



# Boise School District, ID – 50001 READY

## BACKGROUND

The Boise School District covers 1,072 square miles and serves more than 25,000 students. This high-achieving District employs about 2,500 people, including 1,900 certified staff members. As evidence of the District’s long-standing interest in energy efficiency, it set up a Resource Conservation Office back in 1997 to reduce energy consumption 10% by 2015—later raising that goal to 15%. The District’s webpage features energy best practices to get teachers, students, and members of the community involved in the effort. Over the years, the system invested in several energy projects to take advantage of discounts offered by Idaho Power. Like most school districts, Boise had little in-house expertise in energy management and no formal structure for analyzing or improving energy use.

## SOLUTIONS

In 2017, the Boise School District set up a Sustainability Committee and encouraged the formation of a student-led Green Team at each school. In the same year, the District joined a cohort of Idaho school districts pursuing Continuous Energy Improvement. The Strategic Energy Group (SEG), under the auspices of Idaho Power, coached the cohort on how to monitor energy use and better manage energy use within the schools.

*“We’re proud of our 50001 Ready status and the energy cost savings we’ve achieved. But most of all, we’re proud of our students, who now take the initiative in finding and researching even more opportunities to save energy.”*

*- Christopher Taylor  
Boise School District*

In 2019, SEG introduced members of the cohort to the 50001 Ready framework for continuous improvement and the potential for recognition by the U.S. Department of Energy (DOE). Boise High School was the first school in the District to achieve 50001 Ready in April 2019 and was able to re-attest in October 2020. By January 2021, eleven more buildings had achieved 50001 Ready,



Students in class outdoors on Power Down Day.

*Photo credit: Boise School District.*

including six junior high schools, two high schools, the District Office, and a Tech Center. Along the way, the District Sustainability Committee stimulated broad student and community involvement through the Green Teams at each high school and junior high. The students have taken the initiative to research and propose promising energy projects—impressing everyone.

## Implementing a 50001 Ready Energy Management System

- ▶ **Real energy savings:** Between January 2017 and May 2021, the twelve buildings participating in Boise School District’s Continuous Energy Improvement Program reduced their energy usage by almost 11.73% and saved approximately \$432,039 off of their power bill since January 2017 based on modeled saving with an adjusted Net of Capital savings of \$285,880. Participating in 50001 Ready allowed them to plan each step in their efficiency improvement process and see the energy savings firsthand.



- ▶ **Student contributions:** The Boise School District's sustainability committee started small, with just five people. As the benefits of the project became apparent, more staff, teachers, and even students joined in. Now the Sustainability Committee has over 50 members, including representatives from the student body, Idaho Power, and the City of Boise – even a legislator!
- ▶ **Energy management team:** The Energy Management Team was headed by the District's Science and Sustainability Supervisor. The Assistant Supervisor, Custodial Supervisor, and HVAC Supervisor were invaluable in planning efficiency improvements. Since the team couldn't be at every school, they handed out "heat maps" of energy use to principals, who shared them with staff and students to brainstorm new ideas. "Green Teams" of students and teachers in each participating school propose ideas to save energy, such as using smart power strips or solar water heaters. Custodial staff at the participating schools have also helped implement sustainability initiatives.
- ▶ **Big savers:** Replacing pneumatic HVAC control systems with direct digital controls has made a huge difference in the district's efficiency. The district can now shut down each school's HVAC system remotely at 7 pm each night, so teachers and custodians don't need to remember to shut the systems down themselves. Schools also removed two lamps from each hallway lighting installation, which reduced their electrical usage while still providing adequate lighting. Most students and teachers didn't even notice the difference!
- ▶ **Procurement:** Idaho Power has worked with the Boise School District to incentivize and implement 22 energy efficient capital incentive projects since the start of the program in 2017. These include new or upgraded Building Operating System controls for five buildings, two roof replacements, three construction, renovation, or expansion projects, and 11 lighting upgrades.

- ▶ **Navigator Tool:** DOE's 50001 Ready Navigator tool inspired the Boise School District sustainability committee to pursue new ideas such as weather stripping, HVAC saving, and de-lamping. It also helped them keep track of the electricity and money they saved. When they publicized the amount of taxpayer money saved through energy efficiency, they received praise from the school superintendent and the Boise community.



Teachers attending annual sustainability summit.

*Photo credit: Boise School District.*

## KEY TAKEAWAYS

Students are capable of not only participating in school sustainability projects but taking leading roles, proposing, researching, and implementing new initiatives to reduce energy use and waste. Student involvement in the Boise School District not only strengthened the energy management system but attracted positive attention from parents, community members, and even legislators. The Boise School District's sustainability committee is thrilled with the success of the program and plans to continue participating in 50001 Ready and incorporate water conservation in the coming years.