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SUSTAINABILITY, MATERIALITY AND INDEPENDENT EXTERNAL ASSURANCE:

AN EXPLORATORY STUDY OF THE UK'S LEADING FOOD RETAILERS

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Introduction

Sustainability is becoming increasingly integrated into the corporate mindset of a growing number of large companies. A survey of business managers and executives undertaken by MIT Sloan Management Review and The Boston Consulting Group (2012) suggested that '70% of companies have placed sustainability permanently on management agendas' and Carroll and Buchholtz (2012), suggested that 'sustainability has become one of business' most recent and urgent mandates.' At the same time effective sustainability reporting is increasingly seen as a vital element in communicating with stakeholders about how companies are performing against strategic environmental and social targets. Sustainability reporting can include a wide and varied range of issues and reporting practices are constantly evolving but there is a growing awareness within the business community that embracing materiality and commissioning external independent assurance are integral elements in the reporting process. In simple terms within sustainability reporting, materiality is concerned with identifying those environmental, social and economic issues that matter most to a company and its stakeholders while assurance, is a process used to provide confidence as to the degree of reliance that can be placed on the reported data. Ernst and Young (2014), for example, argued that while 'today's non-financial reporting environment can seem complex but there is one commonality amongst the various reporting initiatives- materiality.' In a similar vein GreenBiz (2014) identified that a focus on materiality was one of the top four sustainability reporting trends in 2014 and argued that the 'focus is increasing in the sustainability world on the principle of materiality as the essential filter for determining which environmental, social and governance information will be useful to key decision makers.' In making the case for increasing external assurance KPMG (2011) suggest that 'as corporate responsibility reporting begins to play a larger role in the way stakeholders and investors perceive corporate value, companies should increasingly want to demonstrate the quality and reliability of their corporate responsibility data.'

While all companies have a role to play in promoting the transition to a more sustainable future within modern capitalist societies food retailing is an important interface between manufacturers and primary producers on the one hand and consumers on the other. As such large food retailers can be seen as a bellwether for sustainability and they have a crucial role to play in addressing the world's mounting environmental and social challenges and in promoting more sustainable patterns of consumption. With this in mind this paper offers a preliminary examination of how the UK's leading retailers are reporting on sustainability and on the role of materiality and external assurance in their reporting processes. The chapter includes an outline of the characteristics of external assurance and of the concept of materiality, a review of the extent to which the UK's top ten food retailers embracing and materiality and commissioning independent external assurance in their

current sustainability reports and offers some wider reflections on external assurance and materiality in retailers' sustainability reporting.

Sustainability

In recent decades the term sustainability has become increasingly widely deployed to serve and justify a variety of ends but 'the idea of sustainability is not a mere mind game played by modern technocrats, nor the brainwave of some tree hugging eco-warriors It is our primal world cultural heritage' (Gruber 2012). Nevertheless the concepts of 'sustainable development' and 'sustainability' have received much more widespread attention and currency from the 1980's onwards following the publication of the 'World Conservation Strategy' (International Union for Conservation of Nature and Natural Resources 1980) and 'Our Common Future' (World Commission on Environment and Development 1987). In the following decades the term sustainability has become increasingly seen as offering a potential solution for a wide range of challenges and problems from the global to the local scale across seemingly all walks of life. Diesendorf (2000) argued that sustainability can be seen as 'the goal or endpoint of a process called sustainable development.' Arguably the most widely used definition of sustainable development is that provided in 'Our Common Future' namely 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs' (World Commission on Environment and Development 1987). However defining sustainability is not straightforward and there are a number of contrasting and contested meanings.

More specifically there are sets of definitions that are based around ecological principles which focus on conserving natural resources and protecting fragile ecosystems on which ultimately all human life depends. Goodland (1995), for example, defined environmental sustainability as 'the maintenance of natural capital' arguing that it 'seeks to improve human welfare by preserving the sources of raw materials used for human needs and ensuring that the sinks for human waste are not exceeded in order to prevent harm to humans.' There are also broader definitions that include social and economic dimensions along with environmental and ecological goals that seek to meet human needs in an equitable manner. For the United States Environment Protection Agency (2014), for example, 'sustainability creates and maintains the conditions under which humans and nature can exist in productive harmony , that permits fulfilling the social, economic and other requirements of present and future generations.'

Arguably more critically Hudson (2005) argued that definitions of sustainability range from 'pallid blue green to dark deep green.' The former definition Hudson (2005, p.241) suggests centres on 'technological fixes within current relations of production, essentially trading off economic against environmental objectives, with the market as the prime resource allocation mechanism' while for the latter 'prioritizing the preservation of nature is pre-eminent' (Hudson 2005). Hudson (2005) also suggests that the dominant view of sustainability 'is grounded in a blue-green discourse of ecological modernization' and 'claims that capital accumulation, profitable production and ecological sustainability are compatible goals.' Further he contrasts this view with the 'deep green' perspective which 'would require significant reductions in living standards and radical changes in the dominant social relations of production' (Hudson 2005). In a similar vein a distinction is often made, for example, between 'weak' and 'strong' sustainability and Roper (2012) suggests that 'weak

sustainability prioritizes economic development, while strong sustainability subordinates economies to the natural environment and society, acknowledging ecological limits to growth.'

Within the business world the concept of sustainability has moved seemingly ever higher up boardroom agendas. Carroll and Buchholtz (2012), for example, suggest that 'sustainability has become one of business' most recent and urgent mandates.' A survey of business managers and executives undertaken by MIT Sloan Management Review and The Boston Consulting Group (2012) suggested that '70% of companies have placed sustainability permanently on management agendas' and that 'despite a lacklustre economy, many companies are increasing their commitment to sustainability initiatives, the opposite of what one would expect if sustainability were simply a luxury afforded by good times.' A number of factors can be identified in helping to explain this trend. These include the need to comply with a growing volume of environmental and social legislation and regulation; concerns about the cost and scarcity of natural resources; greater public and shareholder awareness of the importance of socially conscious financial investments; the growing media coverage of the activities of a wide range of anti-corporate pressure groups; and more general changes in social attitudes and values within modern capitalist societies. More specifically companies are looking to publicly emphasize their commitment to sustainability in an attempt to help to differentiate themselves from their competitors and to enhance their corporate brand reputation. However Polentz (2011) claims 'ask ten different experts to define corporate sustainability you are likely to receive ten different answers' and suggests that 'part of the problem in defining such an amorphous term arises from its continuing evolution along with the ever-increasing entry of new stakeholders, an inconsistent set of state and federal laws and the constant onslaught of newly adopted federal and state laws.'

At the same time a number of critics view corporate commitments to sustainability as a cynical ploy, often popularly described as 'greenwash', designed to appeal to consumers who are seen to be concerned about the environmental and the social impact of business operations throughout the supply chain, while effectively sidestepping fundamental environmental and social concerns. As such moves towards sustainable marketing might be characterised by what Hamilton (2009) describes as 'shifting consciousness' towards 'what is best described as green consumerism.' This he sees as 'an approach that threatens to entrench the very attitudes and behaviours that are antithetical to sustainability' and argues that 'green consumerism has failed to induce significant inroads into the unsustainable nature of consumption and production' (Hamilton 2009). Perhaps more radically Kahn (2010) argues that 'green consumerism' is 'an opportunity for corporations to turn the very crisis that they generate through their accumulation of capital via the exploitation of nature into myriad streams of emergent profit and investment revenue.'

As interest in sustainability has gathered momentum so a number of attempts have been made to develop theoretical frameworks for sustainability which recognize that social and economic development cannot be viewed in isolation from the natural environment. Todorov and Marinova (2009), for example, reviewed a wide range of models being

developed to conceptualise what they describe as 'an extremely complex concept' but concluded that a simple three dimensional representation of sustainability capturing environmental, social and economic elements, in a Venn diagram as three overlapping circles, is 'powerful in reaching a broad audience.' A number of authors have employed stakeholder theory to conceptualise sustainability and Steurer et. al. (2005), for example, explored the relationship between sustainability and stakeholder theory and examined how 'corporations are confronted with economic, social and environmental stakeholder claims.' There have been attempts to develop a more critical theory. Amsler (2009), for example, has argued that 'the contested politics and ambiguities of sustainability discourses' can be embraced to develop a 'critical theory of sustainability.' Amsler further argues that current debates should be located 'within a broader tradition of social criticism' and that 'competing interpretations of sustainability' should be viewed as 'invitations to explore the complex processes through which competing visions of just futures are produced, resisted and realized' (Amsler2009). Castro (2004) has sought to lay the foundations for a more radical theory of sustainability by questioning the very possibility of sustainable development under capitalism and arguing that economic growth relies upon the continuing and inevitable exploitation of both natural and social capital.

Materiality and External Assurance

The concept of materiality has predominantly been associated with the financial sector and more specifically with the auditing and accounting processes of financial reporting. Here an issue 'is considered material to the company if its omission or misstatement influences the economic decision of users (PGS 2013). However the concept has become increasingly important in sustainability and corporate social responsibility reporting but 'compared to financial reporting, sustainability considers a broader scope of action and covers a multitude of issues: environmental, social, economic and more' and 'requires a more comprehensive definition of materiality' (PGS 2013). At the same time Eccles et. al. (2012) have argued that in defining materiality in nonfinancial reporting 'more emphasis is placed on defining the user of the information, typically described as stakeholders rather than shareholders and emphasising the importance of considering the impact of not providing information.'

That said there is little consensus about what constitutes materiality in sustainability reporting and a number of definitions can be identified. There are sets of definitions that focus principally on investors and shareholders .The International Integrated Reporting Council (2013), for example, in advocating the integration of financial and non-financial reporting, suggests that 'a matter is material if it is of such relevance and importance that it could substantively influence the assessments of providers of financial capital with regard to the organization's ability to create value over the short, medium and long term. In determining whether or not a matter is material, senior management and those charged with governance should consider whether the matter substantively affects, or has the potential to substantively affect, the organization's strategy, its business model, or one or more of the capitals it uses or affects.' There are also definitions that embrace a wide range of stakeholders. PGS (2013), for example, argues that 'materiality aims to identify the societal and environmental issues that present risks or opportunities to a company while taking into consideration the issues of most concern to external stakeholders.' The Global

Reporting Initiative (GRI), for example, asserts that 'material topics for a reporting organisation should include those topics that have a direct or indirect impact on an organisation's ability to create, preserve or erode economic, environmental and social value for itself, its stakeholders and society at large' (GRI 2014). More generally the GRI suggests that 'sustainability impacts create both opportunities and risks for an organisation' and that 'the ability of an organization to recognise opportunities and risks and act effectively in relation to them, will determine whether the organization creates, preserves or erodes value' (GRI 2014).

KPMG (2014) argued that a review of definitions of materiality clearly indicates that 'there is an obvious distinction in three key areas: scope (the range of information provided), stakeholder groups (those whose perceived interests are likely to be affected), and time frame (the time period applied)' and it argued that 'these variables are important in that they define the boundaries of materiality made by organisations.' More specifically KPMG (2014) develops these three areas in the context of the increasing recognition within businesses of the importance of 'natural capital' which is taken to include 'natural resources', 'environmental assets', 'ecosystems', 'ecosystem services' and 'biodiversity.' KPMG (2014) suggests that the changing boundaries of what constitutes materiality are 'likely to enhance the interest in and the justification for natural capital's consideration in corporate materiality assessments in relation to the three key areas.' Thus the scope of issues can be seen to be continually evolving, a much wider range of stakeholders, including local communities and non-governmental organisations, need to be included when assessing what is material for natural capital and the time scale may need to be critically reviewed to incorporate short, medium and long term impacts on the environment.

The way in which materiality is identified and operationalized varies from one company and organisation to another but a number of common elements can be identified (PGS 2013). These include the explicit identification of a number of environmental, social and economic issues around which the sustainability report is developed; the evaluation and ranking of both company and stakeholder concerns on each of the identified issues; identification of the ways in which the company has elicited stakeholders' contributions to the process; and the prioritization of these issues in a way that informs a company's sustainability strategy and reporting process. Common elements apart, there is a growing interest in defining and determining materiality on a business sector specific basis. Eccles et. al. (2012), for example, suggested that 'while not a panacea, we believe that developing sector specific guidelines on what sustainability issues are material to that sector and the Key Performance Indicators for reporting on them would significantly improve the ability of companies to report on their environmental, social and governance performance.' Further Eccles et. al. (2012) argued that by employing 'guidance that identifies the environmental, social and governance issues that are material to a sector and how best to report on them, companies will have much clearer guidance on what and how to report.'

A variety of approaches have been developed to determine materiality as an integral component of sustainability reporting. The Sustainability Accounting Standards Board (SASB), for example, claims that its 'Materiality Map creates a unique profile for each industry' and that it 'is designed to prioritize the issues that are most important within an industry' and 'to keep the standards to a minimum set of issues that are likely to be material'

(SASB 2014)' This map classifies issues under five categories namely environment; human capital; social capital; business model and innovation; leadership and governance and then identifies high priority material issues on behalf of what SASB (2014) describes as the 'reasonable investor.' More specifically the development of the map 'relies heavily on two types of evidence: evidence of interest by different types of stakeholders and evidence of financial impact' (SASB 2014).

The 'materiality matrix' is perhaps the most common approach used to determine materiality issues. The matrix plots sustainability issues in terms of two axes namely, the influence on stakeholder assessments and decisions and the significance of environmental, social and economic impacts. PriceWaterHouseCoopers (2014), for example, developed its 'sustainability prioritisation matrix' in 2011 based on surveys, interviews and desk based research from its, clients, its employees, potential recruits, regulators and nongovernmental organisations. Within this matrix while 'quality and ethics' and 'brand reputation' were positioned highly on both the importance to the business and the importance to stakeholder axes while 'biodiversity' was positioned lowly on both axes (PricewaterhouseCoopers 2014). In its 2013-2014 materiality matrix Siemens (2014)the identified 'demographic change', 'urbanization', 'climate change' and 'globalization' as 'mega trends' and positioned 'corporate citizenship', 'health and safety', 'human rights' and 'affordable and personalised health care' lowly on both axes, with 'innovation', 'sustainability in the supply chain', 'resource productivity' and 'environmental portfolio' being positioned correspondingly highly.

A range of benefits are claimed for those companies which embrace materiality as an integral part of their sustainability reporting process. Strandberg Consulting (2008), for example, suggested that materiality analysis can help companies to clarify the issues that can drive long term business value; to identify and capitalise on business opportunities; to co-ordinate sustainability and business strategies; to build and enhance corporate brand and reputation; and to anticipate and manage change. KPMG (2014) claims that 'materiality assessment is much more than a reporting exercise' arguing that it is the foundation for 'sustainability strategy, target setting, stakeholder engagement and performance management.' Looking to the future the introduction of new Global Reporting Initiative (GRI) standards for sustainability reporting seems likely to enhance the focus on materiality. The new guidelines, initially released in 2013, will apply to all corporate sustainability reports to be completed within GRI guidelines and frameworks that are to be published from January 1st 2016. KPMG asserted that the new guidelines 'put materiality center stage' and they encourage 'reporters to focus content on the issues that matter most to the business, rather than reporting on everything' and they look to make 'more explicit links between materiality and the management and performance information organisations should disclose in their report (KPMG 2013). More specifically, for example, corporate sustainability reports should begin with a focus on material issues and maintain this focus throughout the report, include a detailed discussion of the processes by which the company both defines and manages its material issues and provide details of where the impact of material issues is seen to lie.

Assurance can be undertaken in a number of ways. CSR Europe (2008), for example, identified four principal methods namely 'conducting assurance internally', 'stakeholder panels', 'expert input' and assurance by an 'independent, impartial and external organisation.' In theory conducting assurance within a company should provide comprehensive access to the relevant data and be less costly but it may lack credibility especially with external stakeholders. Inviting a panel of stakeholders to produce an assurance statement can have the advantage of ensuring that the process will address those issues important to the invited stakeholders but such panels may not always represent the full range of stakeholder interests. The use of so called 'expert input' in assurance might be seen to lend what some stakeholders might regard as authoritative support to a sustainability report but doubts may remain about the extent to which such experts have had the opportunity or the appropriate access to the primary data which would allow them to make informed judgements.

The most widely adopted approach to assurance is the commissioning of an assurance statement by an independent external organisation and such an approach would seem to have claims to offer credibility, integrity and reliability to the reporting process. An assurance statement is defined by CorporateRegister.com Limited (2008) as 'the published communication of a process which examines the veracity and completeness of a CSR report.' However the production of assurance statements is seen to be problematic in that not only is there considerable variation between the volume, character and detail of the information companies provide in their sustainability reports themselves, but there is currently little consensus on how companies should collect, evaluate and report on their sustainability data. In addressing the issue of appropriate data collection CorporateRegister.com Limited (2008), for example, argued that 'the underlying processes are often opaque and company specific, so it's difficult to know how far a report reflects actual performance' and that 'unless a company can define its scope of performance disclosure, how can an assurance provider define the scope of assurance.'

That said a growing number of major companies now employ the interdependent principles of completeness and responsiveness which are an integral part of the AA1000 Assurance Standard 2008 developed by Accountability (2008), a UK non-profit organisation, to guide and inform their corporate responsibility and sustainable development reporting. The principle of completeness focuses upon the extent to which both the identification and the communication of material issues and impacts is fair and balanced. Responsiveness examines the extent to which a company can demonstrate that it is responding to stakeholders' material issues, impacts and concerns. At the same time it is important to recognize that external assessors work to one of two so called 'levels of assurance' namely 'reasonable assurance' and 'limited assurance.' In the former 'the assurors have carried out enough work to be able to make statements about the report which are framed in a positive manner e.g. the reported environmental data accurately reflect' (the company's) 'environmental performance.' In the latter 'the assurors have only carried out enough work to make statements about the report which are framed in a negative manner e.g. Nothing has come to our attention which causes us to believe that the reported environmental data do not accurately reflect' (the company's) 'environmental performance' (CorporateRegister.com Limited 2008).

A number of benefits are claimed for producing an assurance statement. Perhaps most importantly there is the arguments that, as a wide variety of stakeholders increasingly share an interest in how companies are discharging their social, environmental, economic and ethical responsibilities so the inclusion of a robust and rigorous assurance statement within a sustainability report helps to enhance reliability and credibility (Jones and Solomon 2010). It is also argued that assurance can 'give a boost to (the) internal management of CSR, since the process of providing an assurance statement will involve an element of management systems checking' in that 'a number of assurance statements identify shortcomings in underlying data collection systems, thus providing a roadmap for improvement to the reporting company' (CSR Europe 2008). More commercially the provision of an assurance statement might be seen to enhance both a company's reputation with its stakeholders and its brand identity.

Food Retailing in the UK

Food retailing is by far the largest, and arguably the most fiercely competitive sector within the UK retail economy and Mintel (2014a) estimated that in 2013 total UK consumer spending on food and drink was estimated at £128 billion with 73.2 % being spent on food and non-alcoholic drinks and the remaining 26.8 % being spent on alcoholic drinks and tobacco products. There are a variety of channels and formats within the UK food market with The Institute for Grocery Distribution (2015) estimating that in 2014 'hypermarkets and superstores' accounted for approximately 42% of the 'total grocery market' with the corresponding figures for 'small supermarkets', 'convenience stores', 'discounters', 'online' and 'other retailers' being 20%, 21%, 7%, 4% and 5%. During the latter decades of the twentieth century the large multiple retailers, which collectively trade across all the major channels, consistently increased their market share (Department of Environment, Food and Rural Affairs 2013) but the UK food retail market is now increasingly seen to be 'changing fast, causing upheavals for several of the long established leaders' (Mintel 2014b). More specifically many commentators suggest that large stores are increasingly unwieldy, food shopping behaviour is rapidly changing, online shopping is ever more popular and the discount food retailers are gaining market share from the traditional large food retailers. Nevertheless the market remains extremely concentrated with the top ten retailers accounting for over 85% of all food retailers' sales and just four of these, namely Tesco, J. Sainsbury, Asda (Walmart) and Wm. Morrison sharing a massive 64% share of the market (Mintel 2014).

During the past decade the role of the major food retailers within the food production and distribution system has attracted increasing and often heated debate and criticism. On the one hand the marked concentration within food retailing in the UK has increased the power of the large retailers within their supply chains. On the other hand it has brought the retailers into daily contact with a large number, and a wide cross section, of consumers. The former has given the large food retailers greater power over producers and suppliers while the latter keeps them well attuned to consumer behaviour and allows them to develop sophisticated marketing and brand loyalty strategies. Moreover the large food retailers are widely recognized as having a significant impact on the environment, economy and society. As such the UK Sustainable Development Commission (2008), for example,

argued that 'as gatekeepers of the food system, supermarkets are in a powerful position to create, a greener, healthier, fairer food system through their influence on supply chains, consumer behavior and their own operations'. If the UK Government's policy approach to sustainability is to work 'with the grain of markets' (Department of Trade and Industry/Department for the Environment, Food and Rural Affairs 2003) then the large food retailers would appear to have a central role to play in helping to deliver more sustainable patterns of consumption.

Frame of Reference and Method of Enquiry

In an attempt to review how the UK's top ten food retailers are currently addressing sustainability and commissioning external assurance and embracing materiality as integral parts of their sustainability reporting a two dimensional approach to information collection was chosen. During the past decade 'sustainability reporting has evolved from a marginal practice to a mainstream management and communications tool' (Global Reporting Initiative 2007) and Bowen (2003) suggested that the majority of large companies have realised the potential of the World Wide Web as a mechanism for reporting sustainability commitments and achievements. He also argued that the Web's interactivity, updatability and its ability to handle complexity adds value to the reporting process. With this in mind in January 2015 the authors undertook an Internet search of each of the selected retailers' corporate web sites using the key phrase 'sustainability report', then selected the most recent report/information and searched it digitally using the keywords 'assurance' and 'materiality' using Google as the search engine. The principal focus of this study is an exploratory examination of the current sustainability issues being addressed by the UK's leading food retailers, if and how, they embraced materiality and commissioned independent external assurance, rather than a systematic and detailed comparative evaluation of the sustainability reporting policies of these retailers. The specific examples and the selected quotations from the retailers' sustainability reports /information cited below are used for illustrative rather than for comparative purposes.

In discussing the reliability and validity of information obtained from the Internet Saunders et.al. (2009) emphasise the importance of the authority and reputation of the source and the citation of a specific contact individual who can be approached for additional information. In surveying the top ten UK food retailers the authors were satisfied that these two conditions were met. At the same time the authors recognise that the approach chosen has its limitations in that there are issues in the extent to which a company's public statements genuinely, and in detail, reflect strategic corporate thinking and whether or not such pronouncements may be little more than the cynical marketing ploys outlined earlier. However given the need to drive forward exploratory research such as this and to begin to assess the role retailers are currently playing in promoting sustainability, the internet based analysis adopted offers an appropriate approach and an accessible starting point.

Findings: Sustainability

The internet search revealed that seven of the selected food retailers, namely Tesco, Sainsbury's, Asda (Walmart), Wm. Morrison, The Co-operative Group, Waitrose (John Lewis Partnership) and Marks and Spencer posted sustainability reports while the remaining

three, namely Aldi, Lidl and Iceland posted a more limited range of information on their sustainability policies and achievements. All of the UK's top ten food retailers stress their commitment to the principles of sustainability and to integrating sustainability into their core business activity. Marc Bolland, Chief Executive Officer at Marks and Spencer, for example, stressed that the company 'plans to become a sustainable, international multichannel retailer' while Sir Charlie Mayfield, the Chairman of the John Lewis Partnership, claimed 'sustainability is critical to the Partnership.' In a similar vein Philip Clarke, then Chief Executive at Tesco argued 'if we are to succeed in the future, we need to become a sustainable retailer in every sense of the word' and the company stressed its commitment 'to reducing our impact on the environment' and claimed that 'understanding our impacts and addressing them is integral to our long term success as a business.' Walmart stressed that 'environmental sustainability has become an essential ingredient to doing business responsibly and successfully' and Iceland emphasised that it is 'committed to the principles of sustainability.' These corporate commitments are evidenced across a range of environmental, social and economic agendas.

The selected food retailers addressed a variety of environmental issues throughout the supply chain, namely climate change; carbon emissions; energy consumption energy efficiency and renewable energy; waste management; packaging; water consumption and water stewardship; natural resource conservation; environmentally friendly products; and the land and property holdings. In addressing climate change, Tesco, for example, reported 'we want to be a zero-carbon business by 2050' and to be 'improving the energy efficiency of our stores and distribution centres, reducing the leakage of refrigerant gases and continuing to pioneer the use of natural refrigeration' and that these initiatives 'translate into significant reductions in carbon and other greenhouse gases from our estate.' More specifically by 2013/2014 the company reported a 34.7% reduction (against a 2006/2007 baseline) in carbon dioxide emissions per square foot across its stores and distribution centres and suggested that its 'performance continues to be driven by our strong focus on reducing refrigerant gas leakage and using less harmful alternatives including natural refrigerants.' Tesco also reported 'in addition to reducing the carbon impact of our operations, we are committed to working with suppliers to do the same for the products we sell' and the company has conducted a detailed analysis of the total carbon footprint of its product range which has allowed it to identify which of its product categories and lifecycle stages have the highest carbon intensity.

The John Lewis Partnership stressed 'we need to protect our environment- and our business. So we're reducing our carbon footprint and finding smarter ways to power the Partnership.' Further the company argued 'we recognise the need to adapt and future-proof our business against the impact of climate change and minimise our contribution to it.' More specifically the company suggested that 'the underpinning theme of our carbon plan is the need for solutions that are sustainable' and it reported working to reduce absolute operational carbon emissions by 15% by 2020/2021 (against a 2010/2011 baseline). The John Lewis Partnership further suggested that looking to achieve this 'challenging target' was 'the driving force behind innovation and the development of creative solutions. Looking to the future the company reports 'we aim to maximise our use of low carbon sources and see these technologies as a vital component in our carbon reduction plans.' The company also reported on its initiatives to tackle 'transport emissions to increase efficiency and

reduce our carbon footprint' and claimed 'energy-efficient trucks, reduced mileage and clear targets are helping us distribute and deliver responsibly. 'In a similar vein Walmart reported on its investment in technologies to reduce energy consumption. These include 'continuing to scale and deploy market-ready efficiency technologies, leveraging our global demand to provide scale and certainty to our suppliers' and 'maintaining our focus on testing and experimenting with next-generation technologies to accelerate the future of energy efficiency.'

Waste reduction and recycling are important components of food retailers' sustainability commitments. Wm. Morrison, for example, reports a number of initiatives designed to reduce customer food waste in the home, waste generated in stores, waste generated in the supply chain and packaging under the banner 'Avoiding Waste in the Community.' The company argued, for example, that 'the issue of food waste in the industry has been under increasing scrutiny in recent years' and reported on its 'great Taste less waste' customer food waste awareness campaign' initially launched in 2008 designed 'to provide customers with helpful straightforward information on how best to plan food buying, store food once bought and then utilise leftovers to reduce waste and save money.' In an attempt to achieve these aims the company provide information in store, on food packaging, in its customer magazine and on its website. More generally Wm. Morrison provide over 4,000 recycling collection banks in almost 400 of its 630 Stores within the UK and it offers (in Scotland and Wales it sells) its customers both large and small durable and recyclable woven shopping bags to help to reduce the use of standard plastic carrier bags. The Co-op Group also reported on its commitment to reduce packaging and food waste. The company claimed, for example, that 'reducing our own-brand packaging, while also ensuring this does not increase other environmental impacts such as product wastage is a priority for us' and that 'we also aim to reduce raw material use by maximising the recyclability and the recycled content of packaging.'

Natural resource conservation has attracted attention from many of the UK's top ten food retailers. There is a growing interest in water stewardship as epitomised for example, by the John Lewis Partnership which claimed 'we are committed to managing our water use carefully because we recognise the growing challenge of water scarcity' and reported on its development of a new strategy for its operational water footprint designed to make more effective and efficient use of water resources. The company emphasised that this strategy 'will take into account the infrastructure, procedural and behavioural change that will deliver reductions' and that 'we will establish a road map of achievement to ensure our approach is fully linked to our broader environmental aspirations and be responsive to the future legislative changes and amendments to the water market.' Sainsbury's stresses its commitment to 'demonstrate robust water stewardship, ensuring our supply chain is sustainable in all areas of water vulnerability.' Walmart claimed to understand 'that water is intrinsic to our mission of helping our customers save money and live better lives' and that 'our water management strategy focuses on reducing water consumption in our operations through the implementation of technology such as high efficiency urinals, low-flow toilets, flow reducers in faucets and the recovery of clean water from store processes.'

A number of the selected food retailers stressed their commitment to both sustainable sourcing and environmentally friendly products. The John Lewis Partnership, for example, claimed 'we aim to carefully source raw materials from long term sustainable supply chains' and that we understand that the sourcing of raw materials can have a significant impact on people, environments and ecosystems, if not managed considerably.' More specifically the company reports on its achievements in the sustainable sourcing of fish, soya and palm oil and on its sponsorship of the 'Marine Conservation Society Good Fish' mobile phone app designed to help consumers in choosing fish products. Marks and Spencer reports on its initiatives designed 'to improve our sourcing of sustainable raw materials for food', that it had 'more than doubled the proportion of products from food suppliers that meet our Silver Standard for sustainable food factories from 8% to 19% in just one year' and that 'all our wild fish comes from the most sustainable sources available and that we've developed M&S Select Farm Assurance codes of practice for salmon, shrimp and fish feed.'

A wide range of social issues are also important elements in the top ten food retailers' corporate commitments to sustainability and a number of common themes can be identified including responsible trading and sourcing, diversity and equality of opportunity, training and development, food safety, working conditions at suppliers, and health and safety within the workplace, links with local communities, and charitable donations. Tesco, for example, recognised that 'we operate in a competitive dynamic industry which is changing at a faster pace than ever before' and claimed that 'building strong partnerships with trusted suppliers so that we can deliver high quality safe products that are responsibly produced for our customers at affordable prices.' The company, a founding member of the Ethical Trading Initiative, also reports that 'we monitor compliance through supplier audits' and on its 'pioneering online supplier communities' that 'provide a free network for suppliers to talk to us, share advice and learn best practice.' Under the banner 'Responsible Retailing' the Co-op Group recognised 'we have a significant impact on the health and wellbeing of our customers' and reported that 'responsible retailing is a key strategic priority and we focus on ensuring that a range of healthier and higher welfare choices are available to customers across a range of budgets. More specifically the company recognised that the UK diet contains higher levels of salt, fat and sugar than those recommended by the UK government and that over 25% of UK adults are classed as being clinically obese and reports that it is committed to 'reducing salt, saturated fat and sugar in key products and labelling our products in a way that enables customers to make informed choices.' Under the banner 'sourcing with integrity' Sainsbury's reported its commitment to 'source all our key raw material and commodities sustainably to an independent standard', 'hit £1 billion sales of fairly traded products' and to 'ensure all our meat, poultry, eggs, game and dairy products will be sourced from suppliers who adhere to independent higher welfare standards.'

All the selected food retailers emphasised their commitment to their employees, and diversity and equality of opportunity, employee satisfaction and staff training and development are dominant themes. Iceland, for example, stressed its commitment to making the company 'a great place to work' while Tesco reports on its commitments to its employees under the banner 'being a great employer.' Tesco further reports that 'we work to create opportunities at every stage of an individual's career so that they can achieve their

aspirations' and that 'we are introducing a new People Plan across our markets for 2014/2015 to ensure that all colleagues are empowered to do their best in a happy healthy, high performing team.' In illustrating these commitments the company outlined the opportunities it offers in embarking on the career ladder, in providing development training programmes in mid and advanced careers and in offering flexible retirement arrangements for older employees. Marks and Spencer argued that 'to match our ambitions we need employees with a diversity of skills and experiences' and reports that it has 'trialled a scheme through which 30 female business leaders from across our business have mentored 30 young female students attending schools in disadvantaged areas of the UK.'

Support for local communities and charitable contributions are also prominent themes. The Co-op Group, for example, claims that 'social responsibility lies at the heart of the co-operative approach' and that it is 'investing in and supporting communities across the UK' and 'promoting a more equal and inclusive society.' The company reports that its 'community investment' includes 'our donation of money, goods and time- along with donations by employees, customers, members and suppliers that we have facilitated through which we seek to build more sustainable communities.' The Co-op Group also reports on its 'Green Schools Revolution' under which over 6,000 schools within the UK have now subscribed to a sustainability education programme and on its 'From Farm to Fork' initiative which has enabled almost 20,000 primary school children to visit working farms since 2005. Some of the selected food retailers provide details of their specific charity partners. Lidl, for example, reports that it has 'teamed up with CLIC Sargent' to help 'raise funds for children suffering from cancer' while Wm. Morrison reported on its 'charity partnerships' with 'Save the Children', 'Families and Schools Together' and 'Eat, Sleep, Learn, Play.' This latter charity, for example, supports needy families in the UK and provides access to the basic essentials for children during their early years.

Economic dimensions of sustainability generally receive less explicit attention from the UK's leading food retailers but include employment creation and providing value for customers, supporting national and local businesses, contributing to economic value added, and building shareholder value. The John Lewis Partnership, for example, reported 'in a challenging economic environment where unemployment remains high we are pleased to have been able to create 6,300 new jobs around the country this year through head office, branch openings and by growing our distribution operations.' More specifically the company reported 'to support Waitrose's growth in the north of England and Scotland our distribution centre in Leyland, Lancashire opened in August. The opening has initially created 250 jobs including specialist and support roles such as warehouse and transport managers, catering and maintenance.' Tesco listed 'creating opportunities' as one of its 'three big ambitions' and reported that 'we want to do more than simply create new opportunities within our own operations. We want to help equip young people with the key employability skills that will help them in whatever career they decide to pursue.' More specifically Sainsbury's reported its commitment 'to provide 50,000 new UK job opportunities' by 2010.

The Co-op Group claimed 'we are strong supporters of British farmers and farming', that 'we are committed to increasing our investment in UK sourcing through which we aim to support local economies and UK farmers' and that 'in September 2013 we reinforced our

commitment to UK farmers by converting number of key product ranges (including food-to-go, chilled ready meals and pies) to 100% British meat, poultry and fish wherever possible.' Wm. Morrison stressed its commitment to 'value without compromise' with the focus being on continuing 'to be a value-led grocer' and the company reported that 'buying, making and moving a large proportion of our own supply also helps us to reduce our costs and make our food affordable, whilst reducing our waste and environmental impact.' More generally the Co-op Group emphasised its economic value added, namely the contribution of commercial organisations to national wealth creation and the benefits they deliver to shareholders, and reported that 'in 2013 we contributed £2.1 billion to national wealth.'

Findings: Materiality

The review of the selected retailers' sustainability reports revealed marked variations in the extent to which they embraced materiality as part of the reporting process. Six of the retailers namely Sainsbury's, Walmart, Wm. Morrison, Marks and Spencer, the Cooperative Group and Kingfisher drew attention to the materiality process in producing their sustainability report. While the other four selected retailers, namely Tesco, the John Lewis Partnership, Alliance Boots and the Home Retail Group, drew attention in various ways to the priorities that informed and underpinned their sustainability reports, an essential initial element in determining materiality, they provided no explicit commentary on materiality per se.

Marks and Spencer, for example, recognised that the company faces a wide range of environmental, social and ethical challenges and that it has to 'to manage a continually evolving set of issues.' More specifically Marks and Spencer reports that its sustainability commitments were' assessed for materiality by M&S management, who ranked them in terms of their importance to stakeholders and importance to M&S on a 3x3 matrix.' The two axes of this matrix, namely importance to stakeholders and importance to M& S, are divided into three categories namely high, medium and low. In terms of importance to stakeholders, the high category includes issues that are 'frequently featured in the media, raised by key stakeholders or in key sustainability benchmarks' while the low category includes issues which generally do not attract significant attention. In a similar vein the high and low categories in terms of importance to Marks and Spencer contain issues that are important in 'supporting business strategy for a large part of M&S operations' and those 'supporting business strategy for a small part of M&S operations' respectively. While Marks and Spencer's management are reported to have played the major role in positioning issues within the matrix these positions were 'reviewed and amended where necessary according to direction from Ernst and Young.' Marks and Spencer also reported that some 40 issues were rated as being of high importance to stakeholders and of high or medium importance to the company. Only issues in these two categories within the materiality matrix are independently assured whilst the remaining seven categories are internally audited and assured.

Sainsbury's and Wm. Morrison also report on employing a matrix approach in determining materiality. Sainsbury's, for example, claimed that its 'materiality process helps us to focus on areas of most significance —both for our business and the wider world' and

this process of focusing on the most material issues helps us to make a more direct link between our commercial strategy and the challenges we face regarding responsible operations.' Sainsbury's reported that it 'analysed a wide range of information to understand the key issues for different groups of people' and that it then prioritised these issues on a matrix whose two axes were 'potential business impact' and 'stakeholder concern.' Wm. Morrison reports addressing a wider constituency in determining materiality in that 'we monitor the wider issues that affect our business, take specialist advice, actively engage with our stakeholders, and then analyse risks and opportunities' before 'plotting them on a materiality matrix.' Wm. Morrison also reports that it has developed arnge of company key performance indicators to drive and measure change.

The Co-operative Group also claimed that its 'materiality decision-making process ensures that we focus on the issues that matter most to our stakeholders and our business' and more specifically on 'the issues that reflect our significant social, environmental and economic impact and that influence our stakeholders' assessment and decision making.' In identifying which issues are material and in determining their significance the Co-operative Group consider a number of internal and external factors and a range of mechanisms. These include 'considering issues raised by our members (e.g., through the democratic process and our membership engagement strategy) and other stakeholders (e.g. through customer participation in ethical policy formulation and employee and customer surveys) as well as considering business and society issues (as expressed through our business strategies and risk management processes, societal norms and emerging issues, external reporting standards and benchmarks.' However the company eschews 'simply mapping these onto a materiality matrix' and argued that such an approach 'is not always effective when dealing with the daily reality of evaluating and responding to ethical and sustainability challenges.' Rather the Co-operative Group's 'approach is to detail these various inputs and then set out the material importance of each issue' in its sustainability report. The company reported on its material issues under three overarching headings namely 'social responsibility', protecting the environment' and 'delivering value to our stakeholders' across some 15 thematic issues including climate change, water and chemicals, international communities, promoting equality, suppliers and supply chains and employees.

Although the other four selected retailers stressed a number of priorities in their sustainability reports they did not explicitly refer to the concept of materiality. Tesco, for example, reported 'we have started to tackle three urgent issues facing society- food waste, health and youth unemployment' and 'how we are strengthening our work in four essential areas- trading responsibly, reducing our impact on the environment, being a great employer and supporting local communities- which are fundamental to the way we do business' but offered no information on the processes involved in determining these goals. The Home Retail Group identified five 'good business principles', namely shopping for tomorrow', 'building a great place to work', 'being a good neighbour', 'keeping clean and green' and 'sourcing with care' but the company's sustainability report provided no information on how it determined these principles. While the John Lewis Partnership did not explicitly address materiality in its 2014 'Sustainability Review' the company reported that 'for 2014-2015 we are introducing a sustainability materiality assessment process to update our views of the issues that are most material to our business, so that we can better set our priorities and

then plan and invest accordingly.' Further the John Lewis Partnership stressed that this process 'will involve interviews with senior management across the Partnership, as well as our key stakeholders, to understand what matters most to them, to the business and to wider society.'

Findings: External Assurance

The findings reveal that five of the UK's top ten food retailers, namely, Tesco, Wm. Morrison., Marks and Spencer, the John Lewis Partnership and the Co-operative Group, which publicly reporting on sustainability included independent assurance statements in their sustainability reports. Two of the selected food retailers, namely Marks and Spencer and the Co-operative Group, which included assurance statements in their sustainability reports, also provided an 'external commentary' on their reports, as did Sainsbury's. Walmart reported that its report is 'not externally assured' and the remaining three food retailers made no mention of independent assurance of, or external input to, the limited sustainability information they posted on their corporate web sites. The five external assurance statements vary in their content and approach and in the character of the information provided. There was some variation in the scope and coverage of the reports and while the assurance statement for The Co-operative Group, for example, covered 'all the key data and claims' in the company's report, the Two Tomorrow's assurance statement for the John Lewis Partnership covered 'greenhouse gas emissions', 'operational waste' and community investments' and the assurance report undertaken for Tesco by Environmental Resource Management covered 'carbon and food waste.'

All five assurance statements provided limited assurance as described earlier and in addressing the assurance process all assessors generally provided an outline of the methodology they employed to gather evidence and of the criteria they employed to guide their judgements. In its assurance statement for the John Lewis Partnership for example, Two Tomorrow interviewed 'relevant management responsible for the three areas of focus' (outlined above), 'to gain an understanding of how these issues are managed'; 'reviewing greenhouse gas emissions by checking emission factors.....and sample checks of consolidated data'; and 'reviewing and sample checking the community data measurement, collection and consolidation process.' In producing the assurance statement for Marks and Spencer, for example, Ernst and Young, reported undertaking a review of progress the company had made in relation to selection of its sustainability commitments, of the company's approach to stakeholder engagement and of relevant documentation and interviewed a selection of the company's managers responsible for managing progress towards sustainability commitments. In undertaking external assurance for Wm. Morrison, DNV-GL, undertook a range of activities including interviews with selected directors and senior managers responsible for sustainability issues and a review of selected evidence to support the issues discussed and a visit to one of the company's stores 'to assess whether initiatives and activities detailed in the review aligned with those taking place in store.'

Some of the assurance statements addressed the principles of inclusivity and responsiveness mentioned earlier and all included an outline of findings and a concluding summary. In outlining its findings on inclusivity for Marks and Spencer Ernst and Young reported 'we are not aware of any key stakeholder groups that have been excluded from

engagement' and 'we are not aware of any matters that would lead us to conclude that Marks and Spencer had not applied the inclusivity principles in developing its approach.' In addressing the principle of responsiveness in Wm. Morrison's sustainability report Two Tomorrows reported 'Morrisons continue to develop the maturity of its debate around sustainability issues' and that the company 'has demonstrated responsiveness to the views of the British farming community.' The DNV-GL assurance statement for the Co-operative Group, for example, concluded 'on the basis of the work undertaken, nothing came to our attention to suggest that the report does not properly describe the Co-operative's adherence to the principles or its performance' and that 'in terms of data accuracy, nothing came to our attention that data have not been properly collated from information reported at operational level.' In a similar vein Two Tomorrow's assurance for Wm. Morrison found 'on the basis of work undertaken, nothing came to our attention to suggest that the review does not properly describe Morrison's adherence to the principles or its performance.'

That said in all five assurance statements the assessors also make recommendations which highlight some of the limitations of the sustainability reporting process. In its assurance statement for the John Lewis Partnership, DNV-GL reported that 'raw data for refrigerants is not always readily accessible' and that 'the data consolidation process is largely manual, there exists the possibility for errors' and recommended that the company 'continue to improve data collection coverage.' In providing assurance for Marks and Spencer, Ernst and Young noted that the company had made new sustainability commitments to wood waste and farming and argued that the company 'will need to clearly define the outcomes to be achieved from these commitments and ensure that it can measure progress towards these outcomes with meaningful metrics.' Two Tomorrows reported that data collection in many areas of Wm. Morrison was 'largely a manual process, with information provided from different sources using a range of collation techniques and covering various reporting periods' and it recommended that 'Morrisons should continue improving their methods of data collection and, where feasible, automate the process to increase accuracy and support a move towards real time reporting.'

Three companies, namely, the Co-operative Group, Marks and Spencer and Sainsbury's, included an 'expert opinion/ external commentary' in their sustainability reports. Jonathan Porritt, the Founder Director of Forum for the Future, provided a one page personal 'commentary' as part of the sustainability reports produced by Marks and Spencer and the Co-operative Group while Sally Uren, Chief Executive of Forum for the Future, provided a half page 'expert opinion' for Sainsbury's. In his commentary for the Cooperative Group Jonathon Porritt suggested that 'to say 2013 was a difficult year for The Cooperative would be a significant understatement' but argued 'the day to day sustainability work was pursued throughout 2013 with undiminished enthusiasm, not just by the full-time sustainability staff, but by the thousands of co-operative employees involved in different parts of the programme.' Further Jonathon Porritt claimed that 'the level of investment back into the community (both here in the UK and overseas) remains hugely impressive' as does the company's 'continuing commitment to sustainable energy.' Sally Uren's 'external view' described Sainsbury's commitment to sustainability as a story of 'continuous improvement' which included 'flashes of truly pioneering practice' and suggested that 'Sainsbury's has articulated that real value goes beyond simply cost and championed what it means to deliver a sustainable food system for the future.'

Discussion

While all of the UK's top ten food retailers recognise and publicly report on a wide range of impacts their businesses have on the environment, society and the economy there is some variation in the extent, nature and detail of the sustainability reporting process. As such this may reflect the reality that the UK's leading food retailers all have their own individual styles and strategic imperatives and that they are at the start of a long and potentially difficult journey towards sustainability. Marks and Spencer, for example, has been reported as arguing that currently 'no business in the world can claim to have come remotely close to sustainability' (Barry and Calver 2009). A number of sets of issues merit attention and careful reflection. Given the wide range of the sustainability agendas and issues currently being addressed by the UK's leading food retailers, it will not always be straightforward to align what may be competing and contradictory strategic goals and decisions. At the strategic level, for example, Tesco's commitments to 'source such an enormous range of products and to get them to so many millions of people, conveniently every day and at affordable prices' and the decisions associated with these commitments may threaten other commitments, for example, to 'reducing our impact on the environment' and encouraging 'our colleagues and customers to live healthier lives. When addressing sourcing policies, for example, retailers may have to assess whether the environmental costs of importing fresh fruit and vegetables from Africa are outweighed by the social benefits of trading with less developed economies. Here food retailers may have to make difficult trade-offs between competing goals. At the store level managers who are working to meet what may be ever demanding operational and financial targets and /or to achieve performance related bonuses may, for example, when facing problems in staff scheduling, put employees under pressure to work outside the hours that suit their work/life balance or may refuse to release employees for training and retail education programmes.

There are issues about the ways in which the top ten food retailers construct their sustainability agendas within what is a dynamic retail marketplace. While all of the selected retailers explicitly stress their commitment to sustainability they can be seen to be individually and collectively constructing a specific and narrow definition of the concept. Such a definition is built around business efficiency and the search for competitive advantage and can be seen to be driven as much by business imperatives as by a concern with sustainability. Thus while many of the environmental initiatives addressed in the sustainability reports are designed to reduce energy and water consumption and waste emissions, for example, they also reduce retailers' costs. In a similar vein the retailers' commitments to their employees focusing for example, upon good working conditions, the work/life balance health and safety at work and training and retail education, all help to promote stability, security, loyalty and efficiency within the workforce. The UK's leading retailers might thus be seen to have constructed sustainability agendas, which are driven primarily, though not necessarily exclusively, by their own commercial interests. The accent being on efficiency gains across a wide range of economic, social and environmental issues rather than on maintaining the viability of natural ecosystems and reducing demands on finite natural resources.

Technological innovation has been widely seen to offer a means of promoting production efficiency and of being important in enabling the transition to a more

sustainable future. Schor (2005), for example, suggests 'much of the literature on sustainable consumption has focused upon technological solutions' and claims that 'advocates of technological solutions argue that more intelligent design and technological innovation can dramatically reduce or even stop the depletion of ecological resources, as well as eliminate toxic chemicals and ecosystem disruption.' However Huesemann (2003) suggests a number of reasons 'why technological improvements in eco-efficiency alone will be insufficient to bring about a transition to sustainability.' Schor (2005) further argued that 'the popularity of technological solutions is also attributable to the fact that they are apolitical, and do not challenge macrostructures of production and consumption' and that 'they fail to address increases in the scale of production and consumption, sometimes even arguing that such increases are not unsustainable if enough natural-capital-saving technical change occurs.'

That said the retailers' current construction of sustainability which emphasises efficiency, can be interpreted, for example, as being consistent with the UK government's vision for sustainability which looks to 'encouraging economic growth while protecting the environment and improving our quality of life' (Department for Environment, Food and Rural Affairs 2013). This in turn raises questions about complexity and ambiguity in defining sustainable consumption, about the nature of the relationship between the state and retail capital and about the locus of power within that relationship. French (2002), for example, argues that many states within advanced capitalist societies have sought to 'implement sustainability through a restricted public sphere paradigm which places greater emphasis on the corporate imperative' namely that the state must not jeopardise 'the competitiveness of domiciled corporate interests in the wider globalized economy'. With this in mind he views the role of the state in the definition and promotion of sustainability as a controversial one and he argues that 'there is a balance to be drawn somewhere between overly prescriptive regulation, on the one hand, and the withdrawal of the state from the debate altogether, on the other'. Here the argument is that without direct, sustained and purposeful political direction the market cannot, of itself, be relied upon to promote sustainable consumption while at the same time the state cannot deliver sustainable consumption goals by regulation and legislation alone.

There are significant variations in the extent to which these retailers are embracing materiality and there is no evidence that the UK's leading food retailers have adopted a sector specific approach to the definition and determination of materiality as advocated by Eccles et. al. (2012). Perhaps this is not surprising in that the leading food retailers have, by and large, developed their own individual approach to sustainability reporting. While some of the selected food retailers provide limited information on the continuing development of their approach to materiality there is no indication in the sustainability reports that any of these retailers have the political or commercial desire to adopt a retail sector specific approach in the immediate future. Indeed the premature closure of the 'Race to the Top' project (International Institute for Environment and Development 2004), originally designed 'to track progress towards a greener and fairer food system' suggests a common approach will prove no easy task. Where individual food retailers publicly promote what they see as their specific approaches to sustainability to give them distinctive positions within the extremely competitive market within the UK, this makes the development of a genuinely

shared approach to the determination of a collective and agreed set of material issues a testing and potentially intractable challenge.

While a variety of methods are employed in attempting to determine materiality there is a generic issue concerning the nature of the relationship between company interests and stakeholder interests. Where the company, and more specifically its executive management team, is principally, and sometimes seemingly exclusively, responsible for identifying and determining material issues within its sustainability reporting process. As such the company might also be seen to be essentially responsible for identifying its stakeholders and for collecting, collating and articulating their views on the priorities for the company's sustainability strategies. However whether the leading food retailers can feasibly elicit and represent the views of all their stakeholders remains to be seen. Generally within the business world Banerjee (2008), for example, has argued that 'despite their emancipatory rhetoric, discourses of corporate citizenship, social responsibility and sustainability are defined by narrow business interests and serve to curtail the interests of external stakeholders.' A number of the selected food retailers reported seeking to elicit stakeholder opinions on retailers' sustainability priorities and strategies via stakeholder panels and customer surveys and meetings with investors. This certainly suggests some food retailers wish to look beyond their own immediate commercial imperatives in determining materiality but Cooper and Owen (2007) council caution arguing that 'whilst the corporate lobby apparently espouses a commitment to stakeholder responsiveness, and even accountability, their claims are pitched at the level of mere rhetoric which ignores key issues such the establishment of rights and transfer of power to stakeholder groups.' More specifically Cooper and Owen (2007) suggested that 'hierarchical and coercive power prevent the form of accountability that can be achieved through discussion and dialogue' and that arguably, at best, companies may 'favour shareholders over all other interested groups.'

There are also issues about how executive managers and/or stakeholders rank material issues in terms of both importance and impact and about the nature of the materiality matrices they use to depict materiality. Listing material issues in rank order, for example, effectively fails to depict or to distinguish between the perceived orders of magnitude of importance and impact. Schendler and Toffell (2013), for example, argue that while many of the world's largest companies, including Walmart, 'are working to reduce energy use and waste, and many have integrated sustainability into strategic planning''such actions don't meaningfully address the primary barrier to sustainability, climate change.' Schendler and Toffnell (2013) suggest that 'shareholder analyses of businesses focus almost entirely on operational greening activities and policies, but not on whether companies can continue on their current course in a climate-changed world. In other words, such analyses don't actually measure sustainability.' Equally critically Schendler and Toffell (2013) further argue that many businesses that claim to be sustainability leaders 'don't recognise the primacy of climate change' and that many businesses include 'climate in a basket of equally weighted issues' like oceans, forests or fisheries' and that such an approach is 'misguided' in that 'climate vastly trumps (and often includes) those other environmental issues.' Although the issue of climate change is clearly 'too vast for any single business' (Schendler and Toffell 2013) the major retailers are in a powerful and pivotal position in

global supply chains in that they can exert a powerful influence on both production and consumption.

Concerns have also been expressed that the basic dimensions of the matrices that many large companies currently use to determine materiality are effectively not fit for purpose. Mark McElroy, Executive Director of the Center for Sustainable Organizations, for example, argued that 'while it is common practice now for corporate sustainability reports to include materiality matrices, whether or not they serve their purpose is debatable' (McElroy 2011). McElroy's argument is that the majority of large companies have adapted the concept of the materiality matrix, initially favoured by the Global Reporting Initiative, to suit corporate rather than wider environmental, social and economic goals. More specifically he argued that 'instead of considering the impacts on the economy, the environment and society' as one of the two axes of the materiality matrix as proposed by the Global Reporting Initiative, the matrices contained in the sustainability reports published by many large companies focus 'instead on whether, and to what degree, impacts affect the organisation and/or its business goals' (McElroy 2011). More critically McElroy (2011) claimed that this change 'amounts to a perversion of the idea of materiality in sustainability reporting because it essentially cuts out consideration of what are arguably the most material issues' namely the broad social, economic and environmental impacts of an organisation regardless of how they relate to a particular business plan or strategy' (McElroy 2011).

A number of the UK's leading food retailers include some form of external assurance in their sustainability reports but the nature, character and scope of the external assurance varies considerably. The leading food retailers approach to assurance can perhaps be best collectively described as both idiosyncratic and partial. Idiosyncratic in that the external assessors were given varying briefs and they in turn adopted varying approaches and though this is not a problem per se, as sustainability reports are themselves voluntary and the accompanying assurance statements are not subject to regulation. However it does mean that the lack of a common and agreed methodology makes any systematic assessment of, and comparison between, the major players within UK food retailing effectively impossible. Partial in that three of the UK's top ten food retailers did not post a formal sustainability report on the Internet, two of the seven that posted sustainability reports did not provide any external assurance and the other five food retailers commissioned only a limited external assurance statement. At the same time the expert commentary/external opinion included in the J. Sainsbury, the Co-operative Group and Marks and Spencer sustainability reports addressed general issues. More specifically they offered little or nothing by way of supporting evidence, they lacked critical awareness and they made no explicit systematic reference to the issues of inclusivity and responsiveness. In some ways the external view in the J. Sainsbury report, for example, is little more than a marketing statement seemingly designed to promote the company's corporate responsibility image.

More generally the independence of the assurance process can be a thorny issue. While Wiertz (2009) has argued that 'in applying external verification to CSR reports, a central characteristic of the assurance process is to be independent of the reporter and the subject matter being attested', O'Dwyer and Owen (2005) claim that their work on 41 large UK and European companies 'raises question marks regarding the independence of the

assurance process.' The external assessors which produced the assurance statements for Wm. Morrison, Marks and Spencer, the Co-operative Group and The John Lewis Partnership addressed the issue of their independence. In its assurance statement for Wm. Morrison, for example, Two Tomorrows affirms it has 'no other contact with Morrison's' while DNV-GL's assurance statement for the John Lewis Partnership reports 'we have not been involved in providing the Partnership with any other services during the reporting period.' Ernst and Young report 'we have provided no other services relating to Marks and Spencer's approach to social, environmental and ethical issues' but do not mention if they undertake any financial assurance for Marks and Spencer. Sainsbury's is one of Forum for the Future's Foundation Corporate Partners and this might be seen to compromise the independence of the short external review of their sustainability report mentioned earlier. More generally O'Dwyer and Owen (2005) have expressed concern over the 'large degree of management control over the assurance process' arguing that management 'may place any restrictions they choose on the assurance exercise.'

A wide range of stakeholders are taking an increasing interest in the UK's leading food retailers' corporate social behaviour and in theory the external assurance of sustainability reports must be seen to be important for a variety of audiences including the general public, customers, investors, employees, suppliers, regulatory bodies, trade unions, non-governmental organisations and pressure groups. While RAAS Consulting (2009) has argued that the two primary audiences are regulators and investors, the assurance statements contained in the UK's leading food retailers' reports give little indication of their intended audiences. CorporateRegister.com Limited (2008) suggests that 'statements are supposedly for external stakeholders, but in practice they're probably written for internal audiences and the language of assurance reduces its appeal to the wider audience.' O'Dwyer and Owen (2005) contrast this approach with 'the governance structures underpinning the financial audit process' arguing that management's 'reluctance to address the assurance statement to specific constituencies implies that they are primarily providing value for management thereby reflecting a perceived demand for assurance of this information from management as opposed to stakeholders.' Further O'Dwyer and Owen (2005) conclude that unless this issue is dealt with 'assurance statement practice will fail to enhance accountability and transparency to organisational stakeholders.'

Such reservations and concerns would certainly seem to limit the value, credibility and integrity of the assurance process but it is important to note that the UK's leading food retailers are large, complex and dynamic organisations. Tesco for example is the UK's largest private sector employer and their reach is international and in some cases global. Capturing and storing information and data across a diverse range of business activities throughout the supply chain in a variety of geographical locations and then providing access to allow external assurance is a challenging and a potentially costly venture and one which some of the UK's leading food retailers currently seemingly choose not to pursue. Thus while a retailer's operational carbon emissions may be systematically collected, collated and audited as part of the company's environmental sustainability commitments, information on their contribution to local communities and levels of staff satisfaction may be more difficult to define, measure and assure. While there may be difficulties in collecting and assuring such information within the UK such problems seem likely to be much greater overseas where the UK's food retailers are sourcing many of their products. Where a

company's data collection and collation systems are not so developed to realistically allow rigorous and comprehensive assurance processes then limited assurance may well be the best way forward. At the same time it is important to recognise that assurance statements come at a cost which includes employee time, scheduling impacts and the assessor's fees. Some of the UK's leading food retailers looking to commission comprehensive external assurance across the full spectrum of their business operations might well incur substantially higher costs and they currently seem to choose to make cost/benefit decisions that favour a more 'limited' but deliverable assurance process

Finally there are broader issues about the tension between sustainability and economic growth. In some ways the UK's leading food retailers' general position was epitomized by Sir Terry Leahy, the then Chief Executive Officer of Tesco, in his 'Foresight' contribution at the start of The Global Coca Cola Retailing Research Council Forum report (2009), who argued that, at that time, his company 'is seeking to create a movement which shows that it is possible to consume, to be green and to grow'. This approach is certainly consistent with the argument advanced by Reisch et.al. (2008) for example, that although moving towards sustainable consumption is a major policy agenda, 'Growth of income and material throughput by means of industrialization and mass consumerism remains the basic aim of western democracy.' Reisch et.al. (2008) further argued that 'rather than controlling consumption, recycling materials and increasing production efficiency have tended to be the dominant means supposed to decouple environmental degradation from economic growth.'

More fundamentally Jackson (2006) has argued that 'it is entirely fanciful to suppose that deep emission and resource cuts can be achieved without confronting the structure of market economies.' In a similar vein Castro (2004) has questioned the very possibility of sustainable development under capitalism and argued that economic growth relies upon the continuing and inevitable exploitation of both natural and social capital. Here Fernando's (2003) assertion that 'capitalism has shown remarkable creativity and power to undermine the goals of sustainable development by appropriating the language and practices of sustainable development' resonates loudly. More generally this, in turn, echoes Dolan's (2002) belief that 'the goal of sustainable consumption needs to be seen as a political project, recognising the power relations between social groupings and between cultural value systems' and his warning that 'this is the context within which the idea of sustainability will stand or fall.'

Conclusions

All of the UK top ten food retailers publicly report, albeit in a variety of ways, on their commitments to sustainability and strategically the majority of them essentially argue that by integrating sustainability into their businesses, they are better placed to provide long term growth and financial security for all their stakeholders and to enhance their market position and reputation. However the authors argue that the UK's leading food retailers' definitions of and commitments to sustainability can be interpreted as being driven as much by business imperatives as by any determined commitments to sustainability. Thus the accent is upon making efficiency gains across a wide range of

economic, social and environmental issues rather than focusing on maintaining the viability and integrity of natural ecosystems and on reducing demands on finite natural resources.

There are marked variations in the extent to which the UK's leading food retailers have embraced materiality as part of their sustainability reporting process and there was little or no evidence of a collective sector specific approach to materiality within the retail community. While five of the UK's top ten food retailers drew attention to materiality in their sustainability reports, some of these made very limited reference to how they had determined material issues, and while some of the remaining food retailers identified a number of priorities in their sustainability reports they made no explicit reference to materiality. Looking to the future it is far from clear that the UK's leading food retailers will find it easy to adopt a sector specific approach to the determination of material issues for sustainability reporting. Even if they continue to develop their approaches to sustainability reporting independently they still seem certain to face major challenges in looking to reconcile the potentially contested relationships between executive management teams, investors and a wider range of stakeholders and in operationalizing the concept of materiality and in ranking and/or depicting material issues.

A number of the UK's leading food retailers are commissioning external assurance as part of their sustainability reporting procedures but there is considerable variation in the nature, content and scope of the assurance processes undertaken. At best the accent is upon 'limited' rather than 'reasonable' assurance and there are some concerns about the independence of the assessors and about management control of the assurance process. In many ways this reduces the reliability and credibility of the food retailers' sustainability reports. That said the UK's leading food retailers are large, complex and dynamic organisations and their supply chains often have a considerable geographical reach and this makes more rigorous and comprehensive assurance a difficult and a costly process. Looking to the future growing stakeholder pressure may see the UK's leading food retailers commission more rigorous, systematic and wider ranging external assurance.

In conclusion the authors argue that the UK's leading food retailers are, at best, pursuing a 'weak' rather than a 'strong' model of sustainability. More critically the authors suggest that the top ten UK food retailers' commitments to sustainability are couched within existing business models centred on continuing growth and consumption and that current policies can be viewed as little more than genuflections to sustainability. As such this echoes Roper's (2012) belief that weak sustainability represents 'a compromise that essentially requires very little change from dominant economic driven practices but effectively works to defuse opposition, increase legitimacy and allow business as usual. The UK's leading food retailers are thus effectively and conveniently ignoring the fact that present patterns of consumption may simply be unsustainable in the long term. As such these retailers seem likely to continue to attract potentially increasingly sustained criticism, albeit from a vocal minority, who are exercised about what Jackson (2009) has described as 'an emerging ecological crisis that is likely to dwarf the existing economic crisis.' At the same time the authors currently find little consumer appetite for a transition to a more genuinely sustainable future. Such a scenario seems currently politically unacceptable and the European Commission (2012) has recognised that 'sustainable consumption is seen by

some as a reversal of progress towards greater quality of life' and that 'it would involve a sacrifice of current, tangible needs and desires in the name of an uncertain future.'

TABLE 1: TOP TEN UK FOOD RETAILERS

FOOD RETAILER	UK RETAIL SALES (2013)(£M)	CORPORATE WEB SITE ADDRESS
Tesco	£43, 057	http://www.tesco.com/
Sainsbury's	£23,921	http://www.sainsburys.co.uk
ASDA	£23, 325	http://www.walmart.com/
Wm. Morrison	£17, 680	http://www.morrisons.com/
The Co-operative Group	£17, 237	http://www.co-operative.coop/
John Lewis Partnership	£5, 754	http://www.johnlewis.com/
Aldi	£5, 275	http://www.aldi.co.uk
Marks and Spencer	£5, 063	http://www.marksandspencer.com/
Lidl	£3, 436	http://www.lidl.co.uk/
Iceland	£2, 699	http://www.iceland.co.uk/

(Source: Adapted from Retail Week 2014 and Mintel 2014a)

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