



*“With the energy retrofit we are implementing through this project, our district will net more than \$700,000 in savings over the next 5 years. Plug Smart has demonstrated outstanding results through their performance and has gone above our expectations in completing the project and monitoring the energy output of our school district.”*

- Kristine Blind, Treasurer  
London City Schools

### Overview

**Facility Type:**  
**Project Cost:**  
**Cost Savings:**

**K-12 complex**  
**\$1.01 Million**  
**\$123,000 Annually**

#### The Client:

- Located in central Ohio, the London City School District includes the City of London and the Townships of Deer Creek, Somerford, and portions of Union Township.
- All buildings for the London City School District are housed on one campus, serving a student population of over 2100 students within three schools.

#### The Problem:

- LCS was severely under-performing comparable school districts in its energy consumption (bottom 10%).
- The High School and Elementary buildings are connected buildings and therefore are not metered separately.
- Old and obsolete controls units handle each building system separately.

#### The Plug Smart Solution:

- Helped LCS apply for OSFC program to ensure the payback and allow the financing of the new high efficiency chiller, high efficiency lighting, and a significant energy management system overhaul at the High School and Elementary School.
- Designed, built, programmed, installed and commissioned a fully-integrated Building Automation System and an Internet-based front end Graphical User Interface (GUI) that will communicate with all hardware and software points. All electrical and gas meters connected to BAS in order to provide real time usage information; water/sewer information input manually in the system monthly.
- Integrated scheduling tools for afterhours overrides that ensure only authorized staff members have access when needed.

#### Technical Highlights

- Interior Lighting Retrofit & HID Replacement
- Occupancy Sensors
- Upgraded T8 lamps & electronic ballasts
- Upgraded BAS Software and Hardware
- Replaced Chiller and Upgraded Ice Storage
- Installed Deduct Meter

#### Environmental Impact

- 2,398,580 kWh reduction in annual consumption
- 3,644,007 lbs. reduction of CO2 emissions
- Equivalent to removing 347 cars from the road