**2030 OBJECTIVE:** Reduce our energy consumption 50% per square feet below 2006 levels.

**2016 ACTION ITEMS:**

- Reduce electrical use by upgrading lighting to energy efficient types suited for the application.
- Install light sensors and motion sensors district-wide.
- Replace failed equipment with energy efficient equipment.
- Engage an outside consultant to gauge building energy usage, in real time.
- Build increased awareness and outreach of energy use by engaging PCC staff and faculty to decrease energy consumption.
- Require a minimum of LEED Silver standards for all new (Bond) construction.

**2030 OBJECTIVE:** Produce 20% of our own energy onsite using renewable energy technology.

**2016 ACTION ITEMS:**

- Initiate a district-wide taskforce to develop a strategic plan around building energy usage with the assistance of outside consultants.

**SCOPe II NARRATIVE AND ACCOMPlishments**

The Scope II sub-committee encompasses emissions associated with electricity consumption at PCC. (This sub-committee replaces components of the previous Buildings and Energy sub-committee.)

Although Scope II emissions have increased from 10,761 GHGs to 11,509 GHGs in 2012, based on square footage there has been a .6% decrease. This can be attributed to accomplishments completed by the Scope II sub-committee.

Accomplishments by the Scope II sub-committee include:

- Installation of hand dryers to replace paper towel dispensers in all bathrooms district-wide. This resulted in a 61% decrease in district-wide energy costs related to hand drying in bathrooms.
- Fuel cells were installed and are producing energy at the Sylvania campus in 2011, resulting in better energy efficiency/a reduction in electricity consumption.
- Energy management system controls were installed district-wide during 2011, improving mechanical energy efficiency of the systems.
- In 2012, a heating hot water loop was upgraded to a variable flow pump system on the Sylvania campus. Following an energy audit, this boiler plant project showed the highest energy savings return, in part load conditions.

The project converted 3-way valves in Sylvania's tunnel (that serve all of our buildings' heating hot water) to 2-way valves. Additionally, the main boiler plant pumps were converted to variable speed pumps. These changes allow the plant to supply only the amount of hot water demanded to heat the buildings, preventing un-utilized hot water from circulating or returning unused to the plant.

These upgrades allow PCC to gain both gas and electricity savings by circulating and pumping hot water based solely on demand. The projected savings are:

- **Natural Gas savings of 118,397 terms or $81,100** per year at current rates; and
- **Electricity savings of 84,967 kWh or $6,950** per year at current rates.

This boiler project’s savings are applicable to both Scope I and Scope II sub-committee’s accomplishments.

*Dr. Pulliams strolls beside the Rock Creek solar array.*