

ECOWISE

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www.hud.gov/offices/pih/programs/ph/phecc/newsletter/newsletter.cfm

Big Savings for Small PHAs Using Energy Performance Contracts



Public Housing Agencies (PHAs) everywhere are implementing energy efficient building improvements to help save the environment and money. While many believe that only large PHAs are capable of such costly undertakings, there is an increased interest in providing Energy Performance Contracts (EPCs) to small PHAs. This innovative financing technique allows PHAs to achieve energy savings without up-front capital expenses. The costs of the energy improvements are paid back from these savings within the operating fund. Such projects have generated millions of dollars saved for large and small PHAs nationwide.

The Housing Authority of the City of Meriden (HACM) in Connecticut manages 361 public housing units. Recently 140 of these units were included in an EPC finished construction. To develop the EPC, HACM contracted with an Energy Service Company (ESCO)—CTI Energy Services, of Amherst, MA. Through the EPC, the PHA replaced failing boilers and domestic hot water heaters. They then used the savings from their energy costs to complete a much needed replacement of two elevators at its mid-rise building. Elevators were on the list of capital needs, and the EPC allowed the work to be completed much sooner than it would have been otherwise. The EPC also allowed HACM to add additional exterior and common area interior lighting to enhance safety and security around the site.

Additional measures in the project included low-flow plumbing fixtures, LED exterior lighting, and minimal interior lighting. The total financed was \$1,550,000; the measures performed are expected to reduce energy usage by 30% and water usage by 40% for the included units. By combining capital-intensive work with high savings measures, HACM was able to create a 20 year EPC that allowed it to simultaneously modernize and save energy.

The Bloomington Housing Authority (BHA) of Indiana is another small PHA making energy upgrades through EPCs. BHA manages 310 public housing units at three sites and has an EPC that is in its 3rd year of repayment. When Executive Director Jennifer Osterholt joined BHA in 2004, she wanted to improve the perception of the housing authority for both the residents and the community. One step was to improve buildings that were in need of significant repair due to deferred maintenance. The housing authority established a process to get back on track.

BHA contracted with Ameresco, Inc. of Framingham, Massachusetts, to develop and implement a plan. However, the PHA did not rely solely on the EPC to fund its improvements. BHA utilized funding from other sources such as the Capital Fund Financing Grant, Federal Home Loan Grant, and NIP Grant, to perform additional upgrades to the properties, including windows, landscaping, and welcome signs. By combining multiple funding sources in conjunction with the EPC, BHA successfully upgraded many aspects of its public housing sites and continues to do so in order to reach all of the goals set forth in its original plan.

The measures specific to BHA's EPC consisted of low-flow plumbing fixtures, common area and apartment lighting, refrigerators, furnaces, domestic hot water equipment, temperature controls, and attic insulation. The financed amount of the EPC totaled over \$800,000, and, after 2 years, average annual savings of over \$163,000 have been achieved - which exceed the guarantee provided by the ESCO.

These are just two examples of the diversity of innovative strategies that can be used to achieve substantial cost savings for PHAs of all sizes. To learn more about EPCs, visit:

<http://www.hud.gov/local/shared/working/r9/cpd/guidelines.pdf>

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UPCOMING EVENTS

- » **Northeastern IPM Center Grant Programs**
Urgent IPM Grant Application Due: October 11, 2011
<http://www.northeastipm.org/grant-programs/ipm-center-grants/>
- » **Workshop – Energy Efficient Housing Building: Current Best Practices**
October 28-29, 2011
Washington, MA
<http://www.buildinggreen.com/ebn/calendar-item.cfm?EventID=79976>
- » **2012 ENERGY STAR Award Applications**
Applications Due: December 2, 2011 at 8pm EST
http://www.energystar.gov/index.cfm?c=pt_awards_pt_es_awards

Bugged Out? Integrated Pest Management for Bed Bugs

Fifty-two percent of residents in public housing and project-based Section 8 housing report problems with indoor rodents and insects, according to the U.S. Department of Housing and Urban Development's (HUD) 2004 Resident Survey. Such critters can trigger asthma, contaminate food, and damage buildings. These pests can also cause stress, leading people to misuse and over-use pesticides

The best approach to stemming the spread of all pests including bed bugs is to prevent an infestation from occurring in the first place. PHAs are strongly encouraged to develop an Integrated Pest Management (IPM) Plan. Such plans describe the ongoing efforts the property management will take to prevent and respond to pests. A strong IPM plan for bed bugs would incorporate the following principles recommended by the EPA:

- Raising awareness through education on prevention of bed bugs
- Inspecting infested areas, plus surrounding living spaces
- Checking for bed bugs on luggage and clothes when returning home from a trip
- Looking for bed bugs or signs of infestation on secondhand items before bringing the items home and correctly identifying and reporting the pest
- Keeping records – including dates when and locations where pests are found
- Cleaning all items within a bed bug infested living area
- Reducing clutter where bed bugs can hide
- Eliminating bed bug habitats
- Physically removing bed bugs through cleaning and vacuuming
- Using pesticides carefully according to the label directions
- Following up inspections and possible treatments

In addition or as part of an IPM, PHAs are strongly encouraged to provide training for staff to identify bed bugs, and to perform ongoing prevention actions as outlined in the IPM. When a community is at high risk for bed bugs (for example, if the community has experienced prior infestations), periodic building inspections are recommended. Staff should also actively engage residents in efforts to prevent bed bugs. Education and involvement of project residents is a critical component of IPM for bed bugs. Bed bugs may often go undetected and unreported, because they are active at night, and tenants may not be aware of their presence. PHAs may wish to hold workshops for tenants to learn to identify bed bugs, to create unfriendly environments for pests, and to report suspicions of bed bugs as soon as possible. Finally, PHAs are encouraged to provide information on bed bugs and pest prevention during their orientations for new tenants and staff, and post signs and handouts.

For more detail on IPM, please see the online guide at <http://www.stoppests.org>

Another great resource is the HUD funded bed bug control and prevention video. Click here to view the video:
www.hud.gov/offices/pih/programs/ph/phecc/pestmang.cfm.

More information on bed bug prevention may be found by accessing the below websites.

- **Healthy Homes Training:** *What's Working for Bed Bug Control in Multifamily Housing: Reconciling best practices with research and the realities of implementation.*
http://www.healthyhometraining.org/ipm/NCHH_Bed_Bug_Control_2-12-10.pdf
- **National Pest Management Association Bed Bug Hub:**
<http://pestworld.org/pest-world-blog/the-bed-bug-hub-one-stop-shop-for-bed-bug-information>
- **Environmental Protection Agency:**
<http://www.epa.gov/pesticides/bedbugs/>
- **National Pest Management Association Best Practices Website:**
<http://www.bedbugbmps.org>

Resident's Corner | Don't Throw Money Out of the Window

There are many simple and affordable ways to reduce your energy bill. One of those is by adding energy efficient window treatments. Window treatments are coverings and decorative items such as blinds, drapes, and shades that are designed to be attached to a window. Residents can choose decorative options that will also minimize energy costs and help keep units warm in the winter and cool in the summer.

Window shades can be one of the simplest and most effective window treatments for saving energy. Lowering shades on the sunlit side of your unit in the summer, and raising shades on the south side of your unit in the winter during the daytime hours (and closing them at night) is an effective way of reducing energy costs.

Decorative drapes are another option for reducing energy costs although their ability to impact heat loss and gain depends on fabric type and color. Medium-colored drapes with white-plastic backings can reduce heat gain by 33%. Heat loss can also be managed with most conventional draperies resulting in reductions up to 10%. As with shades, during summer days, you should close draperies on windows receiving direct sunlight to most effectively prevent heat gain. In the winter, closing curtains at night and on windows that do not receive sunlight during the day is the most effective way to prevent heat loss.

There are additional steps you can take to reduce heat loss by up to 25%. These include hanging draperies as close to windows as possible and allowing them to fall onto the windowsill or floor. It is also beneficial to install a cornice at the top of a drapery or place the drapery against the ceiling and then seal the drapery at both sides and overlap it in the center. Finally, you can use Velcro or magnetic tape to attach drapes to the wall at the sides and bottom.



Example of energy saving window treatments (cornice and draperies) that could reduce heat loss by up to 25%

To learn more about energy-efficient window treatments, visit:
<http://www.lower-my-energybill.com/energy-saving-window-treatments.html>

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