A Strategic Response to SUSTAINABLE PROPERTY INVESTING

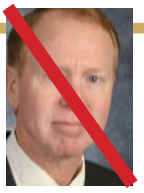
Sustainable properties are all the rage—but what are they?

Is sustainable investing a fad or a structural change in the property markets? How will sustainable building trends affect existing portfolios, new acquisitions, or developments? How should investors respond?

Sustainable property investment is propelled by fundamental changes in how tenants and consumers think about sustainability, concerns about cost and volatility in traditional energy sources, and a dramatic shift by the regulators of real estate to encourage or demand sustainable building.

Why Now?

Sustainable property investing and energy cost concerns have been around for at least a decade in the United States and longer in Europe. However, it wasn't until energy costs began increasing dramatically in recent years and concerns over global warming became widespread in the public domain in 2006 and 2007 that corporations and investors in real estate accelerated their interest in sustainable properties. With the dramatic surge in the consciousness of sustainable properties less than a year old, it is an appropriate time to develop a response to these accelerating trends.



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"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

—Brundtland Commission

What Is a Sustainable Property?

This is a difficult but important question. The complexity arises because of the multitude of standards as well as differences in the sustainable elements that generate a sustainable building, depending on property type and geography. The definition is important because a property's specific costs, benefits, and risks are closely tied to how the property is defined by the marketplace. For example, in order for a property to accrue the leasing benefits due to increased corporate interest, a sustainable building must meet those standards or screens that a corporation would apply to determine whether a property is sustainable. Alternatively, to obtain the benefits of compliance with local regulatory hurdles or to take advantage of incentives, a particular property must comply with local, state, or federal government agency definitions of sustainability.

The most quoted general definition of sustainability comes from the 1987 report of the Brundtland Commission: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs." *Sustainable* and *green* typically are used interchangeably.

Numerous sustainable property rating systems and guidelines have been developed to define what a sustainable property is, as shown in the glossary on p. 35. Accordingly, with more than a dozen definitions in the United States alone, the industry needs to have a way to manage and evaluate sustainable properties, regardless of their specific rating or definition. Including the many local government definitions, there are literally hundreds of different standards of property sustainability. For multinational corporations or international investors, the number of sustainability definitions increases substantially, increasing the need for assessment practices independent of rating systems.

Even if all buildings applied the same standard, such as the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) standard, which is the industry leader to date in the United States, it would not resolve the need to evaluate a property's risk and value based on its specific sustainable attributes. For example, two buildings that achieve LEED Silver certification can obtain that certification with different combinations of sustainable elements and have very different financial and risk profiles. One building may focus on energy efficiency and the other, because of the specific characteristics of the property or geography, may focus on sustainable products or location.

For the purposes of a financial assessment, a sustainable property should be defined by its specific combination of sustainable features or elements. For example, a sustainable office building might incorporate some of the following strategies or features: use of a reflective roof surface or a "green" roof to reduce the heat island effect and reduce storm water runoff; water-efficient landscaping; low-flow toilets and faucets; use of natural light through "daylighting"; high-performance window glazing; high-efficiency HVAC systems; high-efficiency interior lighting with daylight dimming and occupancy sensors; use of low-emitting paints, flooring, and carpet adhesives; a waste management plan for recycling construction debris; and commissioning to ensure that building systems are installed and operated as intended. A property's particular rating or certification will also have to be considered, for some ratings/certifications will have value independent of the sustainable features.

Perhaps the most important point in thinking about sustainable property is to understand that sustainability is not a property type. A sustainable office property is an office property with sustainable features. Accordingly, the key strategic question to address when beginning to think about sustainable property investing is not whether or how much capital should be allocated to sustainable properties or funds, but how will sustainability trends affect the overall organization and portfolio?

Is Sustainable Investing a Fad?

The strategic response to sustainable property investing will be shaped by the answer to this question and a company's specific assets and mission. As argued below, sustainable property investing is not a fad, but a broader structural change in the real estate markets that demands a strategic response.

Sustainable property investing represents a structural change because of increasing energy costs and durable shifts in demand by the users of real estate, the governments that regulate real estate, and the investors who acquire and manage real estate. Some of the facts supporting this conclusion are discussed below.

Increased Demand from Tenants

There has been a dramatic shift in the demand for sustainable property by users. Corporations have demonstrated a dramatic change in 2007 toward sustainable buildings. In a May 2007 McGraw Hill/Siemens survey of 190 corporate real estate executives (84% were CFOs or CEOs), 60% of respondents saw value in sustainability now, and 88% expected to see value in three years. In an early 2007 survey of 300 corporate real estate executives at a Jones Lang LaSalle/CoreNet conference in Asia, 64% of respondents expressed interest in spending more for greater sustainability. In a survey of corporations worldwide presented at the CoreNet Global Conference in Denver in April 2007, 77% of respondents were willing to pay

a premium for sustainability. These survey-based trends have been confirmed by research conducted to date by the Green Building Finance Consortium.

The durability of increasing corporate demand for sustainable properties is supported by an assessment of why corporations have rapidly increased their interest in sustainable properties. The dramatic increases in corporate interest in sustainable property are being driven by the value of a positive sustainability reputation, related recruiting benefits, and energy cost increases, among other factors.

The ability of a corporation to achieve competitive advantage through sustainability is directly correlated to the growth and success of groups that have emerged to track and monitor corporate sustainability. For example, the Carbon Disclosure Project is a group including 280 of the world's largest institutional investors, representing $41 trillion in funds under management, that is specifically requesting 2,400 corporations to fully disclose their carbon emissions in 2007. More than 1,000 corporations responded to the request made in 2006, including 72% of the Fortune 500. The Global Reporting Initiative, with more than 1,000 corporations reporting on their overall sustainability, and the emergence of corporate social responsibility reports are two additional trends in tracking corporate sustainability and responses to global warming. Further, because the threat of global warming and the concepts of sustainability have permeated much of society, it is not just large corporations but private companies and individual consumers who are acting on their preferences for sustainability through their real estate choices.

Regulator Demand for Sustainable Properties

Governments are moving rapidly to regulate and increase incentives for privately owned sustainable building, a trend that supports the durability of the benefits of sustainable investing. Whereas a year ago, only a few local governments regulated or provided incentives for private owners of sustainable buildings, in the last six to 12 months, dozens of local governments, including Boston and Washington, DC, have begun regulating sustainability in the private building sector, and literally hundreds more are expected to adopt similar regulations and incentives during the next 12 months. In January 2007, the federal government set specific standards for sustainability and

Glossary of Sustainability Terms

Sustainability Term	Sponsor/Web Address	Description
ENERGY STAR Label	Environmental Protection Agency (EPA) http://www.energystar.gov	ENERGY STAR's Portfolio Manager benchmarking tool allows building owners to compare their buildings' energy efficiency to a peer group of buildings. Buildings receiving an Energy Performance Rating of 75 or greater (75th percentile or higher) and satisfying certain other prerequisites can earn the ENERGY STAR label.
Government Guidelines	Federal, State, and Local Governments and Utilities	Individual cities (Boston; Washington, DC; San Francisco; etc.), states (California, Nevada, etc.), and the federal government are establishing regulations and incentives that specify a minimum level of sustainability.
Green Globes US	Green Building Initiative http://www.thegbi.org/gbi	The Green Globes rating system in the United States is based on a score derived from seven categories designed to assess a project's environmental performance. As of May 15, 2007, eight buildings had successfully completed third-party verifications in the United States, with an additional 70 buildings in the pipeline. (Based on Ward Hubbell's written testimony submitted to the U.S. Senate Committee on Environment and Public works on May 15, 2007.)
Greenhouse Gas Disclosure	Carbon Disclosure Project www.cdproject.net	Detailed disclosure of corporate-wide greenhouse gas emissions are reported annually. 280 institutional investors representing $41 trillion in investments have requested disclosure on greenhouse gas emissions from 2,400 companies in 2007. 1,000 corporations responded in 2006.
Leadership in Energy and Environmental Design (LEED)	U.S. Green Building Council http://www.usgbc.org	LEED is the most established commercial green building rating system in the United States. It is frequently cited in government building standards and targeted to higher-quality buildings typically found in institutional portfolios. As of June 20, 2007, there were 824 LEED-certified projects and 6,547 projects registered for certification.
NAHB/ICC Model Green Building Standard	National Association of Home Builders (NAHB)/International Code Council (ICC) http://www.nahb.org	The NAHB and the ICC are developing a national residential green building standard that will encompass single-family construction, remodeling, and multi-family construction. Completion of the new standard is expected by the end of 2008.
Responsible Property Investing	University of Arizona/Boston College Institute for Responsible Investing http://www..u.arizona.edu/~gpivo	Responsible property investing encompasses sustainable property investing as well as other investment alternatives, including affordable housing, brownfields, and transit-oriented development.
Sustainability Reporting Framework	Global Reporting Initiative http://www.globalreporting.org/Home	The Global Reporting Initiative's Sustainability Reporting Framework tracks a corporation across a broad array of environmental, economic, and social measures. 1,000 organizations in more than 60 countries have declared their use of the Sustainability Reporting Framework.

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energy efficiency throughout its portfolio. Most state governments are also moving quickly to adopt legislation to address the climate challenge.

Support for the durability of these regulations and incentives can be found in "Stabilization and Wedges: Solving the Climate Problem for the Next 50 Years With Current Technologies" (*Science Magazine,* Aug. 13, 2004), by Stephen Pacala and Robert Socolow. Any seven of their 15 "stabilization and wedges," if implemented, would solve the carbon and climate problem for the next half century. Their report identifies efficient buildings as one of the 15. More importantly, a report by McKinsey found that energy-efficient buildings are one of the most cost-effective strategies available, actually producing a net benefit, compared to other more costly alternatives to solving the climate problem.[1] As governments increasingly understand this point and try to enact legislation, there is an even stronger probability of increased regulation and incentives for the sustainable building sector in the future.

Real Estate Investors

Private real estate investors have dramatically increased their interest in sustainable real estate in 2007. More than 15 sustainable real estate investment funds have been formed, and many have raised hundreds and millions of dollars from the pension community. Many more are in planning stages. The durability of investor interest will be driven by the durability of trends influencing users and regulators of real estate.

Special Consideration in Underwriting Sustainable Properties

The process for underwriting and valuing sustainable properties is not fundamentally different from the process for properties without sustainable features. However, proper underwriting of the risks and value of sustainable properties requires those involved in the process to have additional knowledge and information to address some of the special considerations of sustainable properties.

Some Issues in Evaluating Health And Productivity Benefits

Assessing potential worker productivity and health benefits is particularly important, given the magnitude of potential benefits to tenants and the potential premium such tenants might pay if the benefits exist for a particular property. There has been substantial research supporting the health and productivity benefits of different elements or features of a sustainable property. "Daylighting," increased ventilation, and moisture reduction are a few of the attributes that have been directly tied to health and productivity benefits.

Though the science supporting the benefits is real and substantial, one of the challenges of most of the research is that a correlation can often be established, but the research is not efficiently refined to enable a clear determination of the "dose-response" relationship. For example, although a lower ventilation rate is specifically related to an increase in respiratory diseases and other building-related health symptoms, the research does not yet enable a specification of the best level of ventilation, a minimum standard for ventilation, or the relative benefits of different levels of ventilation, making the application and comparison between buildings difficult. Additionally, most of the research is done for a specific sustainable element, but the process for evaluating a building incorporates all the elements affecting health or productivity simultaneously.

Fortunately, even though we can't proportionally allocate how health and productivity benefits will increase the rents tenants will pay, similar to most other attributes affecting rents, such as the quality of a lobby, the information can be organized in a way that most potential tenants will act upon it. Full assessment of the financial aspects of potential worker productivity and health benefits will also require an assessment of disclosure and liability issues affecting claims, particularly in the health arena.

Evaluating Energy Costs

The key issue in underwriting energy costs is developing the background and knowledge to assess the accuracy and reliability of an energy forecast. For example, a sustainable building might have a forecast for energy costs that is 30% to 40% below that of a traditional building. The key background needed to conduct due diligence is a clear understanding of the factors that would increase the probability of an accurate energy forecast—integrated design, independent third-party energy models, and so on. Energy rating tools like the Environmental Protection Agency's ENERGY STAR program can provide benchmarking that can help in accessing a building's relative performance and the reasonableness of forecasts.

Assessing a Property's Attractiveness to Tenants

Perhaps most important is determining whether a specific building has the sustainable features and elements that will make it attractive to potential corporate tenants, private companies, and consumers. In some cases, a LEED certification may be required to meet tenant requirements, but in many cases, corporations are interested in whether the building's sustainable elements contribute to a positive greenhouse gas disclosure for the Carbon Disclosure Project or help in its overall corporate sustainability rating as tracked by the Global

1. "A Cost Curve for Greenhouse Gas Reduction," Per-Anders Enkvist, Tomas Nauclér, and Jerker Rosander. McKinsey & Company, 2007.

Reporting Initiative Framework. In analyzing this issue for a specific property, the expected tenant mix and other factors will be critical.

Assessing Government Regulations and Incentives

In some states, direct incentives from utility companies and governments can provide up to 5% or more of the capital required in the development or retrofitting of a sustainable property. For nontaxable investors, performance contracting with energy service companies may be the best way to capitalize on the incentives, and this issue needs to be carefully considered. The financial benefits of expedited permitting, density bonuses, and numerous tax credits and other incentives can also be very valuable. Finally, it will be important to assess the cost and capacity to meet the current and expected future regulations regarding sustainable buildings.

Organizational Response

The dynamic nature of the sustainability movement (changing products, tenant preferences, technologies, and regulatory environment) suggest that decision making in this arena should be based on a long-term outlook with built-in flexibility. Although a thoughtful longer-term strategy will reap rewards and avoid potential problems from moving too quickly, the speed of change and the substantial benefits that can be obtained through a phased transition to sustainability suggest a complementary shorter-term strategy also be developed.

Select issues and responses for institutional investors to consider are outlined below:

Senior Management: Senior managers should begin their education and debate on the importance and durability of sustainability to real estate investment generally and to their organizations specifically. Depending on the outcome of these deliberations, resources should be allocated, plans should be developed, and monitoring mechanisms established. Evaluating potential synergies between business units will be particularly critical.

Perhaps the most important initial question to address is whether sustainable real estate investment is a new specialty sector in which the focus might be on creating or investing in a green equity fund or property or a broader transition that requires a response for the entire existing portfolio of assets, as discussed in this article. What should be the objectives for sustainable real estate investment? What vehicles or structures make the most sense? What property types and regions should be emphasized? How quickly should an organization move forward? These are just a few of the considerations for senior managers.

Asset Management: Asset managers will be responsible for tactical decisions and the execution of changes to existing portfolios. Senior pension executives must work with their investment managers to develop the best plan for evaluating the existing portfolio to determine the potential costs and benefits of management and operation changes or retrofitting.

Importantly, the implementation of any sustainable investment strategy across the portfolio will be phased relative to the level of investment required and the time and energy necessary to implement the changes. As a first step, perhaps as part of the initial shorter-term strategy, asset managers could focus their efforts on energy benchmarking, using the ENERGY STAR Portfolio Manager, or sustainability benchmarking, using a sustainability scorecard or another related approach, and on the substantial number of operations and maintenance-related changes that can be implemented at low cost with substantial benefit.

Acquisitions and Development: The small size of the sustainable building market to date prevents a move to a sustainable buildings–only acquisition program for all but the smallest institutional investors. However, for new developments, planned or under way, sustainable features and ratings should be evaluated. Acquisition managers should also consider how sustainability will affect property acquisition criteria. For example, in buying an existing building, acquisition managers may want to consider an evaluation of the cost and ability to make a potential acquisition sustainable.

Research: Research will have a key role in generating the information and content necessary to educate. Internal property information systems may have to be adapted to "mark" sustainable properties within the portfolio to enable targeted analytic work in the future. One particularly rich area of potential advantage for investors is to incorporate a geographic-based analysis of sustainability. Key geographic markets vary significantly based on the sophistication of tenants relative to sustainability in that market, the cost and availability of service providers and contractors, access to materials, and other issues that will be important determinants of the future success of sustainable properties.

Communications: Boards, clients, operating partners, employees, and major tenants all need to be consulted, educated, and/or informed on the issues of sustainability. These educational efforts should be phased over time in a way that both provides the organization the input it needs to respond effectively and communicates in a consistent manner the broader message of the organization's position and response to sustainability.

Conclusion

Sustainable property investing is not a fad, but a structural shift in the demand for and regulation of real estate. Though fundamental changes in valuation and underwriting processes are not expected, better information and knowledge is needed to adapt investment organizations to fully embrace sustainable property investing. ■