



## **PENN DELCO SCHOOL DISTRICT ASTON, PENNSYLVANIA**

Penn Delco School District hired GreenTech Energy Services to retrofit the lighting in several gyms and a swimming pool in the high school and middle schools. The existing lights were 250- and 400-watt metal halide lamps and 9-lamp 40-watt compact fluorescent high bay fixtures. This technology was energy hungry, obsolete, and provided dim, uneven lighting. It was replaced with new 2 x 4 surface-mounted fluorescent fixtures with four 54-watt T5 lamps, reflector lenses, and high-output electronic ballast. The fixtures in the gyms are covered with cages to protect them from wayward basketballs. The new technology provided tremendous energy savings while increasing light levels and improving overall aesthetics. The efficiency of the fluorescent lamps means lower operating cost and a longer life expectancy than the old lamps.

### **Energy & Cost Savings:**

Program Cost-----\$34,604  
Utility Rebate-----\$6,171  
Payback Period-----9.0  
KW Saved-----17  
KWH Saved-----68,850  
Energy Cost Savings---\$9,639  
Total Savings-----\$10,677

### **Environmental Impact:**

Reduction in Carbon Dioxide (pounds)----- 103,275  
Reduction in Sulfur Dioxide (grams)----- 385,560  
Reduction in Nitrogen Oxide (grams)-----172,125

The old lighting was very spotty, but now everything looks noticeably brighter and cleaner,” says Larry Cheety, Penn Delco Middle School head custodian. “It’s a 110% improvement.”

