Chapter 2: Literature Review

2.1 Introduction

This chapter reviews prior literature relevant to the study. As this study is concerned with organisational sustainability\(^6\) and sustainability accounting, these concepts are discussed in the first section. The main focus of this chapter is the literature concerning sustainability accounting and it provides a discussion of studies which consider the emergence, evolution and embedding of sustainability accounting. This is completed in order to portray the context within which the research is placed and to highlight its contributions to the literature.

2.2 Conceptualising Sustainability

Sustainability is a complex and contested concept that can be viewed from a planetary, ecological, societal and organisational perspective (Gray, 2010). Bebbington and Larrinaga (2014, p. 2) suggest that sustainability is the end point of a process of sustainable development. The Brundtland report offers a seminal concept of sustainable development as development that meets “the needs of the present without compromising the ability of future generations to meet their own needs” (UNWCED, 1987, p. 8). This concept concerns human impacts on both natural and social systems (Gray, 2010; Bebbington and Larrinaga, 2014). It involves “the preservation and/or maintenance of a finite and crucial environment; and incurs some duty of social justice – between and within generations” (Gray, 2010, p. 53). Where we currently stand regarding sustainability, or moving away from unsustainability (Bebbington and Larrinaga, 2014, p. 396), at any level, is the subject of extensive debate (Gray, 2010). Sustainability at the level of corporate organisations is no exception to this. The concept of organisational sustainability is discussed in the next section.

2.2.1 Organisational Sustainability

Bebbington and Larrinaga (2014, p. 396) conceptualise organisational sustainability as “actions that organisations might undertake in accordance with the principles of sustainable

\(^{6}\) The term sustainability is often used interchangeably or in conjunction with other related terms such as CSR, corporate citizenship, corporate social responsiveness, corporate philanthropy and corporate social performance (Silberhorn and Warren, 2007). This literature review encompasses work which uses a variety of these terms.
development.” The extent and type of actions required for an organisation to achieve a state of sustainability is not yet fully understood in practice or in the literature (van Marrewijk, 2003; van Marrewijk and Werre, 2003). Nonetheless, organisations, particularly for-profit companies, are subject to increasing socio-political pressures to be, or appear to be, more sustainable or less unsustainable (Berrone and Gomez Mejia, 2009; Berrone et al., 2010; Cho, Roberts et al., 2010; Cho et al., 2012; Thomas and Lamm, 2012; Höllerer, 2013). Individual companies vary in their responses to these external pressures for sustainability ranging from outright rejection, through ceremonial compliance (without substantive change), to substantive engagement (Berrone et al., 2010; Cho et al., 2012; Höllerer, 2013; Pondeville et al., 2013). However, a growing number of companies claim that they are integrating sustainability concerns into strategic and operational decision making processes (Thomas and Lamm, 2012) and are producing (claimed) accounts and narratives of sustainability (Gray, 2010).

The intentions behind, and the adequacy of, these corporate actions towards sustainability are subject to extensive questioning and debate (Gray, 2010; Thomas and Lamm, 2012; Tregidga et al., 2013). The emerging research on organisational sustainability, mirroring work in the related field of CSR (corporate social responsibility), suggests that there are weak and strong forms of organisational sustainability (Thomas and Lamm, 2012). Weak sustainability is concerned with a pragmatic and restrictive business case rationale for sustainability, and organisational actions are limited to win-win opportunities such as eco-efficiency and design for the environment (Thomas and Lamm, 2012; Tregidga et al., 2013; Bebbington and Larrinaga, 2014; Thomson et al., 2014). Companies engaging with this concept of sustainability would remain primarily concerned with profitability and economic growth (Thomas and Lamm, 2012; Tregidga et al., 2013). This approach to sustainability is viewed as allowing individual companies and the business community as a whole to subvert the (potentially) radical nature of sustainability and to continue conducting business as usual (Spence, 2009; Gray, 2010; Archel et al., 2011; Burritt, 2012; Thomas and Lamm, 2012; Tregidga et al., 2013; Bebbington and Larrinaga, 2014; Thomson et al., 2014). In contrast, strong organisational sustainability would “require firms to operate individually and collectively in such a manner that the planet’s carrying capacity is not exceeded. Profit-making would no longer be a company’s primary objective, though it would remain a necessary constraint … Overall value creation would be the over-riding imperative even if
substantial portions of that value were in the form of social and environmental capital (i.e., positive externalities) that could not be appropriated by the firm and its owners” (Thomas and Lamm, 2012, p. 194). This normative, ethics-based rationale for sustainability requires cognitive, strategic, structural and procedural changes at the level of individual organisations and to our social, political and economic systems as a whole (Thomas and Lamm, 2012).

2.2.2 Accounting for Sustainability

Engaging with either a weak or a strong form of organisational sustainability involves (possibly limited and inadequate) organisational activities concerned with environmental and social issues and is usually accompanied by accounts and narratives of these activities. The phrases *sustainability accounting* or *accounting for sustainability* are used here as broad terms to encompass accounts or narratives of business sustainability (Gray, 2010) that may be produced for either external or internal audiences. Numerous sustainability-related accounting activities have been developed in recent years, including biodiversity audits, carbon accounting, corporate social reporting, energy costing, full-cost accounting, shadow accounts, the sustainable balanced scorecard and the connected reporting framework (Thomson et al., 2014). Companies communicate their sustainability activities and policies through a wide variety of channels. Sustainability-related information is frequently reported in corporations’ annual reports, standalone sustainability reports or websites. If a company produces a standalone report, it may be titled a CSR report, an environmental report, sustainability report or triple bottom line report (Milne and Gray, 2007). External sustainability reporting is not yet regulated in the same way as financial reporting. There are, however, a number of voluntary reporting guidelines that have been developed to serve as frameworks for sustainability reporting and auditing. The most prominent standards include the Global Reporting Initiative’s (GRI) Sustainability Reporting Guidelines, AccountAbility’s AA1000 standard, the European Eco-management and Auditing Standard (EAS), the ISO 14000 environmental management standard and the Connected Reporting Framework. Even with these developments, Bebbington and Larrinaga (2014) suggest that robust accounts of organisational (un)sustainability have yet to be realised. Thus, organisational sustainability and accounting for sustainability are evolving and contested concepts and processes, in both practice and the literature (Tregidga et al., 2013; Byrch et al., 2015), and longitudinal engagement-based studies are likely to yield insights into how organisational sustainability practices and accounting unfold.
2.3 The Emergence, Evolution and Embedding of Sustainability Accounting

Research in this area has ebbed and flowed over a number of decades; however, there has been a sustained surge in academic work in the area since the 1990s (Deegan, 2002), with a focus on corporate disclosure studies and deductive theorising (Moore, 2013). Much of the research is informed by, and contributes to, the broad debate on corporate sustainability, transparency and accountability (Tinker et al., 1991; Cooper, 1992; Owen et al., 1997; Gray, 2002a, 2002b, 2010; Cooper et al., 2004; Spence, 2007, 2009; Archel et al., 2011) and in particular is concerned with the potential of sustainability accounting to act as a catalyst for change at an organisational level (Dillard, 1991; Tinker et al., 1991; Cooper, 1992; Gray, 1992, 2001, 2006; Willmott et al., 1993; Power, 1994; Gray et al., 1995; Bebbington, 1997; Gallhofer and Haslam, 1997; Newton and Harte, 1997; Owen et al., 1997; Everett and Neu, 2000; Owen et al., 2000; Neu et al., 2001; Deegan, 2002; Adams, 2004; Cooper et al., 2004; Parker, 2005; Adams and McNicholas, 2007; Archel et al., 2011). There is a broad concern among sustainability accounting scholars that voluntary sustainability reports have little to do with sustainability and instead are attempts to capture and construct the discourse around sustainability in such a way as to maintain the status quo (see, for example, Milne et al., 2006; Milne and Gray, 2007; Spence, 2007, 2009; Gray, 2010; Archel et al., 2011; Tregidga et al., 2013; Bebbington and Larrinaga, 2014). Various forms of corporate sustainability-related activities and accounting have been criticised as being an attempt by business to avoid regulation and manipulate public opinion (Tinker et al., 1991; Newton and Harte, 1997; Everett and Neu, 2000). Companies’ sustainability reports are perceived as part of a strategy aimed at gaining, maintaining or repairing a company’s reputation and social acceptance without it having to adjust its behaviour (Buhr, 1998; Neu et al., 1998; Deegan et al., 2002; Milne and Patten, 2002). This debate has given rise to a large number of studies that have examined external legitimacy as the primary motive for voluntary external sustainability reporting and to a smaller, but growing number of studies that engage with organisations and organisation members to explore sustainability accounting in practice (Contrafatto, 2014).

2.3.1 The Emergence of External Sustainability Reporting

A range of theories have been used to explain the emergence of voluntary external corporate sustainability reporting; the most common among these is external legitimacy theory
Internal and external legitimacy theory is more extensively discussed in the next chapter; this section focuses on external legitimacy theory and sustainability reporting. This vein of legitimacy theory conceptualises legitimacy as the need for organisations, individually or collectively, to convince an external audience that they are acting within the boundaries of broad social values and norms (see, for example Guthrie and Parker, 1989; De Villiers and Van Staden, 2006; Golant and Sillince, 2007). Extending this concept to corporate sustainability, a company may use sustainability-related activities, and in particular reporting on those activities, as a tool to gain, maintain or repair its external legitimacy (Guthrie and Parker, 1989; Buhr, 1998; Neu et al., 1998; Deegan et al., 2002; Milne and Patten, 2002). A range of studies using a variety of methods have examined legitimacy theory as an explicator of social disclosures (Guthrie and Parker, 1989; Neu et al., 1998; Deegan et al., 2000; Campbell, 2000; Deegan, 2002; Deegan et al., 2002; Milne and Patten, 2002; Campbell et al., 2003 Cho, 2009; Cho, Roberts et al., 2010; Cho et al., 2012). These studies have produced mixed results. Some have found evidence consistent with legitimacy theory as an explanatory factor for sustainability reporting (Neu et al., 1998; Buhr, 1998; Deegan et al., 2000; Deegan et al., 2002; Milne and Patten, 2002; O’Donovan, 2002; Cho, 2009). Others have contested the explanatory power of legitimacy theory (Campbell, 2000; Wilmhurst and Frost, 2000; O’Dwyer, 2003a; De Villiers and Van Staden, 2006). Yet there remains disagreement over the link between legitimacy theory and sustainability reporting (Clarkson et al., 2008), and there are suggestions that the reliance on external legitimacy theory as a broad theoretical perspective has become progressively less insightful (Bebbington et al., 2008; Unerman, 2008; Lodhia and Jacobs, 2013).

Alternative perspectives on reporting such as reputation risk management (Bebbington et al., 2008) or institutional theory (Bebbington et al., 2009) have also emerged. Using the reputation risk management perspective Bebbington et al. (2008) examine a specific instance of CSR reporting (Shell’s 2002 CSR report). They suggest that “it may well be the case that the Shell report is as much to do with the manufacture of the organisation’s identity as it is with the external management of reputation” (Bebbington et al., 2008, p. 350). However, the focus of their study remained on the external determinants of sustainability reporting such as the need to maintain the company’s reputation or regulation pressures. Recent research by Clarkson et al. (2008), Cho, Freedman et al., (2010), Cho, Roberts et al., (2010) and Cho et al., (2012) suggests a diversity of practice in relation to environmental performance and
reporting that cannot be explained by reference to socio-political pressures and external legitimacy alone.

### 2.3.2 Diversity in Corporate Sustainability Reporting

Clarkson et al. (2008) take a sample of 191 US firms in environmentally sensitive industries and examine their purely voluntary disclosures (standalone social and environmental reports and related web-based disclosures) in 2003. They consider both legitimacy theory and voluntary disclosure theory as possible explanations for the extent and nature of these disclosures. Their interpretation of external legitimacy theory suggests that worse performing firms will increase their voluntary disclosures in order to change stakeholders’ perceptions of their performance, whereas voluntary disclosure theory suggests the opposite – that better performing firms will seek to convey their superior type through greater levels of voluntary disclosure of objective (hard) performance indicators than worse performing firms who will choose to remain silent and disclose less. Clarkson et al. (2008) were seeking to provide a definitive answer as to whether external legitimacy theory or voluntary disclosure theory best explains the nature or extent of voluntary disclosures, but their results suggest that neither theory is sufficient in its own right. They found that, in line with voluntary disclosure theory, better performing firms choose to make more voluntary disclosures of hard data. Voluntary disclosure theory does not, however, explain the nature of the voluntary disclosures made by worse performing firms. Rather than remaining silent, as would be expected with voluntary disclosure theory, worse performing firms make soft claims about being committed to the environment. Thus, this study suggests a diversity of practice in relation to the external reporting of sustainability among these firms, which cannot be definitively explained by reference to either theory alone. This diversity of reporting practice is also evident in the studies of Cho, Freedman et al., (2010), Cho, Roberts et al., (2010) and Cho et al., (2012).

In a series of studies of U.S. publicly listed companies, Cho, Freedman et al., (2010), Cho, Roberts et al., (2010) and Cho et al., (2012) present empirical support for the arguments that environmental disclosures seem to be motivated by external legitimacy concerns, and are used as impression management strategies by the worst environmental performers, and that in some ways these strategies are effective. Cho, Freedman et al., (2010) build on the work of Clarkson et al. (2008) in this study of the environmental capital expenditures of 119 environmentally exposed U.S. firms. They consider both legitimacy theory and voluntary disclosure theory as motives for the voluntary disclosure of these expenditures. They contend
that legitimacy theory provides a better explanation of these disclosures, as the disclosure of environmental capital expenditure is associated with poorer environmental performance. In addition, although both non-disclosing and disclosing firms are improving their environmental performance, disclosing firms are not improving at a faster pace than non-disclosing firms.

In their study of impression management in US companies, Cho, Roberts et al., (2010) suggest that there are self-serving biases present in the language and verbal tone used in corporate environmental disclosures and that the extent of the bias is related to the corporation’s environmental performance. On the basis of an analysis of annual financial reports and Kinder, Lydenberg, Domini (KLD) Research and Analytics’ environmental performance scores for a cross-sectional sample of 190 U.S. firms, they found empirical support for the hypothesis that the environmental disclosures of the worst performing firms exhibited significantly more bias than those of the best performing firms. In particular, the disclosures of the worst performing firms were found to focus more on reporting good news and blurring responsibility for poorer performance than those of better performing firms. Finally, in their study of U.S. corporate environmental reputations, Cho et al. (2012) suggest that voluntary environmental disclosures appear to mediate the effect of poor environmental performance on a corporation’s environmental reputation. In this study of 92 US firms in environmentally sensitive industries, they examine the relationship between the Trucost environmental performance scores, their Newsweek environmental reputation rankings and membership of the Dow Jones Sustainability Index (DJSI). They found that the Trucost environmental scores were negatively related to both the reputational scores and membership of the DJSI, suggesting that voluntary environmental disclosures can shield a company from reputational damage due to poor environmental performance.

There is a tendency, at times, within the literature on sustainability accounting to treat corporations as a homogenous mass with a uniform (and poor) response to external pressures for greater action, accountability and disclosure in relation to sustainability (see, for example, Tinker et al., 1991; Spence, 2007, 2009; Archel et al., 2011). Taken at this level, progress towards corporate sustainability and accounting for sustainability can be viewed as slow and perhaps unachievable (Gray, 2010). However, organisations are not homogenous and have diverse motivations for, and experiences with, sustainability and accounting for sustainability (van Marrewijk and Werre, 2003; Dyer Jr. and Whetten, 2006; Berrone et al., 2010; Cho,
Roberts et al., 2010; Cho et al., 2012; Lodhia and Jacobs, 2013). These studies (Clarkson et al., 2008; Cho, Freedman et al., 2010; Cho, Roberts et al., 2010; Cho et al., 2012) have provided useful empirical evidence to support the argument that companies with a comparatively poor environmental performance are motivated by external legitimacy concerns to engage in impression management through external sustainability reporting and in doing so can create a legitimacy facade (Maclean and Behnam, 2010; Thomas and Lamm, 2012), shielding themselves from reputational damage due to their performance. However, they have also shown that not all of the companies in their samples choose to pursue these strategies. Better performing environmental companies engage in more purely voluntary disclosures (standalone reports and web-based disclosures), less regulatory driven disclosure in annual reports and less impression management. They are less likely to pursue external recognition (membership of the DJSI) than worse performing firms and are also less likely to be awarded external recognition (Newsweek rankings). External legitimacy provides an insufficient explanation of the behaviour of these companies. The organisational structures and processes and the concerns of internal stakeholders may provide a “more powerful explanation” (Lodhia and Jacobs, 2013, p. 610) for the production of environmental reports than that of external legitimacy (Adams, 2002; Ball, 2005; Contrafatto, 2014). However, our knowledge of how and why sustainability activities and accounting emerge and evolve over time in individual organisational contexts is still underdeveloped (Dey, 2007; Contrafatto, 2014). Section 2.3.3 reviews the existing engagement-based studies of sustainability accounting.

2.3.3 Engagement-based Studies of Sustainability Accounting

Prior engagement-based studies provide insight into three aspects of sustainability accounting: firstly, the motives underlying the emergence of sustainability accounting, in particular, external sustainability reporting; secondly, the role of sustainability accounting in bringing about organisational change (towards sustainability); and thirdly, the interplay between different types of sustainability activities and accounting and the interactions between sustainability accounting and internal organisational and contextual factors (Contrafatto, 2014). This study seeks primarily to contribute to our knowledge of the first and third aspect of sustainability accounting by providing theoretical and empirical insight into these “complex processes” (Contrafatto, 2014, p. 415). In doing so, it may also add to our
knowledge of sustainability accounting’s capacity to contribute to an organisation’s progress towards sustainability (Bebbington and Larrinaga, 2014; Contrafatto, 2014).

2.3.3.1 Motives Underlying Sustainability Accounting

A number of engagement-based studies have focused on providing insight into why sustainability accounting emerges in a variety of organisational contexts (see, for example, Adams, 2002; Buhr, 2002; O’Dwyer, 2002; Bebbington et al., 2008; Lodhia and Jacobs, 2013; Contrafatto, 2014). As discussed in Section 2.3.1, external legitimacy theory is the dominant theory used to explain the emergence of external sustainability reporting. Engagement-based studies have provided more nuanced and complete narratives (O’Dwyer, 2002) around the emergence of sustainability reporting, acknowledging the role of both external mimetic and normative pressures and of internal organisational processes and actors (Contrafatto, 2014) in the emergence of sustainability reporting processes in the context of for-profit (Adams, 2002; Contrafatto, 2014, Belal and Owen, 2015), NGO/socially orientated (O’Dwyer, 2005a, 2005 b; Dey, 2007) and public sector organisations (Adams and McNicholas, 2007; Lodhia and Jacobs, 2013).

2.3.3.2 Sustainability Accounting and Organisational Change

The majority of engagement-based studies are focused on evaluating the role of sustainability accounting interventions in stimulating organisational change (see, for example, Gray et al., 1995; Bebbington and Gray, 2001; Larrinaga-Gonzalez et al., 2001; Larrinaga-Gonzalez and Bebbington, 2001; O’Dwyer, 2003a; Ball, 2005; O’Dwyer, 2005a; Adams and McNicholas, 2007; Dey, 2007; Bouten and Hoozée, 2013; Thomson et al., 2014). These studies have reported results that vary over time and context (Contrafatto, 2014). With the exception of Adams and McNicholas (2007), earlier studies have been generally pessimistic about the potential of sustainability accounting to stimulate organisational change and observed either little structural or cultural change towards sustainability or unintended and undesirable changes in the values and norm systems of the case organisations (Dey, 2007).

However, more recent research (Bouten and Hoozée, 2013; Thomson et al., 2014) has suggested that sustainability accounting systems can act as a catalyst for change and support organisational activities on some aspects of sustainability. Thomson et al. (2014) found that, in the context of two public sector organisations, their current sustainability accounting systems supported some (eco-efficiency and regulatory compliance), but not all aspects of
sustainability. Bouten and Hoozée (2013), in their two-year study of four Belgian companies, including three family-owned companies, consider how environmental reporting, environmental management accounting and environmental management systems may interact in the process of responding to external environmental disturbances or jolts (Laughlin, 1991). They demonstrate that the change pathways vary across each company in terms of: the order of introduction of environmental reporting, environmental management accounting and an environmental management system; interactions between the processes; and the level of organisational action on sustainability issues. They find that environmental reporting may be implemented as a direct response to an environmental jolt or an indirect response, preceded by the introduction of an environmental management system. They also suggest that the interacting processes of environmental reporting and environmental management accounting have the potential to act as a catalyst for substantive organisational change. They argue that the changes in environmental reporting and environmental management accounting processes as well as any organisational changes are dependent on several external and internal factors: the strength of the jolt; top management commitment; and the presence of an environmental champion.

2.3.3.3 Evolution and Embedding of Sustainability Accounting

As regards the evolution and (non) embedding of sustainability accounting, only a small number of studies (O'Dwyer et al., 2011; Contrafatto, 2014; Belal and Owen, 2015) have explicitly focused on providing theoretical and empirical insight into the organisational processes that contribute to the evolution and (partial) embedding of sustainability accounting and related activities. O'Dwyer et al. (2011) use a fine-grained concept of legitimacy to examine the process through which practitioners seek to legitimise sustainability assurance (p. 32) with both internal and external stakeholders. They found that construction of the sustainability assurance statement was initially constrained by the resistance of powerful internal stakeholders (the Risk Department) and that these constraints were only partially overcome through the practitioners’ internal legitimisation efforts (p. 50).

Contrafatto (2014), drawing on institutional theory, focuses on the processes through which social and environmental reporting and related activities have become established and taken for granted (institutionalised) in an Italian multinational company in the energy sector. The study develops a progressive and multi-staged model of the institutionalisation of social and environmental reporting (p. 417) involving: the construction of a common meaning system...
around the concept of social and environmental responsibility; its practicalisation through the adoption and diffusion of rules and routines; and its reinforcement through the adoption of intra-organisational managerial structures and procedures. Using this framework Contrafatto (2014, p.429) proposes a number of insights into the emergence and evolution of the social and environmental reporting process. The emergence of social and environmental reporting is characterised as the natural (logical and expected) result of internal organisational dynamics spurred by the influences exerted by favourable institutional factors, rather than a structurally determined response to external institutional pressures. The company’s first report was seen as both an outcome of, and a medium to construct, reinforce and institutionalise the concept of social and environmental responsibility. The subsequent development of the social and environmental reporting process was found to be both externally institutionally influenced and strongly organisationally orientated, with the “designing, cutting and sewing” (p. 429) of social and environmental reporting and related activity based on the organisation’s needs and expectations. Finally, social and environmental reporting is characterised as institutionalised and a fact of life within the organisation. This institutionalisation was facilitated by the existence of an institutionalised concept of social and environmental responsibility providing a stable and secure basis for the social and environmental reporting activities and the development of formal organisational structures and (management and control) systems to reinforce and support the activities.

Most recently, Belal and Owen (2015) use external legitimacy theory to examine the circumstances surrounding the development and subsequent cessation of stand-alone CSR reporting in a multinational subsidiary in the tobacco industry in Bangladesh. Their study suggests that the rise and fall of CSR reporting in this case was driven by a combination of global and local forces including the subsidiary’s head office, the WHO and changes in local policy and attitudes towards tobacco. The authors use a model of organisational level legitimacy proposed by Tilling and Tilt (2010) for controversial industries that consist of six phases; establishment, maintenance, extension, defence, loss and disestablishment to analyse the changes in reporting over time. The subsidiary initiated CSR reporting in an attempt to create a formal space to defend and maintain the legitimacy of its activities in Bangladesh in the face of growing local anti-tobacco legislation and campaigns. However, when these strategies failed and the organisation was losing legitimacy and facing stakeholder demands which conflicted with its corporate interests, it abandoned stand-alone reporting and formal
stakeholder dialogue. Instead, shorter, general and symbolic narratives were published within their annual report or on their website. Thus, this study demonstrates that longitudinal studies are important in understanding how external sustainability reporting evolves over time and can be vulnerable to changes to an organisation’s external legitimacy.

This study seeks to add to the literature on accounting for sustainability, and in particular the work of Bouten and Hoozée’s (2013), Contrafatto (2014) and Belal and Owen (2015), as it provides both a longitudinal and holistic account of the emergence and evolution of an environmental management system, environmental management accounting, sustainability reporting and later a sustainability programme. In addition the study seeks to examine the interplay between these activities and internal organisational and contextual factors, in particular OI (organisational identity) and internal legitimation processes. In doing so it adds to our understanding of why and how organisational sustainability programmes and sustainability accounting unfold and embed or fail to embed over time.

2.4 Chapter Summary

This chapter was divided broadly into two sections. The first section considered how sustainability, organisational sustainability and accounting for sustainability are conceptualised. The second section reviewed the literature on accounting for sustainability and provided the foundations for a more in-depth consideration of the emergence, evolution and embedding of sustainability accounting.