



CLIENT SUCCESS STORY

Kenton County School District Receives ENERGY STAR's 2018 Partner of the Year Award

CLIENT

Chris Baker, Energy Systems Coordinator; Rob Haney, Executive Director of Support Operations & Finance

GEOGRAPHY

Fort Wright, Kentucky

CHALLENGES

The district was set up for huge energy cost avoidance opportunities, but didn't have the tools in place to create a data-driven energy conservation program.

RESULTS

Using a robust energy management solution with thorough reporting capabilities has allowed Kenton County to analyze their usage to make more data-driven decisions and validate their projects.

FAST STATS

Saved over \$11 million in energy costs since 2005; Completed \$5 million project through Energy Saving Performance Contract; Reduced district-wide source energy usage by four percent since 2016



ENERGY

Energy is the second-highest line item in the budget of most educational institutions. It's a fact Chris Baker and Rob Haney know all too well as Energy Systems Coordinator and Executive Director of Support Operations and Finance for Kenton County School District, the sixth largest district in Kentucky. With 10 elementary schools, three middle schools, three high schools and two academies to oversee, what could have been an anxiety-provoking story of a district bleeding energy dollars is now just the opposite.

Kenton County's energy management program has proven to be an inspiring success story, paving the way for other districts and showing industry peers what's possible when you get the right plans, tools and people in place.

Why are they considered so successful? Here are just a few reasons to date.

Awards

- › 2008 Kentucky Environmental Quality Commission, Earth Day Award
- › 2010 Energy & Environment Cabinet, Energy Leadership Award
- › 2008 NEED Youth Awards, District of the Year National Level
- › 2009, 2011 NEED Youth Awards, District of the Year State Level
- › 2008 NEED Youth Awards, Caywood - KY Elementary School of the Year
- › 2009 NEED Youth Awards, Piner - KY Elementary Rookie School of the Year
- › 2009, 2011 NEED Youth Awards, Caywood - National Elementary School of the Year – Finalist
- › 2009, 2011 & 2012 NEED Youth Awards, Caywood - KY Elementary School of the Year
- › 2010 NEED Youth Awards, Summit View Elementary – National and KY Elementary Rookie School of the Year

2017 Highlights

- › Reducing district-wide source energy usage by four percent since 2016
- › Avoiding more than \$1.4 million in energy costs through energy management and reduction
- › Raising the average ENERGY STAR™ score across entire portfolio of benchmarked buildings to 91, a two-point increase over 2016

- › Completing a \$5 million project through an Energy Savings Performance Contract, including upgrading 90 percent of all school interior lighting to LEDs, replacing one school heating and cooling system, and replacing two school roofs
- › Engaging community in energy savings by publicly posting ENERGY STAR™ scores on district website and in schools, distributing weekly interval data reports to building managers, and providing a monthly energy report to the Board of Education

If that wasn't enough, they're also taking home their **sixth** ENERGY STAR™ Partner of the Year award this year in the areas of Energy Management and Sustained Excellence. So how did they go from being a district that could have faced a tremendous hemorrhage of energy resources to being a nationally recognized champion of energy practices?

Let's go back to 2005.

"After seeing the power of the software, we were able to track better and monitor."

We've become more informed users."

"Our building inventory was in pretty bad shape, and we had substantial dollars afforded to us through a growth nickel tax rate that we were allowed to levy, which gave us the funding to renovate or replace a lot of aging buildings. It was an opportunity for us to design differently, and we had an architect on staff that was really passionate around energy conservation. We approached the design and construction of our buildings differently because of that, and it was at that time we saw a need to create an energy systems job description and find someone who could champion this work. We had to be more efficient with our decisions – we had to control those costs," says Rob.

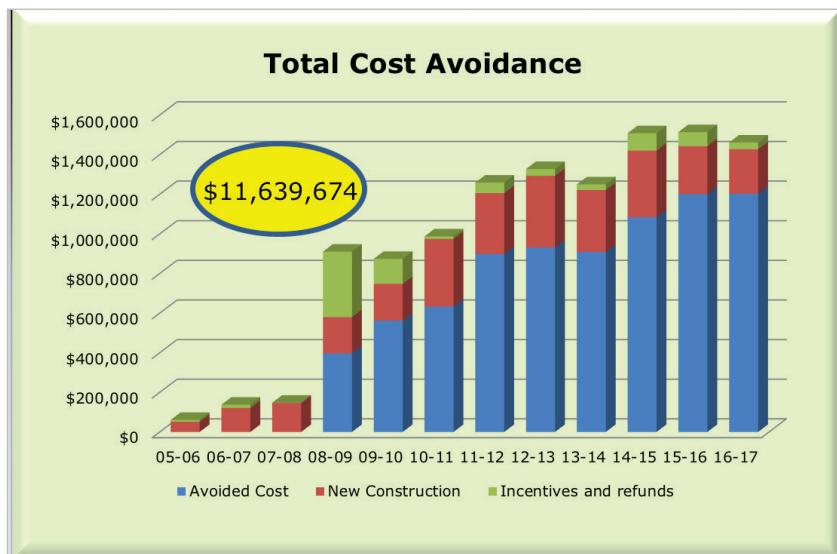
That's when Chris joined the district as Energy Systems Coordinator, working to create an energy program that would be sustainable. At first, they were relying on spreadsheets that required manual data entry, but it soon became clear their project had outgrown that approach.

"Chris had forged ahead with a fantastic conservation program, working with the schools and the students. We had energy teams in all the schools. We had shutdown procedures. We were really doing a lot of great things, and I know we were making a difference, but we were kind of blindly doing it," Rob says. That desire for more visibility into their efforts is what led them to seek out an energy management solution. "After seeing the power of the software, we were able to track better and monitor. We've become more informed users. And now we have tools in the hands of those in the school buildings."

“The software is a vital tool in our toolbox, and it allows us to validate everything we’re doing. The reporting is now so easy to do.”

“What really drew us to the software was the Interval Data Recording graphs. That’s what set it apart,” says Chris. “It was very easy to read. It was a way for us to give responsibility and ownership down to the building level. The software is a vital tool in our toolbox, and it allows us to validate everything we’re doing. The reporting is now so easy to do.”

With that, they were able to get building managers involved, and over time, created shutdown checklists and procedures to promote conservation at each facility. Each school began to get involved, and they were able to do deep dives into the data they were acquiring on their usage and spending. Having the numbers in front of them also helped them to see where they had been improperly billed and were owed refunds.



TOTAL COST AVOIDANCE NUMBERS FROM 2005 TO 2017

From there, a three-legged energy program was built.

One leg was focused around construction – both to new and existing buildings. They partnered with ENERGY STAR™ on new construction, placing an emphasis on renewable energy sources.

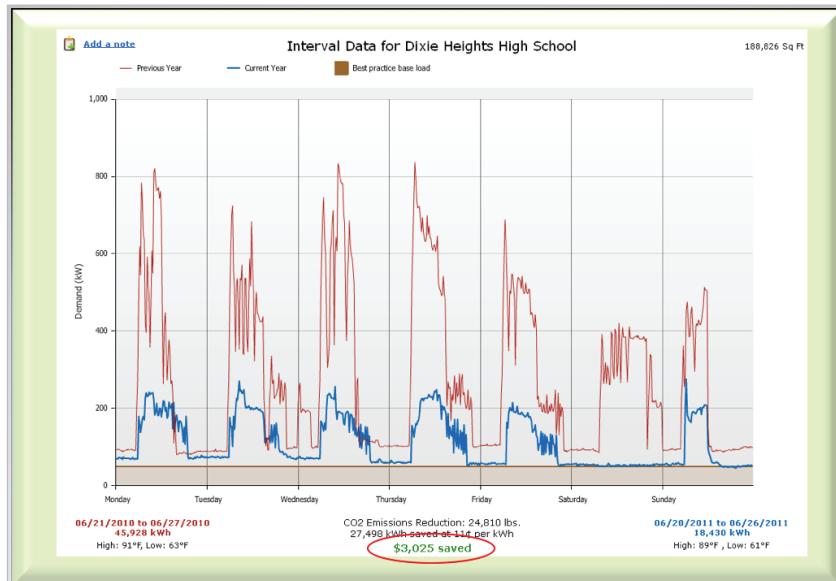
The second leg promoted energy monitoring, consisting of bill analysis and tracking, building automation systems, energy shutdowns, accounting and reporting, and interval data analysis.

The third was all about education. Both Chris and Rob give credit to the staff and students who have gotten passionately involved in doing their part to conserve energy. “People matter. It all counts,” says Chris.

Because of that, a behavior modification program was created, consisting of conservation checklists and best practices that everyone could participate in. "E-WISE is our student energy program. Every elementary and middle school has a team," Chris says. "They do building assessments, and the point is to see how much their building used or spent. These are all numbers they get out of the software."



These students then present their findings to their schools, which is just one way they get involved. The district also holds energy events, "Go Green" weeks and efforts like "No Tech Tuesdays", and they work conservation into their curriculum. It's how the district not only sets an example to be energy conscious, but also teaches students specific ways to conserve. And it's clearly paying off.



PROOF FROM AN INTERVAL DATA RECORDING GRAPH OF HOW MUCH IMPACT THEIR SHUTDOWN EFFORTS MAKE IN A SINGLE WEEK



It's clear that in Kenton County, it's the people who really take charge and make these programs come to life. Thankfully, they've got energy management software that gives them the data to prove it's all making a measurable difference.

"A report that used to take me hours to do is now a matter of 15 to 20 minutes. It's a tool I couldn't imagine being without."

"In the state of Kentucky, we are legislatively mandated to provide an annual energy report," says Chris. "Every school district has to provide this to the legislation, and the software has made that annual reporting so much easier, to where a report that used to take me hours to do is now a matter of 15 to 20 minutes. It's a tool I couldn't imagine being without."