

School Energy Achievement Program



Energy Update

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PPL Electric Utilities unveils School Energy Achievement Program for K-12 public schools

PPL Electric Utilities is offering a free energy benchmarking service to all public schools within its service territory.

The company's School Energy Achievement Program can help you see how your schools' energy use compares with that of similar schools. It can help you to identify areas where improvements may be needed and to better focus your resources.

To participate and receive an energy benchmarking report for your facility, fill out a Building Data Request form and mail it to the address shown on the form. This form was mailed to your school in May. It can also be accessed online at www.pplelectric.com/schools.

With the energy prices rising, there has never been a better time to think about ways you can save energy and control costs. To learn more, call 1-866-334-0775.



Utility fuel costs in Pennsylvania

Natural Gas: \$1.23/Therm *

Electricity: \$0.09/kWh *

* Average cost for a school in PPL Electric Utilities territory.
For actual cost, please refer to your bill.

Benchmarking at a glance



Energy benchmarking provides schools with a tool for identifying and optimizing future capital improvement projects.

Benchmarking is a basic energy analysis method that conveniently provides participants basic yet constructive results and guidance in managing a facility's energy usage.

Requirements to benchmark:

- One full year of monthly heating bills (gas, fuel oil and any other heating fuels used in your building).
- A completed Building Data Request form for each building. The form is available at www.pplelectric.com/schools.
- Your electric data will be included automatically.

The process:

- Utility data is summarized for each facility and normalized so that weather, building size, and other variables do not affect the results.
- Each school is compared with a pool of local schools and shown its ranking within seven individual categories.
- Schools are also compared with other schools nationally by using ENERGY STAR® Portfolio Manager to generate a score from 1 to 100 for each.

The benefits:

- Provides guidance and justification for focusing district resources on specific buildings and systems.
- Sets a baseline performance so that the effect of changes and improvements can be measured in the future.
- Aids in capital planning and budgeting.

DEP announcements

The Governor's Green Government Council (GGGC) High Performance Green School Planning Grant program helps public pre-K-12 schools, area vocational schools and career and technology centers cover costs directly associated with achieving a Leadership in Energy and Environmental Design (LEED) for Schools certification at the Silver level or above for new construction projects, additions and renovations.

For the 2009-10 fiscal year, the GGGC is looking to expand this program to include certification in LEED for Existing Buildings: Operations and Maintenance to better align with the state Department of Environmental Protection's commitment to performance-based benchmarking and the Energy Star Portfolio Manager program.

See www.depweb.state.pa.us.

Energy-saving tip for evaluating electric use

While benchmarking is a great way to evaluate your school's energy performance, it is not detailed enough to tell you precisely where that energy is going. For this you need to dig a little deeper.

Look at the types and number of devices or appliances that are present in your buildings and note their impact on your electric bill. Here are some examples:

- Computers that run 24 hours per day can cost almost \$40 per year to operate, whereas computers that are shut down or hibernating overnight can cost less than \$20 per year. For a school with 200 computers, this would represent a savings opportunity of around \$4,000 per year just by shutting computers down at night.
- A single refrigerated vending machine running 24 hours per day can cost over \$300 per year to run. A simple vending machine miser can turn off or reduce the refrigeration during off-hours, nearly cutting these costs in half. For a school with five vending machines, that could amount to almost \$700 in savings per year.
- Miniature refrigerators can cost over \$25 per year to run. This may not seem like a lot, but if each room in an 80 classroom school has one; that means over \$2,000 on your energy budget.



A watt meter is used to measure the electrical demand of appliances. This simple tool can be used to measure the effect of an appliance on a school's electric bill.

For more help, use our Energy Cost Calculator at www.pplelectric.com/e-power/school+benchmarking or call 1-866-334-0775 for more detailed assistance.



The EPA's free EZ GPO software puts computers to sleep during periods of inactivity, potentially saving over \$20 per computer annually.

Computer power management

Information technology research firm 1E reports that computers left on overnight cost American businesses \$2.8 billion every year. The problem is not limited to businesses, as school computers are often left on overnight or sit idle, drawing power and costing school districts significant amounts of money.

While 70 percent of monitors use their power management program, only 5 percent of computers have been set to use the feature. The Environmental Protection Agency has developed a free tool, EZ GPO, that puts computers to sleep after a set period of inactivity, generating significant savings.

The North Thurston Public School District in Washington saves \$45,000 a year simply by using the EPA's software. EZ GPO can be found at www.energystar.gov/powermanagement.

Energy-achieving district

Blue Mountain School District

Orwigsburg



Blue Mountain School District, made up of five schools in PPL Electric Utilities service territory, has emerged as a leader in energy efficiency and sustainability over the past few years.

The district instituted an energy management program in 2005 that focused on making everyone – district staff, teachers and even students – accountable for their energy consumption.

Through a partnership with Energy Education Inc., the Blue Mountain administrators adopted an Energy Management Conservation Policy and formed a set of guidelines for energy conservation and building management for the district. With total enrollment of about 3,000 students, the district is actively promoting the benefits of responsible energy use and the results are showing.

The district's Energy Manager and maintenance staff routinely record their monthly energy use and cost, using the EPA's Portfolio Manager benchmarking tool to obtain a Building Rating for each school.

As a result, in 2008 the district was honored by EPA's ENERGY STAR® Program with a 30 percent Improvement Leader Award. In addition to this recognition, Blue Mountain Elementary West, Blue Mountain Elementary-Cressona, Blue Mountain High School and Blue Mountain Middle School all received the prestigious ENERGY STAR® Building Label for the 2008 calendar year.

From May 2005 to April 2009, the school district eliminated the emission of 5,494 tons of carbon dioxide and amassed total energy cost savings of \$1,113,921.

Blue Mountain's disciplined approach to energy management and keeping everyone aware of their effect on the schools' environment has had a significant impact on the entire community and garnered much deserved national appreciation.

ENERGY STAR® Portfolio Manager

The U.S. Environmental Protection Agency's Portfolio Manager Tool ranks the energy use of schools nationwide. Using site-specific information — heating and electric bills, number of computers, etc. — it generates a score of 1 to 100 for individual schools.

This ranking is the nationwide percentile in which the school falls. The higher the ranking, the better the school's energy performance is relative to other schools.

- Schools ranked 75 or higher are eligible for the prestigious Energy Star® Building Label shown below. This is a bronze plaque that then can be displayed at the school.
- Districts that have an average score above 75, or which show improvements of 10 percent or greater, are eligible for Energy Star® Leader awards and have their story featured on the Energy Star Web site.

By participating in the School Energy Achievement Program, your school is automatically evaluated for award eligibility using Portfolio Manager.



The ENERGY STAR® Building Plaque, that is awarded to schools earning a Building Score of 75 or greater.