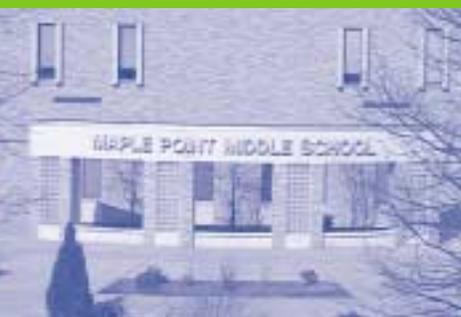


Rebuild America EnergySmart Schools Success Stories highlight schools and school districts that are making smart choices about energy, reducing energy and raising awareness of energy issues.

- New Building Design
- Existing Building Improvement
- Operation and Maintenance
- Renewable Energy Technologies
- Financing Building Improvements
- Energy Education



Neshaminy School District

Partnering with Rebuild America to Save More Energy

The Neshaminy School District, located in Pennsylvania's Bucks County, serves students from six boroughs and townships. The county has a rich history - once home to the Lenape Indians and part of William Penn's colony - and a rural character defined by small, residential communities. As the region transitions to the 21st century, the area is balancing its rural character with advances in technology and increased energy requirements. The Neshaminy School District is working to increase energy efficiency throughout its school buildings to reduce energy consumption. From replacing inefficient lighting to working with Rebuild America Business Partners to upgrade equipment, this school district is saving energy dollars.

The Challenge

Before joining Rebuild America, the Neshaminy School District had been actively implementing energy-efficiency measures in its 14 elementary, middle and high schools. However, as more equipment was added to the schools over the past decade - such as computers, televisions and air conditioning - the school district faced higher electric bills. Several schools were also experiencing problems with computer hardware and electric clock systems caused by poor power quality and harmonics distortion from transformers that were over 35 years old.

The Solution

To offset the increase in electricity consumption, the school district implemented a lighting retrofit project. T-12 fluorescent lighting fixtures and incandescent bulbs in every school were replaced with more efficient T-8 lamps and compact fluorescent lights. Now, the school district is using the same amount of electricity as before the lighting retrofit, despite adding more electronic equipment.

With the success of the lighting retrofit, the school district searched for more opportunities to save energy dollars while addressing the issue of power supply quality, explains Gene Shillingford, facilities supervisor. To further their efforts, the school district formed a Rebuild America partnership.

The school district teamed up with two Rebuild America Business Partners to install 16 high-efficiency transformers in four middle schools. As the schools power-down equipment at the end of the school day, the new transformers use less electricity than other older models. Energy savings from the retrofit will pay for the improvements in about three years.

While saving energy, the new equipment also provides a cleaner supply of electricity, which can increase the reliability of electronic equipment sensitive to the quality of power.

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Rebuild America Schools
U.S. Department of Energy

Endorsed
by



National School
Boards Association

Partnership Facts:

Name of Partnership:
Neshaminy School District
partnership

Targeted buildings:
K-12 school buildings

Space completed:

- 1.5 million square feet in lighting improvements
- 300,000 square feet in transformer space in four middle schools

The Neshaminy School District:
Enrollment: 9,600
Cost of Energy Saving Improvements: \$1.7 million
Energy Savings:

- \$80,000 in 2003 (projected)
- \$235,000 annually after projects are completed (2004-2005)

Payback Period: 7 to 7.5 years

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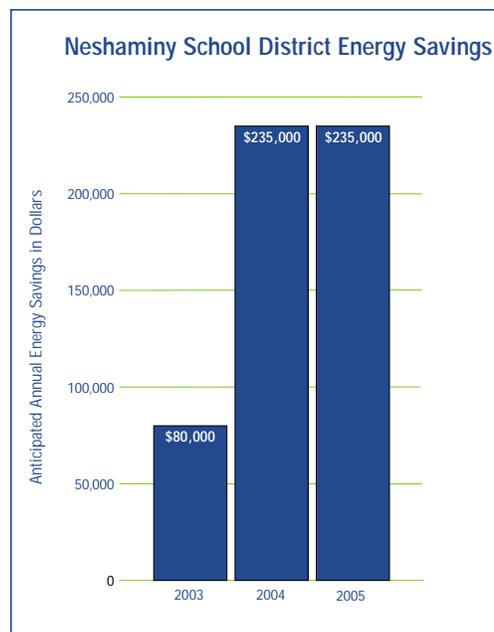
For more information, visit the
EnergySmart Schools Web site:
www.energysmartschools.gov.

The Results

In 2003, the school district expects to save \$80,000 as a result of their energy-saving efforts. After the remaining energy-efficiency improvements are complete, savings should reach \$235,000 annually.

What the Future Holds

Plans call for the installation of high-efficiency HVAC at Maple Point Middle School. This project, when combined with other energy-saving improvements at the school, will cut energy use by 25 percent by year-end and 40 percent by the end of summer 2004. The school district also plans to reach out to their students through energy education.



To learn more visit: www.eere.energy.gov.

A Strong Energy Portfolio for a Strong America

Energy efficiency and clean, renewable energy will mean a stronger economy, a cleaner environment, and greater energy independence for America. Working with a wide array of state, community, industry, and university partners, the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy invests in a diverse portfolio of energy technologies.

Rebuild America is a U.S. Department of Energy program that focuses on improving communities through energy-saving solutions.



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