

ENERGY EFFICIENCY TRUST FUND PROGRAM REPORT

January 2015 through December 2015



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Illinois
Department of Commerce
& Economic Opportunity

Bruce Rauner, Governor

ENERGY EFFICIENCY TRUST FUND PROGRAM UPDATE

For the Period January 2015 through December 2015

The Department of Commerce and Economic Opportunity (Department) administers the Energy Efficiency Trust Fund (EETF 571) as established by the Renewable Energy, Energy Efficiency, and Coal Resources Development Law of 1997 (Law). The Law was renewed on December 4, 2015, PA 99-489, to extend the expiration date to December 12, 2020, which continues the revenue collection. 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.

Over the years, these funds have supported several energy efficiency initiatives such as: the Affordable Housing New Construction Program, University of Illinois' *Illinois Center for a Smarter Electric Grid*, Residential Retrofit Program, and University of Illinois' Efficient Living: Public Housing Authority (PHA) Energy Program. These programs are administered in partnership with a range of public and private entities, including universities, and investor-owned utilities. It should be noted that the majority of funding for many of these initiatives comes from the Energy Efficiency Portfolio Standards (EEPS) Fund, but Trust Fund dollars allows the Department to expand these programs, particularly to those who are not customers of an investor-owned utility. For example, the Public Housing Authority Energy Program is predominantly funded through EEPS, but the Trust Fund allows the Department to also support PHAs that might be served by a municipal utility or electric coop.

Of particular note in 2015, the Department was honored to receive an award for the PHA Energy Program. The Department, along with its partners at U of I, were 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.

Also of note in 2015, \$6 million was swept from the Energy Efficiency Trust Fund, and no appropriation has been provided thus far for FY2016. As a result, no new projects were funded. Additionally, several existing grants were suspended and deobligated.

The following provides a summary of typical EETF initiatives, some of which received funding in prior years and completed projects in 2015:

University of Illinois' Illinois Center for a Smarter Electric Grid

DCEO has partnered 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.

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.

The Department obligated a \$1 million EETF grant for this project in a prior year. \$136,080 was paid in FY15, with \$363,920 remaining.

Illinois Energy Efficient Affordable Housing Construction Program

The Illinois Energy Efficient Affordable Housing Construction 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.

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 the Department to include funding for super-efficient refrigerators, high-efficiency air conditioners and more efficient lighting as part of these housing projects.

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, 3,793 units have been rehabilitated, 6,135 units of new multi-family housing have been constructed, and nearly 1,665 new single-family homes have been completed. In addition to the EETF most of these projects leverage funding from additional sources, such as the Energy Efficiency Portfolio Standards Fund, Illinois Housing Development Authority, U.S. Department of Housing and Urban Development, and the City of Chicago.

In 2015, the EETF paid for \$39,400 of energy efficient measures in Christian County, for eight single family homes in Stonington and for 18 single family homes in Taylorville.

Residential Retrofit Program

The Residential Retrofit Program captures electric and gas savings in privately owned and small-scale rental low-income housing, public housing and multi-family rental housing that is in need of renovation and repair. Most of the funding comes from the Energy Efficiency Portfolio Standards fund which is approximately \$10 million. The Trust fund has been used to fund projects either outside the utility areas of ComEd, Ameren, Peoples Gas, Nicor Gas, North Shore Gas, or to meet demand of the EEPS program. This program was not funded through EETF in 2015.

Efficient Living: Public Housing Program

The program targets renters with incomes below 80% of median income; 67% are extremely low to low-income households, and 72% are elderly or disabled who occupy 8,606 of 11,640 units in 96 public housing buildings across the state that had energy efficiency measures installed. Since 2010, almost \$13 million has been awarded through the EEPS Fund and the EETF, helping install 97,965 energy cost reduction measures, saving more than 15.6 million kWh, 676,560 therms, 33 million gallons of water. This program was not funded through EETF in 2015.

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. The EETF helps reach low income residents outside of the EEPS utility territories. Program funding and activities from EETF is suspended until an appropriation for this fund is available.