

1 CHAPTER 5

3 WAITING FOR MATERIALITY IN  
5 THE CONTEXT OF INTEGRATED  
7 REPORTING: THEORETICAL  
9 CHALLENGES AND PRELIMINARY  
11 EMPIRICAL FINDINGS  
13

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19

21 **5.1. INTRODUCTION**

23 The concept of materiality lies at the very heart of reporting environmental,  
25 social, and governance performance, as it has generally been acknowledged  
also in the financial accounting field, from both the practitioners and the  
academia.

27 Its supremacy and pivotal role is strictly related, in that sense, to the  
metaphorical discourses materiality is embedded into (Edgley, 2013).

29 In effect, with limited resources, managers have to choose a small set of  
31 material performance indicators and, hence, they face a strategic dilemma  
(especially when looking from a non-financial perspective), if to try to  
33 satisfy every one of the company's stakeholders or to cope with the most  
strategic amongst them (Deloitte, 2012).

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1 Despite of its importance, a shared vision of materiality for non-financial  
 3 information is still a long way ahead, either if we review the literature, which  
 5 has constantly grown in recent years but it is yet in its early stages, or if we  
 7 take the practitioners' perspective, which calls for a process of improving  
 9 materiality and the relevance of information disclosed (Black Sun and The  
 11 International Integrated Reporting Council, 2014).

7 At the same time, the relationship between materiality and other core  
 9 principles of Integrated Reporting (in particular consistency, comparability,  
 11 and conciseness) needs to be still nurtured, from different intellectual  
 angles, if the momentum of Integrated Reporting itself aspires to a long-  
 lasting and fertile success.

Bearing these considerations in mind, this chapter first addresses the  
 13 issue of materiality for financial and for sustainability reporting  
 (Section 5.2) and then (Section 5.3) from the perspective of Integrated  
 15 Reporting ("IR"); second, it presents the main theoretical and operational  
 challenges of the current approach toward non-financial materiality  
 17 (Section 5.4) making also use of some empirical findings (Section 5.5); the  
 last paragraph draws some preliminary conclusions (Section 5.6).

19 In more detail, Section 5.2 portrays the principal roots of accounting  
 materiality, making also use of the fruitful approach of "genealogy of  
 21 materiality" recently adopted in literature (Edgley, 2013), whilst Section 5.3  
 unites together practitioners' views, international guidelines, and theoretical  
 23 positions toward the issue of materiality for non-financial reporting.

Section 5.4 presents a number of hot topics in the present state-of-art of  
 25 materiality for non-financial reporting (the choice of a single/multiple  
 framework; the process of materiality; the role of stakeholders and their  
 27 dialogue with the company; the materiality scale and the materiality  
 matrix) and Section 5.5 presents some preliminary findings from an  
 29 analysis of recent Integrated Reports, which shed light into the diverse (at  
 least, currently) attitudes of companies when disclosing their approach  
 31 toward materiality.

## 33 **5.2. BACKGROUND: MATERIALITY FOR FINANCIAL** 35 **AND NON-FINANCIAL REPORTING**

### 37 *5.2.1. Materiality for Financial Reporting*

39 Under the accounting paradigm, accordingly from strictly financial report-  
 ing, materiality wields a paramount role, for both the literature and the  
 practitioners.

1 The notion of materiality presupposes the accountants' ability to deter-  
2 mine whether a misstatement or an error may affect the decisions of the  
3 users of the financial statements (Faux, 2012); materiality is often formal-  
4 ized using thresholds above which an error becomes too important to be  
5 tolerated (Lydenberg, 2012; Mio & Fasan, 2013; Tuttle, 2002) and the  
6 materiality judgment ought to consider the nature of the misstatements –  
7 that is, qualitative aspects and the context – as well as their quantity  
8 (Eccles, Krzus, Rogers, & Serafeim, 2012).

**AU:2**

9 An absorbing and convincing reasoning has been recently furnished by  
10 Edgley (2013), whose work about the genealogy of accounting materiality  
11 highlights its profound and diverse roots: in the socio/legal imagery (mate-  
12 riality as a moral responsibility to protect the investors), as a solution to  
13 the cost/benefit problem (and in particular to the issue of over-auditing),  
14 the role of materiality as technical knowledge and, in the end, the metaphor  
15 of materiality as a rule of thumb (Edgley, 2013).

16 According to the current version of IFRS Framework (2014), informa-  
17 tion is material if omitting it or misstating it could influence decisions that  
18 users make on the basis of financial information about a specific reporting  
19 entity (Qualitative Characteristic, QC, 11).

20 In other words, materiality is an entity-specific aspect of relevance based  
21 on the nature or magnitude, or both, of the items to which the information  
22 relates in the context of an individual entity's financial report; in this sense,  
23 the IASB cannot specify a uniform quantitative threshold for materiality or  
24 predetermine what could be material in a particular situation (Qualitative  
25 Characteristic, QC, 11).

26 The FASB and the AASB adopt positions similar to the IASB: accord-  
27 ing to the FASB, materiality relies on the magnitude of an omission or mis-  
28 statement of accounting information, so that, in the light of the  
29 surrounding circumstances, it makes probable that the judgment of a reason-  
30 able person relying on that information would have been changed or  
31 influenced by the omission or misstatement (FASB, 1980).

32 Likewise, the AASB declares that materiality depends on the size and  
33 nature of the omission or misstatement judged in the surrounding circum-  
34 stances (AASB, 2010).

35 The above definitions are *inter alia* strikingly analogue to the paragraph  
36 of the 1895 British Companies Act, which calls for materiality in the fol-  
37 lowing terms: "every contract or fact is material which would influence the  
38 judgment of a prudent investor in determining whether he would subscribe  
39 for the share or debenture offered by the prospectus."

The auditing literature (Messier, Martinov-Bennie, & Eilifsen, 2005) and  
the audit profession have devoted time and attention, too, to the issue of

1 materiality, which is evidently important for audit firms, that do not have a  
2 complete knowledge of the company and its operations and that must rely  
3 on quantitative methods, as thresholds are, to proxy for materiality, as  
4 they can only rely on accounting numbers (Mio & Fasan, 2013).

**AU:3**

5 In this sense, the International Standard on Auditing n. 320 points out  
6 that misstatements, including omissions, are considered to be material if  
7 they, individually or in the aggregate, could reasonably be expected to  
8 influence the economic decisions of users taken on the basis of the financial  
9 statements (ISA n. 320, 2009).

10 Moreover, judgments about materiality are made in light of surrounding  
11 circumstances, and are affected by the size or nature of a misstatement, or  
12 a combination of both (ISA n. 320, 2009).

13 Furthermore, judgments about matters that are material to users of the  
14 financial statements are based on a consideration of the common financial  
15 information needs of users as a group, so the possible effect of misstate-  
16 ments on specific individual users, whose needs may vary widely, is not  
17 considered (ISA n. 320, 2009).

18 Both the Securities and Exchange Commission (SEC) and the European  
19 Securities and Markets Authority (ESMA) commented on materiality  
20 as well.

21 The SEC defines materiality as information related to those matters  
22 about which an “average prudent investor” ought reasonably to be  
23 informed, in line with the seminal ruling of the Supreme Court in “TSC  
24 Industries v. Norway, Inc.” whereas the Court itself stated that a fact is  
25 material if there is a substantial likelihood that the fact would have been  
26 viewed by the reasonable investor as having significantly altered the “total  
27 mix” of information available (Lydenberg, 2012).

28 The ESMA has published, in 2013, the feedbacks to a consultation  
29 paper; several respondents, as ESMA pointed out, confirm that the qualita-  
30 tive and quantitative aspects of materiality judgments cannot be separated,  
31 because doing so could lead to the development of a “tick-box” mentality  
32 rather than using of judgment in the assessment of materiality (ESMA,  
33 2013).

### 35 5.2.2. *Materiality for Non-Financial Reporting*

36  
37  
38 The increase of disclosure of non-financial information should help compa-  
39 nies in rebuilding the trust toward them and allow stakeholders, as a whole,  
40 to take informed decisions (Lydenberg, 2012), yet companies should also

1 manage and tackle the intrinsic risk of information overload, that is stake-  
holders are required to process an overwhelming and consistently increas-  
3 ing amount of data (Mio & Fasan, 2013).

In effect, more concise reporting is seen as a benefit, but even those  
5 organizations which have succeeded in cutting reports – keeping them  
under the information overload threshold – admit that maintaining con-  
7 ciseness is an ongoing struggle (Black Sun and the International Integrated  
Reporting Council, 2014).

9 So, the balance between comprehensive information, which tentatively  
addresses all the information needs of all the stakeholders, and selective  
11 information, which is chosen after a process of prioritization of the diverse  
needs of multi-range stakeholders, leads to placing great importance, from  
13 a non-financial reporting perspective, to the issue of materiality.

The concept of materiality, in fact, assists companies in finding a solu-  
15 tion for two typical dilemmas in approaching stakeholders: voluminous  
data versus basic information and mechanized reporting versus flexible  
17 reporting (Zhou, 2011).

Furthermore, it may be the case that a certain piece of information is  
19 material for a certain stakeholder and not material for another; since users  
of non-financial reporting are individuals and may consider information  
21 differently, one individual may consider that an event warrants some form  
of negative action, another may consider the event positively and still  
23 another may consider the event to be non-relevant (Faux, 2012).

Moreover, whilst the accounting literature is quite conscious of the  
25 mutual intersection between financial and non-financial measures (Riva,  
2001), it has not yet fully addressed the issue of materiality in the context  
27 of non-financial reporting (Moroney & Trotman, 2013; O'Dwyer, 2011).

Reviewing the few conversations about the issue, we find a call for an  
29 industry-specific materiality approach (Eccles et al., 2012) and for a deeper  
analysis of data about materiality of different environmental and social  
31 issues (Churet & Eccles, 2014).

Other authors propose that materiality for non-financial reporting  
33 should keep a clear and different approach compared to accounting materi-  
ality, even if they obviously share some common features and are routed in  
35 a seemingly similar environment.

In effect, using the incisive wording of Edgley (2013), the first derives  
37 from a stakeholder logic, is forward looking, asks for a close dialogue with  
stakeholders and has a more subjective nature, whilst the second is plunged  
39 into a market logic, emphasizes accuracy and makes use of past data, with-  
out any specific involvement of stakeholders.

1 While the literature is still trying to come to terms with non-financial  
reporting and materiality, influential definitions and approaches come con-  
3 versely from the standard setters for non-financial reporting, which, aware  
of the continuous endeavor toward a balanced information, already pro-  
5 poses definitions of materiality and routines for determining material issues.

According to AccountAbility, materiality is about determining the rele-  
7 vance and significance of an issue to an organization and its stakeholders.  
A material issue is an issue that will influence the decisions, actions, and  
9 performance of an organization or its stakeholders. From another per-  
spective, if the report is subject to formal auditing and assurance, materi-  
11 ality requires that the assurance provider states whether the reporting  
organization has included in the report the information about its sustain-  
13 ability performance, required by its stakeholders for them to be able to  
make informed judgments, decisions, and actions (AccountAbility, 2006).

15 Moreover, the Standard AA1000 defines materiality and proposes a  
materiality determination process, designed to ensure that comprehensive  
17 and balanced information is input and then analyzed (AA1000, 2008).

In more detail, an organization needs to input the right types of infor-  
19 mation from the right sources, covering an appropriate time period; such  
inputs include information other than financial information: information  
21 on non-financial, sustainability drivers and their impact on stakeholders in  
the short, medium, and long term (AA1000, 2008).

23 More recently, in August 2013, AccountAbility has released a paper  
about materiality with a suggestive *incipit*: “materiality is like packing a  
25 backpack for a hike: you can only bring the supplies that are absolutely cri-  
tical, otherwise the weight will slow you down and eventually bring you to  
27 your knees” (AccountAbility, 2013).

The paper above asks for expanding the perimeter of materiality, claim-  
29 ing that widening the focus of materiality is the means by which the basis  
of mainstream financial assurance and reporting can absorb, or be  
31 absorbed into, the sustainability agenda (AccountAbility, 2013).

In addition, the same paper (AccountAbility, 2013) articulates the pro-  
33 cess of materiality identifying four milestones: “discern” (which issues are  
most material), “develop” (appropriate mechanisms and processes that  
35 enable continual learning and assessment of material priorities), “manage”  
(in ways that anchor sustainability issues at the heart of a company’s oper-  
37 ating system) and “disclose” (on a timely and transparent basis).

AA1000 focuses mainly on the relationship and the process between the  
39 company and its stakeholders, whereas the Global Reporting Initiative  
 (“GRI”) Guidelines are mostly principles-based (Mio & Fasan, 2013).

1 The GRI Guidelines latest updating highlights, from the beginning, a  
2 strong focus on materiality, meaning that sustainability reports will be  
3 centered on matters that are really critical in order to achieve the organiza-  
4 tion’s goals and manage its impact on society (G4, 2013).

5 Materiality, in this context, is connected to the relevance of the topics to  
6 be included in a document, so that sustainability reports should disclose  
7 the items which may reasonably be considered important for reflecting the  
8 organization’s economic, environmental, and social impacts, or influencing  
9 the decisions of stakeholders; therefore, these issues potentially deserve  
10 inclusion in the reports (G4, 2013).

11 G4 goes further and, following the materiality concept from financial  
12 reporting, asserts that materiality is also the threshold at which aspects  
13 become sufficiently important that they should be reported (G4, 2013).

14 G4, as well as AA1000, develops a procedure of prioritization of mate-  
15 rial issues, which encompasses the following stages: first, assessing the sig-  
16 nificance and the influence of each topic (according to the significance of  
17 the organization’s economic, environmental, and social impacts and consid-  
18 ering the influence on stakeholder assessments and decisions), then identify-  
19 ing the material aspects by combining the different assessments and  
20 eventually, after having made use of some specific thresholds, deciding for  
21 each material aspect the level of coverage, the amount of data and narra-  
22 tive explanation to be disclosed (G4, 2013).

23 Finally, the GRI – which also proposes a specific “Sector Supplement” –  
24 has the merit of framing the issue of materiality in a sector-specific approach  
25 (Mio & Fasan, 2013).

26 Even if with a closer attention to the companies incorporated in the  
27 United States, also the Sustainability Accounting Standards Board  
28 (“SASB”) comments on the notion of materiality and builds a path for the  
29 determination of material issues.

30 SASB follows the definition of materiality adopted by U.S. Securities  
31 laws and case law; according to the U.S. Supreme Court, information is  
32 material if there is a substantial likelihood that the disclosure of the  
33 omitted fact would have been viewed by the reasonable investor as having  
34 significantly altered the total mix of the information made available (SASB  
35 Conceptual Framework, 2013).

36 The methodology adopted by the SASB for assessing material items  
37 takes into consideration industry-specific elements, as the G4 does, but it  
38 is also centered on a multiple evidence-based model, which includes  
39 (under a forward-looking perspective) the evidence of interest – for  
40 instance, the stakeholders’ concern – and the evidence of economic

1 impact, for instance, revenues, costs and risk profile (SASB Conceptual Framework, 2013).

3 At the end of the process, the prioritization mechanism allows to understand which issues are most important to address; it also ensures that the Standards are kept to a minimum set that is likely to be material (SASB Conceptual Framework, 2013).

7 The International Integrated Reporting Council (“The IIRC”) has raised as the most recent, to date, player amongst the sustainability reporting standard setters, even if its mission probably targets a more comprehensive and ambitious scenario than the other organizations mentioned above.

11 The vision of the IIRC toward materiality is presented in the following section.

13

15

### 17 **5.3. THE IR AND THE CONCEPT OF MATERIALITY**

17

19 Standard setters in the field of environmental, social, and governance issues and reporting have recently engaged in a fierce competition between different bodies (Hess, 2014).

21 The struggle for depicting a comprehensive picture of the overall performance of companies has been amplified by the current debate on “Integrated Reporting,” strongly supported by the IIRC.

23 In effect – and by contrast with AccountAbility, GRI and SASB – the IIRC promotes an aspiring and wide program, devoted to combining financial reports with sustainability reports into one single integrated report, as opposed to having a standalone sustainability report and a separate financial report.

29 This concept (of an “Integrated Report”) has been gaining momentum during the last few years and it does not only represent, in its simplest form, an expression of the convergence of the sustainability report and the financial report into a single “narrative” communication (Churet & Eccles, 2014) but, more ambitiously, a model for reshaping strategy, governance, and communication according to the well-known approach of the triple-bottom line (Savitz, 2013).

31 In this sense, Integrated Reporting is the “way forward” (KPMG, 2010) since it could be capable of providing a better picture of financial and non-financial performance (Ditlevsen, Nielsen, & Thomsen, 2013).

37 Even though the main idea of integrated reporting is to provide a unique narrative about the company’s performance the ultimate goal of the project

39



1 seems to be that companies should incorporate – in an integrated and  
cross-referenced fashion – sustainability reports in their annual reports,  
3 therefore adding non-financial information – about environmental, social,  
and governance issues – to their financial reports.

5 Therefore, Integrated Reporting basically pushes for an improvement of  
the ways non-financial issues are addressed in annual reports and contri-  
7 butes mainly in this area and in how diverse information (financial and  
non-financial) can be linked and disclosed in an integrated way.

9 The Integrated Reporting approach enriches the current knowledge of  
materiality for non-financial reporting, since the Integrated Reporting  
11 Framework defines materiality as one of the seven guiding principles of  
Integrated Reporting itself (The Integrated Reporting Framework, 2013).

13 Materiality is indirectly defined in point 3.17, which states that an inte-  
grated report should disclose information about matters that substantively  
15 affect the organization’s ability to create value over the short, medium, and  
long term (The Integrated Reporting Framework, 2013).

17 The pattern for assessing materiality, as it is presented in the Integrated  
Reporting Framework, comprises the following phases:

- 19 (a) identifying relevant matters based on the ability of the company to  
affect value creation;  
21 (b) evaluating the importance of relevant matters in terms of their known  
or potential effect on value creation;  
23 (c) prioritizing the matters based on their relative importance;  
25 (d) determining the information to disclose about material matters;  
(e) assessing the “reporting boundary” of the information which have to  
27 be disclosed.

The process above should be embedded in the company’s processes and  
29 should carefully consider stakeholders engagement; point 3.20 clarifies in  
effect that the materiality determination process is integrated into the orga-  
31 nization’s management processes and includes regular engagement with  
providers of financial capital (The Integrated Reporting Framework, 2013).

33 During the identification of the relevant matters (phase (a)), companies  
have (i) to include matters related to value creation that are discussed at  
35 meetings of those charged with governance and (ii) to understand the per-  
spectives of key stakeholders.

37 The evaluation of the importance of relevant matters (phase (b)) poten-  
tially reduces the number of “relevant items” to be disclosed, since the  
39 information has to be provided only for items which are at the same time  
both relevant and material.

1 In this sense, materiality involves evaluating the magnitude (both quan-  
 3 titative and qualitative) of the matter's effect and, if it is uncertain whether  
 the matter will occur, its likelihood of occurrence.

Once the matters are identified and measured, they are prioritized (phase  
 5 (c)) on the basis of their magnitude (The Integrated Reporting Framework,  
 2013).

7 At the end of the process, the amount of information to be disclosed has  
 to be decided (phase (d)).

9 The issue above implies consideration from different perspectives, both  
 internal and external, and it is assisted by continuous engagement with pro-  
 11 viders of financial capital.

The last point (phase (e)) plays a pivotal role in the topic of materiality,  
 13 since it defines the components of the perimeter the companies have to refer  
 to, in case of Integrated Reporting.

15 The reporting boundary, in this sense, includes both the company and  
 some "qualified" stakeholders (beyond the financial reporting entity), who  
 17 have a significant effect on the ability of the financial reporting entity to  
 create value.

19 On this subject, the position of the Integrated Reporting Framework is  
 as follows (point 3.35):

21 [...] The entities/stakeholders within this portion of the reporting boundary are not  
 23 related to the financial reporting entity by virtue of control or significant influence, but  
 rather by the nature and proximity of the risks, opportunities and outcomes. For exam-  
 25 ple, if aspects of the labour practices in the organization's industry are material to the  
 ability of the organization to create value, then disclosure in the integrated report might  
 include information about those aspects as they relate to suppliers' labour practices [...].  
 27 (The Integrated Reporting Framework, 2013)

Let alone the Integrated Reporting Framework, the IIRC has been  
 29 engaged in a number of different paths to develop a shared notion of mate-  
 riality for Integrated Reporting: for instance, in 2014 the IIRC has pro-  
 31 moted a call for papers with the aim to investigate, inter alia, the mutual  
 relationships between materiality and conciseness, which is another guiding  
 33 principle of Integrated Reporting and which is defined in terms of  
 "[Integrated Reporting not being] burdened with less relevant informa-  
 35 tion"; an effective Integrated Reporting, in this sense, shall balance both  
 principles.

37 Moreover, Black Sun (a consultancy firm) and the IIRC joined forces in  
 2014 and published the results of an ample survey dedicated to the  
 39 Integrated Reporting and its impact on the management of the firms  
 involved, for example on: understanding value creation, improving

1 management information systems and decision making, a new approach  
2 toward stakeholders and so forth (Black Sun and the International  
3 Integrated Reporting Council, 2014).

4 One of the most significant outcomes of the survey is strictly connected  
5 to the issue of materiality, since nearly all organizations interviewed said  
6 they had either significantly changed what they measured or had plans to  
7 do so in the future (Black Sun and the International Integrated Reporting  
8 Council, 2014).

9 The IIRC has earned worldwide recognition and attention for its effort  
10 to bring together, in a cohesive and connected system, both financial and  
11 non-financial models, approaches, and processes.

12 Nevertheless, its definition of materiality and the procedure advanced  
13 for determining material issues raise a number of concerns, both theoretical  
14 and operational, which will be discussed in the following section.  
15

## 17 **5.4. MATERIALITY AND IR: THE MAIN CHALLENGES**

18 Materiality for non-financial information, as it is defined by the practi-  
19 tioners and the literature, raises a number of challenges and questions,  
20 both theoretically (the conceptual frameworks to be adopted and the  
21 mutual relationships between principles) and for the practical and opera-  
22 tional implications (the process of materiality, the stakeholder engagement,  
23 the materiality scale, and the materiality matrix) which are now discussed.  
24  
25

### 27 *5.4.1. The Frameworks and the Process of Materiality*

28 A growing amount of literature has been devoting time and efforts in mea-  
29 suring the non-financial disclosure of companies in their IR or sustainabil-  
30 ity reports (Boiral, 2013).

31 Yet, this stream of literature, both intriguing and fruitful, should metho-  
32 dologically and theoretically take into account materiality as a prerequisite;  
33 if the attention turns to materiality itself first of all organizational processes  
34 related to materiality should be factored into the analysis (Unerman &  
35 Zappettini, 2014).  
36  
37

38 In effect, internal engagement within the organization is a major risk (if  
39 it's weak) and opportunity (if it's solid) in developing the IR agenda, espe-  
cially when addressing the issue of materiality.

1 A recent research shows that finance, sustainability, and investor relations  
3 departments have the most active participation across all stages of the  
5 process, whilst risk management and internal audit are the least involved in  
the IR process (Black Sun and The International Integrated Reporting  
Council, 2014).

7 This rich involvement of different departments, in effect, requires not  
9 only a more effective collaboration between departments: a true and significant  
11 path of recombining them is asked for, with departments being intertwined,  
reporting lines being changed, data being connected and an alignment of  
processes in the pipeline (Black Sun and The International  
Integrated Reporting Council, 2014).

13 Notwithstanding this call for inclusiveness and connectivity of information  
15 and processes, literature has conversely experienced little consistency  
17 in reporting lines, reporting functions and degree of formality between  
sustainability reporting teams in different organizations (Adams & Frost,  
2008), with a weak connection between systems for collecting environmental  
and economic data (Adams, 2002).

19 These mixed results, in terms of consistency between standards for  
reporting non-financial information (both sustainability information and  
21 IR) and companies' internal structures (departments, data collecting and  
management, processes owners and so forth), underline that a more in-  
depth analysis of the process of materiality is required.

23 First of all, the materiality process should foster the development of  
accounting methods, metrics and procedures for all the types of capital  
25 which are different from financial capital (i.e., intellectual, human, social  
and relationship, natural and manufactured capital, according to The  
27 Integrated Reporting Framework, 2013).

29 In this sense, materiality could improve the ongoing viability of individual  
businesses as well as broader financial market stability, with a positive  
ripple effect (Black Sun and The International Integrated Reporting  
31 Council, 2014).

33 Secondly, the process of materiality should be considered according to a  
number of different theoretical lenses, convenient for interpreting the findings  
(Searcy & Buslovich, 2014).

35 In this sense, stakeholder theory, legitimacy theory, and institutional  
theory could all assist the process of materiality itself.

37 The stakeholder theory (Freeman, 2010) lays the foundation of the  
extent of stakeholder involvement in the development of IR, underlying the  
39 obligations companies have to its internal and external stakeholders, such  
as suppliers, employees, customers, communities, and investors; according

1 to the stakeholder theory, stakeholder relationships are viewed as critical in  
2 managing an organization and should inform key decisions (Searcy &  
3 Buslovich, 2014).

4 The legitimacy theory (Suchman, 1995) explains why companies are  
5 eager to demonstrate (inside and outside the corporation) that they are tak-  
6 ing action on sustainability issues; in this sense, legitimacy theory focuses  
7 on perceptions of organizational actions in connection to social expecta-  
8 tions, thus reflecting the social license to operate (Searcy & Buslovich,  
9 2014).

10 The institutional theory (Scott, 2008) frames discussions on the coerci-  
11 tive, mimetic, and normative pressures that help clarify what and how com-  
12 panies choose to report (Searcy & Buslovich, 2014).

13 Amongst the conversations going on in the broad context of institu-  
14 tional theory, institutional isomorphism (Di Maggio & Powell, 1983)  
15 explains why organizations come to resemble one another over time, due to –  
16 as above in Scott – coercitive, mimetic, and normative pressures.

17 Given this theoretical background, both the literature and the practi-  
18 tioners have to gather more information about the IR and the sustainabil-  
19 ity reporting processes and the extent to which data are collected and used  
20 in decision making (Adams & Frost, 2008), since the reporting processes  
21 and attitudes to reporting are likely to impact the extensiveness, quality,  
22 quantity, and completeness of the reports themselves (Adams, 2002).

23 In this sense, a recent research, conducted via a number of interviews of  
24 some large Canadian corporations, has developed a routine of eight  
25 research questions which investigate thoroughly the process of sustainabil-  
26 ity reporting (Searcy & Buslovich, 2014).

27 The research questions can be easily and conveniently applied to the  
28 IR too.

29 Moreover, they are all related, explicitly or tacitly, to the process of  
30 materiality, as they cover the following topics:

31

- 32 (1) motivation for a company to publish sustainability reports/IR: here  
33 legitimacy theory, institutional theory, and institutional isomorphism  
34 play the pivotal role; the reasons for approaching non-financial reports  
35 are decisive, in effect, when the entity defines who are the most promi-  
36 nent stakeholders and identifies the most significant issues;
- 37 (2) processes exploited for assessing and deciding what to disclose in the  
38 reports: this research question directly impacts the process of material-  
39 ity and it constitutes both a prerequisite and a crucial item of material-  
40 ity itself;

- 1 (3) stakeholders involvement and engagement: according to stakeholder  
 3 theory, the involvement of stakeholders should substantially contribute  
 to shape the major corporate decisions;
- 5 (4) integration of financial and non-financial information, and integration  
 of sustainability issues with financial matters: as long as inclusiveness,  
 7 completeness, and connectivity are considered, this point deals in gen-  
 eral with the process of IR;
- 9 (5) collecting data and writing the reports: this research question directly  
 concerns the process of materiality;
- 11 (6) key challenges in developing the reports: also this question sheds light  
 on the process of materiality;
- 13 (7) current use, internally, of sustainability reports/IR: this question inves-  
 tigates the internal organizational relevance of the process;
- 15 (8) perception of the future use of sustainability reports/IR: as above this  
 question deals with the relevance of the process in a forward-looking  
 perspective.

17

19 In effect, the process of materiality in the context of IR roundly deals, as  
 mentioned above, with the process of determining the nature and the  
 amount of disclosure (question 2), collecting data and writing the reports  
 21 (question 5), taking also into account some manifold challenges during the  
 process itself (question 6) and the current and expected future use of IR  
 23 (question 7 and 8).

25 In more detail, the process of materiality has to be centered not only  
 (question 2) on the items to be disclosed – which are, in effect, the result of  
 standards, internal evaluations, formal or informal consultation of stake-  
 27 holders – but also on the mechanisms for gathering information and for  
 writing, in practice, the reports (question 5).

29 The first issue (collecting data) raises a number of sub-questions: is the  
 collection of the data handled by internal or external personnel? Is there a  
 31 primary reference person? Is there a small team of participants? Do they  
 belong to a unique or to different departments?

33 Similarly, the process of writing the report (second issue) could be  
 expanded further: does the writing rely exclusively on internal personnel,  
 35 external personnel or a combination of both? In the latter case, do they  
 manage to work in a collaborative and coordinated manner?

37 Moreover, some of the key pieces of the jigsaw puzzle of the IR (ques-  
 tion 6) belong to the process of materiality.

39 For instance, the issues of overlapping timelines, staff resources, IT  
 mechanisms for collecting data and striking an appropriate balance

1 between items – which are some common challenges for companies  
approaching IR – all affect the process of materiality, which is deemed to  
3 be more rigorous and precise if, *coeteris paribus*, it is conducted with speci-  
fic and integrated resources (staff, IT and so forth), who converse with all  
5 the departments, browse all the organization’s procedures and activities  
and hold both an external and an internal perspective.

7 In this sense, the point according to which Corporate Social  
Responsibility has the greatest potential when it is deployed by external  
9 consultants in tandem with internal environmental management systems  
(Sulkowski & Waddock, 2014) could fit to IR as well.

11 Last, current and future uses of IR jointly considered (for instance,  
employee awareness and engagement, internal reference tool and new  
13 potential uses, see Searcy & Buslovich, 2014; questions 7 and 8) contribute  
to dynamically outline the prospective path of materiality, so they should  
15 be included in a recurrent assessment and they should be explicitly com-  
prised in the process of materiality itself.

17 In conclusion the process of materiality raises two main broad (and only  
partially interlaced) issues to be investigated (and specifically evaluated by  
19 assurance providers in charge of auditing the reports): the effectiveness of  
the process of materiality and the quality of the disclosure of the process  
21 itself in the sustainability reports or in the IR.

#### 23 5.4.2. *The Stakeholder Engagement*

25 Stakeholder engagement is critical in the process of determining materiality  
and – as a consequence – material items, since companies should primarily  
27 determine the significance of stakeholder expectations via a measurement  
of the legitimacy, leverage, and urgency of their claims (Mason &  
29 Simmons, 2013; Mitchell, Agle, & Wood, 1997).

31 In effect, the principle of materiality itself – in the context of both sus-  
tainability reporting and IR – implies that stakeholder engagement will  
determine which information and data should be included in the report  
33 (Gray, 2000).

35 At the same time, stakeholder engagement constitutes a central part of  
the operational routine for assessing material items (see question 3 of the  
process developed by Searcy & Buslovich, 2014; above).

37 In these terms, stakeholder engagement should be formalized in a speci-  
fic process, which enables organizations to take into account stakeholder  
39 views when evaluating Corporate Social Responsibility activities (Mason &  
Simmons, 2013) or when designing and evaluating IR processes.

1 The process should be embedded in the process of determining material-  
 3 ity with a multi-stakeholder consultation approach (Mason & Simmons,  
 2013) that is underpinned by core values as the principles of relevance and  
 inclusiveness.

5 Obviously, the process will approach different stakeholders gradually,  
 using a path toward stakeholders which – after identifying and mapping  
 7 them – will distinguish between primary (which determine the very survival  
 of a corporation) and secondary (which affect or are affected by the cor-  
 9 poration but do not affect its sustainability; see Clarkson, 1995; Manetti,  
 2011).

11 The system of measuring and managing stakeholder engagement, once  
 formalized and formally enforced, should be periodically assessed and eval-  
 13 uated, since the legitimacy of the decisions that organizations make relies  
 on the discursive quality of their decision-making process and their stake-  
 15 holder engagement approach (Mason & Simmons, 2013).

The assessment of stakeholder engagement asks, in turn, for mechanisms  
 17 for detecting the main phases of this process and for convenient systems  
 for evaluating the quality of these stages and the reliability and effective-  
 19 ness of the process as a whole.

For instance, previous literature has proposed models for disaggregating  
 21 the process of stakeholder engagement into a small number of elementary  
 items (Manetti, 2011), such as:

- 23 – identification of all the stakeholders, both primary and secondary;
- 25 – appointment of representatives of the groups of stakeholders engaged;
- 27 – degree of stakeholder involvement (from the simple consultation and  
 information gathering to a more direct and proactive role in the  
 process);
- 29 – timeliness of the consultation of stakeholders (from an earlier and pre-  
 ventive consultation to a continuous engagement during the whole pro-  
 cess of determining materiality);
- 31 – review by the stakeholders of the final document and ability, for them,  
 33 to express their opinion on the materiality of the information displayed;
- engagement channels and methods (for instance, one-on-one consulta-  
 35 tions, panels, focus groups, and surveys).

These components should be evaluated with a model capable of discrimi-  
 37 nating between the different levels of quality of stakeholder engagement  
 and management, from the stakeholders' perspective.

39 In this sense, the Ladder of Citizen Participation (Arnstein, 1969;  
 Friedman & Miles, 2006; Manetti, 2011) comprises the following stages:



- 1 – Manipulation and therapy: these levels refer to the control and skillful  
3 management, or maneuvering of stakeholders' opinion; managers try to  
brainwash the relevant audience through massive use of self-laudatory  
5 corporate information until the stakeholders are indoctrinated with the  
same principles of the corporation.
- Informing, consultation, and placation: the emphasis is either on a one-  
7 way flow of information or, where there is two-way communication, the  
received views may not be used or acted on; in this sense, managers  
9 maintain the right of decision and veto.
- Partnership: at this level stakeholders are involved, both in planning and  
11 in the decision-making processes.
- Delegated power: stakeholders have sufficient decision-making authority  
13 and the intention of the engagement is to give a minority representation  
to the stakeholders in the decision-making process through extensive  
15 dialogue, such as board representation.
- Citizen control: stakeholders obtain the majority of decision-making  
17 seats or full power.

19 In this context the identification of material non-financial information  
requires a robust, replicable, and structured process which explicitly takes  
21 into consideration the subjective judgments of stakeholders and yields a  
ranking of items, according to their relative importance (Deloitte, 2012).

23 Even though this process could be based on the traditional stakeholder  
engagement techniques already mentioned (one-on-one consultations,  
25 panels, focus groups, and surveys) some studies suggest a more advanced  
and formally structured process, as decision science.

27 This mechanism, which makes use of structured questions in guiding a  
stakeholder panel to create a preference ranking of different issues along a  
29 single numeric scale, helps in managing decisions of disclosure that involve  
multiple stakeholders, multiple alternatives and multiple attributes  
31 (Deloitte, 2012).

According to Deloitte (2012), decision science is efficient, makes colla-  
33 borative dynamic processes, creates single and sound numeric scales, allows  
for scenario analyses and can capture fluid and uncertain issues.

35 Evidently, since this mechanism is supported by a robust statistical back-  
ground, it may not be fully representative unless a consistent amount of  
37 population is queried with the mechanism itself.

The topic of stakeholder engagement could open the way to two differ-  
39 ent streams of research, the first related to the measurement of the effective-  
ness of the process of stakeholder engagement and the second to the

1 ascertainment of the quality of the disclosure, in the reports, of the process  
itself.

3 Once again, as above, these two aspects – effectiveness and disclosure of  
the process of stakeholder engagement – could also be specifically evalu-  
5 ated by assurance providers in charge of auditing the reports.

7

#### 9 *5.4.3. The other Principles: Consistency, Comparability and Conciseness*

11 Generally speaking, investors use non-financial information to assess risk  
and return implications, evaluate management quality, engage with compa-  
13 nies, inform proxy voting and develop customized investment products  
(Canadian Institute of Chartered Accountants, 2010).

15 Moreover, companies struggle to cope with the demand voiced by inves-  
tors for non-financial information to be quantitative, reported consistently  
17 over several years and conducive to comparisons between and within  
industries (Deloitte, 2012).

19 In effect, because most of non-financial information is still voluntary,  
the data can be inconsistent and incomparable across companies; in effect,  
21 a system of voluntary disclosure creates an uneven playing field, with some  
companies clearly informing investors and others under-reporting, over-  
reporting, green-washing, or producing misleading propaganda (Sulkowski &  
23 Waddock, 2014).

25 For instance, in 2010 some authors (Sherman & Di Giulio, 2010) have  
studied along a number of years eight companies, belonging to different  
27 industries, and found that comparability has not improved over several  
iterations of G3 reporting.

29 Moreover, in 2011, a research of over 4,000 sustainability reports has  
found a significant number of data omissions and wrong figures (Leeds  
University, Euromed Management School, 2011).

31 Since non-financial information bears the considerable risk of being  
inconsistent, non-comparable or even inaccurate, a growing number of  
33 investors, rather than relying on companies' reports, build their own inter-  
nal databases (for instance, UBS) or use data from dedicated data provi-  
35 ders as MSCI, Asset4, or Trucost (Deloitte, 2012).

37 Along this line, it is not clear whether the emphasis on materiality could  
foster or slow down the advancement in the path toward comparability: in  
effect, materiality will not automatically lead to more comparability of  
39 information, and more comparability focus will not simply lead to more  
materiality.

1 In this sense, there is a strong need to balance the two principles, since  
they both are of critical importance (Thurm & De Ruiter, 2014).

3 Moreover, from the specific point of view of the investors, there is the  
5 same potential trade-off: some investors do want transparency on a wide-  
ranging set of metrics, even at the possible expense of comparability, and  
others want comparability, even at the possible expense of materiality.

7 In the end, adding to materiality and comparability the issue of the role  
of the audience, other authors identify a “trilemma” of IR which should be  
9 addressed by the literature and the practitioners (The IIRC, interview with  
Thorsten Pinkepank, Director Sustainability Relations, BASF, 2014).

11 A similar dilemma and a potentially even more laborious tension arises  
between application of materiality and achieving conciseness, which should  
13 be handled both in order to include all material items and, at the same  
time, to keep the information within a sound and sensible dimension.

15 In this sense, Internet-based tools (web pages, social networks, interac-  
tive IR with explicit links to supplementary information) could work as  
17 ancillary pillars and repository of interesting (yet, not primary)  
information.

19 Evidently, this mechanism of segregation of information (between the  
reports and the Internet) should be clearly explained and could potentially  
21 lead to minor consistency and comparability.

23  
25 *5.4.4. The Materiality Scale and the Materiality Matrix*

27 In Financial Reporting materiality is commonly thought of as a threshold  
above which a misstatement or an omission would influence the economic  
29 decisions of those using an organization’s financial statements, while mate-  
riality in IR is not limited to those topics that have a significant and  
immediate financial impact.

31 Hence, determining materiality for IR means considering the diverse  
issues in an integrated perspective and evaluating if their economic, environ-  
33 mental and social impacts fall above the relevant threshold for their  
importance in affecting the ability to meet the needs of the present without  
35 compromising the needs of future generations, with a long-term and for-  
ward-looking view.

37 Even though the threshold concept, as defined above, keeps a firm ratio-  
nale and ensues from a consistent theoretic background, the actual process  
39 of identifying and measuring the threshold itself results in a stiff challenge,  
both for the time horizon to be considered (the long term) and for the

1 difficulty in determining comparable quantitative or financial measures for  
environmental and social impacts which are still to come.

3 That said, albeit the criticalities of using thresholds in IR, a structured  
approach and a quantitative scale in determining materiality should be wel-  
5 come, as already underlined by some authors with specific reference to the  
sphere of Corporate Social Responsibility (Lydenberg, Rogers, & Wood,  
7 2010).

9 In this sense, the materiality of each issue could be articulated in a num-  
ber of parameters (for instance, financial performance; financial risk; com-  
petitive position and strategic expectations; interest groups; future  
11 regulations; and so forth) which could in turn be measured and organized  
in a formal chart, useful for reaching an unbiased perspective regarding the  
13 materiality of a single item.

15 Put in other words, stakeholder diversity, which reflects on the divergent  
and conflicting interests and values of stakeholders on sustainability issues,  
should lead to a measurement, when possible, and to a hierarchy of  
17 materiality.

19 According to this model, the perspective should embody both different  
concern levels by different stakeholders and divergent impacts on stake-  
holders and it should eventually portray three situations on materiality  
21 (general consensus, stakeholders consensus, and stakeholders non-consen-  
sus), which in turn depict the complexity grades of materiality (Zhou &  
23 Lamberton, 2011).

25 This approach moves from the pioneering work of AccountAbility, in  
2003, whose report “Redefining Materiality” launched de facto the sustain-  
ability matrix, recommending a five-part materiality test, embedded in a  
27 transparent process of stakeholder engagement (Eccles & Krzus, 2014).

29 The latest update of GRI Guidelines (G4) in effect contains a materiality  
matrix, with “Influence on Stakeholder Assessments and Decisions” on the  
vertical axis and “Significance of Economic, Environmental, and Social  
31 Impacts” on the horizontal axis.

33 Matrices plainly bring the same communication advantages as graphs,  
which are well-established and at least fourfold (Beattie & Jones, 2002):  
attention, especially if their visual saliency is increased by the use of color  
35 (Leivian, 1980); use of the visual sense (which is pretty dominant) to see  
data in a direct way (Beattie & Jones, 2002); data can be readily retrieved  
37 (Wainer, 1992); mechanisms for enlivening, with color and images, the pre-  
sentation of numbers and data (Beattie & Jones, 2002).

39 At the same time, researchers have often stressed (Beattie & Jones, 2002)  
some significant possibilities of graphical infidelity, which could be applied

1 to matrices too: the selectivity (which is related to bias regarding the choice  
of variables graphed), the measurement distortion (where the physical  
3 representation of the numbers of the graph is not directly proportionate to  
the underlying numbers), and the presentation enhancement (which arises  
5 where the design of the graph enhances or degrades certain aspects of the  
information set). In effect:

- 7 – the label of the axis in a materiality matrix could change, for instance  
replacing the horizontal axis with “Potential Impact on Our Business,”  
9 thereby departing from GRI’s intention of comparing real-world  
impacts to stakeholder sentiment (selectivity);
- 11 – the size of the items could be unrepresentative of the actual relevance  
attributed to some specific issues (measurement distortion);
- 13 – some items could be highlighted in a brighter color (presentation  
enhancement).

15 Along this line, some authors have recently examined a number of mate-  
17 riality matrices, pointing out their accuracy and their mutual consistency  
(Eccles & Krzus, 2014) and finding some substantial variations in some spec-  
19 ific aspects (for instance, the procedure of stakeholder engagement, in  
terms of both the identification and the disclosure).

21 In spite of these theoretical and operational complexities, matrices could  
be conveniently adopted, moving from the sphere of sustainability, in the  
23 process of IR as well, bearing in mind the above mentioned limitations and  
possible flaws.

## 27 **5.5. EMPIRICAL FINDINGS**

29 We have extracted from the Sustainability Disclosure Database, powered  
by GRI, all the Integrated Reports (as explicitly defined as such, in the  
31 Reports themselves) available in English language, as of 2014, of all the  
companies which declare to comply with GRI-G4 Guidelines.

33 After leaving out of the sample the integrated reports of financial institu-  
tions – for their specific set of environmental, governance, and social issues  
35 different from companies operating in other industries – our sample com-  
prises the 19 companies as given in Table 5.1.

37 Since the process of materiality appears, as anticipated above from the  
review of the literature, both prominent and complex, we have focused our  
39 research looking at the disclosure of the process itself, evidently in the con-  
text alone of the Integrated Reports of the companies of our sample.

**Table 5.1.** The Sample.

Company	Country	Industry
Apoteket	Sweden	Health care products
ARMZ Rosatom	Russian Federation	Mining
Atomenergomash	Russian Federation	Energy
EVN	Austria	Energy
Gecina	France	Real estate
Grupa Azoty	Poland	Chemicals
KPN	Netherlands	Telecommunications
Niaep	Russian Federation	Construction
Philips	Netherlands	Consumer durables
Rosatom	Russian Federation	Energy
Rosenergoatom	Russian Federation	Energy
SAP	Germany	Other
Sonae Sierra	Portugal	Real estate
Tele2	Sweden	Telecommunications
TenneT	Netherlands	Energy utilities
TF1	France	Media
TNT	Netherlands	Logistics
Vattenfall	Sweden	Energy utilities
Wartsila Corporation	Finland	Energy

In detail, we have investigated the following points, which we believe could be conveniently used to describe the key milestones of the process of materiality:

- (a) explicit linkage between stakeholder dialogue and materiality;
- (b) disclosure of the time period during which the process of determining materiality has been carried out;
- (c) disclosure of the methods used to assess material issues;
- (d) disclosure of the “internal” Sustainability Body (if any) consulted before concluding the process;
- (e) disclosure of the “external” Sustainability Body (if any) consulted before concluding the process;
- (f) explicit approval at the end of the process of determining materiality and disclosure of the body or person in charge of the approval;
- (g) explicit follow-up of previous processes of materiality and of the material issues previously identified.

The analysis highlights the following points:

- the linkage between stakeholder dialogue and materiality is explicitly addressed (in the sections of the Integrated Reports which cover

- 1 stakeholder dialogue) by a short majority of the companies, on the other  
hand a consistent minority of them (47%) does not even mention, when  
3 assessing their approach toward stakeholder, its importance for building  
materiality;
- 5 – the disclosure and the narratives are largely vague about the timing of  
the activities performed for assessing material issues and materiality; in  
7 effect, only seven companies explicitly declare the time period covered  
for determining (and/or checking after having determined it) materiality;
  - 9 – the companies in the sample all converge in disclosing the methods they  
have employed for assessing materiality;
  - 11 – the explicit consultation of a specific Sustainability Body (either internal  
or external) is contended: a wafer-thin majority (10 vs. 9) for the first  
13 option (internal Body) and only a single company for the second (external  
Body);
  - 15 – only 10 out 19 companies (53%) declare that there is a formal approval  
at the end of the process of determining materiality, whilst the percentage  
17 increases to 68% when it comes to the follow-up of the previous  
rounds of materiality (quite curiously, since it is a follow-up of a process  
19 which has not been explicitly endorsed).
  - In detail, seven companies have materiality formally approved by man-  
21 agers/executives, two by a Steering Committee and one by the  
Sustainability Board.

23

An overall examination of Table 5.2 demonstrates that the current  
25 state of disclosure about the process of materiality in Integrated Reports  
is still in its early stages, since (a) some significant features of the process  
27 itself are described by a very small number of companies (e.g., the time  
period used for assessing materiality and material issues), (b) some essential  
29 components of the process are performed only by a narrow majority  
of companies (linkage between materiality and stakeholder dialogue, for  
31 instance, presence of an Internal Sustainability Body and explicit  
approval of the process) whilst (c) there is unanimous consensus among  
33 companies only on explicitly naming their armory of methods for determining  
materiality.

35 Moreover, also the declaration of the methods adopted for addressing  
materiality varies widely among the companies.

37 In effect, Table 5.3 reports (company by company) the methods explicitly  
presented by the companies for identifying material topics: the range  
39 is between one single method up to 10, with a significant variance along the  
sample.

**Table 5.2.** Tabulates the Synthetic Results.

Item	Y (%)	N (%)
(a) Linkage stakeholder/materiality	10 (53)	9 (47)
(b) Time period	7 (37)	12 (63)
(c) Methods	19 (100)	0 (0)
(d) Internal Sustainability Body	10 (53)	9 (47)
(e) External Sustainability Body	1 (5)	18 (95)
(f) Explicit approval	10 (53)	9 (47)
(g) Explicit follow-up	13 (68)	6 (32)
Total	70 (53)	63 (47)

**Table 5.3.** Methods Employed for Addressing Materiality.

Company/Item	N	List of Methods Employed for Addressing Materiality
Apoteket	1	Stakeholder dialogue
ARMZ Rosatom	1	Discussion with stakeholders
Atomenergomash	2	Public Reporting Committee/Survey of stakeholders
EVN	2	Stakeholder dialogue/Specialist departments
Gecina	3	Meeting of experts/Stakeholder Committee (planned)/ International Guidelines
Grupa Azoty	4	Market research/Meetings and workshops/Key internal personnel/External experts
KPN	10	Customer panels/Market research/Social media/Round table discussions/Meetings/Management cafés/Annual employee survey/Working groups with NGOs/Annual Supplier Day/International Guidelines
Niaep	4	Dialogues with stakeholders/International Guidelines/ Polling of company management/Polling of major stakeholders
Philips	4	Stakeholder dialogue/Meetings and task forces/ Multi-stakeholder project/Media analysis
Rosatom	3	Stakeholder dialogue/Stakeholder questionnaire/ International Guidelines
Rosenergoatom	2	Survey of stakeholders/survey of top management
SAP	2	International Guidelines/Stakeholder dialogue
Sonae Sierra	2	Stakeholder dialogue/Annual Investor information request
Tele2	2	Supply chain/Peers
TenneT	5	Stakeholder dialogue/Road shows/Investor calls and meetings/Media coverage/Annual reputational survey
TF1	3	International Guidelines/Rating agencies/Media forum
TNT	2	International Guidelines/Annual online survey
Vattenfall	1	Survey
Wartsila Corporation	3	Stakeholder dialogue/Questionnaire/Peer review
Total	56	



**Table 5.4.** Double-Entry Results.

Company/Item	a	b	c	d	e	f	g	Total
Apoteket	1	1	1	1	0	1	0	5
ARMZ Rosatom	1	1	1	0	0	1	0	4
Atomenergomash	0	0	1	1	0	0	1	3
EVN	1	1	1	1	0	1	1	6
Gecina	1	1	1	1	1	1	1	7
Grupa Azoty	1	0	1	1	0	0	0	3
KPN	1	0	1	0	0	1	1	4
Niaep	0	0	1	0	0	0	1	2
Philips	0	0	1	1	0	1	1	4
Rosatom	1	0	1	0	0	0	1	3
Rosenergoatom	1	0	1	0	0	0	0	2
SAP	0	0	1	1	0	1	1	4
Sonae Sierra	1	0	1	0	0	0	1	3
Tele2	0	0	1	0	0	0	1	2
TenneT	0	0	1	1	0	1	1	4
TF1	0	1	1	1	0	1	0	4
TNT	0	0	1	1	0	1	1	4
Vattenfall	1	1	1	0	0	0	1	4
Wartsila Corporation	0	1	1	0	0	0	0	2
Total	10	7	19	10	1	10	13	70

As a matter of fact, stakeholder dialogue emerges as a powerful means of identifying material issues and items, even if it is not explicitly linked to materiality when the narratives in the reports describe stakeholder dialogue itself (see above).

Companies declare on average 2 and 2.9 (median and average, respectively) methods for determining materiality, with a notable contribution of stakeholder dialogue, as mentioned, and International Guidelines.

Table 5.4 disentangles the items as of Table 5.2, company by company, in a double-entry chart (1 for Yes and 0 for Not).

The companies of the sample score:

- as a group 70 points out of a maximum amount of 133 points (53%);
- on average 3.68 and 4 (average and median, respectively) points out of 7, with the notable exception of Gecina (7) and EVN (6).

## 5.6. CONCLUSIONS

The concept of materiality for non-financial information, with specific reference to IR, could be conveniently rooted in the broad theoretical

1 frameworks generally used for depicting sustainability issues as well (stakeholder theory, legitimacy theory, institutional theory).

3 However, the process of determining materiality and material issues is manifold, both in itself and for the different perspectives it should be  
5 viewed from.

7 Some of the most relevant aspects may be namely: stakeholder engagement and the relationship between materiality and other principles, such as consistency, comparability, and conciseness.

9 That said, the preliminary and descriptive findings in Section 5.5 highlight that the process of determining materiality – and the disclosure about  
11 that process – as they are presented in the Integrated Reports of 2014, are still far to be satisfactory for the readers, since important issues and information are missing or not disclosed in a clear and comparable manner.  
13

15 At the same time, the very future of materiality for non-financial information – which focuses on scope (the range of information covered), stakeholder groups (those whose perceived effects are likely to be affected)  
17 and time frame (the time period needed) – is closely related to the future (and the success) of IR itself and to its attempts to institutionalize a New Reporting Framework (Humphrey, O’Dwyer, & Unerman, 2014).  
19

21 Assuming that Integrated Reporting – and Sustainability Reporting – will maintain their relevance in the future, research efforts could be devoted to addressing theoretical and empirical issues – for instance, the disclosure  
23 of the process of materiality adopted – with more sophisticated techniques, which employ the examination of both the volume and the tone of disclosure (Rodrigue, Cho, & Laine, 2015).  
25

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