

## Green's rent and value premium

Do green improvements command a premium in rents and resale values? If they do, you need to know, because it will change your decision-making. Long-payback green measures that boost net operating income in other ways could move from infeasible to highly desirable.

Today underwriters calculate the utility of adding green technology by looking at only the direct and measurable benefits (reduced energy consumption, longer life-cycles) and not the plausible but heretofore elusive increases in rents (from tenants who will pay a premium for a green building) or in residual values (from investors seeking green assets in their portfolios). Zero has been plugged in for these benefits because we lacked meaningful evidence, such as statistics to support arguments that energy improvements reduce property volatility and risk, and therefore increase long-term property value.

Now there *is* evidence – from the commercial sector to be sure, but evidence of some substance. In a forthcoming paper<sup>1</sup>, *The Economics of Green Building*, three researchers (two at the Netherlands' Maastricht University, the third from the University of California at Berkeley) ran the statistics on commercial buildings across the country and found:

"Economic premiums in rent and asset values are substantial. [...] The attributes rated for both thermal efficiency and sustainability **contribute to premiums in rents and asset values**. Even among green buildings, increased energy efficiency is fully capitalized into rents and asset values."

To derive the findings, the authors used a rigorous approach, tapping huge databases of commercial real estate performance, and then sifting these databases for suitable subject properties. The authors identified 694 green commercial buildings in the U.S. which they could pair with an average of 12 comparables in their particular markets. They then did regression analysis to derive the following findings:



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1. Green buildings commanded **rents roughly 3% higher** than non-green buildings of similar age, location, and type.
2. This premium was larger in 2007 than in 2009, but is still persistent despite the downturn.
3. Green properties **sell at a 13% premium to conventional**, all other things being equal – meaning after controlling for location, NOI, and other rentability factors.
4. LEED and Energy Star certifications added statistically significant elements of value – separately or in combination. LEED was worth more than Energy Star, and LEED Gold held a premium over LEED Silver.

These findings are limited to commercial buildings. To extend them into underwritable residential benefits, or even further to affordable residential, would be speculative right now because:

1. Residential renters might be less green-conscious than commercial lessees, and affordable renters might be less green than conventional. I haven't seen any data on this – have readers?
2. In both commercial and residential, the sales premium might burn off over time, as investors seeking LEED buildings get their allocation appetites met.

<sup>1</sup> Available at [http://cbey.research.yale.edu/uploads/Environmental%20Economics%20Seminar/EKQ%20082010%20JMQ%20\(2\).pdf](http://cbey.research.yale.edu/uploads/Environmental%20Economics%20Seminar/EKQ%20082010%20JMQ%20(2).pdf), accessed November 30, 2010.

3. In both asset classes, the green premium might in any case be a passing thing.

Nevertheless, we can quantify the speculative benefits. Take a typical apartment property with (say) \$850 average monthly rents, 93% occupancy, expenses of \$425 a month (50% of GPR), and a market cap rate of 8.0%. Boosting rents 3% as a result of green improvements bumps the property's value by 6%, from \$54,800 per apartment to \$58,400. More to the point, the green improvements would add \$3,500 per year of capitalizable value *over and above their energy savings*, and *excluding any improvement in cap rate* – the equivalent of a \$3,500-per-apartment tax-free rebate on a refinancing.

Additionally, if the 13% price boost found in *The Economics of Green Building* held on sale, our hypothetical apartment would be priced at \$61,900, \$7,100 more than without the green improvements, a further \$3,600 residual credit on top of the \$3,500 refinancing rebate.

These findings are nowhere near robust enough to take to the bank, but they're not meaningless either. To get them into multifamily residential, we need the evidence, which we can do in either of two ways:

- **Statistical.** We could collect rent and operating expense information in a standardized format alongside relevant building characteristics – such as location, configuration, age, tenancy, utility delivery – and then make those statistics available for aggregation and comparison. Should properties receiving financing or tax benefits from the federal, state, or local governments be required to furnish this information?
- **Before-and-after compilation.** Each property going through an energy retrofit should capture all its before-retrofit economics, both energy (a thorough energy audit should do this) and operating (financial statements), then install continuous-commissioning devices that track after-retrofit usage. A sufficiency of post-retrofit-reporting properties will build a sub-database that should both prove the reliability of properly performed energy audits and surface the elusive rent premium compared with non-retrofitted competition.

The commercial sector has found ways to turn aggre-

gated data into money. We can, too, because if not, we're leaving money on the table – as much as \$7,100 per apartment's worth. **TCA**

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## HUD Invites Comments on Proposed Rental Survey

HUD is seeking comments by January 18 on a proposed 2011 Rental Housing Finance Survey. The survey will be used to gather information and data on multifamily rental housing properties throughout the nation, for research and policy purposes.

(<http://edocket.access.gpo.gov/2010/pdf/2010-29276.pdf>) **TCA**

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