

ENERGY EFFICIENCY

IN MONTANA'S SCHOOLS



Vote yes on House Bill 646

While schools are struggling to make ends meet, high energy bills are making things worse. In December 2007, the Legislative Fiscal Division reported that **40 percent of Montana schools will not have enough money to continue their 2007-08 programs in 2008-09.** Electricity rates for most of Montana are the highest in the region. Other sources of energy also have seen wild fluctuations in price. An assessment of Montana schools found that \$27 million was spent on energy in 2007. An energy efficiency program that leads to a 30% reduction in energy use would save the state's school districts over \$8 million annually.

Fortunately, energy costs are one of the few expenses schools can reduce without sacrificing the quality of education.

We Need to Invest in Efficiency Improvements for Our Schools; a Solution That ...

Pays for Itself

Last year, Butte School District retrofitted and updated old, inefficient metal halide light fixtures in gymnasiums, other lighting improvements. It also began aggressively using occupancy sensors. The project cost \$550,000 and rebates from Northwestern Energy amounted to \$120,000. The district is now saving \$115,000 a year in electricity costs. This project will pay for itself in 3.7 years.

Improves School Performance

■ **More Efficient Use of Tax Dollars:** Energy savings will allow more of our school funding dollars to go directly toward the quality of our children's education;

■ **Daylighting:** Students attending schools with a significant amount of daylighting achieve 5-15% higher test scores;¹

■ **Climate Controls:** On average, improved temperature controls result in 3.6% productivity gains;¹

■ **Teacher Retention:** High-performing school buildings can lead to a 5% reduction in teacher turnover;¹

■ **Air Quality:** Schools with proper ventilation can lead to 25% reductions in asthma occurrence, and reduce absences;¹

■ **Lower Costs/Higher Performance:** Additional benefits include fewer sick days, lower operation and maintenance costs, reduced insurance and risk-related costs, and improved educational quality.¹

Creates Jobs and Supports Local Economies

■ Improving energy efficiency in our buildings means more of our tax dollars stay in our communities instead of flowing to energy companies. Every \$10 million in additional energy efficiency improvements contributes about 160 short-term jobs and 30 long-term or permanent jobs.¹

■ Through widespread investment in energy-efficiency improvements, Montana has the opportunity to help schools significantly reduce costs, reduce pollution, and help stimulate the economy through the creation of quality "green collar" jobs.

Reduces Pollution

■ In the United States, buildings account for just under 40% of our energy use and approximately the same percentage of greenhouse gases released into our air, according to the U.S. Green Building Council. While much attention is paid to energy use in transportation, more efficient buildings can make a big difference in reducing energy use and energy costs overall. When those efficiencies are added to public buildings such as schools, the savings directly benefit taxpayers.

■ Montana has 1,124 school buildings, so widespread energy efficiency improvements that cut energy costs by \$8 million a year also would significantly reduce the environmental impact of buildings in Montana.²

HB 646 CAN MAKE ENERGY EFFICIENCY A REALITY IN MONTANA SCHOOLS TODAY

% of Montana Schools Needing Improvement

(with estimated payback periods)



Source: Montana K-12 School Facility Condition Assessment

Recent Developments in Montana

■ The 2005 Montana legislative special session mandated the completion of an inspection of all school buildings in the state. This assessment, the Montana K-12 Facility Condition and Needs Assessment and Energy Audit, was completed in July 2008 and provides a snapshot of the current condition of Montana's K-12 school facilities. The report identifies \$359 million in maintenance costs for Montana schools. Of that, \$87 million is for energy-saving projects.²

■ Montana Governor Brian Schweitzer recently initiated a plan that mandates a 20% reduction in state building energy use by 2010. He also encouraged schools to meet these goals.

■ The Climate Change Advisory Committee released its final report last year, along with 54 recommendations for state-level actions to reduce greenhouse gas emissions. Recommendations dealing with energy efficiency in buildings were high on the list in terms of impact on greenhouse gas emissions as well as cost-effectiveness.

Significant Potential for Energy Savings

Montana schools spent over \$27 million on energy in 2007.² An energy efficiency program that leads to a 30% reduction in energy use would save the state's school districts over \$8 million annually.

A majority of Montana's schools (68%) were built before 1970.² These facilities often use older types of heating and ventilation, have insufficient insulation, inefficient lighting, and do not adhere to current building codes. Energy-efficient retrofitting of these buildings would save schools a significant amount of money.

1. Capital E Report: Greening America's Schools: Costs and Benefits www.cap-e.com
2. Montana K-12 School Facilities Condition Assessment <http://www.opi.mt.gov/Facilities/Index.html>
3. Montana Code Annotated http://data.opi.state.mt.us/bills/mca_toc/index.htm

The Montana High Performance Schools and Economic Stimulus Act:

- Creates a school energy efficiency program at the DEQ mirroring the current program for state buildings.
- Uses information from the K-12 facilities report along with data from an energy audit to prioritize energy efficiency projects in schools.
- Maximizes our investment in energy efficiency by directing funds to achieve the greatest savings of energy and money with reasonable payback periods.
- Provides the structure for distributing money from the American Recovery and Reinvestment Act of 2009 that is intended for school energy efficiency projects.
- Provides for an ongoing program to connect schools with other sources of funding for energy efficiency improvements through INTERCAP loans, other federal money, utility energy conservation money, and energy performance contracts with an energy service company.
- Will be coordinated with the Quality Schools Facility Grant Program (if House Bill 152 becomes law).



Legislation has Broad Support

Sponsor: Rep. Wanda Grinde

Co-sponsors: Rep. Jesse O'Hara

Sen. Kelly Gebhardt

Sen. Bob Hawks

Sen. Carol Williams

Sen. Ryan Zinke

Supported by: MEA-MFT

Clark Fork Coalition

Montana Audubon

Montana Carpenters Union

Montana Conservation Voters

Montana Contractors Association

Montana Environmental Information Center

Northern Plains Resource Council

NorthWestern Energy

Paid for by the **Northern Plains Resource Council**, a grassroots conservation and family agriculture group that organizes Montana citizens to protect our water quality, family farms and ranches, and our unique way of life.