



**Understanding the limits of voluntary carbon  
reporting and the potential of mandatory reporting**

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## **Abstract**

Information can play a hugely important role in the governance of corporate behaviour. The provision of reliable information on the financial performance of firms underpins the operation of financial markets, and the provision of information on the environmental performance of firms has enabled both 'governance from the inside' (through corporations better understanding and managing their own activities), and 'governance from the outside' (through opening up areas of private activity to wider public scrutiny).

This briefing considers the extent to which the voluntary provision of information on corporate greenhouse gas emissions enables the emergence of new forms of governance. Using the case of the UK supermarket sector, this briefing argues that, while voluntary reporting has provided important benefits, current disclosures limit stakeholders' ability to assess corporate climate change performance, to compare companies and, in turn, to effectively influence corporate performance.

The recent announcement by the UK government that it intends to introduce mandatory reporting requirements for large companies signals a step change in the debate. If well designed and effectively implemented, mandatory carbon reporting has a potentially valuable role to play in facilitating information-based governance through, at least partially, addressing the limitations in the information being provided by companies, and at a relatively modest cost to companies and government. However, as this briefing explains, mandatory reporting is not a panacea and will not address all of the issues around data consistency and comparability. The consequence is that stakeholders will need to continue to invest time and resources in understanding and interpreting data as an essential part of delivering effective governance from the outside.

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Professor Andy Gouldson is Director of the Centre for Climate Change Economics and Policy at the University of Leeds. His work focuses on the influence of different forms of policy and governance on the relationship between the environment and the economy, and on the factors that are shaping the transition to a low carbon economy. Most recently, he has worked on the economics of low carbon cities through a series of city scale mini-Stern reviews. This work has led to the adoption of carbon reduction strategies in various contexts, and it is part of a wider debate on stimulating investment in the low carbon economy.

## **The Non-State Actors and the Low Carbon Economy project**

The material presented in this article is based on information gathered as part of a wider project, Non-State Actors and the Low Carbon Economy, being run by the ESRC Centre for Climate Change Economics and Policy (a joint initiative between the University of Leeds and the London School of Economics). The project, which will run from 2010 to 2013, examines how corporate climate change performance has been influenced by non-state actors such as environmental non-governmental organisations (NGOs), investors, employees and customers, and the extent to which these various actors have

moved companies beyond the actions that would be justified in cost-benefit terms. A fuller description can be found at:  
<http://www.cccep.ac.uk/Research/Programmes/climate-change-governance/project2b-corporations-low-carbon-economy.aspx>

## **1 Setting the scene**

Information can play a hugely important role in the governance of corporate behaviour. The provision of reliable information on the financial performance of firms underpins the operation of financial markets, and the provision of information on the environmental performance of firms has been a significant factor shaping their behaviour and performance (Gouldson, 2004; Hamilton, 2005; Mol, 2011). The collation and provision of reliable information enables both ‘governance from the inside’ (through enabling corporations to better understand and manage their own activities), and ‘governance from the outside’ (through opening up areas of private activity to wider public scrutiny).

This briefing considers the extent to which the voluntary provision of information on corporate performance on greenhouse gas emissions enables the emergence of new forms of governance. It also considers whether mandatory carbon reporting is needed if the potential of information-based governance is to be realised.

We begin by providing a general overview of the types of information stakeholders are interested in and of this information may be used. Using the case of the UK supermarket sector, we then considers whether the information provided by companies enables these requirements to be met. We conclude by offering some general reflections on whether there is a need to move beyond voluntary reporting towards some form of mandatory reporting, and by offering some comments on the recent announcement by the UK government that large companies will be required to report on their greenhouse gas emissions from 2013.

## **2 What information do stakeholders want?**

Any discussion of information-based governance must begin by acknowledging that companies need to communicate with and provide information to a wide range of stakeholders. Inevitably, these stakeholders will have quite different interests, and will seek to use the information provided by companies in a range of ways. For example, in relation to greenhouse gas emissions, they may want to (adapted from Sullivan, 2011:

14-15):

- Answer yes/no questions such as whether the company is complying with its climate change commitments or meeting its own objectives and targets (e.g. on emissions reductions).
- Assessing companies relative to their sector peers.
- Assessing companies' quality of management (on climate change specifically or on environmental and social issues more generally).
- Assessing the financial or other implications of climate change for the business (e.g. the costs of complying with regulation, the costs of addressing the physical impacts of climate change, the opportunities presented by new regulations).
- Assessing the performance of a specific company in the context of wider social or environmental impacts. For example, stakeholders may be interested in how much a particular company contributes to national or global greenhouse gas emissions.

This divergence of interests influences the decisions that companies make about reporting – should they report or not, what should the scope of their reporting be, what information should they provide, how much resource should they dedicate to reporting. These decisions, in turn, impact on the ability of stakeholders to hold companies to account for their performance; that is, the effectiveness of 'governance from the outside' is critically dependent on the information provided by companies.

### **3 The case of the UK supermarket sector**

#### **3.1 Why Focus on UK Supermarkets?**

We focus on the UK supermarket sector for two reasons. The first is the potential significance of the sector's carbon footprint. It is estimated that the major supermarkets contribute – through the direct emissions from their own operations and the emissions from their electricity consumption – approximately 1% of the UK's total greenhouse gas emissions and that the emissions from the sector's value and supply chains are an order of magnitude higher (Sustainable Development Commission (SDC), 2008: 40). The second is that the sector is widely seen as a leader for the quality of its

environmental and social reporting and, in particular, there is a significant amount of information available on greenhouse gas emissions from the sector. This latter point makes the sector a particularly relevant case-study, as it allows us to explore whether the information being provided is sufficient to facilitate effective governance from the outside.

### **3.2 Current Reporting Practice in the Supermarket Sector<sup>1</sup>**

Of the nine major supermarket groups in the UK (ALDI, ASDA, Co-operative Group, LIDL, Marks and Spencer, Morrisons, Sainsbury's, Tesco and Waitrose), seven publish a corporate responsibility report or equivalent (e.g. a substantive section on environmental performance on their websites), with five (the exceptions are Waitrose and The Co-Operative Group) also reporting to the Carbon Disclosure Project<sup>2</sup>. The two that do not report are ALDI and LIDL.

Of the seven that report, all have a reasonably long track record of corporate responsibility (or, previously, environmental) reporting. For example, Sainsbury's first reported in 1998 and Waitrose, Tesco and Marks and Spencer first reported in the early 2000s. In their most recent corporate responsibility reports, all seven companies provide at least four and typically five years of trend data on greenhouse gas emissions.

All seven companies provide an estimate of their total greenhouse gas emissions, and provide information on emissions from their own operations and the emissions associated with their electricity use. However, beyond their own operations there is a wide divergence in what is reported. For example, six provide information on business travel (although Wal-Mart only provides this information for its US operations), three provide some information on waste disposal-related emissions and one on third party

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<sup>1</sup> A fuller evaluation of the disclosures provided by the UK supermarket sector is provided in Sullivan and Gouldson (2012). It is relevant to note that the issues raised here about companies not reporting and the inconsistencies in the reported information are relevant to most sectors. See, for example, the analysis in Sullivan (2009, 2010) and Sullivan *et al.* (2008).

<sup>2</sup> The CDP is an investor-backed initiative that, annually, requests information on the risks and opportunities of climate change from the world's largest companies and publishes this information on the CDP's website (see, further, <https://www.cdproject.net/en-US/Programmes/Pages/CDP-Investors.aspx>, last viewed 10 October 2011).

contract distribution. Only Tesco and Marks and Spencer provide information on emissions from their supply chains and value chains. Tesco has estimated that the carbon footprint of its UK supply chain is about ten times its direct carbon footprint in the UK (Tesco 2010: 14) and Marks and Spencer has estimated that the emissions from the use and disposal of its products and services, and from its supply chain were approximately ten times its operational (including emissions associated with electricity purchase) emissions<sup>3</sup>.

There is limited consistency on the activity and other information provided by companies to put their emissions into context. For example, only four provide information on their total energy consumption, three on the amount of renewable energy that they purchase and two on transport-related mileage. This supplementary information is particularly important to stakeholders seeking to understand how the company is managing its greenhouse gas emissions and the effectiveness of its actions in this regard. For example, if a company reports a reduction in its greenhouse gas emissions from energy use, the first question that needs to be answered is whether the reported change is attributable to an actual reduction in energy use, to fuel shifting (towards lower carbon intensity fuels), to changes in the business (e.g. outsourcing certain activities), to changes in calculation methodologies (e.g. new emission factors), to changes in the scope of reporting or to some combination of these factors.

#### **4 What can the available data tell us?**

Despite the limitations in the data being provided, the climate change-related information provided by companies can be used in a number of different ways.

First, the fact that a company has a climate change policy and/or that it reports on its performance can be used to draw some conclusions about the quality of a company's quality of management of climate change-related risks and opportunities. In relation to policies, in Western multinationals, the adoption (by the Board) of a policy on a specific issue is generally seen as an essential starting point for the effective management of

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<sup>3</sup> See, for example, Marks and Spencer's response to the 2008 Carbon Disclosure Project (Note 2).

the issue. Clearly, the existence of a policy does not guarantee that the policy will be effectively implemented. However, the converse is perhaps even more important. That is, the absence of a policy suggests that the issue in question (e.g. climate change) is not a priority for the organisation (Lydenberg, 2010: 17; Sullivan 2009, 2010). A similar argument could be made in relation to reporting; while the fact that a company reports is not, in and of itself, an indication of the quality of a company's management of an issue, the lack of reporting suggests that climate change is not on the corporate agenda or that it is not seen as a priority for management attention.

Second, the data being reported do allow an assessment to be made of trends in performance within individual companies. For those companies in the supermarket sector that have reported, most provide five or more years of historic data. This allows both the direction of travel and performance against each company's own objectives to be evaluated. This, in turn, allows an assessment to be made of the quality of the company's implementation of its climate change strategy and of the outcomes achieved, although – as noted above – such assessments are complicated by the lack of consistency in the supplementary information provided by companies.

Third, with specific reference to the supermarket sector, the available data on scope 1 and 2 emissions (i.e. those emissions that relate to the company's own activities and operations, and to the emissions related to electricity consumption) allow a broad assessment to be made of the environmental significance of these emissions; as indicated above, scope 1 and 2 emissions from the supermarket sector represent approximately 1% of the UK's total greenhouse gas emissions. Similarly, an assessment can be made of the financial significance of these emissions, e.g. through assessing current and future carbon prices and comparing these to the companies' profits or turnovers (see further Sullivan (2011: 22-58)).

However, there are two notable areas where current disclosures limit stakeholders' ability to assess corporate climate change performance. The first relates to efforts to compare the performance of different companies. While there are broad signs of convergence in reporting, it is extremely difficult to make a robust comparison of

performance across the sector, or to develop a robust benchmark (or ranking) of performance. There are various reasons: only seven of the nine companies report, there are variations in the scope of each company's reporting, and there are significant gaps and inconsistencies in the information being reported (Sullivan, 2009, 2010; Sullivan and Gouldson, 2012; Sullivan et al., 2008).

The second is that, while it is possible to draw some conclusions about the scale (magnitude) of direct/operational emissions, it is not possible to have anything like the same confidence in assessing the significance of emissions associated with supply chains and value chains. The reason is that the tools and methodologies for quantifying these emissions remain in their infancy and our research (which has included interviews with most of the major UK retailers as well as some of the large international players) suggests that most have yet to develop a comprehensive inventory of their emissions. This is not intended to suggest that they are not taking action to address these emissions; in fact, many have programmes, albeit of varying degrees of intensity and detail, directed at reducing energy consumption and emissions through the supply chain, and at engaging with their customers to encourage and support them to reduce their greenhouse gas emissions.

## **5 Beyond voluntarism**

These findings suggest that we are close to the limits of what we can expect from voluntary reporting. Given that carbon reporting is well established in the supermarket sector, it is striking that a number of companies still do not report at all and that it remains extremely difficult to compare companies across the sector. This limits the potential for stakeholders to exert influence; that is, the weaknesses in reporting mean that the potential for governance from the outside is significantly compromised.

Recognition of the limits of voluntary reporting opens up a critical question of the role of government. The ability of stakeholders to hold companies to account for their climate change performance is critically dependent on the quality of the information that is available; at present, the data being provided are inconsistent and incomplete. While

there are signs of a consistent approach to reporting emerging in the supermarket sector, it is also clear that a voluntary approach alone is unlikely to deliver the level of consistency required to enable stakeholders to properly use the information provided.

The case for mandatory carbon reporting on carbon clearly resonates with wider discussions on the role of information-based governance. Information can be a powerful force for change. But to release its power information needs to be provided in a consistent form. That inevitably requires some intervention from government. However, the costs to government and industry are comparatively modest; government doesn't have to do much other than to mandate reporting in a consistent format to facilitate and strengthen the ability of non-state actors to contribute to the delivery of a critical public interest objective.

As one example, the UK government has recently announced that it intends to introduce mandatory greenhouse gas emissions reporting for all companies listed on the main index of the London Stock Exchange from April 2013<sup>4</sup>. The Department for Environment, Food and Rural Affairs (Defra) will initiate a consultation later in 2012 on draft regulations to implement this commitment. The introduction of mandatory reporting has been welcomed by a range of groups, including the UK Confederation of British Industry (the peak UK business lobby group)<sup>5</sup> and the Aldersgate Group (an alliance of leaders from business, politics and society that encourages action for a sustainable economy)<sup>6</sup>.

## 5.1 Design Considerations

In theory, making carbon reporting mandatory should help ensure that all companies report and should also help to address the problems caused by inconsistencies in

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<sup>4</sup> See <http://www.defra.gov.uk/environment/economy/business-efficiency/reporting/> and [http://www.parliament.uk/documents/commons-vote-office/June\\_2012/20-06-12/3.DEFRA-Company-reporting-greenhouse-gas-emissions-by-quoted-companies.pdf](http://www.parliament.uk/documents/commons-vote-office/June_2012/20-06-12/3.DEFRA-Company-reporting-greenhouse-gas-emissions-by-quoted-companies.pdf)

<sup>5</sup> <http://www.cbi.org.uk/media-centre/press-releases/2012/06/cbi-responds-to-defra-announcement-on-mandatory-carbon-reporting/>

<sup>6</sup> <http://www.aldersgategroup.org.uk/news/2012>

reporting. However, to be effective, the regulations and associated guidance that will implement and underpin the reporting requirements will need to<sup>7</sup>:

- Specify the reporting boundaries so that all firms define the scope of their reporting in a consistent manner. While acknowledging that there may be challenges in requiring overseas entities to report, it makes most sense that reporting is based on financial control (i.e. the consolidated entities that are covered by companies' financial reporting). This will allow greenhouse gas emissions to be related to measures of business activity such as turnover.
- Require all companies to report on, as a minimum, their Scope 1 (i.e. emissions from sources owned or controlled by the company, including the generation of electricity, heat or steam, physical or chemical processing, transport in company owned/controlled vehicles, fugitive emissions) and Scope 2 emissions (i.e. emissions from the generation of purchased electricity that is consumed in owned or controlled equipment or operations)<sup>8</sup>.
- Encourage companies to report on Scope 3 emissions (i.e. emissions from other sources not owned or controlled by the company, such as business travel, external distribution, supply chain or the use/disposal of the company's products and services). It should be noted that reporting on Scope 3 emissions is much less well developed than reporting on Scope 1 and 2.
- Require reporting on all greenhouse gases, expressed both in terms of total carbon dioxide equivalent (CO<sub>2</sub>e) and, where relevant, broken down by greenhouse gas. This should include specification of the conversion factors to be used to convert the different greenhouse gases to CO<sub>2</sub>e.
- Require companies to provide a clear account of how they have calculated their greenhouse gas emissions, including the assumptions they have made, the activity and other data they have used to produce their emissions and the emission factors they have used to calculate their emissions.

The other point we would like to raise here relates to the scope of the proposed regulations which, for the first two years, will apply only to large quoted companies. The

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<sup>7</sup> This builds on the proposals made in CBI (2009) and the authors' previous work analysing the disclosures provided by companies in other mandatory reporting schemes (see, Gouldson and Sullivan (2007); Kolominskas and Sullivan (2004); Sullivan and Gouldson (2007, 2012); Sullivan and Woods (2000)).

<sup>8</sup> For a further description, see WBCSD/WRI (2004: 26-34).

consequence is that many large unquoted companies and many large unquoted organisations (e.g. government agencies, local authorities) that will not be covered by this legislation. In the interests of creating a level playing field for all organisations and, perhaps more importantly, enabling a proper assessment to be made of the performance of all companies, the government should extend the scope of the regulation to all organisations (where the scope could be defined by reference to measures such as total number of employees, turnover, or total electricity consumption).

## **5.2 Will Mandatory Reporting Work?**

It is likely that mandatory reporting, if effectively designed and implemented, will address some of the issues that have been identified with voluntary reporting; it should ensure that all companies report and should address at least some of the inconsistencies and other issues that affect current reporting.

However, it is important to recognise that mandatory reporting – even where the calculation methodologies and processes are prescribed in some detail – will not necessarily address all of the issues around data consistency and comparability. Inevitably, as has been seen in other areas where mandatory environmental reporting has been introduced (Gouldson and Sullivan, 2007; Sullivan and Gouldson, 2007), companies will have significant discretion on the scope of reporting, the emission factors that they use, and how they present their data. The consequence is that stakeholders using these data will still need to take care to ensure they interpret the data correctly and appropriately.

The introduction of mandatory reporting may also have the effect of undermining the credibility of those companies that have taken a leadership position through voluntarily reporting on their social and environmental commitments. Quite a few stakeholders (including investors) use the existence of a CSR or equivalent report as a proxy for the quality of social and environmental management (on the grounds that the publication of such a report is some sign that social and environmental issues are on the corporate

agenda). However, the reality is that we have moved well beyond the days when the publication of such a report was a clear sign of corporate engagement with the sustainability agenda. Mandatory reporting offers the potential to reinvigorate the debate around leadership and innovation, through forcing us all to look beyond the fact that a report has been produced to looking much more carefully at the substance of that reporting.

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