



Montville High School is a public school in Montville, Connecticut, serving over 1,200 students.

## key facts

- **Est. Annual Energy Savings**  
\$22,692 or 15% of annual energy usage

## challenge

Montville High School was spending over \$150,000 annually on energy costs, in part due to energy waste in areas with both intermittent and inadvertently high energy usage during peak periods. Given that a school operates much differently than a factory or office building, Montville HS needed a flexible solution that could meet the particular needs of the school schedule and behavior.

## solution

Using our energy analytics platform, RTIS<sup>®</sup>, and working with local energy utility Eversource, Montville gained a better understanding of equipment performance and was quickly able to identify wasted usage in intermittently occupied areas of the building. As a result, the school was able to better manage their idle load usage and mitigate peak demand charges, without interrupting the school's schedule. To manage idle load, the school deployed sub-meters to monitor intermittently occupied areas and identify wasted usage. Once the school determined their most inefficient areas, they deployed Variable Frequency Drives and CO2 sensors to modulate and curtail usage in these parts of the building. To mitigate demand costs, the school used RTIS<sup>®</sup> to setup demand thresholds that both notified facilities management and automatically curtailed certain building loads when these thresholds were reached.

## result

Montville HS has already reduced energy costs by over 15%, equating to \$22,692 in annual savings. June is typically the school's peak demand month of the year, and before using RTIS<sup>®</sup>, the school's peak demand hit 319.5 kW in June 2016, whereas peak dropped to 236 kW in June 2017. Montville HS can now monitor energy consumption in real time. Going forward, Montville HS plans to add additional sub-meters and sensors to further improve their carbon footprint, with the goal of reaching "building zero," where only critical loads are used during unoccupied periods.



Working with Artis Energy has given me and my staff unprecedented visibility and control over the school's energy usage. One of the most attractive benefits of RTIS<sup>®</sup> has been the ability to analyze comparison periods, so we can identify anomalies and areas of the school using energy excessively. I'm excited to collect more data and find new ways to reduce energy usage, and I'm proud to be able to help the school save money without causing disruption to students and faculty.



—Steve Carroll, Director of Facilities, Montville High School

860-613-7000  
[artisenenergy.com](http://artisenenergy.com)