Sustainable Property Investment for an Energy Efficient Built Environment

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Sustainable Property Investment Strategies

(1) **Selection / Screening**: Purchase and/or disposal of property assets that meet / don’t meet predefined environmental and social performance requirements

(2) **Build and operate / Build and sell**: Investments into new building projects that are designed, constructed and subsequently managed according to the requirements of sustainable buildings

(3) **Optimisation**: Investments into the existing building stock in order to systematically improve sustainability performance

(4) **Cause-based investment**: Investments into community projects such as affordable housing and urban revitalisation in order to foster a more sustainable society

“Sustainable property investing can be described as investing in pursuit of sustainability, or, to be more precise, as investing in pursuit of greater durability, adaptability, usability and efficiency of buildings and the building stock, leading to enhanced productivity, well-being, and economic benefit measured in terms of financial, natural, manufactured, human and social capital.”
## Sustainable Property Investment Strategies II

### Indirect property investment vehicles

<table>
<thead>
<tr>
<th>Sustainable property investment strategies</th>
<th>Selection / Screening</th>
<th>Build and operate</th>
<th>Build and sell</th>
<th>Optimization</th>
<th>Cause-based investment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Open-end Property Funds</strong></td>
<td>✓</td>
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<tr>
<td><strong>Closed-end Property Funds</strong></td>
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<tr>
<td><strong>Real Estate Investment Trusts</strong></td>
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<tr>
<td><strong>Restricted Property Funds</strong></td>
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<tr>
<td>(only for institutional investors)</td>
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<tr>
<td><strong>Real Estate Partnerships / Opportunity Funds</strong></td>
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<tr>
<td><strong>Stock listed Property Companies</strong></td>
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<td>✓</td>
<td>✓</td>
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</tr>
</tbody>
</table>

### Preconditions

- Experts
- Rating Agencies
- Assessment Methods and Tools
- Labels
- Performance Data
What the Leaders are Doing

The Principles for Responsible Investment state:

*We believe that environmental, social, and corporate governance (ESG) issues can affect the performance of investment portfolios (to varying degrees across companies, sectors, regions, asset classes and through time).*

“This statement affirms the view of the drafting signatories that the types of actions suggested in the Principles are underpinned by a strong business case and this consultation has found that many leading investors recognize its applicability to the property sector.”

Different aspects of property value – Superior building performance adds value in many ways

It’s all about Value:

“The value of goods is always the necessary consequence of human knowledge that the maintenance of life, of well-being, or of some ever so insignificant part of them, depends upon control of a good or a quantity of goods. […]

The value of goods arises from their relationship to our needs, and is not inherent in the goods themselves. With changes in this relationship, value arises and disappears.”

Carl Menger, 1871, Principles of Economics
“Green is good for asset value.”

Source: RICS, 2005, Green Value – Green buildings, growing assets, Published by: The Royal Institution of Chartered Surveyors
"....there is no significant difference in average cost for green buildings as compared to non-green buildings."

Source: Matthiessen, L. F. and Morris, P., 2007, Cost of Green Revisited, Published by: Davis Langdon
Property industry executives are even willing to pay more for sustainable solutions!

How much more are you willing to pay for sustainable real estate solutions?

- Willing to pay more than 10% more: 3%
- Willing to pay 5-10% more: 22%
- Willing to pay 1-5% more: 52%
- Expect to pay the same: 22%
- Expect to pay less: 1%

Source: CoreNet Global / Jones Lang LaSalle, 2008, Sustainability Perceptions and Trends - Survey among more than 400 industry executives
Property industry executives are even willing to pay more for sustainable solutions! (cont.)

Results of a survey among the audience (about 260 executives and representatives of the German property industry) of this year’s annual real estate conference organised by Handelsblatt:

15. Handelsblatt Jahrestagung Immobilienwirtschaft, 6-7 Mai 2008, Berlin

For more information on this conference and its participants see: http://www.immobilien-forum.com
Why then are more Sustainable Property Investment and Management not yet Mainstream?

Owners / End Users
'We would like to have sustainable buildings but there are very few available.'

Investors
'We would invest in sustainable buildings, but there is no demand for them.'

Designers & Constructors
'We can build or retrofit buildings in a sustainable way, but developers don’t ask for it.'

Developers
'We would ask for sustainable buildings, but the investors won’t pay for them.'

Adopted from: Cadman, D., 2000
In theory, each of these statements can be turned into a positive, turning the vicious circle into a virtuous circle.

- **Owners / End Users**: ‘We demand and occupy sustainable buildings because they are cheaper to run, increase our well-being and improve our image.’

- **Investors**: ‘We invest in sustainable buildings because that’s what occupiers want and because they give better returns and have higher value growth potential.’

- **Designers & Constructors**: ‘We design and construct sustainable buildings and environments because that’s what our clients want and what society expects.’

- **Developers**: ‘We develop sustainable buildings because they are easier to sell, achieve higher prices and are much more resistant to obsolescence.’
The full picture: Turning the Vicious Circle of Blame into Loops of Feedback and Adaptation

Owner Associations
- We represent the interests of our members but we also encourage them to improve sustainability performance.

Assessors / Certifiers
- We assess and communicate the sustainability performance of buildings because that's the basis for improved decision-making.

Insurers
- We grant better insurance conditions for sustainable buildings because they offer many loss prevention benefits.

Researchers
- We find out what works best and why and we empirically prove the benefits because that's what everybody needs to know.

Investors
- We invest in sustainable buildings because that's what occupants want and because they give better returns and have higher value growth potential.

Designers & Constructors
- We design and construct sustainable buildings and environments because that's what our clients want and what society expects.

Developers
- We develop sustainable buildings because they are easier to sell, achieve higher prices and are much more resistant to obsolescence.

Educators
- We spread the knowledge on sustainable buildings because that's critical for the implementation of sustainable development principles within the profession.

Valuers & Advisors
- We recognise the benefits and reflect this in our estimates of market value and calculations of worth as well as in our advice given to clients.

Policy Makers
- We create a supportive legal framework for the benefit of all.

Banks
- We grant better financing conditions for sustainable buildings because they are less risky.

Who are the stakeholders involved in this cycle?
- Owners / End Users
- Assessors / Certifiers
- Insurers
- Researchers
- Investors
- Designers & Constructors
- Developers
- Educators
- Banks
- Policy Makers

What role does each stakeholder play in the cycle?
- Owners / End Users: Demand and occupy sustainable buildings because they are cheaper to run, increase our well-being and improve our image.
- Assessors / Certifiers: Assess and communicate the sustainability performance of buildings.
- Insurers: Grant better insurance conditions for sustainable buildings.
- Researchers: Find out what works best and why.
- Investors: Invest in sustainable buildings.
- Designers & Constructors: Design and construct sustainable buildings.
- Developers: Develop sustainable buildings.
- Educators: Spread knowledge on sustainable buildings.
- Banks: Grant better financing conditions for sustainable buildings.
- Policy Makers: Create a supportive legal framework for the benefit of all.

How do these stakeholders interact with each other in the cycle?
- The cycle is a feedback loop where each stakeholder influences the next, creating an adaptive system.

What is the outcome of this cycle?
- Improvement in sustainability performance through feedback and adaptation.

What are the benefits of this cycle for stakeholders?
- Owners / End Users: Better performance, increased well-being, improved image.
- Assessors / Certifiers: Improved decision-making.
- Insurers: Better insurance conditions.
- Researchers: Empirical evidence.
- Investors: Higher returns, better growth potential.
- Designers & Constructors: Work on sustainable buildings.
- Developers: Sell sustainable buildings.
- Educators: Spread knowledge.
- Banks: Less risky financing.
- Policy Makers: Supportive legal framework.

What is the key to maintaining this cycle?
- Continuous feedback and adaptation in the system.
Consequences for property valuation practice

\[
\text{Market Value} = \frac{\text{Net Operating Income}}{\text{Cap Rate}}
\]

- Changes in market participants’ preferences (+)
- Lower share of operating costs for tenants (+)
- Ease of conducting maintenance and servicing activities (-)
- Lower repair costs (-)

Net Operating Income (Market Rent – operating costs not attributable to tenants)

Cap Rate (risk free rate + risk premium – growth + depreciation)

- More stable Cash-Flows (-)
- Improved marketability / shorter vacancy periods (-)
- Reputation gains (-)
- etc.
- Improved competitiveness (+)
- Rising energy costs (+)
- „Sustainability Hype“ (+)
- Longer useful economic life spans (-)
- Longer compliance with increasingly stringent environmental legislation (-)

Summary:*

Market Rent ↑
Operating Costs ↓
Risk Premium ↓
Growth ↑
Depreciation ↓

Market Value ↑

*: Reversed direction of arrows for conventional / unsustainable buildings
But: Sustainable development discourse & changing user requirements have dramatically increased valuation complexity!
Integration of sustainability issues into valuation and investment counselling is a **major** challenge!

In almost all of these areas we do not yet have the necessary experience, resources and structures to appropriately reflect sustainability issue in everyday practice.
Lack of empirical validation requires property professionals explicitly explaining their **expert opinion** on both the benefits of sustainable design and on why and how these benefits impact on property values!
Biggest problem: Quality of building descriptions in transaction databases

<table>
<thead>
<tr>
<th>Type</th>
<th>Brief Explanation</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Characteristics based description</td>
<td>Statement on the availability, number, age or size of particular building features or components</td>
<td>Floor area, central heating, green roof, number of rooms, flexible walls, suspended ceiling, etc.</td>
</tr>
<tr>
<td>Experience based description</td>
<td>Subjective and mainly qualitative judgement mainly based on implicit assumptions</td>
<td>Building quality is considered ‘good’ because of sound structural condition, favourable layout, equipment, etc.</td>
</tr>
<tr>
<td>Attribute based description</td>
<td>Judgement or classification based on quantifiable technical and/or physical building characteristics</td>
<td>Heat and sound insulation class, degree of efficiency of heating system, share of renewable materials, etc.</td>
</tr>
<tr>
<td>Performance based description</td>
<td>Measurement of direct impacts that result from the building’s technical and physical characteristics</td>
<td>Primary energy demand, CO₂-emissions, life-cycle-costs, annual maintenance costs, etc.</td>
</tr>
</tbody>
</table>

It will take years to accumulate the informational data basis necessary to empirically underpin a valuer’s decision to provide a ‘valuation bonus’ for a sustainable building or a ‘valuation reduction’ for a conventional/unsustainable one.

“The EU directive on the energy performance of buildings] should be extended to include other key environmental and sustainability elements, such as indoor air quality, accessibility, noise levels, comfort, environmental quality of the materials and the life-cycle cost of the building. It should also include the ability of the building to resist environmental risks, such as flooding, storms or earthquakes, depending on their location.” (page 22)

“The common [assessment] methodology […] and the resulting evaluations and life-cycle costing should then be used to promote best practice linked to a range of incentives. For example, a high level of sustainability might lead to lower tax rates; insurance companies and lending institutions might offer more favourable conditions. Once the appropriate methodology is well established, the Commission will then propose further non-energy-related environmental performance requirements to complement Directive 2002/91.“ (page 23)
Widening the scope of energy performance certification into integrated building performance certification

2006

Energy performance

Energy performance certificate

200?

Environmental performance

Energy performance

Risks to the environment

Land use / Sealing

Waste production

Water usage, etc.

20??

Integrated building performance

Cost performance

Environmental performance

Social performance

Technical performance

Functional performance

Environmental performance

Possible scope of building performance certification
The Energy Performance of Buildings Directive (EPBD) was a good start; it
(1) raised awareness among building owners that energy performance of
buildings is an area of major concern; and
(2) is one more reason that increases the pressure for investors to pursue more
sustainable property investment and management strategies.

However, when extending or revising EPBD the following key issues should be
taken into account:

- Regardless of the scope of building performance certification, there should be only one certificate and not separate certificates covering different areas of building performance.

- Certification categories must be consistent across Europe; without harmonised certification categories and schemes end-users become confused and benchmarking becomes impossible.

- Certification results should link through to real fiscal incentives; otherwise certification may be considered as another bureaucratic burden.
1. More sustainable property investment & management practices are already applied in practice. However, they are far from being mainstream.

2. One major barrier is seen in the difficulty of integrating sustainability considerations into property valuation and investment counselling practices.

3. Property valuation & investment advisory reports should be extended to include statements on why and how sustainability issues impact on estimates of worth, value and financial performance.

4. The description of property assets in transaction databases & indexes must be improved by using clear criteria and performance indicators as well as reliable assessment methods and tools → Only this will allow empirical validation.

5. A revised EPBD including harmonized performance metrics would be an important step in the right direction as it would enable proper comparison between environmental and financial performance data of buildings across Europe.

6. The mainstreaming of sustainable property investment practices will require new decision support instruments; i.e. instruments that will allow linking and balancing environmental, social and financial aspects of property investment & ownership.
New decision support instruments: A precondition for mainstreaming sustainable property investment

What is the „probability of default“ of value estimates?

- Property Rating / Risk Analysis
- Monte-Carlo Simulation
- Full Explanation of input parameters (incl. „sustainability impacts“)

AAAvalue: Valuation / Advisory Report

- Red Book
- Blue Book
- White Book
- National Valuation Standard

What are the costs of adjusting an existing building to new requirements?

- Estimate of refurbishment costs
- Comparison of competing alternatives
- Cost-return-impact scenarios
- Business-Plan
Outlook – Changing Investment Paradigm

Not Return or Sustainability but Return and Security through Sustainability!
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