	0	0	0	0	Influential Groups
0	0	0	0	0	0	1	0	0	International / Regional organizations
0	1	1	0	1	0	0	1	1	Investors
0	0	0	0	0	0	0	0	0	Lenders of capital
0	0	0	0	0	0	0	0	0	Management (senior and non-senior)
0	0	0	1	0	0	1	0	1	Media / Press
0	0	0	0	0	0	0	0	0	National and international advisory boards
0	0	0	0	0	0	0	0	1	Neighbours
1	0	1	1	1	1	1	0	1	NGOs
0	1	0	0	0	0	0	0	1	Non profit organisations
0	0	0	0	0	0	0	0	0	Others (analysts, guests, environment, advertisers)
1	0	0	0	0	0	0	0	0	Public agencies / organizations
0	0	0	0	0	0	0	1	0	Regulators
0	0	0	0	0	0	0	0	0	Retailers
0	0	0	0	0	0	0	0	0	Sales representatives
1	0	0	1	0	1	1	0	1	Shareholders
0	0	0	0	0	0	0	0	0	Social Partners
1	0	1	1	1	1	1	1	1	Suppliers / Contractors
0	0	0	0	0	0	0	0	0	Tenants
0	0	0	1	1	0	0	0	1	Trade Unions

79	78	77	76	75	74	73	72	71	Stakeholder Groups
1	0	1	0	1	0	0	0	1	Academic institutions
0	1	1	1	1	1	1	1	0	Business Partners
0	0	0	0	0	0	0	0	0	Certification bodies
0	0	0	0	0	0	0	0	0	Charitable organizations
1	0	0	0	0	0	0	0	0	Civil Society
1	1	1	0	1	1	1	1	1	Communities
0	0	0	0	0	1	0	0	0	Competitor
0	0	0	0	0	0	0	0	0	Consumer protection organizations
0	0	0	0	0	0	0	0	0	Contractors
1	0	0	0	0	0	0	0	1	Customer / Clients (dealer/ distributors)
1	1	1	1	1	1	1	1	1	Customer / Clients (user)
0	0	0	0	1	0	0	0	0	Distributors
1	1	1	1	1	1	1	1	1	Employee / team members
0	0	0	0	0	0	0	0	1	Financial institutions
0	0	0	1	1	0	1	1	1	Governments
0	0	1	0	0	0	0	0	0	Indigenous Peoples
0	0	0	0	0	0	0	0	0	Influential Groups
1	0	0	1	0	0	0	0	0	International / Regional organizations
1	0	0	0	1	1	1	0	0	Investors
0	0	0	0	0	0	0	0	0	Lenders of capital
0	0	0	0	0	0	0	0	0	Management (senior and non-senior)
1	0	0	0	1	0	0	0	0	Media / Press
0	0	0	0	0	0	0	0	0	National and international advisory boards
0	0	0	0	0	0	0	0	0	Neighbours
1	1	0	1	1	0	1	0	1	NGOs
0	0	1	0	0	0	0	0	0	Non profit organisations
0	0	0	0	0	0	0	0	0	Others (analysts, guests, environment, advertisers)
1	0	0	0	0	0	1	0	0	Public agencies / organizations
0	0	0	0	0	0	0	0	0	Regulators
0	0	0	0	0	0	0	0	0	Retailers
0	0	0	0	0	0	0	0	0	Sales representatives
0	1	0	1	0	1	1	0	0	Shareholders
0	0	0	0	0	0	0	0	0	Social Partners
1	0	1	1	1	0	1	1	1	Suppliers / Contractors
0	0	0	0	0	0	0	0	0	Tenants
0	0	0	0	0	0	1	0	0	Trade Unions





97	96	95	94	93	92	91	90	89	Stakeholder Groups
0	1	1	0	1	0	0	1	0	Academic institutions
1	0	1	0	1	0	1	1	1	Business Partners
0	0	0	0	0	0	0	0	0	Certification bodies
0	0	0	0	0	0	0	0	0	Charitable organizations
1	0	0	0	0	0	0	0	0	Civil Society
1	0	1	1	1	1	0	1	1	Communities
0	0	0	0	0	0	0	0	0	Competitor
0	0	0	0	0	0	0	0	0	Consumer protection organizations
0	0	0	1	0	0	0	0	0	Contractors
0	0	1	0	0	0	0	0	0	Customer / Clients (dealer/ distributors)
1	1	1	1	1	1	1	1	0	Customer / Clients (user)
0	0	0	0	0	0	0	0	0	Distributors
1	1	1	1	1	1	1	1	1	Employee / team members
0	0	0	0	0	0	0	0	0	Financial institutions
0	0	0	0	1	0	0	0	0	Governments
0	0	0	0	0	0	0	0	1	Indigenous Peoples
0	0	0	0	0	0	0	0	0	Influential Groups
0	0	0	0	0	0	0	0	0	International / Regional organizations
0	0	1	1	0	1	0	0	0	Investors
0	0	0	0	0	0	0	0	0	Lenders of capital
0	0	0	0	0	1	0	0	0	Management (senior and non-senior)
0	1	1	0	1	0	0	1	1	Media / Press
0	0	0	0	0	0	0	0	0	National and international advisory boards
0	0	0	0	0	0	0	0	0	Neighbours
0	1	1	0	1	1	0	0	0	NGOs
0	0	0	0	0	1	0	0	1	Non profit organisations
0	0	0	0	0	0	1	0	0	Others (analysts, guests, environment, advertisers)
0	0	1	0	0	0	0	1	0	Public agencies / organizations
0	1	0	1	0	0	0	0	1	Regulators
0	0	0	0	0	0	0	0	0	Retailers
0	0	0	0	0	0	0	0	0	Sales representatives
1	0	0	1	1	1	0	0	1	Shareholders
0	0	0	0	0	0	0	0	0	Social Partners
1	1	1	1	0	1	1	1	1	Suppliers / Contractors
0	0	0	0	0	0	0	0	0	Tenants
0	0	0	0	1	0	0	1	0	Trade Unions



115	114	113	112	111	110	109	108	107	Stakeholder Groups
1	0	0	0	0	0	1	1	0	Academic institutions
1	0	0	0	0	1	0	1	1	Business Partners
0	0	0	0	0	0	0	0	0	Certification bodies
0	0	0	0	0	0	0	0	0	Charitable organizations
0	0	0	0	1	0	0	0	0	Civil Society
0	1	1	1	1	1	0	0	1	Communities
0	0	0	0	0	0	0	0	0	Competitor
0	0	0	0	0	0	0	0	0	Consumer protection organizations
0	0	0	0	0	0	0	0	0	Contractors
0	0	0	0	0	0	0	1	0	Customer / Clients (dealer/ distributors)
1	1	1	1	1	1	1	0	1	Customer / Clients (user)
0	0	0	0	0	0	0	0	0	Distributors
1	1	1	1	1	1	1	1	1	Employee / team members
0	0	0	0	0	0	0	0	1	Financial institutions
1	1	1	1	0	0	1	0	1	Governments
0	0	0	0	0	0	0	0	0	Indigenous Peoples
0	0	0	0	0	0	0	0	0	Influential Groups
0	0	0	0	0	0	0	0	0	International / Regional organizations
0	1	1	1	1	0	1	0	0	Investors
0	0	0	0	0	0	0	0	0	Lenders of capital
1	1	1	0	1	0	0	0	0	Management (senior and non-senior)
1	1	0	1	1	1	1	1	0	Media /Press
0	0	0	0	0	0	0	1	0	National and international advisory boards
0	0	0	0	0	0	1	0	0	Neighbours
1	1	1	1	1	0	1	1	0	NGOs
0	0	0	0	0	0	0	0	0	Non profit organisations
0	0	0	0	0	0	0	0	0	Others (analysts, guests, environment, advertisers)
0	1	1	0	1	0	1	1	0	Public agencies / organizations
0	0	0	0	0	1	0	1	1	Regulators
0	0	0	0	0	0	0	0	0	Retailers
0	0	0	0	0	0	0	0	0	Sales representatives
1	1	1	0	1	1	0	1	1	Shareholders
0	0	0	0	0	0	0	0	0	Social Partners
1	1	1	1	1	1	1	1	1	Suppliers / Contractors
0	0	0	0	0	0	0	0	0	Tenants
0	0	0	0	0	0	1	1	0	Trade Unions

124	123	122	121	120	119	118	117	116	Stakeholder Groups
0	0	1	0	1	0	0	0	0	Academic institutions
1	0	0	1	1	0	1	0	1	Business Partners
0	0	0	0	0	0	0	0	0	Certification bodies
0	0	0	0	0	0	0	0	0	Charitable organizations
1	0	0	0	0	0	0	0	0	Civil Society
1	1	0	1	0	0	0	1	0	Communities
0	0	0	1	0	0	1	0	0	Competitor
0	0	0	0	0	0	1	0	0	Consumer protection organizations
0	0	0	0	0	0	0	0	0	Contractors
0	0	0	0	0	0	0	0	0	Customer / Clients (dealer/ distributors)
0	1	1	1	1	0	1	1	0	Customer / Clients (user)
0	0	0	0	0	0	0	0	0	Distributors
1	1	1	1	1	1	1	0	0	Employee / team members
0	0	0	1	0	1	0	0	1	Financial institutions
0	0	0	0	0	1	1	0	1	Governments
0	0	0	0	0	0	0	0	0	Indigenous Peoples
0	0	0	0	0	0	0	0	1	Influential Groups
0	0	1	0	0	0	0	0	0	International / Regional organizations
1	0	1	0	0	0	0	1	0	Investors
0	0	0	0	0	0	0	0	0	Lenders of capital
0	0	1	0	0	0	0	0	0	Management (senior and non-senior)
0	0	1	0	0	0	0	0	1	Media / Press
0	0	0	0	0	0	0	0	0	National and international advisory boards
0	0	0	0	0	0	0	0	0	Neighbours
0	0	1	0	1	0	0	0	0	NGOs
0	0	0	0	0	0	0	0	0	Non profit organisations
0	0	1	0	0	0	0	0	0	Others (analysts, guests, environment, advertisers)
1	0	0	0	1	0	0	0	0	Public agencies / organizations
0	0	1	0	1	0	1	0	0	Regulators
0	0	0	0	0	0	0	0	0	Retailers
0	0	0	0	0	0	0	0	0	Sales representatives
0	1	1	1	1	1	0	0	1	Shareholders
0	1	0	0	0	0	0	0	1	Social Partners
0	0	1	0	1	1	0	0	0	Suppliers / Contractors
0	0	0	0	0	0	0	0	0	Tenants
0	0	0	0	0	0	1	0	1	Trade Unions

133	132	131	130	129	128	127	126	125	Stakeholder Groups
1	0	0	0	0	0	0	1	0	Academic institutions
1	0	0	0	1	0	1	0	0	Business Partners
0	0	0	0	0	0	0	1	0	Certification bodies
0	0	0	0	0	0	0	0	0	Charitable organizations
1	0	0	1	0	0	0	0	1	Civil Society
1	1	1	1	1	1	1	1	1	Communities
0	0	0	0	1	0	0	0	0	Competitor
0	0	0	0	0	0	0	0	0	Consumer protection organizations
0	0	0	0	0	0	0	0	0	Contractors
0	0	0	1	0	0	0	0	0	Customer / Clients (dealer/ distributors)
0	1	1	0	1	1	1	1	1	Customer / Clients (user)
0	0	0	0	0	0	0	0	0	Distributors
1	1	1	0	0	1	0	1	1	Employee / team members
1	0	0	0	0	1	0	1	1	Financial institutions
1	1	0	1	0	0	1	1	1	Governments
0	0	0	0	0	0	0	0	0	Indigenous Peoples
0	0	0	0	0	0	0	0	0	Influential Groups
0	0	0	0	0	0	0	0	0	International / Regional organizations
1	0	1	1	1	1	0	1	1	Investors
0	0	0	0	0	0	0	0	0	Lenders of capital
0	0	0	0	0	0	0	0	0	Management (senior and non-senior)
1	0	0	1	0	0	0	0	0	Media /Press
0	0	0	0	0	0	0	0	0	National and international advisory boards
0	1	0	0	0	0	0	0	0	Neighbours
1	1	0	0	0	0	0	1	1	NGOs
0	0	0	0	0	0	0	0	0	Non profit organisations
1	0	0	0	0	0	0	0	0	Others (analysts, guests, environment, advertisers)
0	0	0	0	0	0	0	0	0	Public agencies / organizations
0	0	0	0	1	1	1	1	1	Regulators
0	0	0	0	0	0	0	0	0	Retailers
0	0	0	0	0	0	0	0	0	Sales representatives
0	0	0	1	0	1	1	1	1	Shareholders
0	0	0	0	0	0	0	0	0	Social Partners
1	1	1	1	0	1	1	0	1	Suppliers / Contractors
0	0	0	0	0	0	0	0	0	Tenants
0	1	0	0	0	0	0	1	0	Trade Unions

	140	139	138	137	136	135	134	Stakeholder Groups
41	1	1	1	0	1	1	0	Academic institutions
66	1	1	1	0	1	0	0	Business Partners
1	0	0	0	0	0	0	0	Certification bodies
1	0	0	0	0	1	0	0	Charitable organizations
24	0	0	0	1	1	1	0	Civil Society
112	1	0	1	1	1	1	1	Communities
16	0	0	0	0	1	0	1	Competitor
1	0	0	0	0	0	0	0	Consumer protection organizations
2	0	0	0	0	0	0	0	Contractors
19	1	0	0	0	0	0	0	Customer / Clients (dealer/ distributors)
112	1	1	0	1	0	1	1	Customer / Clients (user)
1	0	0	0	0	0	0	0	Distributors
130	1	1	1	1	0	1	1	Employee / team members
27	0	1	0	0	0	0	0	Financial institutions
78	1	1	0	0	1	1	0	Governments
4	0	0	0	0	0	0	0	Indigenous Peoples
1	0	0	0	0	0	0	0	Influential Groups
5	0	0	0	0	0	0	0	International / Regional organizations
57	0	1	1	0	1	0	1	Investors
3	0	0	0	0	0	0	0	Lenders of capital
11	0	0	0	0	0	0	0	Management (senior and non-senior)
56	0	1	1	0	0	1	0	Media / Press
5	0	0	0	0	0	0	0	National and international advisory boards
9	0	0	0	0	0	0	0	Neighbours
61	0	0	0	0	1	1	1	NGOs
7	0	0	0	0	0	0	0	Non profit organisations
11	1	0	0	0	0	0	0	Others (analysts, guests, environment, advertisers)
25	0	0	0	0	1	0	1	Public agencies / organizations
37	0	0	1	0	0	1	0	Regulators
2	0	0	1	0	0	0	0	Retailers
3	0	0	0	0	0	0	0	Sales representatives
76	0	0	1	1	0	0	1	Shareholders
4	0	0	0	0	0	0	0	Social Partners
100	1	1	0	0	0	1	1	Suppliers / Contractors
2	0	0	0	0	0	0	0	Tenants
21	0	1	0	0	1	0	0	Trade Unions

## ANNEX 4

Table 9: Engagement techniques

8	7	6	5	4	3	2	1	Evaluation issues
0	0	0	0	0	1	0	0	Annual excellence awards
0	0	1	1	0	0	0	0	Audits
0	1	1	0	1	1	1	1	Call centres
0	0	1	0	0	0	0	0	Chats
0	0	0	0	0	0	0	0	Community panels
0	0	0	0	0	0	0	1	Complaints and claims channels
0	0	0	0	0	0	0	0	Dialogues
0	0	1	0	1	0	0	0	Emails
1	0	0	0	0	1	0	1	Events, seminars, conferences, etc .
0	0	0	0	0	1	0	0	Fairs
0	0	0	0	0	0	0	0	Fax
0	0	0	0	1	0	1	1	Focus Groups discussions
0	1	1	0	0	0	0	1	General committees
0	0	0	0	0	0	0	1	Informative reports
0	0	0	0	0	0	0	0	Interaction with academic institutions
0	1	0	1	0	0	0	0	Interviews
0	0	0	0	0	0	0	0	Labor management councils
0	0	1	1	0	0	0	0	Letters
0	0	0	0	0	0	0	1	Media/Press events
1	0	0	1	1	1	1	1	Meetings with management or staff
0	0	0	0	0	0	0	0	Memorandum of understanding
0	0	0	0	0	0	0	0	Participation in government networks
0	0	0	0	0	0	0	0	Press/ internal releases
0	1	0	0	0	0	0	1	Sharing of expertise
0	0	0	0	1	1	1	1	Social media
0	0	0	0	1	0	0	1	Specialized websites
0	1	0	0	1	1	0	1	Surveys
0	0	0	0	0	0	0	1	Sustainability awareness and training
0	0	1	1	0	0	0	1	Tour programs
0	0	0	0	0	0	0	0	Union consultations
0	0	0	0	0	0	0	0	Videos
0	0	0	0	0	0	0	1	Workplace health and safety
0	1	0	0	1	0	0	1	Workshops

17	16	15	14	13	12	11	10	9	Evaluation issues
0	0	0	0	1	0	1	0	0	Annual excellence awards
0	1	0	0	0	0	1	0	0	Audits
1	1	1	0	0	0	0	0	1	Call centres
0	1	1	0	1	0	0	1	1	Chats
0	0	0	0	0	0	0	0	0	Community panels
1	0	0	0	0	0	1	0	0	Complaints and claims channels
0	0	1	0	0	0	0	0	1	Dialogues
1	0	0	0	0	0	1	0	0	Emails
1	0	1	1	0	0	0	0	0	Events, seminars, conferences, etc.
0	0	0	0	0	0	0	0	0	Fairs
0	0	0	0	0	0	0	0	0	Fax
0	0	0	0	1	0	0	0	0	Focus Groups discussions
0	1	0	0	0	0	1	0	1	General committees
0	0	0	0	0	0	0	0	0	Informative reports
0	0	0	0	0	0	0	0	0	Interaction with academic institutions
0	1	1	0	0	0	0	0	0	Interviews
0	0	0	0	0	0	0	0	0	Labor management councils
0	0	0	0	0	0	0	0	0	Letters
0	1	0	1	0	0	0	0	0	Media/Press events
0	1	1	1	0	0	1	1	1	Meetings with management or staff
0	0	0	0	0	0	0	0	0	Memorandum of understanding
0	0	0	0	0	0	1	0	0	Participation in government networks
1	0	0	0	0	0	1	0	0	Press/ internal releases
0	0	0	0	0	0	0	0	0	Sharing of expertise
0	0	0	0	0	0	1	0	0	Social media
1	0	0	0	0	0	1	0	0	Specialized websites
1	1	0	1	1	1	1	1	0	Surveys
1	0	0	0	0	0	0	0	0	Sustainability awareness and training
0	0	0	1	1	0	0	0	1	Tour programs
0	0	0	0	1	0	0	0	0	Union consultations
1	0	0	0	0	0	0	0	0	Videos
0	0	0	0	0	0	0	0	0	Workplace health and safety
1	0	1	0	0	0	0	1	0	Workshops







44	43	42	41	40	39	38	37	36	Evaluation issues
0	0	0	0	0	0	0	0	0	Annual excellence awards
0	0	0	0	0	0	0	0	0	Audits
1	1	0	0	0	0	0	0	0	Call centres
1	1	0	0	0	0	0	0	0	Chats
0	0	0	0	0	0	0	0	0	Community panels
0	0	0	0	0	0	0	0	0	Complaints and claims channels
1	1	0	0	0	1	1	0	1	Dialogues
1	1	0	0	0	0	0	0	0	Emails
1	0	0	0	0	0	0	0	0	Events, seminars, conferences, etc.
0	0	0	0	0	0	0	0	0	Fairs
0	0	0	0	0	0	0	0	0	Fax
0	0	0	0	0	0	0	0	0	Focus Groups discussions
0	0	0	0	0	0	0	0	0	General committees
0	0	0	0	0	0	0	0	0	Informative reports
0	0	0	0	0	0	0	0	0	Interaction with academic institutions
0	0	0	0	0	0	0	1	0	Interviews
0	0	0	0	0	0	0	0	0	Labor management councils
0	0	0	0	0	0	0	0	0	Letters
0	0	0	0	0	0	0	0	1	Media/Press events
0	1	0	0	1	0	0	1	1	Meetings with management or staff
0	0	0	0	0	0	0	0	0	Memorandum of understanding
0	0	0	0	0	0	0	0	0	Participation in government networks
0	0	0	0	0	0	0	0	0	Press/ internal releases
0	0	0	0	0	0	0	0	0	Sharing of expertise
0	1	1	0	0	0	0	0	0	Social media
0	0	0	0	0	0	0	0	0	Specialized websites
1	0	1	0	1	1	1	1	1	Surveys
0	0	0	0	0	0	0	0	0	Sustainability awareness and training
1	0	0	0	0	0	1	0	0	Tour programs
0	0	0	0	0	0	1	1	0	Union consultations
0	1	0	0	0	0	0	0	0	Videos
0	0	0	0	0	0	0	0	0	Workplace health and safety
0	0	0	0	0	0	1	0	0	Workshops

53	52	51	50	49	48	47	46	45	Evaluation issues
0	1	0	0	0	0	0	0	0	Annual excellence awards
0	0	0	0	0	0	0	1	0	Audits
0	0	1	1	0	0	1	1	0	Call centres
0	1	1	1	0	0	1	1	0	Chats
0	0	0	0	0	0	0	0	0	Community panels
0	0	0	0	0	0	0	0	0	Complaints and claims channels
1	1	0	0	1	1	0	0	0	Dialogues
0	0	0	0	0	0	0	0	0	Emails
0	0	0	0	0	0	1	1	0	Events, seminars, conferences, etc.
0	0	0	0	0	0	0	0	0	Fairs
0	0	0	0	0	0	0	0	0	Fax
0	0	0	0	0	0	0	0	0	Focus Groups discussions
0	0	0	0	0	0	0	0	0	General committees
0	0	0	0	0	0	0	0	0	Informative reports
0	0	0	0	0	0	0	0	0	Interaction with academic institutions
1	0	1	0	0	0	0	0	0	Interviews
0	0	0	0	0	0	0	0	0	Labor management councils
0	0	1	1	0	0	1	1	0	Letters
0	0	0	0	0	0	0	0	0	Media/Press events
0	1	1	1	0	0	1	1	0	Meetings with management or staff
0	0	0	0	0	0	0	0	0	Memorandum of understanding
0	0	0	0	0	0	0	0	0	Participation in government networks
0	0	0	0	0	0	0	0	0	Press/ internal releases
0	0	0	0	0	0	0	0	0	Sharing of expertise
0	0	0	0	0	0	0	0	0	Social media
0	0	0	0	0	0	0	0	0	Specialized websites
0	0	1	1	0	0	0	0	0	Surveys
0	0	0	0	0	0	0	0	0	Sustainability awareness and training
0	0	0	0	0	1	1	1	0	Tour programs
0	0	0	0	0	0	0	0	0	Union consultations
0	0	0	0	0	0	0	0	0	Videos
0	0	0	0	0	0	0	0	0	Workplace health and safety
0	0	1	1	0	0	1	1	0	Workshops

62	61	60	59	58	57	56	55	54	Evaluation issues
0	0	0	0	0	0	0	0	0	Annual excellence awards
1	0	0	0	0	0	0	0	0	Audits
0	0	0	1	1	0	1	1	0	Call centres
0	0	0	0	0	0	1	0	0	Chats
1	0	0	0	0	0	0	0	0	Community panels
0	0	0	0	0	0	0	0	0	Complaints and claims channels
0	0	0	0	0	0	0	1	0	Dialogues
0	0	0	1	0	0	0	0	0	Emails
0	0	0	0	0	0	0	0	0	Events, seminars, conferences, etc .
0	0	0	0	0	0	0	0	0	Fairs
0	0	0	0	0	0	0	0	0	Fax
0	0	0	0	1	1	0	0	0	Focus Groups discussions
0	0	0	0	0	0	0	0	0	General committees
0	0	0	0	0	0	0	0	0	Informative reports
0	0	0	0	0	0	0	0	0	Interaction with academic institutions
1	1	1	0	0	0	0	0	0	Interviews
0	0	0	0	0	0	0	0	0	Labor management councils
0	0	0	1	0	0	1	1	0	Letters
0	0	0	0	0	0	0	0	0	Media/Press events
1	0	1	1	0	0	0	1	0	Meetings with management or staff
0	0	0	0	0	0	0	0	0	Memorandum of understanding
0	0	0	0	0	0	0	0	0	Participation in government networks
0	0	1	0	0	0	0	0	0	Press/ internal releases
0	0	0	0	0	0	0	0	0	Sharing of expertise
0	0	0	1	0	0	0	0	0	Social media
0	0	0	1	0	0	0	0	0	Specialized websites
0	0	0	0	0	1	1	1	1	Surveys
0	0	0	0	0	0	0	0	0	Sustainability awareness and training
1	1	1	0	0	0	0	0	0	Tour programs
0	0	0	0	0	0	0	1	0	Union consultations
0	0	1	0	0	0	0	0	0	Videos
0	0	0	0	0	0	1	0	0	Workplace health and safety
0	0	0	0	0	0	1	1	0	Workshops





89	88	87	86	85	84	83	82	81	Evaluation issues
0	0	0	0	0	0	0	0	0	Annual excellence awards
0	0	0	0	0	0	0	0	0	Audits
0	1	1	0	0	0	1	1	1	Call centres
0	0	0	1	0	0	1	0	0	Chats
0	0	0	0	0	0	0	0	0	Community panels
0	0	0	0	1	0	0	0	0	Complaints and claims channels
1	0	0	1	1	0	0	0	0	Dialogues
0	1	1	1	0	0	1	0	0	Emails
1	0	0	1	0	0	0	1	1	Events, seminars, conferences, etc.
0	0	0	1	0	0	0	0	0	Fairs
0	0	0	0	0	0	0	0	0	Fax
0	0	0	0	0	0	0	0	0	Focus Groups discussions
1	0	1	0	0	0	0	0	0	General committees
0	0	0	0	0	0	0	0	0	Informative reports
0	0	0	0	0	0	0	0	0	Interaction with academic institutions
0	0	0	0	0	0	0	0	0	Interviews
0	0	0	0	0	0	0	0	0	Labor management councils
0	0	0	1	1	0	0	1	0	Letters
0	1	1	1	0	0	0	1	1	Media/Press events
1	1	1	1	1	1	1	0	1	Meetings with management or staff
0	0	1	0	0	0	0	0	0	Memorandum of understanding
0	0	0	0	0	0	0	0	0	Participation in government networks
0	0	0	0	0	0	0	0	0	Press/ internal releases
0	0	0	1	0	0	0	0	1	Sharing of expertise
0	0	0	0	0	0	1	0	0	Social media
0	0	0	0	0	0	0	0	0	Specialized websites
0	0	0	1	1	0	1	1	0	Surveys
0	0	0	0	0	0	0	0	0	Sustainability awareness and training
1	1	1	1	1	0	0	1	1	Tour programs
0	0	0	0	0	0	0	0	0	Union consultations
0	0	0	0	0	0	0	0	0	Videos
0	0	0	0	0	0	0	0	0	Workplace health and safety
0	0	0	0	1	0	0	1	0	Workshops



98	97	96	95	94	93	92	91	90	Evaluation issues
0	0	0	0	0	0	1	0	0	Annual excellence awards
0	0	0	0	0	0	0	0	0	Audits
1	1	0	1	1	1	1	0	1	Call centres
1	0	0	1	0	0	0	0	1	Chats
0	0	0	0	0	0	0	0	0	Community panels
0	0	0	0	1	0	1	0	0	Complaints and claims channels
0	0	0	0	0	0	0	1	0	Dialogues
1	1	0	0	1	0	1	0	1	Emails
0	1	0	0	0	0	1	1	1	Events, seminars, conferences, etc.
0	0	0	0	0	0	0	0	0	Fairs
0	0	0	0	0	0	0	0	0	Fax
0	0	0	0	1	0	0	0	0	Focus Groups discussions
1	0	1	0	0	0	0	0	0	General committees
0	0	0	0	0	0	0	0	0	Informative reports
0	0	0	1	0	0	0	0	0	Interaction with academic institutions
0	0	0	1	0	0	0	0	0	Interviews
0	0	0	0	1	0	0	0	0	Labor management councils
1	0	0	1	1	0	0	0	1	Letters
1	0	0	1	0	0	1	0	0	Media/Press events
1	1	0	0	1	1	1	0	0	Meetings with management or staff
1	0	0	0	0	0	0	0	0	Memorandum of understanding
0	0	0	0	0	0	0	0	0	Participation in government networks
0	0	0	0	0	0	1	0	0	Press/ internal releases
0	0	0	0	1	0	0	0	0	Sharing of expertise
1	1	0	0	1	1	1	0	0	Social media
0	0	0	0	0	0	1	0	0	Specialized websites
0	0	0	0	0	0	0	0	0	Surveys
0	0	0	1	0	0	0	0	0	Sustainability awareness and training
1	1	0	0	0	0	0	0	1	Tour programs
0	0	0	0	0	0	0	0	0	Union consultations
0	0	0	0	0	0	0	0	0	Videos
0	0	0	0	0	0	0	0	0	Workplace health and safety
0	0	1	0	0	0	0	1	0	Workshops







134	133	132	131	130	129	128	127	126	Evaluation issues
0	0	0	0	0	1	0	0	1	Annual excellence awards
0	1	0	0	1	0	0	1	0	Audits
1	1	0	1	1	1	0	1	1	Call centres
0	0	0	0	1	0	0	1	1	Chats
0	0	0	0	0	0	0	0	0	Community panels
0	0	0	0	1	0	0	1	1	Complaints and claims channels
0	0	0	0	0	0	0	0	0	Dialogues
1	0	1	0	1	1	0	1	1	Emails
0	0	0	0	1	1	0	1	1	Events, seminars, conferences, etc.
0	1	0	0	0	0	0	0	0	Fairs
0	0	0	0	0	0	0	0	0	Fax
1	0	0	1	0	0	0	0	0	Focus Groups discussions
0	0	0	0	0	0	0	0	0	General committees
0	0	0	0	0	0	0	0	1	Informative reports
0	0	0	0	0	0	0	0	0	Interaction with academic institutions
0	0	0	0	0	0	0	0	0	Interviews
0	0	0	0	0	0	0	0	0	Labor management councils
0	0	0	0	1	0	0	1	0	Letters
0	0	0	0	0	0	0	0	0	Media/Press events
1	1	0	0	1	1	0	1	1	Meetings with management or staff
0	0	0	0	0	0	0	0	0	Memorandum of understanding
0	0	0	0	0	0	0	0	0	Participation in government networks
0	1	1	0	0	1	0	0	0	Press/ internal releases
0	0	0	0	0	0	0	0	0	Sharing of expertise
0	1	0	0	1	1	0	1	0	Social media
0	1	1	0	0	1	0	0	0	Specialized websites
0	0	1	1	1	1	0	1	0	Surveys
0	0	0	0	0	0	0	0	0	Sustainability awareness and training
1	1	0	0	0	1	0	1	1	Tour programs
0	0	0	0	0	0	0	0	0	Union consultations
0	0	0	0	0	0	0	0	0	Videos
0	0	0	0	0	0	0	0	0	Workplace health and safety
0	0	0	0	1	1	0	0	0	Workshops

	140	139	138	137	136	135	Evaluation issues
13	0	0	0	0	0	0	Annual excellence awards
19	0	1	0	0	0	1	Audits
75	0	0	1	0	0	1	Call centres
39	0	0	0	0	1	1	Chats
4	0	0	0	0	0	0	Community panels
22	0	0	0	0	0	0	Complaints and claims channels
29	0	0	0	1	0	1	Dialogues
50	0	0	0	0	0	0	Emails
42	0	1	0	0	0	0	Events, seminars, conferences, etc.
10	1	0	0	0	0	0	Fairs
3	0	0	0	0	0	1	Fax
17	0	0	0	0	0	0	Focus Groups discussions
19	0	1	0	0	0	0	General committees
2	0	0	0	0	0	0	Informative reports
3	0	0	0	0	0	0	Interaction with academic institutions
22	0	0	0	1	0	0	Interviews
2	0	0	0	0	0	0	Labor management councils
44	0	0	1	0	1	1	Letters
27	0	0	0	0	0	0	Media/Press events
96	0	0	1	1	0	1	Meetings with management or staff
8	0	0	0	0	0	0	Memorandum of understanding
4	0	0	0	0	0	0	Participation in government networks
20	1	1	0	0	0	0	Press/ internal releases
9	0	0	0	0	0	0	Sharing of expertise
36	1	1	0	0	0	0	Social media
21	1	1	0	0	0	0	Specialized websites
59	1	0	0	0	0	0	Surveys
10	1	0	0	0	0	0	Sustainability awareness and training
51	0	1	0	0	0	0	Tour programs
8	0	0	0	0	0	0	Union consultations
4	0	0	0	0	0	0	Videos
4	0	0	0	0	0	0	Workplace health and safety
24	0	0	0	1	0	1	Workshops