

Green Bank of Kentucky



**NASEO CONFERENCE
FEBRUARY 8, 2012**



Foundation and Inspiration



ABOUT THE GREEN BANK OF KENTUCKY

About Green Bank of Kentucky



- **The Green Bank of Kentucky was founded September 2009 by Governor Steve Beshear with \$14.17 million from American Recovery and Reinvestment Act (ARRA) funds from the US Department of Energy.**
- **It is managed through a unique partnership between the Energy and Environment Cabinet and the Finance and Administration Cabinet.**

Inspiration



- The initiative is inspired by the Governor's Energy Plan called "Intelligent Energy Choices for Kentucky's Future" released November of 2008.
- The Governor's plan calls for a statewide reduction in projected energy demand of 25% by 2025 through energy efficiency and renewable energy.



Revolving Loan



- The Green Bank of Kentucky is the nation's first low-interest revolving loan fund dedicated to energy efficiency upgrades for state facilities.
- Funds earned through the repayment of loans will be perpetually recycled to fund new loans.



Loan Repayment



- Green Bank of Kentucky loans finance the initial cost of energy efficiency upgrades to state-owned facilities.
- The savings generated by the investment provide the capital necessary to repay for the loan.
- This makes possible a capital improvement with a neutral or positive cash-flow for the state agency.



Goals



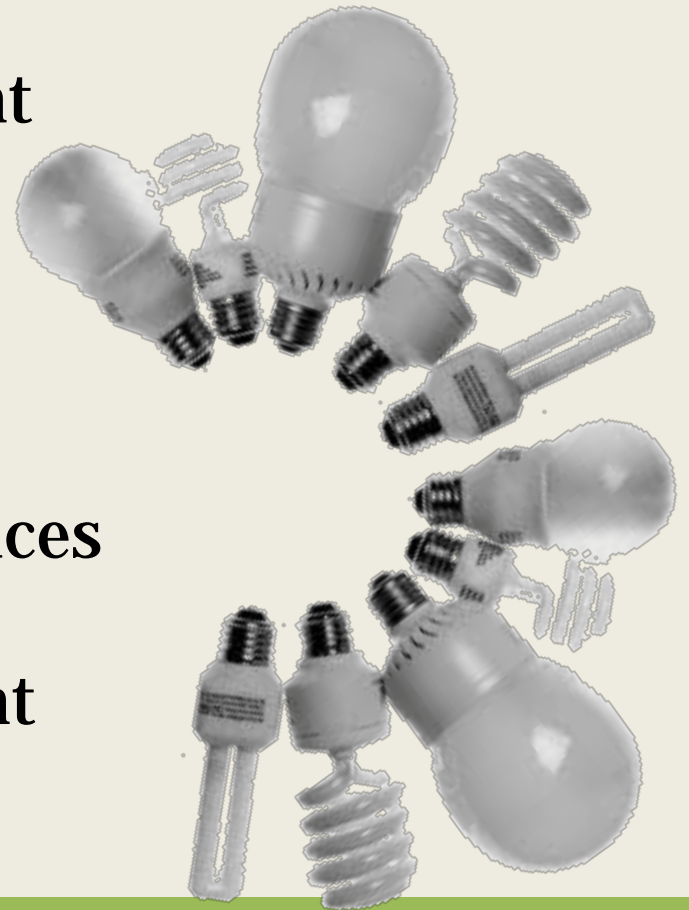
The goals of the Green Bank of Kentucky are to:

- Provide energy efficiency capital improvements to public buildings at no additional cost to the taxpayer
- Lower demand for energy and water
- Lower operating costs at participating facilities
- Promote economic development
- Lower peak demand for energy on Kentucky's grid
- Create construction and energy management jobs in Kentucky

Examples of Upgrades



- **Lighting**
 - ✦ Upgrades and Controls
- **Heating and Cooling Equipment**
 - ✦ Including Boilers and Chillers
- **Hot Water Systems**
 - ✦ Including Laundry and Dishwashing
- **Building Envelope**
- **Motors and Miscellaneous Devices**
 - ✦ to Control Consumption and Cost
- **Chemical-Free Water Treatment**



LOANS



**TYPES OF LOANS OFFERED BY THE GREEN BANK
OF KENTUCKY**



Loan Types



The Green Bank of Kentucky is composed of three different loan types:

- eSELF
- Hybrid
- Energy Savings Performance Contract (ESPC)



eSELF Revolving Loan Program



- **Self-Performed Projects costing between \$50,000 - \$250,000**
- **Facilities that do not anticipate major capital improvements or renovations within a 7 year period**
- **Generally:**
 - ✦ **effects a 20% reduction in energy consumption**
 - ✦ **enables loan repayment in 5-7 years**

Hybrid Revolving Loan Fund



- **Projects between \$50,000 - \$600,000**
- **State Agencies commission an energy audit or engineering analysis**
- **Agencies procure the labor and materials**



ESPC Revolving Loan Program



- **Projects costing \$600,000 or more**
- **Requires an investment grade energy audit to provide a precise cost benefit analysis of all energy efficiency investments**
- **Must have a life cycle energy cost analysis to guarantee a positive cash-flow during the repayment period**

Projects



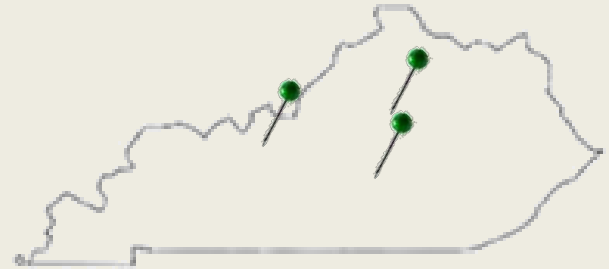
**LOANS TO DATE HAVE FINANCED THE
FOLLOWING PROJECTS**



Kentucky Department of Education



- **\$1.3 million ESPC**
- **14 years at 3.25%**



Three sites:

- Kentucky School for the Blind, Louisville
- Kentucky School for the Deaf, Danville
- Future Farmers of America (FFA)
Leadership Training Center,
Hardinsburg, KY



Kentucky Educational Television



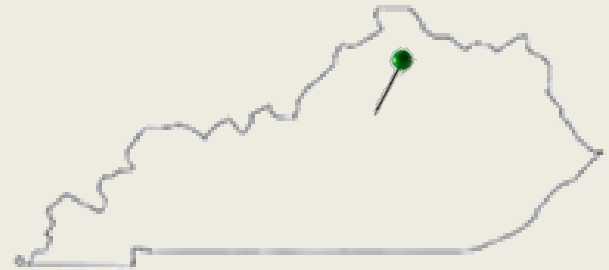
- **\$1.8 million ESPC**
14 years at 3.25%
- **Upgrade a variety of systems**
at the Network Center in
Lexington, KY
- **Investment is estimated to**
achieve a 50% reduction in
energy use



Finance and Administration Cabinet



- **\$2.9 million mixture of loan types**
Various terms (3-14 years)
Various rates (3.25-2.25%)
- **Scope encompasses various Cabinet facilities through the eSELF, Hybrid, and ESPC loan models**
- **Cabinet loans have allowed a 'test-drive' to assure all loan types are workable**

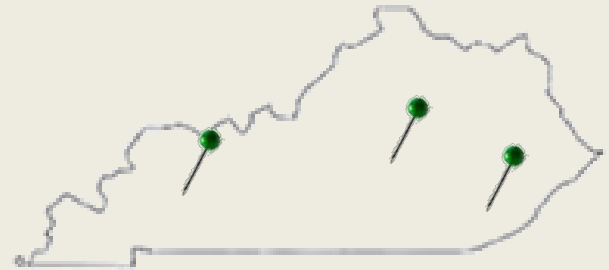


Department of Veterans Affairs



- \$2.2 million ESPC
- 14 years at 2.25%

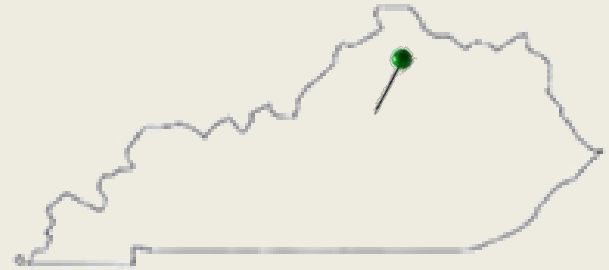
- Three skilled nursing facilities in:
 - Hazard
 - Wilmore
 - Hanson



Kentucky Office of the Blind



- \$600,000 ESPC
- 14 years at 1.5%
- Annual reduction in utility and maintenance costs = 48%
- Upgrades include lighting, HVAC, digital controls, dishwasher, more efficient utility metering



Cabinet for Health and Family Services



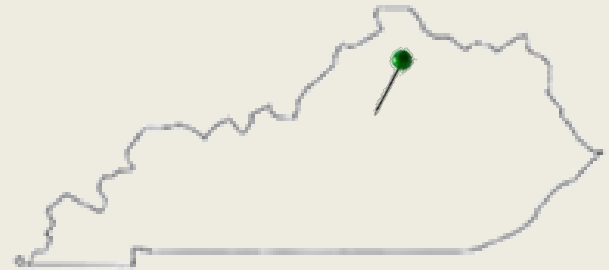
- **\$1.16 million for two facilities**
14 years at 1.5%
- **Upgrades include lighting, high efficiency water fixtures, digital control of mechanical systems, building envelop improvements, HVAC**



Department of Corrections



- **\$4.4 million- 14 years at 1.5%**
Blended finance with private lender for total of \$12.66 million (\$8.26 million at 2.6%)
- **Upgrades include lighting, high efficiency water fixtures, digital control of mechanical systems, building envelop improvements, HVAC**



About the Green Bank of Kentucky



ADDITIONAL INFORMATION

- **As of 12.16.2011 Green Bank has lent all of the original \$14.17 million in ARRA funds**
- **Currently, Green Bank is researching ways to replenish the fund with new capital and how to make the system self-funding**

About the Green Bank of Kentucky



ADDITIONAL INFORMATION

- **Loan applications are reviewed by a board which represents the following cabinets and divisions: Finance Cabinet, Energy and Environment Cabinet, State Budget Director, Office of Financial Management, State Controller's Office**
- **Applications are reviewed as received based on merit**

About the Green Bank of Kentucky



ADDITIONAL INFORMATION

- Multiple additional applications are underway
- Remaining funds will be loaned out by end of 2011
- Income from loans will be reinvested perpetually



Since 2005 Kentucky has contracted over \$162 million in ESPC projects on state facilities. Of those, Green Banks has funded \$14.17 million.

- ★ The Green Bank of Kentucky was ranked 3rd among the Top 10 Most Exciting ARRA Funded State Projects by the State & Local Energy Report.
- ★ Several other states have contacted The Green Bank of Kentucky in order to emulate this innovative program.

