

CITY LIMITS

For Some Landlords, It's Not Easy Going Green

By Patrick Arden
April 23, 2012

If New York is to meet PlanNYC's goals, apartment buildings must get greener. While property owners and tenants both benefit from more efficient systems, getting them up and running takes a different kind of green.



Valerie Neng, WHEDco's Sustainability Manager, in front of Urban Horizons, a building the organization made green out of financial necessity.

Morrisania — At the bottom of a hill on 168th Street is the old Morrisania Hospital, an elegant yellow-brick structure surrounded by apartment blocks in the South Bronx. The city abandoned the building during the fiscal crisis of the mid-1970s, and for 20 years the once-grand hospital sat empty and windowless, its interior a ruin open to the elements.

Nancy Biberman, president of the Women's Housing and Economic Development Corporation (WHEDco), recognized the building's potential, and a gut rehab produced 132 apartments for low-income and formerly homeless families, with health- and child-care centers, plus a commercial kitchen for small start-up businesses. The 1997 project won accolades, but soon WHEDco faced an unanticipated crisis.

"This building was going to tank the organization," recalls Biberman, who says tenants routinely opened their windows in the winter to cool down overheated rooms. "We literally saw money blowing out the windows, and it was bleeding us." Raising rents was out of the question. "But it would be irresponsible to continue to let things go. We would have gone bankrupt."

The solution was an energy-efficient retrofit of the building, now known as Urban Horizons. But once WHEDco began to realize savings on such measures as low-flow water fixtures, energy-efficient appliances, and compact-fluorescent light bulbs—and tenants saw their electricity bills decline—the search for green solutions turned into a permanent, evolving process. The organization even hired a sustainability manager.

WHEDco's experience with Urban Horizons may ultimately be a valuable example in a city with an old housing stock and little available land. It provides one roadmap for existing structures to comply with stricter laws, as the Bloomberg administration implements regulations to make multifamily buildings more energy efficient and to stop the use of the most polluting grades of heating oil. The new rules will reduce energy consumption and bring down costs over the long term, but they also could put a more immediate strain on affordable housing.

New rules for a greener city

The city aims to slash carbon emissions 30 percent by the year 2030, blaming air pollution for 3,000 annual deaths and twice that number of emergency-room visits for asthma. The only way to achieve this goal is by increasing the energy efficiency of buildings, because buildings account for three-quarters of carbon emissions.

About 85 percent of buildings were constructed before the availability of energy-efficient technology, according to the mayor's Office of Long-term Planning and Sustainability, so the new laws address the process of retrofitting, or the installation of new equipment in older buildings.

Last year, large apartment buildings had to start reporting their annual use of energy and water, forming benchmarks for improvement. Next year they'll have to pay for energy audits, which will survey buildings and recommend measures to bring down consumption. In July, buildings will begin to eliminate the use of the dirtiest heating oil.

Though the city claims only 1 percent of buildings burn the dirtiest oil—about 9,000 properties citywide—their boilers are blamed for 86 percent of all soot from buildings. Last summer a report by Manhattan Borough President Scott Stringer’s office found 63 percent of the boilers burning dirty oil are in buildings with rent-regulated units.

The city has set a timetable for all apartment buildings to stop burning dirty oil. But the conversion to cleaner fuels is expensive. And soon, tenants may start feeling those costs. The Rent Stabilization Association, which represents 25,000 landlords, has vowed to make the added costs of boiler conversions and compliance with the new laws a major part of its argument for higher rent hikes during this spring’s deliberations of the Rent Guidelines Board.

A Roadmap for Retrofits

From the day WHEDco opened Urban Horizons, the 70-year-old building was running an operating deficit. “The rents never supported the true costs of building,” says Biberman. “It was an energy guzzler. At the time, we did the best we could, but we were clueless: Green wasn’t in the vocabulary in 1996, other than the color.”

While energy-efficient technology could be found in single-family homes, it remained a rarity in apartment buildings, especially affordable ones, explains Valerie Neng, WHEDco’s sustainability manager. By the time she joined WHEDco in 2007, however, the nonprofit was completing Intervale Green—a brand-new green building in Crotona East. Neng was drawn by Biberman’s green approach, which not only lowered long-term costs but included nontoxic building materials as well as education and training, all informed by an overriding concern with our relationship to the environment. At Intervale Green, this approach even led to the creation of a rooftop farm, where tenants could grow vegetables.

Money for green technology was readily available for new buildings like Intervale, adding only 2 to 3 percent to the cost of construction, but it was harder to finance the retrofitting of Urban Horizons, says Neng. “We had to cobble together sources.” Funds came from the New York State Energy Research and Development Authority (NYSERDA), the Bronx Borough President, and private foundations, as well as from tapping into the building’s equity. The state’s Weatherization Assistance Program helped with lighting, energy-efficient refrigerators, and low-flow showerheads. Power for Jobs, a program by the New York Power Authority (now called ReCharge New York), provided discounted electricity. Con Edison also gave incentives for equipment upgrades.

“We first picked the low-hanging fruit: Weather stripping, air sealing, lighting, appliances, faucet aerators—the things you can knock out quickly at the lowest cost,” Neng says. Each tenant pays for electricity, and within the first three months, bills declined on average by 6 percent, compared to an 8.3 percent average increase citywide.

Low-hanging fruit also has the shortest payback period, but that doesn’t mean these fixes are all cheap. “Under four years is a good payback period for any building owner,” says Neng. Now WHEDco is looking at longer-term paybacks from more extensive ventilation work, the replacement of 15 old boilers with 4 high-efficiency ones, and the installation of cogeneration equipment for the on-site production of electricity from natural gas.

“Natural gas costs a lot less than electricity,” Neng says. The cogeneration equipment will reduce transmission losses from the power plant and reliance on the grid. “And the electricity’s waste heat is captured and used to heat hot water. We’re going to see huge savings—we’re talking about \$100,000 to \$150,000 a year. But the investment is close to half a million dollars.”

Finding the green for affordability

Efforts are underway to help more nonprofit housing developers foot that kind of bill.

The Local Initiatives Support Corporation, or LISC, has long financed the rehabilitation of low-income housing and provided grants and technical assistance to community organizations. Now it’s helping affordable-housing groups to make green investments. It recently provided money for the first solar-thermal system at a HUD-subsidized building. That system, on the roof of a six-story apartment building in Bedford-Stuyvesant, will heat the water for 52 units.

Earlier this year, LISC, with Enterprise Community Partners, invested \$18 million in the energy-efficient retrofit of 2,226 affordable apartments in Brooklyn, the Bronx, Manhattan, and Queens. Most of the money came through the state’s Weatherization Assistance Program, which had received federal economic stimulus funds. After work was complete, LISC educated tenants and building superintendents on equipment operation and more basic energy-saving measures, such as unplugging appliances so they stop drawing electricity when not in use.

LISC is now tracking these buildings’ energy and water consumption. It is using an online grading system called EnergyScoreCard, developed by Bright Power, and will provide quarterly updates to the housing groups, encouraging them to use the same system to track energy and water utilization in their other buildings as well.

“We’d like to figure out which retrofit measures have the biggest impact,” says Colleen Flynn, who oversees LISC’s green efforts in New York City. “If in general we see reductions in operation costs over time, we could actually build in retrofits when we’re underwriting affordable housing deals. That way we wouldn’t have to rely on federal grants to do [retrofits].”

Sarah Hovde, the director of policy and research at LISC NYC, notes that Deutsche Bank just released its own study on the benefits of financing energy-efficient retrofits in multifamily buildings. “They’re trying to get at the same thing: Creating more certainty for lenders about what different retrofit measures will produce in the way of savings, and then you can bank that into your financing numbers.”

Landlords complain of costs

While nonprofit housing providers are finding ways to fund green technology, many private building owners express confusion about how best to comply with the new rules.

Jim Buckley, executive director of the nonprofit University Neighborhood Housing Program in the Bronx, says the buildings in his portfolio switched to natural gas long ago. But he’s heard from area coops concerned about how they’ll pay for boiler conversions. “People have known

that this is coming for a little bit, but as the deadline is getting closer there are a number of issues that have kept them from finalizing what they want to do.”

One of those biggest issues is that natural gas is unavailable in parts of New York City. “If you’re fortunate enough to be close to a good heating gas supply, the cost could be fairly minimal,” Buckley says. “If you’re farther away, the cost could be substantial.” These owners would have to pick up the cost of installing their own gas line, whereas buildings close to gas supplies get hooked up for free.

Installing a line could cost unlucky building owners hundreds of thousands of dollars, says Frank Ricci, the director of government affairs for the Rent Stabilization Association. “The city should have given buildings more time to plan for this,” he says, noting that the mayor announced the new boiler rule in April 2011. “It would have also allowed Con Ed and National Grid to expand their network. But the city, they’re zealous on this. Even in a building where the hookup to Con Ed is zero, there are a lot of other costs.”

If buildings can convert to natural gas, they might still need to add a lining to their chimneys and install a flue pipe system from the basement to the roof, which could cost of as much as \$10,000 per floor. The city has vowed to help owners find financing and to develop investors through Energy Services Agreements. At least one gas provider, Hess Energy Solutions, will take care of the conversion from oil burners if building owners make the company their sole supplier. Hess would then take advantage of government incentives for owners to make the switch as well as a possible rebate from National Grid.

The city hired a private company to guide building owners through the conversion process and to work with utilities on their behalf, but Ricci says, “The feedback we’ve gotten so far is that it’s not been very helpful.” He’d like the city to assist landlords without gas service to form “clusters” with other, neighboring building owners, thereby providing an incentive for natural-gas providers to service the area. In the current circumstances, he believes many of the affected building owners will opt to switch from dirty #6 heating oil to #4 oil, instead of choosing the much-cleaner #2 oil or natural gas, but this is just a stopgap measure. All buildings must convert to the cleanest fuels—#2 oil, biodiesel, natural gas, or steam—by 2030 or when replacing a boiler.

At one time, #6 oil was much cheaper than #4 oil, but recently the difference has lessened. Owners converting to #4 oil may require only \$3,000 to \$7,000 for updated equipment. Yet new operating permits will require new inspections of old buildings, and Ricci’s afraid these owners will ultimately be looking at tens of thousands of dollars in additional expenses to come up to code. “That’s no excuse, but the reality is this is a big hit for a lot of buildings to come up with this money, especially if they’re in a neighborhood with low rents,” he says.

Those taking the road of least resistance to #4 oil will have missed an opportunity to save money over years, cautions Jonathan Braman of Bright Power, the developer of the EnergyScoreCard. Last year Bright Power was the city’s leading energy auditor. “The energy hogs really use a lot of energy.”

Small is beautiful

For the last three years, Benny Quezada has lived in Intervale Green with his wife and three daughters. When they came to New York from the Dominican Republic in 2006, they lived in a single room in his mother's house. Then they moved to a one-bedroom apartment in the Wakefield neighborhood. Now they're in a new three-bedroom, two-bath apartment for \$1,100 a month, and Quezada finally feels at home.

It still required an adjustment, he says. As part of WHEDco's green programming, tenants can attend classes where they learn how to reduce electricity consumption, operate such equipment as dual-flush toilets, and prepare nontoxic cleaning solutions. "Right away my electric bill went from \$200 to \$150," he says. "My last bill was about \$80." Most of the savings, he believes, was due to his putting appliances on power cords and shutting them off when not in use.

"I'm also saving money on cleaning stuff, using vinegar in the kitchen, baking soda in the laundry. My wife uses less bleach and more baking soda. It's better for the fabric, and better for the planet," he says.

Quezada missed nature in the big city, but now he and his youngest daughter plant vegetables on the building's roof. "We grow herbs, beans, lettuce, tomatoes--it's all really good," he says. "Each of these things was a small step, but they add up to a beautiful place."