**Why install renewable energy systems at PHS?**

**PHS Solar Energy Club’s Vision**

**12/6/2013**

We are thinking about installing a renewable energy system at the PHS main building. Renewable energy systems include solar arrays and wind turbines. Increasing the energy efficiency of the building is a smart way to prepare for installing onsite renewable energy systems. To increase the energy efficiency of the building, we need to know and benchmark the buildings current energy use.

Energy efficiency is about using only the energy you need to use, while renewable energy is about getting that energy from a sustainable source.

Efficiency upgrades can shrink the energy load of a building by as much as 35 percent, which will maximize the proportion of clean power generated on-site at the least cost. In other words, energy efficiency gives you the most bang for your renewable energy buck.

Since you can’t manage what you don’t measure, we have set up the PHS main building in the EPA’s ENERGY STAR Portfolio Manager®, an online tool to measure and track energy and water consumption, as well as greenhouse gas emissions. We plan to use it to benchmark the performance of the PHS main building. We used energy bills provided by the Wood County BOE and some basic information about the building.