

Case Study: Rural Oregon School

Unique Oregon school is now more energy-efficient

Crane School District has two distinguishing claims:

- ✓ It is the state's biggest school district geographically—a whopping 7,500 square miles of high desert in southeastern Oregon; and
- ✓ It is Oregon's only public boarding school.

Because it houses students on a 24/7 basis, the Crane school building uses more energy than the typical Oregon school building. But, Crane School also has systems, equipment and lighting fixtures that are outdated, inefficient and cause their energy use to be higher than it should.

"I do not think we have ever done an energy efficiency upgrade—at least not since I have been here," said Crane Maintenance Supervisor Marc Hofmen who has been with the school district for seven years.

In addition, the school's lighting is old enough that PCB leakage was a concern. Old magnetic ballasts contain polychlorinated biphenyls (PCBs) that can cause serious health problems. Moreover, a school district can be subject to hefty fines (up to \$27,000 per day) if district employees or contractors improperly dispose of these materials.

Lighting project begins

The time had come for a lighting upgrade at Crane. The school district contracted with an outside project manager with lighting installation expertise to expedite their upgrades.

The Crane School project included replacement of T12 lamps and magnetic ballasts with energy efficient T8 lamps and electronic ballasts; incandescent lamps with T8s; incandescent EXIT lights with LED (light emitting diode) exit lights; and 250 metal halide lamps with new T8 lamps and electronic ballast fixtures.

The project is expected to save more than 60,000 kilowatt-hours of electricity per year and reduce the Crane School District's electricity bill by \$3,374 per year at current rates.

The district also saves money in staff time. The new energy efficient lamps – especially the LED exit lights – last considerably longer, so they don't have to be replaced as often.

Positive results

The entire building is brighter now. Both students and staff are enjoying the change.

"It's brighter and better than before," said the agriculture teacher. "You can turn the lights on right away and not wait 15 minutes for them to come on as we did in the past."

"We never could have done the lighting project without this grant."

Tim Adsit
Superintendent
Crane School District



625 Marion St. NE
Salem, OR 97301-3737

(503) 378-4040

Toll-free
1-800-221-8035

Fax
(503) 373-7806

Web site
www.oregon.gov/energy

The woodworking teacher sees a result in the students' work. "It is a lot brighter and safer because the kids can see better now. In the finishing room, the students can actually see so their projects look better."

The cafeteria staff noted that the kitchen lighting no longer flashes and flickers like it did in the past.

The new lighting is also quieter. Previously, teachers and others repeatedly asked the maintenance staff to "make the gym quieter." The new fixtures are.

"We never could have done the lighting project without this grant," said Crane School District Superintendent Tim Adsit. "This school district does not have sufficient funds to consider this type of project."



Students can see better with the new lighting so woodworking class is safer.

Williams Oil Settlement

When energy project funds became available in 2005 through the Williams Oil Settlement, Crane School District became a prime candidate for a lighting efficiency project.

The Oregon Department of Energy administers the \$1 million Williams Oil Settlement. The settlement was the result of a coordinated investigation into allegations of price manipulation and antitrust violations in the Western power market during the energy crisis of 2000-01 by the attorneys general of Oregon, California and Washington.

The Oregon Department of Energy identifies and distributes the funds to school facilities with high-energy use. Crane School District qualified. The Williams Oil Settlement funds paid a portion of the \$101,000 lighting project cost.

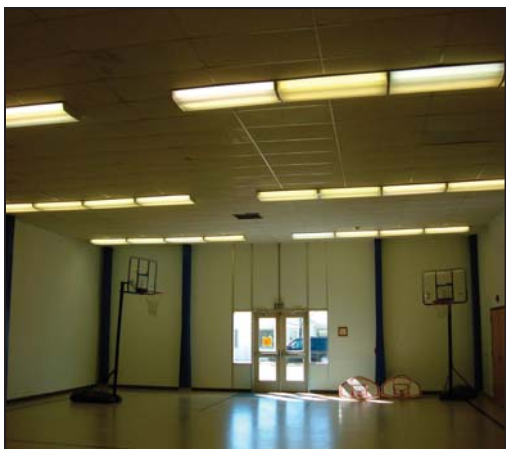
Other funding

In addition to the Williams Settlement Funds, the Crane School District lighting project also qualified for the Oregon Department of Energy's Business Energy Tax Credit Program. The School District, unable to use a 35 percent tax credit, partnered with a private business that served as the school's "pass-through" partner.

The business accepted the School District's tax credit eligibility and paid Crane School District a lump sum of \$12,900 when the project was complete (25.5 percent of eligible costs). The business will take the 35 percent tax credit of \$17,700 over a five-year period (10 percent the first two years and 5 percent the last three years). Harney Electric Cooperative, the Crane School District electric utility, also gave the district \$7,212 for the lighting project.

Thanks to the Williams Oil Settlement, the Oregon Department of Energy, Harney Electric Coop, and Crane School District's business partner this unique Oregon school is saving electricity and money.

Business Energy Tax Credit Pass-through Program



Lighting before the energy project at Crane School was dull and uneven (dark corners).

The Business Energy Tax Credit Pass-through Option is available to schools, non-profits organizations and others without tax liability. It can also be used by for-profit businesses that choose to use it. The Oregon Department of Energy reviews the application for the energy project before the project begins and issues a pre-certification just as it does for a regular energy tax credit project.

When a qualifying pass-through project is completed, the project owner turns in the necessary paperwork. Project owners are responsible for finding a pass-through partner (a business (or individual) with state tax liability that is willing to accept the 35 percent tax credit in exchange for a 25.5 percent cash payment to the project owner). If you need more information, contact Barbara Bonnem, Pass-through Option Developer, by e-mail at barbara.bonnem@state.or.us.