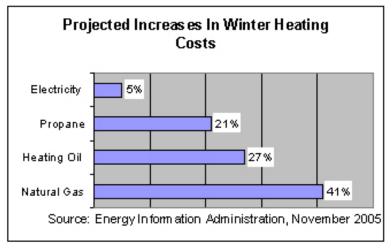
#### November 2005

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 e-newsletter, and to access more information and tools for public housing authorities, visit the Public Housing Energy Conservation Clearinghouse Website at <a href="http://www.hud.gov/offices/pih/">http://www.hud.gov/offices/pih/</a> programs/ph/phecc/.



Nationwide, colder temperatures and higher costs will cause fuel bills to rise significantly this winter. The average increases over last winter are indicated in the above chart.

#### News:

- Understanding the International Energy Conservation Code Gets Easier
- Survey Finds High Energy Costs Lead to Unsafe Actions
- Is Combined Heat and Power Right for Your Multifamily Housing?
- Traditional Construction Techniques Offer Energy Efficiency Opportunities in the Southwest

#### **Events:**

- A Look Into the Future: Green Community Development. November 16 and December 7, 2005. Learn more about designing green buildings by participating in these free Webcasts.
- 2006 ACI Home Performance Conference. May 22-26, 2006. *Mark your calendar for ACI's annual conference on affordable housing.*

#### **Success Stories:**

City of Raleigh Housing Authority Designs HOPE VI Project to Earn the ENERGY STAR®

# **Technology Tip:**

HVAC Controls Balance Temperatures, Save Energy

#### Websites Worth a Click:

Energy-Efficient Operation and Maintenance Made Easy

## **NEWS**

## **Understanding the International Energy Conservation Code Gets Easier**

The Responsible Energy Codes Alliance has developed state-specific guides for sifting through the compliance requirements of the International Energy Conservation Code (IECC). If your state or local jurisdiction has adopted the IECC or you are building a HOPE VI project— b) 4% for which the new Energy Bill requires IECC compliance— c) 8% these short guides may prove particularly helpful. The publications list building envelope requirements for windows, insulation, and foundation type by county.

Find the guides at http://www.reca-codes.org/.

#### Survey Finds High Energy Costs Lead to **Unsafe Actions**

## Test Your "Green" Knowledge

Building green means preserving the quality of the environment while enhancing the profitability, productivity or usefulness of a property. How much do you think building green, affordable housing increases construction costs?

- a) 2%

- d) 16%

A new report, "The Costs and Benefits of Green Affordable Housing," reveals that green building techniques add only about 2% to the construction cost of affordable housing. They also yield significant savings from lower operating, maintenance, and replacement costs.

This September, the National Energy Assistance Directors' Association (NEADA) released its second annual survey of the effect of rising energy costs on low-income families. Among the study's findings:

- Seventy-three percent of the residents surveyed reported that they reduced expenses for household necessities because they did not have enough money to pay their energy bills.
- Twenty-four percent said they used their stove or oven to provide heat. This is not only highly inefficient, it can be very dangerous with gas appliances.
- Nineteen percent said they kept their home at a temperature they felt was unsafe or unhealthy.

View the <u>key findings</u> and <u>full report</u> [large PDF].

Heating expenses are forecast to be much higher this winter due to higher prices and colder temperatures. Arm residents with ways to reduce their energy bills with PHECC's new education materials for residents. The materials include a printable flyer with winter energy-saving tips in English or Spanish.

# Is Combined Heat and Power Right for Your Multifamily Housing?

HUD has developed two guides for multifamily building managers, owners and boards of directors interested in combined heat and power (CHP) systems (also known as cogeneration). For those new to CHP, Q & A on Combined Heat and Power for Multifamily Housing addresses questions ranging from "What is CHP?" to "What Federal programs support the use of CHP?" For the more

initiated, *Feasibility Screening for Combined Heat and Power in Multifamily Housing* explains resources used to determine the return on investment from installing CHP. <u>View these guides</u> (See "What's New").

The City of Danbury Housing Authority (DHA) installed a 60-kW package CHP system to provide electricity and hot water to an all-electric, seven-story, 100-unit multifamily building. The result was a 50%, or \$40,000, reduction in the building's annual energy costs. The DHA financed the installation with a <a href="HUD utility consumption reduction incentive">HUD utility consumption reduction incentive</a>. The system costs \$10,000 per year in maintenance contract fees. Learn more about the DHA project and the benefits of CHP.

## Traditional Construction Techniques Offer Energy Efficiency in the Southwest

Written for providers of low-income housing, *Southwest Housing Traditions* analyzes traditional construction materials and methods in the Southwest, and considers the lessons that can be applied today. Produced by HUD's Partnership for Advancing Technology in Housing (PATH) program, the report explains that traditional Southwestern construction designs and materials are generally cost-competitive, and resource- and energy-efficient.

<u>Download the report</u> for free. A print copy can also be <u>purchased from the Web</u> or by calling 1-800-245-2691.

#### EVENTS

## A Look Into the Future: Green Community Development

November 16, 2005

December 7, 2005

#### Online

Two upcoming Webcasts from Local Initiatives Support Corporation (LISC) discuss how to design, construct and manage green buildings. On November 16, *The Integrated Green Design Process - The Earlier the Better* will feature nine projects that were honored as exceptional in a green, affordable design awards program. Experts will discuss the design process and reasons to begin before calling an architect. On December 7, *The Nuts and Bolts of Green - Lessons Learned from the Ground Up* will feature strategies for integrating green techniques for affordable housing projects on a tight budget. Strategies will include working with architects, general contractors, subcontractors, local regulatory agencies, product vendors, and funding sources.

Both sessions are free of charge and take place at 2:00 pm ET. Learn more by visiting the <u>LISC</u> Website.

#### 2006 ACI Home Performance Conference

May 22-26, 2006

#### Austin, Texas

Formerly known as Affordable Comfort, the ACI Home Performance Conference is one of the largest conferences on energy efficiency practices that features affordable housing. The conference will include a 2-day trade show. Although conference registration is not yet available, you can beat the rush and book your hotel room.

## **SUCCESS STORIES**

# City of Raleigh Housing Authority Designs HOPE VI Project to Earn the ENERGY STAR®

The Housing Authority of the City of Raleigh is working with its partners Advanced Energy, North Carolina State Department of Energy, and Progress Energy, to design and construct a HOPE VI revitalization of Chavis Heights. The housing authority has requested an ENERGY STAR designation.

ENERGY STAR qualified new homes include improvements such as building envelope upgrades, high-performance windows, controlled air infiltration, upgraded heating and air conditioning systems, and tight duct systems. The homes achieve energy savings through a variety of established technologies and building practices. Learn more about the benefits of ENERGY STAR qualified homes.

More than 2,500 builders have constructed over 360,000 ENERGY STAR qualified new homes, locking in financial savings that exceed \$200 million annually.

— www.energystar.gov,

November 2005

The development will consist of senior housing (40 one-bedroom and 15 two-bedroom units), villas (40 one-bedroom units), and town homes/triplexes (46 two-bedroom town home units and 27 three-bedroom triplex units). Ninety-five of these units will have tankless water heaters. <u>Tankless water heaters</u> can cut water-heating bills by 10 to 20%.

"This will mean huge utility cost savings for our residents. It is my hope that other housing authorities look at what we are doing and say, 'we can do this too,' " says Gail Keeter, Director of Development at the housing authority.

To learn more about this project, contact Gail Keeter at 919-831-8300.

## **TECHNOLOGY TIP**

## **HVAC Controls Balance Temperatures, Save Energy**

Do some of your residents complain their apartments are too hot, while others complain they are too cold? Do residents open windows in the winter to keep their apartments from overheating? It is very common in older multifamily buildings to greatly overheat some apartments in order to maintain comfortable conditions in others, but this practice wastes a lot of energy and money.

Proper <u>air sealing</u> and <u>insulation</u> are very important. Modern controls are also available to further improve the operation and distribution of all types of heating and cooling systems. Controls range from <u>resident-controlled radiator valves</u> to <u>boiler controls</u> to computer-based control systems. The advice of a professional engineer is often the best course of action, particularly for larger buildings. <u>Learn more about HVAC controls and other ways to increase your HVAC efficiency</u>.

# **WEBSITES WORTH A CLICK**

# **Energy-Efficient Operation and Maintenance Made Easy**

Energy costs are expected to increase by as much as \$325 per household this winter. Energy-saving strategies are a must.

Often, PHAs can save 10 to 25% of the energy used in their developments by improving O&M practices

—at little or no cost. Good O&M practices can save a significant amount of energy with older systems; such practices help ensure satisfactory performance of new, efficient equipment as well.

PHECC's recently updated <u>Cost Reduction Toolbox</u> makes using energy-efficient O&M and energy conservation measures easier for PHAs. Instructions are included for a wide range of measures, including repairing water leaks, making lighting retrofits, and air sealing. A printable O&M checklist also helps you keep accurate records.

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