

EnergySmart Schools

Financing Profile

East End Community School (Maine)

Project Details

Enrollment/community type: 426 (grades K-5)

Type of project: New construction

Energy efficient and renewable energy features:

The East End School is the first public school in Maine to be awarded a LEED Silver rating. Rooftop solar photovoltaic panels, which were donated to the school, generate 2.6 kW of electricity and facilitate education on sustainable energy production.

Financial Details

Incremental project cost over
"baseline" system \$217,585

Energy Savings

The East End School estimates savings of ~230,041 kWh per year, which nets the school a simple payback period of 6.9 years on its investment. The useful life of the investment is estimated at 20 years.



East End Community School is the first public school in Maine to be awarded a LEED Silver rating.

Financing Mechanisms

State Aid Grant, (55%), Standard Bond Issuance (45%)

- Almost all school capital investment projects conducted in Maine in the past few years have included efficiency measures financed through Efficiency Maine (EM).[†]
- Up to \$120,000 in grant funds is available through the Maine Public Utilities Commission, Efficiency Maine's High Performance Schools Program, which was initiated in 2004. The financing pool for state aid comes through tax on electricity sold by utilities.
- A collaboration between the Maine Department of Education, Bureau of General Services, the Maine School Management Association, the Maine Public Utility Commission and the New Buildings Institute, the program assists in the design and implementation of energy efficient buildings.
- EM offers incentives for schools instituting a new construction or a "75% minimum" retrofit project. Currently, funding is based on reduced use of electricity only.
- The alliance of organizations and other agencies conducted outreach to schools, making a highly effective pipeline for new deals through the program.

Efficiency Maine's High Performance School Program

1. Each project design starts at the Maine Benchmark level of energy usage. All additional design and implementation costs that would result in the installation of energy efficient electrical equipment (and corresponding energy savings) above the benchmark level are eligible for financing. Thus, projects with the highest level of savings will receive the most financing.
2. Design specs are reached through collaboration between an EM program technical advisor (PTA) and school contractors/ architects/engineers. The PTA acts as an advisor to the project team, answering questions about the program and the value of energy efficient design and asking the schools what technologies they want to utilize (T-5, HVAC, lighting shelves, etc.).
3. Once design is agreed upon, energy benefits are determined using a spreadsheet that calculates electrical savings. An appropriate level of financing is agreed upon to cover design and later implementation costs. Memoranda of Understanding (MOUs) are issued for both design and implementation, obligating EM to cover the agreed upon level of financing.
4. At about 90% of the project's completion, EM verifies the installation of the technologies prior to payment. If changes to the project are made post approval, financing for implementation is adjusted accordingly.

[†] The Department of Education and Bureau of General Services require school boards and administrators to consider energy efficiency in all capital investment decisions in Maine.



U.S. DEPARTMENT OF
ENERGY

Energy Efficiency &
Renewable Energy

For more information contact:
EERE Information Center
1-877-EERE-INF (1-877-337-3463)
www.eere.energy.gov

Richard Bacon BEP, CEM
Program Manager, Efficiency Maine
Maine Public Utilities Commission
Tel 207-287-8349
Richard.Bacon@maine.gov