

CENTENNIAL SCHOOL DISTRICT ACES ENERGY EFFICIENCY

STRATEGIC ENERGY MANAGEMENT PRACTICES AND CUSTOM HVAC CONTROLS DELIVER LONG-TERM BENEFITS

PROJECT-AT-A-GLANCE

HVAC Direct Digital Controls upgrade

- \$109,400 in cash incentives
- \$127,800 in estimated annual utility bill savings
- 315,785 kWh saved
- 87.018 therms saved
- Better temperature control, reduced maintenance costs, reduced energy consumption

SEM Participation

- \$28,900 in cash incentives
- \$35,500 in estimated annual utility bill savings
- 341,223 in kWh savings
- 7,084 in therms savings
- Improved energy efficiency, lasting operational improvements, valuable staff engagement

Energy Trust of Oregon

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Serving customers of Portland General Electric, Pacific Power, NW Natural, Cascade Natural Gas and Avista. 11/24 Since 2005, Centennial School District has worked with Energy Trust of Oregon to champion energy efficiency. One of the key ways the district has demonstrated their commitment is through active participation in Energy Trust's Strategic Energy Management (SEM) offering, which provides organizations with the knowledge to understand how they use energy, identify sources of waste, and implement strategies to track and reduce energy usage.

SEM has played a pivotal role in guiding the district's energy-saving initiatives. Practices such as conducting night audits, training staff on start-up and shut-down schedules and making incremental facilities upgrades have helped the district improve energy efficiency and reduce utility bills over time.

"Our SEM participation greatly informed the energy efficiency upgrades, energy management, and other related activities," said Jason LaFarge, director of facilities at Centennial School District.

One of the most impactful projects resulting from SEM learnings was HVAC system direct digital controls (DDC) upgrades made at seven of the district's schools throughout 2022 and 2023. The existing systems were outdated, with failing pneumatic controls and compressors that frequently broke down, making it difficult to maintain comfortable classroom environments.

Guided by the SEM program, the district began a comprehensive retro-commissioning process, coordinated by Energy Trust, to inspect and analyze its systems. The inspection revealed significant issues with the pneumatic system, prompting the district to upgrade to a DDC system.

The results of the HVAC upgrade were immediate and transformative. The DDC systems provided better temperature control in classrooms, reduced maintenance costs and created more comfortable learning spaces for students and staff.

The new systems also allowed the facilities team to monitor and control temperatures across all classrooms from a central computer, enabling quicker diagnoses and repairs.

The district received over \$109,400 in Energy Trust cash incentives for the direct digital controls upgrades, which will save the school district nearly \$127,800 annually on utility bills.



Energy Trust was fantastic to work with. Their long-standing support through the SEM program helped us define and prioritize energy efficiency projects, ensuring we could do more for our students, community and facilities.

Paul Southerton, director of business and operations at Centennial School District



Learn more about available incentives by visiting **www.energytrust.org/existingbuildings**.

Email <u>existingbuildings@energytrust.org</u> or call **1.866.605.1676** to get in touch with a team member today.

