

EFFICIENCY SMART™ • ANNUAL REPORT 2015

THE EVOLUTION



A Year of Evolution

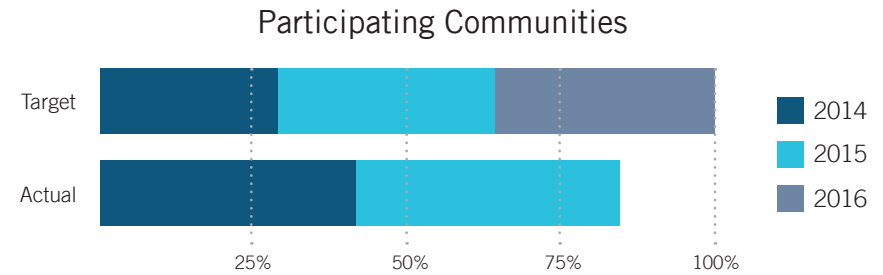
In 2015, Efficiency Smart celebrated our fifth year of offering comprehensive energy efficiency services for American Municipal Power Inc. (AMP)'s participating member communities. We are honored to help AMP member communities continue to successfully build energy efficiency into their power supply portfolios. Energy efficiency remains the lowest cost way to help these communities lower their customers' electric bills, reduce transmission and distribution costs, and contribute to local economic development.

In 2015, we built upon our base of participating communities by launching services in Hamilton, Ohio, the 28th community we currently serve. We had a quick start to the launch of services in the city and we reached our first-year energy saving targets, thanks in part to our experience from previous launch promotions and early collaboration with key stakeholders in the community.

Throughout all participating communities in 2015, we helped 4,078 residential customers and 205 commercial and industrial energy users complete energy efficiency improvements in homes and businesses. These efficiency upgrades resulted in 18,458 megawatt-hours (MWh) of energy saved for the year. This achievement is roughly the equivalent to:



The 18,458 MWh of energy savings exceeded the 2015 targeted goals by 20 percent. When combined with the results achieved in 2014, Efficiency Smart is well-positioned to exceed our three-year performance targets, having reached 85 percent of this goal at the end of 2015. These energy savings were achieved through cost-effective levels of energy efficiency, as participating communities received, on average, a return of \$3.24 for every \$1 spent on energy efficiency services in 2015.



In 2015, our 2014 energy saving results were validated through an independent evaluation, measurement, and verification (EM&V) company, and we attained a 96 percent realization rate for our energy saving claims. Since 2011, Efficiency Smart has averaged 98 percent, which is among the highest realization rates in the country.

This high quality of technical services has resulted in verifiable savings for participating communities. For the first time in 2015, communities that participated in the 2011-2013 Efficiency Smart contract period earned money back from the sale of capacity energy savings. A total of 11.4 megawatts (MW) of capacity savings produced by energy efficiency projects were sold into the PJM capacity market auction and the 2015-2016 revenue from this sale totaled nearly \$400,000.

Key Trends in 2015:

- Several businesses completed projects with Efficiency Smart for the first time, as nearly 43 percent of commercial and industrial projects were done by organizations that had not worked with Efficiency Smart before
- A shift to a deeper mix of energy efficiency improvements, as 25 percent of commercial and industrial projects included non-lighting technologies
- More than 43 percent of participating communities completed municipal projects in 2015

2015 Top Municipal Project Types (by MWh savings)



Promoting Evolving Technologies

We recognize that as technologies evolve, so does the demand for those technologies. In 2015, Efficiency Smart embraced the emergence of additional LED technology and promoted the adoption of these products through both residential and business programs. In response to increased demand, improved quality, and decreased prices for LED products, Efficiency Smart introduced a new rebate for LED linear replacement lamps (TLEDs) through the Business Energy Rebates (BER) program for small and mid-sized businesses in 2015. The new rebate was met with enthusiasm, as 12.5 percent of all BER projects in 2015 involved TLEDs.

LEDs represented 70 percent of all lightbulb purchases through the online store in 2015



Efficiency Smart also promoted the use of LEDs for residential customers by partnering with local retailers in participating communities. In 2015, we piloted a lighting markdown program in select communities to provide CFLs and LEDs with instant discounts in these local retailers. More than 30 percent of all lightbulbs purchased during the pilot were LEDs. The information learned during this pilot is being incorporated into a larger 2016 lighting markdown campaign.

We also introduced more LED lighting options with deeper discounts through our online store for residential customers. The 5,500 LEDs sold represented 70 percent of all lightbulb purchases through the online store in 2015. In total, 7,544 LED lightbulbs were sold through the online store and local retailers in 2015.

In addition, we laid the foundation for new offerings that will launch in 2016. This included new residential rebates on the purchase of advanced power strips and ENERGY STAR® certified clothes dryers. We also initiated the launch of new partnerships with community action agencies in several communities to serve low-income populations, senior citizens, and other hard-to-reach residents. In 2016, we will expand these efforts into additional communities.



Ambassador of Energy Efficiency award presentation to Discount Drug Mart in Wellington, Ohio



Lighting Markdown at Main Street Ace Hardware in Bowling Green, Ohio

Evolving our Services

Since we began providing energy efficiency services in 2011, we have seen both the evolution of new technologies along with the evolving energy efficiency needs of our communities. As a result, we are excited to announce that we will be offering a brand new portfolio of energy efficiency services in 2016 for AMP member communities to consider. Based on feedback from communities, we have worked together with AMP to design new services that are flexible and that offer a wide range of options and price points. We encourage you to consider the new offerings to see if there is a fit for your community.

As we move forward, we do so with our focus on serving our communities to best meet their needs, and to help lower their customers' bills. We also look forward to continuing to work with AMP member communities and to be part of the solution in building a sustainable energy future.

On behalf of the entire Efficiency Smart team,

David Cawley
Director, Efficiency Smart

“Efficiency Smart is a proven model that delivers reliable and verifiable energy savings and long-term economic benefits. The introduction of new Efficiency Smart program offerings will give AMP members the opportunity to select the program or combination of programs that best meet their community's unique energy efficiency goals. Energy efficiency remains the most cost-effective and low-risk power supply option for utilities and participation in Efficiency Smart will help communities establish a platform for sustainable growth.”

Marc Gerken, PE, President/CEO
American Municipal Power, Inc.



Downtown Napoleon, Ohio

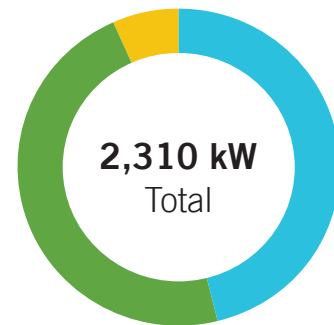


Collaboration with Supports to Encourage Low-Income Families (SELF) in Hamilton, Ohio

2015 Results

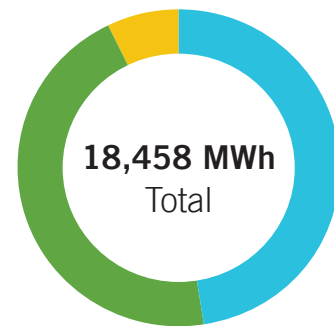
Coincident Peak Kilowatt Savings

1,066 kW Commercial
1,090 kW Industrial
153 kW Residential



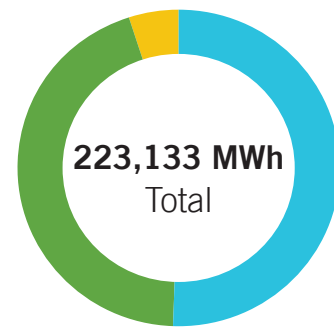
Annual MWh Savings

8,814 MWh Commercial
8,347 MWh Industrial
1,297 MWh Residential



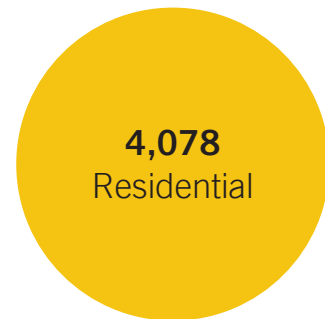
Lifetime MWh Savings

113,167 MWh Commercial
99,155 MWh Industrial
10,811 MWh Residential



Project Completions

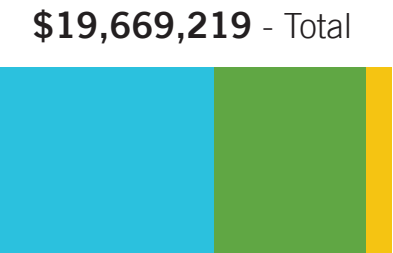
146 Commercial
59 Industrial



4,283 - Total

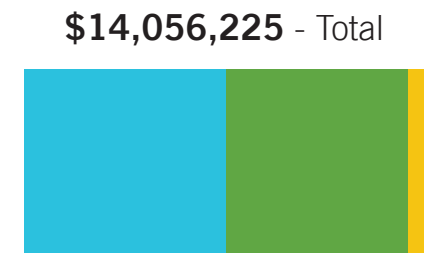
Lifetime Customer Savings

\$10,883,846 Commercial
\$7,518,160 Industrial
\$1,267,213 Residential



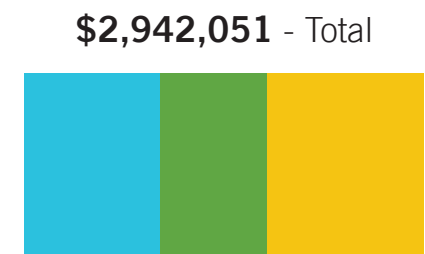
Total Resource Benefits¹

\$7,085,992 Commercial
\$6,392,001 Industrial
\$578,233 Residential



Efficiency Smart Expenditures

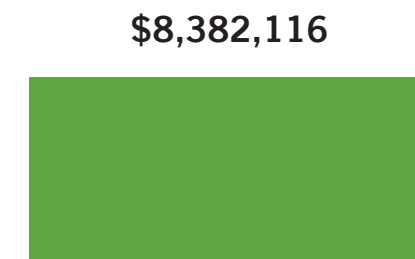
\$992,123 Commercial
\$778,385 Industrial
\$1,153,543 Residential



Aggregate Benefits

$$\begin{array}{r}
 \$14,056,224 \\
 \text{Total Resource Benefits}
 \end{array}
 \div
 \begin{array}{r}
 \$4,339,314 \\
 \text{Participant Cost Paid}
 \end{array}
 =
 \begin{array}{r}
 3.24:1 \\
 \text{Benefit-to-Cost Ratio}
 \end{array}$$

Net Lifetime Economic Benefits²



Emission Reductions

Carbon Dioxide (CO ₂)	33,239,419 lbs
Methane (CH ₄)	401 lbs
Nitrogen Oxide (NO _x)	30,443 lbs
Nitrous Oxide (N ₂ O)	513 lbs
Sulfur Dioxide (SO ₂)	105,390 lbs

¹ Total Resource Benefits represents the present value of lifetime avoided electrical energy and demand charges as well as fossil fuel and water savings that result from energy efficiency measures.
² Net Lifetime Economic Benefits is equal to Total Resource Benefits plus operation and maintenance savings, minus the cost paid by Efficiency Smart to operate the program and the implementation of cost paid by participants.



smart energy solutions. powerful savings.

877.889.3777 | 1111 Schrock Road | Suite 203 | Columbus, Ohio 43229

info@efficiencysmart.org | efficiencysmart.org |   