The Greening of Affordable Housing

New Initiatives Promise Opportunities

North Park @ Scott Center, Miami, Florida
Certified under Enterprise Green Communities Criteria
Photo courtesy of McCormack Baron Salazar

At Castle Square Apartments, a 40-year-old HUD-assisted apartment complex in Boston, WinnDevelopment, in partnership with the tenants association, completed a "deep energy retrofit" that has slashed energy and water usage and drastically cut operating costs and utility bills paid by the owner and tenants. (A deep retrofit is an upgrade reducing prior energy usage by more than 50%.)

This project is illustrative of a variety of exciting initiatives aimed at making affordable housing more "green" and sustainable – to the benefit of both residents and owners.

At Castle Square Apartments, a complex of 500 affordable apartments in four mid-rise buildings and 19 townhouses, the $50.5 million retrofit project involved applying a 5-inch super-insulated shell or skin to the building exterior; installing a super-insulated reflective roof; sealing air leaks; putting in high-efficiency windows, appliances, HVAC systems, and solar panels for heating water; and other steps. Before the retrofit, natural gas for heating and hot water cost $194,000 a year and electricity another $397,000. Post-retrofit these annual tabs are expected to tumble to roughly $50,000 and $181,000, respectively, according to a Web site detailing the effort (http://www.castledeepenergy.com). At Castle Square Apartments, tenants pay for electricity for their apartments while the property covers the costs for gas heat, hot water, and common area electricity.

Boston-based WinnDevelopment financed the project using multiple funding sources, including tax credit equity, state dollars, and a grant from the U.S. Department of Housing and Urban Development's Green Retrofit program – a one-time initiative capitalized by 2009 federal stimulus dollars.

The company, a major developer/owner/manager of affordable, market-rate, and mixed-income residential multifamily properties, including rehabilitated historic buildings, is committed to greening the developments in its portfolio.

"We view ourselves not just as a solid affordable housing developer and not just a solid historic tax credit developer, but as a substantive energy conscious operator of real estate," says Larry Curtis, President and Managing Director of WinnDevelopment. "We've become a known entity in the world of energy efficiency activity."

Under the eye of point man Darien Crimmin, Vice President of Energy and Sustainability, WinnDevelopment monitors utility usage at its properties; compares

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the figures to portfolio and external benchmarks; figures out which properties need to be retrofitted and in what order; determines the specific improvements to be made; and decides on how to fund the project and procure the capital.

Large Universe of Candidates

The number of existing affordable rental housing properties that could use energy- and water-efficient improvements to be made "greener" is enormous.

"The biggest need is for the four to five million existing units where HUD is providing some form of rental or mortgage subsidy, and another million-plus [low-income housing] tax credit units," says Boston attorney David Abromowitz, a partner at Goulston & Storrs, a senior fellow at the Center for American Progress, and author of *Green Affordable Housing: Within Our Reach* (December 2008). "That's the biggest universe of existing properties where there's a lot of energy inefficiency and the biggest opportunity to reduce energy costs."

Incorporating green features in new construction multifamily buildings or in existing buildings undergoing an acquisition/rehab transaction is very feasible. Tax credit equity, debt, and gap sources can fund these elements within the overall project budget.

Similarly, public housing agencies can cover the costs of energy and water retrofits to their existing public housing properties by using their public housing capital funds or by entering into "energy performance agreements" with energy service companies (ESCOs). ESCOs, which are private companies, design and install energy and water efficiency upgrades in existing public housing properties at no upfront cost to the housing authority. The PHA repays the ESCO over the contract period from a portion of the generated utility cost savings.

ESCOs, though, have not been used much for retrofits of existing privately-owned, government-aided affordable multifamily rental developments, such as HUD-assisted or LIHTC properties.

The real challenge that needs to be addressed, say sources, is finding capital to pay for energy and water efficiency improvements to these kinds of properties when no ownership change will occur. A couple of impediments stand in the way.

A major one, says Abromowitz and consultant Dave Carey, a principal at Harcourt Brown & Carey, is the "split incentive" issue. Under HUD and LIHTC program rules, owners generally have no incentive to spend money for energy and water retrofits to their existing property where tenants pay for their own utilities; they can't reap the resulting financial benefits, which flow instead to the tenants or – in the case of HUD-assisted projects – to HUD, which reduces its utility allowance or subsidy. In addition, some HUD programs restrict the ability of owners to tap their project's residual receipts or surplus cash flow to pay for improvements.

Carey says some owners may be able to fund improvements by refinancing the current debt on the property – if refinancing is possible at the time and if sufficient surplus cash flow would be generated. In this vein, one attractive source is the Fannie Mae/FHA Green Refinance Plus program, according to Trisha Miller, Senior Advisor in HUD's Office of Sustainable Housing and Communities. This program has more liberal underwriting standards and offers loans to refinance the existing debt on an affordable multifamily property plus extra dollars to pay for energy and water efficiency improvements.

New Efforts, Initiatives

A number of current initiatives and demonstrations by WinnDevelopment, Stewards of Affordable Housing

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Resources for Green Building/Retrofits

Green Building Rating Systems
Enterprise Green Communities
http://www.enterprisecommunity.com/solutions-and-innovation/enterprise-green-communities

LEED
http://new.usgbc.org/leed

NAHB National Green Building Standard
http://www.nahb.org

EarthCraft
http://www.earthcraft.org

State-by-State Incentives for Energy & Water Efficiency Improvements
http://www.dsireusa.org

Other
Global Green Analysis of 2012 LIHTC QAPs for Green Building Criteria
http://www.globalgreen.org/i/2012QAP_Final.pdf

Enterprise Retrofit Toolkit
http://tinyurl.com/a28j2zx

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for the Future (SAHF), and others are designed to facilitate many more retrofits of existing privately-owned affordable multifamily properties by developing and testing models to provide financing and a more integrated approach to retrofiting projects.

SAHF, a nonprofit organization, is a network of 12 major nonprofit multifamily housing sponsors around the country (BRIDGE Housing, The Community Builders, Evangelical Lutheran Good Samaritan Society, Homes for America, Mercy Housing, National Affordable Housing Trust, National Church Residences, National Affordable Housing Trust, National Housing Trust, NHP Foundation, Preservation of Affordable Housing, Retirement Housing Foundation, and Volunteers of America).

One demonstration underway by SAHF, using a grant from the U.S. Department of Energy, is to test the use of a private ESCO combined with third-party financing to fund energy retrofits to an initial sample of 20-plus HUD-assisted or LIHTC properties owned by SAHF's member organizations. Through an energy performance contract, the ESCO – Johnson Controls, Inc. – will do the retrofit work and guarantee the utility savings. The improvements will be funded by loans to the owners, typically 10 years in term, provided by the Low Income Investment Fund, a community development financial institution (CDFI), says Richard Samson, President of SAHF Energy, a division of SAHF. He indicated that this demo seeks to overcome the three major barriers encountered by affordable multifamily property owners when it comes to trying to make energy retrofits to their properties: a lack of in-house energy expertise, not enough personnel to do the work, and a shortage of capital to fund the job.

A related, crucial piece is comprised of flexibilities that SAHF has negotiated with HUD for the demonstration projects. One, aimed at mitigating the split incentives hurdle, is HUD's agreement to incorporate into the HUD contract rent an amount equal to 95% of the utility cost savings. For example, if HUD's tenant utility allowance for a unit is $100 a month, and the retrofit reduces the utility cost by $20, the Department will reduce the utility allowance by $20, to $80. But instead of ending here, as normally occurs, HUD will permit the current contract rent for the unit to be increased by

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95% of the amount of the utility savings, or $19 (95% of $20). This will allow the owner the extra funds needed to service the debt incurred to pay for the retrofit work.

Samson said HUD has also agreed to permit owners of the sample projects, under certain circumstances, to draw on property reserve funds to pay for part of the work.

Construction work on the demonstration projects could start in the second quarter of 2013.

A multitude of research and demonstration projects have been spurred by HUD's initial batch of 12 Energy Innovation Fund grants, announced in March 2012.

NRG Solutions LLC, a unit of WinnDevelopment, received a $5.25 million grant from HUD that will be combined with another $15 million from other partner organizations to capitalize a multi-pronged approach to making and funding energy retrofit projects in a sample of existing affordable multifamily properties. Elements will include the creation of a credit-enhanced multifamily energy loan fund to finance improvements, the use of an ESCO to deliver energy services to the selected properties, and other features. The ESCO is being modeled after an existing "open market" ESCO developed by Winn that has done retrofits to some of the company's properties as well as to those of third-party owners.

SAHF is using a $1.5 million Energy Innovation Fund grant to develop an "EZ Retrofit" tool. "We

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intend to create a tool that can replace or at least limit the need for energy audits for certain affordable multifamily properties which would be especially useful for smaller properties that can't afford a full-blown audit," says Samson. "It's going to help owners identify quickly certain needs and help them get it done...It's a tool that's going to match properties with particular energy-savings measures that they would benefit from. So you're going to have a tool where you load your data with regard to your property. And it recommends from a list of energy conservation measures those which are likely to benefit the property, here's what they're likely to cost, and here's what you're likely to save."

Samson expected the first version of the model software to be ready by the end of February. Beta testing will be limited to SAHF members on 5 to 10 of their properties. But eventually the final product will be posted on SAHF's and HUD's Web sites and available to anyone.

Finally, SAHF is working in partnership with the California Housing Partnership Corporation and two California utilities (Southern California Gas and Southern California Edison) to pilot a model for making it easier to undertake and fund utility retrofits in affordable multifamily properties. One element is to establish a single point of contact at each of the utility companies that a multifamily owner can contact to get information about all of the different programs the utility offers that could help fund retrofit work. The second piece, Samson says, is an "on-bill repayment" system. Under this, an owner obtains some of the funds to pay for a retrofit project from the utility company, gets a loan to finance the rest from another source, and the loan is repaid from an extra charge added to the owner's utility bill from the utility company.

The pilot is focused on properties in which the owner pays most of the utilities. It is being tested so far on one property in California, with the two utility companies paying for about half of the cost of the retrofit work and the rest funded by a loan from a CDFI. TCA