

# CASE STUDY



## London City Schools London, OH



# \$1.01M

Investment

...

# \$123K

Annual Savings



2,398,580 kWh reduction  
in annual consumption

...

3,644,007 lbs. reduction  
of CO<sub>2</sub> emissions

...

Equivalent to removing  
347 cars from the road



Interior lighting retrofit  
& HID replacement

...

Occupancy sensors

...

Upgraded T8 lamps  
& electronic ballasts

...

Upgraded BAS software  
and hardware

...

Replaced chiller and  
upgraded ice storage

## 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 Challenge

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.

## Our 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.



*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,**  
London City Schools  
Treasurer