Green Certification: Is it Worth the Cost?

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In the United States, the terms Energy Star and LEED have quickly become synonymous with “green building.” Today’s mainstream recognition of these market-based systems for voluntary green certification is indicative of the market demand for commercial real estate which minimizes immediate operational expenses and maximizes a return on investment while portraying a socially conscious image.

Over the past 10 years, the escalating number of green buildings absorbed into the national market has illustrated the nation’s demand. According to RREEF Research, in 2008, 25 times more green office space was constructed in the United States than in 2000. By 2009, this figure had increased to 50 times that of 2000. Despite that overall office construction fell flat in the Great Recession, green office construction continued to rise. In addition, a large and growing number of cities and states - such as Washington D.C., Los Angeles, San Francisco, Boston, and California – mandate green building. These mandates have also fueled proactive integration of green building elements in other localities before such elements are mandated and result in an unknown amount of capital expenditures and risk down the road. While it is clear that the green building trajectory has held steady during the early stages, it is less clear whether it will persist into the future as the economics of green development become more apparent.

Lack of Green Data

Until recently, data regarding the direct economic impact of green building on operational expenses and returns on investment have lagged. Instead, the efficacy of green buildings was based on soft data indicating that green buildings are linked to relatively intangible benefits, including improved corporate images, increased employee productivity, lower energy bills, decreased risks of incurring environmental compliance related capital expenditures, and greater occupancy rates.

For many, operational data are not necessary to decide to invest in green buildings. Not surprisingly, these players have primarily been corporate owner-occupiers, the federal government, and universities – all parties benefiting from the ongoing utilization of green buildings. In contrast, institutional developers have been slower to jump onto the bandwagon partially due to the lack of data regarding the economic benefits, if any, of investing in green buildings. Recent studies, however, may provide the hard data that institutional developers need to incentivize investment in green buildings.
Green = Increased Costs?

The additional up-front costs of constructing a commercial green building constitute the primary risk in green building investment. These costs comprise those associated with obtaining certification (e.g., certification fees and delayed timelines due to required approvals) and those incurred in the process of meeting green specifications (e.g., purchasing specific materials and equipment). Various reports, including those by the Burnham-Moores Center for Real Estate (2008) and Costar Group (2010), indicate that these increased costs are approximately 2% to 7% higher than comparable conventional buildings. More specifically, the cost premium for LEED certification, from certified to platinum, ranges from approximately 0.6% to 6.7%, respectively. Other unofficial surveys of parties who have met LEED certification indicate a cost premium of about 3% for certified buildings and 5.5% for silver buildings. In contrast, the University of Reading, UK and the United States Green Building Council have concluded that constructing a LEED building, at the certified level, results in no significant cost premium. Regardless of the difference in opinions, it is reasonable to estimate that the cost premium for a green building ranges from 2% to 7%, depending on the type and level of certification.

Nevertheless, some developers have proffered the ante and bet that the up-front costs of constructing a certified green building are outweighed by short-term operational savings and long-term returns on investment. In fact, RREEF Research data demonstrate that enough institutional developers placed this bet in the past few years to expand their green development activities 22% faster than corporate activities and 50% faster than government activities. And now, these developers can rest a bit easier, because despite the recent economic recession, data from several recent studies shows that their bets have generally been relatively safe.

Green = Value Premiums?

On the flip side, as reported in the Journal of Sustainable Real Estate (2009), several studies have concluded that green buildings achieve greater rent and sales prices than conventional buildings. Although these studies do not agree on the exact economic benefit derived from green building investments, they all attribute at least some positive economic correlation. For example, the University of Reading, UK concluded in 2008 that Energy Star and LEED buildings command a 4% to 5% premium, respectively, on contract rental rates. In terms of sales premiums, a study by Norm Miller, Jay Spivey and Andy Florance (2008) and a report by Eichholtz, Kok and Quigly (2009) indicate a range of 10% to 25% for LEED buildings and 5% to 25% for Energy Star Buildings.

In addition to rent and sales premiums, recent data indicate that greater energy efficiency translates into not only lower utility bills but also increased property value. Commercial LEED buildings have been shown to use, on average, 24% less energy than the national average for comparable commercial buildings (with gold and platinum buildings performing 45% better) (Turner and Frankel, 2008). A $1 savings in energy costs due to increased thermal efficiency has been shown to translate into an $18 increase in the valuation of an Energy Star certified building (Eichholtz, Kok and Quigly, 2009). Therefore, energy efficiency improvements can be expected to play a quantifiably beneficial role in both operational expenses and returns on investment.

Green = Good Investment?

Thus, with the benefit of hindsight, it appears that developers who jumped into the green building market over the past few years paid 3% to 7% in additional expenses to construct and certify their buildings and received immediate
operational savings coupled with rental premiums of 4% to 5% and sales premiums of 10% to 25%. In addition, these developers likely received tax benefits, lower vacancy rates, and faster market absorption. Whether these numbers will hold up in the long term and increase the green building trajectory is debatable.

Rent and sales premiums vary depending on the level of certification achieved and the general real estate market. For example, through the recent recession, while LEED-certified buildings have maintained their rental premium, the premiums for Energy Star buildings seem to have vanished. In addition, as more green buildings saturate the market, economic benefits derived from a lack of supply will surely diminish, if not evaporate. On the other hand, as the regulatory arena moves closer toward mandating green elements, it may be that obsolete conventional buildings are the only ones feeling any significant economic impact from the green building movement.

The debate continues.