

## BEREA ENERGY COST SAVINGS PLAN A Comprehensive Community Energy Plan

A joint venture of the City of Berea, the Kentucky Environmental Foundation, and Sustainable Berea, Inc.

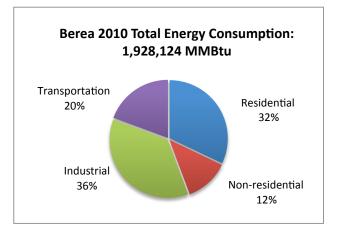
## September 2012

**Energy Efficiency Planning for Berea.** In 2009, the City of Berea, KY was encouraged by local civic, environmental and health groups to join ICLEI, Local Governments for Sustainability. This association of local governments works to use energy more efficiently in order to reduce harm to the environment and save money in the process. ICLEI, which includes hundreds of city members in the U.S. and several in Kentucky, prescribes a five-step process that helps cities realize their full energy savings potential. The Berea Energy Cost Savings Plan (BECS) is a key step in Berea's energy future.

**Setting Energy Savings Goals.** In order to prepare the BECS Plan, the city underwent a comprehensive energy inventory, which looked at Berea's energy consumption in four sectors:

residential; non-residential; transportation; and industry. A BECS community advisory committee, consisting of representatives from the city government, schools, environmental groups, social service groups, Berea College and others then set forth a goal to reduce energy usage in Berea by **30% by the year 2042**, an average of 1% reduction in per capita energy use, per year.

The BECS Plan reflects a comprehensive approach, encompassing all buildings and transportation, with more than 50 recommendations for potential activities that could help achieve this goal.



Energy Savings Mean Cost Savings. Each recommendation in the BECS Plan includes



Home energy audit performed by Berea's Hong Durandal. Photo: MACED

an estimated cost savings amount, making it easy to see which activity investments will reap the greatest short- and long-term savings. The earlier that cost-savings begin, the greater the savings over time; every forgone dollar saved is an "opportunity cost", a lost benefit.

Using current 2012 utility rates, the BECS Plan estimates potential savings of **\$639 per household per year** if the Plan's energy efficiency recommendations are followed. The Plan also considers renewable energy generation (for example, energy generated by solar panels) but those cost savings are more difficult to predict at this time. **Energy Savings Recommendations.** Specific recommendations listed in the BECS Plan include:

- ✓ Coordinated energy audits, weatherization and retrofits for homes, industries and businesses
- Business outreach program to unite local industries and businesses and utilities around energy savings goals
- ✓ Energy Star appliance purchasing policies
- ✓ Support for Safe Routes to School
- ✓ Creation and implementation of a bike and pedestrian master plan
- ✓ Efficient street lighting modifications
- ✓ Water conservation
- ✓ Increased renewable energy generation



Berea resident Steve Boyce at the Berea Solar Farm. Photo: MACED

City staff, businesses, organizations and other stakeholders can work together to determine project priorities based on how much we are able to invest, and how much we want to save.

**Benefits to Our Health, the Environment and Local Economy.** There are many other benefits associated with energy efficiency. Achieving the energy savings goal in this Plan would reduce Berea's "carbon footprint," or, the amount of harmful greenhouse gases emitted, by 29% by the year 2042. Reductions in soot, greenhouse gases like sulfur dioxide and nitrogen oxides can lead to better air quality and better health while we become more energy independent.

Other benefits of the energy cost-savings recommendations include:

- **Economic Development.** Greater investment in energy efficiency helps build job training and new job creation, attract new businesses and enhance public image, and generally improve local economies.
- Extended Equipment Life and Reduced Maintenance Costs. When equipment runs fewer hours per year, its useful life is extended and maintenance, labor, and materials are reduced.
- **Relief for Low Income Families.** Reducing energy waste can stabilize electric bills, or reduce energy spending for households (among others) that often struggle to pay bills.
- **Improved Public Health.** Energy savings including electricity and transportation -- can reduce harmful air pollution, and some studies show that an energy efficient home is linked to better overall health.
- Enhanced Grant Funding. The community involvement component of this planning process and the specificity of the Plan goals and recommendations could make the city more attractive to foundations and government agency grants.

**For more information:** For complete information, please see the full BECS Plan at the City of Berea website (<u>http://bereaky.gov/the-berea-energy-costs-savings-plan</u>). Public input is welcome! Comments and questions can be addressed to Randy Stone, City Administrator, (859) 986-8528, or to Elizabeth Crowe, Kentucky Environmental Foundation, (859) 986-0868.





