The role of accounting in realigning corporate purpose: Essays on carbon accounting and reporting practices



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A thesis submitted for the degree of

Doctor of Philosophy

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Abstract

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The first paper (Chapter 3: Corporate perspective) examines the role of the external carbon reporting requirements in influencing managerial decision-making. Based on a field study informed by semi-structured interviews with 30 sustainability managers in large UK-based companies, this paper demonstrates that the introduction of the carbon reporting requirements enabled the sustainability managers to initiate and implement some degrees of changes to the business practices. However, the paper also shows that they simultaneously inhibited the managers from addressing the unquantifiable and unprofitable aspects of climate change. As such, the paper highlights the positive role of carbon accounting and reporting practices, but also the risk that they may serve to create a 'false' sense of comfort.

The second paper (Chapter 4: Voluntary regulatory body's perspective) examines the role of the 'harmonisation work' of voluntary regulatory bodies in making climate change reporting 'comparable' with financial reporting. Based on a case study of the Climate Disclosure Standards Board (CDSB) informed by semi-structured interviews with its 13 key personnel and 2-month participant observation, this paper demonstrates that the harmonisation work enabled the CDSB to initiate some degrees of changes to the corporate reporting practice. However, the paper also shows that there is a risk that it may inadvertently lead the CDSB into an 'institutional trap' through which changing the corporate reporting practice becomes seen as the ultimate objective, instead of changing the underlying business practice.

The third paper (Chapter 5: Regulatory perspective) examines the role of the UK Financial Reporting Council (FRC) in shaping the formulation of a policy proposal which sought to mandate climate change reporting practice. Based on archival analysis of the public consultation documents, this paper demonstrates that the FRC played a subtle 'thought leadership' role in shaping the way that the actors involved in the regulatory debate perceived the issue. This, in turn, created a 'regulatory-policy loop' which supported the policy makers' formulation of the proposal. As such, the paper highlights the role of the corporate reporting regulator in supporting the formulation of the carbon accounting and reporting regulation by creating a sense of shared interest between the business and the NGOs communities.

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Chapter 1
General introduction

This thesis is structured as three-paper essays comprising three substantive chapters and three general chapters. Each of the substantive chapters presents separate studies in the style of academic papers (with its own introduction, literature review, method, findings, discussion, and conclusion sections) and, therefore can be read independently. The general chapters are intended to provide a general introduction about the study, a general review of the prior literature, and a general discussion to sum up the implication of the study. The chapters will be presented in the following order. **Chapter 1: General introduction** provides a general overview of the problem explored in the study and presents a summary the three substantive chapters. **Chapter 2: General literature review** provides a general review of the relevant literature and specifies the potential contribution of the study to the literature. Then, the three substantive chapters will be presented in the following order – **Chapter 3: Corporate perspective** presents a paper which examines the dynamic of the problem from the perspective of companies, **Chapter 4: Voluntary regulatory body's perspective** presents a paper which examines the role of a voluntary regulatory body in addressing the problem, and **Chapter 5: Regulatory perspective** presents a paper which examines the role of the regulator in addressing the problem. Finally, **Chapter 6: General discussion** offers a general discussion to sum up the practical and research implications of the study.

1.1 Overview

The general theme that is explored in this study is the role of accounting in realigning corporate purpose. Conceptually, this study makes the assumption that the fundamental purpose of corporations is to serve the best interests of the society through the creation of not only economic value, but also beyond (Mayer, 2016; White et al, 2017). Such idealistic notion of the corporate purpose, however, is not always observable in practice. Mayer (2016) argues that the misalignment of the corporate purpose with the wider interests of the society is attributable to the overemphasis of the role of corporations in the reproduction of the financial capital and, at the same time, the under-representation of the other type of capitals (e.g. natural, social, intellectual capitals) to the functioning of corporations (see also White et al, 2017). In this regard, the aim of this study is to explore the role that accounting could play in enabling corporations to realign its purpose with the wider interests of the society. In particular, this study examines the role of accounting in enabling corporate managers to identify and make sense of the intricacies of the corporate purpose, beyond the simplistic measures of financial performance. In conjunction, this study aims to provide a better understanding of the role of accounting in making companies accountable not only to the shareholders, but also to the wider groups of stakeholders.

To that end, this study presents three papers which examine the role of carbon accounting and reporting practices in redefining the role of corporations in addressing climate change. In this regard, this study defines the term 'carbon accounting and reporting practices' very broadly as a range of techniques used for measuring, assessing, and reporting carbon footprint which would allow companies to account for the impact of their business activities in relation to the global issue of climate change (Bebbington & Larrinaga-Gonzalez, 2008; Kolk et al, 2008; Cook, 2009; MacKenzie,

2009; Andrew & Cortese, 2011; Ascui & Lovell, 2011). Broadly, this study examines the two facets of carbon accounting and reporting practices, namely its internal role as a performance measurement system through which the carbon footprint of companies could be made visible and, to some extent, manageable (MacKenzie, 2009; Ascui & Lovell, 2011) as well as its external role as an external reporting system through which companies could be held accountable for their environmental impact by their external constituents (Bebbington & Larrinaga-Gonzalez, 2008; Kolk et al, 2008; Cook, 2009; Andrew & Cortese, 2011). Although these internal and external roles are inextricably related, each represent a distinct mechanism. As a performance measurement system, carbon accounting and reporting practices allow managers to identify the total carbon footprint emanating from a range of business activities, such as energy consumption, electricity usage, transport and distribution, and others (MacKenzie, 2009). Such information could then be used by the managers to make a more holistic business decision, which takes into account the societal responsibility of corporations (Thomson et al, 2014). On the other hand, as an external reporting system, carbon accounting and reporting practices allow a diverse range of the external constituents of the company to examine its carbon performance. For example, the external stakeholders may use the information to inform their initiatives in challenging certain corporate practices; another example, the shareholders may use the information to refine their assessment of the long-term viability of the business in making their investment choices (Kolk et al, 2008; Andrew & Cortese, 2011). As such, while the internal role represents the capacity of the carbon accounting and reporting practices in enabling managerial decision-making, the external role represents their capacity in facilitating the decision-making of the external constituents of the company. In this regard, the purpose of this study is to explore both the internal and external roles of carbon accounting reporting practices, as well as the interplay

between these roles in redefining the corporate responsibility of addressing climate change.

The decision to focus this study on carbon accounting and reporting practices is largely motivated by my broader interest on the role of social and environmental accounting practices in facilitating a better alignment between business activities and the wider interest of the society (Gray, 1992; 2010; Thomson, 2007; Thomson et al, 2014; Unerman et al, 2007). However, the complexity of the various social and environmental challenges that we face in the world today (Bebbington & Larrinaga, 2014) makes it rather difficult to attempt to come up with a 'general theory' of the role of accounting in addressing those multi-faceted issues (if there is ever one). As such, the focus on carbon accounting and reporting practices provides a starting point to explore the kind of roles that accounting could play in redefining business practices with regard to a salient societal issue. As such, the decision to focus on carbon accounting and reporting practices is not intended to downplay the importance of other social and environmental concerns. Rather, it simply represents my attempt to understand the role that accounting could play in addressing a pressing societal issue; particularly one with wide-ranging physical, social and economic consequences (Stern, 2007).

Furthermore, the focus on carbon accounting and reporting practices provides this study with a certain degree of practical relevance given the fact that many major corporations have started to adopt carbon accounting and reporting practices on a voluntary basis, while an increasing number of regulations have also been promulgated to enforce carbon reporting practices more widely (see OECD & CDSB,

2015; TCFD, 2017). For example, Kolk et al (2008) indicate that major corporations across the globe have started to publicly disclose their carbon footprint through a specialised reporting mechanism established by a not-for-profit organisation called the Carbon Disclosure Project (CDP). Similarly, the Climate Disclosure Standards Board (CDSB) has also established reporting frameworks that would allow companies to incorporate discussion about climate change related issues in their annual reports (Andrew & Cortese, 2013; Thistlethwaite, 2015). These voluntary reporting initiatives represent a specialised mechanism for facilitating the disclosure of climate change related information, and, in practice, they are often used by companies in conjunction with the more general voluntary reporting initiatives, such as the Global Reporting Initiative (GRI) Framework (Etzion & Ferraro, 2010; Levy et al, 2010). Additionally, the growing number of climate change related regulations have also made carbon accounting and reporting practices increasingly relevant to companies. For example, the establishment of the European carbon market (the EU Emissions Trading System) requires companies to establish a carbon reporting system in order to account for the surplus/ deficit in their carbon allowances (Bebbington & Larrinaga-Gonzalez, 2008; Cook, 2009; MacKenzie, 2009). Moreover, some countries including the UK and France have also introduced a mandatory requirement for listed companies to report climate change related information in their annual report (CDSB, 2016). In this regard, despite the limitation imposed by the scope of the study, it provides a starting point for exploring the role of accounting in addressing a pressing societal issue on which ample of practical evidence is available.

By exploring the role of carbon accounting and reporting practices, this study seeks to contribute to the literature by re-examining the role of the social and environmental accounting practices (Gray, 1992; 2002; 2010; Power, 1992; Larrinaga-Gonzalez &

Bebbington, 2001; Adams & McNicholas, 2007; Hopwood, 2009; Thomson et al, 2014; Unerman & Chapman, 2014). Prior literature (Gray et al, 1995; Larrinaga-Gonzalez & Bebbington, 2001; Larrinaga-Gonzalez et al, 2001; O'Dwyer, 2002) has demonstrated the limited role of social and environmental accounting practices in stimulating deep-seated changes to the corporate practices. In particular, they highlight the incapacity of these practices for shifting the managerial perception of profit as the most important element in decision-making. Yet, in practice, there has been an increasing number of companies making bold social and environmental commitments (Hopwood, 2009; Hopwood et al, 2010; Contrafatto, 2014) and attributed social and environmental accounting practices as important factors in formulating and implementing those commitments (Henri & Journeault, 2010; Arjalies & Mundy, 2013; Contrafatto & Burns, 2013; Rodrigue et al, 2013). Further, the proliferation of sustainability reporting guidelines (Kolk et al, 2008; Etzion & Ferraro, 2010; Levy et al, 2010; Andrew & Cortese, 2013; Rowbottom & Locke, 2016; Humphrey et al, 2017) as well as sustainability reporting regulations (Larrinaga et al, 2002; Cooper & Owen, 2007; Archel et al, 2011; Bebbington et al, 2012; Rowbottom & Schroeder, 2014; Thomson et al, 2014) seems to suggest that social and environmental accounting practices remain to be relevant. In this regard, there seems to be a contradiction in the sense that while the literature has highlighted the inherent limitation of social and environmental accounting practices, those same practices seem to remain relevant to companies, voluntary regulatory bodies, and regulators alike. The motivation of this study is to address and provide some insights to contextualise this contradiction.

In order to extend the prior literature, this study draws on various theories such as 'sensemaking and sensegiving' (Gioia & Chittipeddi, 1991; Weick, 1995), 'institutional

work' (Lawrence & Suddaby, 2006; Zietsma & Lawrence, 2010), and 'regulatory space' (Hancher & Moran, 1989; Young, 1994). I will leave detailed discussion of these theories for later, but I would just like to discuss the key assumption underpinning these theories in here. Although each theory has their own unique way of illuminating the problem, I would suggest that the common thread between these theories lies on their 'social constructivist' assumption. The social constructivist assumption refers to an epistemological position which assumes that there is an inherently recursive relationship between a system of knowledge and social interaction. Thereby, a certain knowledge could only be professed as 'true' insofar as the majority of the members of the society believe and enact it, so that it becomes real (Hacking, 2002). The application of such a constructivist assumption in studying accounting has led to the re-examination of the functional perspective of accounting (e.g. accounting as a mechanism for monitoring economic costs) toward the multi-dimensional perspectives of accounting in which it is seen as a tool that is defined and simultaneously defines certain societal objectives (e.g. accounting as a mechanism for defining an economic objective by establishing practical concepts such as 'costs') (Hopwood, 1987; see also Burchell et al, 1980; Hines, 1988; Chapman et al, 2009; Miller & Power, 2013). Drawing on such constructivist assumption, this study seeks to demonstrate that the role of carbon accounting and reporting practices is shaped by and recursively shapes the constantly changing relationships between companies, voluntary regulatory bodies, and regulators (Gray et al, 1995; Hopwood, 2009; Unerman & Chapman, 2014). While prior literature has discussed the role of social and environmental accounting as a tool for holding companies accountable to the their external stakeholders (Gray et al, 1995; Deegan, 2002; Patten, 2002; Cooper & Owen, 2007; Cho et al, 2012) or their shareholders (Dhaliwal et al, 2010; 2012; Henri & Journeault, 2010; Arjalies & Mundy, 2013; Barth et al, 2017), this study seeks to demonstrate another perspective for understanding the mechanism through which

social and environmental accounting practice could mediate companies, voluntary regulatory bodies, and regulators in negotiating the role of corporations in society (see also Miller & Power, 2013). In other words, the primary interest of this study is to obtain a better understanding of the role of carbon accounting and reporting practices as mechanisms for allowing a diverse set of actors to collectively make sense of the role of corporations in addressing climate change.

In order to illustrate such theoretical assumption, this study explores three cases which examine the role of carbon accounting and reporting practices from the perspectives of companies, voluntary regulatory bodies, and regulators. The three papers explore each of the case using a qualitative research methodology, which represents an appropriate approach given that the overarching purpose of this study is to build and extend a certain theoretical position, rather than to test and falsify (Flyvbjerg, 2001). The first paper examines the relevance of carbon accounting and reporting practices to the activities of sustainability managers in large UK-based companies. Then, the second paper examines the activities of a voluntary regulatory body whose main purpose is to develop reporting frameworks for facilitating the disclosure of climate change related information. Next, the third paper examines the role of the corporate reporting regulator in shaping the introduction of a mandatory climate change disclosure requirement. I would suggest that these cases contribute to the study by providing a practical grounding for exploring the role of carbon accounting and reporting practices from the multiple perspectives of companies, voluntary regulatory bodies, and regulators. I will explain and justify the selection of the case in detail in the method sections of each paper. As with most qualitative research, the selection of the cases was largely a function of the appropriateness of the context as well as the available opportunity (Hammersley & Atkinson, 1995). In this

regard, it is noteworthy that the scope of this study is not exhaustive. For example, this study has not explored the mobilisation of social and environmental information by investors. This is a clearly important area that would need further attention in the future. For example, an examination of the recent emergence of the Environmental, Social and Governance (ESG) funds may prove useful in shedding some light to the use of social and environmental information by investors. However, given the nascent state of such practice, it has been excluded from the main analysis of this study to provide a grounded focus on the examination of the current, rather than future practices.

1.2 Summary of the three papers

The first paper (Chapter 3: Corporate perspective) addresses the problem of whether the introduction of external carbon reporting requirement would lead to the internalisation of climate change issue into managerial decision-making. Specifically, the paper examines the role of the 'integrated' carbon reporting practices, which have been developed to enable companies to account for the relationship between the carbon footprint and the underlying business activities of companies (Henri & Journeault, 2010; Gond et al, 2012; Thomson et al, 2014); these carbon reporting practices could be distinguished from other type of carbon reporting which is solely oriented toward accounting for the carbon footprint without necessarily considering its financial implication (MacKenzie, 2009; Ascui & Lovell, 2011). Drawing on the theoretical concepts of 'sensemaking' (Weick, 1995) and 'sensegiving' (Gioia & Chittipeddi, 1991), the paper examines the cognitive and enactive effects of the integrated carbon reporting practices in influencing the managerial perceptions of the relevance of climate change and the subsequent behaviours of the managers in relaying such perceptions to other organisation members. The paper illustrates the

theoretical concepts through a field study that is primarily informed by semi-structured interviews with 30 sustainability managers who were based in large UK-based companies operating in a cross-section of industries. The paper shows that the integrated carbon reporting practices influenced the activities of the sustainability managers by triggering a shift in the perception of their role from that of merely ensuring compliance with certain regulations toward a more performance-based role which was concerned with improving both the carbon and financial performance of the company. Additionally, the paper also demonstrates that those practices influenced the sustainability managers by priming their attention toward the 'business case' frames of climate change. That, in turn, enabled them to foster an intersubjective understanding with the other organisation members in shaping the organisational perception of the relevance of climate change. However, the paper also shows that absent from the frames of reality of the sustainability managers was the possibility of unconditionally minimising the carbon footprint. In this regard, the paper argues that although the introduction of such integrated carbon reporting practices enabled the sustainability managers to initiate and implement some degrees of changes to business practices, it simultaneously hid the unquantifiable and unprofitable aspects of climate change. As such, the paper highlights the positive role of carbon reporting, but also the risk that it may serve to create a 'false' sense of comfort that the 'real' climate change issue could be alleviated without a paradigm shift toward a more prudent outlook of the relationship between corporations and its natural environment (Roberts, 2001; 2003; Bebbington, 2008; Gray, 1992; 2010).

The second paper (Chapter 4: Voluntary regulatory body's perspective) addresses the problem of whether the application of the financial reporting principles in formulating the external carbon reporting requirements would better enable external stakeholders

to hold companies accountable for their social and environmental responsibility. Specifically, this paper examines the 'harmonisation work' of making social and environmental information 'comparable' with financial information. Prior literature has highlighted that those actors who are involved in such harmonisation work includes, among others, The Prince's Accounting for Sustainability Project (A4S) (Hopwood, 2009; Hopwood et al, 2010), the International Integrated Reporting Council (IIRC) (Rowbottom & Locke, 2016; Humphrey et al, 2017), the Sustainability Accounting Standards Board (SASB) (Herz & Rogers, 2016) as well as the Climate Disclosure Standards Board (CDSB) (Andrew & Cortese, 2013; Thistlethwaite, 2015). Drawing on the lens of institutional work (Lawrence & Suddaby, 2006; Zietsma & Lawrence, 2010), this paper examines the role of such harmonisation work in reconfiguring the boundaries of the sustainability reporting field ('boundary work') and in enabling external stakeholders to encourage companies to make changes to their corporate reporting practice as well as to their underlying business practices ('practice work'). The paper illustrates the theoretical concepts through a case study of the activities of the CDSB in seeking to promote climate change disclosure in the mainstream corporate report. The case study is primarily informed by semi-structured interviews with 13 key personnel of the CDSB and 2-month participant observation at the organisation. The paper demonstrates that the harmonisation work of making sustainability reporting 'comparable' comprised refocusing the work of the organisation to identifying pragmatic solutions to the corporate reporting practice, in contrast to the focus of the conventional environmental activists, and demonstrating the commitment by seeking the involvement of the accounting professionals. Further, the organisation also presented the objective of 'enlightening' the shareholders as its primary mission, while the objective of creating stakeholder accountability being addressed as a secondary mission. The paper shows that such harmonisation work enabled the CDSB to instigate some degrees of changes to the corporate reporting

practice by allowing the organisation to directly engage with the corporations in providing some advices for presenting the sustainability-related information in an integrated manner. Additionally, it also allowed the organisation to engage with the financial reporting standard-setters and the corporate reporting regulators in providing some advices with regards to the relevance of sustainability reporting practices to the works of those authoritative bodies. However, the paper also shows that there is a risk that the harmonisation work may inadvertently led the CDSB into an 'institutional trap' through which changing corporate reporting practice became seen as the ultimate objective, instead of the original intention of stimulating changes to the underlying business practices. As such, this paper discusses the possibilities (Etzion & Ferraro, 2010; Haack et al, 2012) and the constraints (Archel et al, 2011; Malsch, 2013) faced by the voluntary regulatory bodies who seek to use social and environmental accounting practices as the mechanisms for redefining corporate practices.

The third paper (Chapter 5: Regulatory perspective) addresses the extent to which the corporate reporting regulator could play a role in regulating social and environmental accounting practices. Specifically, this paper examines the role of the Financial Reporting Council (FRC) in shaping the formulation of a policy proposal which was aimed at widening the scope of corporate reporting to include the disclosure of climate change related information. While social and environmental disclosure is not an entirely new practice, the idea of mandating climate change disclosure is quite a recent one with the UK being one of the pioneers (OECD & CDSB, 2015). Drawing on the theoretical concept of 'regulatory space' (Hancher & Moran, 1989; Young, 1994), this paper conceptualises the policy proposal as being negotiated in a discursive space comprising actors, including the FRC as the regulator, the Department for Business,

Innovation and Skills (BIS) as the policy makers, as well as numerous other interested actors, such as companies, investors, business associations, accounting firms, as well as NGOs. Given the diverse interests of the different actors, the role of the regulator is to maintain the 'logic of appropriateness' (March & Olsen, 1989; Young, 1994) of the field to ensure that actors would negotiate their individual concerns in relation to the concerns of other actors, thereby maintaining the shared interests for having a certain regulation. The paper illustrates the theoretical concept by examining the case of the amendment to the UK Company Law proposed by the BIS to introduce a climate change disclosure requirement. The paper is primarily informed by the analysis of the public documents issued during the public consultations conducted by the BIS in 2010-2013. The paper shows that the majority of the actors involved in the regulatory debate were not very interested in the initial policy proposal which was presented as a mechanism to monitor the 'social and environmental duties' of corporations. On the contrary, there were ample of supports for the final version of the proposal which framed the policy as a mechanism for 'cutting clutter' against the disclosure of 'immaterial' social and environmental information in the corporate report. In this regard, the paper suggests that while the FRC did not seem to play an active role in shaping the reformulation of the policy proposal, it played a subtle 'thought leadership' role in mediating the diverse interests of the different actors and shaping the way that they perceived the policy proposal. This, in turn, created a 'regulatory-policy loop' which allowed the policy makers to reformulate the policy proposal in a way that was in tune with the interests of the majority of the actors who were involved in the regulatory debate. As such, the paper considers the subtle role that the corporate reporting regulator could play in creating a sense of shared interest for having a climate change disclosure regulation (cf. Cooper & Owen, 2007).

1.3 Development of the papers and co-authorship

The three papers had been developed during the PhD study and none of them has been published nor submitted for publication in an academic journal outlet (although it is my intention to do so in near future). The development of the papers has immensely benefitted from the contribution of the co-authors. The first paper is co-authored by Professor Richard Barker *(University of Oxford)* who has been immensely influential throughout the study. And, the third paper is co-authored by Dr Yasmine Chahed *(London School of Economics and Political Science)* who has been vastly influential in developing the paper.

Chapter 2
General literature review

This chapter provides some backgrounds on the key strands of research on social and environmental accounting in the current literature. Next, it identifies some areas where there appears to be contradictions between the different strands of the literature and, then discusses the potential contribution that this study could make by addressing those contradictions.

2.1 Key strands of research on social and environmental accounting

Based on the review of the literature on social and environmental accounting, this study identifies two strands of research that are relevant in illuminating the study, namely the 'critical' strand and the 'managerial' strand (see also Thomson, 2007; Bebbington & Thomson, 2013; Unerman & Chapman, 2014). Although there is an inextricable link between the critical and managerial strands, each strand adopts different theories that seem to lead to a different focus in their respective examinations of the role of social and environmental accounting. First, the critical strand of the literature refers to the studies that mainly focus on the limitation of social and environmental accounting practices for enhancing the accountability of corporations toward their external stakeholders. The critical strand offers the most wide-ranging perspectives with regards to critiquing the capacity of social and environmental accounting from enabling changes to business practices (Gray et al, 1995; Larrinaga-Gonzalez & Bebbington, 2001; Larrinaga-Gonzalez et al, 2001; Deegan, 2002; Patten, 2002; Cho & Patten, 2007; Cho et al, 2012), from enabling NGOs to challenge companies (Spence, 2009; Archel et al, 2011; Andrew & Cortese,

2013; Tregidga et al, 2014), and from enabling the regulator to oversee the social and environmental responsibility of companies (Larrinaga et al, 2002; Cooper & Owen, 2007; Archel et al, 2009; Bebbington et al, 2012; Malsch, 2013).

To demonstrate the limitation of social and environmental accounting from enabling organisational change, Gray et al (1995) builds on the 'organisational change' framework of Laughlin (1991) in order to distinguish the superficial changes ('morphostatic' changes) from the deep-seated changes to business practice ('morphogenetic' changes). Based on their examination of environmental reporting practices of large UK and New Zealand firms, Gray et al (1995) demonstrates that such practices would, at most, lead to superficial organisational changes, rather than radically shifting the way that corporate managers perceive their social and environmental responsibility; Larrinaga-Gonzalez et al (2001) reach similar conclusion following their examination of environmental reporting practices in the Spanish context. Further, Larrinaga-Gonzalez & Bebbington (2001) argue that there is an element of 'institutional appropriation' in the sense that such environmental reporting practices could be used by companies to create a misleading impression of change, without actually making any major change. In relation, Cho & Patten (2007) draws on the 'legitimacy theory' (Dowling & Pfeffer, 1975) to examine a sample of US companies and show a negative relationship between environmental performance and environmental disclosure to make the argument that such disclosure was largely used as an 'impression management' tool by the poorly-performing companies. Additionally, Cho et al (2012) show that firms are able to maintain positive reputations by providing an extensive environmental disclosure regardless of the underlying environmental performance, thereby affirming the influence of such disclosure on the public perspective (see also Deegan, 2002 and Patten, 2002). As such, the critical

strand of the literature has demonstrated the limited role of social and environmental accounting in effectuating organisation change as well as the danger of social and environmental accounting being used as a tool for impression management.

Next, the critical strand of the literature has also deliberated the limited potential of social and environmental accounting from empowering the NGOs from holding companies accountable for their social and environmental responsibility. For example, Tregidga et al (2014) conducted a longitudinal analysis of the sustainability reports of a sample of New Zealand firms and show that the reports were largely used to represent the 'sustainable business' identity of the companies with very little information about the underlying social and environmental performance, thereby providing limited information to the NGOs to challenge the current corporate practices. In relation, drawing on the neo-Marxian concept of 'heretic discourse' (Levy & Egan, 2003), Archel et al (2011) make an argument for the deradicalizing potential of social and environmental accounting as they examine the case of the introduction of social and environmental accounting regulation in Spain and demonstrate that some of the NGOs had come to believe in the dominant 'business case' discourse and lost their radical edge as they began to adopt the language of business in deliberating the formulation of the regulation (see also Spence, 2009). Andrew & Cortese (2013) turn the critique toward the voluntary regulatory bodies who are responsible for establishing the sustainability reporting guidelines for their complicity in reinforcing the 'neoliberal' ideology and allowing major corporations to 'capture' the sustainability reporting practices. As such, the critical strand of the literature has also demonstrated the limited role of social and environmental accounting in facilitating the work of the NGOs as well as its potential of deradicalizing the NGOs as they become complicit (consciously or otherwise) to the business case discourse.

Then, the critical strand of the literature has also problematised the limited potential of social and environmental accounting for allowing the regulator to oversee the social and environmental responsibility of companies. For example, Bebbington et al (2012) conduct a comparative analysis of the mandatory social and environmental reporting regime in Spain against the voluntary social and environmental reporting regime in the UK, and demonstrate that the ambiguity of the Spanish regulation made it less effective in promoting the social and environmental reporting practices in comparison to the clearly-defined voluntary reporting regime in the UK (see also Larrinaga et al, 2002). On the other hand, Cooper & Owen (2007) also examine the social and environmental reporting practices in the UK, and argue that neither the voluntary nor the mandatory social and environmental reporting practices would lead to deep-seated changes in business practice given the pervasive focus on the business case discourse which is largely catered toward empowering the shareholders, rather than creating stakeholder accountability. In relation, Malsch (2013) argues that the emergence of the voluntary sustainability reporting guidelines served to reinforce the 'self-regulatory' approach for addressing social and environmental issues that, in turn, diminished the power of the regulator to stage an intervention. On the other hand, Archel et al (2009) argue that the regulator is not merely the victim, but rather it is complicit in maintaining the neoliberal ideology as they examine the case of labour relations in Spain and demonstrate the role of the regional government in supporting the business case discourse promoted through the sustainability report of a major multinational corporation while disregarding the popular discourse highlighted in the local media. As such, the critical strand of the literature has also shown the limited potential of the social and environmental accounting regulation as well as the limited role played by the regulator.

The preceding paragraphs have shown the wide-ranging perspectives offered by the critical strand of the literature. The critiques offered in this strand of literature also vary from being mildly critical of the role of social and environmental accounting and attribute its limitation to contextual issues (Gray, 1992; 2002; Owen et al, 1997) to being sharply critical and attribute the problem on the social and environmental accounting itself as these practices had come to be 'captured' by powerful business interests (Spence, 2009; Gray, 2010). As such, there are almost 'sub-strands' in the critical strand as some studies were considered as 'too soft' by some, while others were considered as 'too critical' by others (Owen et al, 1997; Gray, 2002; Unerman & Chapman, 2014). I would suggest that the wide-range of topics covered in this strand may contribute to the disagreement, which was not entirely helped by the dearth of empirical evidence to support the theoretical positions, especially during the early period when social and environmental accounting practices were largely the subject of academic propositions, rather than common organisational practices (Owen et al, 1997; Gray, 2002). As such, while the critical strand of the literature offers rich perspectives on diverse areas, there remains to be some complexities as demonstrated by the recent developments in the field that could be not be satisfactorily explained by the theories offered by this strand (Unerman & Chapman, 2014).

Second, the managerial strand of the literature refers to the studies that mainly focus on the potential of social and environmental accounting practices in enabling companies to manage multiple and often conflicting demands from their external constituents. The managerial strand is mainly concerned with the role of social and environmental accounting practice in enabling organisational change (Adams, 2002; Adams & McNicholas, 2007; MacKenzie, 2009; Hopwood, 2009; Henri & Journeault,

2010; Gond et al, 2012; Arjalies & Mundy, 2013; Contrafatto & Burns, 2013; Rodrigue et al, 2013; Contrafatto, 2014; Thomson et al 2014) as well as the role of the voluntary regulatory bodies who are responsible for developing the social and environmental accounting 'best practices' (Power, 1992; 1997; Kolk et al, 2008; Etzion & Ferraro, 2010; Levy et al, 2010; Haack et al, 2012; O'Sullivan & O'Dwyer, 2015; Humphrey et al, 2017). With regard to the role of social and environmental accounting practices in enabling organisational change, Adams (2002) and Adams & McNicholas (2007) point out that the examination of the efficacy of those practices needs to take into account the multiplicity of internal organisational factors, such as ownership structure, industry type, corporate culture, and many others. For example, Henri & Journeault (2010) conducted a survey to gauge the perception of the senior executives in large Canadian firms about the relevance of environmental accounting practices, and found that such practice was deemed to be useful for managing both the environmental and economic performances of the firms, especially for the participants who were based in the bigger firms with a higher degree of public visibility. On the other hand, Thomson et al (2014) suggest that the efficacy of social and environmental accounting practice in stimulating organisational change is inextricably bound up by its implementation at the local level (see also Hopwood, 2009). In a similar vein, Contrafatto (2014) draws on the 'institutional theory' (Scott, 2002) and highlights the role of social and environmental accounting in allowing not only the senior executives, but also the middle managers to engage in addressing the social and environmental issues faced by the company (see also Contrafatto & Burns, 2013). Meanwhile, MacKenzie (2009) shifts the emphasis toward the feature of the accounting system itself. Drawing on the 'actor-network theory' (Latour, 2005; Muniesa & Callon, 2007), he argues that the construction of a common accounting and reporting system is essential in enabling a particular social and environmental issue to be considered as a common element of corporate decision-making. In relation, Gond et al (2012) draw

on the 'levers of control' framework (Simons, 1995) and argue that the efficacy of social and environmental accounting practices is also influenced by the degree of 'integration' of the novel accounting systems into the traditional corporate accounting and reporting system (see also Arjalies & Mundy, 2013 and Rodrigue et al, 2013). In this regard, they propose that the potential for successfully implementing an 'integrated sustainability strategy' could only be achieved when there are sufficient degrees of 'technical' integration (methodological link between the accounting systems), 'practical' integration (practical link between different organisational structure and role), and 'cognitive' integration (common frame of reference for perceiving financial and sustainability-related issues). As such, the managerial strand of the literature has demonstrated the importance of the central and local organisational factors as well as the degree of integration in unlocking the potential of social and environmental accounting practices.

Next, the managerial strand of the literature has also examined the role of the voluntary regulatory bodies who are responsible for issuing the sustainability reporting guidelines. For example, Etzion & Ferraro (2010) and Levy et al (2010) make use of the concept of 'institutional entrepreneurship' (Maguire et al, 2004) in examining the strategy of the Global Reporting Initiative (GRI) of drawing analogies between sustainability reporting and financial reporting in order to stimulate the adoption of sustainability reporting practice by corporations. Similarly, Kolk et al (2008) also draw on the concept of institutional entrepreneurship to examine the strategy of the Carbon Disclosure Project (CDP) in enrolling the support of the institutional investors in compelling companies to measure and disclose their carbon footprint. In relation, Haack et al (2012) examine the effect of the adoption of the 'Equator Principles' in the banking industry, and suggest that the social and

environmental disclosure requirement created by the Equator Principles led to a 'moral entrapment' whereby companies became obliged to consider social and environmental issues as a result of the reporting commitment, i.e. sustainability reporting as a 'Trojan horse' for making social and environmental issues visible to companies (see also O'Sullivan & O'Dwyer, 2015). On the other hand, Power (1992; 1997) considers the role of the accounting profession in shaping the sustainability reporting field by examining the strategy adopted by the European accounting professions in establishing their claim of expertise to the environmental auditing market. Humphrey et al (2017) draws on the concept of 'boundary work' (Gieryn, 1983) to examine the role of the International Integrated Reporting Council (IIRC) in carefully negotiating its position with the accounting profession and the financial reporting standard-setters by making various compromises in order to extend its influence into the traditional corporate reporting field (see also Rowbottom & Locke, 2016). As such, the managerial strand of the literature has also deliberated the role of the voluntary regulatory bodies in devising novel strategies as well as in negotiating with the powerful actors in the field in enabling the widespread diffusion of social and environmental accounting practice.

The preceding paragraphs have shown that the managerial strand of the literature offers a more granular perspective of social and environmental accounting practice through a closer engagement with both the companies and the voluntary regulatory bodies. However, it is notable that there is a very limited discussion about the role of the regulator in the managerial strand of the literature. In this strand, regulation is often considered either as an external factor that leads to the adoption of certain social and environmental accounting practices (Adams & McNicholas, 2007; MacKenzie, 2009; Arjalies & Mundy, 2013; Rodrigue et al, 2013) or as an external resource that

could be mobilised by the voluntary regulatory bodies in order to extend the influence of certain social and environmental accounting practices (Etzion & Ferraro, 2010; Levy et al, 2010; Humphrey et al, 2017). In this regard, many studies in the managerial strand still appear to rely on the earlier studies developed under the critical strand in order to provide a nuanced discussion about the potential of social and environmental accounting in stimulating organisational change and, on the other hand, the socio-political limitation of such practice from engendering deep-seated changes to business practice (for example, Kolk et al, 2008; Hopwood, 2009; Levy et al, 2010; Contrafatto & Burns, 2013; Rodrigue et al, 2013; Thomson et al, 2014; O'Sullivan & O'Dwyer, 2015). As such, I would suggest that the managerial strand is complementary to the critical strand, in the sense that it offers alternative theoretical angles for understanding not only the limitation, but also the potential of social and environmental accounting practices (Unerman & Chapman, 2014).

It is worth mentioning that there is also another strand of research which focuses on the capital market effect of social and environmental accounting practices (Richardson & Welker, 2001; Dhaliwal et al, 2011; 2012; Matsumura et al, 2014; Plumlee et al, 2015; Barth et al, 2017). For example, Dhaliwal et al (2011) conducted a longitudinal analysis of the voluntary CSR disclosure of a sample of large US firms, and found that firms with both comprehensive CSR disclosure and positive CSR performance tend to have lower costs of capital (see also Richardson & Welker, 2001 and Plumlee et al, 2015). Matsumura et al (2014) examine the carbon disclosure practices of a sample of US firms, and found a positive relationship between the market value and the level of carbon disclosure and carbon performance of the firms. In this regard, most of the studies in this strand tend to focus on the 'output' of the implementation of the social and environmental accounting practices at the firm level,

whereas this study is concerned mainly with the process through which such output is being accomplished from the multiple perspectives of corporations, voluntary regulatory bodies, and regulators. As such, I would suggest that this strand of the literature is not directly relevant to this study given the different unit of analysis (Margolis & Walsh, 2003). Having said that, it needs to be acknowledged that recent studies in this strand has begun to explore much wider perspectives, for example, by examining factors relating to the legal origin of the country in moderating the capital market effect (Dhaliwal et al, 2012) as well as the 'real effect' of the implementation of the social and environmental accounting practices on the firms' capabilities to efficiently allocate capital investment (Barth et al, 2017). In this regard, I would suggest that this study does not, in principle, contradict the main insights from this strand of research in spite of the fact that this study does not make extensive references to the studies in this strand.

2.2 Identifying contradictions and contributing to the literature

Although the literature has offered wide-ranging perspectives in understanding the role of social and environmental accounting, I would suggest that this study could offer additional insights by seeking to reconcile what seems to be contradictions in the literature. First, from the corporate perspective, the current literature does not seem to offer a sufficient explanation for reconciling those studies which attributed social and environmental accounting as a tool for impression management (Gray et al, 1995; Larrinaga-Gonzalez & Bebbington, 2001; Larrinaga-Gonzalez et al, 2001; Cho & Patten, 2007; Cho et al, 2012) and other studies that have demonstrated its role in stimulating changes to business practice (Henri & Journeault, 2010; Rodrigue et al, 2013; Arjalies & Mundy, 2013; Contrafatto, 2014; Thomson et al, 2014). The critical strand of the literature has rightly pointed out that the implementation of the social

and environmental accounting practices had often led to superficial changes (Gray et al, 1995; Larrinaga-Gonzalez & Bebbington, 2001) or even merely symbolic changes (Cho & Patten, 2007; Cho et al, 2012). However, the arguments seem to contradict the evidence from the managerial strand of the literature which has demonstrated the role of the various type of social and environmental accounting practices in enabling companies to engage in a range of social and environmental issues, for example by focusing on improving the eco-efficiency of the operations (Henri & Journeault, 2010; Thomson et al, 2014) or even by devising a more holistic corporate 'sustainability strategy' (Arjalies & Mundy, 2013; Contrafatto, 2014).

In addressing the contradiction from the corporate perspective, this study draws on the theoretical concepts of sensemaking (Weick, 1995) and sensegiving (Gioia & Chittipeddi, 1991) to provide some insights for reconciling the contradiction. Sensemaking refers to the cognitive and enactive processes of framing ambiguous issues, while sensegiving refers to the social process of enrolling others into one's way of framing the issue to facilitate a coordinated response in the face of ambiguity. As such, one's effort to engage in sensegiving is highly interrelated with one's way of framing the issue, i.e. sensemaking (Rouleau, 2005; Maitlis & Lawrence, 2007). I would suggest that the concepts of sensemaking and sensegiving are useful for disentangling the contradiction in the literature from the corporate perspective because they allow the examination of the internal effect of social and environmental accounting practice, which may very well be initially intended to manage the expectation of the external stakeholders. Such exploration builds on the studies (O'Dwyer, 2002; Roberts, 2003; Bebbington et al, 2008) which have indicated the role of social and environmental accounting as an internal mechanism for rationalising and justifying corporate activities in the face of the equivocal pressures from various

external constituents. In this regard, this study suggests that such theoretical exploration could provide some evidences on the internal effect of impression management through which companies could come to believe in their own hype and sought to realise their external identity portrayed through the sustainability reports (Roberts, 2001; 2003; Bebbington et al, 2008; Tregidga et al, 2014; Cho et al, 2015).

Second, from the voluntary regulatory bodies' perspective, the current literature also does not seem to offer a comprehensive explanation to reconcile those studies which have highlighted the limited role of social and environmental accounting in empowering the NGOs (Spence, 2009; Archel et al, 2011; Andrew & Cortese, 2013; Tregidga et al, 2014) and other studies which have highlighted the proliferation and the widespread adoption of sustainability reporting guidelines that are, no less, published by the voluntary regulatory bodies – a particular type of NGOs focused largely on the development and promotion of voluntary corporate sustainability reporting guidelines (Kolk et al, 2008; Etzion & Ferraro, 2010; Haack et al, 2012; O'Sullivan & O'Dwyer, 2015). While the critical strand of the literature has suggested that the NGOs have little to gain by focusing on social and environmental accounting (Spence, 2009; Archel et al, 2011) as well as by collaborating with the major corporations (Andrew & Cortese, 2013; Tregidga et al, 2014), the arguments do not seem to explain the evidence offered by the studies in the managerial strand of the literature that have shown the growing number of the voluntary regulatory bodies (Kolk et al, 2009; Etzion & Ferraro, 2010) as well as their successes in obtaining the attention of companies and in instigating some degrees of changes to corporate practices (Haack et al, 2012; O'Sullivan & O'Dwyer, 2015).

In addressing the contradiction from the voluntary regulatory body's perspective, this study draws on the theoretical concepts of boundary work and practice work (Zietsma & Lawrence, 2010) from the lens of institutional work (Lawrence & Suddaby, 2006; Lawrence et al, 2009) to provide some insights for reconciling the contradiction. Boundary work refers to the purposive actions undertaken to redefine institutional boundaries in order to effectuate changes to the underlying organisational practice. On the other hand, practice work refers to the purposive actions undertaken to change the underlying organisational practice in order to redefine the institutional boundary. As such, the interplay of boundary work and practice work is essential in effectuating deep-seated changes to organisational practice (Zietsma & Lawrence, 2010). I would suggest that the concepts of boundary work and practice work are useful in reconciling the contradiction in the literature from a voluntary regulatory body's perspective because they allow the examination of the process of 'means-ends' reversal (Bromley & Powell, 2013) through which the voluntary regulatory body's intention of using social and environmental accounting as a mechanism to stimulate changes to organisational practice could inadvertently create an 'obsession' to focus on the development and adoption of the social and environmental accounting practice in itself. Such exploration builds on the prior studies (Levy et al, 2010; Humphrey et al, 2017) which have indicated the need for the voluntary regulatory bodies to rebalance their objectives of promoting the adoption of sustainability reporting guidelines against that of addressing the needs of the various external constituents of companies. In this regard, this study suggests that such exploration could provide some evidences of the organisational issues that the voluntary regulatory bodies would have to address if they decide to make use of financial reporting analogy, metaphor, and language in holding companies accountable for their social and environmental responsibilities (Etzion & Ferraro, 2010; Haack et al, 2012).

Third, from the regulatory perspective, the current literature also does not seem to offer an adequate explanation to reconcile those studies that have demonstrated the limited potential offered by social and environmental accounting regulation (Cooper & Owen, 2007; Archel et al, 2009; Malsch, 2013) and the proliferation of social and environmental accounting regulation that could be observed in practice (OECD & CDSB, 2015; TCFD, 2017). While the critical strand of the literature has downplayed the role of social and environmental accounting regulation (Cooper & Owen, 2007) as well as the role of regulator in creating stakeholder accountability (Archel et al, 2009; Malsch, 2013), the evidence from the managerial strand of the literature indicates the growing importance of regulation in prompting companies to address various social and environmental issues, for example, by creating financial incentives through the establishment of a market mechanism (Hopwood, 2009; MacKenzie, 2009) or by creating a self-disciplinary pressure through the establishment of a transparency mechanism (Arjalies & Mundy, 2013).

In addressing the contradiction from the regulatory perspective, this study draws on the theoretical concept of regulatory space (Hancher & Moran, 1989; Young, 1994) in order to offer some explanations to reconcile the contradiction. Regulatory space refers to a discursive space whereby political issues are negotiated by diverse actors and formulated into a regulatory pronouncement that could satisfy the diverse interests of those actors. I would suggest that the concept of regulatory space is useful in reconciling the contradiction from the regulatory perspective because it allows the examination of the role of the regulator in rebalancing the formulation of the social and environmental accounting regulation in trying to mediate the diverse interests of the different actors who would be affected by such regulatory pronouncement. In this

regard, this study suggests that such exploration could provide some evidences of the role that the regulator could play in crafting a compromise to assuage the potentially conflicting interests of the proponents and the opponents of social and environmental accounting regulation (cf. Malsch, 2013).

In this regard, I have positioned the three papers with these contradictions and potential contributions in mind. The first paper (**Chapter 3: Corporate perspective**) is positioned to address the contradiction from the corporate perspective. The second paper (**Chapter 4: Voluntary regulatory body's perspective**) is positioned to address the contradiction from the voluntary regulatory body's perspective. And, the third paper (**Chapter 5: Regulatory perspective**) is positioned to address the contradiction from the regulatory perspective.

Chapter 3

Corporate perspective[1]

3.1 Introduction

The problem that we examine in this paper is whether integrating climate change into the corporate accounting system would allow companies to mitigate the effect of climate change while remaining profitable. In this paper, we focus on the activities of major corporations which have long been understood to have profit-maximisation as a central organising principle. Specifically, we examine the influence of the 'integrated' carbon reporting practices which allow corporate managers to account for the relationship between the carbon and financial performance of a company in seeking to minimise the carbon footprint while remaining profitable (Henri & Journeault, 2010; Gond et al, 2012; Bebbington & Thomson, 2013); this type of carbon reporting practices could be distinguished from the other type of carbon reporting practices which are solely oriented toward accounting for the carbon footprint of organisations, without necessarily considering the financial implication (Ascui & Lovell, 2011). It is important to assess the potential of these integrated carbon reporting practices because if such integration could lead to the identification of 'win-win' solutions (Porter & Kramer, 2006; Henri & Journeault, 2010), then it could potentially pave the way for a better alignment between business activities and the wider interests of the society. On the other hand, such integration could also potentially obscure the salient, yet unprofitable aspects of climate change from the attention of both the managers as well as the public (Gray, 2010; Tregidga et al, 2014; Cho et al, 2015). As such, it is

[1] This chapter is entirely based on a working paper that is co-authored by Prof Richard Barker entitled *"Creating a sense of comfort: The role of carbon accounting in rationalising climate change"*.

essential to examine the potential offered and the limitation imposed by these integrated carbon reporting practices to obtain a better understanding of the role that accounting could play in addressing climate change (Unerman & Chapman, 2014).

To examine the matter, we focus on the influence of the integrated carbon reporting practices on the perceptions and behaviours of corporate sustainability managers by analysing the processes of 'sensemaking' (Weick, 1995) and 'sensegiving' (Gioia & Chittipeddi, 1991). Sensemaking refers to the cognitive and enactive processes of individual in framing ambiguous issue into a simplified account of reality that render some aspects of reality as salient while casting some other aspects of it into the background (Swieringa & Weick, 1987; Jonsson, 1987; Kraus & Stromsten, 2012; Goretzki & Messner, 2016). On the other hand, sensegiving refers to the social process of enrolling others toward one's preferred frame of reality in facilitating a coordinated response in the face of ambiguity (Gioia & Chittipeddi, 1991; Fiss & Zajac, 2006; Kraus & Stromsten, 2012). We identify sustainability managers as the primary agents of our study because we learn that they are essentially the 'carbon accountants' in organisations in that they are the individuals who are charged with the responsibility for collecting the carbon data as well as preparing the external carbon reports; this is consistent with prior literature which has also attributed the role of preparing the sustainability report to sustainability managers (Larrinaga-Gonzalez & Bebbington, 2001; Adams & McNicholas, 2007). As such, it is useful to consider the sensemaking and sensegiving processes of the sustainability managers because it allows the assessment of whether the integrated carbon reporting practices have any influence on the perceptions of the sustainability managers in creating the urgency to instigate changes to the corporate practices.

As such, we formulate our research question as follow: *"How do 'integrated' carbon reporting practices influence (or not) the sensemaking and sensegiving processes of sustainability managers with regard to climate change?*

To explore the role of the integrated carbon reporting practices in enabling (or not) the sensemaking and sensegiving processes of the sustainability managers, we conducted a field study (Langley, 1999) of the relevance of these carbon reporting practices to the activities of sustainability managers in large UK-based companies. To this end, we conducted semi-structured interviews with sustainability managers from 30 large UK-based companies (of which 25 were listed) operating in a cross-section of industries (consumer discretionary, consumer staples, energy, financials, industrials, information technology, materials, telecommunication services, and utilities). It is noteworthy that we use the term 'sustainability manager' to refer to the corporate managers of varying job titles (e.g. Director of Sustainability, Group CSR manager, VP of Sustainable Business, and others) who are delegated the task of managing wide-ranging social and environmental issues of companies (Wright et al, 2012; Risi & Wickert, 2017) (see Table 3.1 for the exact job title of the research participants). We suggest that it is useful to obtain the perspectives of these managers because the inherent tension between the societal remit of their role and their responsibility to generate economic value essentially epitomised the trade-off faced by many companies in addressing a range of corporate sustainability issues.

As a summary, we suggest that the integrated carbon reporting practices influenced the perceptions of the sustainability managers regarding the salience of climate change by replacing their previously compliance-based orientation with dynamic

performance measures. The financial and non-financial metrics of carbon performance made it necessary for the sustainability managers to go 'above and beyond' the compliance requirement to demonstrate improvements to the carbon performance of the companies (see also Weber & Glynn, 2006). In relation, we suggest that the carbon reporting practices also provided the sustainability managers with the 'business case' frames for making sense of the connection between climate change and the more familiar operational issues of the companies (see also Englund et al, 2013; Goretzki & Messner, 2016). Additionally, we suggest that the carbon reporting practices enabled the sustainability managers to relay their perceptions to the other organisation members by providing a 'lingua franca' for fostering an intersubjective understanding of the relevance of climate change to the business (see also Jordan & Messner, 2012; Goretzki & Messner, 2016). However, our study also pointed out that absent from the frames of reality of the sustainability managers were the possibility of unconditionally minimising the carbon footprint of the companies. As such, we argue that there is a risk that the integrated carbon reporting practices could create a 'false' sense of comfort that the 'real' issue of climate change had been addressed despite the fact that there were many unquantifiable and unprofitable aspects of climate change that remained unresolved (Bebbington et al, 2008; Gray, 2010).

We suggest that our findings contribute to the social and environmental accounting literature by providing insight into the question of why companies engage in 'impression management' while simultaneously instigate organisational change. (Larrinaga-Gonzalez & Bebbington, 2001; O'Dwyer, 2002; Bebbington et al, 2008). In this regard, our findings provide some evidences on the internal effect of the sustainability reporting practice through which companies had come to believe in their own hype and instigated actual organisational change in enacting their identity

as ‘sustainable businesses’ (Roberts, 2001; 2003; Bebbington et al, 2008; Tregidga et al, 2014; Cho et al, 2015). However, our evidence suggests that the organisational changes driven by the business case frames were largely limited to the quantifiable and profitable aspects of climate change that led to the ‘forgetting’ of the real climate change issues. Additionally, we suggest that our findings also contribute to the literature on the integration of social and environmental accounting into the traditional corporate accounting system (Gond et al, 2012; Arjalies & Mundy, 2013). We do so by showing the limitation of a ‘one-way integration’ which overlooks the fallibility of the traditional accounting assumptions in conceptualising the integration of social and environmental issues into the corporate accounting system (see also Hines, 1988). Finally, we suggest that our findings also contribute to a more general understanding of the role of accounting as sensemaking and sensegiving devices (Boland & Pondy, 1983; Swieringa & Weick, 1987; Kraus & Stromsten, 2012; Jordan & Messner, 2012; Gortezki & Messner, 2016). We do so by showing the effect of the ‘accounting-sustainability hybrids’ (Thomson et al, 2014) in facilitating action to be taken not only under the condition of uncertainty of its consequence (Jordan & Messner, 2012; Goretzki & Messner, 2016), but also regardless of the individual attitudes toward the underlying issue.

The remaining paper is structured in the following order. The ‘Literature review’ section presents our current understanding of the role of social and environmental accounting in influencing organisational practice. Then, the ‘Theoretical framework’ section discusses our understanding of the theoretical lens and its relevance to our study. Next, the ‘Method’ section delineates our research design, data collection method, and data analysis approach. Then, the ‘Findings’ section presents our key analysis of the role of the integrated carbon reporting practices in influencing

managerial perception of climate change. Next, the 'Discussion' section brings together the implication and contribution of our findings. Lastly, the 'Conclusion' section highlights the limitations of this paper and offers some thoughts for future studies.

3.2 Literature review

In this section, we draw some insights from the existing literature on social and environmental accounting with respect to the potential of carbon reporting in allowing companies to minimise their environmental impact. Based on the review of the literature, we identify that prior studies on social and environmental accounting largely adopt either 'critical' or 'managerial' perspectives in understanding the role of social and environmental accounting in enabling organisational change (Bebbington & Thomson, 2013; Unerman & Chapman, 2014). Prior studies adopting a critical perspective are primarily concerned with establishing the distinction between the substantive organisational change ('morphogenetic change') that is oriented toward preserving the sustainability of the social and natural systems and the superficial change ('morphostatic change') that is instigated for 'cosmetic' purpose to justify the 'business as usual' (Gray et al, 1995; Larrinaga-Gonzalez & Bebbington, 2001). To this end, Gray et al (1995) analysed the environmental reporting practices of large UK and New Zealand firms, and observed some elements of organisational change. However, they also noted that there remained to be little evidence of a changing attitude with regard to the perception of the social and environmental responsibility of business. As such, they argue that there is a risk that social and environmental accounting practices could be used by companies to negotiate, define, and ultimately control the social and environmental agenda by casting a 'mirage' of progress, essentially for maintaining the status quo. Larrinaga-Gonzalez et al (2001) affirm the argument of Gray et al

(1995) by examining the environmental reporting practices of Spanish firms, observing that those companies were largely motivated by fears (e.g. personal responsibility, reputation) rather than by an intrinsic desire for changing their ways. Further, other studies have also considered the 'legitimacy theory' in uncovering the decoupling of the content of the sustainability reports from the underlying social and environmental performance, suggesting that social and environmental accounting has become merely a tool for impression management (Deegan, 2002; Patten, 2002; Cho et al, 2012). As such, this line of literature is largely sceptical about the potential of social and environmental accounting practices, which are regarded as "fairy tales to help the children sleep at night" (Gray, 2010, p. 50).

However, the studies adopting the critical perspective were often criticised for failing to take into account the emergent organisational change instigated under the aegis of the business case reasoning that had nonetheless resulted in improved social and environmental performance (Adams, 2002; Henri & Journeault, 2010; Arjalies & Mundy, 2013). In this regard, studies that adopted a managerial perspective were primarily interested in identifying the conditions through which the potential of social and environmental accounting could be unlocked, for example, by enrolling the support of the senior management (Adams & McNicholas, 2007). Meanwhile, a more recent studies have shifted the attention toward the degree of integration of social and environmental accounting into the traditional management control system of corporations in enabling managers to improve the social and environmental performance of companies while remaining profitable (Henri & Journeault, 2010; Gond et al, 2012; Arjalies & Mundy, 2013; Contrafatto & Burns, 2013; Rodrigue et al, 2013). The evidence from these studies indicated that the integration of social and environmental issues had resulted in improved financial performance through various

mechanisms, including cost reduction through the implementation of 'eco-control' (Henri & Journeault, 2010), improved reputation through a better stakeholder engagement (Rodrigue et al, 2013), innovation by facilitating discussions between the sustainability department and the operational department (Arjalies & Mundy, 2013), as well as strategic renewal through the identification of a holistic sustainability strategy (Contrafatto & Burns, 2013; Contrafatto, 2014). However, it is not entirely evident whether the net effect of the improvement in the social and environmental performance is sufficient for preserving the sustainability of the social and natural systems; with several studies highlighting the cognitive constraint posed by the business case reasoning, which essentially justifies companies producing more products if they could improve the efficiency of their social and environmental footprint (Contrafatto & Burns, 2013; Rodrigue et al, 2013; Thomson et al, 2014).

The synthesis from these studies paints an ambivalent picture of the role of social and environmental accounting, i.e. as a tool for manipulating external perception that had nonetheless invoked internal organisational change. In trying to resolve the contradiction, Bebbington et al (2008) proposes that by becoming a conduit for impression management, social and environmental accounting had led companies to come to believe in their own hype, albeit for reasons that have nothing to do with the sustainability of the social and natural systems (see also O'Dwyer, 2002; Gray, 2010). Bebbington et al (2008) brings into attention the 'ethics of narcissus' argument of Roberts (2001; 2003), which contends that business sustainability practices were shaped by the desire to maintain a coherent identity that provides a sense of comfort that one is both powerful and good. Roberts (2003; 2009) argue that such ethics of narcissus is not equivalent to genuine ethics, which is oriented toward serving others, rather than creating a 'false' sense of security to oneself. In this regard, the

longitudinal study of Tregidga et al (2014) examine the identity construct presented by companies in their sustainability reports, and show that businesses had gradually transformed the presentation of their identity from that of "compliant organisations" to that of "leaders in sustainability". However, it is not entirely evident whether such an indifferent attitude toward social and environmental responsibility would provide managers with the urgency to initiate deep-seated changes to organisational practice (Gray, 1992; Gray et al, 1995; Bebbington et al, 1994). In the next section, we delineate how the concepts of sensemaking and sensegiving could help us to better understand the cognitive and enactive effects of social and environmental accounting practices in shaping managerial perceptions and behaviours.

3.3 Theoretical framework

In this section, we introduce the concepts of sensemaking and sensegiving, and then discuss their relevance in extending our understanding of the role of carbon reporting in effectuating deep-seated organisational changes. The concept of sensemaking is defined as the cognitive and enactive processes of framing ambiguous situation into a simplified account of reality, by making some elements of reality salient while casting some other element of it into the background (Swieringa & Weick, 1987; Jonsson, 1987; Kraus & Stromsten, 2012; Goretzki & Messner, 2016). When actors are 'thrown' into unfamiliar situation, there is a need for them to rationalise and invent a simplified account of reality to allow them to react and manage the situation (Weick, 1995; 2001; Maitlis & Christianson, 2014). Meanwhile, sensegiving refers to the social process of enrolling others into one's way of framing an issue in order to facilitate a coordinated response in the face of ambiguity (Gioia & Chittipeddi, 1991; Fiss & Zajac, 2006; Kraus & Stromsten, 2012). As such, one's effort to engage in sensegiving is highly interrelated with one's way of framing the issue, i.e. sensemaking (Rouleau, 2005; Maitlis &

Lawrence, 2007). The sensemaking process would only obtain a degree of significance in an organisational context through the sensegiving process which would allow an individual to advance his/her frame of reality throughout the organisation. Prior research shows that the process of sensegiving could be achieved by taking into account the perspectives of the interlocutors (i.e. other organisation members), for example, by using language that is familiar to the interlocutors (Fiss & Zajac, 2006; Sonenshein, 2006; Maitlis & Lawrence, 2007) or by realigning the frames of reality to accommodate the interest of the interlocutors (Kaplan, 2008).

The concepts of sensemaking and sensegiving have also been used in theorising the role of accounting as 'sensemaking device' and 'sensegiving device' in enabling organisational change (Boland & Pondy, 1983; Jonsson, 1987; Swieringa & Weick, 1987; Kraus & Stromsten, 2012). As a sensemaking device, accounting provides managers with a simplified account of reality through which an ambiguous situation could be rendered into a concrete numerical figure (Tillmann & Goddard, 2008; Kraus & Stromsten, 2012; Englund et al, 2013; Goretzki & Messner, 2016). For example, Goretzki & Messner (2016) demonstrate the role of accounting metrics as a 'filtering mechanism' which primes managerial perceptions toward certain areas of business. This, in turn, allows the managers to engage in a 'calculative reasoning' which refers to the process of comparing the pattern arising from the accounting calculation against that of operational information drawn from various other sources (see also Englund et al, 2013). Additionally, as a sensemaking device, accounting also reshapes the role expectation of the managers toward certain areas, which are made visible through the accounting metrics. For example, Kraus & Stromsten (2012) demonstrate the shifting role expectation of the CEOs and the CFOs of newly listed companies as they were influenced by the short-term focus of the financial analysts (see also Roberts

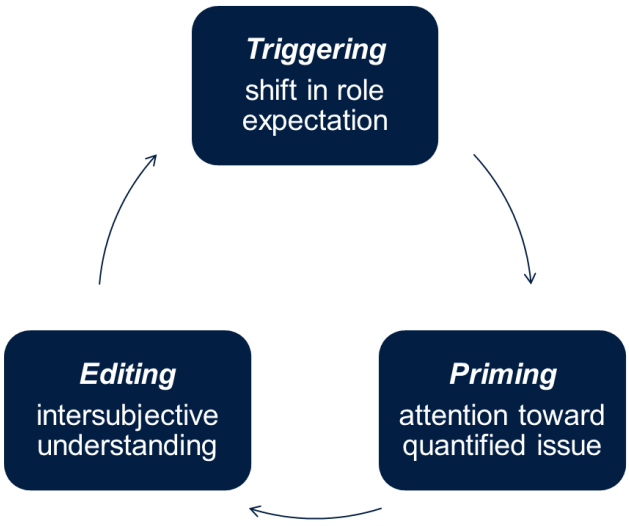
et al, 2006). On the other hand, as a sensegiving device, accounting provides managers with a mechanism for translating their strategic vision into workable, short-term targets to facilitate and urge organisational actions (Swieringa & Weick, 1987; Jordan & Messner, 2012). In this regard, accounting provides the means for aligning the perceptions of various individuals within the different levels of hierarchy in an organisation. For instance, Goretzki & Messner (2016) demonstrate the role of accounting in fostering an intersubjective understanding between cross-divisional managers, thereby creating a sense of comfort to execute an agreed-upon plan even in the face of ambiguity (see also Pentland, 1993).

> "To render the numbers plausible means to have the group agree that there is sufficient confidence in the numbers to base decisions about future actions on them (…) From the perspective of the individual, reaching such a social agreement that the numbers are plausible is a way of *creating comfort*, in the sense that the responsibility for basing particular decisions on the numbers is shared within the group." (Goretzki & Messner, 2016, p. 119, emphasis added)

To bring together the role of carbon reporting as sensemaking and sensegiving devices, we suggest that the theoretical framework of Weber & Glynn (2006) offers a well-structured organising principle. They propose that sensemaking is interpenetrated by institutional factors, such as role expectation, codifications of categories, and organisational identity (see also Weick et al, 2005; Cornelissen, 2012). Drawing on Weber & Glynn (2006) and prior literature on accounting as sensemaking and sensegiving devices (Jonsson, 1987; Swieringa & Weick, 1987; Kraus & Stromsten, 2012; Jordan & Messner, 2012; Englund et al, 2013; Gortezki & Messner, 2016), we

conceptualise that the carbon reporting practices influence the sensemaking and the sensegiving processes of the sustainability managers through the following three mechanisms: by 'triggering' a shift in their role expectations (Kraus & Stromsten, 2012; Jordan & Messner, 2012), by 'priming' their attention toward areas highlighted by the accounting metrics (Jonsson, 1987; Kraus & Stromsten, 2012; Englund et al, 2013), and by facilitating the 'editing' of their intersubjective understanding with other organisation members to facilitate coordinated actions (Swieringa & Weick, 1987; Goretzki & Messner, 2016).

Figure 3.1. Carbon reporting as sensemaking and sensegiving devices



Adapted from: Weber & Glynn (2006)

We suggest that the theoretical framework offers a useful guiding principle in our study because it allows us to examine the role of carbon reporting in reshaping (or not) the perceptions and behaviours of the managers with regard to climate change. Prior literature has demonstrated that there are largely two main reasons for businesses to engage in corporate sustainability reporting practices, namely: the impression

management argument in which company seeks to legitimise the 'business-as-usual' in response to external pressures (Gray et al, 1995; Larrinaga-Gonzalez et al, 2001; O'Dwyer, 2002; Deegan, 2002; Patten, 2002; Cho et al, 2012) and the 'integration' argument in which company seeks to engage with corporate sustainability issues strategically to generate additional economic values (Henri & Journeault, 2010; Gond et al, 2012; Arjalies & Mundy, 2013). In this regard, we suggest that the sensemaking perspective provides us with a rich lens to explore the gap between these two explanations, and build on the 'ethics of narcissus' argument in which company could come to internalise and enact the sustainable business identity constructed through the process of preparing the sustainability reports which may very well be initially intended to assuage pressures from the external stakeholders (Roberts, 2001; 2003; Bebbington et al, 2008). In doing so, the examination allows us to sketch out the enabling potential afforded by carbon reporting in reducing ambiguity and enabling coordinated actions, as well as the unintended consequences arising from the simplification of an issue by way of quantification (cf. Robson, 1992).

3.4 Method

3.4.1 Research design

We conducted a field study of the influence of carbon reporting practices on the activities of sustainability managers in large UK-based companies. In the UK, companies are legally required to account for the carbon emissions which arise from certain energy-intensive operations, if those operations fall under the 'Carbon Reduction Commitment' regulation (CRC regulation) which was introduced in 2005. The CRC regulation also requires companies to purchase carbon allowances, if their carbon emissions level exceeds a given threshold (HM Treasury, 2015). Further, companies are also legally required to quantify and disclose the total amount of carbon

emissions arising from their overall business activities in their annual report (not only in their sustainability report) if they are listed in UK stock exchanges as per the 'Strategic Report and Directors' Report Regulation' (GHG reporting regulation) which was introduced in 2013 (CDSB, 2016). Additionally, many large UK companies have also opted to publish more detailed information about their carbon emissions and other climate change related information through a specialised reporting platform maintained by a not-for-profit organisation, called the Carbon Disclosure Project (CDP) (Kolk et al, 2008; Andrew & Cortese, 2011). In conducting our study, we initially intended to focus on the CRC regulation and the GHG reporting regulation in reshaping corporate practices due to their distinctive regulatory design. These carbon reporting requirements are of interest because they require companies not only to account for their carbon footprint, but also to consider the relevance of climate change to their respective businesses. However, as we commenced the interviews, it quickly became evident that the CDP voluntary reporting initiative was considered as equally important by the sustainability managers despite its non-mandatory status. It is notable that the CDP also requires companies to both account for the total carbon footprint as well as identify any competitive advantage that they could obtain by reducing their emissions. As such, in addressing the research question, we primarily focus on these three carbon reporting practices (CRC regulation, GHG reporting regulation, and CDP) to illustrate the influence of integrated carbon reporting practices in shaping the perceptions and behaviours of the sustainability managers.

3.4.2 Data source

The primary data source informing our study includes 30 semi-structured interviews with sustainability managers from 30 large-UK based companies. We designed the interview protocol to include some general questions on the activities of the

sustainability managers as well as some specific questions about carbon reporting practices (see Appendix 1A). During the interviews, some questions were modified to maintain the flow of the conversation, while a few prompts were also spontaneously asked to follow up on any vague assertions made by the interviewee (Rubin & Rubin, 1995). We made every effort to ensure that the interview questions were phrased in a way that would not 'lead' the participant's response. Although an interview data only captures the process of sensemaking retroactively, Cornelissen (2012) suggests that interviewing allows the elaboration of the interviewee's frame of reality, which would not be possible to capture through any other means. Additionally, he suggests that interviewees would not seek to retroactively edit their frame of reality unless they are motivated to do so. As such, we also made every effort to suspend any judgment in following the line of argument deliberated by the interviewee. For instance, when an interviewee asserted that the consumer demand for sustainable product had increased, we responded by seeking to understand how they came to that conclusion rather than to ask for a concrete data to substantiate the assertion. Additionally, we conducted the interview on a strict term of confidentiality and reasserted the confidentiality agreement again at the beginning of each interview to reassure the interviewee that they could speak candidly.

The participants were selected from a sample pool that we compiled manually from various data sources, including: CDP Climate Change Investor Data, LinkedIn searches, and conference attendance lists[2]. The sampling method followed a purposive approach by focusing on companies with highly visible sustainability initiatives. We suggest that such companies represent a 'critical case' (Flyvbjerg, 2001) where we

[2] This included the attendance lists collected throughout our participation in the following conferences: Natural Capital Forum 2015 (in Edinburgh), Sustainability Live 2015 (in Birmingham), and CDSB launching of the 'Comply or Explain' report in 2016 (in London).

could expect to observe the influence of carbon reporting, if any. To this end, we sent out formal invitation letters and emails to 55 companies, from which we received 39 responses, of which 30 were positive. In total, we conducted interviews with sustainability managers from 30 different companies between January – April 2016, with each interview lasting approximately 60-90 minutes. Additionally, we conducted 5 follow-up interviews with some of the participants between February – April 2017. Each interview was recorded and fully-transcribed, barring one interview (Interviewee 29) where the participant declined to be recorded for confidentiality reasons (extensive notes were taken during this interview). From the total of the 35 interviews conducted, 25 were phone-based and 10 were face-to-face. Our assumption is that the location of the interview did not substantially affect the quality of the data. The final sample consists of sustainability managers representing 25 listed companies (15 in FTSE 100 index, 7 in FTSE 250 index, and 3 in FTSE All-Share index) and 5 'large companies' as per the definition of *Companies Act 2006*. The participants were based in a cross-section of industries including: consumer discretionary (6 participants), consumer staples (5 participants), energy (2 participants), financials (2 participants), industrials (7 participants), information technology (2 participants), materials (2 participants), telecommunication services (1 participant), and utilities (3 participants).

Table 3.1. Description of the interview participants

Interviewee	Interviewee's job title	Company	Industry sector (GICS)	Legal form	Stock index info
Interviewee 1	Director of CSR	Company 1	Consumer discretionary	Non-listed	-
Interviewee 2**	Deputy Head of Group Corporate Sustainability	Company 2	Financials	Listed	FTSE 100
Interviewee 3	Director of Health, Safety and Environment	Company 3	Consumer discretionary	Listed	FTSE 100
Interviewee 4	Director of Sustainable Business	Company 4	Consumer staples	Non-listed	-
Interviewee 5**	Director of Sustainability	Company 5	Consumer discretionary	Listed	FTSE 100
Interviewee 6	Head of Sustainability	Company 6	Financials	Listed	FTSE 100
Interviewee 7*	Group CR Manager	Company 7	Information technology	Listed	FTSE 250
Interviewee 8	Environmental Manager	Company 8	Information technology	Non-listed	-
Interviewee 9**	Group Energy and Environment Manag er	Company 9	Industrials	Listed	FTSE All-Share
Interviewee 10***	Group Sustainability Manager	Company 10	Utilities	Listed	FTSE 100
Interviewee 11	Sustainability Specialist	Company 11	Industrials	Non-listed	-
Interviewee 12	Director of Health, Safety, Environment, and Quality	Company 12	Energy	Listed	FTSE 250
Interviewee 13**	Sustainability Director	Company 13	Materials	Listed	FTSE 250
Interviewee 14	Group Sustainability Manager	Company 14	Consumer staples	Listed	FTSE 250
Interviewee 15	Energy and Sustainability Director	Company 15	Industrials	Listed	FTSE All-Share
Interviewee 16***	Group Head of Environment	Company 16	Materials	Listed	FTSE 100
Interviewee 17**	Carbon Plan Manager	Company 17	Consumer staples	Non-listed	-
Interviewee 18	Group CSR Manager	Company 18	Industrials	Listed	FTSE 250
Interviewee 19	Director of Sustainability	Company 19	Consumer discretionary	Listed	FTSE 100
Interviewee 20	Group Environmental Manager	Company 20	Industrials	Listed	FTSE All-Share
Interviewee 21	Director of Sustainability & Innovation	Company 21	Consumer discretionary	Listed	FTSE 100
Interviewee 22***	Group Head of Environment	Company 22	Industrials	Listed	FTSE 100
Interviewee 23	Group Environment Manager	Company 23	Telecommunicati on Services	Listed	FTSE 100
Interviewee 24***	Head of Sustainability	Company 24	Consumer staples	Listed	FTSE 100
Interviewee 25	Group Head of Environment	Company 25	Utilities	Listed	FTSE 100
Interviewee 26	Head of Sustainability	Company 26	Utilities	Listed	FTSE 100

Interviewee 27	Head of Sustainability	Company 27	Energy	Listed	FTSE 250
Interviewee 28	VP of Sustainable Business	Company 28	Consumer staples	Listed	FTSE 100
Interviewee 29	VP of Corporate Responsibility & Sustainability	Company 29	Industrials	Listed	FTSE 250
Interviewee 30	Head of Corporate Susta inability	Company 30	Consumer discretionary	Listed	FTSE 100

* Company 7 had just been acquired by an overseas company prior to the interview. However, the interview mainly focused on the company's operation prior to the acquisition.
** We conducted follow up interview with these participants to clarify some points made during the initial interview.
*** Due to the idiosyncratic nature of the participant's job title, a roughly equivalent job title has been presented instead to maintain the participant's anonymity.

In addition, we triangulate our primary data source with other secondary data sources to confirm the veracity of the assertion made during the interviews. The secondary data sources analysed include the annual reports and the sustainability reports of the sample companies (2015/ 2016 year-end) as well as the LinkedIn profiles and the public profiles of the interviewees, when available. The analysis of the annual reports and the sustainability reports of the companies were particularly useful in complementing and verifying the information gathered during the interview on the carbon target set by the company as well as the scope coverage of the carbon accounting metrics. For example, Interviewee 15 had informed us during the interview that the company had set the carbon target of -50%, but had advised us to consult the annual report of the companies for the exact parameter of the target. Through the analysis of the annual report, we gathered that the -50% target was a target set for the year of 2020 with a baseline year of 2013 (see Table 3.5 and 3.6). Then, the analysis of the LinkedIn profiles and the public profiles of the interviewees were primarily used to complement and verify the demographic background of the participant. Although we collected some demographic information, they were not extensive enough given that we did not envisage that the identity of the sustainability managers would substantially affect the analysis. As such, the subsequent analysis of the LinkedIn

profiles and the public profiles of the sustainability managers were particularly useful in providing further demographic information about, for example, the previous post held and the educational background of the interviewees (see Table 3.3).

3.4.3 Data analysis

The data source was analysed in the tradition of qualitative data analysis (Strauss & Corbin, 1998; Gioia et al, 2013). The first stage started with 'within-case analysis' (Eisenhardt, 1989) in which we sought to obtain further familiarity with the cases by selecting a few transcripts for up-close reading. We then discussed our interpretations of the transcripts and agreed that the important theme was around the participants' ambiguous definition of the term 'sustainability' that was in stark contrast with their lucid description of the carbon reporting practices. The preliminary analysis confirmed our feeling that sensemaking is a useful lens to conceptualise accounting as a filtering mechanism. Subsequently, we went back to the remaining transcripts and conducted 'open coding' that led to the 73 first-order codes capturing various themes around external carbon reporting, internal carbon metrics, and the influencing role of the sustainability managers. Next, the second stage focused on identifying patterns that were consistently replicated across the interviews ('replication logic'). For example, we identified that some interviewees mentioned cost saving as a reason for minimising carbon footprint, while some others suggested reputation. At this stage, we sought to extract the common themes and labelled both cost saving and reputation (among others) as "framing" to denote the frame of reality used by the sustainability managers. This process led to the clustering of the first-order codes into 11 second-order codes. Lastly, the third stage was oriented towards synthesising the analysis into a parsimonious theoretical relationship that could offer some responses to the research question. At this stage, we conducted a more systematic reading of the

literature to structure our findings and, in the process, concurrently developing the theoretical framework described in the previous section. This stage led to the aggregation of the second-order codes into 3 aggregate codes representing the role of carbon reporting in triggering shift in role expectation, priming attention towards quantifiable and profitable issues, and facilitating sensegiving through the editing of the sensemaking of others.

3.5 Findings

3.5.1 Background: Carbon reporting practices and sustainability manager role

In this section, we seek to provide some backgrounds on the integrated carbon reporting practices and the role of the sustainability manager. As mentioned previously, our study focuses on the GHG reporting regulation, the CDP voluntary reporting initiative, and the CRC regulation in order to illustrate the role of integrated carbon reporting practices. The GHG reporting regulation and the CDP voluntary reporting initiative recommend that preparers follow the 'GHG Protocol' or other similar methodology to account for the carbon emission arising from their business activities (for further detail about the GHG Protocol, see Appendix 1B). The GHG Protocol prescribes companies to account for the carbon footprint based on three categories of emissions sources, namely: 'Scope 1' which comprises direct energy usage (e.g. consumption of gas or fuel), 'Scope 2' which includes purchased energy (e.g. electricity usage), and 'Scope 3' which includes other upstream and downstream emissions (e.g. emissions from supplier's rendering of service, emissions from product-use phase) (GHG Protocol, 2004; 2011). The CRC regulation adopts a narrower perspective by focusing only on the energy usage of certain energy-intensive operations (e.g. power plant). In this regard, the methodology adopted for compliance with the CRC regulation is, to some extent, equivalent to Scope 1, but covers only the

emissions arising from certain operations, rather than the overall business activities of the company. In accounting for the carbon footprint of companies, the carbon accounting methodology (e.g. GHG Protocol) is typically used in conjunction with the 'conversion factors' issued by the authoritative bodies (e.g. the UK Department for Environment, Food and Rural Affairs/ Defra or the Intergovernmental Panel on Climate Change/ IPCC). The conversion factors allow the different type of greenhouse gases (e.g. methane, nitrous oxide, hydrochlorofluorocarbons) to be converted into their carbon equivalence (CO2e), thereby allowing an organisation to come up with a single figure to account for its total carbon footprint (for further detail, see MacKenzie, 2009).

In our context, 24 out of 30 companies had to comply with the CRC regulation, while 25 out of 30 companies had to comply with the GHG reporting regulation. Both regulations required companies to account for their carbon footprint, while the CRC regulation also required companies to purchase carbon allowances if certain threshold of emissions were exceeded. In addition, 28 out of 30 companies had voluntarily reported to the CDP. While reporting to the CDP is largely discretionary, companies are often pressured by certain institutional investors, particularly those who are the signatories of the CDP, to provide more detailed climate change related information (Kolk et al, 2008). Companies reporting to the CDP could elect to make their responses available to the general public or only to a certain group of users; 25 out of 28 companies reporting to the CDP in our sample elected to make their reports publicly available.

Table 3.2. Carbon reporting practices in our context

	Carbon reporting practices		
Company	**CRC regulation**	**GHG reporting regulation**	**CDP (voluntary)**
Company 1	✓		✓
Company 2	✓	✓	✓
Company 3	✓	✓	✓
Company 4	✓		✓*
Company 5	✓	✓	✓
Company 6	✓	✓	✓
Company 7		✓	
Company 8	✓		✓
Company 9	✓	✓	✓*
Company 10	✓	✓	✓
Company 11	✓		✓*
Company 12		✓	✓
Company 13	✓	✓	✓
Company 14	✓	✓	✓
Company 15	✓	✓	✓
Company 16		✓	✓
Company 17	✓		
Company 18	✓	✓	✓
Company 19	✓	✓	✓
Company 20		✓	✓
Company 21	✓	✓	✓
Company 22	✓	✓	✓
Company 23	✓	✓	✓
Company 24	✓	✓	✓
Company 25	✓	✓	✓
Company 26	✓	✓	✓
Company 27	✓	✓	✓
Company 28		✓	✓
Company 29	✓	✓	✓
Company 30		✓	✓
	24	25	28

* Non-public response

Consistent with prior literature, we learn from our study that the sustainability managers were typically heavily involved in the carbon reporting processes, although some parts such as the preparation of the carbon report in the annual report (for listed companies) required a close coordination with the Company Secretary. Other than the reporting role, the sustainability managers had also been increasingly expected to act

as ‘change agents’ in improving the social and environmental performance of the company. The following remark represents the perception of Interviewee 7 about the partly clear and partly ambiguous role of a sustainability manager.

> “In the new requirement of the Companies Act [GHG reporting regulation], we have to explain our environmental impact and social impact; that was a very clearly defined element. The rest as I say, kind of, it almost survived by not being defined; which is go on see what you can dabble in that might have a sustainability improvement (…) and, be convincing with the business case.” (Interviewee 7)

The quote above encapsulated the dual role of the sustainability managers in ensuring the compliance with certain regulations, while also attempting to catalyse change to the corporate practice, for example by undertaking ad-hoc initiatives or by influencing various parts of the business to commit to certain social and environmental initiatives (see also Wright et al, 2012).

We found that the sustainability managers often led a small team, while also relying on a semi-formal network (e.g. matrix team) to liaise with other divisional managers to implement the change initiatives (see also Wright et al, 2012; Risi & Wickert, 2017). As such, we found that a business aptitude was considered as equally important as the technical knowledge about the social and environmental issues to effectively perform the sustainability manager role. While an extensive technical knowledge was considered to be essential for ensuring the compliance with certain regulations, an astute understanding of the business was considered to be critical for performing the

change agent role effectively. In the following remark, Interviewee 3 who had an extensive industry background prior to assuming the sustainability manager role sought to emphasise the importance of such business understanding to the role.

> "When I'm with my peers from other companies who are more just purely doing sustainability, perhaps, not with a bigger day job if you like, then I know there's a lot of tension between them and their operating businesses (…) Sometimes, how I see them pitch ideas, they're kind of missing the point sometimes about the business benefit." (Interviewee 3)

In the quote above, Interviewee 3 implied that such business aptitude enabled a 'big picture' thinking of the contribution of the role to the wider business activities, in contrast to other peers who might not have a "bigger day job". Similarly, other interviewees with an environmental background had also emphasised the increasing importance of the soft skills to their role. Indeed, we found that while most of our interviewees had an environmental background, there were also some others who had extensive industry backgrounds prior to assuming the sustainability manager role. Based on our analysis of the previous position held and the educational background of the sustainability managers, we identified that 18 out of 30 participants had an environmental background only, 9 out of 30 participants had an industry background only, and 3 out of 30 participants had both an environmental and a business background. Table 3.3 summaries the background of the sustainability managers who took part in our study.

Table 3.3. Background of the sustainability managers

Interviewee	Tenure length (current)	Previous post	Tenure length (previous)	Same company?	Education	Environ-mental background	Industry background
Interviewee 1	4 years	Group Head of Sustainability	4 years	No	Master's in environmental sustainability	✓	
Interviewee 2	12 years	Environmental NGO	16 years	No	Master's in environmental sustainability	✓	
Interviewee 3	7 years	Business Support Director	12 years	Yes	-		✓
Interviewee 4*	3 years	Business Development Manager	12 years	Yes	-		✓
Interviewee 5*	7 years	Environmental Manager	7 years	Yes	Master's in environmental sustainability	✓	
Interviewee 6	3 years	Head of Sustainability	2 years	No	Master's in geography	✓	
Interviewee 7	3 years	Head of Sustainability	2 years	No	-	✓	
Interviewee 8	3 years	Sustainability Officer	2 years	No	Bachelor's in environmental sustainability	✓	
Interviewee 9	6 years	Sustainable Business Manager	5 years	No	Master's in environmental sustainability	✓	
Interviewee 10	4 years	Group auditor	1 year	Yes	Doctorate in financial reporting		✓
Interviewee 11	2 years	Sustainability Research Analyst	1 year	No	Master's in environmental sustainability	✓	
Interviewee 12	6 years	HSE Manager	8 years	Yes	Doctorate in engineering	✓	✓
Interviewee 13	3 years	Senior Management Accountant	1 year	No	Master's in environmental sustainability; MBA; CIMA	✓	✓
Interviewee 14	4 years	Sustainability Manager	3 years	No	Master's in environmental sustainability	✓	
Interviewee 15	13 years	Environmental Consultant	-	No	-	✓	
Interviewee 16	5 years	Business association	3 years	No	Master's in liberal arts		✓
Interviewee 17	2 years	Environmental Assistant	3 years	No	Master's in environmental sustainability	✓	
Interviewee 18	4 years	Group Communications Manager	5 years	Yes	Bachelor's in business		✓
Interviewee 19	7 years	Business consultant	8 years	No	Bachelor's in computer science		✓

Interviewee 20	2 years	Environmental Manager	4 years	Yes	Master's in environmental sustainability	✓	
Interviewee 21	2 years	Environmental NGO	10 years	No	Master's in environmental sustainability	✓	
Interviewee 22	6 years	Business association	5 years	No	Bachelor's in engineering		✓
Interviewee 23	8 years	Senior CR Manager	7 years	Yes	Master's in environmental sustainability	✓	
Interviewee 24	6 years	Head of Corporate Relations	3 years	Yes	Master's in environmental sustainability		✓
Interviewee 25	9 years	Environment & Compliance Manager	11 years	No	Master's in environmental sustainability	✓	
Interviewee 26	7 years	Carbon Manager	1 year	Yes	MBA	✓	✓
Interviewee 27	7 years	Environmental Manager	7 years	Yes	Master's in environmental sustainability	✓	
Interviewee 28	8 years	Regional VP	4 years	Yes	Bachelor's in liberal arts		✓
Interviewee 29	8 years	Sustainability Consultant	4 years	No	Bachelor's in environmental sustainability	✓	
Interviewee 30*	4 years	Sustainability Reporting Manager	4 years	No	Master's in environmental sustainability	✓	
						21	12

* Due to the idiosyncratic nature of the participant's job title, a roughly equivalent job title has been presented instead to maintain the participant's anonymity.

3.5.2 'Triggering' shift in role expectation

In this section, we discuss the influence of the integrated carbon reporting practices in shifting the role expectation of the sustainability managers. Firstly, our study shows that that in a few instances, the introduction of the CRC regulation in 2005 had led to the creation of the sustainability manager role in the first place. In the following quote, Interviewee 9 shared the story about the origin of the sustainability manager role in the company.

> "The reason I was hired, for example, is because they never had an environment manager before the CRC (…) they realise that they don't have

anybody who understood what to do with it, so they got somebody who had an experience, which was myself." (Interviewee 9)

Despite the substantial effect of the CRC regulation in creating the sustainability manager role in the case of Interviewee 9, we observe that such effect was largely limited to few cases as most companies had anticipated the importance of corporate sustainability issues and created the sustainability manager role prior to the introduction of the CRC regulation. Additionally, we also find very little evidence of the effect of the GHG reporting regulation and the CDP voluntary reporting initiative in leading to the creation of the sustainability manager role.

Secondly, our study also shows that the carbon reporting practices shifted the role expectation of the sustainability managers by replacing their previously compliance-based orientation with dynamic performance measures. Unlike to the static role of ensuring the compliance with certain regulations, we suggest that the financial and non-financial metrics for measuring carbon performance necessitated the sustainability managers to actively pursue the change agent role with regard to climate change in order to demonstrate an improvement to the carbon performance of their companies (see also Weber & Glynn, 2006). For example, Interviewee 5 suggested that the CRC regulation gave more "weight" to the carbon initiatives by providing a financial deterrent for exceeding a certain level of emissions. Additionally, in the following quote, Interviewee 9 claimed that the CRC regulation had established a direct accountability to the CEO which, in turn, created an urgency to place more attention on managing the carbon performance of the company.

> "The other thing that the CRC has done is that once a year, I have to sit down with the CEO and persuade him to sign a check for, at the moment, it's about £314,000 (…) the fact is when you've got a fine of £314,000, the CEO wants to know what he's signing." (Interviewee 9)

Other than the financial metrics, other participants had also suggested that the transparency generated by the non-financial metrics had also prompted them to put more emphasis on climate change in ensuring that they could report a continuous improvement to the level of carbon performance. For example, Interviewee 6 remarked that the degree of publicity created by the CDP voluntary reporting initiative generated this subtle pressure for improving the carbon performance of the company out of the anticipation of being scrutinised by others (see also Roberts et al, 2006).

> "Because we report under the CDP, our reporting is available in the Bloomberg screen, so any shareholders know what we're doing in terms of our carbon emissions. Once you start reporting, you need to be performing well." (Interviewee 6)

Surprisingly, we found that most of the interviewees assigned a greater degree of importance to the CDP voluntary reporting initiative than to the GHG reporting regulation in creating the expectation of performance improvement. One possible explanation could be that the CDP was introduced some 10 years prior to the introduction of the GHG reporting regulation, which was then no longer perceived as a surprise to those who had already established well-kept carbon reporting system (see

also CDSB, 2016). For instance, Interviewee 5 described the GHG reporting regulation as, “A very lightweight regulation provided that you've got decent data.”

While most interviewees saw the expectation of performance improvement as an opportunity to extend their influence in the company, some interviewees were quite critical of the shifting role expectation. Based on our further analysis, we found some indications that the interviewees’ attitudes toward the carbon reporting practices were related to their prior background. While most interviewees with an environmental background mainly considered the CRC regulation as an opportunity to have a conversation with the top management team, some of those with an industry background perceived the CRC merely as a “carbon tax” (Interviewee 19, Interviewee 22), which was regarded as considerable in an absolute amount, but largely inconsequential in the big picture of the business. The contrasting perspectives on the CRC regulation are demonstrated in following quotes.

> “Fundamentally, the CRC was incredibly effective in bringing understanding of carbon emissions for business into the Boardroom.” (Interviewee 6 – environmental background)
>
> “But, really it's no more complicated than putting a new column in a spreadsheet, calculating that particular cost.” (Interviewee 13 – industry background)

Also, while most interviewees with an environmental background considered the GHG reporting regulation as “raising the profile” (Interviewee 14) and credibility to the task of collecting the carbon data, some of those with an industry background discounted

its effect given that the company could have done it anyway regardless of the GHG reporting regulation. The contrasting perspectives on the role of the GHG reporting regulation are reflected in the following quotes.

> "Occasionally, somebody might ask, 'Why do we collect all this data?', so it's helpful to say that, 'Well, we have a statutory obligation to report it now'." (Interviewee 23 – environmental background)

> "In our annual report, we a have a level of reporting on climate change, which is driven by UK legislation, but that's not a problem because it's going to be reported anyway." (Interviewee 16 – industry background)

Lastly, while most of those interviewees with an environmental background perceived the CDP voluntary reporting initiative as an opportunity to "get a grip" (Interviewee 15) on the potential risk posed by climate change to the business, some of those with an industry background were critical about the comprehensive nature of the CDP report that was argued to have become increasingly invasive.

> "It's a better way for us to get a grip on our carbon as a whole. If you look at CDP reporting, it partly requires you to consider the risk relating to it. So, it's almost like an annual stimulus to tie in and put it together." (Interviewee 15 – environmental background)

> "The problem with CDP is they're going further, further and further (…) And, by doing that, they're getting into areas where they shouldn't be engaging in,

> for instance, (…) what our strategy should be, well it has nothing to do with voluntary reporting." (Interviewee 16 – industry background)

We suggest that the pattern could be interpreted in terms of the 'threats to identity' (Dutton & Dukerich, 1991; Maitlis & Christianson, 2014) in the sense that those with an environmental background perceived the shifting role expectation as reinforcing their 'green' identity (Wright et al, 2012), while those with an industry background perceived it as challenge to their identity as corporate managers (Bebbington et al, 1994; Gray et al, 1995). However, we acknowledge that we do not have the evidence to support the claim of a one-to-one relationship between individual background and the attitude toward the carbon reporting practices. In fact, we found some contradictory evidences that show that there were more nuances to the stereotypical relationship proposed above. In practice, we suggest that the perceptions of the sustainability manager were likely to be also affected by other organisational factors. For example, we found that the interviewees who were based in consumer-facing firms indicated that they were more aware of the potential risk of appearing to be 'unsustainable' (see also Larrinaga-Gonzalez et al, 2001). For example, Interviewee 28 who was based in a company that operated in a consumer-facing industry argued that they had always been aware about the risk posed by corporate sustainability issues.

> "The other reason that consumer goods companies get working on sustainability is because they are consumer-facing (…) Companies with brand are much more conscious of the risk of an NGO campaign, which can damage the value of your brand if there were boycott, for example." (Interviewee 28)

In summary, although we recognise that there must be some other non-accounting factors at play, our evidence has demonstrated that the integrated carbon reporting practices introduced through both mandatory (CRC regulation, GHG reporting regulation) and voluntary (CDP) measures were pivotal in triggering and reinforcing the shifting role expectation of the sustainability managers.

3.5.3 'Priming' attention towards quantifiable and profitable issues

In this section, we discuss the role of the integrated carbon reporting in shaping the process through which the sustainability managers made sense of the relevance of climate change. Based on our analysis, we identified that the carbon reporting practices influenced the framing of the sustainability managers by playing the role of a 'filtering mechanism' that, in turn, enabled them to engage in a 'calculative reasoning' in making sense of the connection between climate change and the more familiar operational aspects of the business (see also Englund et al, 2013; Gortezki & Messner, 2016). Firstly, as a filtering mechanism, we identified that the carbon reporting practices narrowed down the attention of the sustainability managers toward issues which were quantifiable and profitable. We found that the focus toward quantifiable issues were partly attributable to the sheer physical boundary challenges of accounting for the carbon emissions. For example, Interviewee 5 suggested that he had to conduct over 50,000 metre readings annually to account for the emissions arising from the company's electricity usage given the breadth of the company's property ownership. In addition, there was also the issue of legal boundary that made it very difficult to quantify any carbon emissions falling beyond the entity's boundary. In the following quote, Interviewee 20 who was based in an industrial company discussed the challenges of accounting for the impact of choosing the different type of the construction materials.

> "Obviously with electricity and fuel, the figures and the [conversion] factors are fairly robust and well understood. But, when you start to talk about different material type and stuff like that, everyone's looking at the boundary, I think that puts a lot of people off from starting." (Interviewee 20)

The remark made by Interviewee 20 indicated that whereas the emissions arising from electricity and fuel (i.e. Scope 1 and 2) could be reliably measured, the attempt to quantify carbon emissions arising beyond the company's boundary (i.e. Scope 3) would yield in less 'reliable' measurement. In addition, we find that the perception of a reliable measurement was related to the perception of the company's ability to act upon the quantified issue. For example, the fact that a company could directly 'control' its energy usage meant that it would have the power to scrutinise the activity in such detail to allow a reliable measurement to be taken. However, the fact that a company may not be able to directly control the activities of their suppliers meant that any attempt for quantification would be futile. For example, Interviewee 2 argued that if certain issue fell beyond the control of the company, then it is probably not worthwhile to attempt to account for it.

> "I know that some people have included more and more into their Scope 3 disclosures. But, I think, in many cases, these aren't necessarily meaningful (…), and not necessarily under your 'control'. If they're not under your 'control', you can't manage them; if you can't manage them, they're probably not really a business risk." (Interviewee 2)

In the quote above, Interviewee 2 implied that a "meaningful" measurement in s corporate context was the type of measurement that would allow the business to act upon the issue in a way that would generate economic value. As such, we suggest that the process of quantifying climate change through the carbon reporting system allowed the abstract issue of climate change to be filtered and made comprehensible to the sustainability managers by only making visible the aspects of climate change which were relevant to them, i.e. those aspects which were profitable (with potential economic value).

Second, in enabling calculative reasoning, we identified that the carbon reporting practices allowed the sustainability managers to make sense of the relationship between the climate change issues and the more familiar operational issues of the company. Given that the act of quantifying the carbon performance had essentially filtered the abstract issue of climate change, the determination of the 'win-win' solutions became possible. For instance, Interviewee 9 suggested that it had become impossible for him to distinguish a sustainability project from a cost reduction project, "When you do a cost reduction project, you also know that you're going to reduce the amount of emissions, therefore, it is also a sustainability project." In addition, almost all of our interviewees suggested that they had come to focus on some operational metrics (e.g. energy usage or gas mileage) in trying to minimise the carbon footprint of their companies, essentially "forgetting" (Interviewee 17) the word 'carbon' in the process.

> "Carbon is a non-managed KPI, so no one will directly manage 'carbon'. What we do have is a suite of KPIs underneath that is energy, refrigeration,

> distribution, and energy procurement (…) So, I'm personally right now trying to make people forget the word 'carbon', it's not important to the everyday running of this business" (Interviewee 17)

The quote above is representative of the processes through which the sustainability managers framed the relevance of climate change. In this regard, we suggest that the carbon reporting practices enabled the sustainability managers to make sense of the relevance of climate change to the business (see also Englund et al, 2013), thereby enabling them to identify the 'win-win' solutions for minimising the carbon footprint of the company while remaining profitable.

In this context, we identified four variants of the frames of reality that were used by the sustainability managers to make sense of the relevance of climate change, namely the 'cost saving' frame, the 'advertising' frame, the 'innovation' frame, and the 'reputation' frame (see Table 3.4). First, the cost saving frame refers to the framing of reducing carbon emissions of the company as equivalent to improving its energy efficiency (Henri & Journeault, 2010; Thomson et al, 2014). The cost saving frame is illustrated by the following quote.

> "So, the beauty of my role is the fact that in the world of transportation, it's a low-margin business. If I can save them fuel, then I meet my environmental goals, but they also meet their cost goals." (Interviewee 9)

Table 3.4. Business case frames of climate change

	Frames			
Interviewee	**Cost saving**	**Advertising**	**Innovation**	**Reputation**
Interviewee 1	✓	✓	✓	
Interviewee 2	✓			✓
Interviewee 3	✓	✓		
Interviewee 4	✓			✓
Interviewee 5	✓		✓	
Interviewee 6	✓			✓
Interviewee 7	✓	✓		
Interviewee 8	✓	✓	✓	
Interviewee 9	✓	✓		✓
Interviewee 10	✓			✓
Interviewee 11	✓		✓	
Interviewee 12				✓
Interviewee 13	✓	✓		✓
Interviewee 14	✓	✓		
Interviewee 15	✓	✓		
Interviewee 16	✓			✓
Interviewee 17	✓	✓		
Interviewee 18	✓	✓		
Interviewee 19	✓			✓
Interviewee 20	✓	✓		
Interviewee 21	✓		✓	✓
Interviewee 22	✓			
Interviewee 23	✓	✓	✓	
Interviewee 24	✓			✓
Interviewee 25	✓		✓	✓
Interviewee 26	✓			✓
Interviewee 27	✓			✓
Interviewee 28	✓	✓	✓	✓
Interviewee 29	✓	✓		
Interviewee 30	✓			
	29	14	8	15

Second, the advertising frame refers to the framing that being perceived as addressing climate change would enhance the brand equity of the company which would eventually lead to an improved sales performance. The advertising frame could be demonstrated by the following comment.

> "We specifically focus on campaigning around deforestation directly to consumers, so we invested in consumer advertising in not trying to sell the product, but just to position the issue (…) and we believe that by creating (…) some real meaning behind the brand name will have a positive 'halo effect' on the purchasing of our product" (Interviewee 28)

It is noteworthy that we observed that the advertising frame was equally used by those who were based in consumer-facing and non-consumer facing industries alike, with the latter attributing the value of being perceived as 'sustainable' to the likelihood of winning business contracts from corporate clients who did not want to be perceived as dealing with 'unsustainable' suppliers.

Third, the innovation frame refers to the framing of addressing the challenging issue of climate change as a catalyst for driving the development of new products and services which could cater to the evolving needs of the consumers (see also Arjalies & Mundy, 2013). The innovation frame is illustrated by the following quote.

> "I think over time the word 'sustainability' may disappear from our language, and actually what we're thinking about is innovation (…) think about the smart home industry, the reason that the business is promoting smart home products is not always a sustainability driver." (Interviewee 21)

Fourth, the reputation frame refers to the framing of the cost of addressing the climate change issues as equivalent to the cost of insuring the business against potential negative publicities in maintaining the 'license to operate' (Larrinaga-Gonzalez et al, 2001; Bebbington et al, 2008; Rodrigue et al, 2013). The reputation frame is exemplified by the following remark.

> "There are nice parts, where we are taking the industries forward (…), and actually improving and leaving things better (…) For the majority, I think at the moment is making sure that we're insuring ourselves against external challenges; extreme with consciousness, sorry." (Interviewee 4)

It is notable that the four frames above were distinctly oriented towards the quantifiable and profitable aspects of climate change. For example, the emphasis on eco-efficiency (cost saving frame) was related to the measurement of Scope 1 and 2 that provided a way to make sense of the relationship between energy cost and carbon performance. The other frames (advertising, innovation, and reputation frames) also served to conceptualise the need to address climate change as a kind of investment that was expected to lead to future economic benefits. However, it is noteworthy that absent from the frames of reality of the sustainability managers were the possibility of unconditionally minimising the carbon footprint.

As shown in Table 3.4, our further analysis shows that the cost saving frame was used by almost all of the interviewees (29 out of 30), while the advertising frame was used by 14 interviewees, the innovation frame by 8 interviewees, and the reputation frame by 15 interviewees. While we found no immediately visible pattern between the frames

of reality used by the sustainability managers, we found some indications of the different type of rationalisations for using these business case frames in making sense of the relevance of climate change. We observed that while those with an environmental background suggested that they had to be "pragmatic" (Interviewee 25) in order to stay relevant to the business, those with an industry background suggested that they were simply trying to do what's best for the shareholders.

> "I sort of call myself a 'pragmatic-environmentalist', and by that, I mean, I don't really put forward proposal to the executives in the company whereby we will be spending a lot of money just to be 'green', the proposals that we put forward actually helps profitability and the bottom-line." (Interviewee 25 – environmental background)
>
> "My job is to look after the interest of the shareholders that is my only role (…) There is a value in disclosing GHG emissions transparently because it makes people feel good. And, if it makes people feel good whether it's the buyer of our products or the consumer downstream (…), they'll buy it [our product]." (Interviewee 13 – both environmental and industry background)

Again, we acknowledge that we do not have the evidence to support the claim of a one-to-one relationship between the type of rationalisations used and the individual background of the sustainability managers. In fact, we found some contradictory evidence that would suggest the merging of the two identities whereby those with an environmental background had become increasingly sensitised with the business case argument, while those with an industry background also becoming sensitised with the 'moral' argument of climate change. In summary, we have demonstrated that the

carbon reporting practices influenced the sensemaking process of the sustainability managers by priming their attention toward the quantifiable and profitable aspects of climate change that, in turn, shape their frames of reality in making sense of climate change.

3.5.4 Facilitating sensegiving through 'editing' the sensemaking of others

In this section, we discuss the role of the integrated carbon reporting as an organisational mechanism, which facilitated the sensegiving process of the sustainability managers. Based on our analysis, we identified that the carbon reporting practices stimulated changes to the behaviours of the sustainability managers by providing a lingua franca to relay their perception and a target-setting mechanism to urge actions from other organisation members (see also Swieringa & Weick, 1987). Firstly, as a lingua franca, the carbon reporting practices enabled the sustainability managers to articulate the relevance of climate change to the business in fostering an intersubjective understanding with the other organisation members. For example, Interviewee 17 indicated the central role of the carbon reporting system in enabling her to relay her perception about the salience of climate change to both the CFO as well as the Head of CSR of the company.

> "The beautiful thing about carbon is that you can speak in any language (…) I can go into my CFO, and say, 'We have these many millions on our resource bill' (…) or I can go into my Head of CSR, and say, 'We've got huge problems in this world (…), and I think it's the right thing for us to do is to put public commitment that we're going to reduce that amount of carbon.'" (Interviewee 17)

In the quote above, Interviewee 17 indicated the capacity of the integrated carbon reporting practices to transcend the linguistic barrier in allowing the message about the importance of climate change to be relayed throughout the organisation. In relation, we found that the carbon reporting practices were perceived by the sustainability managers to be equally useful for conveying the message to other divisional managers. For example, Interviewee 9 claimed that the establishment of a carbon reporting system in the company was essential in allowing him to encourage the operational managers to act.

> "I can dangle that carrot in front of the operating manager, and say, 'If you do this project, there will be a % increase of x in your operating margin.' (…) So, that eliminates persuasion, it allows the decision to be made on data, which is a much more powerful, if the data is in your favour, of course." (Interviewee 9)

In the quote above, Interviewee 9 implied that the cost saving frame afforded by the carbon reporting practices was instrumental in performing his role as a change agent in enrolling the support of the operational managers, regardless of their attitude toward climate change.

Secondly, as a target-setting mechanism, the carbon reporting practices provided the sustainability managers with the justification to urge other members of the organisation to take action for changing certain corporate practice. We found that although the sustainability managers were often heavily involved in setting the carbon target, the process often involved a close coordination with other divisional managers

as well as the top management team. In this regard, the collective nature of the target-setting process allowed the sustainability managers to get a sense of the underlying interests of the other organisation members in refining the way that they would frame the relevance of climate change (see also Kaplan, 2008). In the following quote, Interviewee 14 suggested that the process of setting the carbon target in her company sought to take into account the perspectives of the operational managers as well as the top management team.

> "First of all, we identify whether this is a key issue for us, and if we need to be setting target in relation to it. Then, we have dialogue internally with our operation people generally around what initiatives they have planned (…) We will then consolidate that, and then we will decide centrally whether or not, we feel that our number is challenging enough." (Interviewee 14)

In the quote above, Interviewee 14 indicated a collective nature of the target-setting process, which allowed the target to be set at an achievable, yet challenging level to motivate action (see also Swieringa & Weick, 1987). In contrast, Interviewee 28 suggested another approach of setting a "big hairy ambitious goal" to send a clear signal of the company's commitment for addressing climate change throughout the organisation.

> "We have a big overarching goal, which is to halve the GHG impact of our products across the lifecycle by 2020. We also have a specific target for our manufacturing operation, which is to be net-carbon positive by 2030 (…) We actually didn't know how we're going to get there, but we decided that it was

right for us as a company to go for a 'big hairy ambitious goal'." (Interviewee 28)

In the quote above, Interviewee 28 also seems to indicate that the preference toward the "big hairy ambitious goal" was intended to create 'ambiguity-by-design' effect (Gioia & Chittipeddi, 1991), which was envisaged to stimulate innovation and lead to breakthrough. Regardless of the different approaches, we suggest that there were some elements of "guesswork" (Interviewee 24) in setting the carbon target through which the 'objective' carbon measures were rendered into subjective judgment. In this sense, we suggest that the target-setting process represented a way for fostering an intersubjective understanding between the various organisation members of different levels of hierarchy in motivating urgent actions to be undertaken, regardless of the imperfect knowledge of how to achieve the target and whether the achievement of the target mattered at all to the sustainability of the natural system (Roberts, 2003; Gray, 2010).

In addition, as shown in Table 3.5, our further analysis shows that 29 out of 30 companies had set internal carbon targets for their Scope 1 and 2 emissions, while 27 out of 30 companies had stated the target publicly in their annual and sustainability reports in which 9 had also publicly claimed the achievement of the target. In the one case where a carbon target had not been set (Interviewee 12), it was suggested that the company was not able to set a "meaningful" target given the wide fluctuation of the emissions arising from their business activities. In this regard, we found that the metrics used to set the carbon targets could be generally categorised into an 'absolute target', which measures the absolute reduction of the level of carbon emissions or an

'intensity target', which measures the reduction of the carbon emissions relative to some financial or operational metrics (e.g. revenues, product output, or number of full-time employee). However, we found no immediately visible pattern from our analysis of the type of metrics used and the level of the target difficulty.

Table 3.5. Carbon targets – Scope 1 and 2

	Scope 1 and 2							
Interviewee	**Target**	**Metric**	**Actual target**	**Base-line year**	**Tar-get year**	**Achie-ved?**	**Annu-alised target**	**Audit-ed?**
Interviewee 1	Intensity	CO2/ product output	-30%	2007	2020	✓	-2%	
Interviewee 2	Intensity	CO2/ full time employee	-33%*	2015	2023		-4%	✓
Interviewee 3	Intensity	CO2/ revenues	-20%	2015	2017		-10%	✓
Interviewee 4	Absolute	CO2	-10%	2007	2015	✓	-1%	
Interviewee 5	Intensity	CO2/ sqm completed building	-25%	2013	2018		-5%	✓
Interviewee 6	Absolute	CO2	-20%	2010	2015	✓	-4%	✓
Interviewee 7	Intensity	CO2/ sqm floorspace	-3%	2013	2014	✓	-3%	
Interviewee 8	Absolute	CO2	-20%	2000	2020	✓	-1%	
Interviewee 9	Absolute	CO2	-5%*	2015	2020		-1%	✓
Interviewee 10	Intensity	CO2/ MWh supplied	-50%	2006	2020		-4%	✓
Interviewee 11	Intensity	CO2/ revenue tonne km	-30%	2007	2020		-2%	
Interviewee 12								
Interviewee 13	Absolute	CO2	-20%	2010	2020		-2%	✓
Interviewee 14	Intensity	CO2/ product output	-15%	2014	2020		-3%	✓
Interviewee 15	Absolute	CO2	-50%	2013	2020		-7%	✓
Interviewee 16	Intensity	CO2/ product mix index	-10%	2008	2015	✓	-1%	✓
Interviewee 17	Absolute	CO2	-15%	2010	2020		-2%	✓
Interviewee 18	Intensity	CO2/ revenues	-5%	2015	2016		-5%	
Interviewee 19	Absolute	CO2	-25%	2009	2015	✓	-4%	✓
Interviewee 20	Absolute	CO2	-30%	2010	2020		-3%	✓
Interviewee 21	Absolute	CO2	-25%	2010	2020		-3%	✓
Interviewee 22	Absolute	CO2	-50%	2014	2025		-5%	✓
Interviewee 23	Absolute	CO2	2 to 1	2015	2018			✓
Interviewee 24	Absolute	CO2	-50%	2007	2020		-4%	✓
Interviewee 25	Intensity	CO2/ MWh supplied	-42%	2010	2020	✓	-4%	✓
Interviewee 26	Absolute	CO2	-21%	2006	2015		-2%	✓
Interviewee 27	Absolute	CO2	-15%	2015	2020		-3%	✓
Interviewee 28	Absolute	CO2	-100%	2015	2030		-7%	✓

Interviewee 29	Intensity	CO2/ revenues	-10%	2014	2015	✓	-10%	
Interviewee 30	Intensity	CO2/ sqm completed building	-10%	2015	2025		-1%	✓
						9		22

* Internal target

On the other hand, we found that 24 out of 30 companies had some degrees of measures for their Scope 3 emissions, while 4 out of the 24 companies had also set a target for their Scope 3 measures (see Table 3.6). In contrast to the Scope 1 and 2 measures, we found that the Scope 3 measures were relatively patchy with most companies having decided to focus on 'easily quantifiable' emission sources, such as business travel, commuting travel, outsourced transportation, and the processing of waste and water treatment. In this regard, Interviewee 2 suggested that he was sceptical about the company's ability to come up with a sensible estimate for their Scope 3 emissions, hence, the limited focus on the issue.

> "I am nervous about these numbers because no one is actually measuring anything. Compared with the way we would measure Scope 1 and 2, we are very dependent on other people's calculations, basically. I would take the Scope 3 numbers with a pinch of salt." (Interviewee 2)

In the quote above, Interviewee 2 suggested that the challenge of measuring the Scope 3 emissions was related to the company's incapability of extensively scrutinising the numbers which were provided by the different organisation. This, in turn, limited the capability of the sustainability managers to make sense and give sense of the relevance of these Scope 3 emissions.

Table 3.6. Scope 3 targets and measures

	Scope 3					
Interviewee	**Tar-get**	**Meas-ure only**	**Scope coverage**	**Target description**	**Innov-ation frame**	**Consu-mer facing**
Interviewee 1	✓		Product use (tailpipe emissions - g/km CO2)	-25%; by 2015 from 2007 baseline; achieved	✓	✓
Interviewee 15	✓		Business travel	-30%; by 2016 from 2013 baseline		
Interviewee 21	✓		Use of sold products	-38 TWh savings in customer energy used by 2020 from 2011 baseline	✓	✓
Interviewee 23	✓		Use of sold products	Twice reduction in customer's emissions to own operational emissions by 2018 from 2015 baseline	✓	✓
Interviewee 10		✓	Outsourced transportation			✓
Interviewee 11		✓	Upstream processing of fuel, purchased goods & services, business travel, commuting travel, outsourced transportation		✓	✓
Interviewee 12		✓	Business travel			
Interviewee 14		✓	Business travel, outsourced transportation			✓
Interviewee 17		✓	Business travel, water, waste			✓
Interviewee 18		✓	Business travel			
Interviewee 19		✓	Business travel			✓
Interviewee 2		✓	Business travel			✓
Interviewee 20		✓	Outsourced construction			
Interviewee 24		✓	Purchased goods, capital goods, transmission loss, transportation, waste, business travel, commuting travel, end of lite treatment, agricultural sourcing			✓
Interviewee 25		✓	Use of sold products		✓	✓
Interviewee 26		✓	Transmission loss, business travel, waste			✓
Interviewee 27		✓	Business travel			
Interviewee 28		✓	Use of sold products		✓	✓
Interviewee 29		✓	Outsourced transportation			
Interviewee 30		✓	Business travel, transmission loss			✓
Interviewee 4		✓	Business travel, water			✓
Interviewee 5		✓	Purchases goods and services, business travel, waste, transmission loss		✓	✓
Interviewee 8		✓	Business travel, commuting travel, waste		✓	

Interviewee 9		✓	Outsourced transportation			
Interviewee 13						
Interviewee 16						
Interviewee 22						
Interviewee 3						
Interviewee 6						
Interviewee 7						
	4	20			8	16

Nonetheless, we observed a few cases where companies had attempted to measure and even set a target for their Scope 3 emissions. For example, Interviewee 21 and Interviewee 23 suggested that their companies had voluntarily set a target on the product-use phase, while Interviewee 1 also suggested the same thing although he acknowledged that his case was largely driven by a regulatory factor, which was unique to the company's industry sector. In addition, we found some indications that the interviewees who did not account for any Scope 3 emissions were less likely to use the innovation frame in making sense of the relevance of climate change (see Table 3.6). We suggest that this evidence was consistent with our argument that the availability of the Scope 3 measures was instrumental in enabling the sustainability managers to make sense of the relevance of minimising the upstream and downstream emissions of the company. However, again we acknowledge that we do not have the evidence to claim such one-to-one relationship. In fact, there may be an alternative explanation given that the companies which did not report any Scope 3 emissions were largely based on non-consumer facing industry, which may have less motivation to be perceived as 'sustainable' (see also Bebbington et al, 1994; O'Dwyer, 2002).

In summary, we have shown that carbon reporting practices influenced the sensegiving process of the sustainability managers by enabling them to relay their perceptions of the relevance of climate change in editing their intersubjective

understanding with the other organisation members. However, while we have mentioned the different type of rationalisations between those with an environmental background and those with an industry background, we did not find any substantial difference in terms of their sensegiving behaviours, which largely gravitated towards the business case frames. In this regard, it remains uncertain whether the carbon reporting practices had enabled the sustainability managers to grasp the salience of climate change and to relay the message throughout their respective organisations, or whether it had merely created a 'false' sense of comfort that they had done their part by addressing the aspects of climate change that had been made visible by the carbon reporting practices. In the next section, we explore the implications of our findings.

3.6 Discussion

3.6.1 Implication

As a summary, we have demonstrated that the integrated carbon reporting practices that we examine influenced the perception of the sustainability managers in making sense and giving sense of the relevance of climate change. In responding to our research question, we suggest that the carbon reporting practices facilitated the sensemaking process of the sustainability managers by replacing their compliance-based orientation with dynamic performance measures. We show that these financial and non-financial carbon performance measures facilitated the sustainability managers to go 'above and beyond' the compliance requirement by shifting their focus from ensuring the compliance with certain regulations to demonstrating improved carbon performance (see also Weber & Glynn, 2006). Additionally, we suggest that the carbon reporting practices provided the sustainability managers with the business case frames for making sense of the connection between the abstract issue of climate change with the more familiar and workable operational activities of the company

(Englund et al, 2013; Goretzki & Messner, 2016). In relation, we suggest that the carbon reporting practices facilitated the sensegiving process of the sustainability managers by enabling them to foster an intersubjective understanding with other organisation members in motivating action, regardless of their attitude toward climate change and regardless of the imperfect knowledge of the consequence of the action (see also Jordan & Messner, 2012; Goretzki & Messner, 2016).

The main purpose of our study is to examine whether the integration of climate change issues into the corporate accounting system could enable companies to address their social and environmental responsibilities while remaining profitable. In this regard, our findings provide some evidences to support the claim that such integration had enabled the sustainability managers to pursue carbon initiatives that were congruent with the profitability objective by priming the attention of the sustainability managers toward the issues of cost saving, advertising, innovation, and reputation (Henri & Journeault, 2010; Gond et al, 2012; Arjalies & Mundy, 2013). However, although we found some evidences of the role of the integrated carbon reporting practices in facilitating changes to reduce the carbon footprint of the companies, we also found that the 'real' climate change issues had come to be forgotten in the process (Gray, 2010; Rodrigue et al, 2013; Thomson et al, 2014). We suggest that the 'forgetting' of the 'real' climate change issues could lead to unintended consequences in which the act of appearing to reduce the carbon footprint could become decoupled from the sustainability objective, for example, by shifting the operational emissions (Scope 1 and 2) toward the 'invisible' upstream or downstream emissions (Scope 3). The following anecdotal evidence provided by Interviewee 1 on the much-lauded emergence of electric vehicles illustrates our argument.

> "One of the challenges when you're going to electric vehicles, for example, you then have to rely on 'green' source of electricity, and if you don't have that, you're just shifting the environmental impact from another part of the lifecycle, and not making improvement overall." (Interviewee 1)

In this regard, we suggest that the capacity of the carbon reporting practices for holding companies accountable for their environmental responsibility was inherently limited by the partial visibility that it could offer. As such, it would be very difficult to conceive how carbon reporting could offer a holistic perspective which encompasses both the profitability and the environmental objectives, if they were not accompanied by a paradigm shift toward a more prudent outlook of the relationship between firm and its natural environment (Gray, 1992; 2010).

In our study, we also examine whether the background of the sustainability managers had any effect on the mobilisation of the carbon accounting data in supporting their framing strategy (Gray, 1992; Gray et al, 1995; Bebbington et al, 1994). In this regard, we found no substantial difference in the frames of reality of the sustainability managers with environmental backgrounds and those with industry backgrounds, nor did we find any substantial difference in terms of their choice of carbon accounting metrics. However, we found some indications of the different type of rationalisations whereby those with environmental backgrounds portrayed themselves as "pragmatic-environmentalist" (Interviewee 25), while those with industry backgrounds portrayed their role as contributing to shareholder value. Despite the different type of rationalisations, the absence of any evidence to suggest a substantially different action suggests that the carbon reporting practices may play the role of merely creating a

false sense of comfort to reaffirm the respective identities of the sustainability managers. On the one hand, the visibility afforded by the carbon reporting system enabled those with industry background to reaffirm their corporate identity by demonstrating their capability to be both profitable and good (i.e. ethics of narcissus, Roberts, 2001; 2003). On the other hand, the visibility equally allowed those with environmental background to construct a 'heroic' narrative in reaffirming their 'green' identity by demonstrating the environmental progress that could be achieved by being pragmatic (Wright et al, 2012).

Finally, our study may also have some implications for the growing interest in integrated reporting, which put forward the idea of 'integrated thinking' as a solution for encouraging businesses to improve their social and environmental performance (Hopwood et al, 2010; Eccles & Serafeim, 2013). In line with the previous argument, we suggest that our findings were consistent with the capital market evidence on integrated reporting (Serafeim, 2015; Barth et al, 2017) which suggests its role in improving both the capital market performance as well as the internal decision making of companies. However, our findings also suggest that the capacity of such integrated thinking in engendering deep-seated changes to corporate practices is inherently limited by the organisational capability of rendering certain social and environmental issues into quantifiable metrics as well as the organisational capability for inventing creative narratives for setting up the business case for motivating the corporate managers to take action on such issues.

3.6.2 Contribution

In this section, we discuss the contribution of the findings of our study to the existing literature. First, we suggest that our findings contribute to the social and environmental accounting literature by providing further insight on the role of carbon reporting in influencing the sensemaking and sensegiving processes of sustainability managers. Prior literature has highlighted the role of social and environmental accounting as a tool for impression management (Gray et al, 1995; Deegan, 2002; Patten, 2002; O'Dwyer, 2002; Cho et al, 2012) as well as its potential in facilitating organisational change (Adams & McNicholas, 2007; Henri & Journeault, 2010; Contrafatto, 2014). We suggest that our findings contribute to the gap between this literature by addressing the question of why companies engage in impression management and yet simultaneously instigate organisational change. In this regard, our findings provide some evidence on the internal effect of external sustainability reporting practice through which companies had come to believe in their own hype and instigated actual organisational change in enacting the sustainable business identity that is projected externally (Roberts, 2001; 2003; Bebbington et al, 2008; Tregidga et al, 2014; Cho et al, 2015). However, we show that the organisational changes driven by the business case frames were largely limited to the quantifiable and profitable aspects of climate change that could lead to the forgetting of the real climate change issues. In this regard, we argue that there is a risk that the carbon reporting practices could create a false sense of comfort to the corporate managers that they had addressed the real climate change issues despite the fact that there were many unquantifiable and unprofitable aspects of climate change that remained unresolved (Bebbington et al, 2008; Gray, 2010).

Further, we suggest that our findings also contribute to the literature on the integration of social and environmental accounting into the traditional management control system of corporations (Henri & Journeault, 2010; Gond et al, 2012; Arjalies & Mundy, 2013; Contrafatto & Burns, 2013; Rodrigue et al, 2013). While the literature highlights the lack of integration as the key factor in enabling companies to improve their social and environmental performance (Gond et al, 2012; Arjalies & Mundy, 2013), our findings show the limitation of a one-way integration which fail to consider the fallibility of the central assumptions underlying the traditional accounting practices (Contrafatto & Burns, 2013; Rodrigue et al, 2013). For example, our evidence suggests that most of the companies struggled to account for the carbon emissions beyond their operation (i.e. Scope 3) because of the cognitive as well as the practical limitations imposed by the 'entity' concept, which represents a central assumption in the traditional corporate accounting practice (see also Hines, 1988). In such case, the resulting integrated thinking would largely represent an entity-centric vision, which largely discounted the interconnection between businesses and the social and natural systems (Gray, 2010). In this regard, we argue that while the notion of integration remains key in enabling businesses to address their environmental responsibility, a more fundamental rethink of the central assumptions of the traditional corporate accounting practice is also necessary in enabling a 'two-way integration' between social and environmental accounting practices and the traditional accounting practices.

Second, we suggest that our findings also contribute to the more general understanding of the role of accounting as sensemaking and sensegiving devices (Boland & Pondy, 1983; Jonsson, 1987; Swieringa & Weick, 1987; Kraus & Stromsten, 2012; Jordan & Messner, 2012; Englund et al, 2013; Gortezki & Messner, 2016). The

literature has examined the effect on sensemaking and sensegiving as a result of the introduction of budgeting (Boland & Pondy, 1983; Jonsson, 1987), accounting metrics (Swieringa & Weick, 1987; Kraus & Stromsten, 2012), and operational metrics (Jordan & Messner, 2012; Englund et al, 2013; Goretzki & Messner, 2016). To the best of our knowledge, our study is among the early exploration of the effect of a hybrid accounting system (Thomson et al, 2014) on the sensemaking and sensegiving processes. In this regard, our evidence suggests that the carbon reporting practices, which sought to integrate climate change issues into the corporate accounting system, were instrumental not only in facilitating action to be taken under uncertainty (Swieringa & Weick, 1987; Jordan & Messner, 2012; Goretzki & Messner, 2016), but also in enabling action to be taken regardless of individual's attitude toward climate change. For example, our evidence suggests that the carbon reporting system provided a lingua franca that enabled the sustainability managers to encourage actions regardless of the interlocutor's stance on climate change. Paraphrasing Jonsson (1987, p. 293), we suggest that carbon reporting 'legitimizes, disciplines, and settles disputes' on the 'moral' argument of climate change in organisational context.

In addition, we suggest that our theoretical framework could be applicable beyond the context of social and environmental accounting as it is largely consistent with the findings of prior literature, which has highlighted the role of accounting in triggering shift in role expectation (Kraus & Stromsten, 2012; Jordan & Messner, 2012), priming attention toward quantifiable and profitable area (Kraus & Stromsten, 2012; Englund et al, 2013; Goretzki & Messner, 2016), and editing of intersubjective understanding of organisation to motivate action (Swieringa & Weick, 1987; Goretzki & Messner, 2016).

3.7 Conclusion

In conclusion, we have tried to demonstrate the potential of the integration of climate change into corporate accounting system in offering a business case framing of climate change that, in turn, allowed sustainability managers to perform their role as change agents in effectuating changes to the corporate practices. In addition, we also highlighted the pitfall of relying too much on carbon reporting given the partial visibility that it afforded in representing the complexity of climate change (Bebbington & Larrinaga, 2014). As such, we suggest that our study offers further theoretical depth in advancing our understanding of the role of accounting and reporting in enabling corporations to address their social and environmental responsibility (Unerman & Chapman, 2014).

We acknowledge that our theorisation of the problem is limited by the depth and breadth of our data source. First, our study is primarily focused on the cognitive and social effects of carbon reporting while side-stepping the direct effect of carbon reporting on action. In this regard, our study only offers a glimpse of carbon accounting 'in action', for instance, we only offer partial understanding on the effect of framing on the subsequent action taken by the managers. We suggest that future studies could adopt in-depth case study method in responding to such question, explicating the recursive sensemaking and sensegiving processes between sustainability managers and other members of organisation. In addition, we have pointed out some indications of the relationship between the individual background of the sustainability managers and the type of rationalisations used (e.g. 'pragmatic-environmentalist' vs. shareholder value) as well as the relationship between the frames of reality adopted and the availability of the Scope 3 measures. However, our data do not allow us to examine those relationships in finer detail. As such, we suggest

that future studies could also adopt a comparative case study method to control for confounding organisational factors, such as the influence of the top management team or whether the firms were consumer-facing (see also Adams, 2002; Thomson et al, 2014). Moreover, longitudinal study would also enrich our understanding on how the pattern of sensemaking and sensegiving evolves over time (see also Contrafatto & Burns, 2013; Contrafatto, 2014). Second, our study is primarily focused on climate change issues while overlooking the potential conflict between climate change and other social and environmental concerns, such as water scarcity (Bebbington & Larrinaga, 2014). For example, in our study, Interviewee 13 lamented the fact that their carbon emission figure included the emissions arising from their water treatment facility, which he argued to have improved the water quality of the neighbouring community. As such, future studies could enrich our understanding by exploring the tension points not only between climate change and profit, but also between climate change, profit, and other social and environmental issues. In addition, future studies could also seek to compare and contrast the organisational dynamics emanating from carbon accounting against, for example, water accounting, which arguably has a less established methodology (Egan, 2014).

As a final thought, although our study has demonstrated the potential of carbon reporting, it has also highlighted its limitation as a mechanism for holding companies accountable over their environmental responsibility. In this respect, we echo the 'limits of accountability' argument put forward by Messner (2009) and Roberts (2009). We wonder whether social and environmental accounting could ever supplant moral judgment when it comes to guiding the consideration of one's environmental responsibility.

> "It is only when we recognize that nothing is totally right or totally wrong, neither entirely justified nor unjustified, that we feel the need to act responsibly, to do the right thing even if we know that there is no *one* right thing to do. The question of responsibility arises at the precise moment that knowledge or mastery comes to an end." (Messner, 2009, p. 936, emphasis original)

As our study has considered the role of carbon reporting in creating a sense of comfort to the sustainability managers, it rouses a thought-provoking question of whether carbon reporting is also a way for society to feel reassured that we could atone for the consequences of past actions, regardless of whether such actions matter at all to the sustainability of the planet in the grand scheme of the universe.

Chapter 4

Voluntary regulatory body's perspective[3]

4.1 Introduction

The problem that is explored in this paper is whether 'harmonising' the purpose of sustainability reporting with that of financial reporting would enhance the social and environmental accountability of corporations. This paper explores the problem in the context of the sustainability reporting field, which is described as a field that is populated by voluntary regulatory bodies – a particular type of NGOs focused largely on the development and promotion of voluntary corporate sustainability reporting guidelines. Other actors who are involved in this field include the preparers and the users of the sustainability reports as well as the corporate reporting regulators, the financial reporting standard-setters, the accounting professionals, and others whose works may be affected by the emergence of sustainability reporting practices. Specifically, this paper focuses on the 'harmonisation work' undertaken by the voluntary regulatory bodies in seeking to create a degree of 'comparability' between the social and environmental information contained in the sustainability reports and the financial information contained in the traditional corporate reports. Such harmonisation work refers to the recent efforts of the diverse actors in the sustainability reporting field to create a closer alignment between sustainability reporting and financial reporting practices (Andrew & Cortese, 2013; Thistlethwaite, 2015; Rowbottom & Locke, 2016; Humphrey et al, 2017). These efforts could be contrasted to the earlier efforts aimed at 'loosely coupling' sustainability reporting to financial reporting practices, exemplified by the work of the Global Reporting

[3] This chapter is entirely based on a working paper entitled *"Institutional work or institutional trap? The possibilities and constraints of making sustainability reporting 'comparable' with financial reporting"*.

Initiative (GRI) (Levy et al, 2010; Etzion & Ferraro, 2010). In this regard, this paper seeks to address whether such harmonisation work would enable the voluntary regulatory bodies to stimulate greater uptake of sustainability reporting practices in promoting the transition toward "less unsustainable" corporate practices (Unerman & Chapman, 2014).

It is important to examine such harmonisation work because there is a potential that a greater comparability between the sustainability-related and financial information could prompt businesses to place a greater emphasis on sustainability issues, as the shareholders become facilitated with the capacity to incorporate social and environmental information (Power, 1992; Owen et al, 1997; Larrinaga et al, 2002). On the other hand, such harmonisation work could also lead to the 'financialization' of social and environmental information which could potentially lead to the overlooking of unprofitable, yet salient social and environmental issues (Power, 1997; Cooper & Owen, 2007; Archel et al, 2011; Malsch, 2013). Further, the emphasis on making things comparable could also potentially lead to a 'means-ends' reversion (Bromley & Powell, 2012; Wijen, 2014) in which the focus of the voluntary regulatory bodies could become diverted toward the reporting process as the 'ends' in itself, rather than as the 'means' toward engendering deep-seated changes to the corporate practice (Power, 1996; Spence, 2009; Archel et al, 2011).

To examine the problem, this paper conceptualises the attempt to harmonise sustainability reporting with financial reporting practices as a form of institutional work in which the voluntary regulatory bodies sought to engage in the 'boundary work' of reconfiguring the sustainability reporting field in order to provide them with the

legitimacy to engage in the 'practice work' of encouraging companies to address the corporate sustainability issues (Lawrence & Suddaby, 2006; Zietsma & Lawrence, 2010). Prior literature has already used the concept of boundary work in exploring various contexts, including the efforts of the accounting professionals in extending the financial auditing expertise (Power, 1997), the role of the financial reporting standard setter in extending its authority over controversial issues (Young, 2014), and, even the efforts of a voluntary regulatory body in extending the influence of sustainability reporting practice into the corporate reporting field (Humphrey et al, 2017). This paper builds on this line of literature by introducing the concept of practice work (Zietsma & Lawrence, 2010) to examine the interplay between the institutional work undertaken to harmonise sustainability reporting with financial reporting (boundary work) and the institutional work undertaken to effectuate changes to the underlying corporate practices (practice work). I would suggest that this theoretical lens provides this study with useful analytical constructs to examine the interplay between the original intention for engaging in the harmonisation work and the subsequent consequences (intended and unintended) of the reconfiguration of the sustainability reporting field.

As such, this paper formulates its research question as follow: *"How does 'harmonisation work' facilitate (or not) the voluntary regulatory bodies in encouraging companies to adopt sustainability reporting practice and address corporate sustainability issues?"*

To sketch out the problem, I conducted a case study of the effort of the Climate Disclosure Standards Board (CDSB) in harmonising the sustainability reporting

practice with the 'mainstream' corporate reporting practice. The CDSB is a network organisation established to foster coordination between the voluntary regulatory bodies who are responsible for establishing the widely adopted sustainability reporting guidelines, such as the Carbon Disclosure Project (CDP), the Climate Registry, the Sustainability Accounting Standards Board (SASB), and the World Resources Institute (WRI). Further, the CDSB also seeks to establish a closer link between these voluntary regulatory bodies and the business communities by seeking the participation of prominent business associations, including the Climate Group, the Coalition for Environmentally Responsible Economies (CERES), the International Emissions Trading Association (IETA), the World Business Council for Sustainable Development (WBCSD), and the World Economic Forum (WEF). The mission of the CDSB is to envision an approach for harmonising the different sustainability reporting guidelines in a way that would also offer 'useful' information to both the shareholders and the stakeholders (Andrew & Cortese, 2013; Thistlethwaite, 2015). I would suggest that the CDSB is an apt site for the study because of its singular focus in harmonising the different sustainability reporting guidelines, in contrast to other bodies such as the GRI (Levy et al, 2010; Etzion & Ferraro, 2010) or the International Integrated Reporting Council (IIRC) (Rowbottom & Locke, 2016; Humphrey et al, 2017) who also engaged in some degrees of harmonisation work, but in relation to the efforts of diffusing their own reporting guidelines. As such, I would expect to observe a more 'mission-oriented' form of harmonisation work that would provide an opportunity to examine the wide-ranging effects of such harmonisation work, if any. The case study is primarily informed by my ethnographic account of the organisation as well as by semi-structured interviews conducted with the key personnel of the organisation. These methods are useful because they provide in-depth knowledge regarding the original intention, the key decisions, and the ongoing activities and struggles of the organisation (Flyvbjerg, 2001).

As a summary, this paper identifies that the CDSB sought to make sustainability reporting practice 'comparable' with financial reporting practice by reconfiguring the boundaries of the sustainability reporting field. This paper identifies that such boundary work comprised altering the 'inclusion-exclusion criteria' of the field by setting up the organisation in a way that would focus on offering pragmatic solutions to the corporate reporting practice, thereby subtly creating a distinction with the conventional environmental activists, while at the same time, creating a common purpose with the accounting professionals and among the established voluntary regulatory bodies. In addition, it is identified that the CDSB sought to reconfigure the sustainability reporting field by inverting the 'subordinate-superordinate hierarchy' of the field by setting up the primary purpose of sustainability reporting as that of 'enlightening' the shareholders, with the objective of creating stakeholder accountability being addressed as a secondary role. This paper suggests that such boundary work enabled the practice work of the CDSB in instigating some degrees of changes to the corporate reporting practice by enabling the organisation to directly engage with the corporations in providing advices for preparing the sustainability-related information in an integrated manner. Additionally, it also enabled the organisation to engage with the financial reporting standard-setters and the corporate reporting regulators in providing advices with regards to the relevance of sustainability reporting practices to the traditional financial reporting field. However, this paper also highlights that while the harmonisation work had enabled the CDSB to instigate changes to the corporate reporting practice, there is a risk that it may simultaneously create an 'institutional trap' through which changing the corporate reporting practice becomes seen as the ultimate objective of the organisation, instead of changing the underlying business practice.

In terms of contribution, I would suggest that the findings of this paper contribute to the literature around the standardization and the regulation of sustainability reporting practice. It does so by considering the idea of institutional trap which refers to the constraint imposed by introducing financial reporting analogy, metaphor, and language in addressing social and environmental issues. The idea of institutional trap could be contrasted with the idea of 'moral entrapment' discussed by Etzion & Ferraro (2010) and Haack et al (2012) referring to the potential of adopting financial reporting analogy, metaphor, and language in representing particular social and environmental concerns as salient issues in businesses. Contrary to the idea of moral entrapment, the findings suggest that there is a risk that actors in the sustainability reporting field could become fixated at creating the perfect representation of the social and environmental issues as financial reporting matters, while overlooking the issue of the usefulness of the sustainability reports to both the preparers and the users. Although the findings confirm the argument of the deradicalizing potential of sustainability reporting (Cooper & Owen, 2007; Spence, 2009; Archel et al, 2011; Malsch, 2013), this paper provides more nuances to the argument by considering the deradicalization as a matter of organisational constraint, rather than as an inevitable outcome.

In addition, I would suggest that the findings of this paper provide further insight to the concepts of boundary work and practice work. I would suggest that the institutional work lens (Lawrence & Suddaby, 2006; Lawrence et al, 2009; Zietsma & Lawrence, 2010) provides another dimension for considering the concept of boundary work (e.g. (Power, 1997; Young, 2014; Humphrey et al, 2017) by examining the interplay between the institutional work aimed at reconfiguring the field and the institutional work aimed at promoting reporting change and organisational change.

Additionally, I would suggest that the findings of this paper also provide new insight to the concepts of boundary work and practice work introduced by Zietsma & Lawrence (2010) by bringing into attention the distinction between the adoption of a new standard of practice and the suitability of the adoption of that standard in addressing the intended societal objective. In this regard, this paper considers the possibility of means-ends decoupling (Bromley & Powell, 2012; Wijen, 2014) that could occur as a result of 'too much' emphasis on the standard in itself, rather than focusing on the use of the standard to address the intended societal objective. In this regard, this paper also shows that a gap between a particular standard of practice and its intended societal objective could already arise at the standard-setting level, even prior to the implementation phase of the standards by organisations.

The remaining sections of this paper are structured in the following order. The 'Theoretical Framework' section provides some contexts on harmonisation work in relation to the dynamics in the sustainability reporting field and specifies the concepts of boundary work and practice work. Then, the 'Method' section delineates the research design and provide some explanations and information for selecting the CDSB as the site for the case study. Next, the 'Findings' section discusses my observation and analysis of the possibilities and constraints resulting from the harmonisation work of the CDSB. Then, the 'Discussion' section summarises the implications and the contributions of the findings. Lastly, the 'Conclusion' section identifies the limitations of this study and offers future research avenue. A list of the acronyms of the various different organisations discussed in this paper is provided in Appendix 2A.

4.2 Theoretical framework

In this section, this paper begins by providing some backgrounds to situate the harmonisation work in the context of the evolution of the sustainability reporting field and delineate the implications of prior research on the research context. Next, it specifies the concepts of boundary work and practice work and explains the theoretical insights that they offer in examining harmonisation work.

4.2.1 'Harmonisation work' and the evolution of sustainability reporting field

This paper refers to harmonisation work as the recent efforts initiated by the diverse actors in the sustainability reporting field to create a closer alignment between the sustainability reporting and financial reporting practices (Andrew & Cortese, 2013; Humphrey et al, 2017). Such harmonisation works are loosely organised around the idea of integrating the social and environmental information into the well-established corporate reporting practices with the intention of making sustainability-related information comparable with financial information. In doing so, it is also envisaged that the harmonisation work would allow the shareholders to take a more proactive role in disciplining those companies with poor social and environmental performance (Rowbottom & Locke, 2016; Humphrey et al, 2017). Based on the prior literature, this paper identifies that some of the actors who had been extensively involved in such harmonisation works include, among others, The Prince's Accounting for Sustainability Project (A4S) (Hopwood, 2009; Hopwood et al, 2010), the International Integrated Reporting Council (IIRC) (Rowbottom & Locke, 2016; Humphrey et al, 2017), the Sustainability Accounting Standards Board (SASB) (Herz & Rogers, 2016) as well as the case organisation, the Climate Disclosure Standards Board (CDSB) (Andrew & Cortese, 2013; Thistlethwaite, 2015). The common thread between the works of these independently established organisations is the shared

objective of making sustainability reporting practice comparable with the financial reporting practice. This could be achieved, for example, by shifting the focus toward addressing the information needs of the shareholders, by a more stringent application of the financial reporting principles (e.g. the principle of 'materiality'), and by encouraging companies to present social and environmental information in the annual report, not only in the standalone sustainability report.

The actors involved in the harmonisation works mentioned above were established during the period of mid-to-late 2000s. It is notable that they have markedly different views of sustainability reporting from that of the established actor in the field – the Global Reporting Initiative (GRI) which was established in 1997 and whose reporting framework had assumed the status of *de facto* standards for sustainability reporting practice (Levy et al, 2010; Etzion & Ferraro, 2010).[4] One of the most important distinctions is the 'users' assumption that is specified by the proponents of harmonisation work as the shareholders, in contrast to the established view that the stakeholders are the main audience of the sustainability reports (Andrew & Cortese, 2013; Humphrey et al, 2017). Additionally, while those actors who engaged in the harmonisation works aimed to subsume the sustainability reporting practice as part of the broader corporate reporting practice, the GRI initially adopted a financial reporting analogy merely to create a sense of familiarity to companies in promoting the adoption of its sustainability reporting guidelines. It is noteworthy that the GRI began to deviate its guidelines from the financial reporting practice as soon as it considered that the critical mass of adopters had been reached (Etzion & Ferraro, 2010). However, Levy et al (2010, p. 91) suggest that the departure was soon followed by the loss of momentum as the GRI struggled to meet the needs of its diverse users;

[4] The A4S, the CDSB, the IIRC, and the SASB were established in 2004, 2007, 2010, and 2011 respectively.

as the investors remaining unconvinced about the objectivity of the sustainability-related data, the companies doubting the benefit of sustainability reporting, and the NGOs not finding the data useful in informing their campaigns. In this regard, the drive toward harmonisation works could be seen as a strategic renewal, rather than as a challenge to the GRI version of sustainability reporting, especially as demonstrated by the public support of the GRI on the key proponents of the harmonisation works, such as the A4S and the IIRC (Humphrey et al, 2017). Further, the Financial Stability Board (FSB) had also recently formed the high-profile Task Force on Climate-related Financial Disclosures (TCFD) to develop a comparable and consistent approach for the corporate disclosure of climate change related information. The fact that the TCFD's recommendations built on the work of the voluntary regulatory bodies mentioned above indicated the increasing relevance of the harmonisation work not only to the sustainability reporting field, but also beyond (TCFD, 2017).

It is also worth noting that such 'investor-oriented' version of sustainability reporting is also markedly different from the 'social accounting project' envisioned within the social and environmental accounting academic community (Owen et al, 1997; Gray, 2002). While actors in the sustainability reporting field tend to focus on the reporting process of companies, the social accounting project was envisioned as a system-level reporting process. Gray (2010) argues that it would only be possible to produce an account of 'unsustainability' with company-level reporting given the inherent difficulty of accounting for both negative and positive impacts created outside of the organisational boundary. Although the practices and accounting techniques coming from the social accounting project (e.g. counter-account, dialogical accounting) remain largely confined to the academic sphere, its critique of sustainability reporting practice is equally relevant in informing the challenges faced by actors in the

sustainability reporting field in effectuating deep-seated changes to the business practice (Unerman & Chapman, 2014).

With regard to the potential benefit of using accounting to address corporate sustainability issues, Power (1992) argues that accounting could provide a mechanism for organising the "common needs of strangers" in establishing workable solutions for addressing pressing social and environmental concerns. Similarly, Bebbington et al (2012) suggest that a well-designed sustainability reporting practice could lead to the production of new business norms, which are more attuned toward the wider interests of the society. In relation, Haack et al (2012) argue that sustainability reporting practice could create a moral entrapment in the sense of allowing the corporate managers to grasp the salience of the social and environmental issues by presenting them as a 'business case' (see also O'Sullivan & O'Dwyer, 2015). In this regard, sustainability reporting is seen as the means for prompting businesses to accomplish the ends of transitioning toward less unsustainable practice.

On the other hand, others in the literature have also highlighted the constraint imposed by adopting accounting as the means for achieving the ends of a sustainable society. Malsch (2013) argues that the adoption of financial reporting principles could lead to the 'financialization' of sustainability reporting that could serve to reinforce the power of corporations in dictating the terms for addressing various social and environmental issues, thereby minimizing the ground for a regulatory intervention. In relation, Cooper & Owen (2007) examine the sustainability reporting practices in the UK and argue that neither the mandatory nor the voluntary forms of sustainability reporting would lead to stakeholder accountability given the increasing subordination

of the social and environmental issues to the financial focus; Larrinaga et al (2002) and Archel et al (2009) also reach a similar conclusion based on their examination of the sustainability reporting practices in Spain. From a civil society perspective, Archel et al (2011) argue that the adoption of the language of accounting, by way of sustainability reporting, could put civil society movements under the 'trap' of the neoliberal discourse.

> "In other words, social actors and social movements often come to be defined, not by their original raison d'etre or putative political ideology, but by the institutional processes within which they engage. In some sense they are *trapped* within these processes and rely on them for the construction of their identity and legitimacy." (Archel et al, 2011, p. 329, emphasis added)

In this regard, the critics of sustainability reporting are concerned that the language of accounting could subconsciously constrain the civil societies from envisioning a more 'radical' idea as they begin to see the world from the neoliberal perspective (see also Spence, 2009).

Additionally, Wijen (2014) also cautions against the proliferation of sustainable business practices standards due the complexity of these issues which would make it extremely difficult to distinguish between the compliance with 'the letter' *vis-à-vis* the compliance with 'the spirit' of the standards. In this regard, Bromley & Powell (2012) introduce the concept of means-ends decoupling, which refers to the diversion of organisational resources toward the rigorous implementation of certain standards, almost regardless of its effect in achieving the intended objective of those standards.

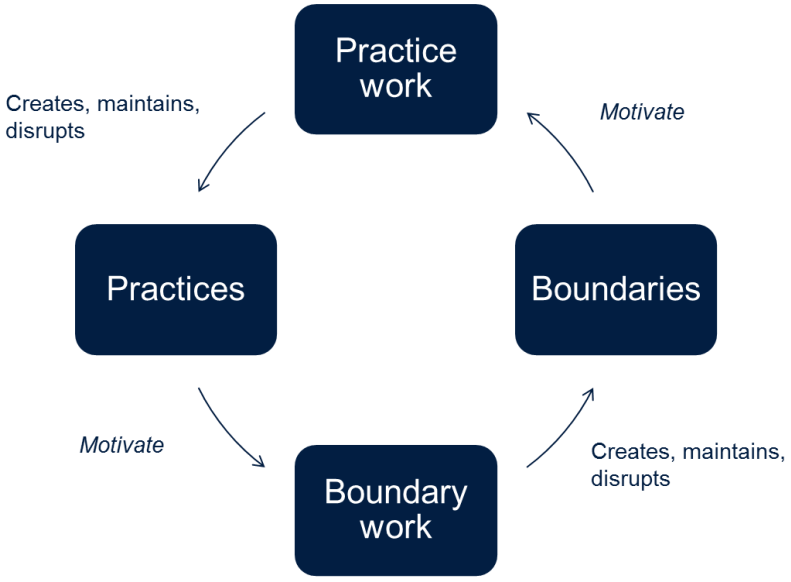
Such means-ends decoupling brings into attention the risk of 'too much' compliance, in contrast to the more commonly discussed problem of 'policy-practice' decoupling, which refers to the problem of symbolic compliance and legitimacy-seeking behaviour (Meyer & Rowan, 1977; DiMaggio & Powell, 1983). While the literature has largely discussed the phenomenon of means-ends decoupling at organisational level, this paper suggests that it is possible for such phenomenon to occur at the standard-setting level. In this regard, this paper suggests that the voluntary regulatory bodies are equally susceptible to the institutional trap whereby the diffusion of sustainability reporting practice could become seen as the ends in itself, rather than as the means for facilitating companies to address pressing societal issues (see also, Power, 1996).

4.2.2 Boundary work and practice work: Conceptualising the interplay of promoting reporting change and organisational change

This paper uses the concepts of boundary work and practice work based on the lens of institutional work in order to conceptualise the role of harmonisation work in facilitating (or not) actors in sustainability reporting field in promoting changes to business practice by way of sustainability reporting. The concept of boundary work refers to the purposive actions undertaken to create, maintain, or disrupt the institutional boundaries in order to circumscribe one's incapacity to intervene with the underlying practice. On the other hand, the concept of practice work refers to the purposive actions undertaken to create, maintain, or disrupt underlying practice in order to circumscribe one's incapacity to intervene with the established institution (Lawrence & Suddaby, 2006; Zietsma & Lawrence, 2010). From this perspective, the emergence of a stable pattern of structures, rules and routines is understood to be created, maintained, and disrupted recursively through practice (Lawrence et al, 2011). In this regard, the concepts of boundary work and practice work build on the

earlier typology of institutional work developed by Lawrence & Suddaby (2006) in providing another angle to distinguish whether certain type of institutional work is oriented toward reshaping the institutional boundary to motivate further changes to the underlying practice (boundary work) or if it is oriented toward reshaping the underlying practice to motivate further changes to the institutional boundary (practice work), as illustrated in Figure 4.1 (see also, Lawrence et al, 2009; Hampel et al, 2015). As such, the concepts of boundary work and practice work provide useful analytical constructs to examine the interplay between the macro-level and micro-level changes, thereby allowing the analysis of the interplay between the different types of institutional work; in relation, these concepts also allow this study to circumvent the problematic nature of capturing the complexity of social phenomena using the highly stylised typology of institutional work (Jarzabkowski et al, 2009; Zietsma & McKnight, 2009; Hayne & Free, 2014; Canning & O'Dwyer, 2016).

Figure 4.1. The interplay of boundary work and practice work



Source: Zietsma & Lawrence (2010)

As suggested above, boundary work refers to the type of institutional work that is aimed at reshaping the macro-level institutional field configuration. Prior literature has shown that the reconfiguration of those institutional boundaries could be accomplished by manipulating the inclusion-exclusion criteria (Gieryn, 1983; Lamont & Molnar, 2002) as well as the subordinate-superordinate hierarchy (Dezalay, 1995; Power, 1997) of the field. The concept of boundary work is not unique to the institutional work lens as it was drawn from the broader sociological literature, hence, there are papers which use the concept of boundary work without necessarily adopting the lens of institutional work. For example, Young (2014) discusses the boundary work of the US Financial Accounting Standards Board (FASB) in excluding the opinion of lay actors by describing it as "political" in setting up the contrasting "technical" opinion of the accounting experts in seeking to maintain its role as the focal actor in the financial reporting standard-setting process. On the other hand, building on the institutional work lens, Humphrey et al (2017) discusses the boundary work of the IIRC of including the accounting profession in its governance structure as well as cultivating relationships with the financial reporting standard-setters in order to negotiate the extension of the relevance of its work to the corporate reporting field. Similarly, Hayne & Free (2014) also discusses the strategy adopted by the COSO of including diverse professions in establishing the relevance of its reporting guidelines. Other than the manipulation of the inclusion-exclusion criteria of the field, Power (1996; 1997) demonstrates that boundary work could also be accomplished by reconfiguring the subordinate-superordinate hierarchy of the field. He discusses the strategy of the European accounting professions in negotiating their entry to the environmental auditing market by presenting the financial auditing expertise as an abstract body of knowledge that could be implemented equally well to any other field.

As such, the literature has demonstrated the diverse strategies that could be adopted by actors to reconfigure the inclusion-exclusion criteria as well as the subordinate-superordinate hierarchy of the field in reconstructing the institutional boundaries.

On the other hand, practice work refers to the type of institutional work that is directed at reshaping the micro-level practices. Prior literature shows that practice work could be accomplished by undertaking symbolic actions to evoke a legitimacy crisis in the established institution (Schneiberg & Lounsbury, 2008) or through the invention of new standards of practice (Zietsma & Lawrence, 2010). Unlike boundary work, the concept of practice work was introduced by Zietsma & Lawrence (2010) who adopt the lens of institutional work in order to examine the recursive relations between institution and practice. They make the distinction between practice work, which refers to the institutional work aimed at influencing the practice and 'practice', which refers to the routine set of actions shared by certain actors in the field, as illustrated in Figure 4.1 (Zietsma & Lawrence, 2010, p. 192). The example given to illustrate the concept of practice work includes a consumer boycott which was organised by a group of environmental activists who aimed to disrupt the activities of a major forestry company in a protest to its unsustainable logging practice. Similarly, Elsbach & Sutton (1992) discuss the strategy adopted by a group of environmental activists in purposefully engaging in innocuous illegitimate activities (e.g. tree-sitting, road-blocking) in seeking to disrupt the activities of major corporations in protests over certain environmental issues. Other than undertaking these symbolic actions, Zietsma & Lawrence (2010) show that practice work could also be accomplished by developing a new standard of practice. They demonstrate the influence of a sustainable logging 'best practice' that is developed by a forestry company in reshaping not only its own practices, but also the practices of other similar companies in the industry. Similarly,

Leblebici et al (1991) trace a pattern connecting the key moments in the evolution of the US radio industry with the invention of the disruptive standards of practice that were developed by actors who were initially considered as marginal players in the field (see also, Ahmadijan & Robinson, 2001; Jones, 2001). As such, the literature has also demonstrated how the concept of practice work could enrich our understanding of the concept of boundary work by considering the co-evolution of the micro-level practice with macro-level institutional configuration.

In this regard, I would suggest that the institutional work lens offers a suitable theoretical framework as it provides this study with the analytical constructs to examine the interplay of boundary work and practice work in analysing the context. Additionally, the concept of boundary work has been used by Humphrey et al (2017) in examining a similar context, as they analyse the efforts of the IIRC to reconfigure the corporate reporting field in extending the influence of its reporting framework beyond the sustainability reporting field. Similarly, Etzion & Ferraro (2010) discuss the 'analogical work' of the GRI in diffusing its reporting framework by drawing on the financial reporting analogy to encourage adoptions. Both studies demonstrate that the voluntary regulatory bodies could establish the relevance of their reporting frameworks by engaging extensively in boundary works. The institutional work lens offers another angle by considering the recursive relation between the boundary work undertaken by these actors with the kind of practice work that becomes possible. In this regard, this paper builds on the current literature (Etzion & Ferraro, 2010; Humphrey et al, 2017) by exploring the recursive relation between the boundary work of the voluntary regulatory bodies and the practice work that they undertake in promoting the adoption of their reporting frameworks as well as in encouraging companies to address their social and environmental responsibility. As such, I would

suggest that these concepts are useful in examining whether or not the harmonisation work of making sustainability reporting comparable with financial reporting would enable the voluntary regulatory bodies to instigate further changes to the underlying corporate practices.

4.3 Method

In this section, this paper begins by specifying the research design and provides some explanations for selecting the Climate Disclosure Standards Board (CDSB) as a site for the case study. Then, it provides further context about the CDSB to provide some background information about the organisation. Next, it discusses the methods of data collection and specifies the data sources used to inform the case study. Lastly, it discusses the approach to analysing the data.

4.3.1 Research design

This paper adopts a case study approach (Flyvbjerg, 2001) to examine the harmonisation work of making sustainability-related information comparable with financial information. Although prior literature, as mentioned above, suggests that there are several key proponents of such harmonisation work, this paper decided to undertake a single case study of the Climate Disclosure Standards Board (CDSB) to provide an in-depth analysis of the specific mechanisms underlying such harmonisation work. I would suggest that the CDSB represents a 'critical case' (Flyvbjerg, 2001) for understanding the mechanisms of harmonisation work because of its singular focus in envisioning a way to harmonise the different sustainability reporting guidelines, in contrast to other bodies such as the GRI (Levy et al, 2010; Etzion & Ferraro, 2010) or the IIRC (Rowbottom & Locke, 2016; Humphrey et al,

2017) who also engaged in some degrees of harmonisation work, but in relation to the efforts of diffusing their own reporting guidelines. As such, I would suggest that the context provides a setting to observe a mission-oriented form of harmonisation work which I assume as more likely to be instigated with the aim of making changes to the underlying corporate practice. In addition, the CDSB was established as a network organisation for coordinating the interests of the key actors in the sustainability reporting field. As such, the setting also provides an opportunity to identify the main proponents and opponents of the harmonisation work and, therefore, provides a broader understanding of the dynamic of the sustainability reporting field. In this regard, I would suggest that the single case study approach is apt for the purpose of this study as it allows the close examination of the specific mechanisms of the harmonisation work without necessarily losing a degree of generalisability beyond the case organisation.

4.3.2 Research context

The idea to form the CDSB was conceived during a meeting at the World Economic Forum (WEF) in 2007 where several voluntary regulatory bodies and business associations (see Table 4.1) deliberated the issue of how to further the impact of sustainability reporting in addressing the global issue of climate change (Thistlethwaite, 2015). During the meeting, the participants discussed the sporadic development of sustainability reporting practices and contemplated the idea of harmonising the different conventions (e.g. assumptions, principles, and terminologies) used by the different voluntary regulatory bodies in order to leverage the influence of the sustainability reporting practice. The following statement reflects the original intention for establishing the CDSB.

> "CDSB was created in response to the need for a market intervention to bring order to global corporate reporting practices on climate change and natural capital. CDSB's mission, aims and objectives are agreed to support and build on the work and best practice of Board members' activity, allowing CDSB to harness their collective power to drive change." (Terms of Reference – CDSB Technical Working Group, 2016)

The quote above also reflects the ongoing mission of the CDSB in coordinating the development of the sustainability reporting guidelines, particularly those which relate to climate change. In this regard, the work of the CDSB was envisioned not to create another sustainability reporting guideline, but rather to leverage the impact of the existing guidelines.

As shown in Table 4.1, the CDSB acts upon the interests of nine organisations, which were represented by a senior individual from each of the organisation who collectively forms the Board of the CDSB (Andrew & Cortese, 2013; Thistlethwaite, 2015). Most of the organisations are the founding members who were present at the WEF 2007 meeting, except for the Sustainability Accounting Standards Board (SASB) who joined in 2017. The CDSB is also supported by an expert group called the Technical Working Group (TWG), which comprises a mixture of accounting experts (representatives of Big 4, accounting associations, accounting academics) and sustainability experts (representatives of voluntary regulatory bodies, sustainability consultancies, NGOs). The daily work of the CDSB is coordinated by the Secretariat, which comprises a handful of full-time staffs who initiate and implement projects in seeking to achieve the mission of the organisation. Since the inception of the organisation, the Secretariat

has been hosted by the Carbon Disclosure Project (CDP) who provides the CDSB with working facilities within its office as well as paying the salary of the full-time staffs.

Table 4.1. Composition of the Board members of the CDSB

Board members	Business association	Voluntary regulatory body	Reporting guideline	Scope	Juris-diction
Carbon Disclosure Project (CDP)		✓	CDP Questionnaire	Environmental (climate change, water, forest)	Global
Climate Group	✓		-	-	-
Climate Registry		✓	Climate Registry	Environmental (climate change)	US & Canada
Coalition for Environmentally Responsible Economies (CERES)	✓	✓	Founder of the Global Reporting Initiative Framework (GRI)	Social and environmental	Global
International Emissions Trading Association (IETA)	✓		-	-	-
Sustainability Accounting Standards Board (SASB)		✓	Sustainability Accounting Standards	Social and environmental	US
World Business Council for Sustainable Development (WBCSD)	✓	✓	GHG Protocol	Environmental (climate change)	Global
World Economic Forum (WEF)	✓		-	-	-
World Resources Institute (WRI)		✓	GHG Protocol	Environmental (climate change)	Global

The mission of the CDSB is to establish a sustainability reporting approach that could offer a decision-useful information to facilitate the incorporation of social and environmental performance into investment decision-making (CDSB, 2015). In this

regard, the organisation envisions that a more stringent application of the financial reporting principles in preparing sustainability-related information could provide a way to harmonise the different sustainability reporting guidelines. The CDSB seeks to accomplish its mission by publishing best practice guidelines which are positioned as 'meta-framework' that builds upon the existing sustainability reporting guidelines. The two main best practice guidelines published by the CDSB included the Climate Change Reporting Framework 1.1 (CCRF) which was published in 2012 and the CDSB Framework which was published in 2015. While the CCRF provides a detailed guidance for corporate carbon reporting, the CDSB Framework provides high-level reporting principles for the wider natural capital reporting. The reporting guidelines have been continuously updated in conjunction with the latest developments in both sustainability reporting and corporate reporting fields. For example, the CCRF was updated in 2012 in light of the publication of the IASB Conceptual Framework in 2010 (see Table 4.2).

Table 4.2. Best practice frameworks published by the CDSB

Timeline	Framework	Purpose of update
06 April 2010	Climate Change Reporting Framework	-
20 July 2012	Climate Change Reporting Framework 1.0	Align definition of organisational boundary with GHG Protocol reporting standard
17 October 2012	Climate Change Reporting Framework 1.1	Align definition of organisational boundary with IASB Conceptual Framework 2010
08 June 2015	CDSB Framework	Align scope with EU Non-financial Reporting Directive; expands the scope of the framework to 'natural capital'

Additionally, the CDSB also engages in the policy work of influencing the financial reporting standard-setters as well as the corporate reporting regulators in seeking to

shift their perspectives on the relevance of sustainability reporting to the corporate reporting practice more generally. While the policy work of engaging the financial reporting standard-setters has not yet resulted in any meaningful impact, the policy work of engaging the corporate reporting regulators has contributed to the promulgation of the amendments to the corporate reporting regulations both in the UK and in the EU (see Table 4.3).

Table 4.3. Policy work of the CDSB

Regulation	Regulator	Jurisdiction	Engagement type	Outcome
Strategic Report and Directors' Report Regulation 2013	FRC and Defra	UK	- Preparing report for Defra - Advisory role	CDSB reporting guideline referenced by Defra's Environmental Reporting Guidelines
Non-financial Reporting Directive (Directive 2014/95/EU)	European Council	EU	- Advisory role	CDSB credited in non-binding Guidelines on Non-financial Reporting

Table 4.3 shows that one of the CDSB reporting guidelines (the Climate Change Reporting Framework 1.1) has been referenced as a mean for compliance for the GHG reporting regulation under the 'Strategic Report and Director's Report Regulation 2013' in the UK (Defra, 2013). Similarly, the CDSB has also been credited for its contribution to the promulgation of the 'EU Guidelines on Non-financial Reporting' (EC, 2017). As such, I would suggest that the CDSB represents an apt site for examining the research question given its manifest focus of envisioning and promoting the harmonisation of sustainability reporting with the mainstream corporate reporting practices.

4.3.3 Data collection

The case study is primarily informed by my ethnographic account (Hammersley & Atkinson, 1995) of the organisation as well as by formal semi-structured interviews (Rubin & Rubin, 1995) conducted with the key personnel of the case organisation. Firstly, my ethnographic account of the organisation was drawn from a participant observation role to the CDSB which took place in September 2014 – June 2015. The role included reviewing the analysis and the positioning of a research report published by the CDSB that involved both face-to-face and teleconference meetings approximately twice every month. The role culminated in the launching of the report in an event in which the CEO of the Financial Reporting Council (FRC) provided a response to the report; the event was attended by 136 individuals and streamed online by 77 individuals representing major corporations, Big 4, accounting associations, and NGOs. Although this involvement was not entirely by-design, it prompted the following enquiries: how did financial reporting come to be seen as a reference point for addressing climate change? Also, how did a report which was patched together by a few full-time CDSB staffs and advises from ourselves and few others come to gain the attention of major corporations, major accounting firms, and the corporate reporting regulator?

Secondly, the curiosity led to a more formal enquiry to understand the mission of the organisation. To this end, I conducted 13 semi-structured interviews with the key personnel of the CDSB during the period of March – June 2017. The interviews were focused around four broad themes: the aspiration of the organisation, the successes and failures, the relationship with other key actors in the field, and the personal motivation of the interviewee. I interviewed 4 Secretariat staffs and 9 Technical Working Group (TWG) members. Some of the key interviewees included the Founding

Director, the Managing Director, and the TWG Chairman; this paper simply refers to these individuals as either Secretariat staff or TWG member to maintain their anonymity. Each interview lasted approximately 1 hour, was recorded and fully-transcribed for data analysis. Detail of the interviewees is provided below.

Table 4.4. Description of the interviewees

Interviewees	Position	Other affiliation	Interview date
Interviewee 1	TWG member	Company	9 March 2017
Interviewee 2	Secretariat staff	-	9 March 2017
Interviewee 3	Secretariat staff	-	10 March 2017
Interviewee 4	Secretariat staff	-	4 April 2017
Interviewee 5	TWG member	Business association	10 April 2017
Interviewee 6	TWG member	Big 4	20 April 2017
Interviewee 7	TWG member	Academia	25 April 2017
Interviewee 8	TWG member	Company	3 May 2017
Interviewee 9	TWG member	Voluntary regulatory body	25 May 2017
Interviewee 10	TWG member	NGOs	31 May 2017
Interviewee 11	Secretariat staff	-	31 May 2017
Interviewee 12	TWG member	Accounting association	1 June 2017
Interviewee 13	TWG member	Consultancies	2 June 2017

Thirdly, following the interviews, I was informed that there was an opportunity to undertake a participant observation role at the Secretariat which could be designed specifically to inform the case study. The data collection process represents a combination of the formal research design and the opportunity arising from the interaction with the participants at the research site (Hammersley & Atkinson, 1995). In this regard, I felt that a participant observation role that is by-design would enable the undertaking of a more focused observation of the organisation, in contrast to the prior engagement in which no specific observation was made and no formal field note was taken (Spradley, 1980). I undertook the participant observation role, taking up the capacity as 'Associate Researcher' from July – August 2017. I actively participated

in assisting a research project of the organisation, while a considerable latitude was also given for me to undertake an unobtrusive observation. I spent a total of 128 hours (two days per week for two months) observing the organisation and recorded 52 pages of field note, which included some 'condensed accounts' of the event occurring at the research site that was jotted down *in-situ* and some 'expanded accounts' comprising my reflection of the event after departing the research site on each day of the observation period (Spradley, 1980). As such, some of the quotes taken from the field note represent my best intention to reproduce the actual conversation based on the 'condensed accounts' that would inevitably contain traces of my own voice (Spradley, 1980; Hammersley & Atkinson, 1995). Additionally, I was also granted full access to the internal database of the case organisation (under strict confidentiality agreement), attended 4 internal team meetings and 2 organisation-wide meetings.

To maintain the confidentiality of the data collected through the participant observation role, I agreed to sign a formal confidentiality agreement prior to commencing the role which prohibit the public disclosure of commercially-sensitive information collected throughout the research. Further, I obtained informed consents to undertake the participant observation role from the senior members of the organisation who had provided me with the initial research access (Hammersley & Atkinson, 1995). I had also made all of the remaining Secretariat staffs aware of my role and the purpose of the research during an internal team meeting. Further, I had also circulated the initial draft of the paper and presented the initial research findings in a meeting which was attended by senior members of the organisation upon the conclusion of the fieldwork. For further safeguard, I had refrained from presenting quotes from the various conversations engaged throughout the participant

observation role and instead describing only the general insights that were drawn from the experience.

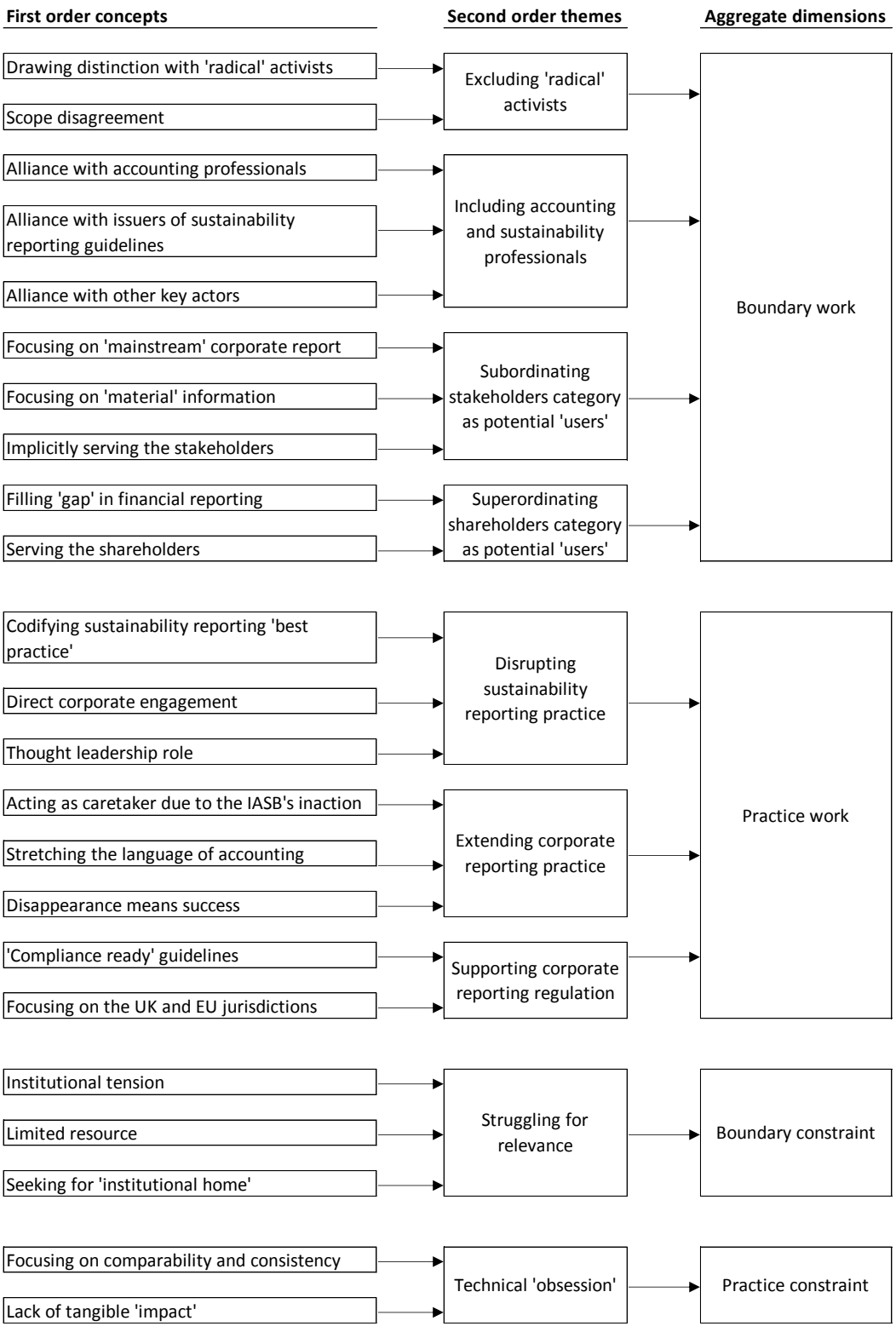
Lastly, I also analysed some publicly available documents in order to support the primary data source. The documents reviewed included 29 reports published by the CDSB, including the two sustainability reporting guidelines (the Climate Change Reporting Framework 1.1 and the CDSB Framework), research reports, and reports about the latest development in sustainability reporting practice. In addition, I also reviewed 17 other reports published by other organisations discussing matters closely related to the CDSB's activities, including the two regulatory guidelines (the 'Environmental Reporting Guidelines' published by the Defra in 2013 and the 'EU Guidelines on Non-financial Reporting published by the European Commission' in 2017), some publications of the International Accounting Standards Board (IASB) on the matters relating to sustainability reporting practice, and the publications of the Task Force on Climate-related Financial Disclosure (TCFD). However, it is noteworthy that the influence of the TCFD has been purposefully excluded from the main analysis of this paper given that the majority of the fieldwork was conducted prior to the release of the final version of the TCFD recommendations.

4.3.4 Data analysis

The data was analysed in the tradition of qualitative data analysis (Strauss & Corbin, 1998; Langley, 1999; Gioia et al, 2013) in three stages. The first stage included the construction of a coherent narrative of the organisation by consolidating the pieces of information obtained from the various data sources. I started by developing a narrative of the CDSB based on my ethnographic account of the organisation

summarising its vision and mission, governance mechanism, strategies, and accomplishment. Then, I analysed the interview transcripts separately from the field note to identify the key concepts arising from the transcripts. Subsequently, I aggregated the two data sources together by combining the similar concepts, removing a few idiosyncratic concepts, and introducing some new concepts to capture the amalgamation of the two data sources. The outcome of this process was 23 first order concepts summarising the key activities, motivations, and challenges of the case organisation. The second stage of analysis included examining the first order concepts 'axially' (Strauss & Corbin, 1998) in identifying the common patterns that could explain the dynamic of the case. In doing so, I went 'back-and-forth' between the data and the theory to recursively reorder the coding with insights from prior literature. During this process, I systematically identified the relevant literature, conducted close-readings of some of the relevant papers, and set out any relevant insight to inform the axial coding process. The outcome of this process was 9 second order themes summarising the key mechanisms that put some order into the data to provide some responses to the research questions. Finally, the third stage of analysis included the process of identifying the key insight from the analysis. In doing so, I identified that the study could potentially contribute to the concepts of boundary work and practice work by identifying the boundary constraint and practice constraint faced by the organisation. The outcome of this stage of data analysis was 4 aggregate dimensions summarising the theoretical insights of the analysis. The data structure generated as result of this process is shown in Figure 4.2, which is used to guide the structure of the 'Findings' section.

Figure 4.2. Data structure



4.4 Findings

In this section, this paper discusses the boundary work of the CDSB in reconfiguring the sustainability reporting field. Then, it discusses the practice work undertaken by the organisation in diffusing a new standard of practice for sustainability reporting. Finally, it discusses the boundary constraint and the practice constraint resulting from the interplay of the boundary work and the practice work of the CDSB.

4.4.1 Boundary work: Making sustainability reporting comparable by changing the way of seeing sustainability-related information

This paper identifies that one of the central elements of the harmonisation work of the CDSB was to change the way of seeing the sustainability-related information. This paper suggests that such activities resembled a boundary work in the sense that the CDSB sought to accomplish the objective by reconfiguring the inclusion-exclusion criteria as well as the subordinate-superordinate hierarchy of the sustainability reporting field (see also Humphrey et al, 2017). As shown in Figure 4.2, it is identified that some of the works that were aimed at reconfiguring the inclusion-exclusion criteria included delimiting the scope of the organisation's mission to draw a distinction between the organisation and the other 'radical' environmental activists ('excluding 'radical' activists'). At the same time, building alliances with the accounting professionals who were predominantly based in the elite accounting firms and the other main actors in the sustainability reporting field ('including accounting and sustainability professionals'). Further, it is identified that some of the works that were aimed at reconfiguring the subordinate-superordinate hierarchy of the field included encouraging companies to shift away from the standalone model of sustainability reporting, while also emphasising the importance of the principle of materiality ('subordinating stakeholders category as potential 'users''). At the same

time, positioning the sustainability-related information as a potential component of the financial reporting practice in shifting the purpose of sustainability reporting from addressing the wide-ranging concerns of the stakeholders toward a clearly-defined information need of the 'enlightened' shareholders ('superordinating shareholders category as potential 'users"). This paper will now turn to discuss each mechanism in more detail.

This paper identifies that the first mechanism that allowed the CDSB to change the way of seeing the sustainability-related information included disassociating the organisation's mission from that of the conventional environmental activists. In this regard, the work of the CDSB was positioned as informed by expert knowledge which would enable companies to address the social and environmental challenges in a pragmatic way. Based on the participant observation experience, there was a conspicuous narrative among the staffs at the Secretariat of the unique positioning of the work of the CDSB in offering pragmatic solutions to companies. This could be contrasted with the work of the more conventional environmental activists, such as WWF or Greenpeace, which tend to focus on delivering a powerful, yet often ambiguous message to companies. Such positioning was inscribed in the terms of reference of the Board members of the CDSB.

> "Members are asked to contribute to the development of the CDSB Framework through the provision of expert knowledge and sharing practical experience of climate change and natural capital-related reporting." (Terms of reference – CDSB Board Members, 2016)

The quote above shows that the expectation was that the Board members would possess some degrees of expert knowledge and practical experience in sustainability reporting practice, particularly relating to climate change and natural capital. Although there was no condition prohibiting the involvement of the more conventional group of environmental activists, the delimitation of the organisational mission toward expert knowledge subtly subdued the 'radical' voice. In this regard, the work of the CDSB was positioned to be different, yet complementary to the work of the environmental activists. However, the positioning of the work, at the same time, also exposed the organisation to the continuous challenge of justifying its mission given the inherent difficulty of identifying and measuring the impact of sustainability reporting.

Although the Board had been set up to only include the experts on sustainability reporting, the Technical Working Group (TWG) which provided wide-ranging advices to the organisation comprised diverse organisations representing diverse voices. The delimiting of the organisational mission was an ongoing matter in which the 'experts' would need to continuously negotiate with the 'radicals'. A quote from a TWG member sums up the point.

> "When you look at the Technical Working Group, there are vocal … How should I say it? You've got accounting bodies that say we need to keep this 'close'. You've got advocates who want to say everything should be 'open'." (Interviewee 6)

The quote above demonstrates that the boundary work of creating a distinction between the work of the CDSB with the conventional environmental activists was an ongoing accomplishment that involved negotiating a compromise with the 'radical voice' from inside the organisation.

Then, this paper identifies that the second mechanism that allowed the CDSB to change the way of seeing the sustainability-related information included building alliances with the accounting professionals, the other voluntary regulatory bodies, as well as other potential supporters. An alliance with the accounting professionals was foundational to the harmonisation work of making sustainability reporting comparable given that the accounting professionals had the claim of expertise to financial reporting practice. As such, the alliance was essential in enabling the CDSB to make use of the financial reporting assumptions, principles, and terminologies in a manner that was faithful and consistent with the way that they were used by the accounting profession. The main strategy for building alliances with the accounting professionals included inviting the 'sympathetic' accounting professionals into the TWG.

> "We have a Technical Working Group and those who are most interested in this specific section are, of course, the Big 4 (…) They helped us work on the first Climate Change Reporting Framework, which acknowledges the interrelationship between some of these climate change aspects and International Financial Reporting Standards." (Interviewee 2)

At the time of writing, the TWG comprised 39 individuals from the following backgrounds: 44% accounting, 31% sustainability, 15% preparers, and 10% others. The accounting experts included representatives from major accounting firms (mostly the Big 4), accounting associations, and academia. On the other hand, the sustainability experts included representatives from other voluntary regulatory bodies as well as other 'like-minded' environmental NGOs. I learned that the membership of the TWG required fewer formal procedures to that of the Board, and the members were involved, more or less, on a *pro-bono* basis. As such, the TWG provided a mechanism for creating alliances with the sympathetic individuals who happened to be part of the accounting profession. The following quote by a TWG member demonstrates the point.

> "One of the things that one needed to do at [our accounting firm] was what's called an 'out of box experience' (…) there was an opportunity to go and it was a secondment to the A4S (…) That's how I got into the whole accounting for sustainability. That is where I met Anthony Hopwood (….) I first came across Lois [Lois Guthrie, the Founding Director of CDSB] and CDSB there (…) That's how I got involved in CDSB." (Interviewee 6)

The quote above demonstrates that the individual's involvement in the CDSB was primarily motivated by a personal interest on the subject matter following the individual's encounter with the idea of accounting for sustainability during a stint at the A4S (Hopwood, 2009; Hopwood et al, 2010). Although each of the TWG member that I interviewed gave different accounts of their initial involvement, it is clear that

they were all motivated by a personal interest on sustainability reporting, rather than by a commercial interest.

The alliances with the other voluntary regulatory bodies were equally essential given the vested interest for their continuing influence in the sustainability reporting field. As such, it was essential for the CDSB to reassure that any harmonisation work would build on the established sustainability reporting guidelines. While the founding members of the CDSB had already included some of the most influential voluntary regulatory bodies (see Table 4.1), new members could still be inducted to the Board if their work was deemed relevant, for example, the SASB joined as a Board member in 2017. Additionally, the alliance building also happened through less formal means, for example the IIRC was represented in the TWG, while the CDSB was also represented in the advisory body of the GRI. The alliances with these actors enabled the CDSB to begin harmonising their reporting approaches, particularly on the issue of climate change and natural capital, as well as enabling a collective policy work. The point is reflected on the following quotes.

> "Our partnership with GRI, we fell into a number of their consultations and provided some advices on the development of some of the standards. Very early on we were involved, to some extent, in the development of G4, and particularly in some of the reporting boundary associated with G4." (Interviewee 2)

> "If you look at the IIRC, SASB, CDP, CDSB, they're sort of a single sort of investor-oriented reporting bodies. Bringing that together, going to meetings

> together with the organisations or the governments we're trying to influence is always very helpful." (Interviewee 3)

The quotes above show that the alliance building mechanism was aimed at creating a bond between the emerging "investor-oriented reporting bodies" as well as trying to build and advance the work of the established bodies, such as the GRI. Lastly, the alliances with the other potential supporters also served to further the harmonisation work of the organisation. I observed that one approach for creating an alliance with a potential supporter included initiating a joint project, for example by co-authoring reports with other 'like-minded' environmental NGOs such as the Carbon Tracker (Carbon Tracker & CDSB, 2016) and the Promethium Carbon (Promethium Carbon & CDSB, 2013); it is notable that my own engagement with the CDSB began in this way as well.

Next, the paper identifies that the third mechanism that allowed the CDSB to change the way of seeing the sustainability-related information included the work aimed at re-theorising the approaches undertaken for preparing the sustainability reports. They did so by encouraging a shift away from the standalone sustainability reporting model (see also Humphrey et al, 2017). The emphasis to encourage companies to present the sustainability-related information in the mainstream corporate report was a central idea in making sustainability reporting comparable. The importance of shifting away from the standalone sustainability reporting model was underlined in the opening paragraph in one of the reporting guidelines produced by the CDSB.

> "We are committed to advancing and aligning the global *mainstream* corporate reporting model to equate the relevance of information about business' use of and effect on natural capital with the relevance of information about financial capital for understanding corporate performance." (CDSB Framework, 2015, p. 1, emphasis added)

The quote above reflects the vision of the organisation of "equating" the sustainability-related information with financial information that would result in the integration of the sustainability-related information into the "mainstream" corporate report. To this end, the financial reporting principles of materiality has been considered as a pivotal concept for filtering the 'fluffy narrative' in sustainability reports and crystallising the decision-useful aspects which could then be used to inform investment-decision making. This point is reflected in the quote below.

> "I guess more important here is ensuring that that principle of 'materiality' is firmly defined appropriately (…) I think that's why the CDSB Framework really includes 'materiality' and one of the key aspects of discussions all along was trying to focus on organisation on issues that matter and to reduce clutter and boilerplate information." (Interviewee 12)

The quote above shows that the harmonisation work of making sustainability reporting comparable included a more stringent application of the financial reporting principles that was envisioned to increase the rigour of sustainability reporting in a way that any clutter or boilerplate information could be filtered out.

The aim of integrating the sustainability-related information into the mainstream corporate report by focusing on the material issues, however, implicitly meant demoting the importance of the stakeholder category as the potential users of the sustainability report, in a stark contrast to the convention established by the GRI (Etzion & Ferraro, 2010). In this sense, the information needs of the stakeholders become subordinated to the information needs of the users of the annual report, i.e. the shareholders (Young, 2006). The subordination of the stakeholder category was clearly evident in the following statement taken from one of the CDSB reporting guidelines.

> "The CDSB Framework is designed to help organisations report environmental information in mainstream reports and therefore the intended audience is investors as they are the primary users of mainstream reports. While the CDSB Framework concentrates on investors as the primary users (…), it recognises that the information may satisfy the needs of other stakeholders too." (CDSB Framework, 2015, p. 6)

The quote above reflects that the project of making sustainability reporting comparable implies the subordination of the stakeholder category as the potential users of the sustainability reports in which the demand for the 'immaterial' information to satisfy the wide-ranging concerns of the stakeholders became less relevant to the mission of the CDSB.

Next, this paper observes that the fourth mechanism that allowed the CDSB to change the way of seeing the sustainability-related information included the work aimed at

positioning the sustainability-related information as “filling a gap” (Interviewee 11) in financial reporting. In this sense, capturing the decision-useful elements of the sustainability-related information was conceptualised as the ‘missing piece’ of financial reporting practice. The argument made by a Secretariat staff during the interview illustrates the point.

> “If you study literature on the financial crisis (…) the ‘on balance sheet’ financial statements were sufficient, whereas the mischief and the contagion was taking place ‘off balance sheet’ (…) At the moment, climate change information is ‘off balance sheet’ (…) We're just saying you have to look at the whole system and how that contributes to capital market success, corporate performance and societal longevity and environmental health.” (Interviewee 4)

The quote above shows how social and environmental issues become considered as a function of the “capital market success”. Hence, the harmonisation work of making sustainability reporting comparable also implies the re-directing of the purpose of sustainability reporting toward the goal of market efficiency. In this regard, the “theory of change” (Interviewee 3) adopted by the CDSB for prioritising the shareholders over the stakeholders was that if the shareholders could coerce companies to report their social and environmental performance, then the poorly performing companies would be forced to change their business practice. The point is demonstrated by the following quote.

> “I don't think accounting is suitable at all, to be quite honest. I think, it's not the right tool except as a framework to engage companies on their

> environmental impact, their non-financial impact. I think the approach is sensible insofar as, in the absence of any other way into companies. In terms of what the shareholders are interested in, are either returns on investments or risks associated with that (…) as a result, the premise of looking at risk was the only real option available to us." (Interviewee 1)

The quote above shows that the superordination of the shareholders category was not meant to benefit the shareholders per se. Rather, it was envisioned as a mechanism for stimulating changes to the underlying business practice. As such, the agenda behind the harmonisation work was largely consistent with the well-established agenda of sustainability reporting. Yet, it is not evident whether such harmonisation work would enhance the impact of the sustainability reporting practice. This paper will turn to this issue next by discussing the practice work of the CDSB.

4.4.2 Practice work: Influencing corporate reporting practices by making sustainability reporting comparable

This paper identifies that the other central element of the harmonisation work of the CDSB was to influence the way that the sustainability-related information was presented by corporations. This paper suggests that such activities represent a practice work in the sense that they were aimed at de-legitimising the established convention for preparing the sustainability-related information. As shown in Figure 4.2, it is identified that some of the works undertaken to stimulate changes to the corporate reporting practices included a direct corporate engagement, for example, by facilitating companies to prepare a decision-useful sustainability-related information ('disrupting sustainability reporting practice'). Additionally, the organisation also

sought to indirectly shape the corporate reporting practices, for example, by seeking to influence the way that the financial reporting standard-setters and the corporate reporting regulators perceived their remits with regards to the sustainability-related information ('extending corporate reporting practice').

This paper observes that the first mechanism that allowed the CDSB to influence the way that the sustainability-related information was presented by companies was through the codification of the best practices in the form of the reporting guidelines. As mentioned previously, the CDSB had published two main sustainability reporting guidelines called the CCRF and the CDSB Framework that were both positioned as 'meta-frameworks' which would enable the financial reporting assumptions, principles, and terminologies to be applied in the context of sustainability reporting. The following statement explaining the reason for updating the CCRF reflected the positioning of the guidelines.

> "At the time of publishing edition 1.1 of the CCRF, the IASB has completed the first phase of its conceptual framework project [Conceptual Framework 2010] (…) Based on the experience of its Board members, CDSB has adapted the IASB's qualitative characteristics of useful financial information for application to climate change related disclosure." (Climate Change Reporting Framework 1.1, 2012, p. 14)

The quote above reflects the positioning of the reporting guidelines as mechanisms for a more stringent application of the financial reporting principles in preparing the sustainability-related information. One way for diffusing this new approach was

through a direct corporate engagement. However, based on the overall fieldwork, I observed that there was no major effort to promote the adoption of the CCRF or the CDSB Framework per se. Rather, the focus was to change the way that companies were presenting the sustainability-related information. As such, most of the corporate engagement was about looking at the company's disclosure "under the microscope" (Interviewee 4) in identifying ways to reposition the way that the sustainability-related information was presented by companies.

Based on the participant observation experience, it was noted that the corporate engagement initiative of the CDSB was not exactly driven by the motivation of ensuring the adoption of any particular reporting guideline, rather it was envisioned as a way for building alliances with the sympathetic companies, thereby fostering a relationship that would benefit each other in the long-term. For example, during one internal team meeting, the Secretariat staffs discussed a request from a large UK-based company to advice the preparation of its sustainability report. Instead of focusing on trying to get the company to adopt its reporting guidelines, the staffs were more concerned with applying the insights from the reporting guidelines to help the company to present a more integrated information in its sustainability report. Also, the senior staffs insisted that the advice to be provided *pro-bono*. The rationale was that the CDSB would benefit more from a long-term association with the company which would allow them to demonstrate the continuing relevance of its work.

Other than the direct corporate engagement, the CDSB also engaged with companies indirectly through its thought leadership activities. These activities ranged from publishing research & update reports, speaking at conferences, conducting Webinars,

as well as creating an online platform for compiling the different sustainability reporting regulations, guidelines, and resources. In line with the corporate engagement approach, the thought leadership activities were also intended to provide wide-ranging supports to companies. The point is highlighted by the following quote.

> "We're conscious that we need to renew, as I said, the capacity building, the learning, the engagement, the support that we give to companies, so that we can be more supportive and have an engagement strategy that complements the innovative and challenging questions." (Interviewee 2)

The quote above reiterates the focus on supporting companies in adopting the "innovative" approach for presenting the sustainability-related information. As such, the harmonisation work of the CDSB also included the efforts of building relationships with companies in facilitating the adoption of the new reporting approach.

Then, this paper identifies that the second mechanism that allowed the CDSB to influence the way that the sustainability-related information was presented by companies included engaging with the financial reporting standard-setters, particularly the IASB, in attempting to influence them to consider widening the scope of their work toward the sustainability reporting practice. Indeed, I learned that the CDSB had attempted to engage the IASB as early as 2008, just a few months following its own establishment. However, there remained to be little response from the IASB to this day primarily because of the IASB's concern for being perceived to overreach its remit. The IASB's discussion about its role on the 'wider corporate reporting' was

instructive in understanding its position, which was encapsulated in the following remark.

> "I think the issue that for me is slightly more difficult is what I describe as the 'borders problem', and that is what we're essentially doing is we're expanding our borders and in doing that we're expanding into the space that others have seen as their space (…) we have to be really careful of straying into that space." (Darrell Scott, IASB Board Member – IFRS Foundation, 2017)

The quote above encapsulates the reason for the ongoing challenge faced by the CDSB in influencing the work of the IASB as their investor-oriented version of sustainability reporting remained to be excluded from the legitimate boundary of financial reporting as recognised by the IASB. Given the "lukewarm response" (Interviewee 7) of the IASB, the CDSB had sought to position its work as something which was *in lieu* of the IASB. The following quote represents the way that the CDSB sought to maintain the relevance of their work despite the lack of an explicit endorsement from the IASB.

> "When it was set up we were deliberately, you know, CDSB – IASB. We had quite a dull, boring kind of look, logo, feel. We were set up to look like them, we were set up to sound like them, we were set up to kind of be like them, but just for non-financial information. And, that was sort of at the time when IFRIC 3 which was on greenhouse gas accounting was sort of taken out. It was too far ahead of its time (…) So, that's why we look a bit like them. It's always been on people's minds that this was a gap, and that we're filling a gap." (Interviewee 11)

The quote above shows how the CDSB sought to position its work as a temporary 'caretaker' who was capable of extending the financial reporting expertise into the sustainability reporting domain while waiting for the IASB to enter the fray. Indeed, I identified that the best practice guidelines published by the CDSB made extensive references to the work of the IASB as evidenced by 67 references to the term 'IASB', 'IFRS', and 'Management Commentary' in CCRF 1.1 and 34 references to the term 'IASB', 'IFRS', and 'Management Commentary' in the CDSB Framework. In relation, a common narrative around the organisation was the temporary role of the CDSB in which the organisation was expected to disappear once its works were overtaken by an authoritative body with the power to enforce the corporate disclosure of the sustainability-related information. The following quote was echoed by almost everyone in the organisation.

> "This is the end-game: if disclosure on natural capital and more broadly on sustainability moves to a place where it has significant maturity (…) and has an international consensus on what should be reported, how it should be reported, the characteristics of that information (…) that could be perhaps achieved through financial reporting standards in the IASB's work. If we could get to that point, I think we as CDSB would be very happy not to exist anymore." (Interviewee 2)

The quote above captures the CDSB's aspiration for making sustainability reporting comparable with financial reporting so much so that it would be perceived as the legitimate remit of the financial reporting standard-setters.

Next, this paper observes that the third mechanism that allowed the CDSB to influence the way that the sustainability-related information was presented by companies included engaging with the corporate reporting regulators, particularly the UK and the EU regulators. It is identified that the strategy adopted by the CDSB in influencing the corporate reporting regulators included positioning its best practice guidelines as "compliance ready" documents that could be directly referenced by the regulators. The point is highlighted in the quote below.

> "Because we are a small NGO, I think all we can do is develop a voluntary framework. However, what we aim to do is to develop something that is what we call 'compliance-ready'. So, we don't expect ever to be a standard, but, what we would like to be is to be referenced as the mechanism that should be used for compliance." (Interviewee 4)

The quote above sums up the strategy undertaken for co-opting the corporate reporting regulators to diffuse the new standards of practice envisioned by the organisation. The effort to influence the corporate reporting regulators to reference the reporting guidelines included meeting and advising the corporate reporting regulators who generally had minimal knowledge of sustainability reporting. As such, the regulatory engagement would also often include creating "enabling conditions" for the regulators, such as by supplying research reports, connecting them with the relevant actors, and building supports from the business communities. The following quote reflects the regulatory engagement approach undertaken by the CDSB.

> "We went and met with all the regulators to get their support (…) we could create the enabling conditions to allow regulators to regulate. So, even just working with companies builds up that body of 'best practice' that allows regulator to progress. Because if business is just going to bomb it down, then they don't have a chance but if we can say, 'We've got 40 companies in your jurisdiction that use our framework' (…), then the regulator goes 'Oh, that's not so hard.' Then, we can shift." (Interviewee 11)

The quote above highlights the regulatory engagement approach that had contributed to the recent establishment of the sustainability reporting regulations in the UK and the EU (see Table 4.3). In this way, the new standard of practice as envisioned by the CDSB could be enshrined into a regulatory mechanism, which could then be used to coerce the corporate disclosures in diffusing the new standard of practice more widely. However, it is notable that the diffusion of the standard of practice that has been discussed here is all about reporting changes, rather than the changes to the underlying business practice. In this regard, this paper observes that a major challenge for the harmonisation work of the CDSB was the constraint that it imposed on the organisation from participating in activities which could directly influence the underlying corporate practices. This paper will turn to this issue next.

4.4.3 Boundary constraint and practice constraint: Institutional work or institutional trap?

This paper identifies that a major challenge to the harmonisation work of the CDSB included the institutional trap created by the interplay of the boundary work and the practice work of the organisation. This paper suggests that while the boundary work

undertaken to make sustainability reporting comparable with financial reporting had enabled the practice work of diffusing the new reporting approach more widely, it had also inhibited the CDSB from engaging in activities which could stimulate a direct change to the underlying business practice. As shown in Figure 4.2, this paper suggests that the struggle for establishing the organisation as a legitimate actor in both the sustainability reporting and corporate reporting fields ('struggling for relevance') led to the 'obsession' on technical reporting matters which could risk preventing the CDSB from pursuing its original intention of stimulating changes to the underlying corporate practices ('technical 'obsession'').

This paper identifies that the first constraint faced by the CDSB relates to the self-imposed restriction resulting from the boundary work of the organisation that was positioned as a 'fix' to the financial reporting practices, rather than as a solution for addressing pressing social and environmental issue in itself. In this regard, the focus of the organisation became mainly directed at resolving the "institutional tension" (Interviewee 4) between different the voluntary regulatory bodies. The point was highlighted by the following quote.

> Interviewer: So, what is that sort of the main challenge, for harmonisation?
>
> Interviewee 11: Oh yes, egos; egos of CEOs. And, I consider myself not to have an ego because I'd give up this gig tomorrow if we can merge with someone. I quite like that in our organisation, we're not self-perpetuating because I don't think it's helpful for the mission either, and I often say on stage, 'I'm really sorry that we're doing such a bad job of trying to communicate this to you because I'm one of these guys.'

The quote above again reflects the characterisation of the CDSB as a selfless, mission-oriented organisation which was less interested in "building an empire" (Interviewee 1). However, the emphasis on alleviating the institutional tension through the harmonisation work inevitably diverted the organisation's attention from facilitating the companies to use the sustainability-related information to influence their strategic decision making process.

While the intention of the CDSB to "disappear" once it manages to achieve its mission indicates the mission-oriented nature of the organisation, it seems that the singular focus on making sustainability reporting comparable had also limited the scope of its work. Although the unique positioning of the work of the CDSB in comparison to the other voluntary regulatory bodies had been its source of strength, it also simultaneously constrained its appeal from a wider audience. The following quote highlights the point.

> "It's just because, you know, funders rightly are looking for transformational ideas and we are a technical organisation and the messages about us don't sound terribly exciting. I can't tell you how many times … I hate this phrase, but I'll just repeat what's been said to me: it's just not sexy. And, it's not meant to be and we don't want it to be (…) I don't want to dress it up as something else." (Interviewee 4)

The quote above reflects the ongoing challenge faced by the CDSB in securing the continuity of the organisation, at least, until its work could be acknowledged by a

relevant institutional authority. As such, the self-restriction imposed by its own boundary work led to the ongoing struggle of the organisation in establishing itself as a legitimate actor in both the sustainability reporting and corporate reporting fields.

Then, this paper observes that the second constraint faced by the CDSB relates to the diversion of the organisation's focus towards technical reporting matters, creating an 'obsession' toward making sustainability reporting comparable almost regardless of its efficacy in facilitating changes to the underlying business practice. While the aspiration of making sustainability-related information comparable and consistent was echoed throughout the organisation, there was very little discussion on the specific ways for enabling the users to mobilise the information in generating changes to the underlying business practice. The point is reflected in the quote below.

> "What success looks like? Being recognised as a solution to the challenge that says, 'How can I explain my environmental performance in a clear, concise, consistent, comparable way that is investment-grade information?' That's about saying, 'Is it appropriately taking into account all the risks that are out there?'" (Interviewee 6).

The quote above implies that the importance of the comparability and consistency of the sustainability-related information was rooted on the taken-for-granted assumption of market discipline, which remained to be unquestioned. In this regard, the lack of focus in delineating the specific mechanism for changing the function of the market put the CDSB in a difficult position of not being able to identify the tangible impact of its activities. Based on the participant observation experience, despite the

strong sense of purpose and belief in the organisational mission, it appeared that the staffs at the Secretariat were all too aware of the ambiguity of their work and whether it will ultimately realise their individual aspiration of working toward the betterment of the society. In this regard, this paper suggests that while the focus on harmonisation work had enabled the CDSB to initiate some degrees of changes to the corporate reporting practice, it may also inadvertently lead them into an institutional trap through which there could be a risk of means-ends decoupling (Bromley & Powell, 2012; Wijen, 2014) whereby changing the corporate reporting practice becomes seen as the ultimate objective of the organisation, rather than the original intention of facilitating organisational change by way of sustainability reporting.

4.5 Discussion

In this section, this paper summarises how the findings of the study respond to the research question and discuss the implications of the findings. Then, it specifies the contribution of the findings in providing new insight to the literature on sustainability reporting as well as on institutional work.

4.5.1 Implications

In responding to the research question, it is identified that the harmonisation work of making sustainability reporting comparable with financial reporting entailed the boundary work of reconfiguring the purpose and priority of the sustainability reporting field and the practice work of influencing the way that the sustainability-related information was being perceived by the companies, the financial reporting standard-setters, and the corporate reporting regulators. Summarising the previous section, this paper suggests that the boundary work conducted by the CDSB comprised

reconfiguring the inclusion-exclusion criteria of the sustainability reporting field by distinguishing its work from that of the 'radical' environmental activist, while also articulating the commonality of purpose that it shared with the accounting professionals and the other more established voluntary regulatory bodies. At the same time, the organisation also engaged in the boundary work of reconfiguring the subordinate-superordinate hierarchy of the field by superordinating the shareholders category as the primary users and subordinating the stakeholders category as the secondary users of the sustainability reports. This paper suggests that such boundary work supported the CDSB in conducting the practice work of diffusing the new reporting approach directly to the corporations (who were generally receptive to the idea of presenting a decision-useful sustainability-related information). Additionally, it also enabled the organisation to diffuse the new reporting approach indirectly by engaging with the financial reporting standard-setters and the corporate reporting regulators. However, this paper also observes that the interplay of the boundary and practice works simultaneously created boundary and practice constraints by generating an 'obsession' to endlessly work to make sustainability reporting comparable with financial reporting, almost regardless of its efficacy in facilitating changes to the underlying business practice. In this regard, this paper argues that while the harmonisation work may facilitate more widespread corporate disclosures of sustainability-related information, it may not necessarily of much help in supporting both the preparers and users of the sustainability reports to make more informed strategic and investment decisions respectively. In other words, this paper argues that it takes more than the harmonisation work to make the sustainability-related information useful to the preparers and the users.

The findings have implications on our understanding of the harmonisation work beyond the case organisation as the study demonstrates its limitation in facilitating the voluntary regulatory body to stimulate further changes to the underlying business practice. As mentioned, the effort of making sustainability reporting comparable was also supported by other key actors in the sustainability reporting field, including the A4S (Hopwood, 2009; Hopwood et al, 2010), the IIRC (Rowbottom & Locke, 2016; Humphrey et al, 2017), and the SASB (Herz & Rogers, 2016). The case study shows that the harmonisation work of making sustainability reporting comparable inadvertently diverted the focus of the CDSB largely toward the technical reporting matters with the risk of the criteria of comparability and consistency becoming perceived as the ends in itself, rather than as the means to stimulate further changes to the underlying business practice (Bromley & Powell, 2012; Wijen, 2014). In this regard, this paper suggests that there is a need for voluntary regulatory bodies to rebalance their harmonisation work with the, arguably, more challenging tasks of facilitating the preparers and the users to mobilise those sustainability-related information.

The findings also show that the potential offered by non-voluntary measures (i.e. regulations and enforceable standards) for diffusing sustainability reporting practice may come at the expense of the emancipatory potential of the sustainability reporting practice, in the sense that the more that sustainability reporting is comparable with financial reporting, the more likely that it will be accepted by the well-established actors in the corporate reporting field given the minimal challenges that it could pose to the current practice (Cooper & Owen, 2007; Archel et al, 2011; Malsch, 2013). By this logic, I would argue that a 'less-than-perfect' harmonisation work may prove to be a way for empowering actors in the sustainability reporting field to problematise

the fallibilities of the central assumptions that have become taken-for-granted in the financial reporting practice, without necessarily getting 'trapped' in the quagmire of the technical reporting matters. In this regard, there could be a role for the voluntary regulatory bodies to draw the insights from the application of the financial reporting principles into the sustainability reporting field and bringing them to the attention of the financial reporting standard-setters and the corporate reporting regulators. After all, as suggested by Gray (2002), one of the foundational functions of sustainability reporting is to remove the 'shackles' imposed by the taken-for-granted financial reporting principles.

4.5.2 Contribution

I would suggest that the findings of this study contribute to the literature around the standardization of sustainability reporting (Power, 1997; Kolk et al, 2008; Levy et al, 2010; Etzion & Ferraro, 2010; Andrew & Cortese, 2013; Rowbottom & Locke, 2016; Humphrey et al, 2017) and the regulation of sustainability reporting (Larrinaga et al, 2002; Cooper & Owen, 2007; Archel et al, 2009; Archel et al, 2011; Bebbington et al, 2012; Malsch, 2013). First, I would suggest that the findings of this paper provide further insight to this line of literature by considering the institutional trap that actors in the sustainability reporting field would inevitably have to face just by adopting the analogy, metaphor, and language of financial reporting (Archel et al, 2011). While Etzion & Ferraro (2010) and Haack et al (2012) demonstrate the potential of sustainability reporting in creating a moral entrapment in prompting companies to address their social and environmental responsibilities, this paper shows that the overemphasis on the sustainability reporting practice in itself could create an institutional trap that could inhibit actors in sustainability reporting field from obtaining a better understanding of the usefulness of the sustainability reports from

the perspectives of the corporations, the shareholders, and the stakeholders. Contrary to the idea of moral entrapment, the findings suggest that there is a risk that actors in the sustainability reporting field could become fixated at creating the perfect financial representation of the social and environmental issues, while overlooking the ultimate objective of making sustainability reporting useful to both the preparers and the potential users. Second, I would suggest that while the findings of this paper confirm the argument of the deradicalizing potential of sustainability reporting (Cooper & Owen, 2007; Spence, 2009; Archel et al, 2011; Malsch, 2013), this paper provides more nuances to the argument by considering the deradicalization as a matter of organisational constraint, rather than as an inevitable outcome. In this regard, this paper suggests that sustainability reporting could still yet play an important role in enabling the transition toward less unsustainable business practice, provided that more initiatives are established the rebalance the harmonisation work, for example, by seeking more involvement from the preparers and users of the sustainability reports (Power, 1992; Gray, 2002; Hopwood, 2009; Unerman & Chapman, 2014). Third, the findings of this paper moderate the account of Andrew & Cortese (2013) of the CDSB by suggesting it as a case of inadvertently extending, rather than actively promoting the dominance of neoliberalism as evidenced by the mission-oriented account of the organisation that pervaded the data collected throughout the study.

In addition, I would suggest that the findings of this paper also contribute to the institutional work literature, particularly, in relation to the concepts of boundary work (Power, 1997; Young, 2014; Humphrey et al, 2017) and practice work (Lawrence et al, 2009; Zietsma & Lawrence, 2010). First, I would suggest that the institutional work lens (Lawrence & Suddaby, 2006; Lawrence et al, 2009; Zietsma & Lawrence, 2010) provides another dimension for considering the boundary work of standard-setting

practice by considering the interplay between the abstract activities aimed at changing the way that we see things and the practical activities aimed at promoting reporting change and organisational change. This paper builds on prior literature which has considered the interplay between boundary work and the identity construct of standard-setting bodies (Young, 1994; 2014; MacDonald & Richardson, 2004; Canning & O'Dwyer, 2016) by considering the actual works conducted by these bodies in instigating changes to the corporate reporting practice. Second, I would suggest that the findings of this paper also provide a new insight to the concepts of boundary work and practice work introduced by Zietsma & Lawrence (2010) by considering the constraints that they simultaneously generate to the institutional entrepreneurs. In this regard, this paper brings into attention the distinction between the adoption of new standards of practice and the efficacy of the adoption of that standards of practice in achieving the intended societal objective. In this regard, this paper considers the potential of means-ends decoupling (Bromley & Powell, 2012; Wijen, 2014) that could arise as a result of 'too much' emphasis on the standard in itself, rather than focusing on the use of the standard to address the intended societal objective. Third, I would suggest that the findings of this paper also provide an additional insight to the concept of means-ends decoupling (Bromley & Powell, 2012; Wijen, 2014) as this paper shows that such means-ends decoupling is equally observable at the standard-setting level.

4.6 Conclusion

To conclude, I would delineate the limitations of this study and suggest future research avenue. As a single case study, the examination of harmonisation work was limited to the activities conducted by the case organisation. Although, I would suggest that the case organisation represents an apt site for assessing the harmonisation work due to its singular focus on making sustainability reporting comparable with financial

reporting, there might be other forms of works conducted by other voluntary regulatory bodies that this paper failed to capture. As such, I would suggest that future research could build on this study in two ways: by examining a broader range of actors in the sustainability reporting field that were involved in harmonisation work and by adopting a longer time horizon to provide a longitudinal perspective.

First, the examination of a broader range of actors would be useful because it would lead to a better understanding of the collaboration as well as the competition between actors in the sustainability reporting field in conducting harmonisation work. In this regard, Zietsma & McKnight (2009) offers a model of 'institutional co-creation' whereby a diverse group of actors located in the same field come to intentionally and unintentionally coalesce towards the dominant 'logic' of the field through the mechanisms of 'competitive convergence' and 'collaborative co-creation'. A possible context of such study would be the examination of the Task force on Climate-related Financial Disclosures (TCFD) which was set up to formally bring together the different voluntary regulatory bodies, including the CDSB, the CDP, the GRI, the IIRC, and the SASB. It would be useful to examine whether the establishment of the TCFD could act as an 'experimental boundary' (Zietsma & Lawrence, 2010) to both harmonise and revitalise the emancipatory potential of the sustainability reporting practice.

Second, the examination of a longer time horizon would be useful because it would allow greater appreciation of the dynamic in sustainability reporting field as an unfolding process of institutionalisation. Another possible context for such study would be the examination of the evolution of the dominant actors in sustainability reporting field over time (see also Leblebici et al, 1991). While the GRI (Levy et al,

2010; Etzion & Ferraro, 2010) has arguably been the most dominant actor thus far, the findings together with other research (Andrew & Cortese, 2013; Rowbottom & Locke, 2016; Humphrey et al, 2017) show the emergence of the 'enlightened shareholder' logic in the sustainability reporting field that may imply the reversion to the 'market logic' which permeates financial reporting practice and the disappearance of the 'stakeholder logic' as envisioned by the GRI (Etzion & Ferraro, 2010). As such, it would be equally useful to examine whether the recent harmonisation trend in the sustainability reporting field would mark the evolution, or the termination point of sustainability reporting.

Chapter 5

Regulatory perspective[5]

5.1 Introduction

The problem that we explore in this paper is the extent to which the corporate reporting regulator could play a role in regulating the social and environmental disclosure practices of corporations. We explore the problem in the context of the corporate reporting practice in the UK which is regulated by the Financial Reporting Council (FRC). Specifically, we examine the role that the corporate reporting regulator could play in supporting the legislative process for mandating the corporate disclosures of social and environmental information. The role of the corporate reporting regulator in regulating the social and environmental disclosure practices of corporations is not entirely clear given that the scope of work of the corporate reporting regulator traditionally does not extend toward the objective of holding companies accountable for their social and environmental responsibilities (Cooper & Owen, 2007). Further, historically the corporate reporting regulator has played a limited role in the development of the social and environmental disclosure practices, which have been largely advanced by various NGOs through the voluntary reporting regimes (Bebbington et al, 2012). As such, the involvement of the corporate reporting regulator in this area could lead to the marginalisation of the previously influential NGOs, and the reorientation of the underlying motivation of social and environmental disclosure practices (Archel et al, 2011; Malsch, 2013). On the other hand, the involvement of the corporate reporting regulator could potentially support the work

[5] This chapter is entirely based on a working paper that is co-authored by Dr Yasmine Chahed entitled *"'Regulatory-policy loop': The role of corporate reporting regulator in extending the 'logic of appropriateness' of corporate reporting field"*.

of these NGOs by providing social and environmental disclosure with a status of a legitimate part of the corporate reporting practice. The support of the corporate reporting regulator could be important given that prior research has shown that the appetite of social and environmental disclosure regulation (Cooper & Owen, 2007; Chahed, 2014; Rowbottom & Schroeder, 2014) is heavily subject to the ebb-and-flow of the agenda of the policy makers. As such, it is important to examine the extent to which the corporate reporting regulator could influence the legislative process of mandating the disclosure of social and environmental information, and whether such influence (if any) would serve to 'silence' some of the divergent voices (Young, 1994; 2014) or rather to mediate diverse interests of the different actors in the field (Nicholls, 2010).

We draw on the 'regulatory space' literature (Hancher & Moran, 1989) to conceptualise the role of the corporate reporting regulator in supporting the legislative process for mandating the corporate disclosures of social and environmental information. In line with the prior literature (Hancher & Moran, 1989; Young, 1994; MacDonald & Richardson, 2004; Nicholls, 2010; Canning & O'Dwyer, 2013), we define a regulatory space as a discursive space whereby political issues are debated and negotiated by a range of actors who are affected by the regulation (Hancher & Moran, 1989). Given the diverse interests of the different actors, the role of the regulator is to maintain the 'logic of appropriateness' (March & Olsen, 1989; Young, 1994) of the field, i.e. ensuring that actors are aware of the common interest of the field for having the corporate reporting regulation in promoting and negotiating their individual concerns. We suggest that the concept of regulatory space provides a useful lens to examine our problem because it allows us to consider the extent to which the FRC could play a role in shaping the regulatory debate among a host of interested

actors such as the accounting professionals, business communities, investor communities, NGOs, and others. Furthermore, the theoretical lens also enables us to examine the implicit political influence of the FRC in the sense of allowing us to obtain a better understanding of the FRC's role in shaping the perceptions of the policy makers on the relevance of the social and environmental disclosure practices.

As such, we formulate our research question as follow: *"How does the corporate reporting regulator shape (or not) the legislative process for mandating the corporate disclosure of social and environmental information?"*

In order to sketch out the problem, we focus on the case of the introduction of the climate change disclosure requirement under the 'Strategic Report and Directors' Report Regulation' proposed by the UK Department for Business, Innovation and Skills (BIS) as an amendment to the UK *Companies Act 2006* . In this regard, we seek to analyse the role of the FRC in shaping (or not) the stance of the actors who responded to the public consultations conducted by the BIS on the subject matter during the period of 2010-2013. The case provides an apt setting for our study because the initial policy intent of the proposal was to specifically extend the scope of corporate reporting as a mechanism for ensuring that companies address their "social and environmental duties" (BIS, Aug 2010, p.5). Prior research (Rowbottom & Schroeder, 2014; Carter & Childs, 2017) has demonstrated the contentious nature of the policy proposal as it was strongly supported by environmental NGOs while at same time being ardently opposed by business associations. As such, we assume that the FRC as the corporate reporting regulator would be more likely to exert its influence (if any) given the controversial nature of the policy proposal could potentially destabilise the

balance of interests among the actors in the corporate reporting field. In analysing the case, we conducted a 'modified content analysis' (Berg, 2004; Suddaby & Greenwood, 2005), investigating the key publications relating to both the initial and follow-up public consultations conducted by the BIS (see Table 4.1). As with previous studies on regulatory space (MacDonald & Richardson, 2004; Malsch & Gendron, 2011; Canning & O'Dwyer, 2013), we find that the method of modified content analysis useful because it allows us to make sense of both the 'manifest' information as well as the 'latent' meaning of the contents of the public documents in examining our problem.

As a summary, we suggest that while the FRC did not seem to play an active role in shaping the formulation of the policy proposal, it played a subtle role as the focal actor in the regulatory space in shaping the way that both the incumbent and the new actors perceived and responded to the policy proposal. This, in turn, created a 'regulatory-policy loop' in influencing the consideration of the policy makers. We suggest that the FRC's 'thought leadership' on the role of non-financial reporting through the publication of the "Louder than Words" and "Cutting Clutter" reports provided the actors in the regulatory space with a sense of the 'appropriate' response to the policy proposal and allowed them to latch onto the 'financial reporting terminologies' (such as 'boilerplate'/ 'box ticking', 'clutter', 'transparency', 'tell the story'), in responding to the public consultation. In this regard, our analysis shows that those financial reporting terminologies were the most frequently used type of terminologies in comparison to the 'legal terminologies' ('safe harbour', 'layered/ overlapping regulation') or the 'stakeholder accountability terminologies' ('corporate spin'/ 'greenwash' / 'lip service'). We suggest that this shows that the majority of the actors had come to recognise the potential offered by the involvement of the corporate reporting regulator in regulating the corporate disclosures of the various social and

environmental issues. The response of the majority of the actors in 'rallying' behind the FRC's position, in turn, allowed the policy makers to pass the regulation by realigning the policy proposal toward the FRC's vision of the role of non-financial reporting, which was widely supported by the majority of the actors who were involved in the regulatory debate. Additionally, we demonstrate that the 'turn' in the regulatory debate allowed some of the actors from the NGOs community to assume a more constructive role of advancing the shift toward the 'integrated reporting' model, in comparison to the 'antagonistic' role of advocating for the idea of monitoring the social and environmental duties of corporations. In this sense, we suggest that that the FRC played the role of supporting the legislative process for mandating the corporate disclosure of social and environmental information by crafting a compromise to mediate the diverse interests of the different actors in the field in re-negotiating the legal scope of corporate reporting.

We suggest that our findings provide further insight to the social and environmental accounting literature (Cooper & Owen, 2007; Archel et al, 2011; Bebbington et al, 2012; Malsch, 2013). We do so by examining the role of the corporate reporting regulator in crafting a compromise to facilitate the formulation of a policy proposal which was amenable to the majority of the actors. In this regard, our findings demonstrate the subtle role played by the FRC in advancing the view that the disclosure of social and environmental information should be considered in relation to its 'materiality'. We suggest that although this view signified a diversion from the original intent of the policy proposal, it represented a compromise that regardless ascribed social and environmental disclosure with a status of a legitimate part of corporate reporting; something that could potentially support the work of the NGOs in diffusing the social and environmental disclosure practices more widely.

Additionally, we suggest that our findings offer some insights into the regulatory space literature (Hancher & Moran, 1989; Young, 1994; 1995; 2014; MacDonald & Richardson, 2004; Nicholls, 2010; Canning & O'Dwyer, 2013; Chahed, 2014). We do so by considering the response of the regulator to the competing logics of appropriateness. Young (2014) has argued for the "anti-political" nature of the financial reporting standard-setters insofar as they are primarily concerned with the technical nature of the standard-setting process in maintaining the 'purity' of the 'market logic' underlying the financial reporting practice. On the contrary, we show quite a different picture in the case of the corporate reporting regulator. In this regard, we demonstrate the implicit political role of the FRC in shaping the regulatory-policy loop that extended the logic of appropriateness of the field toward the new actors (e.g. environmental NGOs) who seek to join the regulatory space. As such, we suggest that the work of the corporate reporting regulator, consciously or otherwise, served to extend the market logic underlying the corporate reporting practice toward other societal domain (Greenwood et al, 2011; Thornton et al, 2012), thereby 'hybridising' the corporate reporting practice, rather than maintaining its 'purity' (cf. Young, 2014).

The following sections are presented in the following order. The 'Theoretical framework' section delineates the concept of regulatory space and its relevance to our study. Then, the 'Method' section delineates our research design, provides some background information on our research context, and specifies our method of data collection and data analysis. Next, the 'Findings' section elaborates our analysis to demonstrate the subtle role played by the FRC in enrolling the key actors, shaping the regulatory debate, and reasserting the logic of appropriateness of the field. Then, the 'Discussion' section sums up the implication and contribution of our findings. Lastly,

the 'Conclusion' section delineates the limitations of our study and offers future research avenues.

5.2 Theoretical framework

5.2.1 Regulatory space and the challenge of maintaining the shared interest for having regulation

In this section, we specify the concept of regulatory space and discuss the relevance of the concept in examining our research context. The concept of regulatory space refers to the discursive space where political issues are negotiated by diverse actors (Hancher & Moran, 1989). In this regard, we specify a regulatory space as a discursive arena that is (1) populated by a set of actors, (2) who are concerned with a range of regulatory debate, and (3) delimited by certain logic of appropriateness (Hancher & Moran, 1989; Young, 1994; MacDonald & Richardson, 2004; Nicholls, 2010; Canning & O'Dwyer, 2013). The first element of a regulatory space is the set of actors who represent diverse members of the public in debating certain regulatory issues. Although anyone could technically join the regulatory space, Hancher & Moran (1989) suggests that organised groups such as companies, government agencies, and NGOs play a more central role than any individual person given their institutional capacities. Prior literature shows that the regulator typically occupies a central position in the regulatory space, although the balance of power between the regulator and regulatees could vary depending on the case. For instance, MacDonald & Richardson (2004) examine the work of the Canadian corporate reporting regulator and demonstrate its role in creating stability to the field by offering an interpretation to an open-ended corporate reporting law. In contrast, Nicholls (2010) examines the role of the regulator of the emerging social entrepreneurship field and demonstrates its subdued role due to its incapacity to obtain the support of the key actors (e.g. social entrepreneurs, affected

community, potential investors). As such, the literature has shown that the regulator's capacity to control a regulatory space is not a given, but rather it has to be continuously negotiated with the other actors in the field.

The second element of a regulatory space is the range of regulatory debate which represents the diverse interests of the actors. The complexity of some of the regulatory issues means that multiple solutions could be offered by different actors. For example, Young (1995) shows that the complexity of the US savings and loan crisis in the 1980s resulted in three different accounting solutions being proposed by three different US public authorities who saw the same problem, but each in different light. In addition, the range of the regulatory debate is also influenced by the relative balance of power between actors in the regulatory space. For example, Young (1994) suggests that the success of the Financial Accounting Standards Board (FASB) in establishing its position as the focal actor in the US financial reporting field and resisting the pressures from other influential actors (such as the accounting profession, the securities regulator, and the policy makers) means that such, "Regulatory space [of US financial reporting field] is not a space within which dramatic changes in accounting practices occur. Instead, it is a space for tinkering with existing practices and financial statements" (p.85). On the other hand, Chahed (2014) examines the introduction of the narrative reporting practice by the UK accounting standard-setter who had previously been largely concerned with the more quantitative financial reporting issues. She demonstrates that an innovation could occur in a regulatory space if the right 'conditions of possibility' are there. As such, the literature has demonstrated the role of the regulator in influencing the regulatory debate in supporting and extending the current regulatory regime, and even reforming it when they saw fit.

The third element of a regulatory space is the logic of appropriateness which represents the common interests shared by the actors in the regulatory space for complying with the regulation. The concept of logic of appropriateness (March & Olsen, 1989) could be contrasted with the rational model of 'logic of consequence'. While the concept of logic of consequence sees regulation as a potential solution to resolve a certain societal problem, the concept of logic of appropriateness sees regulation as a form of compromise which allows the regulator to uphold its 'duties and obligations' (Young, 1994, p.87) in minimising the conflicting interests of actors in the regulatory space. Prior literature (Young, 1995; MacDonald & Richardson, 2004) has shown that the logic of appropriateness of the field could become taken-for-granted over time as it comes to define the institutional identity of the regulator whose ongoing work, in turn, simultaneously shapes the way that the regulatees perceive the appropriate response to certain problems. However, tension could arise when an alternative way of perceiving a certain problem is brought into the regulatory space. For example, Young (2014) examines the process of the financial reporting standard-setting for stock options in the US which attracted the interests of the policy makers. She shows that the FASB responded by designating the policy makers' view as a 'political' view which could be contrasted with its role as a 'technical' regulator whose only concern was with financial reporting issues, not the underlying issues concerning executive remuneration. In this regard, she cautioned that although such a strategy had resulted in the successful formulation and adoption of the standards, it may also create an expectation gap between the regulation and the diverse interests of the different members of the public (see also MacDonald & Richardson, 2004). As such, the literature has shown the role of the logic of appropriateness as the 'rules of the game' which bind together the actors in the regulatory space and that tension could arise due to the introduction of a competing logic of appropriateness.

In this regard, we suggest that the concept of regulatory space is instructive in illuminating our research context because it recognises both the formal and the informal mechanisms through which the regulator comes to be perceived as the main authority in addressing a certain problem. While the scope of the work of the FRC as a corporate reporting regulator is formally bound by the pronouncement of the policy makers as the 'legislators', the concept of regulatory space allowed us to analyse the informal mechanisms through which the FRC could mobilise its influence in the regulatory space in recursively shaping the way that the policy makers formulate a certain policy proposal. As such, insight from this literature provides us with an approach to examine the informal mechanisms through which the FRC could support the policy makers in the legislative process for mandating the corporate disclosure of social and environmental information.

In addition, such examination would also provide us with a better understanding of the motivation of the FRC in shaping (or not) a certain policy proposal. In this regard, Nicholls (2010) suggests that the regulator could act as a 'mediator' in brokering a negotiation between the policy makers, the regulatees, and the wider members of the public. On the other hand, Young (2014) examines the role of as the US financial reporting standard-setters (FASB) and takes a more critical view in suggesting its role as an "anti-political" entity which is largely concerned with establishing and enforcing the rules that are already in place.

> "Although the FASB regards its work as *apolitical*, its much described processes may, instead, often be *anti-political*—anti-political as the processes act to limit

> the acceptable parameters of contestation and focus attention primarily on issues designated as technical (Barry 2002; Jeppesen 2010)." (Young, 2014, p. 742, emphases added)

In this sense, Young (2014) argues that the aspiration of the financial reporting standard-setters in portraying itself as an "apolitical" entity could render its work "anti-political" in the sense that they could lose sight of the diverse interests of the different actors in the quest of promulgating a technically-perfect set of standards. Despite the opposing views, Nicholls (2010) and Young (2014) both recognise that the regulator is often caught between multiple logics of appropriateness and has to make decisions in responding to the new logic brought forward by the new actors.

In this sense, we suggest that the concept of logic of appropriateness can be enriched by the literature on 'institutional logics' (Kraatz & Block, 2008; Greenwood et al, 2011). Kraatz & Block (2008) suggests that the concept of logic of appropriateness is not only consistent, but also deeply influential to the development of the concept of 'institutional logics', which is described as "overarching sets of principles that prescribe how to interpret organizational reality, what constitutes *appropriate* behaviour, and how to succeed" (Greenwood et al, 2011, p. 318, emphasis added). However, while the concept of logic of appropriateness is largely used to conceptualise the common view of 'appropriateness' held by a group homogenous actors, the concept of institutional logics has been used to explore the multiplicity of *common views* of 'appropriateness' held by a group of heterogenous actors. For example, Thornton et al (2012, Ch. 3) distinguish the 'market logic' from the 'state logic' in which the former is characterised by the shared view of economic efficiency, while the

latter by the shared view of civic obligation, among other things (see also Friedland & Alford, 1991). We suggest that the institutional logics literature offers another angle for thinking about the regulatory space as it allows us to identify the competing set of logic of appropriateness in the corporate reporting field and consider the responses of the corporate reporting regulator to such competing logic (Pratt & Foreman, 2000; Kraatz & Block, 2008).

5.3 Method

In this section, we specify our research design and provide some explanations for the selection of the case. Then, we provide some background information about our research context. Finally, we describe our data source and discuss our approach in analysing the data.

5.3.1 Research design

In responding to our research question, we examine the case of the introduction of the climate change disclosure requirement under the 'Strategic Report and Directors' Report Regulation' which was enacted in 2013 as an amendment to the *Companies Act 2006*. We suggest that the case provides an apt setting for our study for several reasons. First, the explicit policy intent of the proposal to focus on the "social and environmental duties" of companies (BIS, Aug 2010, p.5) represents a significant departure from the traditional mandate of the FRC, and thus we would expect that the FRC would try to shape the policy proposal, if they have any capacity to do so. Second, prior research (Cooper & Owen, 2007; Rowbottom & Schroeder, 2014) has demonstrated that the policy proposal had attracted intense political debates between those who supported and those who opposed the policy proposal, indicating deeply

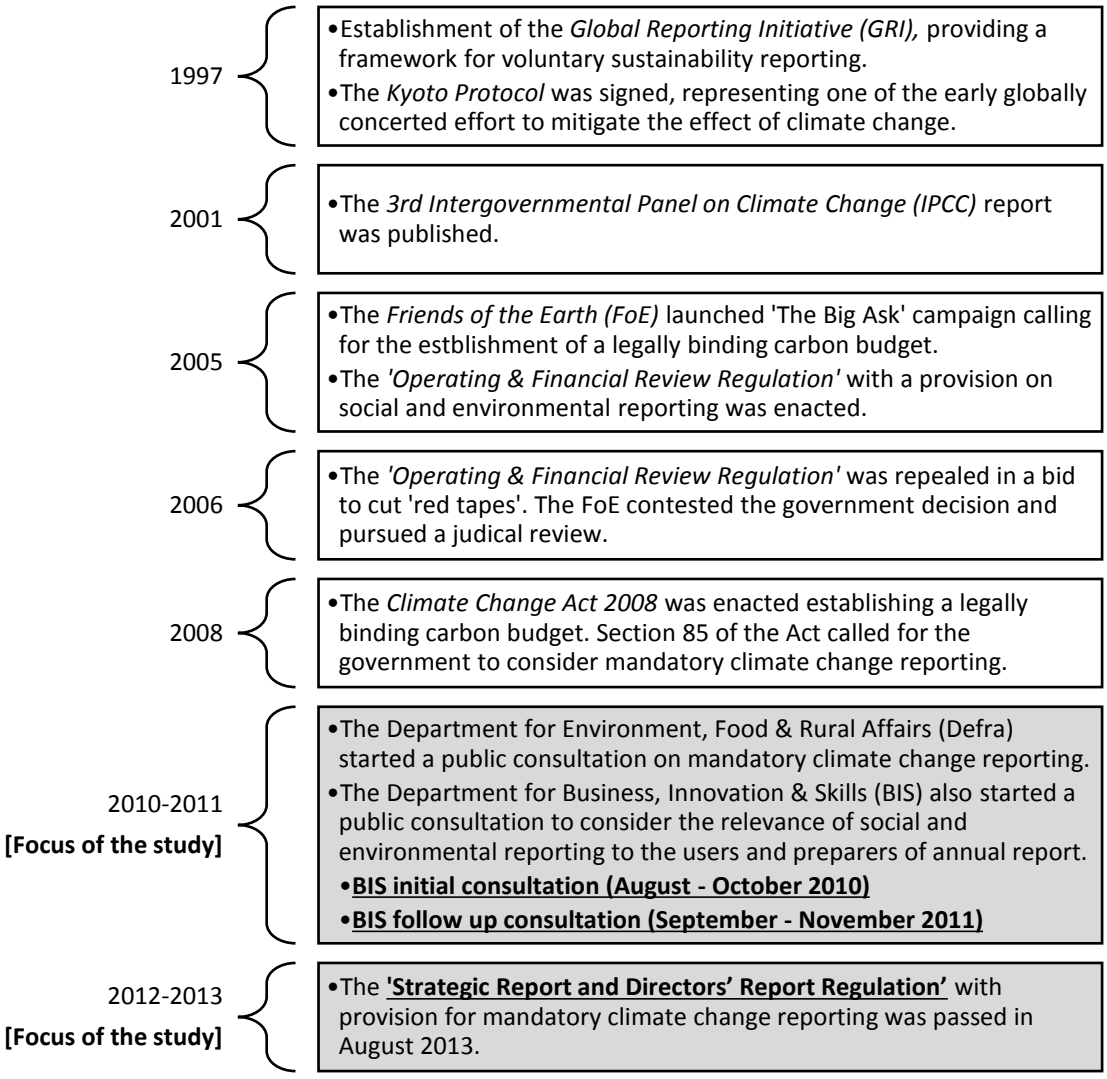
conflicting assumptions and values held by the proponents and opponents of the proposal. In this regard, we suggest that the setting provides us with an opportunity to understand the role of the regulator in mediating the different view(s) or logic(s) of appropriateness held by the different type of actors in the regulatory space (Nicholls, 2010; Young, 2014). Thirdly, the issue of climate change clearly represents an important societal problem and it is important to understand the extent to which the corporate reporting regulation could play a role in holding companies accountable for their social and environmental responsibilities (Cooper & Owen, 2007; Malsch, 2013). While recognising the limitation of a single case study, we suggest that our case represents a 'critical case' (Flyvbjerg, 2001) which provides us with an illustrative setting for understanding the influence and the motivation of the corporate reporting regulator in shaping (or not) the formulation of legislative policy that is intended to mandate the corporate disclosure of social and environmental information.

5.3.2 Research context

Corporate social and environmental reporting practice is not an entirely new idea (Kolk et al, 2008; Etzion & Ferraro, 2010), but, the idea of mandatory climate change disclosure is quite a recent one, with the UK being one of the pioneers (OECD & CDSB, 2015). The issue of climate change has been obtaining global attention since the establishment of the Kyoto Protocol in 1997 which has been followed up by the works of the Intergovernmental Panel on Climate Change (IPCC) which has identified a strong link between climate change and commercial activities (Carter & Childs, 2017). The increasing awareness about the importance of climate change bolstered the campaigning efforts of the environmental NGOs, including the Friends of the Earth (FoE), who had been incredibly vocal in calling for a legislation to set out a legally binding carbon budget for the UK government. Carter & Childs (2017) attribute the

notoriety of the FoE campaign to the shifting political landscape in the UK as the commitment of the Conservative opposition for addressing climate change triggered the Labour government to ratchet up their own agenda on the subject matter, thereby creating a cross-party consensus in facilitating the establishment of a law to regulate the issue.

Figure 5.1. Timeline of events



The first time that the issue of social and environmental disclosure was addressed through the corporate reporting regulation was under the 'Operating & Financial

Review (OFR) Regulation' which was enacted in March 2005 (Chahed, 2014; Rowbottom & Schroeder, 2014). The OFR was mainly envisaged to create a requirement for providing some narrative information about the operational matters of companies, but it also included a relatively minor provision requiring companies "to the extent necessary" for understanding the nature of its business to "discuss information about environmental matters (including the impact of the business of the company on the environment)" (OFR Regulation, Schedule 7ZA, s.4a). Rowbottom & Schroeder (2014) identify the initially indifferent responses of the environmental NGOs to the OFR regulation, with FoE reported to describe the social and environmental disclosure provision as "all but meaningless" (p.664). In an unexpected turn of events, Gordon Brown (the Chancellor of the Exchequer of the Labour government, at the time) announced the government's intention to repeal the OFR regulation, just 8 months after its enactment, in a speech at a conference which was hosted by the Confederation of British Industry (CBI). The announcement triggered a critical reaction from the FoE who ended up pursuing a judicial review against the government's decision on the grounds of insufficient public consultation; the judicial review was eventually settled out-of-court with the government promising to open further consultation immediately (Rowbottom & Schroeder, 2014). The FoE garnered a further momentum when the *Climate Change Act 2008* was enacted, introducing comprehensive reforms to the UK public and private sectors in addressing climate change. Of interest here is Section 85 of *Climate Change Act 2008* which orders the government to consider amending the Company Law to introduce a mandatory climate change disclosure requirement for companies.

(1) The Secretary of State must, not later than 6th April 2012—

(a) make regulations under section 416(4) of the Companies Act 2006 (c. 46) requiring the directors' report of a company to contain such information as may be specified in the regulations about emissions of greenhouse gases from activities for which the company is responsible, or

(b) lay before Parliament a report explaining why no such regulations have been made.

(2) Subsection (1)(a) is complied with if regulations are made containing provision in relation to companies, and emissions, of a description specified in the regulations.

When the Conservative party came into power to form the Coalition government[6] in 2010, they sought to fulfil Section 85 of the *Climate Change Act 2008* and instigated joint public consultations to be led by the Department for Business, Innovation & Skills (BIS) and the Department for Environment, Food & Rural Affairs (Defra). In this regard, the BIS conducted public consultations entitled "The Future of Narrative Reporting" from August – October 2010 (BIS, Aug 2010) and also another follow up consultation from September – November 2011 (BIS, 2011) to solicit the public opinion regarding, among other things, the relevance of social and environmental disclosure to the corporate reporting practice. On the other hand, the Defra conducted a public consultation entitled "Measuring and Reporting of Greenhouse Gas Emissions by UK companies" from May 2011 – June 2012 to solicit the public opinion

[6] In 2010, the Conservative party led by David Cameron managed to secure a parliamentary majority by forming the Coalition government with the Liberal Democrat party.

on whether the climate change disclosure requirement should be adopted on a voluntary or mandatory basis as well as the technical matter of accounting for the greenhouse gases. It is notable that the term 'climate change' was not explicitly used in the questions put forward in the BIS public consultation, rather the questions were worded using terms, such as 'information on environmental matters', 'environmental and social information', and 'environmental and social disclosures' (BIS, Aug 2010; BIS, 2011). However, the BIS public consultation had always been intended to run in conjunction with the Defra public consultation in addressing Section 85 of the *Climate Change Act 2008*. The following statement reflects how the BIS envisaged the contribution of its public consultations.

> "The Government is currently reviewing the contribution that reporting is making to reducing emissions and the findings of that review, led by DEFRA (…) We are also committed under the Act either to introduce regulations, under the Companies Act by April 2012, to require corporate greenhouse gas reporting, or explain why not. BIS is working with DEFRA and DECC on implementation of the Climate Change Act commitments. The outcome of that work and this consultation on narrative reporting will inform the Government's approach to any changes to the company reporting framework." (BIS, Aug 2010, p.12).

The statement above shows that while the Defra was taking the lead in devising the specific climate change disclosure requirement, the BIS was given the task of considering whether it would be appropriate to include such disclosure as a central part of the corporate report. As such, although the term 'climate change' was not

specifically used in the BIS public consultation, it had always been the intention to use the evidence obtained from the public consultations to inform the development of the proposal for widening the scope of corporate reporting to include the disclosure of climate change related information.

Following the public consultations, the 'Strategic Report and Directors' Report Regulation' was enacted in August 2013 as an amendment to the *Companies Act 2006*. Among other things, the regulation created a requirement for companies listed in the UK stock exchanges to quantify and disclose its greenhouse gas emissions in the 'Director's Report' section of the annual report and discuss any 'material' implication presented by climate change to their businesses in the 'Strategic Report' section of the annual report. While many UK companies had discussed climate change issues in their standalone sustainability reports, the 'Strategic Report and Directors' Report Regulation' introduced a more rigorous approach requiring companies to quantify their climate change impact based on government-approved methodologies (Cooper & Owen, 2007; CDSB, 2016). On paper, the regulation seems to be in line with the concerns of the environmental NGOs who were calling for reform. However, the question of whether the climate change disclosure requirement will be sufficiently enforced by the corporate reporting regulator and adopted 'in spirit' by the companies depended on the policy makers' ability to convince these actors that it is in their best interest to do so. We discuss this issue in detail in the 'Findings' section.

5.3.3 Data source and data analysis

Our primary data source includes the public consultation papers and the response letters relating to the two public consultations conducted by the BIS, called "The

Future of Narrative Reporting" taking place from 2010-2013. Additionally, we also analyse the draft regulations, the parliamentary debates, and the explanatory memorandum relating to the process of promulgating the 'Strategic Report and Directors' Report Regulation'. Our primary data set includes 4 public consultation papers published by BIS, 195 response letters from multiple respondents (84 response letters from the initial consultation and 111 response letters from the follow up consultation), 1 document each of draft regulation, parliamentary debate, and explanatory memorandum. In total, we analyse 202 documents composing of 2,451 pages. The description of our data set is presented in Table 5.1.

Table 5.1. Description of the data source

Motivation for data selection	**Document type**	**Document name**	**Document's author**	**Length (pages)**	**Date**
Identify range of regulatory debate	Public consultation	"The Future of Narrative Reporting - A Consultation"	BIS	30	Aug-10
Identify key actors and their stance	Public consultation	Responses to the "The Future of Narrative Reporting - A Consultation" **[84 responses]**	Multiple respondents	818	Oct-10
Identify range of regulatory debate	Public consultation	Summary of Responses to the "The Future of Narrative Reporting - A Consultation"	BIS	43	Dec-10
Identify range of regulatory debate	Public consultation	"The Future of Narrative Reporting - Consulting on a New Reporting Framework"	BIS	53	Sep-11
Identify key actors and their stance	Public consultation	Responses to the "The Future of Narrative Reporting - Consulting on a New Reporting Framework" **[111 responses]**	Multiple respondents	1,442	Nov-11
Identify range of regulatory debate	Public consultation	The Government Response to the "The Future of Narrative Reporting"	BIS	26	Mar-12
Identify range of regulatory debate	Draft regulation & commentary	"The Future of Narrative Reporting - A New Structure for Narrative Reporting in the UK"	BIS	21	Oct-12
Identify range of regulatory debate	Parliamentary debate	Draft Companies Act 2006 (Strategic Report and Directors' Report) Regulations 2013	Hansard	12	Jul-13
Identify range of regulatory debate	Explanatory memorandum	Draft Companies Act 2006 (Strategic Report and Directors' Report) Regulations 2013	BIS	6	Aug-13
No. of documents	202		*No. of pages*	2,451	

It is noteworthy that the BIS public consultation was largely focused on two issues: the relevance of social and environmental reporting and the disclosure requirement of the directors' remuneration report. The 111 response letters included in our analysis mostly provide comments on both agenda (some only on social and environmental reporting); we excluded another 22 response letters which provided comments on the directors' remuneration report issue only. Additionally, we examine several documents (including the parliamentary report and the summary of the public consultation outcome) published in relation the public consultation held by the Defra, called "Measuring and Reporting of Greenhouse Gas Emissions by UK companies" from 2011-2012 to inform our background knowledge of the issue. Lastly, to provide some further contexts to our study, we reviewed several other supplementary public documents relating to the events that led to the 'Operating & Financial Review (OFR) Regulation' and the *Climate Change Act 2008* including the summary of the public consultation on the OFR, the Government briefing paper relating to the repeal of the OFR, witness statement relating to the judicial review of the repeal of the OFR, as well as the parliamentary evidences and reports relating to the debate on the Climate Change Bill.

In line with previous studies on regulatory space (MacDonald & Richardson, 2004; Malsch & Gendron, 2011; Canning & O'Dwyer, 2013), we use the method of modified content analysis in analysing our data. The method of modified content analysis comprises two dimensions: manifest analysis which is oriented towards extracting quantifiable information and literal words from the archival data and latent analysis which is oriented toward interpreting the implicit meaning conveyed by the archival data (Berg, 2004; Ventresca & Mohr, 2005). In this regard, the focus of our manifest

analysis was to identify the key actors involved and the key issues highlighted. Based on the manifest analysis, we identified 15 categories of key actors including: academia, accounting associations, accounting firms, Big 4, business associations, consultancies, investor associations, institutional investors, listed companies, NGOs, other associations, other companies, FRC, other regulators, trade union. Then, based on the description of the actors' activities provided in the response letters, we categorised them into 5 mutually-exclusive groups: accounting professionals (accounting association, accounting firms, Big 4), business communities (business associations, consultancies, listed companies, other companies), investor communities (investor associations, institutional investors), others (academia, NGOs, other associations, other regulators, trade union), and regulator (FRC). At this stage of analysis, we also identified that the key issues proposed in the public consultation papers revolved around three main issues: social and environmental duties, empowering the shareholders, and reducing boilerplate disclosures.

Subsequently, in conducting our latent analysis, we draw on the tradition of 'argumentative discourse analysis' (Hajer, 1993; 2006) to focus on the terminologies that were used by the actors in their response letters in seeking to understand their implicit concerns about a certain issue (see also Suddaby & Greenwood, 2005). To identify the terminologies used, we open-coded the response letters, and then identified 9 common terminologies that were used frequently in the response letters ('boilerplate', 'clutter', 'tell the story', 'box ticking', 'safe harbour', 'layered regulation', 'corporate spin', 'integrate', 'transparency'). The heuristic criteria that we used for identifying the commonality of the terminology was that it must be used by more than 10 actors and must occur more than 10 times at each stage of the public consultation. Based on the criteria, we excluded several other notable terminologies including: 'level

playing field', 'one size fits all', 'corporate citizen', 'seeing wood for the tress', 'spirit of the law', and others. We did not filter out the use of a 'negative terminology' whereby the actor expressed disagreement with the use of a certain terminology, and we assume that it would not substantially affect our analysis.

At this stage of analysis, we also attempted to interpret the stance of the response letters with regards to their position on the policy proposal. We classified the stances into 4 mutually exclusive categories: 'relevant', 'not relevant', 'only when material', and 'no comment'. The response letters were classified as 'relevant' if there was some references to the concept of "social and environmental duties", 'not relevant' if there was some references to the idea that corporate reporting is not for the stakeholders, 'only when material' if there was some references to the concept of materiality, and 'no comment' if there was no obvious assertion. We use some levels of judgement in classifying the stance of the response letters given that there was some degrees of overlap between the stances.

5.4 Findings

5.4.1 Response of the key actors: Rallying behind the regulator

In this section, we identify the key actors who responded to the public consultation and their respective stance by analysing the response letters. From the accounting professionals group (which included accounting professional associations, Big 4, and other accounting firms), there were 9 responses (11.3%) during the initial consultation and 11 responses (11.8%) during the follow up consultation. From the business communities group (which included listed companies, other companies, consultancies, and business associations), there were 25 responses (31.3%) during the

initial consultation and 41 responses (44.1%) during the follow up consultation. From the investor communities group (which included institutional investors and investor associations), there were 18 responses (22.5%) during the initial consultation and 19 responses (20.4%) during the follow up consultation. Then, given the subject matter of the consultation, there were also 10 responses (12.5%) during the initial consultation and 7 responses (7.5%) during the follow up consultation from the NGOs group. From others (which included academia, other associations, other regulators, personal, and trade union), there were 17 responses (21.3%) during the initial consultation and 14 responses (15.1%) during the follow up consultation. Finally, the FRC also submitted a response letter to both the initial consultation and the follow up consultation. Detail of the respondents is available in Appendix 3A.

Table 5.2. Key actors

	Accounting professionals	Business communities	Investor communities	NGOs	Others	Regulator (FRC)	Total
Initial consultation							
'Only when material'	4	11	16	6	11	1	**49**
'Relevant'	0	0	0	4	2	0	**6**
'Not relevant'	3	4	0	0	0	0	**7**
'No comment'	2	10	2	0	4	0	**18**
Total	**9**	**25**	**18**	**10**	**17**	**1**	**80**
Follow up consultation							
'Only when material'	9	19	15	4	5	1	**53**
'Relevant'	0	1	0	3	3	0	**7**
'Not relevant'	0	10	2	0	0	0	**12**
'No comment'	2	11	2	0	6	0	**21**
Total	**11**	**41**	**19**	**7**	**14**	**1**	**93**

Additionally, we identified that 62 out of 80 (77.5%) actors offered some views on the policy proposal for widening the scope of corporate reporting to include the disclosure of social and environmental information during the initial consultation and 72 out of

93 (77.4%) actors did so during the follow up consultation. Reciprocally, 18 out of 80 (22.5%) offered no comment during the initial consultation and 21 out of 93 (22.6%) did so during the follow up consultation. In these cases, the actors either chose to discuss only the matter of social issues (e.g. human rights, gender diversity, human capital) or sought to discuss environmental issues, but did not offer any concrete argument.

While the Defra public consultation showed an overwhelming support for the climate change disclosure requirement (Defra, 2012), we identified that most of the actors who responded to the BIS public consultation were primarily concerned whether the disclosure of such climate change related information is 'material', i.e. if such information has the potential of influencing investment decision-making ('only when material' stance) (see also Edgley, 2014). During the initial consultation stage, we identified that 49 actors (79.0%; out of 62 actors who offered views on the issue), including the FRC made the argument that any form of social and environmental disclosure should only be considered if it offers material information to the shareholders ('only when material' stance), as shown in Table 5.2. On the other hand, we find that there were only a minority of actors who showed a strong opposition against the policy proposal ('not relevant' stance). In this regard, we identified that 7 actors (11.3%) responded by making the argument that the social and environmental disclosures do not offer any value to the shareholders ('not relevant' stance). Similarly, we only find a minority of actors who showed a strong support for the initial policy proposal ('relevant' stance). In this regard, 6 actors (9.7%) made the argument that the social and environmental disclosures would be helpful in enhancing the accountability of companies to the stakeholders ('relevant' stance).

In its response letter, the FRC deliberated the stance of 'only when material' by reiterating that, "Company law requires that only matters of material interest to shareholders need to be reported," while also acknowledging that, "Directors need to consider carefully the issues that are relevant to a wider range of stakeholders whose views determine the company's reputation" (FRC response letter, 2010, p. 3). In addition, the FRC suggested that 'immaterial' disclosure would risk creating 'clutter' in the corporate report as they referenced the "Louder than Words" report (FRC, 2009) which had discussed the issue of 'clutter'. Our analysis identified that the respondents were aware of the FRC's projects relating to the issue of 'clutter' as demonstrated by 35 explicit references to the word 'clutter' at this stage of consultation. On the other hand, there was little evidence of coordinating effort from the business associations, with the only hint of coordination happening between the CBI and the 100 Group who both included a verbatim paragraph about businesses still "feeling their way" in complying with the previous disclosure regulation.

> "Since the provisions are relatively new, it will inevitably be the case that there is an element of some companies "feeling their way" in determining the style, nature and extent of the disclosures they make, including making comparisons with other companies, as good practice in this area develops." (CBI response letter, 2010 & 100 Group response letter, 2010)

Although the CBI and the 100 Group submitted response letters independently and offered different opinions on numerous other issues, the identical paragraph above suggests that there was some degrees of coordination between them.

Then, during the follow up consultation stage, we identified 53 actors (73.6%; out of 72 actors who offered views on the issue) that took the stance of 'only when material', 12 actors (16.7%) that took the stance of 'not relevant', and 7 actors (9.7%) that took the stance of 'relevant', as shown in Table 5.2. The FRC stood by its previous position at this stage, while also announcing the publication of the "Cutting Clutter" report in April 2011 which specifically addresses the issue of 'clutter' as well as instigating a new initiative called the "Financial Reporting Lab" which aims to create a 'safe space' for involving a broader group of companies, investors, and other stakeholders in testing new ideas for a better corporate reporting regulation. The focus on 'clutter' was also echoed by the other respondents, as we identified 82 explicit references to the word 'clutter' at this stage. In addition, we also identified that 17 actors (23.6%) made specific references to the "Cutting Clutter" report and 16 actors (22.2%) made specific references to the "Financial Reporting Lab", indicating that the actors were 'rallying' behind the FRC's thought leadership on the issue. It is notable that the accounting professionals group had shifted their stance to 'only when material' at this stage; whereas there were 3 actors (Institute of Chartered Accountants in England and Wales/ ICAEW, Institute of Chartered Accountants of Scotland/ ICAS, Grant Thornton) in the accounting professionals group that took the stance of 'not relevant' in the initial consultation, 2 of the actors (ICAEW, Grant Thornton) shifted their stance to 'only when material' and 1 actors (ICAS) shifted its stance to 'no comment' at the follow up consultation stage. The evidence on both the indirect reference to the idea of 'clutter' and the direct reference to the "Cutting Clutter" report suggests that the positioning of the FRC's response letters as well as the publication of the "Louder than Words" and "Cutting Clutter" reports had managed to enrol the support of the majority of the actors in the regulatory space.

On the other hand, we also find some evidences of the few actors who sought to build a separate alliance in promoting the 'not relevant' stance at the follow up consultation stage. Although some of these actors also made references to the word 'clutter', they took a more critical stance in highlighting primarily the potentially negative legal implications of the policy proposal. In this regard, we identified 7 companies (Barclays plc, BP plc, British American Tobacco plc, Diageo plc, Rio Tinto plc, SABMiller plc, and Smith & Nephew plc) which explicitly referenced the response letter of the GC100 in conveying their concerns about the policy proposal. The following paragraph was echoed and, in some cases, referenced verbatim by the identified companies, and it sums up the concerns of these actors.

> "We would also emphasise that company reporting should primarily be driven by the company's relationship with its owners, i.e. shareholders, and not by the interests of any particular stakeholder groups or NGOs" (GC100 response letter, 2011).

The statement above reflects the concerns of the actors who took the stance of 'not relevant' about the underlying political agenda behind the policy proposal that could potentially dilute the primacy of the shareholders as the main beneficiary of the corporate reporting practice.

Then, interestingly, we find that the stance taken by the NGOs was split. During the initial consultation stage, only 4 out of 10 NGOs (Corporate Responsibility (CORE) Coalition, ClientEarth, Amnesty International, and CAFOD) responded by making the argument that the disclosure of social and environmental information would allow the

stakeholders to hold companies accountable for their "social and environmental duties" ('relevant' stance). It is noteworthy that the FoE submitted a collective response under the CORE Coalition, which also represented a number of other prominent NGOs. Meanwhile, during the follow up consultation stage, only 3 out of 7 (CORE Coalition, ClientEarth, and FairPensions) NGOs took the 'relevant' stance. On the other hand, the remaining NGOs responded in a fairly similar way to the way that the FRC problematised the issue ('only when material' stance); these included the following actors from the NGOs group: Aldersgate Group, Business in the Community, Carbon Tracker, CDP, CDSB, IIGCC, Tomorrow's Company, and WWF UK. This evidence points to the limited influence of the stance of 'relevant' in the regulatory debate. The NGOs who took the 'relevant' stance appeared to be 'out-of-sync' from the other actors in the regulatory space as they sought to promote the idea of social and environmental duties of corporations which did not quite resonate with the logic of appropriateness of the field. On the other hand, the NGOs that took the stance of 'only when material' largely struck a conciliatory tone, focusing on reforming the current system of corporate reporting rather than trying to destabilise the system.

As such, our analysis shows that the majority of the actors (including some of the NGOs) coalesced around the view that the disclosure of social and environmental information should only be made in the corporate report, if it offers material information in conjunction to the remaining elements of the corporate report. On the other hand, we identify that there were only a minority of actors who strongly supported the policy proposal as it stood or strongly opposed the policy proposal altogether. While the majority of the actors had come to endorse the stance of 'only when material' which represented the FRC's position on the matters, we do not find any evidence of the FRC trying to actively influence the legislative process, other than

normally responding to the public consultations and publishing some thought-leadership reports ("Louder than Words" and "Cutting Clutter" reports). Yet, the evidence demonstrates that the majority of the actors clearly preferred the FRC's vision of the role of non-financial reporting, rather than the policy makers' initial policy proposal. Next, we discuss how this process unfolded by examining the 'turn' in the regulatory debate.

5.4.2 'Turn' in the regulatory debate: Realigning the policy objective into financial reporting objective

In this section, we discuss the changing focus point of the regulatory debate by analysing the terminologies used by the actors in their response letters and the role of this 'turn' in the regulatory debate in influencing the policy makers' decision to reformulate the policy proposal. We identified that the objective of the policy that was initially proposed by the BIS was to enhance the accountability of businesses on their "social and environmental duties" by reinstating the social and environmental disclosure requirement introduced by the OFR regulation. In fact, this objective was explicitly stated in the Coalition government's programme which was published in 2010 (HM Government, 2010, p. 10), and the commitment was reiterated again in the ministerial foreword of the public consultation document.

> "The coalition's commitment to reinstating an Operating and Financial Review to ensure that social and environmental duties have to be covered in company reporting and to investigate further ways of improving corporate accountability and transparency is central to achieving these aims" (BIS, Aug 2010, p.5).

The statement above indicates the vision of the BIS in positioning the climate change disclosure requirement as a mechanism for holding companies accountable for their social and environmental duties. It is notable that such commitment was in stark contrast to the decision of the previous Labour government to repeal the OFR regulation which triggered a strong reaction from the environmental NGOs (Rowbottom & Schroeder, 2014). In this regard, we suggest that there was an element of political agenda underlying the BIS public consultation as the Coalition government sought to distinguish itself from the previous government, and perhaps even secure the support of the 'green' community in the process (see also Carter & Childs, 2017). As such, it is not entirely clear whether the Coalition government's commitment to reinstating the OFR represented a genuine concern for the social and environmental duties of corporations, or rather a symbolic gesture to distinguish its programme from that of the previous Labour government.

Despite the Coalition government's commitment, we identified that there was very little support from the respondents for reinstating the OFR regulation (BIS, Dec 2010). In line with the previous section, we found that although the majority of the actors acknowledged the relevance of social and environmental disclosure as well as the other type of non-financial disclosure, they expressed their concerns about the 'clutter' that may arise as a result of prescribing the disclosure of 'immaterial' information in the corporate report. As shown in Table 5.3, we identified that these concerns were encapsulated by the financial reporting terminologies used by the actors in their response letters in discussing the implication of the policy proposal.

Table 5.3. Terminologies *(frequency of occurrences)*

Terminologies (frequency of occurrences)*	Initial consultation (n=80)	Follow up consultation (n=93)	
'Boilerplate'/ 'Box ticking'	126	155	Financial reporting termino-logies
'Transparency'	99	135	
'Tell the story'	67	42	
'Integrate'/ 'Joined up'	61	97	
'Clutter'	35	82	
'Safe harbour'	27	49	Legal termino-logies
'Layered/ Overlapping regulation'	25	32	
'Corporate spin'/ 'Greenwash' / 'Lip service'	12	11	Stakeholder accountability termino-logies

* Frequency of occurrence count excluded the reference to specific item (e.g., Cutting Clutter, IIRC, or Transparency Directive). For example, specific reference to 'The FRC's Cutting Clutter' was excluded from the frequency count of 'clutter'.

In this regard, we show that the financial reporting terminologies represented the most frequently used terminologies during the initial public consultation, as the terminologies of 'boilerplate'/ 'box ticking' occurred 126 times, and followed by 'transparency' (99 times), 'tell the story' (67 times), 'integrate'/ 'joined up' (61 times), and 'clutter' (35 times); the FRC used the terminologies 'boilerplate'/ 'box ticking' (3 times), 'clutter' (3 times), and 'tell the story' (1 times) in its response letter to the initial consultation. On the other hand, we show that the legal terminologies which highlight the actors' concerns about the potential legal consequences of the policy proposal were less frequently used, as the terminologies of 'safe harbour' and 'layered/ overlapping regulation' appeared 27 times and 25 times in the initial consultation. In relation, we also show that the stakeholder accountability terminologies which encapsulated the original policy intent for holding companies accountable for their social and environmental duties were the least frequently used type of terminologies, as the

terminologies of 'corporate spin'/ 'greenwash'/ 'lip service' altogether appeared only 12 times in the initial consultation. This evidence reflects the general tone of the regulatory debate which was predominantly focused on the implication of the policy proposal on the corporate reporting practice, rather than the legal challenges that it may present or its potential societal role of holding companies accountable to wider groups of stakeholders.

Following the lack of support on the initial policy proposal, the BIS decided to shift the objective of the policy proposal, as the consultation paper published at the follow up consultation stage shifted the objective of the proposal toward creating a "simpler framework for narrative reporting that will reduce burdens on companies that are currently producing large, complex reports that lie unread by investors" (BIS, 2011, p.5). The BIS proposed to do so by introducing the idea of segregating the disclosure of the strategic information in the 'Strategic Report' section of the annual report and the additional disclosure in the 'Annual Directors' Statement (ADS)' which would be presented separately in an online format. The BIS argued that the proposal would enable companies to prepare a report which takes an integrated view of the business by considering the link between the social and environmental matters and the core business of companies. The following statement reflects the BIS's vision.

> "The Strategic Report is also the place for quoted companies to describe (to the extent necessary for an understanding of the business) how social, environmental and human rights considerations relate to their business model and strategy. This will ensure that social and environmental information is considered alongside the analysis of the company's strategy and risks – the

> result being an *integrated report* demonstrating, where relevant, the links between these issues" (BIS, 2011, p.10, emphasis added).

Based on our analysis, we identified that while there was ample supports for the idea of an 'integrated reporting' model, many respondents were wary that the proposed split between the 'Strategic Report' and the 'Annual Directors' Statement (ADS)' would render the latter as a "dumping ground" (BIS, Mar 2012, p. 8) for the 'immaterial' information. Such a response was consistent with the predominant concern in the initial consultation that the disclosure of social and environmental information could create 'clutter' in the corporate report and obscure the presentation of the strategic information. During the follow up consultation stage, as shown in Table 5.3, we identified that the financial reporting terminologies of 'boilerplate'/ 'box ticking' (155 times) remained the most commonly used, followed by 'transparency' (135 times), 'integrate'/ 'joined up' (97 times), and 'clutter' (82 times) in the follow up consultation. Notably, there was an increasing use of the terminologies of 'integrate'/ 'joined up' with 15 actors making specific reference to the 'International Integrated Reporting Committee'[7], while the terminology of 'tell the story' saw decreasing use in the follow up consultation stage. Next, there was also an increasing use of the legal terminologies of 'safe harbour' and 'layered/ overlapping regulation', although they remained less frequent in comparison to the financial reporting terminologies. On the other hand, the use of the stakeholder accountability terminologies of 'corporate spin'/ 'greenwash'/ 'lip service' slightly decreased at the follow up consultation stage. We suggest that the evidence demonstrates that that regulatory debate remained to be dominated by concerns about the implications of the policy proposal on the traditional

[7] The International Integrated Reporting Council (IIRC) was known as the International Integrated Reporting Committee when it was first established in 2010.

corporate reporting practice, with the 'integrated reporting' model being discussed as a long-term solution for addressing the deficiency of the current corporate reporting system.

After the follow up consultation, the BIS decided to withdraw the idea of the ADS and proposed that the social and environmental information should only be made in the 'Strategic Report' only "to the extent necessary" for understanding the nature of the business (BIS, Oct 2012). In relation, companies are also required to quantify and disclose their greenhouse gas emissions in the 'Directors' Report' section of the annual report (Defra, 2012); we learn that the draft legislation received an unequivocal cross-party support from the excerpt of the parliamentary debate. We suggest that although the outcome of the regulatory process mandated the climate change disclosure from a legal standpoint, the initial objective of monitoring the "social and environmental duties" of corporations had come to be subsumed under the traditional objective of financial reporting. The predominant concerns showed by the respondents on the financial reporting issues overwhelmed other concerns around the legal as well as the societal implications of the policy proposal. In the end, the empathic level of support for the stance of 'only when material' prompted the BIS to reorient the policy intent from that of holding companies accountable for their "social and environmental duties" into creating a "simpler framework for narrative reporting".

While the FRC did not appear to be actively trying to influence the BIS to reformulate the policy proposal, we suggest that the FRC shaped the regulatory debate on the policy proposal by providing the actors in the regulatory space with the financial reporting terminologies that set the tone of the conversation as one of a financial

reporting debate, rather than a debate on the legal or societal implications of the policy proposal. For example, the "Louder than Words" report which was published in 2009 (prior to the public consultation) had deliberated the issue of clutter and identified two types of clutter, namely a legalistic disclosure that is repeated verbatim every year and an 'immaterial' information that is not relevant for investment decision making (FRC, 2009). Additionally, the FRC also reiterated the need to reduce clutter from the corporate reports in the "Cutting Clutter" report that was published in April 2011, just in the period between the initial consultation and the follow up consultation conducted by the BIS. We suggest that the conceptualisation of the terminologies, such as 'clutter', provided the actors in the regulatory space with a way of perceiving the role of social and environmental disclosure, and allowed them to latch onto these terminologies in negotiating their individual concerns in relation to the collective issue of the field.

Consequently, although the climate change disclosure requirement was enacted as a law, its focus point had shifted from the original objective envisaged in the initial policy proposal. The point is summed up in the following quote from the response letter of FairPensions, an environmental NGO.

> "We support the aim of ensuring that companies provide a clear concise overview of the business which strips out much of the clutter which currently lengthens Annual Reports. However, we are concerned that the objective of simplification seems to have replaced the original purpose of this process, i.e. to improve the quality of social and environmental reporting (…) We do not believe that it addresses the key problem identified in the earlier consultation

– indeed, the problem which the original coalition commitment sought to address" (FairPensions response letter, 2011).

The quote above reflects the concern from the NGOs community over the reorientation of the policy objective. As such, although the climate change disclosure requirement was passed as an amendment to *Companies Act 2006*, the detail of the legislation largely reflected the regulatory debate in the sense that companies would be required to discuss the relevance of climate change issues to their business in the Strategic Report section only if they are deemed to be material. Despite the reorientation of the policy intent, we suggest that the 'turn' in the regulatory debate served to ensure that the climate change disclosure requirement remained relevant to the broader financial reporting concerns, and thereby allowing the FRC to act as the regulator over the issue. Next, we discuss how the 'turn' in the regulatory debate represented the tension between competing logics of appropriateness for problematising the policy proposal.

5.4.3 Reasserting the logic of appropriateness of the field and subsuming other competing logics

In this section, we discuss the role of the FRC in responding to the competing logics of appropriateness brought forward by the policy proposal by analysing the pattern between the type of stance taken by the actors and the type of terminologies that they used. As shown in Table 5.4 (Pattern 1), we identified that the actors who took the stance of 'not relevant' were far more likely to use the legal terminologies of 'safe harbour' and 'layered/ overlapping regulation' than those who took the stance of 'relevant'.

Table 5.4. Terminologies (number of actors)

Termino-logies (number of actors)*	'Only when material' ^						'Relevant' ^			'Not relevant' ^		
	Acc prof (n= 13)	Bus com (n= 30)	Inv com (n= 31)	FRC (n= 2)	NGOs (n= 10)	Other (n= 16)	Bus com (n=1)	NGOs (n=7)	Other (n= 5)	Acc prof (n= 3)	Bus com (n= 14)	Inv com (n=2)
Pattern 1												
'Safe harbour'	9	5	10	0	1	1	0	0	0	3	8	1
% total	*69%*	*17%*	*32%*	*0%*	*10%*	*6%*	*0%*	*0%*	*0%*	*100%*	*57%*	*50%*
'Layered/ Overlapping regulation'	5	8	2	2	1	1	0	0	0	1	5	2
% total	*38%*	*27%*	*6%*	*100%*	*10%*	*6%*	*0%*	*0%*	*0%*	*33%*	*36%*	*100%*
'Corporate spin'/ 'Greenwash' / 'Lip service'	0	3	4	0	3	1	0	5	1	0	1	0
% total	*0%*	*10%*	*13%*	*0%*	*30%*	*6%*	*0%*	*71%*	*20%*	*0%*	*7%*	*0%*
Pattern 2												
'Boilerplate' / 'Box ticking'	9	21	22	2	4	7	0	4	1	3	10	2
% total	*69%*	*70%*	*71%*	*100%*	*40%*	*44%*	*0%*	*57%*	*20%*	*100%*	*71%*	*100%*
'Clutter'	7	13	6	2	3	2	0	1	1	3	8	1
% total	*54%*	*43%*	*19%*	*100%*	*30%*	*13%*	*0%*	*14%*	*20%*	*100%*	*57%*	*50%*
'Transpa-rency'	10	16	20	0	4	12	1	5	4	2	5	1
% total	*77%*	*53%*	*65%*	*0%*	*40%*	*75%*	*100%*	*71%*	*80%*	*67%*	*36%*	*50%*
Pattern 3												
'Tell the story'	4	8	6	2	1	4	0	2	1	3	3	0
% total	*31%*	*27%*	*19%*	*100%*	*10%*	*25%*	*0%*	*29%*	*20%*	*100%*	*21%*	*0%*
'Integrate'/ 'Joined up'	5	11	13	0	7	2	1	6	3	1	1	0
% total	*38%*	*37%*	*42%*	*0%*	*70%*	*13%*	*100%*	*86%*	*60%*	*33%*	*7%*	*0%*

* Number of actors count intends to control for the variation in disproportionately frequent use of terminologies by a single actor

^ Acc prof = Accounting professionals; Bus com = Business communities; Inv com = Investor communities

On the other hand, the actors who took the stance of 'relevant' appeared to be far more likely to use the stakeholder accountability terminologies of 'corporate spin'/ 'greenwash'/ 'lip service' than those actors who took the stance of 'not relevant'. We suggest that the evidence reflects the competing logics of appropriateness as the actors who took the stance of 'relevant' sought to advance the 'stakeholder logic' to infuse the

climate change disclosure requirement with the idea of "social and environmental duties" of corporations, while the actors who took the stance of 'not relevant' sought to defend the market logic underlying the corporate reporting practice by focusing on the potential litigation costs that companies may have to bear for disclosing such uncertain issues.

In addition, as shown in Table 5.4 (Pattern 2), we identify that the actors who took the stance of 'not relevant' were slightly more likely to use the terminologies of 'boilerplate'/ 'box ticking' and 'clutter' than those who took the stance of 'relevant'. On the other hand, those who took the stance of 'relevant' were slightly more likely to use the terminology of 'transparency' than their counterpart. Moreover, Table 5.4 (Pattern 3) shows that the actors who took the stance of 'not relevant' were slightly more likely to use the terminology of 'tell the story' than those who took the stance of 'relevant'. On the other hand, those who took the stance of 'relevant' were slightly more likely to use the terminologies of 'integrate'/ 'joined up'. Although these patterns were less ostensible than Pattern 1, we suggest that they are in line with the previous argument whereby the actors who took the stance of 'not relevant' were primarily concerned that coercing companies to disclose the social and environmental information would result in a 'boilerplate' disclosure and inhibit company's ability to 'tell the story', while the actors who took the stance of 'relevant' were primarily interested in the 'transparency' afforded by such disclosure and its potential for providing the shareholders with an 'integrated' view of corporate performance.

Additionally, based on the analysis of the pattern between the stance of the actors and the terminologies used, we find that the actors who took the stance of 'only when

material' (which represented the majority of the actors) appeared to use a wider range of combinations of the identified terminologies. With regard to Pattern 1, we identified that the actors who took the stance of 'only when material' were more aligned to those actors who took the stance of 'not relevant', as they used the legal terminologies more frequently that the stakeholder accountability terminologies. However, with regards to Pattern 2 and Pattern 3, we identified that the actors who took the stance of 'only when material' appeared to use a much wider combinations of the different terminologies in comparison to the actors who took the stance of 'relevant' or 'not relevant'. We suggest that these patterns reflect a more balanced view of the actors who took stance of 'only when material' in the sense that they took into account of the different considerations regarding both the potentials and challenges presented by the policy proposal. However, the patterns also show that these actors were less interested in exploring the idea of "social and environmental duties" of corporations, as demonstrated by the low usage of terminologies such as 'corporate spin'/ 'greenwash'/ 'lip service'. As such, we argue that the stance of 'only when material' served to decouple the social and environmental disclosure from the stakeholder logic, and espoused it with the logic of appropriateness of the field, i.e. the market logic.

In this regard, we argue that the shifting regulatory focus towards the materiality of social and environmental disclosure signified the reassertion of the logic of appropriateness of the field in responding to the competing stakeholder logic brought forward by the initial policy proposal. Our analysis demonstrates the fragile position of the environmental NGOs. Interestingly, we also find the emergence of some 'centrist' NGOs who had reoriented their positions toward advancing the idea of an 'integrated reporting' model. This is evidenced by the increasing use of the terminologies of 'integrate'/ 'joined up' and the diminishing use of the terminologies

of 'corporate spin'/ 'greenwash'/ 'lip service' by these actors (see Pattern 3, Table 5.4). We argue that the evidence reflects the outcome of the socialisation of these NGOs as 'normal' actors in the corporate reporting field as they came to recognise the common interest shared by the other actors for having the corporate reporting regulation. Although the FRC was circumspect in supporting the 'integrated reporting' model in their responses, our analysis shows a growing number of actors who had come to latch onto the terminologies of 'integrate'/ 'joined up' in conveying their support for the vision of this new model of corporate reporting.

As such, we suggest that the stance of 'only when material' represented the dominant logic of appropriateness (March & Olsen, 1989; Young, 1994) of the field, whereas the stance of 'relevant' largely represented a competing logic of appropriateness that were mainly supported by some of the environmental NGOs. Given the increasing opposition from some of the actors who took the stance of 'not relevant', we suggest that the stance of 'only when material' provided a compromise through which the conflicting interests of the proponents and opponents of the policy proposal could be partially reconciled, thereby facilitating the formulation of a policy proposal that satisfied the interests of the majority of the actors in the field. While the broader effect of the entrance of the NGOs into the regulatory space of corporate reporting is beyond the scope of this paper, it seems evident that the potential of the stakeholder logic to radically destabilise the corporate reporting practice had been significantly curtailed as a result of the shifting regulatory focus. On the other hand, the diminishing use of the legal terminologies by the majority of the actors also indicates the growing recognition of the importance of the social and environmental disclosures, as they had come to be perceived in light of their potential contribution to the corporate reporting practice, rather than their destabilising effect.

5.5 Discussion

In this section, we delineate the implication of our findings to our understanding of the role of the corporate reporting regulator in shaping the legislative process for mandating the corporate disclosure of social and environmental information, and then we discuss the insights from our findings in contributing to the literature. Our analysis shows that the majority of the actors in the regulatory space responded to the policy proposal by 'rallying' behind the FRC in highlighting the need to consider the proposed climate change disclosure requirement in relation to the materiality of such information ('only when material' stance). Additionally, we show that the policy makers' decision to reformulate the policy proposal was related to the 'turn' in the regulatory debate, which had come to be dominated by the concerns about the inclusion of 'immaterial' social and environmental information, as demonstrated by the occurrences of the financial reporting terminologies such as 'boilerplate'/ 'box ticking' and 'clutter'. Further, we demonstrate that the reorientation of the policy proposal represented the reassertion of the logic of appropriateness of the field as the competing stakeholder logic brought forward by the initial policy proposal was subsumed under the market logic which represented the dominant institutional logic of the corporate reporting field; with the NGOs being reassigned to the role of advancing the shift toward the 'integrated reporting' model.

With respect to our research question, our findings suggest that while the FRC did not appear to play an active role in influencing the legislative process, its role as the focal actor in the regulatory space shaped the way that the actors problematised the policy proposal. In this sense, we suggest that the FRC played a subtle role in shaping and rebalancing the perspectives of not only the incumbent actors (e.g. accounting professionals, business communities, investor communities), but also the newcomers

(e.g. NGOs). We suggest that the thought leadership role of the FRC, such as through the publication of the "Louder than Words" and "Cutting Clutter" reports, provided the actors in the regulatory space with a sense of the appropriate response and allowed them to latch onto the financial reporting terminologies, such as 'boilerplate'/ 'box ticking', 'clutter', 'transparency', 'tell the story', in conveying their individual concerns in relation to the wider issue of the field. As such, we suggest that this thought leadership role of the FRC set the overall tone of the regulatory debate and influenced the perceptions of the actors regarding the policy proposal. This, in turn, created a 'regulatory-policy loop' in which the responses of the actors to the public consultations provided the policy makers with some ideas to reformulate the policy proposal in a way that would be amenable to the majority of the actors. In this sense, we suggest that that the FRC played a role of crafting a compromise to mediate the diverse interests of the different actors in the field in re-negotiating the legal scope of corporate reporting.

We suggest that our findings provide further insight to the social and environmental accounting literature (Cooper & Owen, 2007; Archel et al, 2011; Bebbington et al, 2012; Malsch, 2013). We do so by examining the role of the corporate reporting regulator in moderating the opposing views of the proponents and opponents of the policy proposal, thereby facilitating the enactment of the law which prescribes the corporate disclosure of social and environmental information. Our findings demonstrate the subtle role played by the FRC in advancing a view on social and environmental information that was amenable to much wider audiences in the corporate reporting field. We suggest that although such view represented a diversion from the original intent of the policy proposal, it represented a compromise that regardless ascribed social and environmental disclosure with a status of a legitimate

part of corporate reporting. Additionally, we suggest the shifting regulatory focus reassigned some of the NGOs with a more constructive role of promoting the 'integrated reporting' model that appeared to be widely supported by the actors in the corporate reporting field, at least, in principle. In this regard, we suggest that the corporate reporting regulator still yet has a role to play in counterbalancing the influence of the powerful corporate lobbies who historically had been opposed to the idea of social and environmental disclosure regulation (Cooper & Owen, 2007; Archel et al, 2011; Malsch, 2013). As such, we argue that while the mandating of the social and environmental disclosure through corporate reporting regulation may not directly result in creating stakeholder accountability, it could potentially support the work of the NGOs in diffusing the social and environmental disclosure practices more widely (Bebbington et al, 2012).

Additionally, we suggest that our findings offer some insights to the regulatory space literature (Hancher & Moran, 1989; Young, 1994; 1995; 2014; MacDonald & Richardson, 2004; Nicholls, 2010; Canning & O'Dwyer, 2013; Chahed, 2014). We do so by considering the response of the regulator to the introduction of a competing logic of appropriateness into the field. In this regard, we argue that the FRC responded by decoupling the policy proposal from the competing stakeholder logic and espousing it with the market logic which represents the dominant logic of appropriateness of the corporate reporting field. As such, the final version of the regulation represents a hybridisation of the corporate reporting practice in the sense that it was formulated to address climate change, but from the perspective of the market logic. In this regard, while Young (2014) has discussed the potentially "anti-political" nature of financial reporting standard-setting, we show a different dynamic in the case of corporate reporting regulation. We demonstrate the implicit political role of the FRC in shaping

the regulatory-policy loop which extended the logic of appropriateness of the field toward any new actors (e.g. environmental NGOs) who seek to join the regulatory space. In other words, we suggest that the work of the corporate reporting regulator, consciously or otherwise, serves to extend the market logic underlying the corporate reporting practice toward other societal domains (Greenwood et al, 2011; Thornton et al, 2012), thereby hybridising the corporate reporting practice, rather than maintaining the 'purity' of such practice (cf. Young, 2014).

5.6 Conclusion

To conclude, we delineate the limitations of this paper and identify some ideas for future research to complement the insight offered from this study. The focus of our analysis on archival data is largely consistent with the direction of previous studies on regulatory space. The focus of our analysis on the public consultation on "The Future of Narrative Reporting" made it feasible to inspect each document in detail. However, it also limited our analysis from the richness of the organisational context, for instance we identify that the response letters from listed companies were mostly written by the Company Secretary whose view may not fully represent the view of other important actors in a company. Additionally, the role of the FRC in shaping the regulatory debate would almost certainly go beyond the thought leadership role identified in this paper. Indeed, it was stated in the public consultation documents that the BIS was coordinating their efforts in conjunction with the FRC. Similarly, there were also some anecdotal evidence of coordination between some of the 'centrist' NGOs and the policy makers that were also not captured in the response letters. As such, our findings and arguments are caveated by the limited scope of our analysis.

Yet, such limitation creates areas for future research for complementing the insight offered in this paper. Our study illustrates the continuing importance of the national corporate reporting regulator (see also Canning & O'Dwyer, 2013), especially with regard to the non-financial reporting practices. As such, it would be useful to consider the extent to which the activities of the corporate reporting regulator are affected by the widening of the scope of corporate reporting that, among other things, entails the entrance of new actors (such as NGOs) into the regulatory space. One possible way to examine this issue would be to conduct an in-depth case study of the activities of the corporate reporting regulator with regards to the regulation of non-financial reporting practices. Additionally, such a study could also benefit from the comparison with the activities of the international financial reporting standard-setters whose focus on non-financial reporting issues tend to be limited toward providing a non-binding guidance. As such, it would be equally insightful to conduct a comparative case study between the activities of the national corporate reporting regulator and the international financial reporting standard-setters to illuminate the recursive relationship between the dynamics of the regulatory space and the way that the regulators define their institutional identity (Young, 1995; MacDonald & Richardson, 2004).

Chapter 6
General discussion

This chapter discusses the insights that could be surmised from this study regarding the role of carbon accounting and reporting practices in realigning corporate purpose. Then, it delineates some general insights that could be drawn from this study to inform the wider social and environmental accounting research.

6.1 Practical implication

Based on the three papers which are presented, I would suggest that the carbon accounting and reporting practices play different, yet interrelated roles from the perspectives of corporations, voluntary regulatory bodies, and regulators in redefining corporate practices. From the corporate perspective, the study suggests that the carbon accounting and reporting practices played the role of operationalising the abstract demand for companies to address climate change, transpiring from the pressures exerted by the stakeholders and the regulators. The paper shows that these practices enabled the managers to identify the common ground where the environmental and profitability objectives intersected. For instance, the first paper (Chapter 3: Corporate perspective) shows that the carbon accounting and reporting practices enabled the sustainability managers to identify plausible ways for minimising the carbon footprint while simultaneously addressing important business concerns, such as reducing the energy cost, enhancing the customer experience, stimulating innovation, and protecting the corporate reputation. Then, from the voluntary regulatory body's perspective, the study suggests that the carbon accounting

and reporting practices played the role of mediating the voluntary regulatory bodies' concern about climate change by providing a common ground where the voluntary regulatory bodies could engage in a pragmatic negotiation with companies and the regulators. For instance, the second paper (Chapter 4: Voluntary regulatory body's perspective) shows that the CDSB's focus on advancing the practice of climate change reporting enabled the organisation to engage the attentions of many major corporations as well as the corporate reporting regulators. And, from the regulatory perspective, the study suggests that the carbon accounting and reporting practices played the role of extending the influence of the corporate reporting regulator by providing a common ground for the regulator to reconcile the conflicting interests of the corporations and the NGOs. For instance, the third paper (Chapter 5: Regulatory perspective) demonstrates the subtle role of the FRC in supporting the legislative process which subsequently led to the enactment of the climate change reporting regulation in the UK by shaping the regulatory debate in a way that would secure the supports of both the business and the NGOs communities. As such, I would suggest that the potential of carbon accounting and reporting practices in redefining the corporate practices lie on their capacities for providing common grounds for corporations, NGOs, and regulators alike to make sense of each other's demands, practices, and interests. Thereby, enabling these actors to initiate collective efforts for redefining the understanding of the responsibility of corporations in addressing climate change (Bebbington & Larrinaga, 2014; Thomson et al, 2014).

However, the examination has also uncovered some practical constraints that could potentially inhibit corporations, voluntary regulatory bodies, and regulators to fully realise the potential of carbon accounting and reporting practices. From the corporate perspective, the lack of any coherent target imposed by the voluntary regulatory

bodies or the regulator created a disjuncture between the corporate efforts to manage the carbon footprint and the societal objective of mitigating the impact of climate change. For example, the first paper shows that while most of the sample companies had established internal carbon targets to minimise the carbon emissions arising from their operations, most of these companies experienced difficulties in setting targets and establishing concrete plans for addressing the carbon emissions which arose outside of the organisational boundary, i.e. upstream emissions from the supply chain and downstream emissions from the customers. In addition, the study shows that the few sustainability managers who decided to address those upstream and downstream emissions were largely driven by their own intrinsic concerns given the virtually non-existent external coordinating mechanism. Then, from the voluntary regulatory body's perspective, the lack of a coherent institutional support from the regulatory authorities created a disjuncture between the focus of the voluntary regulatory body and the societal objective of mitigating the impact of climate change. For example, the second paper shows that while the CDSB played an influential role in reshaping the corporate reporting practices, the lack of support from the authoritative institutions necessitated the organisation to focus on maintaining its legitimacy, rather than to focus on issues relating to the use of such climate change related information. And, from the regulatory perspective, the lack of any coherent policy intent that was amenable to both companies and NGOs created a disjuncture between the regulatory objective and the societal objective of mitigating the impact of climate change. For example, the third paper shows that despite the enactment of the climate change disclosure regulation, the final version of the regulation largely represented a compromise which did not directly address the issue of corporate responsibility of climate change. In this regard, this study suggests that although the carbon accounting and reporting practices have the potential of enabling inter-organisational coordination, it would not necessarily allow companies, voluntary regulatory bodies,

and regulators to properly address the intended societal objective, in the absence of a coherent idea of what such societal objective constitutes (Bebbington & Larrinaga-Gonzalez, 2008; Bebbington & Larrinaga, 2013). As such, this study suggests that the role of carbon accounting and reporting practices in redefining corporate practices could be amplified by a further specification of science-based corporate targets, a further support from the relevant institutional authorities, and a further commitment from the government to refine the current climate change policies.

6.2 Research implication

I would suggest that this study also provides further insights to the broader understanding of social and environmental accounting by demonstrating the role of carbon accounting and reporting practices in providing common grounds for companies, voluntary regulatory bodies, and regulators to negotiate and reach a compromise to enable immediate actions to be undertaken in mitigating the impact of corporate activities on climate change. In this sense, the study argues that social and environmental accounting practice has a role to play in bringing together different actors regardless of their diverse interests and providing them with an abstract space to charter a new ground whereby their conflicting interests could be potentially reconciled (Miller & Power, 2013). This multi-dimensional perspectives of the role of social and environmental accounting could be contrasted from the perspectives in the current literature which have attributed social and environmental accounting as a tool for holding companies accountable to the stakeholders (Gray, 1992; 2010; Cooper & Owen, 2007; Archel et al, 2009; Spence, 2009; Tregidga et al, 2014) or to the shareholders (Henri & Journeault, 2010; Gond et al, 2012; Arjalies & Mundy, 2013). The perspective that social and environmental accounting has the potential of creating stakeholder accountability has led to the focus on the 'legitimacy theory' (Deegan,

2002; Patten, 2002; Cho & Patten, 2007; Archel et al, 2009; Cho et al, 2012) or the political theory (Spence, 2009; Archel et al, 2011; Andrew & Cortese, 2013). Although this study does not disagree with these theories in principle, it argues that such views are only valid insofar as we can establish that there is a clearly defined societal objective. However, this study demonstrates that in absence of a clearly defined societal objective, we may need to reconsider, for example, whether our perception of the 'failure' of certain social and environmental accounting practices is derived from our own theoretical assumption (see also Unerman & Chapman, 2014). On the other hand, the perspective that social and environmental accounting has the potential of facilitating companies to be both profitable and 'sustainable' has led to the focus on its role in enhancing the management control system of companies (Henri & Journeault, 2010; Gond et al, 2012; Arjalies & Mundy, 2013) as well as the 'institutional entrepreneurship' of the voluntary regulatory bodies in facilitating the achievement of those dual objectives (Kolk et al, 2008; Etzion & Ferraro, 2010; Levy et al, 2010). I would suggest that this study builds on and extends these perspectives by highlighting the recursive relationship of the activities of corporations, voluntary regulatory bodies, and regulators in collectively realigning the purpose of corporations with the wider interest of the society (see also Mayer, 2016; White et al, 2017).

Finally, although this study has provided some insights on the role of social and environmental accounting, I would acknowledge that the scope of this study is limited to the perspectives of corporations, voluntary regulatory bodies, and regulators. In this regard, this study may have overlooked the perspectives of other important actors, particularly the potential users of social and environmental information. Prior literature has suggested that social and environmental information has not been extensively used neither by investors to inform their investment decision-making

(Levy et al, 2010; Humphrey et al, 2017) nor by activists to challenge certain corporate practices (Kolk et al, 2008; Levy et al, 2010). However, the evidence provided by some studies (Dhaliwal et al, 2011; 2012; Matsumura et al, 2014; Barth et al, 2017) on the capital market effect of social and environmental accounting seems to suggest that there are some mechanisms through which such information is being impounded into the capital market. As such, I would suggest that, in future, it would be useful to extend the study to explore the perspective of the investors. For instance, an anecdotal evidence from this study suggests that although there may still be small numbers of investors who specifically asked for social and environmental information, they may regardless play an important role in justifying the role of the sustainability department in companies. In relation, these small number of actors may prove to be pivotal in constructing a new standard of practice for incorporating social and environmental information into investment practices. It would also be useful to extend the scope of the study to explore any other potential users, such as the environmental activists and the NGOs. For instance, another anecdotal evidence from this study suggests that although those voluntary regulatory bodies who are responsible for issuing sustainability reporting guidelines did not tend to engage in a direct campaign against corporations, they were often involved in campaigns, together with other NGOs, in shaping the wider public opinion regarding certain societal issues. Such type of campaign may prove to be key in mobilising the social and environmental information against those companies who decided to disregard their social and environmental responsibility. As such, I would suggest that there is still much to study on the subject of social and environmental accounting and I hope that this thesis would prove to be useful in advancing further research in this area.

Appendices

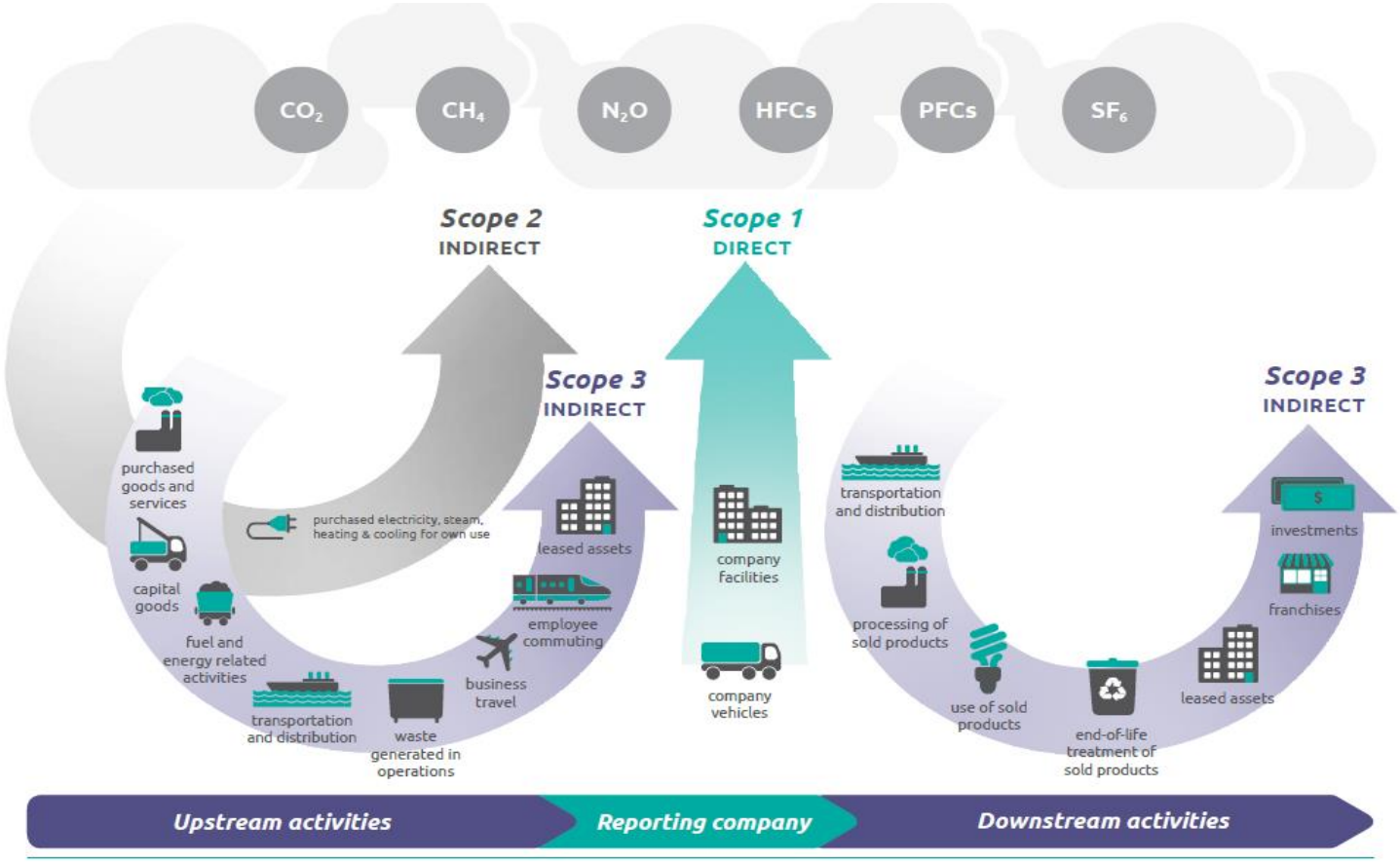
Appendix 1A. Interview questions

Part 1: General
1) What defines your role as a sustainability manager?
2) What aspects of your background and expertise are essential in your current role?
3) How is your role perceived in the company?
4) Why was the role created originally?
5) How does your role fit within the bigger picture of the company?

Part 2: Carbon emissions
6) Why does your company have a commitment to reduce carbon emissions?
7) What is the most salient risk posed by carbon emissions to the ongoing profitability of your company?
8) Can you tell me about the process of assessing climate risk in your company?
9) Can you tell me about the process by which your carbon target is,
    a) Set?
    b) Implemented and monitored?
    c) Reported?
10) Which particular regulations affect the carbon-related data collected by the company?
11) What is the impact of carbon emissions policies, such as the levy under the CRC Energy Efficiency Scheme?
12) Does your company report on carbon emissions beyond the legal reporting requirement?

Part 3: External relations
13) Does your company appoint an external auditor for carbon-related data?
14) How engaged are your customers on matters relating to carbon reduction?
15) How engaged are your suppliers on matters relating to carbon reduction?

Appendix 1B. GHG reporting categories – Scope 1, 2, and 3



Source: GHG Protocol (2011, p. 31)

Appendix 2A. List of acronyms

A4S – The Prince's Accounting for Sustainability Project

CCRF – Climate Change Reporting Framework

CDP – Carbon Disclosure Project

CDSB – Climate Disclosure Standards Board

CERES – Coalition for Environmentally Responsible Economies

FSB – Financial Stability Board

GRI – Global Reporting Initiative

IETA – International Emissions Trading Association

IIRC – International Integrated Reporting Council

SASB – Sustainability Accounting Standards Board

TCFD – Task force on Climate-related Financial Disclosures

TWG – Technical Working Group

WBCSD – World Business Council on Sustainable Development

WEF – World Economic Forum

WRI – World Resources Institute

Appendix 3A. Detail of the respondents

				Stance	
No	**Organisation**	**Group**	**Type**	**Initial Consultation**	**Follow up consultation**
1	ACCA	Accounting professionals	Accounting associations	-	Only when material
2	Chartered Institute of Internal Auditors	Accounting professionals	Accounting associations	-	No comment
3	CIMA	Accounting professionals	Accounting associations	No comment	Only when material
4	ICAEW	Accounting professionals	Accounting associations	Not relevant	Only when material
5	ICAS	Accounting professionals	Accounting associations	Not relevant	No comment
6	BDO	Accounting professionals	Accounting firms	-	Only when material
7	Grant Thornton	Accounting professionals	Accounting firms	Not relevant	Only when material
8	Mazars	Accounting professionals	Accounting firms	No comment	Only when material
9	Deloitte	Accounting professionals	Big 4	Only when material	Only when material
10	Ernst & Young	Accounting professionals	Big 4	Only when material	Only when material
11	KPMG	Accounting professionals	Big 4	Only when material	-
12	PwC	Accounting professionals	Big 4	Only when material	Only when material
13	100 Group	Business communities	Business associations	Not relevant	Not relevant
14	British Bankers' Association	Business communities	Business associations	-	No comment
15	British Property Federation	Business communities	Business associations	Only when material	-
16	Confederation of British Industry	Business communities	Business associations	No comment	Only when material
17	GC100	Business communities	Business associations	Not relevant	Not relevant
18	ICC UK	Business communities	Business associations	-	Only when material
19	Institute of Directors	Business communities	Business associations	No comment	Only when material
20	Quoted Companies Alliances	Business communities	Business associations	No comment	Only when material
21	Addison	Business communities	Consultancies	Only when material	Only when material
22	Black Sun	Business communities	Consultancies	Only when material	Only when material
23	Capita Company Secretarial Services	Business communities	Consultancies	-	Only when material
24	Charles Taylor Consulting	Business communities	Consultancies	-	No comment
25	Prism Cosec	Business communities	Consultancies	Only when material	Not relevant
26	Radley Yeldar	Business communities	Consultancies	Only when material	Only when material

27	SROI Network	Business communities	Consultancies	-	Only when material
28	Total Eco Management Chartered Consultancy	Business communities	Consultancies	-	Relevant
29	Trucost	Business communities	Consultancies	Only when material	-
30	Waller & Associates Ltd	Business communities	Consultancies	-	No comment
31	WorkMatters Consulting	Business communities	Consultancies	Only when material	-
32	Barclays plc	Business communities	Listed companies	-	Not relevant
33	BP plc	Business communities	Listed companies	-	Not relevant
34	British American Tobacco plc	Business communities	Listed companies	Not relevant	Not relevant
35	BT Group plc	Business communities	Listed companies	No comment	Only when material
36	Capital & Counties Properties plc	Business communities	Listed companies	-	No comment
37	Carillion plc	Business communities	Listed companies	-	No comment
38	Diageo plc	Business communities	Listed companies	-	Not relevant
39	GKN plc	Business communities	Listed companies	-	No comment
40	GSK plc	Business communities	Listed companies	No comment	Only when material
41	Hammerson plc	Business communities	Listed companies	No comment	-
42	Hargreaves Lansdown plc	Business communities	Listed companies	-	No comment
43	HSBC plc	Business communities	Listed companies	-	Only when material
44	ITV plc	Business communities	Listed companies	No comment	-
45	Legal & General Group plc	Business communities	Listed companies	Only when material	Only when material
46	Marks & Spencer plc	Business communities	Listed companies	-	No comment
47	Premier Farnell plc	Business communities	Listed companies	-	No comment
48	Rio Tinto plc	Business communities	Listed companies	-	Not relevant
49	Royal Bank of Scotland plc	Business communities	Listed companies	-	Only when material
50	Sabien Technology Group plc	Business communities	Listed companies	No comment	-
51	SABMiller plc	Business communities	Listed companies	-	Not relevant
52	Serco Group plc	Business communities	Listed companies	No comment	-
53	Smith & Nephew plc	Business communities	Listed companies	-	Not relevant
54	Standard Chartered plc	Business communities	Listed companies	-	Only when material
55	Tesco plc	Business communities	Listed companies	No comment	No comment
56	Vodafone Group plc	Business communities	Listed companies	-	Only when material
57	Xstrata plc	Business communities	Listed companies	-	Only when material

58	eFactory Ltd	Business communities	Other companies	-	No comment
59	EIRIS	Business communities	Other companies	-	Only when material
60	Elementus	Business communities	Other companies	Only when material	-
61	FutureValue	Business communities	Other companies	Only when material	Only when material
62	Investis	Business communities	Other companies	Not relevant	-
63	The Virtuous Circle Ltd	Business communities	Other companies	Only when material	-
64	Aviva Investors	Investor communities	Institutional investors	Only when material	-
65	Aviva plc	Investor communities	Institutional investors	-	Only when material
66	BlackRock	Investor communities	Institutional investors	-	No comment
67	Church of England Ethical Investment Advisory Group	Investor communities	Institutional investors	-	Only when material
68	Environment Agency (Active Pension Fund)	Investor communities	Institutional investors	Only when material	-
69	F&C Investments Ltd	Investor communities	Institutional investors	Only when material	Only when material
70	Henderson Global Investment	Investor communities	Institutional investors	Only when material	-
71	Hermes	Investor communities	Institutional investors	Only when material	Only when material
72	Jupiter Asset Management Ltd	Investor communities	Institutional investors	-	Only when material
73	Legal & General Investment Management	Investor communities	Institutional investors	Only when material	Only when material
74	Newton Investment Management	Investor communities	Institutional investors	Only when material	-
75	Railpen Investments	Investor communities	Institutional investors	Only when material	Only when material
76	South Yorkshire Pensions Authority	Investor communities	Institutional investors	-	Only when material
77	The Co-operative Asset Management	Investor communities	Institutional investors	Only when material	Only when material
78	Universities Superannuation Scheme	Investor communities	Institutional investors	Only when material	Only when material
79	Association of British Insurers	Investor communities	Investor Associations	Only when material	Only when material
80	Association of Investment Companies	Investor communities	Investor Associations	Only when material	Not relevant
81	CFA Society	Investor communities	Investor Associations	-	Not relevant
82	Governance for Owners	Investor communities	Investor Associations	Only when material	-
83	Investment Management Association	Investor communities	Investor Associations	No comment	Only when material
84	Local Authority Pension Fund Forum	Investor communities	Investor Associations	Only when material	Only when material
85	National Association of Pension Funds	Investor communities	Investor Associations	Only when material	-
86	PIRC	Investor communities	Investor Associations	Only when material	-
87	UK Individual Shareholders Society	Investor communities	Investor Associations	-	No comment
88	UK Shareholders' Association	Investor communities	Investor Associations	No comment	Only when material

89	UK Sustainable Investment and Finance Association	Investor communities	Investor Associations	-	Only when material
90	London School of Business & Finance	Other	Academia	Only when material	-
91	Portsmouth Business School	Other	Academia	No comment	-
92	University of Glasgow	Other	Academia	No comment	-
93	Aldersgate Group	Other	NGOs	Only when material	-
94	Amnesty International	Other	NGOs	Relevant	-
95	Business in the Community	Other	NGOs	Only when material	-
96	CAFOD	Other	NGOs	Relevant	-
97	Carbon Tracker	Other	NGOs	-	Only when material
98	CDSB & CDP	Other	NGOs	Only when material	Only when material
99	ClientEarth	Other	NGOs	Relevant	Relevant
100	CORE Coalition	Other	NGOs	Relevant	Relevant
101	FairPensions	Other	NGOs	Only when material	Relevant
102	IIGCC	Other	NGOs	-	Only when material
103	Tomorrow's Company	Other	NGOs	Only when material	-
104	WWF UK	Other	NGOs	Only when material	Only when material
105	30% Club	Other	Other associations	-	No comment
106	Association of Corporate Treasurers	Other	Other associations	-	Only when material
107	British Safety Council	Other	Other associations	Only when material	-
108	British Standards Institution	Other	Other associations	Only when material	-
109	Chartered Institute of Building	Other	Other associations	-	Only when material
110	Chartered Institute of Personnel and Development	Other	Other associations	Only when material	No comment
111	Chartered Management Institute	Other	Other associations	Only when material	-
112	ICSA	Other	Other associations	Only when material	Only when material
113	ICSA Registrars Group	Other	Other associations	-	Only when material
114	IEMA	Other	Other associations	Only when material	-
115	Institute of Occupational Health and Safety	Other	Other associations	Only when material	-
116	Institute of Practitioners in Advertising	Other	Other associations	Only when material	-
117	Investor Relations Society	Other	Other associations	No comment	Only when material
118	Law Society	Other	Other associations	-	No comment
119	Strategic Planning Society	Other	Other associations	-	No comment
120	The City of London Law Society	Other	Other associations	No comment	-
121	The Cooperation Incubator	Other	Other associations	Only when material	-

122	UK Commission for Employment and Skills	Other	Other associations	Only when material	-
123	Roger Morton	Other	Other personal	-	No comment
124	Charity Commission for England and Wales	Other	Regulators (other)	-	Relevant
125	London Stock Exchange Group	Other	Regulators (other)	-	No comment
126	Communication Workers Union	Other	Trade union	Relevant	-
127	Trades Union Congress	Other	Trade union	Relevant	Relevant
128	Unite	Other	Trade union	-	Relevant
129	FRC	Regulator	Regulator	Only when material	Only when material
	Total			80	93

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