

# Southern Columbia Area School District

## Catawissa, PA

### High School Exchanges Steam for Green



In 2012, Southern Columbia School District realized it had some major challenges. Their High School's 1961 fuel oil dependent heating system was inefficient, archaic and starting to lose functionality. During the winter, classrooms would overheat, causing teachers to open windows or manually turn off breakers to classroom heating units. With High School classrooms being the last unconditioned classrooms in the District, the administration knew an HVAC replacement was quickly transitioning from a want to a need. In addition, the roofs at both the elementary and high school were causing multiple leaks around the school and were also in need of replacement.

With stretched budgets and lack of funding, the District's financial options were limited, at best, to approach these major upgrades on their own. Enter performance contracting.

In August 2012, the District met with McClure Company for the first time. After a meeting that established project goals and major focus areas, the administration team walked McClure Company around their facilities, further illustrating their problems and areas of opportunity.

#### Testimonial:

*"McClure Company's competency and proficiency was very evident and allowed this comprehensive project to be completed with little interruption to our schools. McClure Company's professionalism is to be commended".*

*Paul Caputo, Superintendent  
Southern Columbia Area School District*

#### Environmental Impact:

The District's partnership with McClure Company not only provided the taxpayers a budget neutral project, it also removed the equivalent of 494 metric tons of carbon dioxide (CO<sub>2</sub>) per year from the environment.

#### CO<sub>2</sub> Reduction Equivalent to:



104 Cars taken off the road for a year.



CO<sub>2</sub> sequestered by 12,667 tree seedlings grown for 10 years



CO<sub>2</sub> produced by 45 homes for 1 year



#### Contract Type:

Guaranteed Energy Services Agreement (GESA) under ACT 39 of 2010

Term – 20 Years

#### Customer Information:

- 2 Building
- 292,000 Square Feet
- Included Fuel Switch from Oil to Propane

#### Contract Amount:

\$4,651,350

#### Savings Summary:

\$165,559 first year guaranteed utility and operational savings

\$4,651,972 guaranteed savings over the term of the program (20 Years)

#### A Trusted Partner

McClure Company has over 300 professionals with offices across PA. Our in-house experts have brought technical, engineering, project management, and 24/7 service capabilities to over 115 Pennsylvania public sector customers in successfully completed, award winning GESA projects. Recognized for our flexibility, progressive solutions and dedication to meeting the ever changing energy landscape demands, we value individual goals, personally delivering dramatic gains and peak efficiency.

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Through a comprehensive energy audit and project estimate, McClure Company returned to the District with a compiled list of results and recommendations. McClure found multiple energy saving opportunities around the District. These energy savings could be utilized by the District to offset the costs of the major capital needs the District faced – the High School HVAC system and District roofing upgrades. McClure Company provided the administration team and board members with a list of energy cost saving measures and their respective costs, savings and simple payback. This list provided the information that the administration team and board members needed to customize their own energy program, one that met their immediate and future needs.



What program did the administration team and school board choose? A \$4,651,350 program that not only saved the District \$165,559 per year, but had a cumulative savings of \$4,651,972 over 20 years! This program included: District Wide Lighting Upgrades, Building Envelope Upgrades, Plug Load Management, and the major capital project needs – the HS HVAC Upgrades and the required roofing upgrades.

The 3-month energy project, which started in June 2013 and ended in August, was a success. Specifically, roof upgrades eliminated all the building leaks and providing the District with a 30 year warranty on all new roofing areas. The HS HVAC system was converted from inefficient oil dependent steam system with pneumatic controls to an efficient propane dependent hot water system with Direct Digital Controls (DDC).

For the High School classroom HVAC upgrade, the District selected an energy recovery heat pump solution. By recovering lost heat inside the classroom, the heat pump was the most efficient solution and provided each classroom the flexibility to heat or cool to a desired classroom temperature.

*McClure Company also displayed their philanthropic values when they donated new LED lights to the District's new flag pole at Tiger Stadium. "In these economic times, your donation is greatly appreciated and will allow "Old Glory" to be proudly displayed for many years to come".*

*Paul Caputo, Superintendent  
Southern Columbia Area School District*



1950's era steam unit ventilator/heating unit.



New energy recovery heat pump