



Energy Savings Performance Contracting

Saving Facility Resources

Case Study



Aberdeen School District No. 5



Project Description:

At Miller Junior High School, the existing pneumatic control system was replaced with a new direct digital control system that could be tied into the district wide energy management system. The existing electric resistance heating coils were replaced with hot water coils and three new high efficiency gas fired boilers were installed. The existing electric water heaters were replaced with high efficiency gas fired water heaters. At Stevens Elementary School, the existing oil fired boiler and water heater were converted to natural gas.

Project Completed: March 2006
Total Project Cost: \$886,150
Project Number: GA Project #2003-225 (1-1)

Annual Energy Project Savings:

Electrical	\$35,300	kWh	732,771
Natural Gas	\$34,280	Therms	38,603
Fuel	\$19,830	Oil	10,767
Water	\$1,960	Gallons	2,326
		CCF	311
Total Avoided Costs:			
Guaranteed	\$54,060		

Funding Sources:

Loans	\$779,210
Utility Incentives	\$6,940
Capital	\$100,000

Project Managers:

Ton Cinert
Director of Facilities,
Aberdeen School District
(360) 538-2199

Roger Wigfield,
P.E. Energy Engineer,
Dept. of General Administration
(360) 902-7198

Mike O'Connor,
President,
Quantum Engineering
(206) 523-5640

“I could not be happier. This project was installed during regular school hours. Like any project of this size, there were some challenges, but weekly meetings and communication with Quantum Engineering staff kept the project clean and smooth. The 1979 constructed building is more comfortable and maintenance friendly”.

*Ronald C Cinert
Director of Facilities*

Emission Reductions:

Annual Reduction in CO2:

1,072,615 pounds per year

Annual CO2 Reduction Represents:

Removing 72 cars from the road, or

Planting 146 acres of trees

Powering 54 homes

Project Benefits:

The new controls and conversion from electric heat to hot water heat at the Miller Junior High School resulted in an improved learning environment for the students and staff.

- New controls replaced a high maintenance pneumatic control system with energy efficient controls.
- New equipment replaced old failing equipment at both schools saving the district energy and water.
- The project provided improved indoor air quality and occupant comfort.

For more information: email GAEnergyTeam@ga.wa.gov
Visit our web site at <http://www.ga.wa.gov/EAS/epc/espc.htm>