



UNIVERSITY OF
GLOUCESTERSHIRE

This is a peer-reviewed, post-print (final draft post-refereeing) version of the following published document, This article is © Emerald Group Publishing and permission has been granted for this version to appear here <http://www.emeraldinsight.com/doi/abs/10.1108/JERER-07-2015-0027>. Emerald does not grant permission for this article to be further copied/distributed or hosted elsewhere without the express permission from Emerald Group Publishing Limited. and is licensed under All Rights Reserved license:

Jones, Peter ORCID logoORCID: <https://orcid.org/0000-0002-9566-9393>, Hillier, David and Comfort, Daphne (2016) Materiality and external assurance in corporate sustainability reporting: an exploratory study of Europe's leading commercial property companies. Journal of European Real Estate Research, 9 (2). pp. 147-170. doi:10.1108/JERER-07-2015-0027

Official URL: <http://www.emeraldinsight.com/doi/abs/10.1108/JERER-07-2015-0027>

DOI: <http://dx.doi.org/10.1108/JERER-07-2015-0027>

EPrint URI: <https://eprints.glos.ac.uk/id/eprint/3649>

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.

This is a peer-reviewed, post-print (final draft post-refereeing) version of the following published document:

Jones, Peter and Hillier, David and Comfort, Daphne (2016). *Materiality and external assurance in corporate sustainability reporting: an exploratory study of Europe's leading commercial property companies*. Journal of European Real Estate Research, 9 (2). ISSN 1753-9269

Published in Journal of European Real Estate Research, and available online at:

<http://www.emeraldinsight.com/doi/abs/10.1108/JERE...>

We recommend you cite the published (post-print) version.

The URL for the published version is

<http://www.emeraldinsight.com/doi/abs/10.1108/JERE...>

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.

Materiality and external assurance in corporate sustainability reporting: an exploratory study of Europe's leading commercial property companies

Journal:	<i>Journal of European Real Estate Research</i>
Manuscript ID	JERER-07-2015-0027.R2
Manuscript Type:	Practice/Professional Paper
Keywords:	property companies, corporate sustainability, materiality, external assurance, Europe, real estate

MATERIALITY AND EXTERNAL ASSURANCE IN CORPORATE SUSTAINABILITY REPORTING: AN EXPLORATORY STUDY OF EUROPE'S LEADING COMMERCIAL PROPERTY COMPANIES

Introduction

Sustainability is fast becoming an important business imperative. In examining recent trends in corporate sustainability strategy and performance Ernst Young and GreenBiz (2012, webpage), for example, argued that *'over the past 2 decades corporate sustainability efforts have shifted from a risk based compliance focus where rudimentary, voluntary, sometimes haphazard initiatives have evolved into a complex and disciplined business imperative focused on customer and stakeholder requirements.'* In the light of these developments growing numbers of companies publicly report annually on their 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. 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 such as the United States, Western Europe and America'* (Deloitte 2014, p. 12).

While the most recent Global Real Estate Sustainability Benchmark (GRESB) report suggested that property companies in Australia and New Zealand are currently the world leaders in addressing sustainability, the report also revealed a continuing improvement in the performance of real estate companies in Europe since 2011 and that European property companies had higher ratings than their counterparts in North America and Asia (Global Real Estate Sustainability Benchmark 2015). In 2011 the European Public Real Estate Association (EPRA) launched its *'Best Practice Recommendations'*, which drew on the Global Reporting Initiative (GRI) guidelines, *'in the hope that'* with their introduction *'the bar will be raised in terms of sustainability disclosure'* (European Public Real Estate Association 2011). This first edition of the recommendations focused solely on environmental issues, namely energy, greenhouse gas emissions, water and waste, but in the second edition, published

three years later, EPRA suggested that more sophisticated approaches were being developed to address the social and economic dimensions of sustainability (European Public Real Estate Association 2014). The recommendations embrace a range of sustainability performance measures and for each measure the guidance includes a definition of each individual measure (e. g. total electricity consumption), a rationale for its use and details of how each measure should be calculated (based on GRI protocols). The EPRA also launched its annual sustainability awards in 2011 with the aims of raising awareness of sustainability reporting within the European property sector.

In the light of the growing interest in sustainability within European real estate this paper provides a preliminary examination of the extent to which Europe's leading commercial property companies 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 the concept of materiality and of assurance, a brief outline of the activities of the leading commercial European property companies and of the sustainability challenges that the industry faces. This is followed by an exploratory examination of the extent to which Europe's leading stock exchange listed property companies have embraced materiality and commissioned external assurance in their current sustainability reports and the paper then offers some wider reflections on external assurance and materiality in sustainability reporting.

Corporate Sustainability

The ideas underpinning sustainability are not new (Gruber 2012) but the concept began to attract 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.'* 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 genuine 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 look 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 in both economy and society (Roper 2012).

Within the world of business the concept of sustainability has consistently moved higher up boardroom agendas as growing numbers of companies increasingly acknowledge

1
2
3 sustainability as one of the emerging drivers of competition and as a significant source of
4 both opportunity for, and risk to, long term competitive advantage. Carroll and Buchholtz
5 (2012, p.4), for example, suggested that *'sustainability has become one of business' most*
6 *recent and urgent mandates'* and Elkington (2004) has argued that future business success
7 depends on the ability of companies to add environmental and social value to economic
8 value. A survey of business managers and executives undertaken by MIT Sloan Management
9 Review and the Boston Consulting Group (2012) suggested that some 70% of the companies
10 surveyed had places sustainability on their strategic management agendas. A number of
11 factors can be identified in helping to explain this trend. These include the need to comply
12 with a growing volume of environmental and social legislation and regulation; concerns
13 about the cost and scarcity of natural resources; greater public and shareholder awareness
14 of the importance of socially conscious financial investments; the growing media coverage
15 of the activities of a wide range of anti-corporate pressure groups; and more general
16 changes in social attitudes and values within modern capitalist societies.
17
18
19

20
21 At the same time a number of critics view corporate commitments to sustainability
22 as a cynical ploy, often popularly described as 'greenwash', designed to appeal to
23 consumers who are seen to be concerned about the environmental and social impact of
24 business operations throughout the supply chain, while effectively ignoring fundamental
25 environmental and social concerns. As such moves towards sustainability might be
26 characterised by what Hamilton (2009, p. 573-574) described as *'shifting consciousness's'*
27 towards *'what is best described as green consumerism.'* This Hamilton saw as *'an approach*
28 *that threatens to entrench the very attitudes and behaviours that are antithetical to*
29 *sustainability'* (Hamilton 2009, p.574). Perhaps more radically Kahn (2010, p.48) argued that
30 *'green consumerism' is 'an opportunity for corporations to turn the very crisis that they*
31 *generate through their accumulation of capital via the exploitation of nature into myriad*
32 *streams of emergent profit and investment revenue.'* This, in turn, reflects the earlier
33 argument proposed by Willers (1994) that sustainable development is effectively
34 synonymous with continuing economic growth which is seen to be compatible with
35 environmental protection.
36
37
38

39
40 As interest in sustainability has gathered momentum so a number of attempts have
41 been made to develop theoretical frameworks of sustainability which recognize that social
42 and economic development cannot be viewed in isolation from the natural environment.
43 Todorov and Marinova (2009,) reviewed a wide range of models being developed to
44 conceptualise sustainability and concluded that a simple three dimensional representation
45 of sustainability capturing environmental, social and economic elements, in a Venn diagram
46 as three overlapping circles, was the most powerful in reaching a general audience. A
47 number of authors have employed stakeholder theory to conceptualise sustainability and to
48 explore relationships between companies and stakeholder's environmental, social and
49 economic agendas. (e.g. Steurer et. al. 2005). There have also been attempts to develop a
50 more critical theory. Amsler (2009, p.127), for example, has argued that *'the contested*
51 *politics and ambiguities of sustainability discourses'* can be embraced to develop a *'critical*
52 *theory of sustainability.'* Castro (2004) has sought to lay the foundations for a more radical
53 theory of sustainability by questioning the very possibility of sustainable development under
54 capitalism and arguing that economic growth relies upon the continuing and inevitable
55 exploitation of both natural and social capital.
56
57
58
59
60

Commercial Property in Europe and Sustainability Agendas

Commercial property is vital to Europe's economy, society and environment and the European Public Real Estate Corporation (EPRA) estimates that commercial property floor space measures some 3.5 billion square metres with shops, offices and warehouses occupying approximately 1 billion square metres each (EPRA 2012a, p.5). EPRA, for example, has characterised property as *'a platform for the economy'* (EPRA (2012b, p. 1). More specifically EPRA (2012b p.1) summarised the role of property thus *'business and society can't function without the services of commercial property, including the provision of offices, shops, factories, housing and many other forms of real estate. The commercial property sector delivers and manages the infrastructure needed for entrepreneurship to thrive. It is therefore a fundamental source of employment and economic growth.'* In assessing property's role in contributing to the economy and supporting jobs EPRA (2012a, p.2) suggested that real estate sector accounts for some 20% of all economic activity and that the commercial property sector contributed an estimated 285 billion Euros to the total economy and that it is directly responsible for over 4 million jobs. At the same time EPRA (2012a) estimated that investment in new commercial buildings and the refurbishment and re-development of existing buildings accounted for some 10% of total investment in the European economy. While the commercial European property industry is diverse embracing massive international companies operating in a wide range of national markets as well as a very large number of small independent operators whose activities are confined to relatively small urban and regional markets. The leading listed property companies are widely acknowledged to be the major drivers of large property development projects (EPRA 2013).

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, suggested that the commercial property sector accounts for the majority of greenhouse gas emissions within cities and more generally his company argued that the environmental impact of buildings includes construction methods, the use of recycled materials, longevity and resilience as well as operational efficiency (Marsh 2012). 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), for example, it was argued that new standards are required for well-being in the workplace and that though the nature of office work has changed dramatically in recent years the office environment has failed to keep pace with these changes. The economic impacts include building investor value and employment creation.

As sustainability has assumed growing commercial significance within the real estate market so it has attracted attention within the academic literature. In general terms Sayce, Ellison and Parnell (2007, p. 633), for example, identified two sets of *'drives for sustainable property investment which have been influential in both raising awareness and leading*

1
2
3 *change.* The first set was rooted in legislation and regulation and seen to reflect
4 increasingly widespread statutory requirements relating, for example, to energy efficiency
5 and waste management. The second set was seen to be more market led and included the
6 need for shareholders to anticipate future legislation and mitigate risk, changing landlord
7 and tenant relationships which have effectively forced landlords to maximise occupier
8 satisfaction and the potential for enhanced returns on investment in sustainable properties.
9 Work by van Wetering and Wyatt (2011, p.29) on the office sector in and around Bristol, for
10 example, revealed that as far as occupiers are concerned the strongest sustainability drivers
11 were *'consumer demand and staff demand.* However Bond and Perrett (2012, p.53)
12 identified a number of barriers to investing in greening buildings. These barriers included
13 *'financial considerations', 'split incentives', 'lack of knowledge and experienced workforce'*
14 and *'lack of incentives.'* The principal issue underling the first barrier is seen to be the belief
15 that green buildings cost more than their more traditional counterparts. The issue of split
16 incentives is that while it is landlords that are investing in green buildings, it is the tenants
17 who benefit via reduced energy and water costs and greater productivity..
18
19
20

21
22 A number of researcher's have looked to explore the relationship between
23 sustainability and pricing premiums mentioned above but so far this work has produced
24 somewhat ambiguous results. In their review of environmental sustainability drivers for the
25 real estate investor Falkenbach et. al. (2010, p.211) recognised that *'the role of*
26 *environmental sustainability has increased within the real estate sector'* but suggested that
27 *'the adoption of environmental principles, however, has been slowed down by a lack of*
28 *evidence relating to the financial benefits and uneven distribution of costs and benefits*
29 *between owners(investors) and occupiers.'* In examining the growth of the green office
30 market in the UK Oyedokun et. al. (2015, p.) suggested that *'market acceptance of the*
31 *importance of greenness appears to be in the melting pot.*
32
33

34
35 In reviewing sustainability and property values Krause and Bittner (2012) suggested
36 that green buildings do generate sales price premiums which stem, in part, from the
37 increased income streams such buildings generate. That said Krause and Bittner (2012,
38 pp.522-523) also noted that *'the price premiums are generally greater in magnitude than*
39 *the income premiums, which suggests that investors perceive benefits from green building*
40 *ownership above and beyond their ability to generate higher operating income.'* Empirical
41 research conducted by' Cajias et.al. (2012,) also suggested that green buildings were able to
42 generate increased revenues. Work by Cajias et. al. (2014) revealed positive relationship
43 between corporate environmental and social performance and increased revenue
44 generation. A survey of real estate stakeholders in Italy by Mori and Soffiatti (2013, p.303)
45 suggested that *'while the importance of green building is widely acknowledged, caution is*
46 *still prevalent regarding expected gains'* and that *'the majority of respondents perceive the*
47 *increase in rent and price premiums as being equivalent to additional costs.*
48
49

50
51 More generally in reviewing the value of sustainability in real estate Warren-Myers
52 (2012, p.115) highlighted *'the limited applicability of research to date in regard to the*
53 *relationship between sustainability and market value for the valuation profession.'* At the
54 same time Warren-Myers (2012, p. 138) advised that *'sustainability presents a rapidly-*
55 *changing dynamic which has varying, complex assessment criteria which cannot be easily*
56 *measured and quantified'* and concludes that *'the global push for sustainability and the*
57 *emotional and moral requirements that sustainability necessitates makes it difficult to*
58
59
60

1
2
3 *develop research demonstrating unbiased opinions and market observations.* Indeed within
4 both the professional and academic communities financial considerations are currently
5 widely perceived to be the principal challenge for the more widespread introduction of
6 more sustainable property strategies and practices. Osborn Clarke, which provides legal
7 services to real estate clients, for example, argued that sustainability would only be
8 established in the property market once the finance equation was favourable for occupiers
9 (Osborne Clarke 2008).

11 **Materiality and External Assurance**

12
13
14 The concept of materiality has predominantly been associated with the financial
15 sector and more specifically with the auditing and accounting processes of financial
16 reporting. However the concept has become increasingly important in sustainability and
17 corporate social responsibility reporting but *'compared to financial reporting, sustainability*
18 *considers a broader scope of action and covers a multitude of issues: environmental, social,*
19 *economic and more'* and *'requires a more comprehensive definition of materiality'* (PGS
20 2013, webpage). That said there is little consensus about what constitutes materiality in
21 sustainability reporting and a number of competing definitions can be identified. There are
22 sets of definitions that focus principally on investors and shareholders. The International
23 Integrated Reporting Council (2013, p.33), for example, suggested that *'in determining*
24 *whether or not a matter is material, senior management and those charged with*
25 *governance should consider whether the matter substantively affects, or has the potential to*
26 *substantively affect, the organization's strategy, its business model, or one or more of the*
27 *capitals it uses or affects.'* There are also definitions that embrace a wide range of
28 stakeholders. The Global Reporting Initiative (GRI), for example, asserted that *'material*
29 *topics for a reporting organisation should include those topics that have a direct or indirect*
30 *impact on an organisation's ability to create, preserve or erode economic, environmental*
31 *and social value for itself, its stakeholders and society at large'* (GRI 2014, webpage).

32
33
34
35
36
37 The way in which materiality is identified and operationalized varies from one
38 company and organisation to another but a number of common elements can be identified
39 (PGS 2013). These include the explicit identification of a number of environmental, social
40 and economic issues around which the sustainability report is developed; the evaluation and
41 ranking of both company and stakeholder concerns on each of the identified issues;
42 identification of the ways in which the company has elicited stakeholders' contributions to
43 the process; and the prioritization of these issues in a way that informs a company's
44 sustainability strategy and reporting process. Common elements apart there is a growing
45 interest in defining and determining materiality on a business sector specific basis. Eccles et.
46 al. (2012, p.10), for example, advocated a sector specific approach and argued that by
47 employing *'guidance that identifies the environmental, social and governance issues that are*
48 *material to a sector and how best to report on them, companies will have much clearer*
49 *guidance on what and how to report.'* A variety of approaches have been developed to
50 determine materiality as an integral component of sustainability reporting but the
51 'materiality matrix' is currently the most commonly adopted approach to determine
52 materiality issues. The matrix plots sustainability issues in terms of two axes namely, the
53 influence on stakeholder assessments and decisions and the significance of environmental,
54 social and economic impacts.
55
56
57
58
59
60

1
2
3 A range of benefits are claimed for those companies which embrace materiality as
4 an integral part of their sustainability reporting process. Strandberg Consulting (2008), for
5 example, suggested that materiality analysis can help companies to clarify the issues that
6 can drive long term business value; to identify and capitalise on business opportunities; to
7 co-ordinate sustainability and business strategies; to build and enhance corporate brand
8 and reputation; and to anticipate and manage change. KPMG (2014) claims that materiality
9 extends well beyond the reporting process per se in that it is the foundation for a company's
10 sustainability strategy, target setting, stakeholder engagement and performance
11 management.
12
13

14
15 Assurance, simply defined, as a process used to provide confidence as to the degree
16 of reliance that can be placed on the reported data, can be undertaken in a number of ways.
17 CSR Europe (2008, webpage), for example, identified four principal methods namely
18 '*conducting assurance internally*', '*stakeholder panels*', '*expert input*' and assurance by an
19 '*independent, impartial and external organisation*.' In theory conducting assurance within a
20 company should provide comprehensive access to the relevant data and be less costly but it
21 may lack credibility especially with external stakeholders. Inviting a panel of stakeholders to
22 produce an assurance statement can have the advantage of ensuring that the process will
23 address those issues important to the invited stakeholders but such panels may not always
24 represent the full range of stakeholder interests. The use of so called 'expert input' in
25 assurance can be seen to lend what some stakeholders might regard as authoritative
26 support to a CSR report. However doubts may remain about the extent to which such
27 experts have had the opportunity or the appropriate access to the primary data which
28 would allow them to make informed judgements.
29
30
31

32
33 The most widely adopted approach to sustainability assurance is the commissioning
34 of an assurance statement by an independent external organisation and such an approach
35 would seem to have claims to offer credibility, integrity and reliability to the reporting
36 process. An assurance statement is defined by CorporateRegister.com Limited (2008, p.6) as
37 '*the published communication of a process which examines the veracity and completeness of*
38 '*a CSR report*.' However the production of assurance statements is seen to be problematic in
39 that not only is there considerable variation between the volume, character and detail of
40 the information companies provide in their CSR reports themselves. There is currently little
41 consensus, for example, on how companies should collect, evaluate and report on their CSR
42 data. In addressing the issue of appropriate data collection CorporateRegister.com Limited
43 (2008, p.6), for example, argued that '*the underlying processes are often opaque and*
44 '*company specific, so it's difficult to know how far a report reflects actual performance*' and
45 that '*unless a company can define its scope of performance disclosure, how can an*
46 '*assurance provider define the scope of assurance*.'
47
48
49

50
51 External assessors work to one of two so called 'levels of assurance' namely
52 'reasonable assurance' and 'limited assurance.' In the former '*the assurers have carried out*
53 '*enough work to be able to make statements about the report which are framed in a positive*
54 '*manner e.g. the reported environmental data accurately reflect*' (the company's)
55 '*environmental performance*.' In the latter '*the assurers have only carried out enough work*
56 '*to make statements about the report which are framed in a negative manner e.g. Nothing*
57 '*has come to our attention which causes us to believe that the reported environmental data*
58
59
60

1
2
3 *do not accurately reflect'* (the company's) '*environmental performance'*
4 (CorporateRegister.com Limited 2008, p.14). A number of organisations offer external
5 assurance services for sustainability reports. Accountancy companies (e.g.
6 PricewaterhouseCoopers) are the largest providers of external assurance for sustainability
7 reports. A number of sustainability consultancies (e.g. Planet and Prosperity) also provide
8 external assurance and a number of engineering firms (e.g. TruePivot) which offer technical
9 certification and specialist engineering expertise and risk based analysis.
10

11
12 A number of benefits are claimed for commissioning and producing an assurance
13 statement. Perhaps most importantly there is the argument that as a wide variety of
14 stakeholders increasingly shares an interest in how companies are discharging their social,
15 environmental, economic and ethical responsibilities so the inclusion of a robust and
16 rigorous assurance statement within a CSR report helps to enhance reliability and credibility
17 (Jones and Solomon 2010). It is also argued that assurance can '*give a boost to (the) internal*
18 *management of CSR, since the process of providing an assurance statement will involve an*
19 *element of management systems checking'* in that '*a number of assurance statements*
20 *identify shortcomings in underlying data collection systems, thus providing a roadmap for*
21 *improvement to the reporting company'* (CSR Europe 2008, webpage). More commercially
22 the provision of an assurance statement might be seen to enhance both a company's
23 reputation with its stakeholders and its brand identity.
24
25
26

27 **Frame of Reference and Method of Enquiry**

28
29
30 In an attempt to address the research question underpinning this paper namely, if,
31 and how, the leading European property companies have embraced materiality and
32 commissioned external assurance as integral elements in the sustainability reporting
33 process the leading listed European property companies, by capital value, (Table 1) were
34 selected for study. In the event, one of the listed companies, Corio, merged with Klepierre in
35 March 2015 and so the study focused on just 19 companies. As such the leading companies
36 might be expected to exhibit best practice approaches to sustainability within the industry.
37 However although the present research is exclusively, if arbitrarily, focused on the leading
38 property companies the authors recognise that many other property companies within
39 Europe have developed and actively pursued sustainability programmes. Deutsche
40 Euroshop, Workspace and Polis Immobilien, for example, all publicly report or provide
41 information on their corporate approach to sustainability. Businesses employ a variety of
42 methods to report on sustainability including '*product labels, packaging, press/media*
43 *relations, newsletters, issue related events, reports, posters, flyers, leaflets, brochures,*
44 *websites, advertisements, information packs and word-of mouth'* (European Commission
45 Directorate-General for Enterprise 2015, webpage). During the past decade '*sustainability*
46 *reporting has evolved from a marginal practice to a mainstream management and*
47 *communications tool'* (Global Reporting Initiative 2007, webpage) and Bowen (2003)
48 suggested that the majority of large companies have realised the potential of the World
49 Wide Web as a mechanism for reporting their sustainability commitments and
50 achievements. also argued that the Web's interactivity, updatability and its ability to handle
51 complexity adds value to the reporting process.
52
53
54
55
56
57
58
59
60

1
2
3 With this in mind in January 2015 the authors undertook an Internet search of each
4 of the selected European property companies' corporate web sites using the key phrase
5 'sustainability report', then selected the most recent report/information and searched it
6 digitally using the keywords 'materiality' and 'assurance', using Google as the search engine,
7 to guide the process of data collection.. A number of authors have used content analysis to
8 systematically identify features within annual reports and on corporate websites. Newell
9 (2008), for example, employed content analysis to examine the annual reports, the
10 corporate and sustainability reports and the carbon disclosure reports in his review of the
11 strategic significance of environmental sustainability of Australian property trusts. However
12 in this preliminary examination the authors deliberately chose to tease out if, and how, the
13 selected real estate companies embraced materiality and commissioned external assurance
14 as part of their sustainability reporting process. In taking this decision the authors were
15 minded that the material on materiality and external assurance was generally confined to
16 discrete sections of the selected companies;' sustainability reports. The information
17 obtained through this search provided the empirical information for this paper and as this
18 information is in the public domain the authors took the view that they did not need to
19 contact the selected property companies to obtain formal permission prior to conducting
20 their research. This paper does not look to offer a systematic and detailed comparative
21 evaluation of the property companies' sustainability reporting policies and the specific
22 examples and the selected quotations from selected companies' sustainability reports
23 /information cited below are used for illustrative rather than for comparative purposes. In
24 reviewing environmental sustainability strategies in Australia Newell (2008) included a
25 number of tables, pie charts and diagrams from company sustainability reports. However in
26 the current paper the authors chose not to reproduce such images taking the considered
27 view that the diversity of the approaches to materiality and assurance within the selected
28 European property companies meant that using a limited of individual illustrations would
29 satisfactorily capture the diversity of the reporting process.
30
31
32
33
34
35

36 In discussing the reliability and validity of information obtained from the Internet
37 Saunders et.al. (2009) emphasise the importance of the authority and reputation of the
38 source and the citation of a specific contact individual who can be approached for additional
39 information. In surveying the leading European property companies the authors were
40 satisfied that these two conditions were met. At the same time the authors recognise that
41 the approach chosen has its limitations in that there are issues in the extent to which
42 a company's public statements genuinely, and in detail, reflect strategic corporate thinking
43 and whether or not such pronouncements may be little more than carefully constructed
44 public relations exercises. However given the need to drive forward exploratory research
45 such as this and to begin to understand the role the leading European property companies
46 are currently playing in promoting sustainability, the current research draws on information
47 that is publicly available and readily accessible. As such this approach is not only fit for
48 purpose but it also provides a simple platform from which future research agendas might be
49 constructed.
50
51
52

53 ***Findings: Sustainability***

54
55 The internet search revealed that ten of Europe's leading property companies had
56 posted sustainability reports and a further five of the companies had included a
57 sustainability report within their annual report while the remaining five had posted some
58
59
60

1
2
3 more limited information on their sustainability policies and achievements on their
4 corporate websites (See Table 1). There is considerable variation in the volume and detail
5 the selected property companies provided on their approach to sustainability but the vast
6 majority of them stress their commitment to the principles of sustainability, albeit in a
7 variety of ways, and to integrating sustainability into their core business strategies. Unibail-
8 Rodamco, for example, reported that since 2007 the company had *'developed a
9 comprehensive and ambitious sustainability strategy and had demonstrated its capacity to
10 succeed in all sustainability fields'* and that *'sustainability thinking is closely integrated into'
11 its operating, development, and investment activities.'* In a similar vein British Land claimed
12 that *'sustainability' was 'at the heart of our business strategy'* and that the company sees
13 *'sustainability as a powerful tool to deliver lasting value and positive outcomes for us and
14 our stakeholders.'* Swiss Prime Site reports that its *'sustainably relevant corporate strategy is
15 aimed at achieving long term financial success'* and that *'sustainability as a business
16 principle is therefore an integral part of corporate governance and effects day to day
17 business operations.'* Great Portland Estates claimed that its *'sustainability strategy'* was
18 *'integrated across investment, development and asset management'* and designed *'to
19 ensure that we meet both current and future tenant needs and those of the wider
20 environment through the responsible development and management of our buildings,
21 enhancing the long term value of our business.'*

22
23
24
25
26 Such strategic corporate commitments are evidenced across a range of
27 environmental, social and economic agendas. The selected European property companies
28 addressed a variety of environmental issues, climate change; carbon dioxide gas emissions;
29 energy sourcing and efficiency; waste management; water stewardship; sustainable design
30 and construction; sustainable travel; timber re-use; and biodiversity. Deutsche Wohnen AG,
31 for example, reports that in undertaking refurbishment activities it *'attaches great
32 importance to high standards of energy efficiency'* and it suggested that its *'use of a
33 combined heat and power plant, which meets the electricity requirements of some 2,000
34 household, annually, is one innovative way in which we show support for political targets
35 relating to climate protection.'* A wide range of social issues are also important elements in
36 the selected property companies' commitments to sustainability namely long term
37 collaboration with tenants and respective clients; health and safety; diversity and equality of
38 opportunity; labour relations; human rights; training, development and educational
39 partnerships; career management; creating value in the community; and charitable
40 donations. SEGRO, for example, reported that *'supporting communities in which we operate
41 remains an integral part of our operations'* and it argued that *'we ensure that the local
42 communities understand why we are undertaking specific commercial projects and the
43 benefits they bring to local areas.'* Economic dimensions of sustainability generally receive
44 less explicit attention from the selected property companies but a number of themes are
45 cited including local and national economic contributions; long term added value for its
46 shareholders; responsible asset management; and meeting investment fund standards; and
47 employment creation. INTU, for example, reported on the beneficial impact of its
48 operations, both directly and indirectly, on the local, regional and national economies. More
49 specifically the company reported that *'89,000 jobs were provided by INTU and its retailers',
50 '26,000 jobs were directly supported by INTU and its retailers'* and *'£297 million in business
51 rates were paid by INTU and its retailers.'*

52
53
54
55
56
57
58
59
60

Findings: Materiality

While all of the leading European property companies publicly reported or provided information on their approach to sustainability on their corporate websites fewer of them are embracing the concept of materiality or commissioning independent external assurance as integral elements in the reporting process. The findings reveal that nine of the selected companies posted information on how they addressed materiality and eleven companies included formal independent external assurance statements as part of their sustainability reporting processes. In addition three of the selected companies drew attention 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 and two provided some limited external verification of selected elements of their sustainability reporting (Table 1).

The nine property companies which addressed materiality in their sustainability reports adopted a different approach and there was some variation in the volume of material they published on the extent to which materiality was seen as an essential element in sustainability strategies, on how they determined materiality, on the issues identified as being material for the sustainability reporting process.. Unibail-Rodamco, for example, reported that integrating sustainability within its core business strategy had enabled the company to establish a hierarchy of material issues and to define both long term and short term targets. Land Securities emphasised that the insight gained from identifying the major material issues was vital in helping the company to both define and set strategic sustainability goals. Land Securities also 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 amongst both internal and external stakeholders. The company 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

1
2
3 while there was some measure of agreement amongst stakeholder of the most important
4 issues, the reasoning behind the stakeholders' decisions varied significantly. When the
5 issues were plotted onto a materiality matrix, corporate governance, bribery and corruption
6 and risk and crisis management appeared as the most important issues with climate change,
7 biodiversity and community integration given only middle ranking status.
8

9
10 Hammerson asked stakeholders to identify the sustainability issues they felt to be
11 most material to the company and to select what they considered to be the top five future
12 issues, from a list of eighteen potential issues identified by the company. The overall
13 outcome was that *'energy security and demand'*, *'technology'*, *'community engagement,*
14 *investment and relevance'*, *'waste'* and *'meeting customer sustainability objectives'* were
15 accorded high materiality status. Klenpierre reported identifying some twenty *'priority*
16 *issues'* which were seen to *'reflect the long term performance of the Group.'* The company
17 suggested that its approach to these issue must be *'efficient, with quantifiable and tangible*
18 *objectives'*, *'irreproachable, to ensure exemplary management of our assets'* and
19 *'innovative, with a focus on best practice.'* All twenty issues were mapped in matrix format
20 but only nine of them, namely human rights, customers, energy, risks, security, waste,
21 ethics, local development and transport, were identified as being material. However the
22 company did not explicitly report on the processes they had adopted in determining
23 materiality.
24
25
26

27 Fonciere des Regions reported on *'structuring dialogue with stakeholders for a more*
28 *in-depth analysis of the materiality of challenges'* for the continuing development of its
29 sustainability strategy. Stakeholders were divided into three groups according to *'their*
30 *influence on decisions and business, the legitimacy of their expectations of Fonciere des*
31 *Regions and their degree of social responsibility or level of commitment to sustainable*
32 *development.'* The three groups were *'core stakeholders'* (including shareholders and
33 tenants), *'other players with a formal link'* (including banks and suppliers)', and *'national*
34 *and international players with no formal link but with influence over the company'* (including
35 media and local government. The issues identified were then mapped on to a materiality
36 matrix in terms of their importance to the company and importance to stakeholders and
37 *'sustainable value'*, *'climate change'* and *'energy'* emerged as the most important material
38 issues with philanthropy, human rights, and local employment being accorded the lowest
39 level of significance.
40
41
42

43 While a number of the other selected European property companies stressed a
44 number of priorities in their sustainability reports they did not explicitly refer to, or report
45 on, the concept of materiality. Castellum, for example, reported on its *'stakeholder*
46 *dialogue'* designed to *'identify and analyse stakeholder expectations.'* These dialogues were
47 conducted with customers, company executives, employees and the company's board of
48 directors and the results were simply listed, rather than mapped, in a matrix format. The
49 most important issues for stakeholders were biodiversity, information security and
50 transportation. For the company the most important issues were the more efficient use of
51 resources, environmental considerations and working conditions at suppliers, health and
52 safety at work, the development of a sustainable real estate portfolio, social and economic
53 development in the communities in which the company's operations were growing and
54 sustainable relationships with customers. Swiss Prime Site reported fostering regular
55 dialogue with its *'most significant stakeholders'*, namely shareholders, tenants, users,
56
57
58
59
60

1
2
3 employees, suppliers, service providers, government officials and the general public. While
4 the company argued that the stakeholder demands it *'strives to meet are complex and*
5 *subject to change over time'* they identified reducing energy consumption and greenhouse
6 gases, providing training opportunities and development opportunities for employees, equal
7 opportunities in the workplace and human rights in the supply chain as the most *'well*
8 *defined demands.'*
9

10 11 12 **Findings: Assurance**

13
14
15 The eleven assurance statements varied in their coverage and approach and in the
16 character of the information provided. In addressing the assurance process the assessors
17 generally provided an outline of how they had gathered their evidence and they provided
18 limited assurance as described earlier. However there was only limited information on the
19 methodology the external assessors employed to gather evidence or of the criteria they
20 employed to guide their judgements. Land Securities, for example, engaged Corporate
21 Citizenship to provide limited assurance of its sustainability report. In introducing its
22 assurance statement Corporate Citizenship emphasised that the aim was to ensure that
23 Land Securities sustainability report was *'robust, credible and that it provides Land Security*
24 *Stakeholders with a balanced account of the social, environmental and economic challenges*
25 *and successes of the company.'* That said the scope of the assurance included a limited
26 range of environmental performance data namely *'energy (kilowatt hours)'*, *'water (cubic*
27 *metres)'*, *'waste (tonnes)'* and *'greenhouse gas emissions (tonnes)'* and the assurance
28 statement stressed that *'Land Securities is entirely and solely responsible for the production*
29 *and publication of the data assured.'*
30
31
32

33
34 In undertaking the engagement Corporate Citizenship performed range of
35 procedures including attending regular meetings of the company's Corporate Responsibility
36 committee in order to understand the operation of the sustainability strategy across the
37 business; reviewing the alignment of sustainability metrics and reporting against industry
38 best practice; interviews with key management personnel involved in the environmental
39 data collection process; and site visits in order to appreciate the complexities of property
40 portfolio and its reporting processes. Corporate Citizenship concluded that *'on the basis of*
41 *the work performed, nothing came to our attention that causes us to believe that the subject*
42 *matter of our assurance as described above is materially misstated.'* At the same time
43 Corporate Citizenship also made a number of suggestions *'that may benefit future*
44 *reporting.'* These suggestions included the need for greater disclosure in linking the
45 identification of material issues to corporate strategy, providing more detailed explanation
46 of the challenges faced by the business and a clearer articulation of the company's long
47 term sustainability strategy. Finally in reporting on its *'independence and competence'*
48 Corporate Citizenship acknowledged that it had worked with Land Securities in facilitating
49 materiality assessment and that it had provided *'additional consultancy services to Land*
50 *Securities'* albeit it not related to the sustainability report, during the reporting period.
51 Corporate Citizenship also provided *'independent assurance'* for INTU which concluded that
52 the company had addressed *'many of its most material issues'* and that *'nothing has come*
53 *to our attention during the assurance process to suggest that there are significant errors or*
54 *misstatements in INTU's data.'* Planet & Prosperity provided a very brief statement on its
55
56
57
58
59
60

1
2
3 assurance of greenhouse gas emission data for Shaftesbury and concluded that *'nothing has*
4 *come to our attention to suggest that these data are not fairly stated.'*
5
6

7 By way of contrast PricewaterhouseCoopers which were commissioned by PSP Swiss
8 Property to perform assurance procedures to provide limited assurance on its sustainability
9 report came to a rather different conclusion. This assurance engagement focused on *'the*
10 *management and reporting processes to collect and aggregate the environmental key*
11 *figures'* and more specifically on carbon dioxide emissions. The assessors explicitly
12 acknowledge that *'the accuracy and completeness of sustainability related indicators are*
13 *subject to inherent limitations given their nature and methods for determining, calculating*
14 *and estimating such data'* and that PSP Swiss Property is *'responsible for the preparation*
15 *and presentation of the selected subject matter.'* The assurance procedures employed by
16 PricewaterhouseCoopers included interviews with company personnel responsible for
17 collecting and reporting on the selected environmental data in Geneva, Olten and Zurich; an
18 assessment, on a sample basis, of the completeness, accuracy, adequacy and consistency of
19 the selected environmental data; a review of management and reporting structures; and an
20 assessment of the appropriateness of the data consolidation processes. In its somewhat
21 negative conclusions PricewaterhouseCoopers reported that PSP's *'internal reporting*
22 *system to collect the data for the environmental key figures is not functioning as designed*
23 *and does not provide an appropriate basis for its disclosure '* and that *'the data and*
24 *information mentioned in the subject matter does not present fairly, in all material respects*
25 *PSP's environmental performance.'*
26
27
28
29

30 Some of the selected companies included details of external recognition of their
31 sustainability report. INTU, for example, reported on benchmarking through indices against
32 its peers ensured that the company remained focused on best practice and continuous
33 improvement. To this end INTU reported on its continuing membership of the Dow Jones
34 Sustainability Index, on maintaining its position in the JSE Socially Responsible Investment
35 Index, and on achieving the Business in the Community-Community Mark. SEGR included an
36 *'Advisor's Statement'* from Emma Hoskyn, the Director of Upstream Sustainability Services.
37 This statement claimed that the company's *'commitment to resource efficiency has been*
38 *demonstrated through the successes they have achieved against SEGRO 2010'* and that that
39 it had gained *'a better understanding of what is required to meet all of the targets by 2020.'*
40 At the same time Hoskyn recommended that SEGRO focus future attention on a range of
41 issues including improving the coverage and quality of its energy data, establishing the
42 drivers for energy saving and SEGRO should work more closely with refurbishment teams to
43 incorporate water and energy efficiency into all its future designs. GSW Immobilien included
44 an *'Audit Opinion'* in the form of a statement of the Global Reporting Initiative's *'GRI*
45 *Application Level Check'* which confirmed the company's sustainability report was *'a valid*
46 *representation of the required disclosures as described in the GRI G3 Guidelines.'* Derwent
47 London simply reported that its sustainability report reflected EPRA's Best Practices
48 Recommendations on Sustainability Reporting.
49
50
51
52

53 **Discussion**

54
55
56 While all of Europe's top leading property companies recognise and publicly report
57 on a wide range of impacts their businesses have on the environment, society and the
58
59
60

1
2
3 economy there is marked variation in the extent, character and detail of the sustainability
4 reporting process. As such this may reflect the reality that the leading property companies
5 are at the start of a long and potentially difficult journey towards sustainability. More
6 specifically only around half of the leading property companies have embraced materiality
7 or commissioned external assurance as integral elements of the sustainability reporting
8 process and a number of issues merit discussion and reflection. While a variety of
9 approaches are employed in attempting to determine materiality there is a generic issue
10 concerning the nature of the relationship between company interests and stakeholder
11 interests. There can be issues, for example, when the company, and more specifically its
12 executive management team, is principally, and sometimes seemingly exclusively,
13 responsible for identifying and determining material issues within its sustainability reporting
14 process. As such the company might also be seen to be essentially responsible for
15 identifying its stakeholders and for collecting, collating and articulating their views on the
16 priorities for the company's sustainability strategies.
17
18
19

20
21 However whether the leading European property companies can realistically and
22 comprehensively elicit and represent the views of all their key stakeholders remains to be
23 seen. Generally within the business world Banerjee (2008, p.53), for example, has argued
24 that *'despite their emancipatory rhetoric, discourses of corporate citizenship, social*
25 *responsibility and sustainability are defined by narrow business interests and serve to curtail*
26 *the interests of external stakeholders.* A number of the selected property companies
27 reported seeking to elicit stakeholder opinions on their sustainability priorities and
28 strategies via stakeholder panels, customer surveys and face to face meetings with
29 investors. This certainly suggests that some of the leading companies wish to look beyond
30 their own immediate commercial imperatives in determining materiality. However Cooper
31 and Owen (2007, p.665) counsel caution arguing that *'whilst the corporate lobby apparently*
32 *espouses a commitment to stakeholder responsiveness, and even accountability, their claims*
33 *are pitched at the level of mere rhetoric which ignores key issues such the establishment of*
34 *rights and transfer of power to stakeholder groups.'* More specifically Cooper and Owen
35 (2007, p.652) suggested that *'hierarchical and coercive power prevent the form of*
36 *accountability that can be achieved through discussion and dialogue'* and that arguably, at
37 best, companies may *'favour shareholders over all other interested groups.'*
38
39
40
41

42 There are also issues about how executive managers and/or stakeholders rank
43 material issues in terms of both importance and impact and about the nature of the
44 materiality matrices they use to depict materiality. Listing material issues in rank order, for
45 example, effectively fails to depict or to distinguish between the perceived orders of
46 magnitude of importance and impact. Schendler and Toffell (2013, webpage), for example,
47 argue that while many of the world's largest companies *'are working to reduce energy use*
48 *and waste, and many have integrated sustainability into strategic planning' 'such actions*
49 *don't meaningfully address the primary barrier to sustainability, climate change.'* Schendler
50 and Toffell (2013, webpage) suggest that *'shareholder analyses of businesses focus almost*
51 *entirely on operational greening activities and policies, but not on whether companies can*
52 *continue on their current course in a climate-changed world. In other words, such analyses*
53 *don't actually measure sustainability.'* Equally critically Schendler and Toffell (2013,
54 webpage) further argue that many businesses that claim to be sustainability leaders *'don't*
55 *recognise the primacy of climate change'* and that many businesses include *'climate in a*
56
57
58
59
60

1
2
3 *basket of equally weighted issues' like oceans, forests or fisheries'* and that such an approach
4 is *'misguided'* in that *'climate vastly trumps (and often includes) those other environmental*
5 *issues.'* Although the issue of climate change is clearly *'too vast for any single business'*
6 (Schendler and Toffell 2013, webpage) the leading property companies can exert a
7 significant influence on energy usage and carbon emissions.
8

9
10 Concerns have also been expressed that the basic dimensions of the matrices that
11 many large companies currently use to determine materiality are effectively not fit for
12 purpose. Mark McElroy, Executive Director of the Center for Sustainable Organizations, for
13 example, argued that *'while it is common practice now for corporate sustainability reports to*
14 *include materiality matrices, whether or not they serve their purpose is debatable'* (McElroy
15 2011, webpage). McElroy's argument is that the majority of large companies have adapted
16 the concept of the materiality matrix, initially favoured by the Global Reporting Initiative, to
17 suit corporate rather than wider environmental, social and economic goals. More
18 specifically he argued that *'instead of considering the impacts on the economy, the*
19 *environment and society'* as one of the two axes of the materiality matrix as proposed by
20 the Global Reporting Initiative, the matrices contained in the sustainability reports
21 published by many large companies focus *'instead on whether, and to what degree, impacts*
22 *affect the organisation and/or its business goals'* (McElroy 2011, webpage). More critically
23 he claimed that this change *'amounts to a perversion of the idea of materiality in*
24 *sustainability reporting because it essentially cuts out consideration of what are arguably*
25 *the most material issues'* namely *the broad social, economic and environmental impacts of*
26 *an organisation regardless of how they relate to a particular business plan or strategy'*
27 (McElroy 2011, webpage.)
28
29
30
31

32
33 The approach the leading European property companies have adopted to external
34 assurance is at best limited. Although this is not a problem per se, as sustainability reports
35 are themselves voluntary and the accompanying assurance statements are not subject to
36 regulation, the lack of independent assurance can be seen to reduce the integrity and the
37 credibility of sustainability reporting process. More generally the independence of the
38 assurance process can be a thorny issue. While Wiertz (2009, webpage) has argued that *'in*
39 *applying external verification to CSR reports, a central characteristic of the assurance*
40 *process is to be independent of the reporter and the subject matter being attested'*, O'Dwyer
41 and Owen (2005, p.205) claim that their work on 41 large UK and European companies
42 *'raises question marks regarding the independence of the assurance process.'* More
43 generally O'Dwyer and Owen (2005. P.224) have expressed concern over the *'large degree*
44 *of management control over the assurance process'* arguing that management *'may place*
45 *any restrictions they choose on the assurance exercise.'*
46
47

48
49 A wide range of stakeholders are taking an increasing interest in Europe's leading
50 property companies' corporate behaviour and in theory the external assurance of
51 sustainability reports must be seen to be important for a variety of audiences including the
52 general public, customers, investors, employees, suppliers, regulatory bodies, local and
53 national government, trade unions, non-governmental organisations and pressure groups.
54 While RAAS Consulting (2009) has argued that the two primary audiences are regulators and
55 investors, the formal assurance statements provided by the leading property companies,
56 provided little indication of their intended audiences. CorporateRegister.com Limited (2008,
57 p.27) suggests that *'statements are supposedly for external stakeholders, but in practice*
58
59
60

1
2
3 *they're probably written for internal audiences and the language of assurance reduces its*
4 *appeal to the wider audience.'* O'Dwyer and Owen (2005, p.224) contrast this approach with
5 *'the governance structures underpinning the financial audit process'* arguing that
6 management's *'reluctance to address the assurance statement to specific constituencies*
7 *implies that they are primarily providing value for management thereby reflecting a*
8 *perceived demand for assurance of this information from management as opposed to*
9 *stakeholders.'* Further O'Dwyer and Owen (2005, p.224) conclude that unless this issue is
10 dealt with *'assurance statement practice will fail to enhance accountability and*
11 *transparency to organisational stakeholders.'*
12
13

14
15 Such reservations and concerns would certainly seem to limit the value, credibility
16 and integrity of the assurance process but it is important to note that Europe's leading
17 property companies are large and dynamic organisations. Capturing and storing information
18 and data across a diverse range of business activities throughout the supply chain in a
19 variety of geographical locations and then providing access to allow external assurance is a
20 challenging and a potentially costly venture and one which many of the Europe's leading
21 property companies currently seemingly choose not to pursue. Thus while operational
22 carbon emissions may be systematically collected, collated and audited as part of a
23 company's environmental sustainability commitments, information on their contribution to
24 local communities and levels of staff satisfaction may be more difficult to define, measure
25 and assure. Where a company's data collection and collation systems are not so developed
26 to realistically allow rigorous and comprehensive assurance processes then limited
27 assurance may well be the best way forward. At the same time it is important to recognise
28 that assurance statements come at a cost which includes employee time, scheduling
29 impacts and the assessor's fees
30
31
32

33 **Conclusions**

34
35 The vast majority of Europe's leading property companies publicly report, albeit in a
36 variety of ways, on their commitments to sustainability and on how they are integrating
37 sustainability into their businesses. There are marked variations in the extent to which the
38 leading property companies have embraced materiality as part of their sustainability
39 reporting process and there was little or no evidence of a collective sector specific approach
40 to materiality emerging. Approximately half of Europe's leading property companies
41 reported embracing materiality and/or commissioning external assurance as an integral
42 element in the sustainability reporting process. In embracing materiality current best
43 practice is focused upon engagement with a wide range of stakeholders, the identification
44 and prioritisation of material issues and target setting. More generally a rigorous and
45 committed approach to materiality that is integrated into a company's core business
46 strategy can be seen as the most effective way to publicly demonstrate a company's
47 commitment to sustainability. At best, in commissioning external assurance, the accent was
48 upon 'limited' rather than 'reasonable' assurance and there are some concerns about
49 management control of the assurance process. In many ways this reduces the reliability and
50 credibility of the European property companies' sustainability reports. That said Europe's
51 leading property companies are large and dynamic organisations and this makes more
52 rigorous and comprehensive assurance a difficult, time consuming and costly process.
53 Looking to the future growing stakeholder pressure may force leading property companies
54
55
56
57
58
59
60

1
2
3 to embrace materiality and commission more comprehensive external assurance as
4 systematic and integral elements in the reporting process.
5

6
7 More generally the authors argue that a number of Europe's leading property
8 companies currently seem reluctant to fully embrace the concept of materiality and to
9 commission independent external assurance and this would suggest that they are pursuing
10 a 'weak' rather than a 'strong' model of sustainability. More critically the authors suggest
11 that Europe's leading property companies' commitments to sustainability are couched
12 within existing business models centred on continuing growth and consumption and that
13 the current policies could potentially be viewed as public relation exercises rather than
14 wholehearted commitments, to sustainability. As such this echoes Roper's (2012, p.85)
15 belief that weak sustainability represents *'a compromise that essentially requires very little
16 change from dominant economic driven practices but effectively works to defuse opposition,
17 increase legitimacy and allow business as usual.'*
18
19

20
21 However Europe's leading property companies would surely want to identify with
22 the belief that *'business leaders must run their companies successfully under present
23 framework conditions while helping to lead society towards new framework conditions of
24 sustainability'* (World Business Council for Sustainable Development 2010, p. 5). Further The
25 World Business Council for Sustainable Development (2010, p.5) argues that strategic
26 corporate commitment to sustainability *'represents vast opportunities'* and that as the
27 *'challenges of growth, urbanisation, scarcity and environmental change become key
28 strategic drivers for business'* so *'smarter systems, smarter people, smarter designs and
29 smarter businesses will prevail.'* Europe's leading property companies will increasingly be
30 looking to position themselves to address the challenges outlined above and also to be
31 promoting and publicising their endeavours and achievements to a wide range of
32 increasingly vigilant and critical stakeholders.
33
34

35
36 While the exploratory nature of this paper does not provide a basis for policy
37 development it does offer a mirror in which Europe's leading property companies can
38 reflect on their approaches to sustainability reporting and more particularly to the role of
39 materiality and external assurance within that process. More specifically and looking
40 positively to the future if the leading property companies are going to obtain leverage and
41 create value by embracing materiality and commissioning external assurance then they
42 must determine the resources they are prepared to invest in sustainability and look to how
43 they identify and measure the benefits of embedding sustainability within their business
44 models. The Ethical Corporation (2015, web page), for example, has argued that *'a good
45 proxy for how seriously organisations take sustainability is, of course, how much money they
46 are prepared to spend on it.'* While a low budget commitment to sustainability is not
47 necessarily a problem per se, for example, in identifying the major sustainability issues
48 facing a company, it can send a clear message throughout the company that sustainability is
49 low on the corporate priority agenda. Arguably more importantly there is the thorny issue
50 of whether and how companies capture and evaluate the benefits of their strategic
51 sustainability commitments and achievements in financial terms. Initially benefits seem
52 likely to be generated by the range of efficiency gains and savings outlined earlier but
53 Europe's leading commercial property companies seem to certain to face a range of
54 challenges in measuring the returns on their investment in sustainability. Looking to the
55
56
57
58
59
60

future Osborne Clarke (2008, p.2) argued that 'ultimately sustainability issues will probably only take root in the market properly once the financial equation is favourable particularly for occupiers.'

Table 1 : Leading European Commercial Property Companies

Company	Country HQ	Sustainability Report (SR) / Information (SI)	Materiality	Assurance
Unibail-Rodamco	France	SR	✓	✓
Land Securities Group	UK	SR	✓	✓
British Land	UK	SR	✓	✓
Hammerson	UK	SI	✓	✓
Swiss Prime Site	Switzerland	SR		
PSP Swiss Property	Switzerland	SR	✓	✓
Klepierre	France	SI	✓	✓
INTU	UK	SR	✓	✓
Corio	Netherlands			
Derwent London	UK	SR		✓
SEGRO	UK	SR		
Capital & Counties	UK	SI		
Deutsche Wohnen	Germany	SR		
Great Portland Estates	UK	SI		✓
Fonciere Des Regions	France	SR	✓	✓
Castellum	Sweden	SR		
Deutsche EuroShop	Germany	SI		
Shaftesbury	UK	SR		✓
GSW Immobilien AG	Germany	SR		
Gecina	France	SR	✓	

Source: EPRA (2013) and European Property Companies' Corporate Websites

REFERENCES

Amsler, S. S. (2009) "Embracing the Politics of Ambiguity: Towards a Normative Theory of Sustainability", *Capitalism, Nature and Socialism*, Vol.20, No. 2, pp.111-125.

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

1
2
3 Bowen, D. (2003) "Corporate Social Responsibility (CSR) Reporting and the WWW:
4 Increasingly Entwined", *International Journal of Corporate Sustainability*, Vol. 10, No. pp. 3,
5 4-9—4-11
6

7 CSR Europe (2008) "CSR Assurance Statements," Available at
8 [http://www.csreurope.org/data/files/2008_csr_assurance_statements_csr_europe_help](http://www.csreurope.org/data/files/2008_csr_assurance_statements_csr_europe_helpdesk.pdf)
9 [esk.pdf](http://www.csreurope.org/data/files/2008_csr_assurance_statements_csr_europe_helpdesk.pdf) {Accessed 27 April 2015}.
10

11
12 Cajias, M., Geiger, P. and Bienert, S. (2012) "Green Agendas and Green Performance:
13 Empirical Evidence for Real Estate Companies", *Journal of European Real Estate Research*,
14 Vol. 5, No. 2, pp.135-155
15

16
17 Cajias, M, Fuerst, F., McAllister, P. and Nanda, A. (2014) "Do Responsible Real Estate
18 Companies Outperform Their Peers", *International Journal of Strategic Property*
19 *Management*, Vol. 18, No. 1, pp.11-27
20

21
22 Carroll, A. B. and Buchholtz, A. K. (2012) *Business and Society: Ethics, Stakeholders and*
23 *Sustainability Management*, South Western, Nashville TN
24

25
26 Castro, C. (2004) "Sustainable Development: Mainstream and Critical Perspectives",
27 *Organisation and Environment*, Vol. 17, No.2, pp. 195-225.
28

29
30 Cooper, S. M. and Owen, D.L. (2007) "Corporate Social Reporting and Stakeholder
31 Accountability; The missing link", *Accounting, Organisations and Society*' Vol. 32 No. 7-8. pp.
32 649-667
33

34 CorporateRegister.com Limited (2008) "Assured View: The CSR Assurance Statement Report"
35 available at <http://www.sustaincommworld.com/pdfs/AssureView.pdf> {Accessed 26 April
36 2014}
37

38
39 Deloitte (2014) "Breakthrough for Sustainability in Commercial Real Estate", available at
40 http://deloitte.wsj.com/cfo/files/2014/11/sustainable_real_estate.pdf (Accessed 27 May
41 2015)
42

43
44 Development Securities (2010) "Quality of Life", available at
45 [http://www.developmentsecurities.com/devsecplc/dlibrary/documents/QualityofLife_Marc](http://www.developmentsecurities.com/devsecplc/dlibrary/documents/QualityofLife_March2010.pdf)
46 [h2010.pdf](http://www.developmentsecurities.com/devsecplc/dlibrary/documents/QualityofLife_March2010.pdf) (Accessed 20 May 2015)
47

48
49 Diesendorf, M. (2000) "Sustainability and Sustainable Development", in Dunphy, D.,
50 Beneveniste, J., Griffiths, A. and Sutton, P. (Eds.), *Sustainability: The corporate challenge of*
51 *the 21st century*, Allen and Unwin, Sydney, pp. 19-37
52

53
54 Eccles, R. G., Krzus, M.P., Rogers, J. and Serafeim, G. (2012) "The Need for Sector-Specific
55 Materiality and Sustainability Reporting Standards", *Journal of Applied Corporate Finance*,
56 Vol. 24 No. 2, pp. 8-14
57
58
59
60

1
2
3 Elkington, J. (2004): "Enter the Triple Bottom Line" in Henriques, A. and Richardson, J. (Eds),
4 *The Triple Bottom Line, Does It All Add Up? Assessing the sustainability of business and CSR*,
5 London, Earthscan Publications Limited, pp. 1-16
6

7
8 Ernst & Young and Greenbiz (2012) "Six Growing Trends in Corporate Sustainability",
9 [http://www.greenbiz.com/sites/default/files/1112-](http://www.greenbiz.com/sites/default/files/1112-1315117_CCaSS_SixTrends_FQ0029_lo%20res%20revised%203.7.2012.pdf)
10 [1315117_CCaSS_SixTrends_FQ0029_lo%20res%20revised%203.7.2012.pdf](http://www.greenbiz.com/sites/default/files/1112-1315117_CCaSS_SixTrends_FQ0029_lo%20res%20revised%203.7.2012.pdf) (Accessed 12
11 March 2013)
12

13
14 Ernst and Young (2014) "Let's Talk: Sustainability", available at
15 [http://www.ey.com/Publication/vwLUAssets/EY_Lets_talk_sustainability_2014-](http://www.ey.com/Publication/vwLUAssets/EY_Lets_talk_sustainability_2014-01/$FILE/EY%20Let's%20talk%20sustainability,%202014-01.pdf)
16 [01/\\$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)
17

18
19 Ethical Corporation (2015) "State of Sustainability 2015", available at
20 <http://events.ethicalcorp.com/subscriptions/ECSOS2015-thank-you.php> (Accessed 23 June
21 2015)
22

23
24 European Commission Directorate-General for Enterprise (2005) "A Guide to
25 Communicating about CSR", available at
26 [http://ec.europa.eu/enterprise/policies/sustainable-business/files/csr-](http://ec.europa.eu/enterprise/policies/sustainable-business/files/csr-sme/communication_guide_en.pdf)
27 [sme/communication_guide_en.pdf](http://ec.europa.eu/enterprise/policies/sustainable-business/files/csr-sme/communication_guide_en.pdf) (Accessed 27 June 2013).
28

29
30 European Public Real Estate Corporation (2011) "Best Practice Recommendations on
31 Sustainability Reporting", http://www.epra.com/media/EPRA_BPR_2011_Sustainability.pdf
32 (Accessed 28 September 2015)
33

34
35 European Public Real Estate Corporation (2012) "Real Estate in the Real Economy", available
36 at [http://www.epra.com/media/Real_estate_in_the_real_economy -](http://www.epra.com/media/Real_estate_in_the_real_economy_-_EPRA_INREV_report_1353577808132.PDF)
37 [EPRA_INREV_report_1353577808132.PDF](http://www.epra.com/media/Real_estate_in_the_real_economy_-_EPRA_INREV_report_1353577808132.PDF) (Accessed 28 May 2015)
38

39
40 European Public Real Estate Corporation (2013) "Building a Stronger Europe", available at
41 [http://www.epra.com/media/Listed_Real_Estate -](http://www.epra.com/media/Listed_Real_Estate_-_Building_a_Stronger_Europe_report_1365168038957.pdf)
42 [Building_a_Stronger_Europe_report_1365168038957.pdf](http://www.epra.com/media/Listed_Real_Estate_-_Building_a_Stronger_Europe_report_1365168038957.pdf) (Accessed 28 May 2015)
43

44
45 European Public Real Estate Corporation (2014) "Best Practice Recommendations on
46 Sustainability Reporting: 2nd Edition", [http://www.epra.com/media/EPRA_Sus-](http://www.epra.com/media/EPRA_Sus-BPR_2014_1424420907752.pdf)
47 [BPR_2014_1424420907752.pdf](http://www.epra.com/media/EPRA_Sus-BPR_2014_1424420907752.pdf) (Accessed 28 September 2015)
48

49
50 Falkenbach, H., Lindholm, A-L. and Schleich, H. (2010) "Environmental Sustainability: Drivers
51 for the Real Estate Investor" *Journal of Real Estate Literature*, Vol. 18, No. 2, pp.201-223
52

53
54 Global Real Estate Sustainability Benchmark (2015) "2015 GRESB Results",
55 <https://www.gresb.com/>
56

57
58 Global Reporting Initiative (2007) "Reporting Ten Years On", available at
59 [http://www.globalreporting.org/NR/rdonlyres/430EBB4E-9AAD-4CA1-9478-](http://www.globalreporting.org/NR/rdonlyres/430EBB4E-9AAD-4CA1-9478-FBE7862F5C23/0/Sustainability_Reporting_10years.pdfh)
60 [FBE7862F5C23/0/Sustainability_Reporting_10years.pdfh](http://www.globalreporting.org/NR/rdonlyres/430EBB4E-9AAD-4CA1-9478-FBE7862F5C23/0/Sustainability_Reporting_10years.pdfh) {Accessed 9 March 2015}.

1
2
3 Global Reporting Initiative (2014) "Materiality in the Context of the GRI Reporting
4 Framework", available at <https://www.globalreporting.org/reporting/G3andG3-1/guidelines>
5 [online/TechnicalProtocol/Pages/MaterialityInTheContextOfTheGRIReportingFramework.asp](https://www.globalreporting.org/reporting/G3andG3-1/guidelines)
6 [x](https://www.globalreporting.org/reporting/G3andG3-1/guidelines) (Accessed 7 January 2015)
7

8
9
10 GreenBiz (2014) "4 Top Sustainability Reporting Trends for 2014", Available at
11 <http://www.greenbiz.com/blog/2014/02/20/top-sustainability-reporting-trends-2014>
12 (Accessed 7 January 2015)
13

14 Gruber, U. (2012) *Sustainability: a Cultural History* (Translated by Ray Cunningham), Green
15 Books, Cambridge.
16

17 Hamilton, C. (2009) "Consumerism, Self-creation and Prospects for a New Ecological
18 Consciousness", *Journal of Cleaner Production*, Vol. 18, No. 6, pp. 571-575.
19

20 International Integrated Reporting Council (2013) "Materiality", available at
21 <http://www.theiirc.org/wp-content/uploads/2013/03/IR-Background-Paper-Materiality.pdf>
22 (Accessed 8 January 2015).
23

24 International Union for Conservation of Nature and Natural Resources (1980) "World
25 Conservation Strategy", available at [https://portals.iucn.org/library/efiles/documents/WCs-](https://portals.iucn.org/library/efiles/documents/WCs-004.pdf)
26 [004.pdf](https://portals.iucn.org/library/efiles/documents/WCs-004.pdf) (Accessed 21 May 2015)
27

28
29 Jones, M.J. and Solomon, J.F. (2010) "Social and Environmental Report Assurance: Some
30 Interview Evidence", *Accounting Forum*, Vol. 34 No.1, pp. 20-31.
31

32
33 KPMG (2011) "KPMG International Survey of Corporate Responsibility Reporting 2011",
34 available at [http://www.kpmg.com/PT/pt/IssuesAndInsights/Documents/corporate-](http://www.kpmg.com/PT/pt/IssuesAndInsights/Documents/corporate-responsibility2011.pdf)
35 [responsibility2011.pdf](http://www.kpmg.com/PT/pt/IssuesAndInsights/Documents/corporate-responsibility2011.pdf) {Accessed 9 March 2015}.
36

37 KPMG (2013) "GRI's G4 Guidelines: The Impact on Reporting", available at
38 [https://www.kpmg.com/Global/en/IssuesAndInsights/ArticlesPublications/Documents/g4-](https://www.kpmg.com/Global/en/IssuesAndInsights/ArticlesPublications/Documents/g4-the-impact-on-reporting-v2.pdf)
39 [the-impact-on-reporting-v2.pdf](https://www.kpmg.com/Global/en/IssuesAndInsights/ArticlesPublications/Documents/g4-the-impact-on-reporting-v2.pdf) (Accessed 8 January 2015).
40
41

42 KPMG (2014) "The Essentials of Materiality Assessment", available at
43 [http://www.kpmg.com/Global/en/IssuesAndInsights/ArticlesPublications/Documents/mate-](http://www.kpmg.com/Global/en/IssuesAndInsights/ArticlesPublications/Documents/materiality-assessment.pdf)
44 [riality-assessment.pdf](http://www.kpmg.com/Global/en/IssuesAndInsights/ArticlesPublications/Documents/materiality-assessment.pdf) (Accessed 8 January 2015).
45

46 Kahn, R. (2010) "Producing Crisis: Green Consumerism as an Ecopedagogical Issue", in,
47 Sandlin, J. A. And McLaren, P. (Eds), *Critical Pedagogies of Consumption*, Routledge, New
48 York, pp. 47-57
49

50
51 Krause, A.L. and Bitter, C. (2012) "Spatial Econometrics, Land Values, and Sustainability:
52 Trends in Real Estate Valuation Research", *Cities*, Vol. 29, pp. 519-525
53

54 MIT Sloan Management Review and The Boston Consulting Group (2012) "Sustainability
55 Nears a Tipping Point", available at
56
57
58
59
60

1
2
3 [http://www.sustainabilityprofessionals.org/system/files/MIT-SMR-BCG-Sustainability-](http://www.sustainabilityprofessionals.org/system/files/MIT-SMR-BCG-Sustainability-Nears-a-Tipping-Point-Winter-2012.pdf)
4 [Nears-a-Tipping-Point-Winter-2012.pdf](http://www.sustainabilityprofessionals.org/system/files/MIT-SMR-BCG-Sustainability-Nears-a-Tipping-Point-Winter-2012.pdf) (Accessed 23 November 2014).

5
6
7 McElroy, M. W. (2011) "Are Materiality Matrices Really Material" available at
8 [http://www.sustainablebrands.com/news_and_views/articles/are-materiality-matrices-](http://www.sustainablebrands.com/news_and_views/articles/are-materiality-matrices-really-material)
9 [really-material](http://www.sustainablebrands.com/news_and_views/articles/are-materiality-matrices-really-material) (Accessed 8 January 2015)

10
11 Marsh (2012) "Property Sustainability", available at
12 <http://uk.marsh.com/Portals/18/Documents/PropertySustainability.pdf> (Accessed 27 May
13 2015)

14
15 Mori, G. and Soffiatti, F. (2013) "Greenbuilding: Sustainability and Market Premiums in
16 Italy", *Journal of European Real Estate Retail Research*, Vol. 6, No. 3, pp.303-322

17
18 Newell, G. (2008) "The Strategic Significance of Environmental Sustainability by Australian-
19 Listed Property Trusts", *Journal of Investment Property and Finance* vol. 26, No. 6, pp.522-
20 540

21
22 O'Dwyer, B. and Owen, D. (2005) "Assurance Statement Practice in Environmental, Social
23 and Sustainability Reporting: A Critical Evaluation", *The British Accounting Review*, Vol. 37,
24 No. 2, pp. 205-229.

25
26
27 Oyedokun, T.B., Jones, C.A. and Dunse, N. (2015) "The Growth of Green Offices in the UK",
28 *Journal of European Real Estate Research*, Vol.9, No 3, available at
29 <http://www.emeraldinsight.com/doi/pdfplus/10.1108/JERER-05-2015-0025> (Accessed 5
30 October 2015)

31
32 Osborne Clarke (2008) "Briefing Note: Sustainability Debate", available at
33 [http://www.osborneclarke.com/media/filer_public/fa/b6/fab63903-9df3-4101-8c51-](http://www.osborneclarke.com/media/filer_public/fa/b6/fab63903-9df3-4101-8c51-60d9aa161b62/property-sustainability-briefing-note-november.pdf)
34 [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)

35
36
37 PGS (2013) "Determining materiality: A Key for Corporate Sustainability", available at
38 [http://www.pgsadvisors.com/2013/07/determining-materiality-a-key-tool-for-corporate-](http://www.pgsadvisors.com/2013/07/determining-materiality-a-key-tool-for-corporate-sustainability/)
39 [sustainability/](http://www.pgsadvisors.com/2013/07/determining-materiality-a-key-tool-for-corporate-sustainability/) (Accessed 8 January 2015)

40
41
42 PriceWaterHouseCoopers (2014) "Materiality: Choosing Our Sustainability Priorities",
43 available at <http://www.pwc.co.uk/corporate-sustainability/materiality.jhtml> (Accessed 8
44 January 2015).

45
46
47 RAAS Consulting (2009) "The Role of the Assurance Provider", available at
48 <http://raasconsulting.com/CSRAssuranceIssues.aspx> (Accessed 15 June 2012).

49
50
51 Roper, J. (2012) "Environmental Risk, Sustainability Discourses and Public Relations", *Public*
52 *Relations Inquiry*, Vol.1 No.1, pp.69-87

53
54
55 Saunders, M., Lewis, P. and Thornhill, A. (2009) *Research Methods for Business Students*,
56 Prentice-Hall, Harlow.

- 1
2
3
4 Sayce S., Ellison L. and Parnell P. (2007) "Understanding Investment Drivers for UK
5 Sustainable Property", *Building Research and Information* Vol. 35, No. 6, pp. 629-643
6
- 7 Schendler, A. and Toffel, M. (2013) "Corporate Sustainability is Not Sustainable", available at
8 <http://grist.org/climate-energy/corporate-sustainability-is-not-sustainable/> (Accessed 7
9 January 2015)
10
- 11 Steurer, R., Langer, M.E. Konrad, A. and Martinuzzi, A. (2005) "Corporations, Stakeholders
12 and Sustainable Development: A Theoretical Explanation of Business-Society Relations",
13 *Journal of Business Ethics*, vol. 51, No. 3, pp. 263-281
14
- 15 Strandberg Consulting (2008) "Materiality Analysis", available at
16 [http://www.corostrandberg.com/pdfs/Strandberg%20Consulting%20Materiality%20Analysi](http://www.corostrandberg.com/pdfs/Strandberg%20Consulting%20Materiality%20Analysis.pdf)
17 [s.pdf](http://www.corostrandberg.com/pdfs/Strandberg%20Consulting%20Materiality%20Analysis.pdf) (Accessed 8 January 2015)
18
- 19 Sustainability Accounting Standards Board (2014) "Determining Materiality", available at
20 <http://www.sasb.org/materiality/determining-materiality/> (Accessed 8 January 2015)
21
- 22 Todorov, V. I. and Marinova, D. (2009) "Models of Sustainability", presented at the World
23 IMACS/MODSIM Congress, Cairns, Australia, available at
24 http://www.mssanz.org.au/modsim09/D2/todorov_D2a.pdf (Accessed 1 June 2015)
25
- 26 Van de Wetering, J. and Wyatt, P. (2011) "Office Sustainability: Occupiers Perceptions and
27 Implementation of Policy", *Journal of European Real Estate Research*, Vol. 4, No. 1, pp.29-47
28
- 29 Wiertz, J.H. L. (2009) "Assurance Statement Practices in CSR Reporting: An International
30 Approach", available at <http://arno.unimaas.nl/show.cgi?fid=16952> (Accessed 25 May
31 2105)
32
- 33 Warren-Myers, G. (2012) "The Value of Sustainability in Real Estate: A Review from a
34 Valuation Perspective", *Journal of Property investment and Finance*, Vol. 38, No. 2, pp. 115-
35 144.
36
- 37 Willers, B (1994) "Sustainable Development: A New World Deception" *Conservation Biology*,
38 Vol. 8, No. 4, pp. 1146-1148
39
- 40 World Business Council for Sustainable Development (2010)"Vision 2050", available at
41 [http://www.wbcsd.org/pages/edocument/edocumentdetails.aspx?id=219&nosearchcontex](http://www.wbcsd.org/pages/edocument/edocumentdetails.aspx?id=219&nosearchcontextkey=true)
42 [tkey=true](http://www.wbcsd.org/pages/edocument/edocumentdetails.aspx?id=219&nosearchcontextkey=true) (Accessed 21 May 2015)
43
- 44 World Commission on Environment and Development 1987 "Our Common Future", available at
45 <http://www.un-documents.net/ocf-02.htm> (Accessed 22
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

About the Authors

Peter Jones is Professor of Strategic Management in the Business School at the University of Gloucestershire. His research interests are in sustainability and retailing. Peter Jones is the corresponding author.

David Hillier is an Emeritus Professor in the Centre for Police Sciences at the University of South Wales and his research interests are in crime and urban design and sustainability.

Daphne Comfort is a Research Administrator in the Business School at the University of Gloucestershire. Her research interests are in sustainability and woodland management

Journal of European Real Estate Research