

the **hammersmith** group
research report
november 2008

Energy-efficiency strategies for multifamily buildings

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Higher oil and energy costs are causing buildings to raise condo fees, and will contribute to the next wave of foreclosures. Building managers and explorers are exploring different strategies for reducing exposure to volatile energy costs.

Over the past few years, the recent dramatic rise in oil, gas, and electricity costs has forced many buildings and management companies throughout New England to raise condo fees or levy special assessments throughout the winter. Other buildings are exploring energy-efficiency and alternative-energy strategies.

“Multifamily buildings, older buildings, vertical buildings, or anyone with a gross rent structure is more exposed to rising utility costs,” said Robert H. McBride, CEO of The Dartmouth Group, one of the leading property management firms in greater Boston area.

The conventional approach to higher oil prices has been to raise monthly fees to cover the budget shortfall. However, this does not address the underlying issue.

“It is easier to raise fees than to raise awareness of energy conservation,” said McBride. “With oil prices coming down temporarily, there’s a chance that the discussion will shift from conservation to business as usual.”

Forward-looking building owners and managers are beginning to see the advantages in using these assessments instead to raise funds for capital improvements to raise a building’s energy-efficiency. Some owners, managers, and developers — convinced that high oil and utility prices are becoming a fact of life — are considering powerful alternative heating and cooling systems such as geothermal exchange.

Two different approaches

The choices being made by the managers of a typical Boston apartment building highlight the differences between taking the short-term approach and a more strategic view. This building also illustrates the challenges that building managers across the United States are facing this winter.

Built in 1915, the limestone and brick building on Commonwealth Avenue has 35 apartments and uses 13,650 gallons of oil

annually. The building has a central heating plant and the apartments do not have separately-metered utilities. The ubiquitous “heat and hot water included” phrase in so many leases is now coming back to haunt owners.

The annual cost to heat this building went from \$10,000 in 1998 (oil at \$0.78/gal), to \$24,500 in 2006 (oil at \$1.80/gal), to \$54,600 in 2008 (oil at \$4/gal). In that same period, the building’s annual operating budget increased slightly from \$63,000 to \$84,000 as average monthly condo fees went from \$150 to \$200. Heating oil represents an increasing amount of the building’s income: 15.8% in 1998, 29.2% in 2006, and 65.0% in 2008.

In order to cover rising heating costs, the building management has two options: raise fees to cover the recurring budget shortfall, or increase energy-efficiency through a one-time capital expenditure.

For the past two years, the building management has asked owners to pay double condo fees from October to April. This increases the operating budget by \$49,000 (35 units x 7 months x \$200/month), which covers the higher oil prices but does nothing to reduce the building’s dependence on oil, or its exposure to rising costs. These assessments significantly increase the true cost of ownership, and reduce the net operating income for investors.

That same \$49,000 raised by the assessment could instead be used to install an alternative energy system with a short payback period, such as geothermal exchange. In the building above, each unit uses roughly 400 gallons of oil at an estimated annual heating cost of \$1,543. Using geothermal exchange, the average annual cost to heat and cool the same unit would be less than half that.

The Dartmouth Group is seeing more discussion on the part of boards to reduce energy and operating costs. Energy audits are becoming more popular, and many buildings are switching from fixed motors to variable-speed drives for pumps and cooling towers. There is also a greater move towards separate metering of utilities, to align incentives between usage and cost.

Even traditional cost centers such as a building's landscaping are being rethought. "Sustainable approaches to landscaping can reduce direct costs for water and labor, reducing operating costs for a building without compromising the quality of life," said Christine Lichatz, founder of Gardenworks LLC, a sustainable landscape design firm based in Mystic, CT. Lichatz devised her proprietary metrics for quantifying landscaping savings after working with the U.S. Naval Base in Groton, CT.

However, very few buildings in the Boston area have committed significant funds to energy-efficient capital improvements, preferring to take a 'wait-and-see' approach — a strategy based on hope that oil prices will go down.

"People don't change until they absolutely have to," said Charles Randall, managing director of Revival Funds, a Denver-based fund which finances sustainable real estate developments. "High energy prices raise awareness of how prices affect you on a daily basis. When your heating bills goes up 50 to 100 percent, you feel the pressure to become energy efficient—quickly."

The economic pressure of higher energy costs is also increasing financial risk for the building and its residents — and will likely contribute to the next wave of foreclosures throughout the spring.

"Many people were counting on maintenance fees to remain as constant as their mortgage payments," said McBride. "Elderly and lower-income residents are less able to sustain increases in monthly costs, but that's a broader pool of people every day, in this economy."

Going forward, buildings that have invested in energy-efficiency will have a significant resale advantage over buildings that require assessments throughout the winter. Building managers and developers can help their buildings command a price premium for sales and rent if the buildings have energy-efficient features that keep monthly costs low.

Conversely, informed buyers will pay less for condos in inefficient buildings once they realize how much higher the true costs of ownership will be.

The rising costs and assessments in many buildings this winter will do likely more to drive the adoption of alternative energies than all of the social and environmental arguments to date.

"The defining study for the benefits of building green still remains unwritten," said Fleming. "We need a landmark study that compares the 10-15 year pro forma of the same buildings built both green and conventionally."

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