



UNIVERSITY OF  
GLOUCESTERSHIRE

This is a peer-reviewed, post-print (final draft post-refereeing) version of the following published document, This is the peer reviewed version of the following article: Jones, Peter and Comfort, Daphne and Hillier, David (2015) Sustainability, materiality, assurance and the UK's leading property companies: a briefing paper for occupiers. *Journal of Corporate Real Estate*, 17 (4). pp. 282-300., which has been published in final form at <http://dx.doi.org/10.1108/JCRE-10-2015-0027>. This article may be used for non-commercial purposes in accordance with Wiley Terms and Conditions for Self-Archiving. and is licensed under All Rights Reserved license:

**Jones, Peter ORCID: 0000-0002-9566-9393, Comfort, Daphne and Hillier, David (2015) Sustainability, materiality, assurance and the UK's leading property companies: a briefing paper for occupiers. *Journal of Corporate Real Estate*, 17 (4). pp. 282-300. doi:10.1108/JCRE-10-2015-0027**

Official URL: <http://dx.doi.org/10.1108/JCRE-10-2015-0027>

DOI: <http://dx.doi.org/10.1108/JCRE-10-2015-0027>

EPrint URI: <https://eprints.glos.ac.uk/id/eprint/2936>

#### **Disclaimer**

The University of Gloucestershire has obtained warranties from all depositors as to their title in the material deposited and as to their right to deposit such material.

The University of Gloucestershire makes no representation or warranties of commercial utility, title, or fitness for a particular purpose or any other warranty, express or implied in respect of any material deposited.

The University of Gloucestershire makes no representation that the use of the materials will not infringe any patent, copyright, trademark or other property or proprietary rights.

The University of Gloucestershire accepts no liability for any infringement of intellectual property rights in any material deposited but will remove such material from public view pending investigation in the event of an allegation of any such infringement.

PLEASE SCROLL DOWN FOR TEXT.

## **Sustainability, materiality, assurance and the UK's leading property companies: a briefing paper for occupiers**

### **Abstract**

**Purpose** -The aims of this paper are to provide a brief for property occupiers who look to monitor trends in sustainability reporting. The paper offers a preliminary examination of the extent to which the UK's leading commercial property companies are embracing the concept of materiality and commissioning independent external assurance as part of their sustainability reporting processes and some wider reflections on materiality and external assurance in sustainability reporting.

**Design/Methodology/Approach** -The paper begins with a review of the characteristics of materiality and external assurance and an outline of the drivers for, and challenges to, sustainability for property companies. The information on which the paper is based is drawn from the leading UK property companies' corporate web sites.

**Findings** -The paper reveals that approximately half of the UK's leading property companies had embraced materiality or commissioned some form of independent external assurance as an integral part of their sustainability reporting processes. In many ways this reduces the reliability and credibility of the leading property companies' sustainability reports. Looking to the future growing stakeholder pressure may persuade more of the UK's leading property companies 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 amongst the UK's leading commercial property companies' sustainability reporting. As such it will not only interest occupiers but also professionals, practitioners, academics and students interested in sustainability in the property industry.

**Keywords**- Property companies; occupiers; corporate sustainability; materiality; external assurance; UK

### **Introduction**

Sustainability is becoming increasingly integrated into the corporate mindset as 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 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, 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), for example, 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.'*

During recent years sustainability has taken on increasing importance within property companies. Warren-Myers (2012, p.1115), for example, suggested that *'the importance of increasing the level of sustainability in the commercial real estate stock is paramount for reducing the negative impact of the built environment on the planet.'* Jon Lowell, Director of Sustainability, Deloitte Retail UK, recently argued *'there is no question that sustainability is a fundamental commercial real estate concern, affecting long term value generation and short term profitability especially in the context of mature markets'* (Deloitte 2014, p.12). In a similar vein PricewaterhouseCoopers/Urban Land Institute (2015, p.13) stressed that *'sustainability is no longer an emerging trend: it has become part of real estate life.'*

More specifically there is a growing body of evidence that occupiers have been taking an increasing interest in sustainability. Almost a decade ago in introducing a survey of *'global trends in sustainable real estate'* covering *'over 400 corporate occupiers'* Jones Lang LaSalle (2007, webpage) reported that *'sustainability is firmly on the corporate agenda'* but suggested that *'the views of corporate occupiers towards sustainable real estate are not widely known.'* That said the survey revealed that *'47% of global respondents indicated that sustainability was already a critical issue to them, with a further quarter of all respondents maintaining that sustainability will become a critical issue to them over the short term.'* Further the survey revealed that *'corporate occupiers accept that sustainable real estate costs more to deliver and are prepared to pay a premium'* (Jones Lang LaSalle 2007). In recognising that *'occupiers are the consumers of or end users of real estate and therefore may be regarded as the market drivers of demand'* van de Wetering (2009, webpage) suggested that *'they are central to the sustainability agenda.'* More recently Cushman and Wakefield (2012, webpage) reported *'increasing occupier demand for sustainable buildings'* and in a survey of occupiers in the US Cushman and Wakefield (2014, p.2) claimed that a discussion about sustainability *'takes place with almost every occupancy decision made today.'* In a similar vein PricewaterhouseCoopers (2013, p.25) emphasised that *'sustainability is rising up the agenda, and good relationships between landlord and occupier are vital to success.'*

While property companies have been taken growing interest in sustainability and in recognizing growing occupier interest in sustainability, the issues of materiality and external assurance have received virtually no attention in the real estate literature. With this in mind this briefing paper offers occupiers, and other stakeholders, a preliminary examination of the extent to which the UK's leading commercial property companies are embracing materiality and commissioning independent external assurance as part of their sustainability reporting processes. The paper includes a summary of the characteristics of sustainability, of the concept of materiality and of external assurance, a brief outline of the activities of the

leading commercial UK property companies and of the sustainability challenges that the industry currently faces. This is followed by an exploratory examination of the extent to which the UK's leading stock exchange listed property companies 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 and the implications for occupiers and other stakeholders.

### ***Sustainability, Materiality and External Assurance***

The ideas underpinning sustainability are not new (Gruber 2012) but the concept began to attract increasing attention 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 and little current consensus in providing an operational definition. There is a family of definitions' essentially based in and around ecological principles and there are definitions which include social and economic development as well as environmental goals and which seek to embrace equity in meeting human needs. At the same time a distinction is often made between-'weak' and 'strong' sustainability with the former being used to describe sustainability initiatives and programmes developed within the existing prevailing economic and social system while the latter is associated with much more radical changes for both economy and society.

Within the world of business the concept of sustainability has recently moved higher up boardroom agendas as growing numbers of companies increasingly acknowledge sustainability **not only** as **a new** driver of competition **but also** as source of, and **a threat** to, competitive advantage **in the long term**. Carroll and Buchholtz (2012, p.4), for example, suggested that *'sustainability has become one of business' most recent and urgent mandates.'* During recent years sustainability has taken on increasing importance within property companies. Warren-Myers (2012, p.1115), for example, suggested that *'the importance of increasing the level of sustainability in the commercial real estate stock is paramount for reducing the negative impact of the built environment on the planet.'*

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'* 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 argued 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 earlier 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.'*

The concept of materiality has traditionally 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).

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.'* 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), 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, webpage).

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, 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 but the 'materiality matrix' is perhaps the most common approach. 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

A number 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.'*

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 sustainability 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 critically 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 there considerable variation between the volume, character and detail of the information companies provide in their sustainability reports themselves. There is currently little consensus, for example, on how companies should collect, evaluate and report on their sustainability 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 assurers 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 assurers 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 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 CSR report helps to establish reliability and credibility. Assurance can also be seen to enhance the management of sustainability within companies in that *'the process of providing an assurance statement will involve an element of management systems checking'* 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). At the same time the provision of an assurance statement might be seen to enhance both a company's reputation with its stakeholders and its brand identity.

### ***Drivers and Challenges for Sustainability for UK Property Companies***

The property sector has a large and wide impact on the environment, on society and on the economy and poses a series of complex and interlinked challenges for sustainable development. Amongst the environmental issues climate change and energy consumption are arguably the most important issues. Martin South, Chief Executive Officer of Marsh Europe, for example, argued that *'property is responsible for the majority of greenhouse gas emissions in our cities'* (Marsh 2012, p. 1). More generally his company argued that *'the environmental impact of buildings is not limited to their operational efficiency, it includes factors such as construction methods, the use of new or recycled /salvaged materials, socio-economic considerations, resilience and longevity, operational performance and impact on climatic change'* Marsh 2012, p.3). Socially, property development and occupation can, for example, have a major impact on local communities and can pose well-being, health and safety issues for employees. In a report on *'the property industry's key role in delivering a better life in Britain'* commissioned by Development Securities (2010, p. 14), for example, argued that *'new foundations are needed for workplace well-being.'* More specifically the report claimed that *'while the nature of office work has clearly changed dramatically, the office environment itself has, in many cases, failed to progress at the same rate'* and suggested that *'the focus for improvements, meanwhile, should be on the four cornerstones*

*of good working conditions: light, air quality, temperature and noise.*' The economic impacts include building investor value, employment creation and long term profitability.

While a number of drivers for sustainability within the property market have been identified the UK's leading commercial property companies face a wide range of challenges in responding to these drivers. Sayce, Ellison and Parnell (2007, p. 633), for example, identified two sets of *'drivers for sustainable property investment which have been influential in both raising awareness and leading change.'* The first set was rooted in legislation and regulation and seen to reflect increasingly widespread statutory requirements relating, for example, to energy efficiency and waste management. The second set was seen to be more market led and included the need for shareholders to anticipate future legislation and mitigate risk, changing landlord and tenant relationships which have effectively forced landlords to maximise occupier satisfaction and the potential for enhanced returns on investment in sustainable properties. In focusing on market led drivers, Deloitte (2014, p.3) for example, identified a *'demand for green buildings'* and suggested that *'commercial real estate owners are gradually recognising the importance of green buildings in enhancing tenant attraction.'* More specifically Deloitte (2014, p.3) suggested that *'both tenants and property owners have started introducing elements of sustainability in leases'* which include *'the establishment of sustainability goals and allocation of implementation responsibilities between the owner and the tenant.'* At the same time Deloitte (2014, p. 4) also argued that *investors can derive tangible benefits from embedding sustainability into the full investment process'* and stressed the need for *'investors to understand the risk of obsolescence of their assets when sustainability measures are not adopted.'* A variety factors are important in helping to explain occupiers' interest in a property's sustainability credentials. These include lower energy costs for occupiers, the safety of buildings and improved health, well-being and comfort of employees.

However strategies designed to embed sustainability within property companies and more generally within the property market, face a range of challenges. Bond and Perrett, for example, identified a number of *'barriers to investing in greening buildings.'* These barriers included *'financial considerations', 'split incentives', 'lack of knowledge and experienced workforce'* and *'lack of incentives'* (Bond and Perrett 2012, p. 53). The principal issue underlying the first barrier is seen to be the belief that green buildings cost more than their more traditional counterparts. The issue of split incentives is that while it is landlords that are investing in green buildings, it is the tenants which benefit via reduced energy and water costs and greater productivity. More generally within both the professional and academic communities financial considerations are widely perceived to be the principal challenge for the more widespread introduction of more sustainable property strategies and practices. Osborn Clarke, which provides legal services to real estate clients, for example, argued *'ultimately sustainability issues will probably only take root in the market properly once the financial equation is favourable, especially for occupiers'* (Osborne Clarke 2008, p.2). Falkenbach et. al. (2010, p.201) argued that *'the role of environmental sustainability has increased in the real estate sector'* but *'the adoption of sustainable principles however has been slowed by a lack of evidence relating to the financial benefits and uneven distribution of costs and benefits between owners(investors) and occupiers.'*



## ***Frame of Reference and Method of Enquiry***

In an attempt to address the extent to which the UK's leading property companies have embraced materiality and commissioned external assurance as integral elements in the sustainability reporting process the leading UK property companies (Table 1) as listed by the European Real Estate Property Corporation 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). During the past decade *'sustainability reporting has evolved from a marginal practice to a mainstream management and communications tool'* (Global Reporting Initiative 2007, webpage) 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 UK property companies' corporate web sites using the key phrase 'sustainability report'. They then selected the most recent report/information and searched it digitally using the keywords 'materiality' and 'assurance', 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 property 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 property companies' 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 leading UK property companies 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 realistically, and in detail, reflect strategic corporate thinking and whether or not such pronouncements may be little more than marketing ploys. However given the need to drive forward exploratory research such as this and to begin to understand the role the leading UK property companies are currently playing in promoting sustainability, the internet based approach adopted offers an appropriate approach and an accessible starting point for analysis.

## ***Findings***

The internet search revealed that six of the selected UK property companies had posted sustainability reports while the remaining three had posted some more limited information on their sustainability policies and achievements on their corporate websites

(See Table 1). There is considerable variation in the volume and detail the selected property companies provided on their approach to sustainability but the vast majority stressed their commitment to the principles of sustainability, albeit in a variety of ways, and to integrating sustainability into their core business. British Land, for example, claimed that *'sustainability' was 'at the heart of our business strategy'* and that the company sees *'sustainability as a powerful tool to deliver lasting value and positive outcomes for us and our stakeholders.'* In a similar vein Great Portland Estates claimed that its *'sustainability strategy'* was *'integrated across investment, development and asset management'* and designed *'to ensure that we meet both current and future tenant needs and those of the wider environment through the responsible development and management of our buildings, enhancing the long term value of our business.'*

Such corporate commitments are evidenced across a range of environmental, social and economic agendas. The selected UK property companies addressed a variety of environmental issues including climate change; carbon dioxide gas emissions; energy sourcing and efficiency; waste management; water stewardship; sustainable design and construction; sustainable travel; timber re-use; and biodiversity. Land Securities, for example, recognised that *'our developments have the greatest impact in the areas of energy, waste and water'* and the company emphasised that *'we measure the environmental impact of our business to help us improve sustainability performance and to ensure compliance with regulation.'*

A wide range of social issues are also important elements in the selected property companies' commitments to sustainability. These included long term collaboration with tenants and respective clients; health and safety; diversity and equality of opportunity; labour relations; human rights; training, development and educational partnerships; career management; creating value in the community; and charitable donations. SEGRO, for example, reported that *'supporting communities in which we operate remains an integral part of our operations.'* Economic dimensions of sustainability generally receive less explicit attention from the selected property companies but a number of themes are cited including local and national economic contributions; long term added value for shareholders; responsible asset management; meeting investment fund standards; and employment creation. INTU, for example, reported on the beneficial impact of its operations, both directly and indirectly, on the local, regional and national economies. More specifically the company reported that *'89,000 jobs were provided by INTU and its retailers'* and *'£297 million in business rates were paid by INTU and its retailers.'*

While all of the selected UK property companies publicly reported or provided information on their approach to sustainability on their corporate websites not all reported embracing the concept of materiality or commissioning independent external assurance as integral elements in the reporting process. The findings reveal that four of the selected companies posted information on how they addressed materiality and six companies included formal independent external assurance statements as part of their sustainability reporting processes (Table 1). One company, SEGRO, provided some limited external verification of selected elements of their sustainability reporting. The four property companies which addressed materiality in their sustainability reports adopted different approaches and there was some variation in the volume of material they published on how

they determined materiality and on how the material issues were identified for the sustainability reporting process.

Land Securities, for example, reported convening six discussion groups comprising shareholders, office and retail customers, suppliers, employees and representatives from local authorities and local communities to discuss and prioritise material issues. This process led to the identification of ten material issues including workforce, environmental impacts, innovation in design, impact on local communities, climate change and resource availability. All ten issues were then mapped onto a materiality matrix whose axes were *'levels of concern and/or importance to stakeholders'* and *'Land Securities ability to have a direct or immediate impact as assessed by Land Securities.'* The workforce emerged as the most important material issue, ranking highest with both internal and external stakeholders. Land Securities suggested this provided a clear mandate to do more to meet the needs of its employees and provide work opportunities to help unemployed people within the communities where it operated. The issues of climate change, resource availability and population appear as much less important but Land Securities argued that while stakeholders considered them to be *'global challenges that will not go away'* the *'stakeholders thought our ability to influence them was limited.'*

In a similar vein INTU reported working with a wide range of internal and external stakeholders in an attempt to ensure that it was focusing and reporting on the sustainability issues that *'are most important to our business and our stakeholders.'* The company defined materiality as concerning *'those topics that have a direct or indirect impact on an organisations' ability to create, preserve or erode economic, environmental and social value for itself, its stakeholders and society at large.'* In looking to elicit stakeholders' views on materiality the company initially focused on a broad range of socially responsible investment issues with the aim being to determine *'which issues were more or less important to our stakeholders and also why this was the case.'* INTU further reported that while there was some measure of agreement amongst stakeholder of the most important issues, the reasoning underpinning the stakeholders' decisions varied significantly. When the issues were plotted onto a materiality matrix, corporate governance, bribery and corruption and risk and crisis management appeared as the most important issues with climate change, biodiversity and community integration given only middle ranking status.

Hammerson asked stakeholders to identify the sustainability issues they felt to be most material to the company and to select what they considered to be the top five future issues, from a list of eighteen potential issues identified by the company. The overall outcome was that *'energy security and demand', 'technology', 'community engagement', 'investment relevance', 'waste'* and *'meeting customer sustainability objectives'* were accorded high materiality status. In addressing materiality British Land reported identifying *'what matters most by engaging with stakeholders, monitoring external trends, assessing risks, benchmarking, reviewing best practice, consulting experts and working with people across the business.'* The company then *'prioritised key social and environmental issues to our business and stakeholders'* in drawing up a materiality index. Six issues were identified as having a high priority for both the business and for stakeholders namely health and safety; local community regeneration; materials; skills development; energy and emissions and wellbeing.

The six assurance statements varied in their coverage, their approach and in the character of the information provided. In addressing the assurance process the assessors generally provided an outline of how they had gathered their evidence and they 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. Land Securities, for example, engaged Corporate Citizenship to provide limited assurance of its sustainability report. In introducing its assurance statement Corporate Citizenship emphasised that the aim was to ensure that Land Securities sustainability report was *'robust, credible and that it provides Land Security Stakeholders with a balanced account of the social, environmental and economic challenges and successes of the company.'* That said the scope of the assurance included a limited range of environmental performance data namely *'energy (kilowhat hours)', 'water (cubic metres)', 'waste (tonnes)' and 'greenhouse gas emissions (tonnes)'* and the assurance statement stressed that *'Land Securities is entirely and solely responsible for the production and publication of the data assured.'*

In undertaking the engagement Corporate Citizenship performed a range of procedures including attending regular meetings of the company's Corporate Responsibility committee in order to understand the operation of the sustainability strategy across the business; reviewing the alignment of sustainability metrics and reporting against industry best practice; interviews with key management personnel involved in the environmental data collection process; and site visits in order to appreciate the complexities of property portfolio and its reporting processes. Corporate Citizenship concluded that *'on the basis of the work performed, nothing came to our attention that causes us to believe that the subject matter of our assurance as described above is materially misstated.'* At the same time Corporate Citizenship also made a number of suggestions *'that may benefit future reporting.'* These suggestions included the need for greater disclosure in linking the identification of material issues to corporate strategy, providing a more detailed explanation of the challenges faced by the business and a clearer articulation of the company's long term sustainability strategy. Finally in reporting on its *'independence and competence'* Corporate Citizenship acknowledged that it had worked with Land Securities in facilitating the materiality assessment and that it had also provided *'additional consultancy services to Land Securities'* albeit not related to the sustainability report, during the reporting period.

PricewaterhouseCoopers were commissioned by British Land, to provide limited assurance on its sustainability report and this exercise covered some 28 key performance indicators. The indicators covered a wide range of environmental and social indicators including total direct greenhouse gas emissions, total electricity consumption, total water consumption, waste management, staff diversity (gender), reportable accidents and health and safety developments. The assurance report included an assertion of the assurer's independence and an outline of the work they undertook to conduct the assurance exercise. The assurance report also carried two qualifications firstly that British Land had sole responsibility for selecting and applying the reporting criteria and secondly that *'the absence of a significant body of established practice on which to draw to evaluate and measure non-financial information allows for different but acceptable measurement techniques and can affect comparability between entities and over time.'* Overall

PricewaterhouseCoopers concluded that *'based on the procedures we have performed and the evidence we have obtained nothing has come to our attention that the selected information ... has not been prepared , in all material aspects, in accordance with the reporting criteria.'*

Some of the selected companies included details of external recognition of their sustainability reports. INTU, for example, reported on benchmarking through selected indices against its peers ensured that the company remained focused on best practice and continuous improvement. To this end INTU reported on its continuing membership of the Dow Jones Sustainability Index, on maintaining its position in the JSE Socially Responsible Investment Index, and on achieving the Business in the Community-Community Mark. SEGRO included an *'Advisor's Statement'* from Emma Hoskyn, the Director of Upstream Sustainability Services. This statement claimed that the company's *'commitment to resource efficiency has been demonstrated through the successes they have achieved against SEGRO 2010'* and that that it had gained *'a better understanding of what is required to meet all of the targets by 2020.'* At the same time Hoskyn recommended that SEGRO focus future attention on a range of issues including improving the coverage and quality of its energy data, establishing the drivers for energy saving and that SEGRO should work more closely with refurbishment teams to incorporate water and energy efficiency into all its future designs. Derwent London simply reported that its sustainability report reflected European Public Real Estate Corporation's Best Practices Recommendations on Sustainability Reporting.

## **Discussion**

While all of the UK's leading property companies 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 leading property companies are at the start of a long and potentially difficult journey towards sustainability. More specifically only around half of the leading property companies have embraced materiality or commissioned external assurance as integral elements of the sustainability reporting process. There are a number of issues, which have implications for occupiers and for other stakeholders, which 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. There can be issues, for example, when 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 a 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 UK's leading property companies 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.53), 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 property companies 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 clearly 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) counsel 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 property companies can exert a significant influence on energy usage and carbon emissions.

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 pointedly 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 approach the UK's leading property companies have currently adopted to external assurance is at best limited. Although 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 the 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.'* O'Dwyer and Owen (2005, P.224) have also 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 property companies' corporate 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, occupiers, 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 the leading property companies, demonstrated 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, p.224) 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 property companies 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 and one which some of the UK's leading property companies currently choose not to pursue. Thus while operational carbon emissions may be systematically collected, collated and audited as part of a 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 facilitate 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***

All UK's leading property companies 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 leading property companies 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. Approximately half of the UK's leading property companies reported embracing materiality and/or commissioning external assurance as an integral element in the sustainability reporting process. At best, in commissioning external assurance, 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 UK property companies' sustainability reports. That said the UK's leading property companies 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 leading property companies to embrace materiality and commission more comprehensive external assurance as systematic and integral elements in the reporting process.

More specifically the findings of this exploratory study suggest that occupiers should not take property companies' sustainability reports or their headline findings at face value. Rather they should interrogate such reports closely in order to test the credibility and reliability of their coverage. Occupiers concerned about sustainability credentials should investigate the extent to which the occupiers' perspectives and priorities have been incorporated into the process of stakeholder engagement prior to the identification of material issues and the reporting on these issues. More specifically where property companies do not include treatment of materiality within their sustainability reports then occupiers may want to bring pressure on these companies to embrace materiality and to publicly report on how material issues are identified and on how they addressed as an integral element in the reporting process. Further where property companies report a limited approach to stakeholder engagement the occupiers may want to encourage more comprehensive approach to this approach in order to more fully capture occupiers' concerns and demands. At the same time occupiers may want to know if corporate property companies have sought external assurance of their sustainability reports and to examine the nature of the assurance process. On the one hand occupiers need to be able to determine the independence of the assurance process and the both coverage and level of that process. On the other hand occupiers may wish to press property companies to specifically address occupiers as a distinct group of shareholders and thus to enhance accountability and transparency.



More generally while a growing numbers of occupiers will increasingly look to develop policies to address sustainability they face challenges in trying to determine the potential enhanced returns on sustainable properties. A number of researcher’s have looked to explore the relationship between sustainability and pricing premiums but so far this work has produced somewhat ambiguous results. In their review of environmental sustainability drivers for the real estate investor Falkenbach et. al. (2010, p.211) recognised that *‘the role of environmental sustainability has increased within the real estate sector’* but suggested that *‘the adoption of environmental principles, however, has been slowed down by a lack of evidence relating to the financial benefits and uneven distribution of costs and benefits between owners and occupiers.*

In conclusion the authors argue that a number of the UK’s leading property companies currently seem reluctant to embrace the concept of materiality and to commission independent external assurance. More critically the authors suggest that the UK’s leading property companies’ commitments to sustainability are couched within existing business models centred on continuing growth and consumption and that the current policies could potentially be viewed as public relation exercises rather than wholehearted commitments to sustainability. As such this echoes Roper’s (2012, p.85) belief that such approaches to sustainability represent *‘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.’*

**Table 1 : Leading UK Commercial Property Companies**

| <b>Company</b>  | <b>Sustainability Report (SR) / Information (SI)</b> | <b>Materiality</b> | <b>Assurance</b> |
|---|--|--------------------|------------------|
| Land Securities Group   | SR   | ✓                  | ✓                |
| British Land  | SR   | ✓                  | ✓                |
| Hammerson   | SI   | ✓                  | ✓                |
| INTU  | SR   | ✓                  | ✓                |
| Derwent London  | SR   |                    |                  |
| SEGRO   | SR   |                    |                  |
| Capital & Counties  | SI   |                    |                  |
| Great Portland Estates  | SI   |                    | ✓                |
| Shaftesbury   | SR   |                    | ✓                |
| Source: EPRA (2013) and UK Property Companies’ Corporate Websites |  |                    |                  |

## REFERENCES

Banerjee, S. B. (2008) “Corporate Social Responsibility: The Good, the Bad and the Ugly”, *Critical Sociology*, Vol. 34 No.1, pp. 51-79

Bond, S. and Perrett, G. (2012) "The Key Drivers and Barriers to the sustainable Development of Commercial Property in New Zealand", *Journal of Sustainable Real Estate*, Vo. 4, No. 1, pp.48-77

Bowen, D. (2003) "Corporate Social Responsibility (CSR) Reporting and the WWW: Increasingly Entwined", *International Journal of Corporate Sustainability*, Vol. 10, No. pp. 3, 4-9—4-11

CSR Europe (2008) "CSR Assurance Statements," available at [http://www.csreurope.org/data/files/2008\\_csr\\_assurance\\_statements\\_csr\\_europe\\_helpdesk.pdf](http://www.csreurope.org/data/files/2008_csr_assurance_statements_csr_europe_helpdesk.pdf) {Accessed 27 April 2015}.

Carroll, A. B. and Buchholtz, A. K. (2012) *Business and Society: Ethics, Stakeholders and Sustainability Management*, South Western, Nashville TN

Cooper, S. M. and Owen, D.L. (2007) "Corporate social reporting and stakeholder accountability; The missing link", *Accounting, Organisations and Society* Vol. 32 No. 7-8. pp. 649-667

CorporateRegister.com Limited (2008) "Assured View: The CSR Assurance Statement Report" available at <http://www.sustaincommworld.com/pdfs/AssureView.pdf> {Accessed 26 April 2014}

Cushman and Wakefield (2012) "European Investors and Occupiers Place greater Focus on Sustainability", available at [https://www.google.co.uk/?gws\\_rd=ssl#q=Cushman+and+Wakefield+\(2012\)+%E2%80%98European+Investors+and+Occupiers+Place+greater+Focus+on+Sustainability%E2%80%99%2C](https://www.google.co.uk/?gws_rd=ssl#q=Cushman+and+Wakefield+(2012)+%E2%80%98European+Investors+and+Occupiers+Place+greater+Focus+on+Sustainability%E2%80%99%2C) (Accessed 18 September 2015)

Cushman and Wakefield (2014) "US Occupier Survey: The corporate view of Sustainability", available at [http://www.cushmanwakefield.com/~/\\_media/global-reports/2014%20Business%20Briefing\\_SustainabilitySurveyResults\\_Final.pdf](http://www.cushmanwakefield.com/~/_media/global-reports/2014%20Business%20Briefing_SustainabilitySurveyResults_Final.pdf) (Accessed 18 September 2015)

Deloitte (2014) 'Breakthrough for sustainability in commercial real estate', available at [http://deloitte.wsj.com/cfo/files/2014/11/sustainable\\_real\\_estate.pdf](http://deloitte.wsj.com/cfo/files/2014/11/sustainable_real_estate.pdf) (Accessed 27 May 2015)

Development Securities (2010) "Quality of Life", available at [http://www.developmentsecurities.com/devsecplc/dlibrary/documents/QualityofLife\\_Marc\\_h2010.pdf](http://www.developmentsecurities.com/devsecplc/dlibrary/documents/QualityofLife_Marc_h2010.pdf) (Accessed 20 May 2015)

Diesendorf, M. (2000) "Sustainability and Sustainable Development", in Dunphy, D., Beneveniste, J., Griffiths, A. and Sutton, P. (Eds.), *Sustainability: The corporate challenge of the 21<sup>st</sup> century*, Allen and Unwin, Sydney, pp. 19-37

Eccles, R. G., Krzus, M.P., Rogers, J. and Serafeim, G. (2012) “The Need for Sector-Specific Materiality and Sustainability Reporting Standards”, *Journal of Applied Corporate Finance*, Vol. 24 No. 2, pp. 8-14

Ernst and Young (2014) “Let’s Talk: Sustainability”, available at [http://www.ey.com/Publication/vwLUAssets/EY\\_Lets\\_talk\\_sustainability\\_2014-01/\\$FILE/EY%20Let's%20talk%20sustainability,%202014-01.pdf](http://www.ey.com/Publication/vwLUAssets/EY_Lets_talk_sustainability_2014-01/$FILE/EY%20Let's%20talk%20sustainability,%202014-01.pdf) (Accessed 9 January 2015)

European Commission Directorate-General for Enterprise (undated) “A Guide to Communicating about CSR”, available at [http://ec.europa.eu/enterprise/policies/sustainable-business/files/csr-sme/communication\\_guide\\_en.pdf](http://ec.europa.eu/enterprise/policies/sustainable-business/files/csr-sme/communication_guide_en.pdf) (Accessed 27 June 2013).

Falkenbach, H., Lindholm, A-L. and Schleich, H. (2010) “Environmental Sustainability: Drivers for the Real Estate Investor” *Journal of Real Estate Literature*, Vol. 18, No. 2, pp.201-223

Global Reporting Initiative (2007) “Reporting Ten Years On”, available at [http://www.globalreporting.org/NR/ronlyres/430EBB4E-9AAD-4CA1-9478-FBE7862F5C23/0/Sustainability\\_Reporting\\_10years.pdfh](http://www.globalreporting.org/NR/ronlyres/430EBB4E-9AAD-4CA1-9478-FBE7862F5C23/0/Sustainability_Reporting_10years.pdfh) {Accessed 9 March 2015}.

Global Reporting Initiative (2014) “Materiality in the Context of the GRI Reporting Framework”, available at <https://www.globalreporting.org/reporting/G3andG3-1/guidelines-online/TechnicalProtocol/Pages/MaterialityInTheContextOfTheGRIReportingFramework.aspx> (Accessed 7 January 2015)

GreenBiz (2014) “4 top sustainability reporting trends for 2014”, Available at <http://www.greenbiz.com/blog/2014/02/20/top-sustainability-reporting-trends-2014> (Accessed 7 January 2015)

Gruber, U. (2012) *Sustainability: a Cultural History* (Translated by Ray Cunningham), Green Books, Cambridge

Hamilton, C. (2009) “Consumerism, self-creation and prospects for a new ecological consciousness”, *Journal of Cleaner Production*, Vol. 18, No. 6, pp. 571-575.

International Integrated Reporting Council (2013) “Materiality”, available at <http://www.theiirc.org/wp-content/uploads/2013/03/IR-Background-Paper-Materiality.pdf> (Accessed 8 January 2015).

International Union for Conservation of Nature and Natural Resources (1980) “World Conservation Strategy”, available at <https://portals.iucn.org/library/efiles/documents/WCs-004.pdf> (Accessed 21 May 2015)

Jones Lang LaSalle (2007) “Global Trends in sustainable Real Estate: an Occupiers Perspective”, available at

[http://www.joneslanglasalle.com/ResearchLevel1/Global Trends in Sustainable Real Estate - Feb 2008 EN.pdf](http://www.joneslanglasalle.com/ResearchLevel1/Global_Trends_in_Sustainable_Real_Estate_-_Feb_2008_EN.pdf) (Accessed 10 October 2015)

KPMG (2011) "KPMG International Survey of Corporate Responsibility Reporting 2011", available at <http://www.kpmg.com/PT/pt/IssuesAndInsights/Documents/corporate-responsibility2011.pdf> {Accessed 9 March 2015}.

KPMG (2014) "The Essentials of Materiality Assessment", available at <http://www.kpmg.com/Global/en/IssuesAndInsights/ArticlesPublications/Documents/materiality-assessment.pdf> (Accessed 8 January 2015).

Kahn, R. (2010) "Producing Crisis: Green Consumerism as an Ecopedagogical Issue", in, Sandlin, J. A. And McLaren, P. (Eds), *Critical Pedagogies of Consumption*, Routledge, New York, pp. 47-57

McElroy, M. W. (2011) "Are Materiality Matrices Really Material" available at [http://www.sustainablebrands.com/news\\_and\\_views/articles/are-materiality-matrices-really-material](http://www.sustainablebrands.com/news_and_views/articles/are-materiality-matrices-really-material) (Accessed 8 January 2015)

Marsh (2012) "Property Sustainability", available at <http://uk.marsh.com/Portals/18/Documents/PropertySustainability.pdf> (Accessed 27 May 2015)

O'Dwyer, B. and Owen, D. (2005) "Assurance statement practice in environmental, social and sustainability reporting: a critical evaluation", *The British Accounting Review*, Vol. 37, No. 2, pp. 205-229.

Osborne Clarke (2008) "Briefing Note: Sustainability Debate", available at [http://www.osborneclarke.com/media/filer\\_public/fa/b6/fab63903-9df3-4101-8c51-60d9aa161b62/property-sustainability-briefing-note-november.pdf](http://www.osborneclarke.com/media/filer_public/fa/b6/fab63903-9df3-4101-8c51-60d9aa161b62/property-sustainability-briefing-note-november.pdf) (Accessed 27 May 2015)

PGS (2013) "Determining materiality: a key for corporate sustainability", available at <http://www.pgsadvisors.com/2013/07/determining-materiality-a-key-tool-for-corporate-sustainability/> (Accessed 8 January 2015)

PricewaterhouseCoopers/Urban Land Institute (2015) "Emerging Trends in Real Estate", available at <http://www.pwc.com/gx/en/asset-management/emerging-trends-real-estate/assets/real-estate-returns2015.pdf> (Accessed 15 October 2015)

RAAS Consulting (2009) "The Role of the Assurance Provider", available at <http://raasconsulting.com/CSRAssuranceIssues.aspx> (Accessed 15 June 2012).

Roper, J. (2012) "Environmental risk, sustainability discourses and public relations", *Public Relations Inquiry*, Vol.1 No.1, pp.69-87

Saunders, M., Lewis, P. and Thornhill, A. (2009) *Research Methods for Business Students*, Prentice-Hall, Harlow.

Sayce S., Ellison L. and Parnell P. (2007) "Understanding investment drivers for UK sustainable property", *Building Research and Information* Vol. 35, No. 6, pp. 629-643

Schendler, A. and Toffel, M. (2013) "Corporate sustainability is not sustainable", available at <http://grist.org/climate-energy/corporate-sustainability-is-not-sustainable/> (Accessed 7 January 2015)

Strandberg Consulting (2008) "Materiality Analysis", available at <http://www.corostrandberg.com/pdfs/Strandberg%20Consulting%20Materiality%20Analysis.pdf> (Accessed 8 January 2015)

van de Wetering, J. (2009) "Occupier Perceptions of Sustainability", available at [http://econpapers.repec.org/paper/arzwpaper/eres2009\\_5f329.htm](http://econpapers.repec.org/paper/arzwpaper/eres2009_5f329.htm) (Accessed 21 September 2015)

Warren-Myers, G. (2012) "The value of sustainability in real estate: a review from a valuation perspective", *Journal of Property investment and Finance*, Vol. 38, No. 2, pp. 115-144.

Wiertz, J.H. L. (2009) "Assurance Statement Practices in CSR Reporting: An International Approach", available at <http://arno.unimaas.nl/show.cgi?fid=16952> (Accessed 25 May 2105)

Willers, B (1994) "Sustainable Development: A New World Deception" *Conservation Biology*, Vol. 8, No. 4, pp. 1146-1148

World Commission on Environment and Development (1987) "Our Common Future", available at <http://www.un-documents.net/ocf-02.htm> (Accessed 22 May 2105)