



VALUING SUSTAINABLE BUILDINGS

Green assets, the role of professional valuers, and assembling an evidence base

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OVERVIEW

- Investors and occupiers increasingly recognise that commercial benefits can flow from many of the measures taken to enhance sustainability
- In particular, there is some evidence that sustainable buildings are more marketable, and require less energy, than otherwise comparable peers
- The valuation profession must now address whether (and if so, how) to reflect the commercial benefits in appraisals
- At CBRE, we do not explicitly incorporate sustainability factors into our methodology, and are unlikely to until it is clear there is a material influence on market values
- Our expectation is that, for the foreseeable future, a building's sustainability rating will not lead to automatic percentage changes in values
- However, we do foresee more nuanced developments over time. For example, we expect the quantum of any impact from sustainability on value to vary depending on factors such as the building's age, use and location, the identity of the parties involved, the state of the market and the nature of the measures that have been implemented
- To assemble an evidence base, we have recently introduced a Sustainability Checklist, and this will be forming an integral part of our valuation inspections

Public awareness and political momentum around the responsible use of the planet's scarce resources has risen rapidly in recent years. For commercial, regulatory and reputational reasons, our clients have been taking a wide range of measures to enhance the sustainable nature of their buildings. This short paper explores the implications of these trends for the valuation profession.

JUSTIFYING THE BUSINESS CASE

The uncertain economic outlook that prevails across most of Europe has created a culture of caution for many firms. Marginal and discretionary projects are prone to postponement or cancellation. We have seen clients delay their expansion plans and restructure their portfolios.

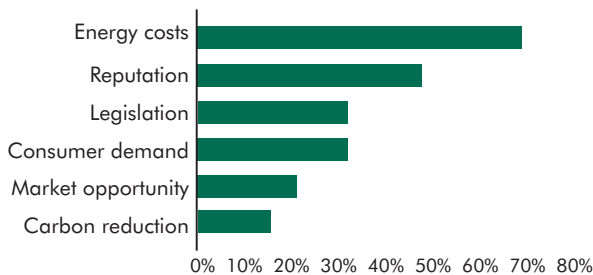
As a result, investment in "green initiatives" has been subject to greater scrutiny by company directors. Business cases must be compiled and benefits quantified. But, crucially, this does not mean all projects are mothballed.

When applied to commercial property, the phrase "sustainability" has become something of a catch-all, encompassing everything from carbon neutrality, to landscaping, to using timber from FSC certified sources. As was noted at the recent Stockholm RICS Valuation conference, there is even confusion about basic terminology – for example, is the custom to refer to "green buildings", "zero-emission buildings", "passive buildings", "healthy buildings", or "sustainable buildings"?¹ Speaking with our clients, they have been reluctant to approve some of the more outlandish or experimental projects that might fall into these categories.

However in a cost-conscious environment, a large number are still being prioritised.

The reason for this is primarily a recognition of an attractive commercial return, often in the form of reduced operating costs. During the 2011 CBRE property and asset management client conference, 69 per cent of attendees identified “energy costs” as a key factor in driving the sustainability agenda, compared with 32 per cent citing both legislation and consumer demandⁱⁱ. Furthermore, in a recent J.P. Morgan survey, 50 per cent of firms confirmed they were actively renovating their facilities to cut energy use and greenhouse gas emissions, and 31 per cent stated their product development programmes were focusing on energy efficiencyⁱⁱⁱ. It is also revealing that we are now seeing specialist funds, such as the Climate Change Property Fund and the Threadneedle Low Carbon Workplace Trust, which maintain that superior returns can be generated by a focus in this field.

Why is sustainability important in your sector?ⁱⁱ



Typical projects where a clear payback seems to exist, in the view of many businesses, include switching energy sources, upgrading the efficiency of air conditioning and installing smart meters. These are relatively small ticket changes that do not require major building works, and can have a disproportionate impact on the efficiency and performance of the asset.

WHERE LIES THE GAIN?

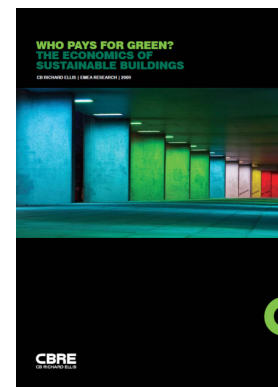
As firms adopt this benefit-led approach, the gains seem to be manifested in two specific areas.

The first is the greater marketability of the property concerned. Tenants are becoming more selective, especially in markets where there is an excess of supply, and some – particularly in

the public sector – have adopted strict policies concerning the environmental performance requirements of any space they occupy. Others will negotiate more aggressively with landlords whose buildings do not comply with best practice or are not appropriately rated, and where they are concerned about refurbishment and maintenance expenses. One result is often shorter void periods in more sustainable buildings.

In the United States, CBRE has participated in a multi-year study in conjunction with the University of San Diego and McGraw-Hill Construction that has suggested LEED certified buildings show on average, a 3.1 per cent improvement in rental rates and building occupancy, compared with the general market^{iv}. Research outside the US confirms a similar trend. A RICS study suggests green buildings can generate income returns around 6 per cent higher, equally split between higher base rents and a reduction in other concessions such as rent-free periods^v. This data led RICS chief economist Simon Rubinsohn to comment that “non-green buildings will eventually become an outdated model.”^{vi}

‘Who Pays for Green?’ CBRE report, 2009^{vii}



The second key source of benefit is reduced energy consumption. This issue has risen rapidly up the corporate agenda as the world enters, according to most experts, a prolonged era of high oil prices. It has been estimated that 40 per cent of total energy use is accounted for by the built environment^{vii}. Utility costs, which once were an almost disregarded line item in the finance director’s ledger, have become a major corporate headache. Benchmarking undertaken of electricity costs in comparable buildings known to CBRE revealed wide discrepancies around the average

per-square-foot figures of £1.68 for offices, £0.94 for retail, and £0.05 for industrial – with outliers up to two or three times higher than these averages. Spread over large assets, these differences can clearly become material for bottom line performance.

Related benefits that are often mentioned anecdotally and in surveys include corporate reputation, and improvements to workforce motivation and productivity, for example through bicycle racks that encourage staff to leave their cars in their driveways. However, these tend to be secondary factors. In the absence of more tangible outcomes they are unlikely to be significant in the valuation debate.

These benefits, of course, require an upfront outlay. Research has suggested that achieving a basic level of certification can increase development costs by 2 to 3 per cent, while the more onerous zero-carbon building status incurs higher incremental costs, of around 12.5 per cent. In modelling costs for a hypothetical 23-storey, 50-unit residential development in 'Who Pays for Green?', CBRE commented: "Whilst clearly significant, this appears a surprisingly modest premium for achieving what is actually a very demanding environmental standard."^{viii}

"Reduced energy consumption has risen rapidly up the corporate agenda"

ENTER THE VALUERS

A responsible valuation professional must be continually aware of trends in the behaviour of investors, developers and occupiers so far as they impact property values. In our view, the scope and scale of "green building" activity has now reached critical mass and can no longer operate under the radar.

The RICS has been actively setting out some of the parameters for consideration^{ix}. They have hypothesised a number of areas for enquiry that valuers could pursue as part of their appraisals, such as:

- Is the building in an area heat, fire and drought impacts may affect insurance and operations?
- Are the building's sustainability characteristics such that it is likely to suffer more or less voids and delays on lettings than comparables?

- What impact will the building's sustainability criteria be likely to have upon the period of time taken to achieve a sale?

The authors conclude that "markets appear to be moving towards a requirement for greater recognition of sustainability issues", although without commenting upon the scale or speed of this movement.

Others have suggested a more aggressive approach, arguing this challenge goes to the heart of the role of valuers. Are valuers simply to reflect the status of the market (hence, "if the market does not differentiate ... between a building that displays strong sustainability credentials and one that does not, there will be no impact on value."), or do they have a broader informational and moral duty towards society? The latter could, it is argued, lead valuers to inform clients

of the wider environmental and social impact, and specify "the implications ... on the likely value development of the subject property." It is even argued that

such a role is explicit in the RICS Royal Charter, which is "to promote the usefulness of the profession for public advantage."^x

In short, should valuers balance the demands of technical accuracy with a broader moral responsibility?

Our view is that these two scenarios are not necessarily incompatible. For valuers, it is not a choice between leading or following the market, because valuers are themselves participants. Far from being distant observers, valuers interact with clients on a daily basis - sharing ideas, gathering experiences, chewing over future developments. By bringing shape and clarity to these discussions, valuers are not just reflecting the market, which must remain their primary duty, but influencing the direction and speed of change.

"Valuers can bring shape and clarity to these discussions"

Valuers can also facilitate the interpretation of evidence from one market to another, as trends emerge. A recent study in Australia has suggested a "green premium in value" of up to 9 per cent arises for properties with a five star rating from the National Australia Built Environment Rating Scheme

(NABERS), and a similar result from the Green Star environmental rating scheme. The authors conclude that the data will help Australian investors to justify “the economic rationale and business case for green buildings, that is do green office buildings add value?”^{xi}

IS THERE AN ALGORITHM?

Everyone active in the valuation profession is aware of how sharply methodologies have evolved over the past twenty or thirty years. Appraisals that were once almost an art form are now highly precise. As one of the authors of this paper recently wrote: “Benchmarking data can be deployed to greater effect, methodologies are more robust, assumptions are more transparent, and process control is tighter. When I joined the profession two decades ago, many of the activities we now take for granted would be scarcely recognisable.”^{xii}

CBRE has reviewed whether our processes should formally include factors such as a building’s BREEAM status, so that a particular rating automatically triggers a set percentage adjustment to the value. At the moment, we have not adopted such a solution. Our view is that evidence does not exist to justify such a formula and, in any event, it would be a blunt instrument.

In fact, some of the early data from the ISPI (IPD UK Sustainability Property Index) Monitor has been unexpectedly random, leading commentator Paul McNamara, Head of Research at PRUPIM, to remark that “At one point, it seemed we had reached an impasse. However, the issue will not go away, and the fact it is difficult should not come as a surprise. It should encourage the profession to widen its pool of source data. That’s why I’m delighted the IPD has renewed its commitment to this goal!”^{xiii}

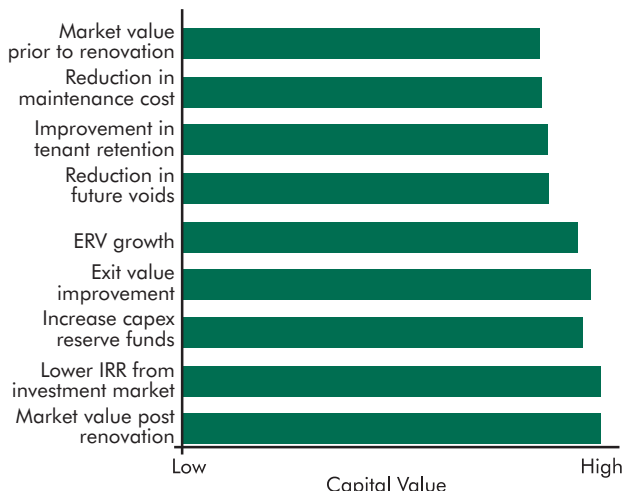
THEY COME IN EVERY SIZE AND SHAPE IMAGINABLE

There are a number of reasons that automatically-generated changes to values would be ill-advised at the present time. Probably the most compelling is the sheer variety of unique circumstances that valuers encounter. A worked example is a helpful

way to demonstrate the interplay of different factors, all of which may vary from one situation to another.

Let us consider a shopping centre that is provided with a green renovation. The graphic shows the hypothetical impact of key discounted cashflow (DCF) variables, pre and post the renovation.

Hypothetical impact of shopping centre green renovation on capital value



While most of the DCF items in this calculation will be generic across all properties, the quantum will vary. This is due to factors such as:

- **The type of asset** – office, industrial, retail, and whether it is new build or part of existing stock
- **The core features of the asset itself** - for example, the age, use, or location
- **The nature of the measures taken** - anecdotal views from some of our clients suggest that upgrading a building from poor or mediocre to good in its environmental credentials has a significant impact, but that, once the obvious changes have been completed, one reaches the point of diminishing returns. Any further value gains no longer follow a linear gradient. This doesn’t of course mean ‘excellence’ is not a worthy aspiration, simply that the rationale may need to be outcomes other than valuation.
- **The tenants involved** – publicly listed occupiers reporting on their CSR credentials may respond differently to such changes than cash-strapped entrepreneurs whose priority is surviving the season
- **The macro-economic picture** – as the evidence base is assembled, it may emerge

that the attitude of occupiers and others to 'green' enhancements is coloured by the general trading outlook and the pressure they experience from their own end-consumers.

CREATING THE EVIDENCE BASE

A theme throughout this short paper has been the importance of an evidence based approach. Understanding how the market actually functions, not how one might expect or wish it to function, is a core obligation of the professional valuer.

We do believe that sustainable characteristics may have a bearing on appraisals in certain situations, and these include (to borrow headings previously used by RICS) land use, design and configuration, construction materials and services, location and accessibility, fiscal and legislative considerations, management and leasing issues, and – especially – energy efficiency. To this end, we are now incorporating sustainability inspection checklists into all our UK property valuations, and ultimately expect to roll this out more widely. CBRE UK Head of Valuation Michael Brodtman summarised the initiative as follows: "The data is not there for existing stock, and investors have to be careful about how they spend their money. We have to get down to the detail to know what to do. It is the start of something longer term for the industry to get behind."^{xiv}

CBRE Sustainability Inspection Checklist: key headings

Section	Item
A	Quality
B	Accessibility
C	Energy Efficiency
D	Flooding
E	Waste
F	Water Efficiency

Assembling the evidence base is the vital first stage in our journey as a profession. Once these are better understood, the next stage will be interpretation. As the philosopher John Dewey remarked: "We can have facts without thinking but we cannot have thinking without facts."^{xv}

The CBRE Sustainability Inspection Checklist (see below) will be used during face-to-face meetings with clients to understand the scope and scale of each buildings' green attributes.

CBRE Sustainability Inspection Checklist



The CBRE Sustainability Improvement Checklist is being rolled out across a sample size that we believe will be statistically significant: involving up to 15,000 commercial properties during the coming twelve months with a combined value in the region of £100 bn. In a future ViewPoint, we hope to explore some of the conclusions to emerge, and discuss the analysis from IPD and others about this rapidly evolving subject. Our contributions to the UK evidence base should be useful in demonstrating whether, and how, valuations are directly influenced by the issue.

In summary, sustainable buildings provide a range of economic benefits to many of their stakeholders. The next few years will see these benefits more closely reflected in valuations. Due to the role it plays within our sector, there will be an increasing obligation on the valuation profession to understand precisely how the relationship between an asset's sustainable features and its value will function. Within the next few years, as this relationship becomes more apparent and quantifiable, the businesses called on to "pay for green" will become better able to prioritise the projects that offer the greatest impact both on the environment and on their bottom line.

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