

THE POWER OF ENERGY EFFICIENCY IN K-12 SCHOOLS



America's K-12 schools spend more than \$7.5 billion annually on energy –more than they spend on computers and textbooks combined.

ENERGY MANAGEMENT IN K-12 SCHOOLS

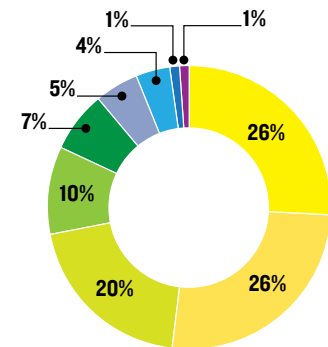
Energy costs are the largest operating expense for kindergarten through 12th grade school districts, after salaries and benefits. Fortunately, energy is one of the few expenses that can be decreased without negatively affecting classroom instruction. Better yet, projects designed to increase the efficiency of lighting, HVAC and other systems also enhance the learning environment by improving light quality, indoor air quality, thermal comfort and security.

The ComEd Smart Ideas® Energy Efficiency Program offers **cash incentives** for projects ranging from lighting and HVAC improvements to new kitchen equipment and vending machine controls. We also provide **free on-site energy assessments** to help your staff identify and prioritize energy efficiency projects. Contact us today to take the next step toward improving your school's energy efficiency.

SMART IDEAS FOR REDUCING ENERGY USE

K-12 facilities include a broad range of building types and operations including classrooms, cafeterias, kitchens, gymnasiums and auditoriums that are typically owned and operated for decades. ComEd Smart Ideas® has numerous incentives available to help every part of your school operate more efficiently.

ELECTRICITY CONSUMPTION BY END USE—K-12 SCHOOLS



- LIGHTING
- COOLING
- OFFICE EQUIPMENT
- OTHER
- VENTILATION
- SPACE HEATING
- REFRIGERATION
- COOKING
- WATER HEATING

Source: U.S. Energy Information Administration

INDOOR AND OUTDOOR LIGHTING INCENTIVES

- » T8 and T5 fluorescent lamps and fixtures
- » LED lamps, fixtures and signage
- » Bi-level stairwell/hall/garage fixtures
- » Sensor-controlled wall pack fixtures
- » Occupancy sensors
- » Daylighting controls
- » Photocells
- » Time clocks
- » Lighting control systems

COMMERCIAL KITCHEN INCENTIVES

- » Kitchen demand ventilation controls
- » Electronically commutated motors
- » ENERGY STAR® refrigerators, freezers and ice makers
- » ENERGY STAR hot food holding cabinet
- » Beverage and snack machine controls
- » Anti-sweat heater controls for glass door cooler/refrigerator
- » Refrigerated display case lighting and controls

BUSINESS ENERGY ASSESSMENTS

- » A free, on-site facility assessment conducted by a ComEd engineer to identify energy efficiency opportunities eligible for incentives

COMPUTER INCENTIVES

- » Network desktop computer power management software

NEW CONSTRUCTION SERVICE

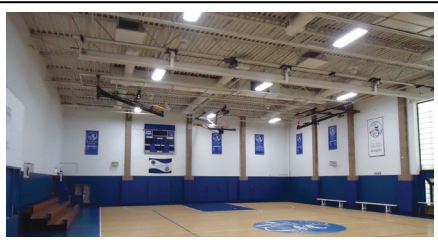
- » Cash incentives and technical assistance, such as energy modeling, to support architects and engineers in designing high-performance buildings

RETRO-COMMISSIONING INCENTIVES

- » Expert analysis of building systems that identifies no-cost and low-cost operational improvements to optimize electricity and gas usage

HVAC INCENTIVES

- » Building energy management system
- » Demand controlled ventilation (interior and parking garage)
- » Demand controlled ventilation (kitchen exhaust hoods)
- » Air-side economizer
- » Electronically commutated motor on fan-powered box
- » Restroom exhaust fan occupancy sensors
- » Wireless direct digital control (DDC) thermostat
- » Water- and air-cooled chillers
- » VSD on HVAC chiller, fan or pump
- » Chilled water reset controls
- » High-efficiency water pumps and retrofits



PROJECT SNAPSHOT

→ **ST. MARY OF THE WOODS SCHOOL
CHICAGO**

MEASURES IMPLEMENTED

→ **T12 to T8 retrofits; exterior metal halide to LED; interior metal halide to T8**

TOTAL PROJECT COST

→ **\$46,310**

ESTIMATED ANNUAL ENERGY SAVINGS

→ **172,589 kWh**

ESTIMATED ANNUAL COST SAVINGS

→ **\$12,944***

SMART IDEAS INCENTIVE RECEIVED

→ **\$12,826**

ESTIMATED PAYBACK PERIOD WITHOUT SMART IDEAS INCENTIVE

→ **3.6 years**

ESTIMATED PAYBACK PERIOD WITH SMART IDEAS INCENTIVE

→ **2.6 years**



PROJECT SNAPSHOT

→ **ST. MARY CATHOLIC SCHOOL
MOKENA**

MEASURES IMPLEMENTED

→ **Metal halide high-bay to LED high-bay; air-cooled chiller; energy management system**

TOTAL PROJECT COST

→ **\$164,649**

ESTIMATED ANNUAL ENERGY SAVINGS

→ **320,811 kWh**

ESTIMATED ANNUAL COST SAVINGS

→ **\$24,061***

SMART IDEAS INCENTIVE RECEIVED

→ **\$30,423**

ESTIMATED PAYBACK PERIOD WITHOUT SMART IDEAS INCENTIVE

→ **6.8 years**

ESTIMATED PAYBACK PERIOD WITH SMART IDEAS INCENTIVE

→ **5.6 years**

FOR MORE INFORMATION

For more information about ComEd Smart Ideas incentives, visit ComEd.com/BizIncentives, call **855-433-2700** during normal business hours to speak with a Smart Ideas service representative or email us at SmartIdeasBiz@ComEd.com.

Public sector institutions should contact the Illinois Department of Commerce & Economic Opportunity at www.ilenergynow.org for information about available incentives.

*Estimated annual cost savings are based on an electricity rate of 7.5 cents per kWh.