

# Ann Arbor Public Schools

Case Study: Chiller tune-up, building management system, and lighting



The mission of the Ann Arbor Public Schools is to ensure that each student realizes their aspirations while advancing the common good, by creating a world-class system of innovative teaching and learning. With this as a backdrop for ongoing success, Ann Arbor Public Schools values the environment as a means of encouraging common good through improving energy efficiency and lowering their operating costs.

To this end, Ann Arbor Public Schools has been a valued participant in DTE's Energy Efficiency Program for Business and have taken an active role in reducing energy waste by making improvements at many facilities over the last several years. They are the model school district in energy efficiency, taking a long-term and comprehensive view of energy improvements that can be made at a diverse portfolio of building types and uses.

Having been such an active participant over so many years, their opportunities have become more complex while searching for deeper savings, and this is where DTE comes in. Our Engineers and Energy Advisors worked closely with Ann Arbor Public Schools, identifying greater opportunities and calculating energy and cost reductions.

### The Solution

Ongoing maintenance operations, capital improvements, and new investments within Ann Arbor Public Schools were reviewed and assessed to determine which opportunities provide the biggest payback. The school district's largest improvements included installing and upgrading their Building Management Systems (BMS) at 27 locations, saving 2,741,742 kWh annually and receiving over \$92,000 in rebates through the Energy Efficiency Program for Business. Not only does the BMS provide ongoing cost and energy savings, but it is also a critical piece in modernizing and improving operational efficiency throughout the school district. These projects had a focused approach of saving energy and public resources while lowering their environmental impact.

## Savings in Action

Recent projects at Ann Arbor Public Schools included district-wide installation of upgraded Building Management System, chiller tune-ups, and LED lighting upgrades. Chiller tune-ups are a recommended maintenance item that offers great savings and assures that capital-intensive equipment runs efficiently and properly year-over-year. As an ongoing maintenance item, we continue to work with the school district tuning their chillers biennially. We also look forward to continually advising on the latest technologies and where their best returns and greatest savings opportunities remain.

## **Project Details**

#### **Building Management System**

2,742 MWh electric savings \$92,686 rebate

#### **Chiller Tune-Ups**

69 MWh electric savings \$10,357 rebate

#### Lighting

8.8 MWh electric savings \$582 rehate

### Get Started

Updating your facility and performing routine maintenance can lower operating costs by thousands. Our Energy Advisors can get you started on your energy efficiency journey.

Call us at 866.796.0512 (option 3)



"The Ann Arbor community recognizes that we all have a role to play in reducing energy waste and minimizing harmful emissions, so it only made sense that the children in this community learn the value of energy efficiency at a young age."

Emile Lauzzana, Executive Director of Physical Properties



Reduced CO<sub>2</sub> emissions are equivalent to avoiding

241.4 Million number of smartphones charged



Emissions saved are equivalent to removing

passenger vehicles from the road for a year



Reduced CO<sub>2</sub> emissions are equivalent to avoiding

2.22 Million pounds of coal burned