MATERIALITY AND EXTERNAL ASSURANCE IN CORPORATE SUSTAINABILITY REPORTING: AN EXPLORATORY STUDY OF UK HOUSE BUILDERS

Abstract

Purpose -The aims of this paper are to provide a preliminary examination of the extent to which the UK's leading house builders are embracing the concept of materiality and commissioning independent external assurance as part of their sustainability reporting processes and to offer some wider reflections on materiality and external assurance in sustainability reporting.

Design/Methodology/Approach -The paper begins with a review of the characteristics of corporate sustainability and of both the concept of materiality and the practice of external assurance and a brief outline of house building in the UK and of the sustainability challenges the industry faces. The information on which the paper is based is drawn from the top twenty UK house builders' corporate web sites.

Findings -The paper reveals that only a minority of the UK's top twenty house builders had embraced materiality or commissioned some form of independent external assurance or verification as an integral part of their sustainability reporting processes. In many ways this reduces the reliability and credibility of the house builders' sustainability reports. Looking to the future growing stakeholder pressure may force the UK's house builders to embrace materiality and commission external assurance as systematic and integral elements in the sustainability reporting process.

Originality/Value – The paper provides an accessible review of the current status of materiality and external assurance in the UK house builders' sustainability reporting process, and as such it will interest professionals, practitioners, academics and students interested in sustainability in the construction industry.

Keywords- Corporate sustainability; materiality; external assurance; house builders; UK

Introduction

Sustainability is becoming increasingly integrated into the corporate mindset as a growing numbers of large companies are reporting publicly on their corporate sustainability strategies and achievements. While corporate reporting practices are constantly evolving there is a growing awareness within the business community that embracing materiality, which is concerned with identifying those environmental, social and economic issues that matter most to a company and its stakeholders, and commissioning external independent assurance of the information contained in such reports, are becoming increasingly important elements in the reporting process. Ernst and Young (2014, p.4), for example, argued that *'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, webpage) 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, p.27) suggested 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, house builders have an important role to play in the more efficient deployment of land and natural resources, in helping to create more sustainable communities and in helping to foster urban resilience via enhancing adaptive capacity and reducing risk reduction. With this in mind this paper provides a preliminary examination of the extent to which the UK's leading house builders are embracing materiality and commissioning independent external assurance as part of their sustainability reporting processes. The paper includes a review of the characteristics of corporate sustainability and of both the concept of materiality and the practice of external assurance, a brief outline of house building in the UK and of the sustainability challenges the industry faces and an exploratory examination of the extent to which the UK's top twenty house builders have embraced materiality and commissioned external assurance in their current sustainability reports. The paper also offers some wider reflections on external assurance and materiality in sustainability reporting.

CORPORATE SUSTAINABILITY

In recent decades the term sustainability has become increasingly widely employed 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, p.13). That said the concepts of 'sustainable development' and 'sustainability' 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 almost all walks of life. Diesendorf (2000, p.21) 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, p.43).

However defining sustainability is not straightforward and there are a number of contrasting and contested meanings. There are sets of definitions which emphasise ecological, marketing and business perspectives. Definitions based around ecological principles, for example, focus on conserving natural resources and protecting fragile ecosystems on which ultimately all human life depends. Goodland (1995, p.3), 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.'* In emphasising a marketing perspective, Charter et.al. (2002, p.12) argued that *'sustainable marketing' is* concerned with *'creating, producing and delivering sustainable solutions with higher net sustainable value whilst continuously satisfying customers and other stakeholders.'* From a wider business and management perspective McKinsey (2009, webpage) have suggested that a *'a sustainable business means a business that can thrive in the long term'* where '*sustainability drives a bottom-line strategy to save costs, a top-line strategy to reach a new consumer base, and a talent strategy to get, keep, and develop creative employees.'*

Arguably more critically Hudson (2005, p.241) argued that definitions of sustainability range from *'pallid blue green to dark deep green.'* The former definition Hudson (2005, p.241) suggested 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, p. 241) also suggested 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 contrasted 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, p.241). In a similar vein a distinction is often made, for example, between 'weak' and 'strong' sustainability and Roper (2012, p.72) suggested that *'weak sustainability prioritizes economic development, while strong sustainability subordinates economies to the natural environment and society, acknowledging ecological limits to growth.'*

Within the world of business the concept of sustainability has consistently moved higher up boardroom agendas as growing numbers of companies increasingly acknowledge sustainability as one of the emerging drivers of competition and as a significant source of both opportunity for, and risk to, long term competitive advantage. Carroll and Buchholtz (2012, p.4), for example, suggested that *'sustainability has become one of business' most recent and urgent mandates'* and Elkington (2004, p.1) has argued that future business success depends on the ability of companies to add environmental and social value to economic value as part of the *'triple bottom line'* (TBL) which focuses on *'people, planet and profit.'* A survey of business managers and executives undertaken by MIT Sloan Management Review and the Boston Consulting Group (2012, p.4) 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.

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 social impact of business operations throughout the supply chain, while effectively ignoring fundamental environmental and social concerns. As such moves towards sustainability might be characterised by what Hamilton (2009, p. 573-574) described as *'shifting consciousness's'* towards *'what is best described as green consumerism.'* This he saw 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, p.574). Perhaps more radically Kahn (2010, p.48) argued 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.'* This , in turn, reflects the argument proposed by Willers (1994, p.1146) that *'sustainable development is code for perpetual growth'* in which *'continued growth and development are presented as compatible with respecting environmental constraints.'*

As interest in sustainability has gathered momentum so a number of attempts have been made to develop theoretical frameworks of sustainability which recognize that social and economic development cannot be viewed in isolation from the natural environment. Todorov and Marinova (2009, p.1217) 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, p.264), 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 also been attempts to develop a more critical theory. Amsler (2009, p.127), for example, has argued that *'the contested politics and ambiguities of sustainability discourses'* can be embraced to develop a *'critical theory of sustainability.' S*he further argued 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, p.125). 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, webpage). 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, webpage). At the same time Eccles et. al. (2012, p. 9 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, p.33), 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, webpage), for example, argues that *'materiality aims to identify the societal and environmental issues that present risks or opportunities to accompany while taking into consideration the issues of most concern to external stakeholders.'* The Global Reporting Initiative (GRI, webpage), 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 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, webpage).

KPMG (2014, p.3) 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, p.3) 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, p3) 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 and 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. Time scales may also 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, webpage). 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, p.10), 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, p.10) 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, webpage), 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, webpage)' This map classifies issues under five categories namely environment: human capital; social capital; business model and innovation; and leadership and governance; and then identifies high priority material issues on behalf of what SASB (2014, webpage) describes as the *'reasonable investor.'* 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, webpage), 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 non-governmental 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, webpage).

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, p.18) 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'*, 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, p.3). More specifically, for example, corporate sustainability reports should begin with a focus on material issues and maintain this focus throughout the report. Ideally reports should include a detailed discussion of the processes by which the company both defines and manages its material issues and provided details of where the impact of material issues is seen to lie.

Assurance, simply defined, as a process used to provide confidence as to the degree of reliance that can be placed on the reported data, can be undertaken in a number of ways. CSR Europe (2008, webpage), 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 CSR report. However 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 sustainability 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, p.6) 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 CSR reports themselves. There is currently little consensus, for example, on how companies should collect, evaluate and report on their CSR data. In addressing the issue of appropriate data collection CorporateRegister.com Limited (2008, p.6), 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.'*

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, p.14).

A number of benefits are claimed for commissioning and producing an assurance statement. Perhaps most importantly there is the argument that as a wide variety of stakeholders increasingly shares 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 CSR 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, webpage). 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.

House Building in the UK and the Challenges of Sustainability

The construction industry is one of the largest sectors of the UK economy, contributing some £90 billion to the economy (6.7%) in added value, and housing; predominantly private house building, accounts for some 30% of the industry .Within the last decade housing starts and completions have fluctuated in response to a variety of economic, social and political factors, with the recession in the first decade of the twenty first century putting a break on the industry. In England, for example, completions in the year to December 2014 were just over 118,000, compared, for example, to 177,000 in the year to December 2007 prior to the recession and to 106,000 in the year to December 2010 (Department for Communities and Local Government 2015).Geographically the highest levels of housing completions are found in East London, around Norwich, in a band running from the north of the London green belt through Cambridgeshire, Bedford shire, Northamptonshire and Leicestershire and in another band from Devon through Gloucestershire to Hampshire. The lowest completion levels were found in some districts of Oxfordshire and in a number of London boroughs. Traditionally house building in the UK was dominated by small local builders but from the middle of the twentieth century onwards a process of continuing consolidation and concentration has seen a relatively small number of specialist housing companies increasingly come to dominate the market. The top ten house builders now account for some 50% of all completions. A range of operating economies of scale and better performance as measured by completions, housing turnover and profit (Cho 2014) have been important factors in driving this process of consolidation and concentration. At the same time Archer and Cole (2014) have also suggested that as acquiring and managing land holdings is the most crucial aspect of the house building process so merger and acquisition activity has enabled large companies to acquire large land banks. The merger of the already large companies of Taylor Woodrow and George Wimpey in 2007 to create the UK's second largest private house builder is cited as perhaps the most notable example of this type of activity within the industry.

Within the UK the leading house builders have long played an important role in the development of land and natural resources, in determining the location and design of the residential development. While residential development has had a growing impact on the natural environment the housing industry has traditionally paid little explicit public attention to these issues. Over a decade ago and as part of its campaign to *'move sustainability from the fringes to the mainstream of UK housing*, for example, the World Wildlife Fund (2004, p.1) argued that *'UK homes have a significant effect on the environment, including direct impacts on climate change, forests, freshwater and pollution'* and that *'other impacts related to the construction of new homes include quarrying to provide aggregates, the wasteful use of water and the widespread use of toxic chemicals in materials.'* As the transition to a more sustainable future assumes seemingly ever greater importance so house builders are seen to face a range of sustainability challenges. More generally the World Wildlife Fund (2004, p.4) argued that given *'the current and insatiable need for new housing, the policy framework and the direct and long-term impacts of the built environment mean that the imperative to address sustainability in the house-building sector is both significant and urgent'* that *the* nature *of house builders' response to sustainability will greatly determine the benefits they can derive'* and *'the more thoroughly sustainability is embedded within the business, the greater the benefits.'*

While the government claimed that *'following reforms of the planning system more than two thirds of all homes are built on brownfield land'* (Gov. UK 2014, webpage) there is also considerable development pressure for new housing on urban fringe land. The continuing development land for housing in outer urban fringe areas has implications for transport and movement, for example, which can run counter to national planning policies designed to *'make the fullest possible use of public transport, walking and cycling'* and which '*support reductions in greenhouse gas emissions'* (Department of Communities and Local Government 2012, p.9). The World Wildlife Fund (2004) also suggested embedding sustainability within the business model and adding value from it house builders would need to address compliance and risk management (particularly the challenges of gaining planning permission); operational efficiency and competitiveness; reputation management; and market differentiation. Underpinning each of these issues is the need for continuing and enhanced engagement with a diverse range of stakeholders. Here the ability of companies to confirm that they have both identified and determined the issues seen to be material to these stakeholders and to provide independent external assurance of the sustainability reporting process seems likely to assume ever greater importance.

Frame of Reference and Method of Enquiry

In an attempt to address the research question underpinning this paper namely, if, and how, the leading UK house building companies had commissioned external assurance and embraced materiality as an integral part of the sustainability reporting process the top twenty UK house builders (Table 1), ranked by turnover, were selected for study. Businesses employ a variety of methods to report on sustainability including '*product labels, packaging,* *press/media relations, newsletters, issue related events, reports, posters, flyers, leaflets, brochures, websites, advertisements , information packs and word-of mouth'* (European Commission Directorate-General for Enterprise undated, webpage). During the past decade *'sustainability reporting which has evolved from an extraordinary exercise by a few pioneering organizations a decade ago to an essential management and communication tool for many businesses'* (Global Reporting Initiative 2007, p.1) and Bowen (2003) suggested that the majority of large companies have realised the potential of the World Wide Web as a mechanism for reporting their 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 house builders 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, to guide the process of data collection. Content analysis is often used to analyse websites but in this preliminary examination the authors chose to tease out if, and how, the selected house building companies embraced materiality and commissioned external assurance as part of their sustainability reporting process. The paper does not look to offer a systematic and detailed comparative evaluation of their sustainability reporting policies and the specific examples and the selected quotations from the house builders' 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 twenty house builders 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 understand the role that the UK's house builders are currently playing in promoting sustainability, the internet based analysis adopted offers an appropriate approach and an accessible starting point.

Findings

The internet search revealed that twelve of the UK's leading twenty house builders had posted sustainability reports, a further seven of the companies had posted a more limited, in some cases a very limited, range of information on their sustainability policies and achievements, while Bloor Homes had posted no information on sustainability on the Internet (See Table 1). There was considerable variation in the volume and detail the selected property companies provided on their approach to sustainability but the vast majority of them stress their commitment to the principles of sustainability, albeit in a variety of ways, and to integrating sustainability into their core business. Barratt, for example, reported that *'our vision is to lead the future of housebuilding by putting* *customers at the heart of everything we do'* and claimed that *'sustainability underpins the delivery of that vision'* and that *'we are committed to integrating sustainability into the way we work.'* In a similar vein Taylor Wimpey reported that *'as one of the UK's leading residential developers, we have a responsibility to integrate social, environmental , economic and ethical responsibilities into our decision making processes'* while Redrow claimed *'we have total commitment from our entire workforce to our sustainable development principles and ambitions.'* Stewart Milne reported being *'fully committed to protection and enhancement of the environment '* and that *achieving high levels of environmental performance is a central goal'* and Cala emphasised its commitment *'to delivering sustainable developments, maximising the use of land and natural resources and minimising our impact on the environment.'*

Such corporate commitments are evidenced across a range of environmental, social and economic agendas. The selected house builders addressed a variety of environmental issues including climate change and greenhouse gas emissions; biodiversity and natural habitats; energy efficiency; water conservation; waste minimisation and management; reducing flood risks; and green procurement. Galliford Try, for example, claimed to be *'placing increasing importance on cutting carbon emissions'* while Countryside reported that *'one of the core goals within our sustainability development policy is to build on sites with a previous use and thereby protect biodiversity.* A wide range of social issues are also important elements in the selected house builders' commitments to sustainability namely customer satisfaction and customer care; engaging with local communities; encouraging more sustainable lifestyles; health and safety; diversity and equality of opportunity; training and development; and charitable donations. Redrow, for example, recognised that the company's *'performance is largely dependent on the qualities and abilities of our employees'* and reported that *'we invest heavily in their development and training.'* Economic dimensions of sustainability generally receive less explicit attention from the selected house builders but a number of themes are cited including business growth; responding to market needs; investing in innovation and development; making home buying affordable; optimising value creation; and employment creation. Crest Nicholson, for example, claimed to be *'selectively growing the business and driving strong levels of earnings'* , *'developing additional revenue streams'* and *'looking to return cash to shareholders in favourable market conditions.'*

While all but one of the top twenty house builders in the UK publicly reported or provided information on their approach to sustainability on the Internet there is much more limited evidence that the selected companies are embracing the concept of materiality or commissioning independent external assurance as integral elements in the reporting process. The findings reveal that six of the selected companies (Table 1) drew attention to how they addressed materiality and only two (Table 1) included formal independent external assurance statements as part of their sustainability reporting processes. In addition four of the top twenty house builders (Table 1) provided some limited external verification of selected elements of their sustainability reporting. While some of the selected companies 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.

Each of the six house builders which addressed materiality in their sustainability reports adopted a different approach and there was some variation in the volume of material they published on how they determined materiality. Miller, for example, provided the most extensive information and their approach was based on the standard materiality matrix. The company reported conducting a series of stakeholder meetings to identify key stakeholder priorities. Stakeholders identified the relative importance of a range of environmental, social and economic issues and the results were weighted to give an overall stakeholder score for some 18 key issues. These issues were then reviewed by the company's Sustainability Steering Group and a measure of the importance of each of these to Miller was determined. These two sets of measures were then depicted in a materiality matrix and those issues identified as having a high priority both to stakeholders and the company were considered to be material. This exercise produced a variety of material issues including ecology and biodiversity, health and safety, community engagement, local employment and education, water, waste and equality and inclusion. Miller then provided a commentary on each of the material issues which focused on why they were considered to be important and what the company aimed to achieve in addressing each issue.

Barratt claimed to have *'provided a balanced representation of material issues concerning its sustainability performance'* and claimed that the company had *'clearly identified its initial assessment of material issues from its engagement with relevant stakeholders identifying 12 significant issues.'* The company further claimed that the identification of these issues *'demonstrated a new vision, priorities and principles which serve to integrate sustainability into the overall business model.'* Berkeley reported that its materiality review was completed by undertaking five tests relating to perceived risks and opportunities; company policy; a process of peer review; stakeholder concerns; and a regulatory review. In drawing *'key conclusions'* from the materiality review the company reported that environmental performance standards, waste and energy were the three issues that arose the most frequently during the materiality tests. Crest Nicholson simply reported regularly reviewing and prioritising material issues *'to ensure that our sustainability approach aligns with our business strategy, integrates feedback from our stakeholders and takes into account the most significant risks and opportunities.'* Redrow reported more succinctly on its approach to materiality and simply suggested that at the time of reporting the company considered the material issues to be climate change and energy; environmental incidents; biodiversity aspects; developing sustainable communities; product life cycle; customer engagement; and supply chain standards. However it provided no information on how these seven issues had been identified. That said Redrow also reported that it would be comprehensively reviewing its materiality assessment following a programme of imminent stakeholder engagement

While a number of the other selected house builders stressed a number of priorities in their sustainability reports they did not explicitly refer to the concept of materiality. Taylor Wimpey, for example, emphasised the importance of *'six sustainability principles that apply to all our business activities'* including *'we try to understand the communities, the environments and the economies in which we operate'* and *'we want to leave a positive environmental, social and economic legacy that future generations can enjoy.'* More specifically Taylor Wimpey identified some 33 *'key topics'* including land stewardship, encouraging more sustainable lifestyles, energy reduction, customer satisfaction, employee well-being and planning agreement contributions. That said there was no explicit or detailed information on how the company identified these issues or any systematic attempt to prioritise these issues. Persimmon identified *'five themes'*, namely community, customers, resource efficiency, skills development and health and safety which underpin the company's sustainability framework. At the same time the company also listed six *'key sustainability risks'* including a range of physical risks (e.g. flooding and extreme weather events), product risks (e.g. meeting increased government and customer demands for sustainable housing) and supply chain risk (e.g. increasing regulation aimed at energy intensive manufacturers which could increase the cost of materials or limit their supply) which were described as driving *'the basic principles of our approach to sustainability.'*

The two external assurance statements varied in their coverage and approach and in the character of the information provided. In addressing the assurance process the assessors provided an outline of the methodology they employed to gather evidence and the other criteria they employed to guide their judgements. Both statements provided limited assurance as described earlier. However there was only limited information on the methodology the external assessors employed to gather evidence or of the criteria they employed to guide their judgements. KPMG was commissioned by Keir, for example, to undertake a limited assurance engagement on selected sustainability performance data. In undertaking this engagement KPMG performed a range of procedures including conducting interviews with management at Keir in order to gain an understanding of the data collection process and information flows ; an evaluation of the existence, design and operation of the systems and methods used to collect, process and aggregate sustainability data at selected business sites; a review of the documentation and findings relating to the review process performed as part of Keir's self-assessment against their performance. KPMG also drew attention to the *'inherent limitations'*, principally that *'greenhouse gas quantification is unavoidably subject to inherent uncertainty as a result of both scientific and estimation uncertainty'* and that *'for other non-financial performance the precision of different measurement techniques may also vary.'* In conclusion KPMG LLP reported that nothing had come to its attention that caused it to believe that the selected sustainability data was not fairly stated.

The assurance statement produced for Barratt explicitly addresses inclusivity, completeness and responsiveness. In outlining its findings on inclusivity Ocean Certification PLC reported *'Barratt continues to demonstrate its commitment to be accountable to those on which it has an impact and is able to demonstrate stakeholder partnerships with several organisations'* and that *'collaboration with local authorities continues providing local as well as commercial benefits.'* In addressing whether Barratt had responded to stakeholder concerns, Ocean Certification PLC , noted that *'evidence was observed to illustrate how Barratt is responding to evoking stakeholder requirements and working in co-operation with interested parties such as the National House Building Council and its suppliers and customers'* and that *'we are not aware of any matters that would lead us to conclude that Barratt has not applied the responsiveness principle in considering the matters to be reported.'* The observation on completeness is also positive namely *'the overriding impression is that the report is more straightforward in its approach than in previous reports and easy for stakeholders to follow.'* That said Ocean Certification LLP made two specific recommendations to Barratt for improving their sustainability reporting process namely the enhancement of the methods by which data is collected and analysed and reviewing the guidance the company gives to its various division on the implementation and maintenance of its ‘Green Teams’ in order to promote a greater focus on sustainability for all employees.

While not commissioning formal external assurance four of the UK’s top twenty house builders, namely, Redrow, Countryside, Miller and Taylor Wimpey, looked to provide some limited external verification as part of their sustainability reporting. Countryside, for example, included a ‘verification statement’ commissioned from RPS in its sustainability report and here the terms of reference were *‘to assess the appropriateness, credibility and soundness of the claims and commitments made in the report.’* This statement concluded that *‘RPS is confident that the published report is a fair reflection of the progress Countryside has made against its sustainability objectives since 2012-2013.’* Redrow claimed that *‘we are working to progressively increase the level of independent assurance across all aspects of our sustainability reporting.*’ More specifically Redrow reported ‘*this year our Environmental Management System successfully gained Phase 2 certification in British Standard BS 8555’* and that *‘we are also working with PricewaterhouseCoopers to secure assurance on other aspects of our reporting.’* More simply Miller lists a number of external awards and accreditations and reported receiving feedback from a small number of *‘industry experts.’* Taylor Wimpey published four external affirmation and verification statements on the company’s health and safety record, environmental impact and carbon emission levels alongside their sustainability report.

Discussion

While all of the UK’s top twenty house builders recognise and publicly report on a wide range of impacts their businesses have on the environment, society and the economy there is marked variation in the extent, character and detail of the sustainability reporting process. As such this may reflect the reality that the UK’s leading house builders are at the start of a long and potentially difficult journey towards sustainability. More specifically only a minority of the UK’s top twenty house builders have included some form of external assurance or embraced materiality as an integral part of the sustainability reporting process and a number of issues merit discussion and reflection. While a variety of approaches 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 house builders can realistically and comprehensively elicit and represent the views of all their key stakeholders remains to be seen. Generally within the business world Banerjee (2008, p.51), 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 house builders reported seeking to elicit stakeholder opinions on their sustainability priorities and strategies via stakeholder panels, customer surveys and face to face meetings with investors. This certainly suggests that some of the leading companies wish to look beyond their own immediate commercial imperatives in determining materiality. However Cooper and Owen (2007, p.665) 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, p.652) 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, webpage), for example, argue that while many of the world's largest companies *'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 Toffell (2013, webpage) 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, webpage) 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, webpage) the leading house builders can exert a significant influence on the extent to which people can reduce energy usage and carbon emissions and thus live more sustainable lifestyles.

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, webpage). 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, webpage). More critically he 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, webpage.)

The UK's leading house builders' approach to external assurance is at best very limited. Though this is not a problem per se, as sustainability reports are themselves voluntary and the accompanying assurance statements are not subject to regulation, the lack of independent assurance can be seen to reduce the integrity and the credibility of sustainability reporting process. More generally the independence of the assurance process can be a thorny issue. While Wiertz (2009, webpage) 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, p.205) claim that their work on 41 large UK and European companies *'raises question marks regarding the independence of the assurance process.'*. More generally O'Dwyer and Owen (2005. P.224) 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 house builders' corporate behaviour. 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, local and national government, trade unions, non-governmental organisations and pressure groups. While RAAS Consulting (2009) has argued that the two primary audiences are regulators and investors, the formal assurance statements provided by Barratt and Keir, and the verification information provided by the small number of the selected house builders, provided little indication of their intended audiences. CorporateRegister.com Limited (2008, p.27) 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, p.224) 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, p224) 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 house builders are large and dynamic organisations. 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. At the present time the majority of the UK's leading house builderscurrently seemingly choose not to pursue such an approach. Thus while operational data on 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. 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

Conclusions

The vast majority of the UK's top twenty house builders publicly report, albeit in a variety of ways, on their commitments to sustainability and on how they are integrating sustainability into their businesses. There are marked variations in the extent to which the UK's top twenty house builders 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 emerging. While six of the UK's leading house builders drew attention to materiality in their sustainability reports, some of these made very limited reference to how they had determined material issues, and while others identified a number of priorities in their sustainability reports they made no explicit reference to materiality. At the same time only a minority of the leading house building companies reported that they had commissioned independent external assurance or verification as an integral part of their sustainability reporting processes. At best the accent was upon 'limited' rather than 'reasonable' assurance and there are some concerns about management control of the assurance process. In many ways this reduces the reliability and credibility of the house builders' sustainability reports. That said the UK's leading house builders are large and dynamic organisations and this makes more rigorous and comprehensive assurance a difficult, time consuming and costly process. Looking to the future growing stakeholder pressure may force the UK's house builders to commission more rigorous and wider ranging external assurance and to embrace materiality as a systematic element in the reporting process.

More generally the authors argue that the UK's leading house building companies currently seem reluctant approach to embrace the concept of materiality and to commission independent external assurance. This suggests that these companies are pursuing a 'weak' rather than a 'strong' model of sustainability. More critically this could suggest that the UK's leading house builders 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, p. 85) 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.'* That said the leading house builders business strategies continue to be are principally driven by land acquisitions (Griffith 2011, p 28) and in an environment where increases in land values consistently outstrip economic growth rates, this generates financial pressures and continuing political pressures about housing shortages. More generally the UK's house building industry would surely want to stress that *'business leaders must run their* *companies successfully under present framework conditions while helping to lead society towards new framework conditions of sustainability'* (World Business Council for Sustainable Development 2010, p. 5). Further The World Business Council for Sustainable Development (2010, p.5) argues that strategic corporate commitment to sustainability *'represents vast opportunities'* and that as the *'challenges of growth, urbanisation, scarcity and environmental change become key strategic drivers for business'* so *'smarter systems, smarter people, smarter designs and smarter businesses will prevail.'* The UK leading house building companies will increasingly be looking to position themselves to address the challenges outlined above and also to promoting and publicising their endeavours and achievements to a wide and increasingly vocal range of stakeholders.

While the exploratory nature of this paper does not provide a basis for policy development it does offer a mirror in which the UK's leading house building companies can reflect on their approaches to sustainability reporting and more particularly to the role of materiality and external assurance within that process. More specifically looking positively to the future if the leading house building companies are going to obtain leverage and create value by embracing materiality and commissioning external assurance then they must determine the resources they are prepared to invest in sustainability and look to how they identify and measure the benefits of embedding sustainability within their business models. The Ethical Corporation (2015, web page), for example, has argued that *'a good proxy for how seriously organisations take sustainability is, of course, how much money they are prepared to spend on it.'* While a low budget commitment to sustainability is not necessarily a problem per se, for example, in identifying the major sustainability issues facing a company, it can send a clear message throughout the company that sustainability is low on the corporate priority agenda. Arguably more importantly there is the thorny issue of whether and how companies capture and evaluate the benefits of their strategic sustainability commitments and achievements in financial terms. Initially benefits seem likely to be generated by the range of efficiency gains and savings outlined earlier but the UK's leading house builders seem certain to continue to face challenges in measuring the returns on their investment in sustainability.

Finally while the authors acknowledge that the approach adopted in this exploratory study has its limitations they believe that in drawing on information that is publicly available and readily accessible it is not only fit for purpose but that it also provides a platform from which future research agendas might be fruitfully constructed. A number of future academic research agendas arguably merit attention. More detailed and comprehensive research might profitably focus on the perceptions and aspirations of a wide range of stakeholders. Research might be undertaken, for example, into the importance both potential and recent house buyers attach to house building companies' commitments to sustainability when making purchasing decisions. Similar research might also be focused on other stakeholders and on the relative importance they attach to sustainability, on how they can be be involved in the determination of materiality and on the extent to which, in their eyes, external assurance brings transparency and credibility to the sustainability reporting process. More generally research in marketing communications might explore the effectiveness of the various methods house building companies can and do use to publicise their sustainability commitments and achievements and to convince their stakeholders that they identifying all material issues and rigorously externally assuring the data which informs the sustainability reporting process. In pursuing such agendas researchers may need privileged access to some stakeholders and they will need to harness a wide range of approaches to data collection which may include questionnaire methods and subsequent statistical analysis, the use of structured interviews and focus groups and the analysis of social media sources and blogs. In looking to negotiate access researchers may face opposition from the house building companies, and potentially from some stakeholders, on the grounds of commercial sensitivity and confidentiality but ultimately if sustainability is to be fully integrated into evolving new business models and to have a vital role to play in creating shared value then such transparency will become increasingly essential.

Table 1 : Top Twenty UK House Builders 2013

Company	***Annual Turnover (£ million)***	***Sustainability Report(SR) /Sustainability Information (SI)***	***Materiality***	***Assurance (A) /Verification(V)***
Barratt	2286.8	SR	✓	A
Taylor Wimpey	2019.0	SR		V
Persimmon	1721.4	SR		
Berkeley	1372.6	SR	✓	
Bellway	1004.2	SI		
Galliford Try	573.9	SR		
Redrow	478.9	SR	✓	V
Bovis	425.5	SR		
Crest Nicholson	408.0	SR	✓	
Bloor	373.0			
Countryside	295.2	SR	✓	V
McCarthy and Stone	289.2	SR		
Avant	280.3	SI		
Miller	265.7	SR	✓	V
Calla	253.7	SI		
Kier	240.8	SR		A
Gallard Holdings	205.2	SI		
Fairview Holdings	205.1	SI		
Stewart Milne	170.5	SI		
Keepmoat	158.7	SI		

Source: Building .co.uk 2015 and UK House Builders' Corporate Websites

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