

Energy-efficient water heaters at Clyde Hill Elementary were a key energy-saving project that CSEM engineers helped facilitate for BSD.

Bellevue School District saves more than \$300k in energy costs

A case study of PSE's Commercial Strategic Energy Management program

Customer background


Bellevue School District (BSD) serves more than 18,000 K-12 students at 29 schools in Bellevue, Wash., and surrounding communities. With 35 building sites, the district maintains more than 3 million square feet of conditioned space.


Energy challenges and opportunities

In 2008, BSD set out to reduce utility costs in order to devote more money in the general fund to classroom expenses. That goal had two parts, one of which was to replace older, inefficient buildings with high-performing, energy-efficient buildings. The other part was to better manage energy consumed by all buildings in the district's portfolio.

That's where PSE's Commercial Strategic Energy Management (CSEM) program came in. The district joined the program in order to accomplish its ambitious energy-management goals. The move paid off — and also helped pay for teacher salaries, library books, classroom supplies and much more.

Energy savings at a glance

 **ELECTRIC SAVINGS**
2,205,652 kWh
That's enough to power 184 homes for a year.

 **GAS SAVINGS**
110,127 therms

 **PSE INCENTIVES PAID**
\$132,529

 **ENERGY COST SAVINGS**
\$303,385

* Metrics are cumulative since BSD's start in CSEM in 2012.

Once we were tracking our energy usage, it was easy to show how expensive it was to run our old, inefficient buildings. That gave us data to justify the higher up-front costs of constructing efficient new buildings that cost less to run in the long term.

Jeff Tweeten
HVAC/utilities control specialist at BSD

How PSE helped

When BSD joined the CSEM program in 2012, we visited the district's building sites and created an energy profile and scope of work that included recommended capital improvements and corresponding incentives that BSD could receive to offset energy-efficient upgrades.

We also recommended low- and no-cost operations and maintenance improvements and behavioral changes that could be implemented districtwide. Along with those recommendations came customized energy-management checklists to make it easy for facilities staff to reduce energy usage, as well as an annual check-in to monitor progress. Our engineers are always available to our CSEM customers to discuss new projects, energy questions and any other concerns as they come up.

PSE has provided us a list of tools for energy management and software-based tracking. They hold us accountable, and they're a partner every step of the way.

Jeff Tweeten

HVAC/utilities control specialist at BSD

In order to monitor energy use and track performance, our team helped BSD utilize software designed specifically to track energy-use metrics against CSEM program benchmarks. It also allows building operators to send energy data to the state, which is a critical benefit of CSEM given compliance requirements of Washington's Clean Buildings Law.

CSEM runs on a three-year program cadence, and customers are eligible to renew their participation at the end of a three-year cycle. BSD has renewed three times and plans on continuing in CSEM for years to come.

We've worked hard to make our buildings perform better. Our involvement in CSEM lets us see our success and have help in troubleshooting when issues arise. We even get help with reading and understanding our energy bill, which is great.

Jeff Tweeten

HVAC/utilities control specialist at BSD



An energy dashboard allows Tweeten to monitor energy use at each building site within Bellevue School District.



An LED lighting retrofit project in the gym at Lake Hills Elementary.

Results

Since joining CSEM in 2012, BSD has saved a staggering amount of energy: 2,205,652 kilowatt-hours and 110,127 therms. It equates to more than \$303,000 in energy costs. That money, which would have otherwise gone to utility bills, stayed in the district's general fund and helped pay teacher salaries, fund classroom needs and enable other investments directly impacting students.

In addition to diverting energy costs, the district has received more than \$130,000 from PSE in cash incentives through CSEM. At BSD, the incentives helped pay for LED lighting retrofits at several school sites, which further reduce utility costs for BSD.

Start your energy-management journey

Learn more about PSE's Commercial Strategic Energy Management program at pse.com/csem. Or get in touch with the program directly by emailing csem@pse.com.



pse.com/csem

