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PRACTICE BRIEFING

Responsible property investing: what the leaders are doing

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Abstract

Purpose – This paper seeks to help those making investment decisions on existing commercial real estate portfolios to understand how environmental, social, and governance (ESG) issues impact the current value and prospective investment performance of the assets they own and manage.

Design/methodology/approach – The issues and literature related to ESG issues in property investing are reviewed and examples of what industry leaders are doing to address these issues are collected and reported.

Findings – Property investors can realize greater returns on their investments through considering and acting on a range of social and environmental issues. Lenders, owners, fund managers, asset and property managers, and developers can all incorporate RPI strategies into their own activities. RPI strategies can be categorized into ten elements covering environmental, social and community issues. There are two types of financially sound RPI strategies: no cost and value added approaches. More research needs to be carried out to understand the economic impacts of some strategies.

Originality/value – Sustainability and corporate social responsibility are major and growing issues for property investors. The study demonstrates a successful example of how fund and asset managers are responding to these issues which can be considered by other managers in their own strategic planning.

Keywords Corporate social responsibility, Sustainable design, Ethics

Paper type General review

During 2006-2007, UNEP Finance Initiative's Property Working Group (PWG) undertook a survey to identify and highlight emerging opportunities in Responsible Property Investing. Their findings are summarized in their CEO Briefing, which was adapted for this article. Their full report and more information on the PWG are available from the UNEP Finance Initiative at www.unepfi.org

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1. Introduction

> Man really is the only animal that builds his terrarium around him as he goes and real estate is really the business of building that terrarium. So we have a tremendous ethical content, a tremendous social purpose (James A. Grasskamp, pioneer of modern real estate studies[1]).

The purpose of this paper is to help those making investment decisions on existing commercial real estate portfolios understand how environmental, social and governance (ESG) issues impact the current value and prospective investment performance of the assets they own and manage. In our view, efforts to understand and respond to these issues constitute the practice of responsible property investing (RPI). We hope that this work will help property asset owners, managers and developers understand and react to financially sound RPI.

As such issues grow in importance for governments, businesses, and society at large, they are increasingly influencing the context within which property investments are held and related decisions made. For example, if tenants exercise a preference for occupying more "sustainable" properties, then the income growth from such investments should prove superior to that from less sustainable, less desirable, stock. Similarly, if investors exercise the same preference, then less sustainable assets will prove less liquid, more risky and potentially less valuable than more sustainable assets. If new social standards based around improved sustainability lead to existing landlords having to improve the performance of their properties, then less sustainable assets will probably require greater expenditure and deliver poorer returns. Investors who preempt these new standards may be best placed to seize the opportunity they offer.

Given this, it is the fiduciary responsibility of property investors to (at least) understand the implications of these issues and to seek economic ways to improve the sustainability of the assets they buy and hold.

With this in mind, the PWG has brought together representatives from some of the foremost property investment organizations around the world, committed to improving the environmental and social performance or governance of their property portfolios. This paper collates examples of how they are meeting their social and fiduciary responsibilities while simultaneously "doing well by doing good". They provide robust evidence of emerging and innovative practice today, which we hope will become common practice tomorrow.

In our view, responsible property investing (RPI) means property investment or management strategies that go beyond compliance with minimum legal requirements in order to address environmental, social and governance issues. Because so many factors relate to these issues, RPI touches upon literally dozens of property location, design, management, and investment strategies. To simplify things, we have grouped these strategies into ten underlying dimensions. Including these in building management decisions will improve an investor's performance on ESG issues:

(1) *energy conservation* – green power generation and purchasing, energy efficient design, or conservation retrofitting;

(2) *environmental protection* – water conservation, solid waste recycling, habitat protection

(3) *voluntary certifications* – green building certification, certified sustainable wood finishes;

(4) *public transport-oriented developments* – transit-oriented development, walkable communities, mixed-use development;

(5) *urban revitalization and adaptability* – infill development, flexible interiors, brownfield redevelopment;

(6) *health and safety* – site security, avoidance of natural hazards, first aid readiness;

(7) *worker wellbeing* – plazas, childcare on premises, indoor environmental quality, barrier-free design;

(8) *corporate citizenship* – regulatory compliance, sustainability disclosure and reporting, independent boards, adoption of voluntary codes of ethical conduct, stakeholder engagement;

(9) *social equity and community development* – fair labor practices, affordable/social housing, community hiring and training; and

(10) *local citizenship* – quality design, minimum neighborhood impacts, considerate construction, community outreach, historic preservation, no undue influence on local governments.

We have identified two types of financially sound RPI strategies: no cost and value added approaches. With the no cost approach, managers find ways to improve the social or environmental performance of their properties at zero added expense. Turning out the lights in unoccupied areas, for example, is a no-cost strategy that fights global warming and reduces energy bills. Value added strategies, on the other hand, require some initial financial outlays, but pay for themselves by either increasing net incomes (via higher rents or lower running costs) or reducing risk premiums (via lower environmental risks, less depreciation or less marketability risk). For example, designing in a childcare facility may cost more in architectural services and materials but the added costs may be offset by higher rents. Many of these measures have been shown to increase returns. In some instances, more research is needed to quantify their financial benefits.

2. What investors are doing

The following are examples of RPI strategies being employed by investors or asset managers today.

2.1 Energy conservation

Saving energy can lower operating expenses and guard against future price spikes while simultaneously reducing CO_2 emissions. Systematic studies from around the world show that energy-related capital expenditures that improve lighting, boilers, air conditioning, and office equipment can be cost-effective for private investors (Mortimer *et al.*, 1998; Pout *et al.*, 2002; Georgopolou *et al.*, 2006; Ürge-Vorsatz *et al.*, 2007). Studies also show that it's cost-effective to "recommission" existing building energy systems, in order to make sure they are performing at expected levels (Mills *et al.*, 2004).

2.1.1 What investors are doing. Investa Property Group (Australia) audits the energy use in its office buildings, diagnoses inefficiencies, and identifies cost-effective ways to save energy. In one building alone it is saving AUS$30,000 and 363 tonnes of CO_2 per year, all with minimal or no cost conservation strategies.

AXA Real Estate Investment Managers (France) is refurbishing the energy systems in its buildings. In one of its properties, updated heating and cooling units, and a change from fuel oil to natural gas, are saving more than €20,000 and 107 tonnes of CO_2 per year.

PRUPIM (UK) cut the energy used by its Mall at Cribbs Causeway by 14 percent in just one year by switching off unessential lighting in the car park at night. Some electrical work was needed to make this possible, but with the energy savings, the capital expenditure will generate a return of nearly 40 percent *per annum* over its first ten years.

2.2 Community development

Efforts to improve neighborhood public health, safety, education, housing, and employment can lower property vacancies, increase rents and cut losses from vandalism and petty crime. Researchers have found that anti-social behavior harms business and property values (Buck, 1991; Fisher, 1991; Gibbons, 2004; Bowes, 2007), that better social conditions, such as higher language proficiency, homeownership, and education improve property values (Fu, 2005), and that tenants will actually pay extra to cover the cost of programs that improve their communities (Thaler, 1978).

2.2.1 What investors are doing. PRUPIM (UK) is sponsoring the Prudential 4 Youth program that encourages young people to help tackle crime and safety issues in the neighborhoods around PRUPIM shopping centers. In properties with the program, youth nuisance and criminal damage problems reported to management have declined by as much as 70 percent.

Learning Links Centers (USA) is addressing educational achievement in inner city neighborhoods by including a learning resource center staffed by a teacher in each of its apartment buildings. Graffiti and other problems have declined, occupancy rates and net incomes have improved, and the children have shown marked improvement in the classroom.

The Phoenix Realty Group (USA) is creating affordable middle-income for-sale housing through its Urban Equity Funds, which are providing home ownership opportunities for the middle class, revitalizing urban neighborhoods, and yielding impressive returns for investors.

The Ethical Property Company (UK) is developing and managing centers for community organizations in inner-city neighborhoods. The centers have helped over 130 organizations while paying institutional and individual shareholders competitive investment returns.

Hermes Real Estate (UK) encourages its shopping center managers to engage with their communities. The firm holds an annual conference to discuss the managers' activities, gives awards for the very best practices, and has hired a Community Champion to promote community initiatives. One center, Clarks Village, generated over £150,000 in public relations value from its program to support the homeless during one recent nine-month period.

2.3 Green power

Green power is electricity generated from renewable sources and is now offered by utilities worldwide (Bird *et al.*, 2002). Green power produces lower environmental

impacts, a smaller contribution to global warming, less air pollution, and reduces our dependence on finite fossil fuels. There is generally a modest price premium for green power purchased from utilities; however it can be avoided through bulk purchasing or offset with cost-effective energy efficiency measures. Research has found that customers are willing to pay a premium for green power to obtain its environmental benefits (Roe *et al.*, 2001; Nomura and Akai, 2004; Wiser, 2007). Therefore, tenants, especially those with corporate environmental programs, may be comfortable absorbing any remaining premiums (Holt *et al.*, 2001).

2.3.1 What investors are doing. PRUPIM (UK) has worked with an energy procurement service provider to contract for green power for 240 of its properties, avoiding 21,000 tonnes of CO_2 emissions *per annum*. The £75 million contract provides the properties with green power at a significant discount to the current market rate. Because the power is generated from combined heat and power plants, it is exempt from the UK Climate Change Levy, making the price even more competitive.

New Gaia Co., Ltd (Japan) has developed four apartment buildings equipped with solar electric power systems and other energy savings devices. An independent assessment of one of its projects, conducted by the Sumitomo Trust and Banking Co., Ltd, found higher returns on equity and total capital compared to conventional properties due to favorable bank financing, construction incentives, higher rents, lower vacancy rates, and lower energy bills.

2.4 Water conservation

Water in commercial properties is used for restrooms, cooling, heating and landscaping. Property owners can conserve water by reducing losses (e.g. fixing leaks), reducing uses (e.g. installing low-flush toilets), and reusing otherwise discarded water (e.g. catching runoff for irrigation). Water conservation benefits water quality, fish and wildlife, forests, groundwater reserves, and other environmental systems. Studies indicate that cost-effective measures with acceptable simple payback periods can produce an average water savings of 28 percent in offices and 22 percent in hotels (US Environmental Protection Agency and State of California, 1997).

2.4.1 What investors are doing. CNP Assurance, Groupe Caisse des Dépôts (France) is undertaking a program to analyze and control water consumption for all of its apartment and office buildings throughout France. It focuses on invoices in order to identify opportunities for improvement.

PRUPIM (UK) reduced water consumption by 17 percent in one year at its Mall Shopping Center at Cribb's Causeway. This was achieved through more prudent use of the external water feature and the installation of presence sensing urinals. Meanwhile, at the PRUPIM headquarters, water displacing "hippos" were placed in all the toilet tanks, resulting in a 25 percent saving.

Investa Property Group (Australia) cut water use by 27 percent at one of its 34-year-old mixed-use properties. The savings came from adding flow restrictors to tap ware and installing urinal sensors and waterless urinals.

In Tower 42, the tallest building in the City of London, Hermes Real Estate (UK) upgraded the urinals to a waterless system. This has significantly reduced the amount of water used from 8,500 units in September 2005 to just 2,600 units in 2006. The installation cost £3,510, but the program is saving £9,300 per year.

2.5 Solid waste management

Better management of waste disposal and recycling can help conserve natural resources, lessen the need for expensive new landfills, eliminate nuisances and improve aesthetics. It can also lessen public complaints and lower running costs. In office buildings, for example, replacing waste desk bins with paper recycling desk bins and a central bin for garbage can lower the cost of cleaning and waste removal (Resource NWS, 2002). And in shopping centers, recycling can lower waste disposal costs by as much as two-thirds (US Environmental Protection Agency, 2004).

2.5.1 What investors are doing. VF Outlet (USA) owns the 450,000 square foot VF Outlet Village in Reading, Pennsylvania. The recycling program there lowered disposal costs from $US100,000 at the start of the program to $US32,000 after implementation – a 67 percent drop. All 80 tenants participate in recycling plastics, bottles, paper, aluminum, yard waste, and corrugated cardboard. Savings from the program more than cover the additional labor expenses. The program saves money, creates jobs, and protects the environment.

F&C Property Asset Management (UK) instituted the Clean Sweep program at its St Christopher's Place Estate in London in 2006. Waste-related problems were an issue for the wider community until the property manager and city council waste officer worked together to launch a new approach. Support was sought from residents and businesses for a new coordinated disposal service that would lessen noise, odors and other problems. Many occupiers now use a single disposal provider, which has improved both the quality and efficiency of services and reduced the carbon footprint of the estate. There is also an economic benefit for commercial tenants, who only pay for the waste they produce, rather than a set waste removal fee. Plans to increase recycling are underway, which are estimated to reduce costs by up to 40 percent.

2.6 Fair labor practices

Construction, maintenance, janitorial, security and other workers underpin the returns produced by property investors. The rights of workers to fair wages and benefits, the freedom of association, vocational training, and decent working conditions are enshrined in global principles. Research shows that better rental incomes is associated with expectations for better building services (Iezman and Ihlenfeld, 1991; Glascock *et al.*, 1993; Hall, 1994) and that better building services can be produced by better wages and benefits (Cleaning and Maintenance Management, 1995). Evidence also suggests that the additional rental income produced in this process can exceed the additional outlay for labor that might be needed to achieve reasonable wages and benefits (Gozan and Moye, 2000). This can make fair labor practices a win-win strategy for workers and owners alike.

2.6.1 What investors are doing. Kennedy Associates Real Estate Counsel, LP (USA) manages the Multi-Employer Property Trust (MEPT) for over 318 participating pension plans. This $US7 billion portfolio is composed of nearly 100 percent union-built, high-quality properties. Pursuant to union contracts, operational building staff are ensured fair wages and benefits. On a risk-adjusted basis, MEPT consistently outperforms the long-term returns for indices in its asset class.

General Growth Properties, Inc. (USA) has committed to providing janitors at the company's 194 regional shopping centers access to affordable health insurance, market-based wage rates, and an employee complaint resolution process. They are also moving to environmentally friendly, "Green Seal" certified cleaning products. This

policy reflects the company's commitment to social responsibility and enhances its reputation. The policy is also designed to produce motivated, dedicated janitors, which are essential to making the malls clean and desirable places for their customers.

Amalgamated Bank (USA) offers the LongView Ultra Construction Loan Fund, for financing properties built by union-affiliated workers. The fund supports the protection of workers' rights that a union affords, creates over 200,000 hours of work per year for every $30 million invested, and has produced returns since inception that are 37 percent higher than its benchmark index.

CalPERS (California Public Employees' Retirement System) (USA), the largest US public pension fund, adopted its Responsible Contractor Policy in 2005. The policy seeks "to support fair wages and benefits for workers employed by its contractors and subcontractors", based on the belief that "an adequately compensated and trained worker delivers a higher quality product and service".

2.7 Environmental quality certification

Several voluntary certification programs, such as LEED, BREEAM, CASBEE, and Green Star have established "green building" standards. Green buildings are designed to conserve natural resources and improve human health. They can deliver a variety of public benefits related to resource conservation, indoor air quality, carbon emissions and air pollution. Systematic research is showing that green buildings can be built at the same cost as conventional properties (Matthiessen and Morris, 2003; Steven Winter Associates, Inc., 2004; Shiers, 2000). Other work has found that occupiers may be willing to pay marginally higher rents to obtain their benefits (GVA Grimley, 2007). Evidence also is growing that green buildings can increase worker productivity and lower running costs (Kumar and Fisk, 2002; Ries *et al.*, 2006). Given this context, green buildings could become more valuable relative to conventional properties over the coming years.

2.7.1 What investors are doing. ICADE/EMPG (France) developed a 10,000 square meter property in Aubervilliers that was certified under France's High Environmental Quality Office program. To date it has achieved a 20 percent lower than average running cost and required no additional budget for its green features. Vacancy rates have been lower than for other buildings.

Morley Fund Management (UK) completed the City of Edinburgh Council Headquarters, incorporating a variety of sustainability measures. It achieved a BREEAM rating of "very good" and has attained particularly efficient energy performance, reducing its carbon footprint and energy costs for tenants.

Infrastructure Leasing & Financial Services (India) financed Chennai-One, a 1.2 million square foot office space for information technology businesses. It is the first LEED Gold certified commercial office building in India. The aim is to achieve 30 percent energy savings. Environmental features added 3 percent to the project cost, but rents have been higher than for conventional properties.

2.8 Historic preservation

The preservation, restoration, and reuse of historic buildings, sites, and landscapes enrich and educate people, promote cultural diversity, and support tourism and community development. Historically designated properties can be more valuable than other properties and produce market rate total returns (Leichenko *et al.*, 2001; Royal Institute of Chartered Surveyors, 2006; Ruijgrok, 2006). Also, the value of

contemporary buildings can be positively affected by their proximity to landmark structures (Shilton and Zaccaria, 1994). In some cases, governments will assist with financing historic preservation because citizens can be willing to pay higher taxes to support preservation programs (Garrod *et al.*, 1996; Mourato and Massimiliano, 2002).

2.8.1 What investors are doing. The National Trust Community Investment Corporation (USA) is a for-profit subsidiary of the National Trust for Historic Preservation. It makes equity investments in projects that qualify for federal and state historic rehabilitation tax credits. Investors generally earn 8-15 percent in cash and tax credits for their investments. The credits can be used to defray corporate income taxes.

2.9 Parks, plazas, atriums and natural areas

Urban, suburban and rural open spaces provide recreational amenities, wildlife habitat and other public benefits. Fortunately, they also increase property values, especially for residential properties. Researchers have found that parks, plazas, atriums and natural areas can increase property values by anywhere from 10 percent to 30 percent or more, depending on the circumstances (Brown and Pollakowski, 1977; Correll *et al.*, 1978; Doiron *et al.*, 1992; Luttik, 2000; Crompton, 2001; Luther and Gruehn, 2001; Thorsnes, 2002; Morancho, 2003; Roe *et al.*, 2004; Nicholls and Crompton, 2005).

2.9.1 What investors are doing. PRUPIM (UK) supports the award winning Prudential Grass Roots program, which helps communities improve their local environment. The projects bring lasting environmental benefits to neighborhoods while also removing blighted wastelands near Prudential-owned shopping centers.

Hermes Real Estate/MEPC (UK) is developing a series of unique public squares and spaces culminating at a major new riverfront beach park as part of its 14 acre, 2.7 million square foot Wellington Place development, in Leeds, West Yorkshire. The creation of a high-quality public area will add to the success of the project by building a strong identity for the district. The pedestrian spine will be activated by a linear water feature running along its length and the riverfront will be planted and managed to support otters and other wild creatures.

2.10 Safety and risk management

Responsible property investors support ongoing efforts to reduce risks to the health and safety of their tenants, visitors, and staff caused by accidents and criminal activity. Unsafe conditions can lead to injuries, sickness and even accidental deaths. For example, 18 percent of all fatalities in US private industry are in building construction, related trades and real estate. Owner liability for such problems can be substantial (Cohen and Smith, 2004).

2.10.1 What investors are doing. PRUPIM (UK) has adopted a robust safety management system at its Mall at Cribbs Causeway. The system was reviewed by the British Standards Institution and gained the Occupational Health and Safety Advisory Services 18001 accreditation. The Mall is the first shopping center in the country to be awarded this certificate.

Hermes Real Estate (UK) requires its office and shopping center managers to coordinate a variety of integrated services. These include asset protection audits of fire, contamination and other issues, statutory engineering inspections of plant and equipment issues, health and safety inspections of hygiene, disability, fire and other issues, and claims management. Key performance indicators are tracked over time.

Annual Responsible Property Investment Awards are distributed to the top managers, with risk management issues accounting for 50 percent of their scores (sustainability and community engagement represent the other 50 percent).

CNP Assurances, Groupe Caisse des Dépôts (France) covers all the apartment and office buildings they own in France by their Safety and Building Program. Every six years properties are evaluated on 36 different points. Necessary improvements are recommended and implemented.

2.11 Transportation demand management (TDM) and transit-oriented development (TOD)

TDM includes efforts, such as carpool services, aimed at reducing or redistributing peak period travel. TOD includes property ownership and developments within walking distance of transit stops and stations. Together, these strategies can reduce energy consumption, air pollution, urban sprawl, traffic deaths and fuel consumption. They can also increase the use of public transport, improve housing choices, and increase access to jobs and housing for the young, old, poor and handicapped. Economically, TODs are more valuable and can out-perform other similar investments (Tay *et al.*, 1999; Cervero *et al.*, 2004; Rodriguez and Targa, 2004). In Dallas, for example, office properties near transit appreciated more than 50 percent faster than elsewhere (Weinstein and Clower, 1999; Weinstein, 2003). Future demand in these locations is expected to be strong as both older and younger householders seek housing near public transportation (Myers and Gearin, 2001; Center for Transit Oriented Development, 2004).

2.11.1 What investors are doing. Hughes Development (USA) created Mockingbird Station, a transit oriented project adjacent to a major Dallas Area Rapid Transit rail line station. It contains over 500,000 square feet of retail, restaurant, residential, office and other uses on ten acres. The project has been very successful, with rents commanding a 40 percent above-market premium.

Hermes Real Estate/MEPC (UK) established the Birchwood Park Express Bus and Shuttle Bus to help the 4,200 workers at its 123-acre Birchwood Business Park become less reliant on car-based commuting. A service charge is added to the price for car parking to help pay for a free, peak time express bus between Birchwood Park and Warrington town center, where commuters can connect to train services.

Shamrock Capital Advisors and KOAR Development Group (USA) are currently developing Solair Wilshire, a 22 story mixed-use, transit-oriented high rise in the Wilshire Entertainment Corridor of Los Angeles. Solair is projected to be consistent with KOAR's mission to develop projects that generally meet three economic thresholds:

(1) 20 percent margin on project development costs;

(2) 20 percent return on equity; and

(3) 20 percent internal rate of return.

2.12 Tree planting and preservation

Planting and preserving trees around properties can improve property values by enhancing aesthetics, and lower operating expenses by cutting heating and cooling costs. Trees also benefit the public by giving shade, cleaning the air, saving energy, absorbing carbon, screening noise, supporting wildlife, and reducing erosion.

Economic studies find that trees can add 10-15 percent to office property values (Laverne and Winson-Geideman, 2003) and lower winter heating bills by 20 percent or more (Akbari *et al.*, 2001; Wang, 2006). In addition, shoppers will spend about 10 percent more for various goods and services in shopping areas with trees. The will also drive further, pay more for parking, and stay longer to shop at well landscaped locations (Wolf, 2005).

2.12.1 What investors are doing. ÆON (Japan) has adopted its Hometown Forests Program to ensure that all of its new shopping centers are lushly verdant and grow into true community facilities that fit in with the local environment. The program has planted nearly six million trees so far. In 2005, tree-planting events took place at 59 sites with more than 50,000 people participating in the planting of more than half a million saplings. Their target is the absorption of 1,658 tonnes of CO_2 by an estimated 471 stores in 2010.

ICADE (France) intends to have "one tree per apartment" for its 45,000 apartment units, requiring 10,000 new trees to be planted on its properties. Seventeen sites have been selected for the installation of carefully chosen species. Meanwhile, at its new EMGP business park campus near Paris, ICADE has decided to double the vegetated space at the former warehouse center and create a new arboretum.

2.13 Urban regeneration

Investments to revitalize and regenerate urban places can advance urban vitality, economic development, infrastructure efficiency and physical accessibility. They can also reduce urban sprawl, conserve natural resources, and lessen auto use and related carbon emissions. Economic evidence suggests that such investments can also be financially competitive. A University of Ulster study found that property investment performance in urban regeneration areas in the UK has matched or exceeded national and local city benchmarks, had a lower level of risk per unit of return, and added diversification to property portfolios (McGreal *et al.*, 2006).

2.13.1 What investors are doing. Morley Fund Management (UK) has created the UK's first urban regeneration fund, called the Morley Igloo Fund. It invests in mixed-use urban regeneration projects in major towns and cities in the UK. The fund was designed to take advantage of under-priced opportunities created by the regeneration market being erroneously perceived as high risk and low return. It is expected to outperform its benchmarks.

California Public Employees' Retirement System (CalPERS) (USA) created the California Urban Real Estate (CURE) program as part of its overall property portfolio. It invests in low-to-moderate-income housing, urban infill, community redevelopment and similar projects where the risk is no greater than in other property investments made by CalPERS. Since CURE's inception, CalPERS' average annual return has been 16.5 percent after fees, through December 31, 2006. This compares to the benchmark industry returns of 8.1 percent.

Shamrock Capital Advisors and DECOMA Developers (USA) are investing in the development of South Pas Town Square – six mixed-use buildings on three blocks in South Pasadena's historic downtown core in the Los Angeles metro area. The certified green project is expected to produce an internal rate of return of more than 25 percent over four years.

Cherokee Investment Partners (USA) specializes in the sustainable redevelopment of brownfields, or properties complicated by environmental contamination. Since 1993, they have acquired more than 520 properties.

2.14 Design quality

According to The UK Commission for Architecture and the Built Environment, "good design" means: fit for purpose, sustainable, efficient, coherent, flexible, responsive to context, and good looking (Commission on Architecture and the Built Environment, 2006). Public safety, sustainability, health and beauty can all be shaped by design quality. Poor design has been empirically linked to functional obsolescence and rapid depreciation (Brown, 1999). Meanwhile, economists find that the best-designed properties produce rents more than 20 percent higher than otherwise similar structures (Hough and Kratz, 1983; Vandell and Lane, 1989; Carmona *et al.*, 2002).

2.14.1 What investors are doing. The Birmingham Alliance (UK), composed of Hammerson, Land Securities Group and Henderson Global Investors, developed The Bullring – a 1.2 million square foot commercial area in Birmingham city center, UK. Stunning contemporary architecture and public spaces were central elements of the project. It received the 2004 Silver Jubilee Cup from the Royal Town Planning Institute and the 2005 Design Award from the International Council of Shopping Centers for its outstanding planning and design.

3. Final thoughts on responsible property investing

It is a truism that properties accommodate most human activity. However, the corollary of this is that properties are also the places where a significant proportion of CO_2 emissions are generated. The Association for the Conservation of Energy in the UK estimates that, through their construction, use and demolition, built structures are the source for nearly 50 percent of such emissions. On this basis, any coherent strategy towards constraining and reducing CO_2 emissions must place thought and action on the environmental impacts of properties at its core.

Substantial and important work is already underway to identify practical ways and policy measures to ensure that newly constructed buildings are built and operated in environmentally sustainable ways. UNEP's own Sustainable Building and Construction Initiative is important in this regard. However, depending on economic and property market cycles, newly developed buildings typically replace up to 2-3 percent of the existing stock *per annum*. This means that any environmental program that focuses solely on new construction would leave untouched the current universe of built structures where most environmental and energy inefficiencies reside and, as such, make only slow progress in the crucial theatre of the built environment. Hence, there is a need for concerted thought and action to be given to finding ways to reduce the environmental impacts of the existing built stock. This is the specific subject area that the UNEP Finance Initiative's Property Working Group is committed to exploring. The complexities surrounding how properties are owned, leased and occupied are such that this requires specialist attention in dealing with the practical management and refurbishment of properties.

Note

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