

EnergySmart Schools

Financing Profile

Foster-Glocester Regional School District (Rhode Island)

Project Details

Ponaganset Middle School (New construction)

Ponaganset High School (Full renovation)

Enrollment/community type: 990 students (grades 9-12); 656 students (grades 6-8); rural community

Type of project: Combination of new construction (completed September 2007) and full renovation (expected to be completed June 2009).

Renewable energy features: Both schools will provide 85% of their heat using new, carbon-neutral, biomass (wood-chip fired) boilers that incorporate gasification technology. These boilers will be the first of their kind in Rhode Island.

Financial Details

Construction cost	\$57.1M
Incremental cost of energy-saving measures	\$11,468,300
Interest charges, bond fees	\$4,286,483
Reimbursements from state	\$10,587,214
Net incremental cost to Foster-Glocester	\$5,167,569

Energy Savings

Average savings over 20 years after 100% implementation and after payments for ESCO annual services: \$697,262/year. This equates to a payback period of 7.4 years.

For more information contact:

EERE Information Center
1-877-EERE-INF (1-877-337-3463)
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or

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Energy Efficiency & Renewable Energy

Financing Mechanisms

State Aid Grant (in form of rebate): 67.2%

Subsidized Bond Issuance: 32.8%†

- Use of state bonding agency allowed schools to bundle bond issuances in order to get better interest rates (~4.25% on average).
 - Capital Lease Revenue Bonds: These bonds are common for ESCO procurement. The ESCO provides an investment grade energy audit (IGEA): “Over X amount of time, you will be able to pay for commissioning.” This provides proof of investment return and is used to guarantee the bond and credit.
 - Loan Payments: When the renovated high school opens in 2009 and decreases electrical usage, the state will reimburse interest and some principal (if the school is bonded through the state bonding agency).
- Grants from the state allowed for subsidized project cost.
- ESCO services were used to conduct energy benchmarking, engineering design, financial planning, commissioning and energy usage monitoring, but the ESCO did not provide any direct financing.
- National Grid, the district's local utility, provides financial benefits to service providers (e.g. contractors and ESCOs) who implement energy efficiency measures in their projects. The ESCO utilized by Foster-Glocester helped them navigate the state utility incentive programs to get the maximum benefit from National Grid to help mitigate project costs.

Financing Barriers

- **Lack of voter authorization for what are often considered “additional expenses”:** For example, an additional request for the new construction funding needed for the wood-chip fired boiler installation and other energy efficient enhancements. This generated significant opposition, even though the add-on to the project was clearly financially viable.
- **Non-energy benefits:** It is difficult for stakeholders and voters to quantify non-energy benefits—such as decreased absenteeism, decreased asthma rates, improved academic performance and productivity—that results from energy efficient improvements.

† The two towns' shares are based on population (Glocester covers 21.8% and Foster 11% of total costs.) The district received a regional bonus in state aid because it combined the projects of both towns into one financing application.

How Foster-Glocester Overcame These Barriers

- The district showed cost savings up front to facilitate voter authorization. Foster-Glocester received state aid funding for a feasibility study to demonstrate financial benefits.
- The district distributed models and literature to decision-makers that linked educational and health benefits to better lighting and HVAC systems. While no real quantitative analysis was available, enough qualitative evidence was gathered to support its case.

