October 2006

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/.

To contact the Public Housing Energy Conservation Clearinghouse email pheccinfo@drintl.com or call 1-800-955-2232.

News:

- October is Energy Awareness Month
- Benchmarking Tool to Combat 7:1 Energy Efficiency Ratio

Events:

- Affordable Housing Symposium. October 13-14, 2006. Atlanta, GA.

Success Stories:

- El Paso Empowers Residents to Take Charge of Energy Costs

Energy Watch:

- High Winter Temperatures Bring Low Natural Gas Prices

Technology Tip:

- Window Films Stop Leaks, Cut Costs

Websites Worth a Click:

- Home Energy Saver
- ENERGY STAR Bulk Purchasing
October is Energy Awareness Month

Energy Awareness Month was first observed in 1991 to ensure that safe, reliable, and affordable sources of energy remain available to the nation. This year, the Partnership for Home Energy Efficiency, comprised of the Department of Housing and Urban Development (HUD), the Department of Energy (DOE) and the Environmental Protection Agency (EPA), is sponsoring Energy Awareness Month. The Partnership’s message: Housing providers and homeowners who make smart energy choices—

- Save money.
- Conserve natural resources.
- Protect the environment by reducing pollution and greenhouse gas emissions.
- Contribute to national security by increasing energy independence.

Public housing agencies (PHAs) can help make energy efficiency practices a habit through resident education and participation in national efficiency campaigns such as the ENERGY STAR Change a Light, Change the World Campaign, a national call to action to encourage individuals to choose energy-efficient lighting.

Promote energy efficiency among residents this October using these Web sites:

- PHECC’s Winter Energy Saving Tips for Residents, available in English and Spanish
- DOE’s Energy Efficiency Guide for consumers
- The Federal Energy Management Program’s Home Energy Checklist
- Consumer Reports’ Greener Choices Guide

Or begin a big change—initiate an Energy Performance Contract to save energy and water with no cost to the PHA.

**Benchmarking Tool to Combat 7:1 Energy Efficiency Ratio**
Similar multifamily buildings can have very different fuel usage patterns, making it difficult for PHAs to develop effective energy upgrade strategies.

To solve this problem, HUD’s Office of Public and Indian Housing is developing a benchmarking tool to help PHAs identify how their buildings’ energy use compares with similar residences. Studies of buildings over the last 20 years show that the ratio between the highest and lowest energy user is approximately 7:1. In other words, poorly performing buildings use 7 times more energy than the most efficient comparable buildings. The benchmarking tool will help identify the most inefficient buildings where upgrades are the best investment strategy.

The new tool will use PHA-specific statistics to generate a benchmark against which a building’s utility usage intensity is compared. The user interface for this interactive tool will require simple information such as the building’s zip code, type, floor area and yearly utility usage. The Web-based tool should be available for trial runs by late 2007.

Did You Know?

On average, buildings waste 40 percent of their energy through a combination of construction defects and management choices. Follow these recommendations to position your buildings in the lower end of the ratio:

- **Review your utility rate structure and identify your load profile.**
  Chart monthly and hourly energy use to identify energy spikes that may raise the overall cost of energy due to peak demand charges.
- **Develop a written energy management plan.**
  Include energy forecasting and procurement options, facility audits, financial analysis, integrated building upgrades, equipment purchasing, new construction, and preventive maintenance.
- **Find out if your HVAC system is the right size.**
  Capitalize on the heating, cooling, and electrical load reductions you have already achieved by reevaluating heating and cooling loads and HVAC systems for possible downsizing.

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**EVENTS**

**EEBA Excellence in Building Conference and Expo**

October 10-12, 2006  
**Norfolk, VA**

The Energy and Environmental Building Association’s (EEBA) annual Excellence in Building Conference and Expo promotes education and technologies for building houses that conserve energy. Attendees will learn from experts who have successfully built efficient houses in every climate zone and every price range. Download the conference agenda and register online.

**Affordable Housing Symposium**

October 13-14, 2006  
**Atlanta, GA**

The Local Initiatives Support Corporation (LISC), FannieMae, The National Equity Fund, Inc, and National Association of Housing and Redevelopment Officials (NAHRO) are sponsoring the third annual Affordable Housing Symposium. Panelists will present case studies and profile cutting-edge techniques...
and capital resources to develop and revitalize housing. View the agenda and register online.

SUCCESS STORIES

El Paso Empowers Residents to Take Charge of Energy Costs

The Housing Authority of the City of El Paso, Texas (HACEP) has experienced first-hand that resident education is a remarkably effective energy conservation strategy. When electricity bills soared at the 240-unit Kennedy Brother Memorial Apartments, HACEP tackled the problem with a successful series of energy conservation training seminars.

Residents changed the way they used electricity and saved a bundle.
Photo: hcep.org

In 1998, residents of the Kennedy site began complaining about high electricity bills. The general contractor for the development conducted several random inspections, which revealed residents' lack of operational knowledge of the air conditioning units; improper closure of doors and windows; inadequate cleaning and/or replacement of air conditioning filters; and incorrect preventive maintenance.

The housing authority responded quickly by arranging energy conservation seminars for residents. In June of 1998, the El Paso Electric Company Technical Resources Division trained residents on the correct use of their air conditioning units.

The Electric Company and HACEP have continued to offer follow-up training as an important part of the site's mandatory orientation sessions. Over the first 2 years of the program, Kennedy residents' electric bills gradually diminished to tenant-acceptable levels.

Click here for more information and examples of other energy-saving strategies.

ENERGY WATCH

High Winter Temperatures Bring Low Natural Gas Prices
Thank last year’s mild weather for this season’s low natural gas prices. The warmer than normal weather last winter left natural gas inventories at high levels at the start of the non-heating season, which runs from April through October.

Natural gas is commonly held in inventory in three types of underground facilities that are present across the lower-48 States:

- Depleted reservoirs in oil and/or natural gas fields,
- Aquifers, and
- Salt cavern formations.

As of September 8, 2006, natural gas inventories exceeded recent historical levels by a wide margin. A large stockpile of domestic reserves helps reduce the cost of natural gas to consumers, and reserves are expected to start this winter’s heating season at their highest levels since 1990. By January 2007, DOE expects spot prices to average more than $3.00 per million cubic feet less than what they were in December of 2005.

### TECHNOLOGY TIP

**Window Films Stop Leaks, Cut Costs**

Single-pane, cracked or leaky windows are a huge drain on a home’s energy budget, but the cost of replacing windows can be prohibitive. One low-cost alternative is window film, which can improve both the energy efficiency and comfort of residents. Films range from $3 to $12 per square foot.

Apply the micro-thin film to the inside of glass windows and doors to cut up to 76 percent of solar heat gain through the glass, 9 to 93 percent of the incoming light, and eliminate up to 99 percent of harmful ultraviolet radiation to protect fabrics and finishes.

If you decide to install window films in your units, be sure to consult a qualified dealer. Some manufacturers offer training seminars. (Avoid ammonia-based window cleaners on coated glass and make sure the film is recommended for your specific window type; application to an insulated window unit may increase stress on the glass and seal.) Window films will keep residences cooler in the summer and can also increase the ability of the window to transmit heat through conductance, helping to reduce winter heating costs. However, a large reduction in incoming light may also require

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Source: Energy Information Administration
September 2006
increased lighting and heating in the winter months.

**WEBSITES WORTH A CLICK**

**Home Energy Saver**

The [Home Energy Saver](#) computes a home's energy use based on methods developed at Lawrence Berkeley National Laboratory. Users can estimate how much energy and money they can save, and how many emissions they can reduce, by implementing energy-efficiency improvements. The calculation includes all end uses (heating, cooling, major appliances, lighting, and miscellaneous).

**ENERGY STAR’s Bulk Purchasing**

Buy in quantity and save! The ENERGY STAR Online [Bulk Purchasing Tool](#) links institutional purchasers to ENERGY STAR partners offering bulk purchasing arrangements. PHAs can quickly obtain competitive bids for ENERGY STAR qualified refrigerators, dishwashers, clothes washers, room air conditioners, dehumidifiers, light bulbs, and fixtures. Visit the Web site to start saving energy today.

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