

Public Housing Energy Conservation Clearinghouse News

May 2004

This monthly e-mail update is brought to you by HUD's Public Housing Energy Conservation Clearinghouse (PHECC). It features news and resources to help public housing authorities manage energy and water costs. To see past issues of this newsletter, and to access more information and tools for public housing authorities, visit the Public Housing Energy Conservation Clearinghouse website at http://www.hud.gov/offices/pih/programs/ph/phecc/.

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Events:

- Houses That Work. May 18. Learn how to achieve improved performance and as much as 50 percent greater energy efficiency with minimal cost increase!
- Energy Performance Contracting for Public Housing Authorities. June 18. Features a role-playing and a case study approach to provide you with tools to implement an Energy Performance Contract in your own PHA!
- Multifamily Building Operator Certification Training. Date and location to be determined. *Prepares building operators for certification, emphasizing health, safety, comfort, and resource efficiency!*

Success Stories:

- Minneapolis Housing Authority, Minneapolis, Minnesota—An energy efficiency retrofit is saving some \$3 million for MHA with no upfront costs!
- North Albany Homes, Albany, New York—A new housing development was designed to be affordable in part through energy efficiency measures.
- Condominium Energy Efficiency Project, Toronto—A package of energy efficiency measures is saving nearly \$40,000 each year, with only a four-year payback!

Tip of the Month: Use Window Shades in Common Areas to Control Heat Gain and Loss

Websites Worth a Click



Tight Budget? Try Energy Performance Contracting!

Your budget is already too tight. Does that mean that improving the energy efficiency of your properties is pie in the sky? Not necessarily. Energy performance contracting could be the answer you've been searching for! Energy performance contracting is useful way to fund energy efficiency improvements without upfront capital. So how does it work? In simple terms, the process goes like this: A housing authority enters into an agreement with an energy

services company (ESCO), which conducts an energy audit of a building and then makes recommendations for improvements that will reduce energy costs. The ESCO generally arranges funding and installs the measures. The cost of the project is then repaid with the energy cost savings over the length of the contract, typically 10 to 12 years. And, the ESCO assumes responsibility for the project, including guaranteeing a certain level of energy savings, while the housing authority reaps many

benefits including lower energy costs and more comfortable units for residents! What's not to love? Want to learn more? See "Energy Performance Contracting" at http://www.energyusernews.com/CDA/Article_Information/
Fundamentals_Item/0,2637,8260,00.html or HUD's Energy Performance Contracting for Public and Indian Housing publication at http://www.huduser.org/publications/hsgfin/energy.html.

Can Your Utility Help With Energy Improvements? Find Out!

Many electric and natural gas customers don't realize that their utilities offer home energy audits, rebates for energy-efficient appliances, zero- or low-interest loans to upgrade insulation or replace old heating and cooling equipment, and other products and programs. But the National Energy Affordability and Accessibility Program (NEAAP) gives Internet users free and easy access to an extensive database of residential energy efficiency

programs offered by public and private utilities, rural electric cooperatives, and state agencies in all 50 states and the District of Columbia. Database users can search for residential energy efficiency programs by state, utility name, utility type, program type, or keyword.

Are there programs in your state that your public housing authority might tap to make an energy project possible? Find out at http://neaap.ncat.org/db/!



Technology Update: The Little Light That Could

Did you know that replacing just five incandescent lights with compact fluorescents (CFLs) could save \$60 in energy costs each year? And imagine how much your housing authority alone could save if you made this change in all of your units! Plus, CFLs last as much as 10 times longer than incandescents, reducing costs associated with more frequent replacement. Advances in technology over the past few years have brought

great improvements to CFLs in terms of light quality and appearance, and CFLs now come in a variety of shapes and sizes. And, we can't overlook the environmental benefits either: a single CFL prevents enough pollution to equal removing one million cars from the road, according to EPA. While CFLs have high costs relative to incandescents, their energy savings allows for a quick payback period. And, many utilities offer rebates, reducing your costs even further.

Ready to get started saving? Get more information, including a list of Energy Star-certified CFLs, on Energy Star's **Lighting** webpage at http://www.energystar.gov/index.cfm?c=cfls.pr_cfls. Also see ACEEE's "Compact Fluorscent Lighting" at http://www.aceee.org/press/op-eds/op-ed1.htm.

Clearing the Air: Are You Managing Pollution INSIDE Your Units?

We all know that pollution in the air outside our homes is unhealthy. But what about indoors? Experts say that in many cases, indoor air pollution is worse than outside! Are you doing enough to protect your tenants? Indoor air quality can be affected by things such as inadequate ventilation, mold, combustion products such as stoves and furnaces fueled by natural gas or propane, wood stoves and fireplaces, cleaning products, paint, and more. However, there are steps you and your tenants can take to improve the indoor air quality of your units. For example, you can minimize mold by ensuring that kitchens and bathrooms have adequate ventilation. Make sure your heating equipment is vented to the outdoors, and have it inspected every year to make sure it's operating properly. If you have gas ranges, install a hood fan that vents directly outside. And some measures can also save energy. For example, with range hoods and ventilation fans, tenants won't have to open a window while cooking with a gas stove or to remove moisture from kitchens and baths. Find out what else you can do by visiting EPA's Indoor Air Quality Information Clearinghouse at http://www.epa.gov/iaq/iaqinfo.html and the American Lung Association website at http://www.alaw.org/air_quality/indoor_air_quality/.

Price Watch: High Energy Prices Here to Stay, Says Greenspan

Many American consumers have held hope that winter's energy prices would decrease with spring's warmer weather. That's likely not the case, however, according to Federal Reserve Chairman Alan Greenspan. In a recent speech on energy security, Greenspan said the "dramatic rise" in oil and natural gas prices over the past several years suggests that high prices will become the norm. Greenspan also said the United States needs to increase global

trade in natural gas so that further price spikes don't harm the world's largest economy. Read more about Greenspan's comments at http://www.iht.com/articles/517294.html.



EVENTS

Houses That Work

May 18, 2004

Fresno, California

Offered by the Energy & Environmental Building Association (EEBA), this event will focus on the house as a system and the reengineering process for improved building performance. Learn from the thousands of homes successfully built using Building

America practices and view case studies that demonstrate dramatically improved performance and energy efficiency with minimal increase in cost. Regional examples and case studies will provide you with concepts and applications that you can immediately apply to your business. Learn more at http://www.eeba.org/events/buildingamerica/default.htm.

Energy Performance Contracting for Public Housing Authorities

June 14-18, 2004

Chicago, Illinois

Looking for ways to reduce your utility costs without investing a bundle in costs upfront? This workshop could be just the ticket! Learn how to use Energy Performance Contracting to get energy conservation measures installed and then use the resulting energy savings for pay for the capital improvements, and even for other needs within your housing authority. Find out more at http://www.hud.gov/local/il/working/EPCagenda04.pdf!

Multifamily Building Operator Certification Training

Date and location to be determined

The New York State Energy Research and Development Authority (NYSERDA) is developing a three- to four-day training program that will prepare multifamily building operators for certification by the Building Performance Institute (BPI). These courses and the certification will ensure a level of knowledge that should allow building operators to prevent or quickly respond to an array of problems that crop up in multifamily buildings every day. The training covers building science, HVAC, DHW, electricity/water usage, health and safety, and record keeping. All classes will emphasize health and safety, comfort, durability, and resource efficiency. In order to meet the individual needs of building owners, training sessions will be held onsite and will feature hands-on training with the equipment used in the building. Building operators completing the course and becoming certified will be eligible for rebates from NYSERDA for a portion of the program cost. For more information, contact Andy Padian at padian@swinter.com or 212-564-5800.



SUCCESS STORIES

Minneapolis Housing Authority Energy Efficiency Retrofit

Minneapolis, Minnesota

In these days of increasingly tight budgets, getting something for nothing probably sounds pretty good to most housing authorities. But this is exactly what the Minneapolis Housing Authority says it got when it undertook an energy performance contract to improve the efficiency of its buildings. Taking advantage of HUD's Energy Performance Contracting (EPC) program, MHA was able to rehabilitate its water, sewer, heating, and cooling systems in 40 high-rise developments, without any upfront costs. Working with an energy service company and a local contractor, MHA successfully rehabilitated some 5,000 housing units over 18 months. Energy savings resulting from the improvements totaled more than \$1 million, and those savings paid back the bond used to finance the project. MHA anticipates savings will reach \$3 million over 10 years, the length of the Energy Performance Contract. Interested in learning more? Visit http://www.huduser.org/periodicals/fieldworks/0600/fworks3.html!

North Albany Homes

Albany, New York

Designing energy efficiency features into new housing is an effective way to keep costs low for residents over time. And that's exactly what the new North Albany Homes development accomplishes. After the existing public housing was demolished from the site, the new development was constructed with energy efficiency features, green building materials, and other amenities such as porches and gardens, incorporated into the design. The result is 132 units that boast affordability and comfort for residents. The project was funded through a creative and successful partnership that included local, state, federal, and private resources. The property is managed by the Albany Housing Authority. For more information on this project, see http://www.dhcr.state.ny.us/general/press/press33.htm.

Condominium Energy Efficiency Project

Toronto, Canada

When the Board of Directors of a 10-story condominium set out to improve the energy efficiency of its hot tub heaters, they instead opted for a larger package of energy efficiency features that reduce the property's energy costs by \$38,423 each year, with a fast payback period of just over four years. Installed measures included new garage lighting, a building automation system, fresh air supply fans, and a new Phalen gas-fired water heater to replace the existing electric water heater, and insuite fan coils. The project was funded through a "capital replacement reserve fund," which was replenished through a portion of the energy savings. Learn more about this project at http://www.cmhc.ca/en/imquaf/himu/bebufa_054.cfm.



TIP OF THE MONTH Use Window Shades in Common Areas to Control Heat Gain and Loss

Solar radiation's heat gain through windows often accounts for 50 percent of air-conditioning load in the summertime. However, using window shades to control that heat gain can go a long way toward reducing energy costs during both winter and summer. In the winter, blinds or curtains in common areas such as community rooms and lobbies should be closed at night to keep warm air inside, and

opened on sunny days to let the sun's rays help heat the room. In the summer, they should be closed during the day to minimize heat gain.

There are several types of window shades, including exterior shading devices such as awnings, interior tinted film, vertical blinds, Venetian blinds, and roller shades. Potential energy savings will depend on a number of factors, including the type of shades you select, how effectively they are operated, your climate, and more. For more information, see PHECC's **Savings Strategy B3. Install Window Sun Shades** at http://www.hud.gov/offices/pih/programs/ph/phecc/strat_B3.cfm.

Also see **Using the Sun: Using Windows Wisely** at http://hes.lbl.gov/hes/makingithappen/no_regrets/solarwindows. html and **Cooling Your Home Naturally** at http://www.eere.energy.gov/erec/factsheets/coolhome.html.



Sustainable Portland

The City of Portland's Energy Division is committed to helping consumers make wise energy choices. Visit its website at http://www.sustainableportland.org/energy_menu_Mul.html to learn more about how you can conserve energy in homes and businesses!

Better Bricks

Use this website as a tool for information energy management in buildings, including utility energy conservation programs. Visit http://www.betterbricks.com/.

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The Public Housing Energy Conservation Clearinghouse is managed by the nonprofit National Center for Appropriate Technology (NCAT) for HUD, Office of Public and Indian Housing.

Comments? Questions? Email the newsletter editor at cathys@phaenergy.org.