



Contents lists available at SciVerse ScienceDirect

Journal of Cleaner Production

journal homepage: www.elsevier.com/locate/jclepro

Carbon accounting and the construction of competence

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ARTICLE INFO

Article history:

Received 1 March 2011

Received in revised form

26 November 2011

Accepted 13 December 2011

Available online 21 December 2011

Keywords:

Carbon accounting

Carbon disclosure

Competence

Epistemic communities

Boundary-work

ABSTRACT

Carbon accounting has evolved rapidly over the past twenty years and now encompasses a wide range of activities with significant financial implications. This paper examines how competence in carbon accounting is being defined and claimed by different actors and communities. Specifically, it focuses on the role of the accountancy profession in carbon accounting, charting its engagement over time and its relationship with other communities involved in carbon accounting. The paper builds on recent work showing that multiple framings and activities are associated with carbon accounting, leading to conflicting views on what it means, how it should be done, and who should be involved. It draws on the concepts of epistemic communities and boundary-work to help explain the role of professions and the emergence of new institutions that mediate between different communities to achieve policy change. We find that, while accountants have undisputed authority in the field of financial reporting of rights and liabilities created under emissions trading schemes ('financial carbon accounting'), their claims to competence in other aspects of organisational carbon accounting overlap with those made by several other communities. Although the accountancy profession's interest in organisational carbon accounting can be traced back at least as far as 2001, the introduction of emissions trading in Europe in 2005 coincided with the start of a new, as yet largely un-scrutinised, initiative to extend its claims of relevant expertise, through a variety of methods including the promotion of standards for disclosure of physical and strategic climate-related information. The Climate Disclosure Standards Board provides an example of a boundary organisation that has been established by different communities with an interest in carbon accounting, with mutually beneficial results, which has nevertheless resulted in the production of a new Climate Change Reporting Framework that is heavily aligned towards the existing competence of accountancy professionals.

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1. Introduction

Over the past twenty years, carbon accounting has evolved from a fringe activity conducted by a handful of specialist economists and scientists, to a highly diversified set of practices, some more specialist, others approaching mainstream, carried out by numerous actors belonging to a variety of different communities (Ascui and Lovell, 2011). It has become clear that the financial stakes are high, with transactions in carbon markets reaching US\$142 billion in 2010, and the Copenhagen Accord promising developing countries assistance to the tune of US\$100 billion/year by 2020 (Linacre et al., 2011; United Nations Framework Convention on Climate Change, 2009). Consequently, it is hardly surprising that we can discern, within the field of carbon accounting,

emerging tensions between different communities over the limits and boundaries of professional expertise, control over the content and process of standards development, and attempts to link new forms of carbon accounting to existing areas of professional practice.

In many ways this process of "discursive competition" echoes ways in which the accounting profession sought to extend its claims to expertise into the new field of environmental auditing in the 1990s, as documented by Michael Power (1991, 1996, 1997). However, although similar patterns may be discerned, the potential economic scale and transformative impact of carbon accounting easily surpasses that of environmental audit, making the contemporary process of professionalization of carbon accounting all the more worthy of close examination.

The research on which this paper is based was motivated by two main questions: first, what are the strategies being employed to define and lay claim to competence in the field of carbon accounting; and, second, who are the principal actors and communities involved in this? The paper builds on recent work

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showing that carbon accounting means different things to different people, with a long history of being framed as a matter of professional expertise by scientists, bureaucrats, economists and accountants, as well as by new communities of practice in the carbon markets (Ascui and Lovell, 2011). It focuses on the development of standards as a mechanism for defining who should carry out an activity, as well as what the activity is and how it should be implemented. The paper also builds on foundations established by Lovell and MacKenzie (2011) in a recent analysis of the role of accountancy professional organisations in governing carbon accounting. It extends this analysis, which focussed primarily on financial accounting and the activities of accountancy professional bodies and financial reporting standard setters, by setting carbon accounting in its wider context of distinct yet partially overlapping fields or frames of reference claimed by multiple “epistemic communities” (Haas, 1992a) where accountants are relatively recent entrants.

We examine the actors involved in the establishment of the Climate Disclosure Standards Board (CDSB) in 2007 and the development of its Climate Change Reporting Framework (released as an Exposure Draft in 2009 and published in September 2010), arguing that the CDSB appears to be a ‘boundary organisation’ linking two epistemic communities. One of these communities consists of people who are motivated by environmental concerns (albeit from an investor perspective), with an interest in expanding the scope and quality of carbon disclosure as a means towards improving carbon management and thus reducing greenhouse gas emissions, while the other consists mainly of individuals from accountancy professional bodies and the ‘Big Four’ global accountancy firms, who, as a profession, have a financial interest in the provision of services in support of carbon disclosure. Their cooperation seems to advance both sets of interests, but a consequence is that although the scope of the CDSB’s Climate Change Reporting Framework covers only non-financial information on greenhouse gas emissions and strategic responses to climate change, it is presented in a format and via technical terminology that clearly aligns it with the existing financial reporting competence of accountancy professionals. The paper’s main conclusion is that the accountancy profession is currently engaged in a major, as yet largely unscrutinised, initiative to extend its claims of relevant expertise in carbon accounting, through a variety of methods including the promotion of standards linking carbon disclosure to existing competence in financial reporting.

1.1. What is carbon accounting?

Climate change poses numerous measurement, attribution, performance monitoring and verification challenges, from the global to the organisational and even down to the individual level. For example, the science of climate change relies on the assimilation of vast quantities of direct and indirect measurements of past and

present greenhouse gas fluxes to and from the atmosphere, coupled with economic models of human activity, in order to develop predictive models of future climate change and the associated impacts. The politics of international climate change agreements such as the Kyoto Protocol relies on quantitative targets which require the calculation of human-induced emissions and removals of greenhouse gases within national boundaries. The very existence of entirely new markets in carbon rights and credits, estimated to be worth nearly US\$142 billion in 2010 (Linacre et al., 2011), depends on complex acts of measurement and commensuration to create fungible, tradable instruments (MacKenzie, 2009). Thousands of companies, and other organisations, now monitor their greenhouse gas emissions, abatement actions and climate risk exposure through their internal management accounting and control systems, and around 3000 companies reported on this to investors and the general public in 2010 via the Carbon Disclosure Project (PricewaterhouseCoopers, 2010). As a consequence of emissions trading schemes, carbon rights and obligations now have a financial value in many countries, which is beginning to attract the attention of accountants in terms of how these assets and liabilities should be reported in corporate financial reports (Bebington and Larrinaga-Gonzalez, 2008; Cook, 2009; KPMG, 2008; Lovell et al., 2010; McGready, 2008; PricewaterhouseCoopers and IETA, 2007).

To characterise all of these varied activities as ‘carbon accounting’ is already to accept and reinforce, to some degree, a rhetorical claim by accountants to relevant jurisdictional expertise in these areas. However, it is clear that many different communities of practice are involved, and conceptions of what each community does and what that practice should be called differ. In this paper, therefore, the generic term ‘carbon accounting’ is used as a provisional marker for something rather amorphous and contested; with the objective being to investigate the ways in which jurisdictional competence is being framed and negotiated by different communities. We therefore accept, at least provisionally, the ‘pick and mix’ definition proposed by Ascui and Lovell (2011) in Table 1 below, where carbon accounting can be understood as any combination (reading left to right) of one or more terms from each cell in the table.

By combining terms in this way, more specific definitions can be derived and related to different forms of carbon accounting: for example, physical carbon accounting is primarily concerned with *estimation* or *direct measurement* of *greenhouse gas emissions* and *removals*, primarily at the *global* level, for *research* purposes, whereas carbon disclosure mainly involves *reporting* of *greenhouse gas emissions* and *impacts from climate change* at the *organisational/ corporate* level, for *voluntary disclosure* purposes (Ascui and Lovell, 2011: 980). Even such an expanded definition is inevitably incomplete: for example, although monetary factors are implied in the references to financial instruments, trades and transactions, there are further ways in which monetary values might be considered in organisational carbon management accounting, for

Table 1
Definition of carbon accounting from Ascui and Lovell (2011: 980).

estimation calculation measurement monitoring reporting validation verification auditing	of	carbon carbon dioxide greenhouse gas	emissions to the atmosphere removals from the atmosphere emission rights emission obligations emission reductions legal or financial instruments linked to the above trades/transactions of any of the above impacts on climate change impacts from climate change	at	global national sub-national regional civic organisational corporate project installation event product supply chain	level, for	mandatory voluntary	research compliance reporting disclosure benchmarking auditing information marketing or other	purposes
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