

Client Services Case Study

Arcanum Local Schools

Arcanum, Ohio



Waibel Energy Systems makes a huge impact in reducing energy consumption by deploying BuildingLogiX technology and leveraging professional services that identify energy savings opportunities that make sense.

Arcanum Schools were spending \$185,014 on utilities annually. WES implemented an Energy Services Agreement and reduced their annual utility cost by 38% in year one, saving Arcanum \$69,852.

The BuildingLogiX suite of technology helped to identify opportunities around discharge air reset on air handlers, chilled water reset on chiller plant, and CO2 demand based ventilation resulting in a reduction of annual electric consumption by 33% from 1,547,256 kWh to 1,042,176 kWh.

Additionally, WES reduced the hours HVAC equipment operated in dehumidification mode and minimized summer boiler operation reducing annual gas consumption by 56% from 7,424 mm Btu to 3,282 mm Btu.

As a result, the building's energy cost per square foot has been reduced from \$1.22 to \$0.76. Furthermore, the work done by the WES team increased the building's energy star score from an average of 38 to 85.

Summary:

The actual annual savings for Arcanum's K-12 are:

- Annual Utility Savings - \$69,852
- Annual Electric Consumption Savings – 505,080 kWh
- Annual Gas Consumption Savings – 4,142 mm Btu
- Cost of energy per square foot improved from \$1.22/b2 to \$0.76

