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Best Practices Review Focuses On Reducing Energy Costs

School Districts Play Key Role in Report

By Rebecca Otto, State Auditor

Energy costs have increased significantly over the past few years, from heating school buildings to fueling the buses that get students to and from school. In response to these rising expenditures, some great things are being done by school districts across Minnesota to reduce their energy costs. These innovative measures are the focus of the Best Practices Review of Reducing Energy Costs in Local Governments recently released by The Office of the State Auditor.

The Office conducted a wide-ranging survey to give local governments and school districts an opportunity to identify energy-related initiatives of interest to them and to share what they're doing to reduce energy costs. Over one thousand local governments participated in the survey, along with 34% of Minnesota's school districts. These high numbers of responses to a voluntary survey reflect a great interest from governmental entities of all sizes in the issue of reducing energy costs.

As energy expenditures continue to increase, more pressure is being put on school budgets. Adding to that, public awareness has increased around energy issues, creating more reason for districts to reduce their energy use.

The Best Practices Review is designed to assist school and local government officials in making informed decisions for reducing their energy costs. The Review includes recommendations for steps to best practices, case studies with cost/benefit analysis, and financial and informational resources.

Case Studies Highlight Best Practices

The Review features case studies which highlight best practices in nine important areas: Lighting Retrofits, Geothermal Heating and Cooling, Passive Solar Energy, Active Solar Energy, Wind Energy, Displacement Ventilation, LEED (Leadership in Energy and Environmental Design) Certification, and Energy Performance Contracts. Among the governmental entities included in the case studies are three school districts: the Watertown-Mayer School District, the Pipestone-Jasper School District and the Anoka-Hennepin School District. Each case study in the Review includes photos of the technology, a cost/benefit analysis, and a contact person from the local government entity who can discuss their

project. Some include lessons learned from District officials on the results of their efforts to reduce energy costs.

One case study examines geothermal heating and cooling systems in the Watertown-Mayer School District. The district installed geothermal systems in a new Elementary School building. They also installed a retrofit system in the remodeled Watertown-Mayer Middle School and High School. A separate case study looks at how the new Elementary School, which was opened in September of 2007, is a LEED-registered project, designed to incorporate energy-efficient and environmentally-sound features.

The Anoka-Hennepin School District needed to replace aging ventilation systems in several buildings due to costly maintenance and chose to install displacement ventilation systems in some of their schools. These systems also save energy over conventional systems. “The positive displacement system selected offers the best solutions to a wide variety of obstacles and indoor air quality concerns unmatched by any systems I have seen yet today,” reports Louis Klingelhoets, the Anoka-Hennepin District’s Director of Buildings and Grounds.

In the Pipestone-Jasper School District, located in Pipestone County on the windy Buffalo Ridge, a wind energy system was installed in the new middle/high school both to provide energy for the school and to be an educational tool for the school’s science curriculum. The District receives a discount on its energy bill for the amount of wind energy they produce each month.

Tools to Help

One obstacle to reducing energy costs that was identified in the survey was access to financial resources. To address that, the online version of the Best Practices Review has live Internet links that connect users directly to financial resources, bringing officials right to the money. It also contains links to information resources and cost calculators to help crunch numbers.

School districts and local governments throughout Minnesota are taking innovative and effective measures to reduce their energy costs. The Best Practices Review shows how these wise investments not only help reduce operating costs but also help hedge against rising energy costs.

The complete report can be found on our website at: www.auditor.state.mn.us under “Reports and Data”. A paper copy can also be requested by contacting Jim Levi at 651-297-3683 or by email at Jim.Levi@state.mn.us.