High energy prices and pressure to mitigate climate change are leading to growing demands from regulators, occupants and the public to use energy more efficiently in buildings. We argue that a series of value drivers, including regulatory frameworks and incentives, cost reductions and occupant demand, will lead to rewarding investment opportunities for real estate investors. Asset owners and asset managers are starting to respond to these trends, however, specific investment products and services are still scarce or not yet publicised.

Professional investors interested in this theme should therefore be proactive in approaching service providers and demanding appropriate investment solutions.

In most developed countries, buildings are the largest contributor to national energy consumption (typically 40% to 45%), which explains why national climate change policies increasingly focus on this sector. On 5 December 2007, for example, German chancellor Angela Merkel announced a package of carbon emissions reduction policies representing a yearly commitment of €3.3bn (US\$4.8bn). The policies are aimed at cutting Germany's carbon emissions by 40% by the year 2020. One of the most significant chapters of the plan focuses on measures to improve energy efficiency in buildings which includes up to €500m (US\$730m) in subsidies. A little more than a month earlier. French president Nicolas Sarkozy announced a similar plan, 'le Grenelle de l'environnement', which also has an important focus on energy efficiency in buildings.

Fund allocation

According to OECD data, pension funds typically allocate between 1% and 15% of assets to direct or indirect real estate investments, with Finland, Italy and Switzerland generally having the highest allocations. In contrast, high net worth individuals and families tend to invest a greater proportion of their fortunes in real estate, on average around 20%, according to the Capgemini/Merrill Lynch World Health Report 2007.

However, a number of trends indicate that the real estate allocations of institutional investors may grow in the coming years, despite the turbulence currently radiating from the US residential real estate market.

Firstly, moves to adopt strategic asset allocations that are more like the diversified multi-asset strategies used by the largest US endowments (i.e. less dominated by listed equity and fixed income) seem likely to result in higher allocations to real estate. Secondly, real estate investment trust (REIT) legislation has recently been introduced (France, Germany, Japan, UK) or is pending (Germany, Italy) in some of the largest capital markets, offering liquid and tax-efficient indirect property exposure to professional and retail investors alike. As of 20 Seeking rewards in sustainable real estate

Ivo Knoepfel and Gordon Hagart outline the investment opportunity present in the growing sector of 'environmentally enhanced' real estate

with non-US REITs surpassing US REITs in volume for the first time, according to figures from Ernst & Young's Annual REIT Report 2007.

Given the growing weight of this asset class, it is important that professional investors and their agents assess the potential impact of energy efficiency and sustainable trends on

their real estate portfolios.

According to a comprehensive 2005 survey of US architects, engineers and contractors by McGraw-Hill, there is an average of 2% higher initial cost in the case of energy-efficient and sustainable buildings, but the value of the financial benefits over the lifetime of the building outweighs the initial additional costs. These benefits include:

June 2007, the global listed REIT

market was valued at US\$764bn,

- An average expected decrease in operating costs of between 8% and 9%:
- An average increase in building value expected to be around 7.5%;
- Occupancy rate expected to increase by 3.5%;
- On average, rental yields expected to increase by 3%;
- Average ROI expected to improve by 6.6%.

Moreover, a growing number of property case studies (looking at new buildings and retrofits) shows that the value-enhancing aspects of sustainable property go beyond cost reductions related to lower energy consumption. These additional benefits apply to both commercial and residential property, and include:

- Higher comfort, due to better thermal conditions, improved acoustic insulation, better use of natural light and healthier indoor environments:
- Attractive locations, because such buildings are usually better linked to public transport systems;
- Healthier indoor environments achieved by using natural materials and controlled ventilation, which are increasingly demanded by higher-income occupants;
- Better comfort and healthier workplaces in office buildings, which have been shown to considerably increase workforce satisfaction and productivity;
 - · Opportunities provided by

projects that invest in the (re)development of brownfield sites or depressed neighbourhoods. The latter can act as a catalyst for the redevelopment and revaluation of a whole area, resulting in value release for the investor;

• Tax credits, speedier regulatory procedures, insurance benefits, positive reputation effects etc.

Certification schemes for energyefficient and sustainable buildings are being introduced in many countries, which we believe will make the quality of such buildings easier to assess for investors. Examples include BREEAM / Ecohomes (UK) and LEED (US).

Real estate trends

Many real estate investment managers and service providers are currently evaluating these trends and starting to develop internal capacities that will ultimately lead to investable strategies. Industrywide initiatives such as the UNEP Finance Initiative Property Working Group support these efforts. However, the work on new investment strategies is seldom publicised, meaning that professional investors interested in this theme should be proactive in approaching service providers and demanding tailored investment solutions.

Some investors and managers have introduced wide-ranging policies relating to their entire real estate portfolios (or to a large part thereof):

- Prudential Property Investment Managers (PRUPIM) has adopted a corporate responsibility initiative that addresses among other things property management, construction, contractor and sourcing policies;
- Similarly, Hermes has developed a set of responsible property investment guidelines for owners and managers across three focus areas (the environment, communities, and stakeholders) aimed at integrating sustainable real estate considerations into traditional financial and risk analysis;
- The California Public Employees' Retirement System (CalPERS) has decided to survey energy efficiency in its core real estate holding, worth approximately US\$5bn, with the goal of reducing energy use by 20% over

the five-year period from 2006 to 2010. In 2006, CalPERS launched a US\$120m Green Development Fund with real estate firm Hines;

• The Australia-based Investa Property Group has implemented a policy to audit the energy use in its office buildings, diagnose inefficiencies and implement cost-effective ways to save energy.

The choice of investment products in this space remains limited, but we believe this will change substantially in the course of 2008 based on planned product launches by several managers. Innovative products providing investments in energy-efficient and sustainable real estate include:

- The Forward Progressive Real Estate Fund, which invests in publicly traded real estate vehicles primarily REITs integrating financial, geographic, and governance analysis with an environmental screening mechanism focussing on companies with strong energy and resource efficiency, environmental impact mitigation, and stakeholder relationship policies;
- In the UK, Morley Fund Management has created the country's first urban regeneration fund, under the name of 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 underpriced opportunities created by the regeneration market being perceived as high risk and low return:
- The Bay State Area Smart Growth Fund in San Francisco and the New Boston-Urban Strategies America Fund in Boston both target underserved communities, where initiatives aimed at creating jobs and services are also expected to provide opportunities for profitable investment;
- The Rose Smart Growth Fund targets urban infill investments with potential for reduced operating costs through environmental efficiency. Cherokee Investment Partners has developed a specialty in revitalising brownfield sites to add value and increase returns;
- Recently, real estate adviser DTZ and property investor Kenmore have announced they are raising capital for a US\$1bn sustainable property fund. The fund, developed in partnership with UK think-tank Forum for the Future, will invest in commercial property across Europe.

In the future, higher energy prices and environmental constraints will be a powerful source of new opportunities and risks that the savvy investor can use to his financial benefit. This is particularly true for real estate, an asset class so far little researched in this context, especially if compared to public and private equity. The possibilities provided by new building technologies to achieve both higher occupant comfort, healthier indoor environments and improved resource efficiency, have direct positive impacts on the investment case for sustainable buildings. In our view, it is simply a matter of time before markets will capitalise on this opportunity.

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