

TVA EnergyRight® helps Kentucky elementary school save money and energy with custom HVAC incentive.

Custom HVAC upgrade incentive lowers costs for Briarwood Elementary School.

BOWLING GREEN, KY — Briarwood Elementary is a Leader in Me Lighthouse Certified school serving 735 PK-6 students in the Briarwood Manor neighborhood. With help from TVA EnergyRight and Bowling Green Municipal Utilities, the school recently completed a comprehensive heating, cooling and ventilation (HVAC) upgrade.

Before the upgrade, the school's outdoor cooling tower, eight hydronic boilers, and 50 water source heat pumps (WSHPs) — with an average energy efficiency rating of 11.6 — were all nearing the end of their effective life. Furthermore, the aging system was struggling to keep students and staff comfortable throughout the school day. Prone to frequent breakdowns and costly repairs, the system was draining resources that would be better spent on educating the community's students.

Saving energy dollars to spend on education.

Thanks to a custom \$7,610 incentive from TVA EnergyRight and Bowling Green Municipal Utilities, the school was able to upgrade their HVAC system with a cost-effective and innovative solution.

Taking advantage of an existing groundwater loop, the school combined the existing loop with 96 new, 400' deep vertical loop wells and replaced existing WSHPs with energy efficient units with an average EER of 19.5.

Thanks to improved efficiency of the new HVAC system, the school no longer needed the eight hydronic boilers that provided supplemental heat for the previous WSHPs. The boilers were removed to capture additional savings.

The new HVAC equipment is projected to save the school 76,100 kWh and an estimated \$7,610 in annual electricity costs. The custom solution helps make the school a more comfortable place to learn, and the money that's saved on electricity will be invested in the students' education.

Go Huskies!

At a glance

Location:

Bowling Green, Kentucky

Facility type:

School

Annual energy savings:

76,100 kWh

TVA incentive received:

\$7,610

Upgrade:

Energy efficient HVAC

Local power company:

Bowling Green Municipal Utilities

About TVA EnergyRight

Together with 153 local power company partners, TVA EnergyRight helps people and businesses use energy more wisely and save money through home energy rebates, energy management programs, business incentives, energy-saving tips and online resources to learn about electric vehicles.

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