

ENERGY EFFICIENCY TRUST FUND PROGRAM REPORT

January 2014 through December 2014

ILLINOIS DEPARTMENT OF COMMERCE AND ECONOMIC OPPORTUNITY
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Illinois
Department of Commerce
& Economic Opportunity

Bruce Rauner, Governor

ENERGY EFFICIENCY TRUST FUND PROGRAM UPDATE

For the Period January 2014 through December 2014

INTRODUCTION

The Department of Commerce and Economic Opportunity (DCEO) administers the Energy Efficiency Trust Fund (EETF) as established by the Renewable Energy, Energy Efficiency, and Coal Resources Development Law of 1997 (Law). The Law is set to sunset December 12, 2015. Senate Bill 51 would extend that expiration date to December 12, 2020. Approximately \$3 million in annual contributions are collected in the fund, from electric utilities and alternative retail electric suppliers that provide electric power and energy to retail customers.

The Law requires that funds be spent on projects that promote residential energy efficiency in the State, with emphasis on low-income households. These programs produce two major benefits for the Illinois economy – the efficiency gains that provide substantial energy cost savings to consumers, which in turn can be reinvested back into their communities, and the additional jobs created to install and implement the projects described in this report. Energy efficiency projects furthermore tend to improve building comfort, improve lighting and indoor air quality, decrease unscheduled maintenance, and make a positive contribution to the environment through the reduction of unnecessary pollution.

Within DCEO, the Illinois Energy and Recycling Office, which operates a range of energy efficiency and renewable energy programs serving all sectors of the State's economy, administers the EETF funds. These funds are used to support several energy efficiency programs such as the Affordable Housing Construction Program, Residential Retrofit Program, Efficient Living: Public Housing Authority Energy Program, Lights for Learning, Codes and Illinois Center for a Smarter Electric Grid. It should be noted that many of these programs are funded from the Energy Efficiency Portfolio Standards fund which receives funds from utilities, however these programs are residential only. These programs are administered in partnership with a range of public and private entities, including universities, and investor-owned utilities. This report provides a summary of the EETF-funded programs and activities completed in 2014.

DCEO was honored to receive an award for the Efficient Living: Public Housing Authority Energy Program's work in 2014. The program was selected as the 2015 *IMPACT Inspiring Efficiency Awards* winner by the Midwest Energy Efficiency Alliance. This award is presented for significant contribution to market transformation that resulted in reduced energy consumption and/or increased market penetration of energy-efficient products.

PROGRAM OVERVIEWS

In 2014, the Energy Efficiency Trust Fund provided a portion of the funding for several DCEO programs, which met the guidelines of the Law, including:

Illinois Energy Efficient Affordable Housing Construction Program

The Illinois Energy Efficient Affordable Housing Construction Program was funded from the Trust Fund in 2014 at a level of \$82,643.50. This program offers grants to fund incremental costs associated with energy efficiency improvements in residential construction projects targeted to low- and moderate-

income households. Although \$5 million is funded from the Energy Efficiency Portfolio Standard (EEPS) fund for this program, grantees outside of the utility territories are funded from the Trust Fund.

This energy efficient housing program has been a highly visible success for DCEO and has garnered support from U.S. DOE, the Illinois Housing Development Authority, the City of Chicago, several major utilities, architectural teams, and numerous affordable housing development networks in the state. The program provides up to \$4,000 per unit for new housing developments and up to \$4,500 per unit in rehab housing developments. The program results in energy savings averaging over 50% and a return on investment of over 30%. In addition, this program has been an integral part of the Energy Office’s effort to leverage private investments with public dollars and increase capital available to Illinois developers. Trust Fund dollars have also allowed DCEO to include funding for super-efficient refrigerators, high-efficiency air conditioners and more efficient lighting as part of these housing projects. The success and the active support of the allied groups listed above have resulted in a tremendous increase in demand for this program, especially in the greater Chicago area.

In addition to providing affordable housing units for these families and meeting the low-income goals of the Energy Efficiency Portfolio law (ILCS 220 5/8-103 and 5/8-104), the results of this program are also used to encourage energy efficient building practices in all levels of construction activity in the state. Further, the program serves as a training ground for tradesmen to learn the latest energy efficient building techniques. The economic efficacy of energy efficient construction practices proven by this program has been and will continue to be publicized to the Illinois development, architectural, and construction industries. Education efforts include presentations, workshops, and seminars.

The program is designed to meet or exceed the standards of the national ENERGY STAR® program and the state’s current Energy Efficient Building Code (based on the International Energy Conservation Code at the time of construction). Many of the buildings would also qualify for LEED certification.

Through this program, grant funding has provided the necessary incremental costs to enable several thousand low and moderate income families to reside in super-efficient structures, saving significant energy resources and connected costs. Since the program’s inception in 1988, 3,412 units have been rehabilitated, 4,963 units of new multi-family housing have been constructed, and nearly 1,500 new single-family homes have been completed. Projects were funded in these categories: Gut Rehab, New Multi-Family and New Single Family. The EETF provided funding for 2 projects that built 8 units of new multi-family housing and 8 units of single-family housing. In addition to the EETF most of these projects were eligible for funding from additional sources, such as the Energy Efficiency Portfolio, Illinois Housing Development Authority, U.S. Department of Housing and Urban Development, or the City of Chicago. The table below contains a complete list of the 2014 EETF affordable housing grantees:

2014 EETF Grantees - Illinois Energy Efficient Affordable Housing Construction Program

Grantee	Project Name	City	Trust Fund Grant	Units	Program
Southern Illinois Coalition	FY 13/EEAHCP	Herrin	\$3,843.50	8	Multi-Fam/New Construction
Christian County Integrated	Hathaway Homes	Stonington	\$78,800.00	8	Single Fam/New Construction
TOTAL			\$82,643.50	16	

Residential Retrofit Program

The Residential Retrofit Program was initiated six years ago to capture electric savings in privately owned and small-scale rental low-income housing that is in need of renovation and repair. The Program was expanded three years ago to capture natural gas savings as well. It has also been expanded to include public housing and multi-family rental housing. Again, most of the funding comes from the Energy Efficiency Portfolio Standards fund which is approximately \$9 million. The Trust fund is used to fund projects either outside the utility areas of ComEd, Ameren, Peoples Gas, Nicor Gas, North Shore Gas, or as demand exceeds EEPs funding, we are able to fund additional projects. Grants are provided to existing housing rehab programs that lack funding to include measures in housing rehab that reduce energy consumption. Here the Public Housing Program is included in the overall Residential Retrofit program. In 2014, \$658,038.62 was awarded to Residential Retrofit grantees from the EETF. In total 767 units were retrofitted and 12 low-income housing units were rebuilt for higher energy efficiency. The table below provides a complete list of the grantees and each program is summarized below:

1. Helping Homes – This program is a residential energy efficiency improvement program that provides energy retrofits to single-family, owner-occupied, senior low-income and low-income households in the city of Springfield receiving electric service from CWLP.
2. Ameren Illinois Tornado Relief – The program provided funding to assist the residents of Gallatin, Saline, and Williamson Counties by paying the incremental costs of installing energy efficient measures as part of the repair and rebuilding of residential properties damaged by the tornado of February 2012. Tornado relief funds of \$369,878.07 were the last of an original \$1.6M grant to fund 156 repairs and 55 rebuilds. Repairs and rebuilds are estimated by funding.

Efficient Living: Public Housing Program - The program targets extremely low to low-income renters with incomes below 80% of median income who occupy one of 51,693 housing units located in 99 public housing authorities across the state to support installation of energy efficiency measures. Since 2010, more than \$11 million has been awarded, helping install 97,510 energy cost reduction measures, saving more than 60 billion BTUs of energy. In 2014, \$242,465.79 supported 713 housing units.

2014 EETF Grantees - Residential Retrofit Program

Grantee	Project Name	City	Trust Fund Grant	Units	Program
Ameren Illinois	Ameren	Gallatin, Saline, and Williamson Counties	\$369,878.07	36 repairs 12 rebuild	Tornado Relief
City of Springfield	Helping Homes	Springfield	\$45,694.76	18	Retrofit
Univ. of Illinois	PHA	Statewide	\$242,465.79	713	Eff. Living: PHA
TOTAL			\$658,038.62	767	

Lights for Learning

The Lights for Learning® (L4L) program stimulates awareness of energy efficiency, and educates students to become the next generation of environmentally aware citizens through hands-on educational presentations conducted statewide, and energy efficiency focused fundraising opportunities. With the majority of funding provided by the Energy Efficiency Portfolio Standards Fund, 340 educational presentations were conducted statewide, reaching more than 20,879 students. The Energy Efficiency

Trust Fund sponsored 19 presentations, educating 1,201 students. These presentations affect the energy consumption habits of the student and the student's family.

L4L fundraisers allow pre-K-12 students to raise funds through the sale of ENERGY STAR qualified compact fluorescent light bulbs (CFLs), light-emitting diode bulbs (LEDs), LED holiday light strands, LED night lights, and smart power strips. During the 2013-14 program year, although no fundraisers were funded from the EETF, the EEPS fund supported 190 schools and youth-based organizations, and 948 students participated in the fundraiser portion of Lights for Learning®.

University of Illinois' Illinois Center for a Smarter Electric Grid

DCEO is partnering with the University of Illinois, over five years, to establish the Illinois Center for a Smarter Electric Grid. This Center will provide services for the validation of information technology and control aspects of smart grid systems. "Smart grid" generally refers to a class of technology people are using to bring utility electricity delivery systems into the 21st century, using computer-based remote control and automation. These systems are made possible by two-way communication technology and computer processing that has been used for decades in other industries. They are beginning to be used on electricity networks, from the power plants and wind farms all the way to the consumers of electricity in homes and businesses. They offer many benefits to residential consumers – mostly seen in big improvements in energy efficiency in the energy users' homes. Over the last several years, the Department has provided \$4 million in support for this project, through EETF, as well as the Renewable Energy Resources Trust Fund.

The key objective of this project is to test and validate, within a laboratory setting, how new and more cost-effective smart grid technologies, tools, techniques, and system configurations can be used in configurations that significantly improve upon the ones that are in common practice today. The laboratory will be a resource for smart grid equipment suppliers and integrators and electric utilities, to allow validation of system designs, before these technologies are deployed to help residential and other customers save energy.

Codes Claimed Savings Work Group

During the first half of 2014, through an EETF grant, the Midwest Energy Efficiency Alliance (MEEA) facilitated a work group – including the Illinois utilities, DCEO and other stakeholders – to develop a program, to improve compliance with the Illinois Energy Conservation Code and claim the resulting energy savings under the Illinois Energy Efficiency Portfolio Standard. The vision for this program was to build on DCEO's current Building Codes Training and Technical Assistance Program and produce real, measureable energy savings for Illinois residents, by ensuring that new homes are built to be energy efficient. Under the work group, the team mapped out what the program would look like, how to determine claimable savings, and developed a program worksheet for cost effectiveness analysis. The work group also vetted the outcomes of this process through the Illinois Energy Efficiency Stakeholder Advisory Group and Illinois Commerce Commission, to increase support for adoption and inclusion in utility program filings. As a result of this work group, DCEO and several Illinois utilities will be implementing an Illinois Codes Collaborative initiative over the next two years. This joint DCEO-utilities program provides rebates for third-party inspectors, to verify compliance with the Illinois Energy Conservation Building Code.

CONCLUSION

Energy efficiency allows Illinois homeowners to save money on their energy bills, while creating jobs and promoting environmental stewardship. With the support of EETF, the Department is able to educate Illinois residents about the benefits of energy efficiency, work with industry professionals to improve residential technologies and practices, and bring energy efficient upgrades to communities with limited resources.