

# Somerset County Goes Green!

## Energy Conservation Initiative

A diverse set of public- and private-sector partners nationwide are joining forces with the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy through ENERGY STAR to protect the environment. ENERGY STAR is a joint program of the EPA and the Department of Energy helping Americans save money and protect the environment through energy-efficient products and practices.<sup>1</sup>

A strategic approach to energy management can both produce savings for the bottom line and have a positive effect on the environment. The EPA's ENERGY STAR partnership offers a proven energy-management strategy that helps in measuring current energy performance, setting goals, tracking savings and rewarding improvements.<sup>1</sup>

In 2004, Somerset County began the Energy Conservation Initiative (ECI), designed to minimize Somerset County's impact on our energy resources. ECI is designed to capture cost-saving opportunities by implementing countywide energy-conservation practices in buildings and equipment operations.

The County contracted with Metro Energy Solutions to develop an action plan to identify potential energy-conservation measures, and to fully optimize our ability to make significant infrastructure improvements to County facilities.<sup>2</sup>

An energy audit was conducted. The following is a summary of recommendations that were made to the County:

- ✓ Turn off air-intake fans at night (air handling units for HVAC system)
- ✓ Replace lighting fixtures with high-efficiency lighting
- ✓ Set back heating and cooling temperatures at night and on weekends
- ✓ Replace lighting fixtures with high-efficiency lighting
- ✓ Install variable-speed drives on hot and chilled water pumps
- ✓ Install programmable thermostats
- ✓ Replace hot-water boilers with high-efficiency boilers
- ✓ Replace old, inefficient heat pumps with new units

These changes are being implemented where applicable for Somerset County buildings. The estimated cost of work for all of these recommendations was approximately \$2,227,000. The overall result of these changes is an estimated annual savings of approximately \$350,000. By 2009, only five years after the adoption of the Energy Conservation Initiative, the County's bottom line for energy costs will be drastically reduced. The New Jersey SmartStart program offers rebates to the County on a per building basis. The total estimate in rebates for Somerset County is approximately \$92,350.

Conservation savings impact this bottom line far more efficiently than many other investment initiatives. When energy is conserved, utility budgets are reduced, and so are the negative impacts on the environment that occur with over-consumption of energy.



Sources: 1. [http://www.energystar.gov/index.cfm?c=about.ab\\_history](http://www.energystar.gov/index.cfm?c=about.ab_history)

2. Memorandum July 29, 2004 County of Somerset Department of Public Works F& S Division

3. Photo source: <http://kivelectric.com/images/retrofit.jpg>