Original Article

The significance of sustainability best practice in retail property

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ABSTRACT Property companies have taken a strong leadership role in the area of environmental sustainability, particularly in the retail property sector. This article highlights some of the strategies used by property companies in the United Kingdom, Europe, the United States, Asia and Australia in developing excellence and best practice in sustainability for retail property. The future implications for sustainability practices in retail property are also highlighted.

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INTRODUCTION

Sustainability has taken on increased importance in recent years, with increased awareness internationally that sustainability is a top priority. In particular, the property industry has a major impact on the environment, with buildings contributing up to 50 per cent of CO₂ emissions, 40 per cent of energy requirements, 16 per cent of water usage, 40 per cent of solid landfill waste, 50 per cent of raw materials and 71 per cent of electricity consumption (Keeping *et al*, 2007).

Official legislation regarding sustainability has also been introduced at the international, regional and local levels; this includes the Kyoto Protocol, UN Principles of Responsible Investment, the EU Directive on Energy Performance of Buildings and the Carbon Reduction Commitment in the United Kingdom. Importantly, the property industry has actively contributed to this sustainability agenda. This has seen both the UN Environmental Program Finance Initiative and the Institutional Investors Group on Climate Change having property working groups to specifically address property issues in these key forums. In the United Kingdom, groups such as Investment Property Forum (IPF) have established a Sustainability Special Interest Group and Investment Property Databank (IPD) recently established an environmental code for commercial

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property. Similar initiatives have also been established in Australia (for example Green Building Council of Australia), the United States (for example Investor Network on Climate Risk) and Asia (for example Association for Sustainable and Responsible Investment in Asia).

A further sustainability catalyst has been the establishment of the World Green Building Council, which includes several European members (for example the United Kingdom, Germany), as well as a range of green building rating schemes established, including LEED (United States), Green Star (Australia), BREEAM (United Kingdom), LEGEP (Germany), Equer, ESCALE and HQE (France) and EcoQuantum (The Netherlands).

Sustainability has been embraced at all levels, including government, tenants, owners, developers, investors and the community. This has seen a number of leading property investors and property developers effectively integrate sustainability into their business platform at all levels of their commercial property activities. This has subsequently seen property companies being among the world leaders in the sustainability agenda; this includes:

- the United Kingdom: Land Securities, British Land, PruPIM, Hermes;
- Australia: Investa, Lend Lease, Dexus, Stockland;
- the United States: Hines, ProLogis.

This is clearly evidenced by the Global 100 index for 2009, comprising the top-100 most sustainable companies in the world, including five property companies, namely British Land, Dexus, Land Securities, Lend Lease and ProLogis. Similarly, property companies are also well represented in the international sustainability benchmarks, including the Dow Jones World Sustainability Index (DJWSI) (13 property companies) and the FTSE4Good Index (46 property companies). Land Securities is rated No. 1 in the property sub-sector and is also rated No. 1 in the broader financial services sector of the DJWSI; see Figure 1 for their sustainability profile.

Importantly, property investors and property developers with significant retail property portfolios have also been leading sustainability property

Figure 1: Land Securities profile in the Dow Jones World Sustainability Index (DJWSI).
Source: Land Securities website.

Table 1: Leading sustainability players in the retail property sector

The United Kingdom: British Land, Land Securities, PruPIM, Hermes, Hammerson, Great Portland Estate, Capital & Regional, Liberty International
The Netherlands: Wereldhave, Redevco, Multi
France: Unibail-Rodamco, Klepierre, Bouggués Imobilier
Germany : Metro, ECE
Portugal : Sonae Sierra
Sweden : Castellum
Australia : Lend Lease, GPT, Stockland
The United States: Hines, Regency Centers, Simon Properties
Japan: Mitsubishi Estate, Mitsui Fudosan
Singapore: CapitalLand, City Developments
Hong Kong: Swire Properties, Sun Hung Kai, Link REIT
Malaysia: YTL
Philippines: Ayala Land
India: Ansal, Sobha

Source: Author's assessment of sustainability information at property company websites.

players. This has been at a truly global level across the United Kingdom, Europe, the United States and the Asia-Pacific, as shown in Table 1. This has also seen the language of sustainability become a fundamental part of the language of the retail property sector, with terms such as triple bottom line, responsible property investment, environmental footprint, carbon neutral space and future proofing becoming increasingly evident in retail property strategic plans and annual reports.

The motivation for property companies to engage in environmentally responsible practices is clearly reflected in the benefits of sustainable commercial property practices. These benefits include improved reputation/profile, energy and water cost savings, enhanced value, capital cost savings, brand differentiation, improved marketability, higher tenant retention, faster lease-up period, eligibility for government tenants, compliance with office grading schemes, compliance with government regulations, future proofing and risk reduction, and personal commitment to Environmental Sustainable Development (ESD) and Corporate Social Responsibility (CSR) (Newell, 2008). Importantly, the extra cost 'premium' for a green building has reduced significantly in recent years, resulting in a reduced payback period for a green building. The extent of this cost premium is influenced by the level of certification sought; for example, typically a 5–8 per cent premium for a LEED gold/platinum rating, down to a 1–2 per cent premium for lower levels of LEED certification.

The original focus by property companies on risk reduction and future proofing, driven by the sustainability legislation, has also now expanded to a fuller articulation of the business case, based on a proven return advantage. This has seen the sustainability research agenda expand in recent years from the valuation implications of sustainability (for example Sayce *et al*, 2004) to become more focused on assessing the impact of specific functional criteria Ellison *et al*, 2007; (Ellison and Sayce, 2007; Sayce *et al*, 2007), identifying sustainability best practice (Newell, 2008; Newell and Manaf, 2008), sustainability practices by property professionals (Dixon *et al*, 2008), green leases (Hinnells *et al*, 2008) and identifying a proven return advantage from green buildings (Miller *et al*, 2008). Significant sustainability reports are also available from the websites of

the leading property advisory groups (for example JLL, CB Richard Ellis) and leading property investors (for example RREEF).

Given this increased focus on sustainability for retail property, the purpose of this article is to assess the strategies used by property companies in the retail property sector in delivering excellence and best practice in environmental sustainability for retail property. This will be considered from an international perspective, with property companies assessed in the United Kingdom, Europe, the United States, Australia and Asia.

METHODOLOGY

The research methodology of content analysis (Krippendorff, 2004) is used in this study. Content analysis is a standard methodology in the social sciences that systematically identifies the properties of textual information to describe and make inferences from the characteristics of a communication (for example book, report, website). This enabled various property company reports to be assessed against specific 'best practice' criteria, and key best practice examples identified. Fuller specific details regarding this content analysis approach are given in subsequent components in this methodology section.

In this case, a range of property company documents was assessed to identify the corporate sustainable commercial property strategies used for implementing excellence and international best practice in environmental sustainability for their retail property portfolios. The public domain documents assessed from the property company websites included annual reports, corporate responsibility and sustainability reports and Carbon Disclosure Project (CDP) reports, with environmentally sustainable commercial property strategies identified at the corporate, portfolio and individual retail property levels. While sustainability involves the three dimensions of environmental, social and economic sustainability, the best practice examples cited in this article will focus on the environmental dimension of sustainability. The validity of this content analysis approach is further reinforced by the often external validation by independent groups of this sustainability material (for example Bureau Veritas, Global Reporting Initiative), rather than just being seen as 'greenwash' or marketing materials.

In terms of identifying what constitutes 'best practice', various benchmarking schemes to judge the sustainability performance of listed companies are available. These are produced by groups including FTSE, Dow Jones, CDP, Global 100 and the UN Global Reporting Initiative, with the selection criteria available for inclusion in these various general sustainability benchmarking procedures. These selection criteria are applied to the retail property companies in this study, particularly focusing on the areas of transparency, accountability and reporting to give a strong sense of the 'richness' of the sustainability culture, commitment and practices by these retail property companies. Specific examples of best practice are identified for these various retail property companies.

This top-down strategic focus on environmental sustainability reporting was considered to be more effective than a bottom-up sustainability micro-practice approach, enabling a richer understanding of the property company sustainability culture and strategies regarding

environmental sustainability. Property companies with significant retail portfolios were assessed in the United Kingdom, Europe, the United States and Asia-Pacific to gain a full international perspective regarding sustainability best practices in retail property portfolios. Known leaders in the sustainability agenda were chosen to reinforce the best practice perspective, rather than being seen as a random sample of property companies. Similarly, no attempt was made to identify poor practice. Most property companies assessed were listed property companies, because of the public availability of their sustainability activities in the various listed property company reports.

The retail property companies selected for this study were part of an original examination of over 300 major property companies and their sustainability practices. These property companies were from the United Kingdom, Europe (including France, Germany, Sweden, The Netherlands), the United States, Australia and Asia (including Japan, Hong Kong, Singapore, Malaysia, India, Philippines). All retail property companies selected were leading property companies in their region (see Table 1), although there was considerable variation in their market capitalisation to demonstrate that best practice in sustainability was not just the domain of the large property companies.

Specific retail property companies (or diversified property companies with significant retail portfolios) that are discussed in detail in this article include:

- the United Kingdom: British Land, Land Securities, Hammerson, PruPIM;
- the United States: Simon Properties, Regency Centers;
- Australia: Lend Lease, Stockland, GPT;
- Japan: Mitsubishi Estate, Mitsui Fudosan;
- Hong Kong: Swire Properties, Sun Hung Kai;
- Singapore: CapitaLand, City Developments;
- Philippines: Ayala Land.

In terms of best practice in sustainability, there was variation evident in the adoption of sustainability practices. In particular, there was clear evidence of strong leadership and commitment to sustainability at a broad level by property companies in the United Kingdom, Europe, Asia and Australia, clearly shown through the 'richness' in their sustainability reports. In contrast, the US property companies did not demonstrate the same broad level of commitment to sustainability; this often saw the US sustainability reports as being more focused on being a procedural reporting document, with limited information and a limited sense of a strong corporate culture in the area of sustainability.

SUSTAINABILITY BEST PRACTICE IN RETAIL PROPERTY

The following sections identify the best practice corporate strategies used by property companies regarding their retail property portfolios. Best practice examples are given for a range of retail property companies in the United Kingdom, Europe, the United States and Asia-Pacific to

Figure 2: Sustainability mission statements: Mitsubishi Estate and City Developments.

Figure 3: Sustainability framework: Ayala Land.

demonstrate the international acceptance of sustainability as a key factor in retail property portfolios.

Corporate strategies

A corporate responsibility strategy is typically developed by property companies. The CEO chairs this committee to reinforce the company's top-down approach to sustainability. A corporate environmental management plan is developed, including a sustainability mission statement. Figure 2 shows mission statements by Mitsubishi Estate (Japan) and City Developments (Singapore). Among the sustainability leaders, this corporate environmental management plan is embedded in the organisational structure, clearly showing how sustainability is a key element in the property company's goals, and shows the sustainability framework to deliver this environmental stewardship. Figures 3 and 4 give the organisational structures and operational frameworks used by Ayala Land (Philippines) and Regency Centers (the United State) to build this environmental stewardship strategy. In the case of Ayala Land, they have a Sustainability Council with eight sub-committees in the areas of targets and benchmarks, market shaping, sustainability training,

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Figure 4: Sustainability framework: Regency Centers.

sustainability reporting, research and development, green procurement, sustainable construction, and health and safety. Strategic sustainability leadership appointments are also important; for example Lend Lease (Australia), PruPIM (United Kingdom).

Corporate responsibility and sustainability reports

Property companies now produce an annual Corporate Responsibility Report or Sustainability Report, covering all aspects of environmental sustainability. These are separate from their annual reports and are up to 50 pages; see Figures 5 and 6 for typical examples by Hammerson and Mitsubishi Estate. The level of sustainability reporting in these sustainability reports has improved considerably in recent years, with considerable detail and performance information now provided. This includes:

- environmental policy statements;
- sustainability strategies;
- targets, including objectives, targets and KPIs (for example environmental, suppliers);
- progress against targets (for example energy consumption, CO₂ emissions), often audited by independent groups (for example Bureau Veritas, GRI, CSR Networks);
- future sustainability objectives;
- environmental management performance, benchmarked at a company, sector and industry level.

Figures 7–9 give typical examples of this detail now provided by property companies in these sustainability reports. These reports are typically presented using the UN Global Reporting Initiative format for sustainability.

Figure 5: Corporate responsibility report: Hammerson.

Figure 6: Corporate social responsibility report: Mitsubishi Estate.

	CO ₂ (tonnes per year)			CO ₂ (kg/m ²)		
	2005/6	2004/5	2003/4	2005/6	2004/5	2003/4
Electricity (kWh)	17,879*	17,980	18,269	12.55	14	19
Gas (kWh)	4,648	5,173	5,998	6.54	9	16
Oil (kWh)	0.17	0.312	35	0.02	0.04	2.65
Total	22,527	23,153	24,302	-	-	-

Figure 7: CO₂ emissions reporting: British Land.

Figure 8: CO₂ emissions reporting: Mitsui Fudosan.

Environmental performance reporting

An explicit statement regarding the property company's environmental footprint is now produced by the sustainability leaders to fully articulate its carbon footprint; this includes all aspects of greenhouse gas emissions, water usage and waste. In some cases, this is done via an environmental tracking scheme (for example CapitaLand). Figure 10 presents Stockland's environmental footprint, detailing greenhouse gas emissions at a macro- and micro-level (for example air travel).

Assessing progress against environmental targets via a JLL Upstream 'Third Dimension' report has also become important (see Figure 11 for PruPIM report). This assesses portfolio risk-adjusted returns against a portfolio sustainability score benchmarked against 11 other property sectors (see Figure 12 for a typical example of this 'Third Dimension' diagram). This graphical technique develops a sustainability score for the property portfolio based on 55 questions across 13 sustainability criteria regarding the three elements of sustainability (environmental, social, economic). With portfolio risk and return as the first two dimensions of performance, this sustainability score is the 'Third Dimension' of the retail portfolio's performance.

This style of report to assess sustainability is seen as an important benchmarking development, as it 'measures' the retail portfolio's sustainability performance relative to other property sectors, hence further developing the link between sustainability and performance. Importantly, it is a value-added performance measure and is seen as being complementary to the external auditing by groups such as Bureau Veritas, which assess progress against sustainability targets.

2007 CR Targets: Environment	Target status
Acquisition	
To review the acquisition checklist to include more specific criteria relating to public transport, biodiversity and energy consumption (France).	In progress ¹
Design	
To ensure current and future retail centre developments have a green travel plan.	In progress ²
To ensure biodiversity is considered as part of the sustainability strategy for our assets and developments.	In progress ³
To create a sustainability implementation plan for each pipeline development.	↑ Fully achieved
To aim for a BREEAM Excellent rating.	↑ Fully achieved
To specify minimum percentage of recycled materials on our projects.	↑ Fully achieved
To develop an Environmental Charter for the construction of retail parks addressing the issues of water and waste management, biodiversity and transport (France).	↑ Fully achieved
Construction	
To introduce energy efficiency reporting requirements by contractors on construction sites and monitor their performance.	In progress ⁴
To introduce water efficiency reporting requirements by contractors on construction sites and monitor their performance.	↑ Fully achieved
To introduce waste management reporting by contractors on construction sites and monitor their performance.	↑ Fully achieved
Management	
To continue to reduce carbon emissions associated with energy use in our shopping centres by 3% against previous year.	↑ Fully achieved ⁵
To continue to reduce carbon emissions associated with energy use in our offices by 3% against previous year.	Not achieved ⁵
To incorporate sustainability KPIs into business plans for each asset.	In progress ⁶
To review energy efficiency and waste management in two existing shopping centres and two existing retail parks and produce implementation plan.	↑ Fully achieved
To introduce carbon neutral travel plan to three existing retail centres.	Not applicable ⁷
To have zero pollution incidents across all managed operations.	↑ Fully achieved
To ensure that a CR action plan, including at least one environmental target, is developed for each and every acquisition completed (France).	Not achieved
To investigate opportunities for implementing rainwater harvesting systems enabling the re-use of rainwater in different parts of buildings under management (France).	↑ Fully achieved
Own Occupation	
To continue to reduce energy consumption per capita at the group's head office by 3%.	↑ Fully achieved

Figure 9: Sustainability performance targets: Hammerson.

Environmental sustainability awards

Property companies have been very successful in gaining major environmental sustainability awards at the local, industry and government levels, including both property-specific awards and the broader business sector awards. These awards figure prominently in media releases and on the company's website to actively promote their sustainability agenda. Inclusion in the international sustainability performance benchmarks has also become highly significant; this includes the FTSE4Good Index, Dow Jones World Sustainability Index, Global 100 and CDP. Property companies with significant retail property portfolios included in these various international sustainability benchmarks include:

- the United Kingdom: British Land, Land Securities, Hammerson;
- Australia: Lend Lease, GPT, Stockland;
- the United States: Simon Properties;
- Asia: Mitsubishi Estate, Mitsui Fudosan, Aeon Mall.

Supply chain screening

To ensure suppliers are consistent with the property company's sustainability agenda, supply chain screening has become an accepted

Stockland's environmental footprint

Total greenhouse gas (GHG) emissions	141,176 tonnes
Emissions source	
Purchased electricity	138,670 tonnes
On-site gas consumption	1,136 tonnes
Air travel	783 tonnes
Car fleet	433 tonnes
Paper consumption	154 tonnes

Electricity

Total purchased electricity	137,040,9580 kWh
GHG emissions	138,670 tonnes*

Division	Per cent of each portfolio type represented†	Area represented (m²)	Total (kWh)	Intensity (kWh/m²)	Total GHG (tonnes CO₂)
Commercial Office	77%	408,265 NLA	64,785,385	159	65,555
Industrial	5%	58,062 GLA	4,698,906	81	4,755
Office Parks	33%	12,468 NLA	1,780,171	143	1,801
Shopping Centres	85%	728,295 GLA	65,776,496	90*	66,558
Shopping Centres (less majors)		309,556 GLA	65,776,496	212*	
Total			137,040,958		138,670

* WRIWBCSD GHG Protocol Initiative (April 2006). Indirect CO₂ Emissions from the Consumption of Purchased Electricity, Heat, and/or Steam Calculation worksheets, Version 1.1.

† These figures capture electricity purchased by Stockland as reported July 2006 by Stockland's major electricity retailers. These figures do not capture assets wholly or partly where data is not available. Typically this is the case where significant tenants purchase electricity directly, for example industrial sites.

* Intensity for shopping centres is given for both total GLA and GLA less majors, as most majors purchase electricity directly.

Gas

Total on-site gas consumption	22,071,546 MJ
Area represented (NLA)	154,287 m²
Intensity	143 MJ/m² (NLA)
GHG emissions	1,136 tonnes*

* GHG Protocol Initiative (July 2005). Calculation Tool for Direct Emissions from Stationary Combustion, Version 2.0.

Air Travel

Total air travel	6,441,882 km
Air travel per employee	6,724 km
Domestic	5,905,467 km
International	536,415 km
GHG emissions	783.4 tonnes*

* WRIWBCSD GHG Protocol (June 2003) Mobile Combustion CO₂ Emissions Calculation Tool, Version 1.2 – Emissions based on fuel use.

Car fleet

Total vehicle fuel purchased	179,944 litres
Total petrol	167,988 litres
Total diesel	11,955 litres
Total fuel per vehicle	2,534 litres
GHG emissions	433 tonnes*

* WRIWBCSD GHG Protocol Initiative (June 2003) Mobile Combustion CO₂ Emissions Calculation Tool, Version 1.2 – Emissions based on fuel use. Calculation based on Stockland fleet of 71 vehicles.

Paper

Total paper consumption	61.6 tonnes
Paper consumption per employee	64kg per employee
Total recycled content	44.3 tonnes
Total virgin stock	17.3 tonnes
GHG emissions	154 tonnes*

* Australian Greenhouse Office (2005). AGO Factors and Methods Workbook. Department of the Environment and Heritage.

Water

Division	Per cent of each portfolio type represented	Area represented (m²)	Total (kL)	Intensity (kL/m²)
Commercial Office	66%	347,915 NLA	423,429 (FY06)	1.2
Shopping Centres	85%	728,295 GLA	811,134 (CY06)	1.11

Waste

In August 2005, we commenced tracking of diversion of waste from landfill in our commercial office portfolio in NSW. From August 2005 to March 2006 (our most recent data), data from our waste contractor indicates that we have consistently diverted more than 50% of waste (as measured by weight) from landfill.

Figure 10: Environmental footprint: Stockland.

Sustainability impact area	Number of targets	0%	1-25%	26-50%	51-75%	76-99%	100%	N/A
Number of sustainability targets	22	4	0	5	1	1	9	2
Achievement by target area (% of total)		18%	0%	23%	4%	5%	41%	14%
Property Management	11	3	0	4	0	1	3	0
Development	2	0	0	1	0	0	0	1
Investment	1	0	0	0	0	0	1	0
Our People	3	0	0	0	0	0	2	1
Our Communities	2	0	0	0	0	0	2	0
Our Suppliers	3	1	0	0	1	0	1	0

Figure 11: JLL Upstream report: PruPIM.

practice. A number of property companies have implemented sustainable supply chain management procedures (for example Stockland, Swire Properties, Ayala Land), as well as using eco-friendly materials (for example Stockland, Mitsui Fudosan). The operational effects of supply chain screening sees these retail property companies developing green procurement management policies via environmental management portals and the development of supplier performance benchmarking tools. This is also implemented via green cleaning contracts.

Sustainability engagement

Participation in local environmental initiatives has become important; for example the Carbon Audit-Green Partners initiative in Hong Kong

Figure 12: JLL Upstream 'Third Dimension' benchmarking diagram.

sees eight property companies (including Swire Properties and Sun Hung Kai) as signatories to reduce their greenhouse gas emissions. This is complemented by in-house company initiatives to focus their sustainability activities. This has seen successful in-house programs such as Green Office, Project Eco-Office, Greenovation, TREES, Green Leaders and Environmental Ambassadors embed sustainability practices at a day-to-day level in these major retail property companies.

Other initiatives

Other initiatives to further reinforce sustainability leadership in retail property include:

- use of green power sources;
- carbon bio-sequestration initiatives to make specific retail properties carbon neutral;
- use of green leases and retail tenant initiatives;
- participation in emissions trading schemes; for example Swire Properties, Hermes, often in preparation for legislation such as the Carbon Reduction Commitment in the United Kingdom in 2009;
- setting environmental sustainability KPIs for asset managers.

MOVING FORWARD

Environmental sustainability has taken on increased importance in retail property in recent years. This has seen a number of retail property investors and developers in the United Kingdom, Europe,

the United States and Asia-Pacific take a strong leadership role in implementing best practice regarding environmentally sustainable retail property at all levels in their retail property portfolios. Many of these retail property companies are now recognised as international environmental sustainability leaders.

However, the environmental sustainability debate needs to be further extended to achieve a fuller culture change in the property industry. This includes focusing on older retail properties, as well as the current focus on new retail properties. While the current global financial crisis is likely to slow the sustainability agenda for retail property, it is not likely to alter the shift to sustainable retail property; particularly given the sustainability market forces in place, including legislation, incentives, proven performance and commitment.

Further initiatives that are likely to advance the sustainability agenda for retail property are:

- consistent sustainability metrics;
- valuation approaches reflecting sustainability issues;
- stronger link between sustainability and performance; the development of an IPD4Good retail property index would add considerably, as well as ongoing research to support the business case for sustainability using the CoStar database;
- tax incentives for effective green building practices.

Overall, retail property has made a significant contribution to the sustainable property agenda at an international level. This article has identified some of the leaders in sustainability in the retail property sector and the major contributions they are making towards international best practice in sustainability.

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