



# Eco Wise



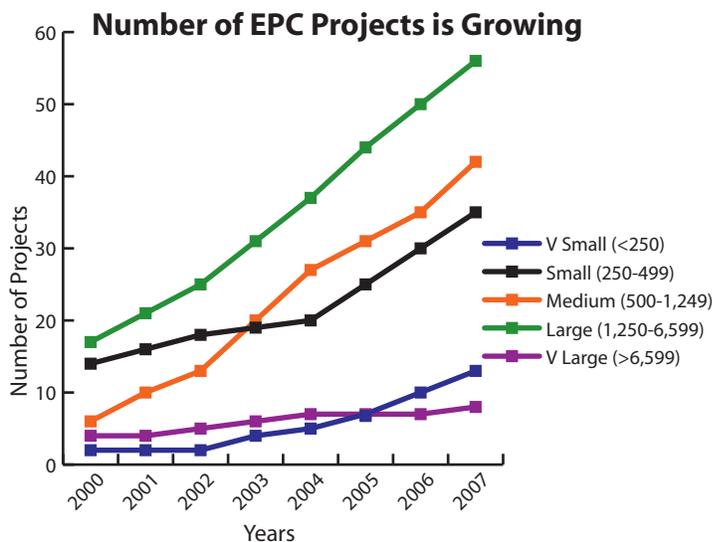
Your Environmental Resource

Volume 6, Issue 01 January 2008

## Importance of Energy Conservation Rises with Fuel Costs

The price of a barrel of crude oil jumped from approximately \$57 in 2005 to \$100 in November 2007 - an increase of over 75 percent in less than two years! After a short decline the price is back up and hovering around the \$90 mark. Throughout that period in January, natural gas has gone through major price fluctuations, sometimes raising month-to-month heating bills in some areas as much as 20 percent. Overall, the delivered price for a thousand cubic feet (mcf) of natural gas increased about 18% over the same two year period - from just over \$11.00 in January, 2005 to just over \$13.00 in December, 2007. The Department of Energy's (DOE's) Energy Information Agency (EIA) expects natural gas prices to increase another 5.5 percent through 2008. DOE forecasts that this upward trend in the price of both oil and natural gas will continue for the foreseeable future.

In FY 2007 Public Housing Agencies (PHAs) spent 23 percent of their budgets on utilities and thus should beware of these trends. Energy Performance Contracts (EPCs) offer funding that results in significant cost savings through energy- and water-efficiency improvements. Many PHAs have already recognized the value of increasing energy efficiency. Documented investment in EPCs has risen approximately 35 percent since 2006. Currently, PHAs have 154 EPCs underway and others in the planning stage. As of 2007, the documented contracts have leveraged \$471M in private capital to finance Energy Conservation Measures (ECMs) in those 154 EPCs, but there is still a lot of room for improvement.



HUD Region V currently has the most EPCs in repayment; 64,269 units for an annual savings of \$16,500,000. Other HUD Regions are somewhat less active. Region VIII has active EPCs covering only 500 units, despite the fact that the annual return on investment for those rehabs has been over 20 percent, probably due to the fact that many Region VIII PHAs are small, and Energy Service Companies (ESCOs) generally do not find smaller ESCOs attractive. ESCOs are beginning to "bundle" multiple PHAs under one EPC to improve the financial viability of the total contract. This will be discussed in more detail in future issues of this Newsletter. As fuel prices continue to rise, investment in improved energy performance in all regions should pay back faster than ever.

## This Issue

- **Energy Conservation Rises with the Price of Crude**
- **Energy Efficient Procurements Through FEMP**
- **Events and Training**
- **Regional Spotlight**
- **Resources**
- **Maintenance Corner**



We want to hear from you! We are accepting nominations for projects to be highlighted in the EcoWise success stories.

[Click here](#) to send us yours now

## Events and Training

[Energy Efficiency Building Operations Specialists Training](#)

January 31 - February 7  
Bronx, NY

[The 2008 International Builder's Show](#)

February 13-16  
Orlando, FL

[Washington International Renewable Energy Conference - WIREC 2008](#)

March 4 - 6  
Washington, DC

## Importance of Energy Conservation Rises with Fuel Costs Continued...

The New York City Housing Authority is leading the way in combining energy-efficient and clean energy technologies to reduce greenhouse gas emissions. NYCHA recently announced a partnership with HUD that will focus on replacing their aging hot water heaters with instantaneous hot water heaters and replacing incandescent light bulbs with energy-efficient Compact Fluorescent Lamps (CFLs). NYCHA's goal is to reduce energy consumption by 15 percent.

For more information on specific energy conservation measures in the PHA arena, check out the Regional Spotlight.

## Energy Efficient Procurements Through the Federal Energy Management Program

Spending more than \$10 billion dollars annually, federal agencies consume the greatest amount of energy using products in the U.S. Thanks to the Federal Energy Management Program (FEMP), the federal government took a bite out of its energy consumption, decreasing costs by 6.4% per square foot from 2003 to 2006. FEMP provides agencies with innovative tools and expanded energy efficient product options that reduce overall energy consumption.

Public Housing Agencies (PHAs) can benefit from specifying FEMP-designated products in their procurements that are recommended for residential equipment. Some PHAs, like the Atlanta Housing Authority featured in this month's Regional Spotlight, realized savings of over \$200,000 by installing replacement boilers and chillers and other lighting and water conservation upgrades. FEMP offers software tools that can help PHAs calculate the cost savings of FEMP equipment and appliances. See the Resource section for a listing of FEMP products, procurement options and the Energy Cost calculator to compute savings for your PHA.

Section 152 of the Energy Act of 2005 requires that "in purchasing appliances, a PHA shall purchase energy-efficient appliances that are ENERGY STAR products or FEMP-designated...unless the purchase of energy-efficient appliances is not cost effective". PHAs spent 23 percent of their budgets on utilities. If PHAs could reduce their amount spent on utilities by as little as two percent, millions of dollars in savings could be achieved. The user-friendly calculator provided by FEMP allows users to estimate the energy cost savings of buying a more efficient product. For example, if a PHA replaced 100 conventional refrigerators with 100 energy efficient refrigerators, this could produce a savings of \$13,968 annually.

### Tips for Maintenance

FEMP also offers on-site training for buying energy-efficient products. For more information on the training course, you can contact the DOE-EERE Information Center at 1-877-337-3463.

Public Housing Agencies can benefit from FEMP designated products that are recommended for residential equipment

To unsubscribe from this mailing list, email [phccinfo@nelrod.com](mailto:phccinfo@nelrod.com) with "unsubscribe phcc" in the body of the message. Comments? Questions? Email the newsletter editor or call 1-800-955-2232.

This monthly e-mail update is brought to you by HUD's Public Housing Energy Conservation Clearinghouse (PHECC) featuring news and resources to help agencies manage energy and water costs.

## Regional Spotlight

### [New York City Housing Authority](#)

The City of New York and HUD are partnering to provide access to energy-efficient and clean-energy technologies at reduced prices for NYCHA. The plan for NYCHA includes building retrofits as well as boiler and heating system modernizations.

### [Atlanta Housing Authority](#)

The Atlanta Housing Authority, in partnership with Water & Energy Savings Corporation, created over \$1 million dollars of savings for fiscal year 2006 by installing new energy-efficient equipment.

### [Niagara Falls Housing Authority](#)

The Niagara Falls HA has implemented a 12-year energy efficiency and water-saving program at three residential communities that is expected to yield annual savings of approximately \$94,000.

## Resources

### [FEMP Designated Products](#)

Courtesy of DOE

### [FEMP Cost Calculators](#)

Calculate your PHA's potential cost savings with the FEMP calculator.

### [Energy Star's Quantity Quotes](#)

This website links institutional and corporate purchasers to ENERGY STAR partners offering bulk procurement arrangements.

### [Cost Reduction Tools](#)

Courtesy of HUD

## Maintenance Corner:

### Operations and Maintenance lead the way in achieving energy savings

Maximizing the operational efficiencies of a company's mechanical systems through Operations and Maintenance (O&M) is an easy and cost-effective way to reduce energy costs by 10 to 25%. O&M that reduces energy consumption can also increase resident comfort through improved temperature and lighting control, ventilation, and indoor air quality.

To create an effective O&M program:

- Ensure that up-to-date operational procedures and manuals are available.
- Obtain current documentation on all building systems, including system drawings.
- Implement preventive maintenance programs complete with maintenance schedules and records of work performed on all building equipment and systems.
- Create a well-trained site management and maintenance team by offering professional development and training opportunities for employees.
- Implement a monitoring program that tracks and documents building systems' performance to identify and diagnose potential problems and track the effectiveness of the O&M program. Include cost and performance tracking in this analysis.

Email us with your Maintenance Corner questions at [phccinfo@nelrod.com](mailto:phccinfo@nelrod.com)