

PROJECT INFORMATION

Program Participant

- Kennedy Elementary School

Location

- 20 Pleasant Hill Road
 Succasunna, NJ 07876

Project Contact

- John Eschmann
 Director of Buildings
 and Grounds
 Roxbury Public Schools

Technology

- T5 and T8 lighting
- LED screw-ins and exit signs
- Lighting controls
- Packaged roof top HVAC units with new economizers
- Programmable thermostats

Total Project Cost

- \$119,740

NJCEP Incentives

- \$83,818 through the Direct Install program

Estimated Annual Savings

- 116,920 kWh
- 2,201 therms
- \$16,229

Project Payback

- 2.2 years

Direct Install Partner

- Donnelly Energy

Project information, savings and environmental benefits were provided by the project contact.

Kennedy Elementary Shows Its Smarts on Energy Efficiency

Background

Roxbury Township, on the western edge of Morris County, New Jersey, is known for providing the best for its younger residents. Roxbury Township is the first community in New Jersey to be selected as one of America's Promise 100 Best Communities for Young People and offers several community services to keep youth active, engaged and supported. In keeping with those efforts, the township has implemented a major initiative to improve the energy efficiency and comfort of the township's public schools.

Kennedy Elementary School, the smallest of seven public schools in the Roxbury School District, has 230 students, grades kindergarten through four. Kennedy Elementary is housed within a 47,000 square-foot building that is 45 years old. The school received new heating equipment as recently as 2006 during a building expansion, but utility bills still surpassed \$90,000 a year. Township officials recognized that — with help from *New Jersey's Clean Energy Program*™ — further energy savings could be achieved.



The Township of Roxbury utilized NJCEP's Direct Install program and the state's Energy Savings Improvement Program to pay for energy-related improvements at Kennedy Elementary School. Equipment upgrades included state-of-the-art lighting and lighting controls, as well as new high-efficiency rooftop HVAC units and programmable thermostats.

Solution

The Roxbury Township Board of Education received a free energy assessment as part of the Direct Install program offered through *New Jersey's Clean Energy Program* (NJCEP). Direct Install is a turnkey solution that makes it easy and affordable to upgrade to high-efficiency equipment.

Donnelly Energy, a participating NJCEP contractor, reviewed the most cost-effective options for new energy efficiency measures at Kennedy Elementary. From those recommendations, Roxbury Township officials chose to replace low-efficiency lighting with state-of-the-art T5

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 Director of Buildings
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 Roxbury Public School



Roxbury Public Schools
 42 N. Hillside Avenue
 Succasunna, NJ 07876

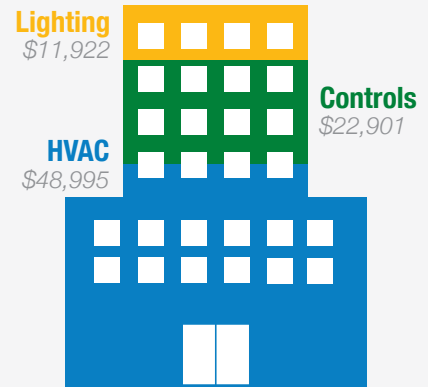
and T8 lighting, LED screw-ins, LED exit signs and lighting controls. The school also replaced its rooftop HVAC units with new, high-efficiency models as well as an economizer system and programmable thermostats.

The Direct Install program covers up to 70 percent of project costs for lighting, HVAC, motors and other equipment upgrades. Kennedy Elementary was eligible for incentives of \$83,818 out of a total project cost of \$119,740. “We were looking at replacing \$50,000 worth of HVAC units and the incentives from the Direct Install program made that possible,” said Roxbury Public Schools’ Director of Buildings and Grounds John Eschmann.

For the remaining out-of-pocket investments, the township participated in another state-run program — the Energy Savings Improvement Program — that allows government agencies to pay for energy-related improvements with their resulting energy savings. This allows the on-going savings, estimated at 116,920 kWh and 2,201 therms per year, or \$16,229 per year, to be used to cover the remaining \$35,922 expenses for the improvements.

By replacing the district’s outdated equipment with new, energy-efficient models, Roxbury officials are now realizing significant maintenance savings. “Before, we were checking to see if equipment was still being manufactured,

Project Incentives: \$83,818



or combining old, broken pieces to make them work as if they were new,” Eschmann said. “Now it’s much easier to maintain our equipment because it’s newer, and all the parts are more readily available.”

With a project payback period of just 2.2 years, Kennedy Elementary School’s new equipment is projected to pay for itself before the current second-grade class moves on to middle school.