

### PREPARED FOR

The Michigan Public Service Commission 7109 W. Saginaw Highway Lansing, MI 48917

SAVINGS FOR A STRONG MICHIGAN

4	Executive Summary
6	Financials
8	Residential   Income Qualified Energy Assistance Program
13	Residential   ENERGY STAR®
16	Residential   Appliance Recycling
18	Residential   Home Performance
20	Residential   Residential Education
22	Residential   Pilot Programs
27	Commercial & Industrial   Prescriptive & Custom
29	Commercial & Industrial   Education
31	Commercial & Industrial   Pilot Program
35	QA/QC
86	Marketing
39	Contacts
Ю	Glossary
<b>41</b>	Appendices

Notes

47

For the fifth consecutive year, Efficiency UNITED achieved program savings targets for each of its collaborative members.

### 2016 BY THE NUMBERS:

- Served 35,550 customers
  - Income Qualified: 1,466
  - Residential: 33,524
  - Commercial & Industrial: 560
- Issued \$4,189,658 in incentives
  - Income Qualified: \$566,404
  - Residential: \$2,227,020
  - Commercial & Industrial: \$1,396,234
- Achieved electric savings of 35,388,701 kWh
  - Income Qualified: 1,612,149 kWh
  - Residential: 12,181,328 kWh
  - Commercial & Industrial: 21,595,224 kWh
- Achieved natural gas savings of 4,188,588 CCF
  - Income Qualified: 207,354 CCF
  - Residential: 1,206,366 CCF
  - Commercial & Industrial: 2,774,867 CCF

### **DURING THIS PROGRAM YEAR, WE:**

- Continued our focus on long-term customer solutions through further completion of Joint Energy Efficiency Plans (JEEP) and installation of long-term measures.
- Continued program collaboration with SEMCO ENERGY Gas Company.
- Tested new technologies and customer approaches through both core and special pilot programs.
- Adjusted outreach models for residential and C&I programs, by dedicating seven local full-time specialists in the Lower Peninsula and five in the Upper Peninsula.
- Offered an Online Energy Audit as a simpler and more user-friendly tool to improve the customer experience.
- Provided members individualized, biannual, cycletime reports, featuring customer participation data and rebate payment times.
- Implemented individual annual meetings with members, receiving positive feedback across the collaborative family.

- Replaced 112 electric water heaters with hybrid heat pump, ultra-efficient water heaters. Collaborated with SEMCO ENERGY Gas Company to install 103 high-efficiency on-demand natural gas water heaters for income qualified customers. Sixtyseven participants were customers of an Efficiency UNITED member utility.
- Increased rapport and trust with tribal communities, leading to completion of work with the Lac Vieux Desert Band of Lake Superior Chippewa, Keweenaw Bay Indian and Hannahville Native American communities. This work will continue in the program year 2017.
- Continued partnership with the nonprofit New Power Tour to provide incentives to incomequalified customers. New Power Tour helped qualify customers for installation of more than 1,600 LEDs, 34 refrigerators and additional weatherization measures while continuing to mentor high school students and train Michigan Technological University students on weatherization installs practices. New Power Tour also hosted a crew of AmeriCorps Volunteers for six weeks in the Houghton Hancock area who assisted with incomequalified weatherization services.
- Hosted the 2016 Michigan Commercial & Industrial Energy Conferences, held in Harris and Battle Creek, MI, drawing a combined attendance of nearly 400 vendors, trade allies and customers. Energy provider sponsors included SEMCO ENERGY Gas Company, DTE Energy, Consumers Energy and energy providers under Energy Optimization.
- Put on more than 40 "Day of Energy Savings" events and attended eight community events, which resulted in sales of more than 14,000 highly discounted energy efficiency products.
- Educated and provided 2,713 energy efficiency kits to students at 41 participating elementary schools through the National Energy Foundation Think! Energy Program.
- Offered enhanced customer experience, fielding 8,940 calls through our call center.



In 2016, Efficiency UNITED issued a total of \$4,189,658 in incentives. Of that number, \$566,404 was issued to incomequalified customers, \$2,227,020 to residential customers and \$1,396,234 to commercial and industrial customers.

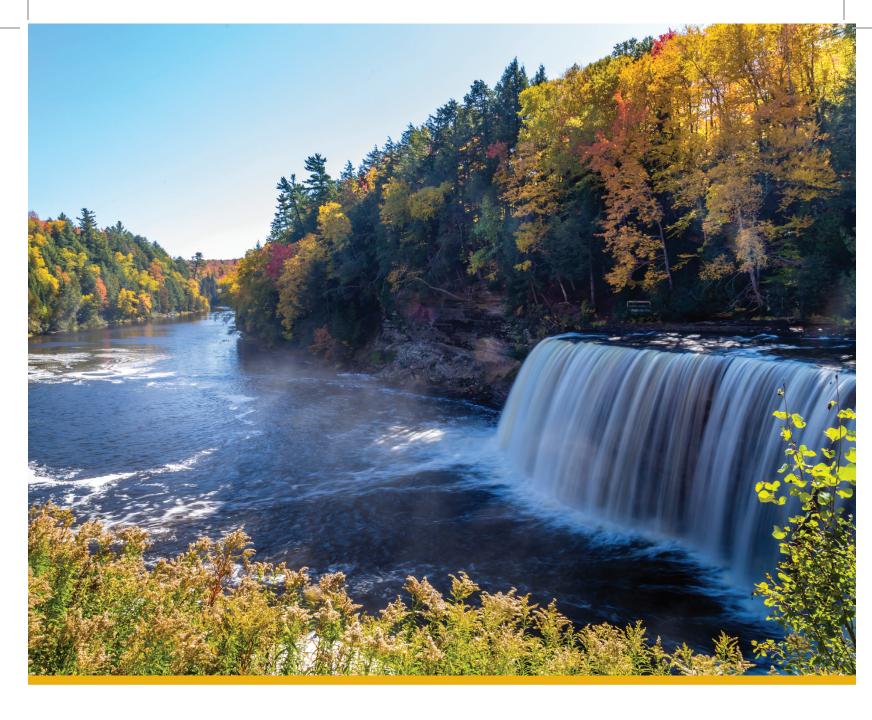


CLASS	COST PER KWH ACHIEVED	COST PER CCF ACHIEVED
Commercial & Industrial	\$0.06	\$0.16
Income Qualified	\$0.27	\$1.37
Residential	\$0.08	\$1.44
CLASS	TOTAL INCENTIVES	PERCENT OF PORTFOLIO

CLASS	TOTAL INCENTIVES	PERCENT OF PORTFOLIO
Commercial & Industrial	\$1,396,234	33%
Income Qualified	\$566,404	14%
Residential	\$2,227,020	53%
TOTAL	\$4,189,658	

2016 ELECTRIC INCENTIVES BY CLASS	TOTAL INCENTIVES	PERCENT OF ELECTRIC PORTFOLIO
Commercial & Industrial	\$1,008,775	48%
Income Qualified	\$326,775	16%
Residential	\$769,873	37%
TOTAL	\$2,105,423	

2016 NATURAL GAS INCENTIVES BY CLASS	TOTAL INCENTIVES	PERCENT OF NATURAL GAS PORTFOLIO
Commercial & Industrial	\$387,459	19%
Income Qualified	\$239,629	11%
Residential	\$1,457,147	70%
TOTAL	\$2,084,235	



CLASS	TOTAL SAVINGS (KWH)	PERCENT OF SAVINGS
Commercial & Industrial	21,595,224	61%
Income Qualified	1,612,149	5%
Residential	12,181,328	34%
TOTAL	35,388,701	

CLASS	TOTAL SAVINGS (CCF)	PERCENT OF SAVINGS	
Commercial & Industrial	2,774,867	66%	
Income Qualified	207,354	5%	
Residential	1,206,366	29%	
TOTAL	4,188,588		

The Efficiency UNITED Income Qualified Energy Assistance Program provided Michigan's most vulnerable residents with \$566,404 in incentives in 2016.

\$326,775 IN INCENTIVES FOR ELECTRIC CUSTOMERS <sup>\$</sup>239,629 IN INCENTIVES FOR NATURAL GAS CUSTOMERS

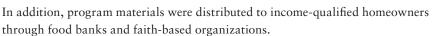
1,612,149 kWh 207,354 CCF

IN ELECTRIC SAVINGS

IN NATURAL GAS SAVINGS

The Efficiency UNITED Income Qualified Energy Assistance Program provided Michigan's most vulnerable residents with no-cost energy-efficient equipment and upgrades.

Community action agencies utilized Efficiency UNITED incentive funds along with other weatherization programs to meet the demand for income-qualified customers. In order to reach more single-family residents, Efficiency UNITED launched an initiative to weatherize manufactured homes. Nationally, manufactured homes are a leading source of affordable housing, and this market in Michigan has been previously underserved by this, and similar, programs. The program continued to maintain relationships and network with local private landlords, housing commissions and corporations.



Overall, 1,446 income-qualified homes received energy efficiency measures and the long-term benefits of weatherization services.



### **MEASURES DELIVERED**

Long-term energy efficiency measures offered in 2016 included energy-saving LEDs and replacement of energy-wasting appliances. New to the program this year was a heavy emphasis on duct and air sealing of manufactured homes, which delivered great dividends.

Furthermore, the community action network continued to submit rebates for air sealing, insulation, refrigerator replacement, furnace and boiler replacement measures.

### WHO WE SUPPORT

Income-qualified service providers are a rich source of leads for the program. Efficiency UNITED continued to foster relationships with the following service providers:

- Michigan Community Action network
- Native American tribal communities
- Housing commissions
- Veterans associations
- Michigan Department of Health and Human Services
- United Way
- Habitat for Humanity
- Upper Peninsula Commission for Area Progress (UPCAP)
- U.S. Department of Housing and Urban Development
- St. Vincent de Paul
- New Power Tour
- Interfaith Power & Light

### **EVENTS WE PARTICIPATED IN**

- Michigan Community Action's Annual Conference
- Michigan Chapter of the National Association of Housing and Redevelopment Officials events
- OHLSA's Walk for Warmth (Efficiency UNITED team members participated in the walk and donated to the organization)
- Coalition to Keep Michigan Warm events
- Upper Peninsula Housing Organization conference
- Building Michigan Communities conference
- Houghton Energy Efficiency Team events
- Michigan Housing Directors Association conference
- Michigan Rural Development conference

# RESIDENTIAL | INCOME QUALIFIED ENERGY ASSISTANCE PROGRAM

### Income Qualified Program Overview

PROVIDER	# OF PARTICIPANTS	INCENTIVE SPENT	2015 CARRYOVER	KWH/CCF ACHIEVED	TOTAL KWH/ CCF ACHIEVED	2016 ANNUAL KWH/CCF GOAL	% OF GOAL ACHIEVED	
ELECTRIC UTILITIES								
Alpena Power Company	80	\$33,126	32,782	102,520	135,302	98,347	138%	
Baraga Electric Utility	5	\$2,736	2,818	2,755	5,573	8,454	66%	
Bayfield Electric Cooperative	2	\$60	-	339	339	483	70%	
The City of Crystal Falls	2	\$2,840	3,873	19,198	23,070	11,618	199%	
The City of Dowagiac	66	\$8,712	6,039	45,530	51,569	18,117	285%	
The City of Gladstone Department of Power & Light	П	\$5,360	652	9,573	10,226	3,966	258%	
The City of Harbor Springs Electric Department	6	\$4,145	2,625	13,500	16,125	21,123	76%	
Hillsdale Board of Public Utilities	17	\$16,667	25,563	27,716	53,279	76,689	69%	
L'Anse Electric Utility	3	\$1,872	4,382	19,689	24,071	13,146	183%	
The City of Negaunee Electric Department	8	\$4,065	1,411	14,911	16,321	15,618	105%	
The City of Norway Department of Power & Light	34	\$5,618	5,144	19,877	25,021	21,193	118%	
Upper Peninsula Power Company	289	\$139,449	175,794	589,229	765,023	527,383	145%	
We Energies	224	\$59,544	65,165	207,829	272,994	195,494	140%	
Wisconsin Public Service	45	\$24,015	34,286	82,604	116,890	119,919	97%	
Xcel Energy	68	\$18,565	51,192	45,154	96,347	153,577	63%	
TOTAL ELECTRIC	860	\$326,775	411,726	1,200,423	1,612,149	1,285,126	125%	
			NATURAL GAS U	TILITIES				
Michigan Gas Utilities	572	\$223,927	25,531	161,473	187,005	130,715	143%	
Wisconsin Public Service	24	\$6,900	2,653	6,210	8,863	7,959	111%	
Xcel Energy	10	\$8,802	4,424	7,062	11,487	13,273	87%	
TOTAL NATURAL GAS	606	\$239,629	32,609	174,746	207,354	151,947	136%	

# RESIDENTIAL | INCOME QUALIFIED ENERGY ASSISTANCE PROGRAM

## Income Qualified Budget & Expenses

INCOME QUALIFIED BUDGET AND EXPENSES	2016 IMPLEMENTATION & TOTAL IMPLEMENTATION INCENTIVE BUDGET & INCENTIVE SPENT		% OF 2016 BUDGET SPENT	INCENTIVE CARRY FORWARD FROM PREVIOUS YEARS	
		Electric Utilities			
Alpena Power Company	\$53,650	\$53,650	100.0%	\$0	
Baraga Electric Utility	\$4,560	\$4,560	100.0%	\$0	
Bayfield Electric Cooperative	\$97	\$97	100.0%	\$0	
The City of Crystal Falls	\$4,726	\$4,726	100.0%	\$29	
The City of Dowagiac	\$14,508	\$14,508	100.0%	\$77	
The City of Gladstone Department of Power & Light	\$8,794	\$8,794	100.0%	\$0	
The City of Harbor Springs Electric Department	\$6,882	\$6,882	100.0%	\$400	
Hillsdale Board of Public Utilities	\$27,779	\$27,779	100.0%	\$0	
L'Anse Electric Utility	\$3,098	\$3,098	100.0%	\$0	
The City of Negaunee Electric Department	\$6,647	\$6,647	100.0%	\$0	
The City of Norway Department of Power & Light	\$8,562	\$8,562	100.0%	\$0	
Upper Peninsula Power Company	\$232,339	\$232,339	100.0%	\$17,856	
We Energies	\$99,157	\$99,157	100.0%	\$0	
Wisconsin Public Service	\$39,595	\$39,595	100.0%	\$0	
Xcel Energy	\$30,925	\$30,925	100.0%	\$802	
TOTAL ELECTRIC	\$541,321	\$541,321	100.0%	\$19,165	
		NATURAL GAS UTILITIES			
Michigan Gas Utilities	\$370,870	\$370,870	100.0%	\$20,620	
Wisconsin Public Service	\$11,420	\$11,420	100.0%	\$0	
Xcel Energy	\$14,669	\$14,669	100.0%	\$0	
TOTAL NATURAL GAS	\$396,959	\$396,959	100.0%	\$20,620	

### **ENERGY STAR EVENTS**

Our Efficiency UNITED Market Outreach Specialists attend public events and host stand-alone events throughout our territory. The MOS team uses these occasions to promote all Efficiency UNITED programs, educating customers about saving energy and how Efficiency UNITED can help them do so, and selling low-cost energy-saving products to qualifying customers. These events provide an important opportunity to interact with customers face to face.

In 2016, our Efficiency UNITED Market Outreach Specialists attended more than 40 "Day of Energy Savings" events and eight community events, and sold more than 14,000 products.

### **Energy-Saving Products Purchased at 2016 Events**

LEDs	PIPE WRAP	BATH AERATORS	KITCHEN SINK AERATORS
13,049	126 linear ft	142	224
HH SHOWER WANDS	SHOWER HEADS	SHOWER STARTS	TOTAL
256	312	63	14,172

#### **ENERGY STAR APPLIANCE REBATE PROGRAM**

Customers receive rebates on a variety of energy-efficient appliances through the ENERGY STAR Appliance Rebate Program. Market Outreach Specialists work with appliance retailers throughout the state to educate customers on available rebates and the benefits of energy-efficient products. We provide educational material, marketing material and rebate applications to retail locations for program promotion.

In-store, we interact with customers and sales associates to promote the program, place marketing materials on qualifying products and answer questions regarding eligibility and appliance qualifications.

### **ENERGY STAR RETAIL PROGRAM**

Efficiency UNITED encourages customers to purchase energy-efficient LED bulbs and fixtures through "instant rebates" available where they shop. Our Market Outreach Specialists visit retail locations to educate retail employees and customers throughout our utility territories, and they use the opportunity to cross-promote Efficiency UNITED's portfolio to retail staff and customers. The staff also places promotional signage in the stores, highlighting products that are sold through the ENERGY STAR Retail Program. Our direct markdown offering provides instant incentives on energy-efficient lighting for customers, with no application to be filled out and no wait time.

### **Our Retail and Manufacturing Partners**

RETAILER	MANUFACTURER
The Home Depot	Cree, Philips, TCP Lighting, LEEDARSON Lighting
Walmart	GE, TCP Lighting
Habitat for Humanity	MaxLite
Dollar General	MaxLite
Dollar Tree	MaxLite

# RESIDENTIAL | ENERGY STAR®

### **ENERGY STAR Appliance Rebates**

PROVIDER	WASHER	DRYER	DEHUMIDIFIER	DISHWASHER	ROOM A/C	TV	TOTAL
	_	EL	ECTRIC UTILITIES	_	_		_
Alpena Power Company	14	17	П	10	T	33	86
Baraga Electric Utility	-	-	-	-	-	-	-
Bayfield Electric Cooperative	-	-	-	-	-	-	-
The City of Crystal Falls	-	T	-	-	-	I	2
The City of Dowagiac	-	-	-	-	-	-	-
The City of Gladstone Department of Power & Light	2	6	-	2	-	3	13
The City of Harbor Springs Electric Department	I	1	3	2	-	-	7
Hillsdale Board of Public Utilities	3	2	1	-	-	I	7
L'Anse Electric Utility	-	-	2	-	-	-	2
The City of Negaunee Electric Department	-	2	I	-	-	2	5
The City of Norway Department of Power & Light	I	I	4	3	-	2	П
Upper Peninsula Power Company	28	36	25	19	5	П	124
We Energies	33	40	17	15	2	17	124
Wisconsin Public Service	4	5	7	6	-	П	33
Xcel Energy	7	-	3	I	-	2	13
		NATU	IRAL GAS UTILITIES				
Michigan Gas Utilities	115	74	-	137	-	-	326
Wisconsin Public Service	4	I	-	I	-	-	6
Xcel Energy	2	7	-	I	-	-	10
TOTAL	214	193	74	197	8	83	769

## **ENERGY STAR Program Overview**

PROVIDER	# OF PARTICIPANTS	INCENTIVE SPENT	2015 CARRYOVER	KWH/CCF ACHIEVED	TOTAL KWH/CCF ACHIEVED	2016 ANNUAL KWH/CCF GOAL	% OF GOAL ACHIEVED
		ELEC.	TRIC UTILITIES				
Alpena Power Company	2,560	\$47,853	242,165	1,121,565	1,363,731	660,894	206%
Baraga Electric Utility	100	\$2,352	4,769	37,879	42,649	12,723	335%
Bayfield Electric Cooperative	12	\$80	-	1,479	1,479	1057	140%
The City of Crystal Falls	272	\$7,376	17,790	134,865	152,655	48,344	316%
The City of Dowagiac	220	\$4,747	43,702	100,569	144,271	115,838	125%
The City of Gladstone Department of Power & Light	368	\$7,926	18,827	140,169	158,996	105,103	151%
The City of Harbor Springs Electric Department	380	\$8,219	16,608	152,182	168,791	121,626	139%
Hillsdale Board of Public Utilities	320	\$7,616	37,280	147,860	185,141	100,632	184%
L'Anse Electric Utility	80	\$4,088	10,237	61,222	71,459	27,425	261%
The City of Negaunee Electric Department	980	\$13,376	4,968	348,274	353,242	49,923	708%
The City of Norway Department of Power & Light	740	\$17,440	33,634	269,530	303,164	125,962	241%
Upper Peninsula Power Company	6,352	\$83,892	494,537	1,789,946	2,284,482	1,322,539	173%
We Energies	5,804	\$96,456	250,717	1,924,106	2,174,823	661,034	329%
Wisconsin Public Service	3,340	\$53,945	156,035	1,282,544	1,438,578	493,276	292%
Xcel Energy	3,084	\$68,579	134,667	1,294,343	1,429,010	360,005	397%
TOTAL ELECTRIC	24,612	\$423,944	1,465,935	8,806,535	10,272,470	4,206,379	244%
		NATURA	AL GAS UTILITIE	S			
Michigan Gas Utilities	307	\$9,507	215	1,851	2,066	987	209%
Wisconsin Public Service	93	\$1,105	5	1,854	1,859	14	12944%
Xcel Energy	5	\$101	10	67	76	25	305%
TOTAL NATURAL GAS	405	\$10,713	230	3,772	4,002	1,026	390%

## RESIDENTIAL | APPLIANCE RECYCLING

In 2016, Efficiency UNITED delivered an Appliance Recycling Program that provided in-home pickup of refrigerators, freezers, room air conditioners and dehumidifiers

Efficiency UNITED used a variety of channels to draw participation in the programs. This included advertisements, promotion at events, retail point of purchase materials and website advertisements.

Historically Efficiency UNITED has partnered with JACO Environmental to facilitate the Appliance Recycling Program. In the wake of JACOs unexpected shutdown in late 2015 and lack of customer interest in early 2016, the Appliance Recycling Program experienced less participation than previous years.

REFRIGERATORS	FREEZERS		
24	16		
ROOM AIR CO	ONDITIONERS		
	7		
DEHUMIDIFIERS	TOTAL		
7	56		



## Appliance Recycling Program Overview

PROVIDER	# OF PARTICIPANTS	INCENTIVE SPENT	2015 CARRYOVER	KWH/CCF ACHIEVED	TOTAL KWH/CCF ACHIEVED	2016 ANNUAL KWH/CCF GOAL	% OF GOAL ACHIEVED
		ELEC.	TRIC UTILITIES				
Alpena Power Company	6	\$1,215	3,047	3,513	6,560	8,315	79%
Baraga Electric Utility	-	-	797	-	797	2,126	37%
Bayfield Electric Cooperative	-	-	-	-	-	0	-
The City of Crystal Falls	-	-	765	-	765	2,079	37%
The City of Dowagiac	-	-	287	-	287	760	38%
The City of Gladstone Department of Power & Light	2	\$248	2,060	817	2,877	11,499	25%
The City of Harbor Springs Electric Department	-	-	304	-	304	2,226	14%
Hillsdale Board of Public Utilities	-	-	3,502	-	3,502	9,454	37%
L'Anse Electric Utility	-	-	474	-	474	1,269	37%
The City of Negaunee Electric Department	5	\$990	307	3,131	3,439	3,088	111%
The City of Norway Department of Power & Light	4	\$630	785	1,578	2,363	2,938	80%
Upper Peninsula Power Company	14	\$3,493	50,474	10,760	61,234	134,983	45%
We Energies	9	\$2,165	4,692	6,611	11,303	12,372	91%
Wisconsin Public Service	10	\$2,010	5,683	5,429	11,111	17,965	62%
Xcel Energy	-	-	2,450	-	2,450	6,549	37%
TOTAL ELECTRIC	43	\$10,750	75,627	31,839	107,466	215,625	50%

### RESIDENTIAL | HOME PERFORMANCE

The 2016 Home Performance Program continued increasing in success through the introduction of new rebate opportunities and enrolling additional contractors.

### **CONTRACTOR NETWORK**

The network of participating contractors increased substantially from 700 to 1,486 in 2016. Contractors continued to be a driving force of the program. Compared to self-installers, contractors submitted approximately 99 percent of all applications, measures and energy savings. Significant increases in long-life measures were also realized.

### Home Performance Program Increase from 2015

Air Sealing	69%	
Duct Sealing	265%	
ECM Furnace	19%	
Insulation	28%	
Heat Pump Water Heaters	33%	
Heating Systems	173%	
Windows	50%	

### **ONLINE ENERGY AUDITS**

Customers complete an Online Energy Audit via the Efficiency UNITED website. This audit helps customers discover how energy in their home is utilized and lost, along with offering recommendations on how to make their home safe, healthy and more energy efficient.

### **JOINT ENERGY EFFICIENCY PLANS**

Joint Energy Efficiency Plans leveraged longtermrelationships with customers to promote efficiency upgrades. During the complimentary service, a qualified program representative provided an assessment of the home's appliances, envelope and mechanical systems, and installed energy saving upgrades including LEDs and high efficient aerators. The JEEP recommendations developed a collaborative action plan to improve comfort and energy efficiency. Energy Coaches made followupcalls after the completion of a JEEP to offercontinued assistance in navigating the efficiency upgrade process.

### **JEEP Outreach Overview**

TOTAL COMPLETE	NUMBER OF UPGRADES
331	95

### MANUFACTURED HOME INITIATIVE

Manufactured Home Initiative (MHI) was created in 2015 to provide non-traditional energy efficiency enhancements to customers living in manufactured homes. Manufactured homes are defined as factory-built, pre-fabricated housing, mobile homes, and homes within mobile home-type communities. It does not include homes traditionally built entirely at a construction site. The program addresses market barriers that prevent these customers from accessing deeper energy-saving improvements.

The program partnered with highly qualified contractors to implement blower door testing to confront air leakage as well as duct leakage issues. Direct install measures were also performed by the contractors, including pipe wrap, showerhead, shower start, shower start with showerhead, bath and kitchen aerators, and programmable thermostats.

### **MHI Units Completed**

TOTAL UNITS	INCENTIVE SPENT	ADJUSTED FIRST YEAR SAVINGS (therms)
715	\$289,113	205,731

## Home Performance Program Overview

PROVIDER	# OF PARTICIPANTS	INCENTIVE SPENT	2015 CARRYOVER	KWH/CCF ACHIEVED	TOTAL KWH/CCF ACHIEVED	2016 ANNUAL KWH/CCF GOAL	% OF GOAL ACHIEVED	
ELECTRIC UTILITIES								
Alpena Power Company	17	\$2,877	9,406	9,230	18,636	25,670	73%	
Baraga Electric Utility	3	\$432	1,762	1,360	3,122	4,700	66%	
Bayfield Electric Cooperative	=	-	-	-	-	0	-	
The City of Crystal Falls	2	\$150	3,332	657	3,989	9,055	44%	
The City of Dowagiac	17	\$2,980	10,839	19,649	30,488	28,730	106%	
The City of Gladstone Department of Power & Light	6	\$2,357	6,644	13,834	20,478	37,090	55%	
The City of Harbor Springs Electric Department	6	\$800	4,208	3,285	7,493	30,816	24%	
Hillsdale Board of Public Utilities	175	\$21,200	60,351	136,142	196,493	162,908	121%	
L'Anse Electric Utility	4	\$750	2,255	1,576	3,830	6,040	63%	
The City of Negaunee Electric Department	16	\$3,210	3,912	10,118	14,030	39,318	36%	
The City of Norway Department of Power & Light	9	\$2,233	3,133	6,405	9,538	11,733	81%	
Upper Peninsula Power Company	489	\$139,705	231,965	530,299	762,264	620,344	123%	
We Energies	94	\$42,279	32,881	148,561	181,442	86,694	209%	
Wisconsin Public Service	106	\$33,175	8,086	99,053	107,139	25,564	419%	
Xcel Energy	34	\$13,012	4,609	63,542	68,151	12,322	553%	
TOTAL ELECTRIC	978	\$265,159	383,384	1,043,710	1,427,094	1,100,984	130%	
		NA.	TURAL GAS UTILI	TIES				
Michigan Gas Utilities	3,937	\$1,253,953	174,528	857,074	1,031,602	801,203	129%	
Wisconsin Public Service	129	\$42,921	9,600	37,936	47,535	25,858	184%	
Xcel Energy	169	\$42,160	8,114	30,855	38,969	21,333	183%	
TOTAL NATURAL GAS	4,235	\$1,339,034	192,241	925,865	1,118,106	848,394	132%	

### RESIDENTIAL | RESIDENTIAL EDUCATION

The Residential Education Program is delivered primarily through a partnership with the National Energy Foundation (NEF). The NEF's "Think! Energy" Program refines a curriculum approved by the Michigan Department of Education and delivers energy efficiency education at a grade-appropriate level to both fourth and sixth grade students. Through an interactive presentation, students learn how energy works and how they and their families can develop and practice more energy-efficient habits. Students receive hands-on experience with energy and how it is generated through the "How Energy Is Made" power plant demonstration and the "Let's Make a Circuit" game.

Each participating student received a "Take Action!" kit with energy-saving items to help them and their parents save energy at home. The students were asked to "Talk!" energy with their families and "Take Action!" by installing the kit items. They had a homework assignment with the kit and a home energy worksheet that asked what they learned and if they had installed the kit items. Once students returned their home energy worksheets, teachers receive a mini-grant to benefit the school. This acted as a great incentive to both teachers and students.

### "Think! Energy" Participation Results

SCHOOLS	TEACHERS	"TAKE ACTION!" KITS DISTRIBUTED
41	106	2.713

## Residential Education Program Overview

PROVIDER	# OF PARTICIPANTS	INCENTIVE SPENT	TOTAL KWH/CCF ACHIEVED	2016 ANNUAL KWH/CCF GOAL	% OF GOAL ACHIEVED
	EL	ECTRIC UTILITIES			
Alpena Power Company	228	\$3,604	25,866	25,866	100%
Baraga Electric Utility	40	\$116	913	913	100%
Bayfield Electric Cooperative	-	\$19	50	50	100%
The City of Crystal Falls	35	\$355	2,318	2,318	100%
The City of Dowagiac	132	\$668	5,478	5,478	100%
The City of Gladstone Department of Power & Light	139	\$673	5,141	5,141	100%
The City of Harbor Springs Electric Department	44	\$531	5,732	5,732	100%
Hillsdale Board of Public Utilities	47	\$1,495	11,403	11,403	100%
L'Anse Electric Utility	68	\$209	1,561	1,561	100%
The City of Negaunee Electric Department	120	\$566	3,520	3,520	100%
The City of Norway Department of Power & Light	60	\$706	5,277	5,277	100%
Upper Peninsula Power Company	518	\$17,679	85,749	85,749	100%
We Energies	258	\$7,880	31,811	31,811	100%
Wisconsin Public Service	132	\$2,022	21,415	21,415	100%
Xcel Energy	101	\$2,105	17,363	17,363	100%
TOTAL ELECTRIC	1,922	\$38,627	223,598	223,598	100%
	NATU	JRAL GAS UTILITI	ES		
Michigan Gas Utilities	1,067	\$39,389	30,761	30,761	100%
Wisconsin Public Service	95	\$1,065	1,103	1,103	100%
Xcel Energy	101	\$1,298	1,129	1,129	100%
TOTAL NATURAL GAS	1,263	\$41,752	32,993	32,993	100%

### SMARTVENT PILOT PROGRAM

The Efficiency UNITED SmartVent pilot was offered to Michigan Gas Utilities customers and set out to prove:

- Energy savings can be attributed to the installation and adoption of a smart vent system
- Smart vents may be used in an effective incentive program
- Identify potential demographic and behavioral data to influence future program designs.

A smart vent system enables customers to create a zoned heating and cooling environment in their home without significant renovation to their existing heating and cooling setup. A smart thermostat is installed to communicate with the smart vent system. Smart vents easily replace the existing registers in the home without any rewiring or duct work because they are battery operated and fit the existing register size. Once installed, the smart vents connect wirelessly to a nearby temperature sensor to regulate the temperature in a room or area by opening and closing the dampers automatically. The system can be controlled from a smartphone, giving the customer the ability to control the temperatures in their home from remote locations.

This smart vent system was installed in 15 Michigan Gas Utilities customers' homes through the end of 2016 and into early 2017.

Pilot participants were asked to respond to a survey following installation that asked about their experience with the technology and the pilot program overall.

In general, customers were satisfied with their experience of the pilot program and the contractors. Customers enjoyed the greater temperature control the smart vent system gave them. Some customers reported issues with the temperature sensors causing the system to overheat or under-heat some zones. Most issues with the system stemmed from its relative newness, which Ecovent is addressing with system updates that customers will receive automatically.

Historical utility consumption data taken prior to installation of the smart vent system was collected and will be assessed against 2016–2017 data, normalized for weather data.

### **EDUCATION & METERING PILOT PROGRAM**

The Efficiency UNITED Education & Metering pilot intended to find if customers use less energy when they are able to better track and visualize their energy use. The pilot also assessed whether energy efficiency education has an impact on behavioral energy savings.

For Michigan Gas Utilities gas customers, a gas monitor was installed downstream from the utility gas meter to monitor the amount of gas used in the home. For electric customers, an electric meter was installed near the home's breaker panel with two current transformers clamped onto the two main lines. Usage was uploaded wirelessly to an energy dashboard that customers could view from any smart device to learn more about their usage. The dashboard showed energy usage in real time and in different historical increments. Pilot program staff also entered the customer's gas rate into the dashboard so that the customers could review a financial visualization of their energy use.

Gas monitors were installed in eight customers' homes. Electric monitors were installed in 16 homes. Desired enrollment was 44 electric and 10 gas participants. The low customer enrollment is likely due to the low customer appeal of the EKM Metering system used. Pilot program staff reported that many potential participants did not feel the system would be beneficial to them and their home.

Participating customers were sent a survey after installation on their experiences with the technology and the pilot program. Overall, customers were neutral in their experiences with the system. Customers found the energy dashboard to lack intuitiveness and beneficial findings on their gas usage. EKM Metering, the monitoring company used for the pilot, is working on a new energy dashboard for its system that will address these issues. Some customers found the monitor to be highly beneficial for learning when their usage peaked and were able to identify which appliance was causing their gas bill costs to rise most significantly. Customers were then empowered to make energy efficiency upgrades to these high gas-using culprits in the home.

Contractors reported that the gas meter was difficult to install since they needed to reroute the gas line and hard-wire a connection to a system hub and the home's internet for the data to be uploaded to the

energy dashboard. The contractors noted that a wireless connection through the hub and internet would make installation much simpler.

As part of the efficiency education aspect of the pilot, customers were sent the Department of Energy's EnergySavers booklet, which covers energy efficiency recommendations and tips for residential homes. Some customers found the information very useful and made the recommended steps which resulted in higher energy savings.

Historical utility consumption data from before installation of the monitors was collected and is due to be compared against 2016–2017 data, normalized for weather data.

### HOME ENERGY STIMULUS PILOT

The 2015 Technology Demonstration Pilot Program facilitated and promoted adoption of the Department of Energy's Home Energy Score (HEScore) through assessing and scoring more than 500 homeowners in SEMCO ENERGY Gas Company, Michigan Gas Utilities, UPPCO and We Energies service territories.

The purpose of the Home Energy Stimulus Pilot was to assess whether the HEScore has a demonstrable influence on energy efficiency investment decisions. The pilot compared customer investment in energy efficiency between customers who have a HEScore and those without a HEScore.

The following three populations of customers were offered a limited-time 100 percent insulation rebate bonus (or Pilot Bonus).

### **Control Group:**

Customers who previously received a Joint Energy Efficiency Plan (JEEP) in-home assessment, but not a HEScore.

Correspondence referenced the previous assessment and its specific recommendations, stated the typical incentives available for the recommended upgrades and offered the Pilot Bonus. No mention was made of the HEScore.

### Population I:

Customers who previously received a HEScore.

Correspondence referenced the original HEScore and its specific recommendations, stated the typical incentives

available for the recommended upgrades and offered the Pilot Bonus. The offer also included re-scoring the house following the upgrades (at no cost) to present an increased score.

### Population 2:

Customers who previously received a JEEP in-home assessment, but not a HEScore.

Correspondence referenced the previous assessment and its specific recommendations, stated the typical incentives available for the recommended upgrades and offered the Pilot Bonus as well as a no-cost HEScore both before and after the upgrade earning the Pilot Bonus.

Following the pilot, customers were surveyed, and all said that saving energy and increasing their home comfort led to their decision to make the insulation upgrades. Most customers said that they would have made the upgrades within the next year or five years even if not offered the Pilot Bonus. Some customers noted that they would not have made the upgrades without the assessment's recommendations and the Pilot Bonus being offered.

Three Michigan Gas Utilities customers and one UPPCO customer took advantage of the pilot bonus, with an average rebate paid of \$271.

Customers in Population 1—HEScore customers—made the most upgrades, being twice as likely to make upgrades than the customers who received a JEEP and no HEScore. Customers noted that the suggestions provided through the HEScore were a main factor in deciding to make upgrades.

# RESIDENTIAL | PILOT PROGRAMS

## Residential Pilot Program Overview

PROVIDER	# OF PARTICIPANTS	INCENTIVE SPENT	TOTAL KWH/CCF ACHIEVED	2016 ANNUAL KWH/ CCF GOAL	% OF GOAL ACHIEVED		
ELECTRIC UTILITIES							
Alpena Power Company	-	-	-	43,110	0%		
Baraga Electric Utility	-	-	-	1,522	0%		
Bayfield Electric Cooperative	-	-	-	84	0%		
The City of Crystal Falls	-	-	-	3,864	0%		
The City of Dowagiac	-	-	-	9,130	0%		
The City of Gladstone Department of Power & Light	-	-	-	8,568	0%		
The City of Harbor Springs Electric Department	-	-	-	9,554	0%		
Hillsdale Board of Public Utilities	-	-	-	19,005	0%		
L'Anse Electric Utility	-	-	-	2,602	0%		
The City of Negaunee Electric Department	-	-	-	5,867	0%		
The City of Norway Department of Power & Light	-	-	-	8,795	0%		
Upper Peninsula Power Company	20	\$29,465	142,916	142,916	100%		
We Energies	I	\$1,928	7,785	53,018	15%		
Wisconsin Public Service	-	-	-	35,691	0%		
Xcel Energy	-	-	-	28,938	0%		
TOTAL ELECTRIC	21	\$31,393	150,701	372,663	40%		
		NATURAL GA	AS UTILITIES				
Michigan Gas Utilities	31	\$65,649	51,265	51,268	100%		
Wisconsin Public Service	-	-	-	1,839	0%		
Xcel Energy	-	-	-	1,882	0%		
TOTAL NATURAL GAS	31	\$65,649	51,265	54,989	93%		

## Electric Savings Table by Program

PROGRAM	# OF TOTAL PROGRAM PARTICIPANTS	INCENTIVES PAID	KWH SAVINGS ACHIEVED	% OF RESIDENTIAL KWH SAVINGS ACHIEVED
Appliance Recycling	57	\$10,750	107,466	0.9%
ENERGY STAR	24,612	\$423,944	10,272,470	84.3%
Home Performance	978	\$265,159	1,427,094	11.7%
Residential Education	1,922	\$38,627	223,598	1.8%
Pilot	21	\$31,393	150,701	1.2%
Total	27,590	\$769,873	12,181,328	100.0%

## Natural Gas Savings Table by Program

PROGRAM	# OF TOTAL PROGRAM PARTICIPANTS	INCENTIVES PAID	THERM SAVINGS ACHIEVED	% OF RESIDENTIAL THERM SAVINGS ACHIEVED
ENERGY STAR	405	\$10,713	4,002	0.3%
Home Performance	4,235	\$1,339,034	1,118,106	92.7%
Residential Education	1,263	\$41,752	32,993	2.7%
Pilot	31	\$65,649	51,265	4.2%
Total	5,934	\$1,457,147	1,206,366	100.0%

# RESIDENTIAL | CLASS OVERVIEW

## Residential Class Budgets and Expenses

PROVIDER	2016 IMPLEMENTATION & INCENTIVE BUDGET	2015 INCENTIVE CARRY FORWARD	2016 ADJUSTED BUDGET WITH CARRYOVER	TOTAL IMPLEMENTATION & INCENTIVE SPENT	2016 INCENTIVE UNSPENT	% OF 2016 ADJUSTED BUDGET SPENT
ELECTRIC UTILITIES						
Alpena Power Company	\$185,132	\$66,868	\$252,000	\$132,460	\$119,539	53%
Baraga Electric Utility	\$6,031	\$4,980	\$11,011	\$5,374	\$5,637	49%
Bayfield Electric Cooperative	\$720	\$629	\$1,349	\$396	\$953	29%
The City of Crystal Falls	\$18,465	\$516	\$18,980	\$15,460	\$3,520	81%
The City of Dowagiac	\$34,746	\$9,616	\$44,362	\$22,657	\$21,705	51%
The City of Gladstone Department of Power & Light	\$34,775	\$47,984	\$82,758	\$25,555	\$57,203	31%
The City of Harbor Springs Electric Department	\$27,562	\$24,823	\$52,385	\$20,873	\$31,512	40%
Hillsdale Board of Public Utilities	\$77,766	\$62,049	\$139,815	\$62,215	\$77,600	44%
L'Anse Electric Utility	\$10,828	\$7,156	\$17,984	\$9,502	\$8,482	53%
The City of Negaunee Electric Department	\$29,221	\$35,900	\$65,120	\$30,209	\$34,912	46%
The City of Norway Department of Power & Light	\$35,530	\$7,521	\$43,050	\$36,078	\$6,972	84%
Upper Peninsula Power Company	\$919,419	\$784,714	\$1,704,134	\$651,475	\$1,052,658	38%
We Energies	\$409,747	\$171,123	\$580,869	\$318,859	\$262,011	55%
Wisconsin Public Service	\$104,528	\$29,777	\$134,305	\$134,300	\$5	100%
Xcel Energy	\$109,460	\$46,633	\$156,093	\$128,612	\$27,482	82%
TOTAL ELECTRIC	\$2,003,928	\$1,300,288	\$3,304,217	\$1,594,025	\$1,710,191	48%
		NATURAL	. GAS UTILITIES			
Michigan Gas Utilities	\$2,045,251	\$460,636	\$2,505,886	\$2,209,011	\$296,875	88%
Wisconsin Public Service	\$55,255	\$17,762	\$73,016	\$67,808	\$5,208	93%
Xcel Energy	\$67,498	\$10,689	\$78,187	\$71,250	\$6,937	91%
TOTAL NATURAL GAS	\$2,168,003	\$489,086	\$2,657,090	\$2,348,069	\$309,020	88%

The Efficiency UNITED Commercial & Industrial Prescriptive & Custom Program provides incentives for high-efficiency equipment upgrades in non-residential facilities. The program is separated into two main parts: prescriptive and custom. The prescriptive portion offers pre-determined rebates often associated with one-forone retrofits. The custom portion allows customers to take a unique, more innovative look at energy efficiency and customize it to their specific needs.

### 195 Total JEEPs:

As in past years, Efficiency UNITED utilized an Energy Advisor outreach model for the 2016 program year, which provides direct contact with end-use customers and trade allies. This model once again proved its success by producing many opportunities, most of which were completed in 2016. The remaining applications will be considered for the 2017 program year.

In addition, Commercial & Industrial Program participants were encouraged to work with their Energy Advisor to develop or update a Joint Energy Efficiency Plan (JEEP). These plans are designed to provide customers with a starting point for long-term energy planning and establish a strategic energy plan.

### **403 Projects Completed:**

Customer participation in 2016 increased 15 percent from 2015. The year started with reasonably good participation in Q1 and Q2. However, some programs suffered challenges due to an uneven economy, especially in select areas of the Upper Peninsula.

To help increase participation, a number of customer bonuses were initiated in select areas in 2016. These "specials" were designed to:

- Encourage customers to perform upgrades earlier in the year
- Increase trade ally participation in an underperforming region
- Help drive the adoption of specific high-efficiency technologies
- Offer a streamlined program targeted to small businesses

In addition, increased outreach was focused on utility service territories that could not afford specials due to budget constraints. As a result, participation levels and interest saw strong growth through the first two quarters. The Commercial & Industrial Prescriptive & Custom Program exceeded its objectives for all but one utility, where the goal was achieved in other areas of the portfolio to compensate.

### **MARKET CHANGES**

The Commercial & Industrial Program saw two largescale changes in the market place in the areas of lighting and controls.

- Since 2013, the Efficiency UNITED service territories have seen a dramatic shift toward LED lighting. Exterior LED projects gained market acceptance first, but interior LED projects now make up a substantial part of the Efficiency UNITED electric project portfolio. By 2016, only a few projects utilized CFLs or linear fluorescent lamps for their lighting upgrade. Given this large shift in the marketplace toward LEDs, many vendors have suffered a lack of inventory due to high market demand.
- The Commercial & Industrial sector showed increased integration of digital controls for HVAC projects to capture energy savings.

### **OUTREACH OPPORTUNITIES**

The majority of outreach is performed through oneon-one relationships developed by the Commercial & Industrial Energy Advisor staff. In addition, the team participated in events to market the program. These events included:

- U.P. Builders Show Construction Expo
- Michigan Commercial & Industrial Energy Conferences
- U.P. Energy Summit
- Wittock Trade Show
- Michigan School Business Officials Facility/ Operations Director Conference & Expo
- U.P. State Fair

# COMMERCIAL & INDUSTRIAL | PRESCRIPTIVE & CUSTOM

### Commercial & Industrial: Prescriptive & Custom Program Overview

PROVIDER	# OF PARTICIPANTS	INCENTIVE SPENT	2015 CARRYOVER	KWH/CCF ACHIEVED	TOTAL KWH/CCF ACHIEVED	2016 ANNUAL KWH/CCF GOAL	% OF GOAL ACHIEVED
		ELE	ECTRIC UTILITIES				
Alpena Power Company	60	\$71,522	385,900	2,515,985	2,901,885	1,065,085	272%
Baraga Electric Utility	7	\$16,348	52,506	188,372	240,878	144,916	166%
Bayfield Electric Cooperative	-	-	-	-	-	0	-
The City of Crystal Falls	7	\$16,826	28,708	228,966	257,674	79,235	325%
The City of Dowagiac	11	\$56,352	155,989	1,001,145	1,157,134	430,529	269%
The City of Gladstone Department of Power & Light	8	\$9,064	25,095	157,550	182,645	140,388	130%
The City of Harbor Springs Electric Department	15	\$15,538	23,133	189,957	213,090	171,258	124%
Hillsdale Board of Public Utilities	16	\$66,657	268,740	1,131,856	1,400,596	741,722	189%
L'Anse Electric Utility	5	\$5,165	22,499	75,738	98,237	62,097	158%
The City of Negaunee Electric Department	6	\$11,619	9,898	177,220	187,119	100,823	186%
The City of Norway Department of Power & Light	5	\$7,206	26,881	122,932	149,812	101,883	147%
Upper Peninsula Power Company	84	\$375,729	1,779,701	4,344,589	6,124,290	4,911,974	125%
We Energies	104	\$164,515	814,045	4,564,366	5,378,412	2,012,518	267%
Wisconsin Public Service	17	\$52,099	589,420	787,371	1,376,791	1,896,648	73%
Xcel Energy	6	\$40,821	275,935	675,383	951,318	761,581	125%
TOTAL ELECTRIC	351	\$909,460	4,458,452	16,161,429	20,619,880	12,620,659	163%
		NATU	JRAL GAS UTILIT	IES			
Michigan Gas Utilities	46	\$307,233	253,750	2,151,817	2,405,567	1,195,208	201%
Wisconsin Public Service	4	\$15,798	31,955	122,584	154,538	88,195	175%
Xcel Energy	2	\$20,990	10,262	96,769	107,031	28,323	378%
TOTAL NATURAL GAS	52	\$344,021	295,967	2,371,169	2,667,136	1,311,726	203%

The 2016 Efficiency UNITED Commercial & Industrial Education Program focused primarily on the continuation of previous years' education initiatives. These initiatives featured the Michigan Commercial & Industrial Energy Conference and Commercial Online Audit.

# MICHIGAN COMMERCIAL & INDUSTRIAL ENERGY CONFERENCE

The Michigan Commercial & Industrial Energy Conference was held in Battle Creek and Harris, MI. Efficiency UNITED collaborated with Consumers Energy, DTE Energy, SEMCO ENERGY Gas Company and Energy Optimization to provide sponsorships that allowed their respective customers to attend the educational event at no cost. The two one-day events consisted of exhibitors, breakout sessions and multiple networking opportunities for customers to learn about energy use and energy efficiency.

The conference in Harris coincided with an extended snow storm, but still attracted more than 100 attendees, while the Battle Creek event had nearly 300 attendees.

### **COMMERCIAL ONLINE AUDIT**

The Commercial Online Audit offers customers a quick and simplified audit report based on information provided and questions answered via online software.

#### MICHIGAN INTERFAITH POWER & LIGHT

The remaining funds were used to initiate a program with Michigan Interfaith Power & Light (Michigan IPL) as a Michigan-based advocate and resource for energy efficiency. The aim was to establish Michigan IPL as a voice of and resource for energy efficiency by presenting at events, addressing its houses of worship base, and

establishing a website and social media campaign. Five events were held in Q4, with the social media campaign and website initiated at year-end. Plans are to continue the program in 2017 and beyond to build on these initial efforts and provide a continuing resource of energy efficiency information, including tips, best practices, utility rebates, motivational stories and Department of Energy tools.

### **TOOL LIBRARY**

The Tool Library program was offered to customers on as needed basis. The tools which were purchased through the 2014 Program were made available to customers in 2015. These were loaded out to help customers understand how and where they use energy and help them quantify their usage along with preand/or post-metering to help establish baselines for potential energy efficiency projects.

# COMMERCIAL & INDUSTRIAL | EDUCATION

## Commercial & Industrial: Education Program Overview

PROVIDER	INCENTIVE SPENT	TOTAL KWH/CCF ACHIEVED	2016 ANNUAL KWH/ CCF GOAL	% OF GOAL ACHIEVED
	ELECTRI	C UTILITIES		
Alpena Power Company	\$4,092	34,731	34,731	100%
Baraga Electric Utility	\$568	4,726	4,726	100%
Bayfield Electric Cooperative	-	-	0	-
The City of Crystal Falls	\$352	2,584	2,584	100%
The City of Dowagiac	\$1,505	14,039	14,039	100%
The City of Gladstone Department of Power & Light	\$615	4,578	4,578	100%
The City of Harbor Springs Electric Department	\$496	5,585	5,585	100%
Hillsdale Board of Public Utilities	\$2,672	24,186	24,186	100%
L'Anse Electric Utility	\$251	2,025	2,025	100%
The City of Negaunee Electric Department	\$403	3,288	3,288	100%
The City of Norway Department of Power & Light	\$398	3,322	3,322	100%
Upper Peninsula Power Company	\$17,155	160,174	160,174	100%
We Energies	\$6,975	73,264	73,264	100%
Wisconsin Public Service	\$3,821	61,847	61,847	100%
Xcel Energy	\$2,530	24,834	24,834	100%
TOTAL ELECTRIC	\$41,832	419,183	419,183	100%
	NATURAL (	GAS UTILITIES		
Michigan Gas Utilities	\$15,714	38,974	38,974	100%
Wisconsin Public Service	\$630	2,876	2,876	100%
Xcel Energy	\$903	924	924	100%
TOTAL NATURAL GAS	\$17,247	42,774	42,774	100%

The 2016 Efficiency UNITED Commercial & Industrial Pilot Program was a technology demonstration program designed to quantify the energy savings from specific emerging technology with the view to introducing it into the core Efficiency UNITED offering.

Two technologies were chosen for 2016: a packaged rooftop unit heat recovery technology for the natural gas utilities and advanced defrost controls for the electric utilities.

# HEAT RECOVERY FOR PACKAGED ROOFTOP UNITS

This heat recovery technology for packaged rooftop units regains heat from the A/C unit to preheat domestic hot water. Targeted outreach in the pilot focused on customers who have significant cooling and hot water demand. These customers included restaurants, laundromats, truck stops, health clubs and residential care facilities.

Although the first installed location showed very positive results, only three locations were installed across Efficiency UNITED utilities in 2016 due to the following challenges:

- Unusually warm weather in 2016 (it was the hottest summer on record) that taxed HVAC companies' service crews (this meant that companies were too busy on service calls to actively sell replacement services)
- The large physical space requirement of the storage tank

Data collection for this technology initiated the Q3 and is scheduled to continue through the summer of 2017. Efficiency UNITED plans to continue installing and demonstrating this technology in 2017 program year.

### **ADVANCED DEFROST CONTROLS**

This package of advanced controls is designed to control the defrost cycle(s) in walk-in coolers and freezers. Targeted outreach focused on customers with walk-in coolers and freezers, including, but not limited to, restaurants, convenience stores, food banks and schools.

A total of 31 units for 22 participating customers were installed with defrost controls in 2016. Efficiency UNITED plans to install additional control units in 2017 and continue to perform data collection for all locations. This is a promising technology with a substantial, untouched market potential.

# COMMERCIAL & INDUSTRIAL | PILOT PROGRAM

## Commercial & Industrial: Pilot Program Overview

PROVIDER	# OF PARTICIPANTS	INCENTIVE SPENT	TOTAL KWH/CCF ACHIEVED	2016 ANNUAL KWH/ CCF GOAL	% OF GOAL ACHIEVED	
_	ELECTRIC UTILITIES					
Alpena Power Company	2	\$6,800	57,710	57,885	100%	
Baraga Electric Utility	I	\$742	6,172	7,876	78%	
Bayfield Electric Cooperative	-	-	-	0	-	
The City of Crystal Falls	I	\$460	3,375	4,306	78%	
The City of Dowagiac	I	\$2,509	23,398	23,398	100%	
The City of Gladstone Department of Power & Light	I	\$803	5,979	7,630	78%	
The City of Harbor Springs Electric Department	I	\$826	9,307	9,308	100%	
Hillsdale Board of Public Utilities	2	\$3,400	30,779	40,311	76%	
L'Anse Electric Utility	I	\$328	2,645	3,375	78%	
The City of Negaunee Electric Department	I	\$526	4,294	5,479	78%	
The City of Norway Department of Power & Light	I	\$520	4,339	5,537	78%	
Upper Peninsula Power Company	6	\$28,591	266,957	266,955	100%	
We Energies	2	\$6,402	67,244	122,107	55%	
Wisconsin Public Service	I	\$3,019	48,870	103,079	47%	
Xcel Energy	I	\$2,556	25,091	41,390	61%	
TOTAL ELECTRIC	22	\$57,482	556,161	698,636	80%	
		NATURAL (	GAS UTILITIES			
Michigan Gas Utilities	3	\$26,190	64,957	64,957	100%	
Wisconsin Public Service	-	-	-	4,793	0%	
Xcel Energy	-	-	-	1,539	0%	
TOTAL NATURAL GAS	3	\$26,190	64,957	71,289	91%	

## Commercial & Industrial: Class Budgets and Expenses

PROVIDER	2016 IMPLEMENTATION & INCENTIVE BUDGET	2015 INCENTIVE CARRY FORWARD	2016 ADJUSTED BUDGET WITH CARRYOVER	TOTAL IMPLEMENTATION & INCENTIVE SPENT	2016 INCENTIVE CARRY FORWARD	% OF 2016 BUDGET SPENT
		ELECTRIC	UTILITIES			
Alpena Power Company	\$212,856	\$31,736	\$244,592	\$169,739	\$74,853	69%
Baraga Electric Utility	\$29,546	\$25,878	\$55,424	\$29,780	\$25,644	54%
Bayfield Electric Cooperative	-	-	-	-	-	-
The City of Crystal Falls	\$18,319	\$7,528	\$25,847	\$25,154	\$693	97%
The City of Dowagiac	\$78,297	\$17,062	\$95,359	\$92,488	\$2,872	97%
The City of Gladstone Department of Power & Light	\$31,988	\$21,681	\$53,669	\$23,605	\$30,064	44%
The City of Harbor Springs Electric Department	\$25,793	\$2,091	\$27,885	\$27,443	\$442	98%
Hillsdale Board of Public Utilities	\$138,966	\$11,743	\$150,710	\$129,740	\$20,970	86%
L'Anse Electric Utility	\$13,061	\$7,960	\$21,021	\$11,102	\$9,918	53%
The City of Negaunee Electric Department	\$20,941	\$22,923	\$43,863	\$21,138	\$22,725	48%
The City of Norway Department of Power & Light	\$20,691	\$13,744	\$34,434	\$16,611	\$17,823	48%
Upper Peninsula Power Company	\$892,276	\$409,004	\$1,301,280	\$787,534	\$513,746	61%
We Energies	\$362,781	\$217,318	\$580,098	\$326,724	\$253,374	56%
Wisconsin Public Service	\$198,723	\$55,757	\$254,480	\$140,465	\$114,015	55%
Xcel Energy	\$131,604	-	\$131,604	\$99,898	\$31,706	76%
TOTAL ELECTRIC	\$2,175,841	\$844,425	\$3,020,267	\$1,901,422	\$1,118,845	63%
	natural gas utilities					
Michigan Gas Utilities	\$817,349	\$250,704	\$1,068,053	\$684,459	\$383,594	64%
Wisconsin Public Service	\$32,787	\$3,613	\$36,400	\$29,879	\$6,521	82%
Xcel Energy	\$46,951	\$2,978	\$49,929	\$41,154	\$8,775	82%
TOTAL NATURAL GAS	\$897,087	\$257,295	\$1,154,382	\$755,492	\$398,890	65%

# COMMERCIAL & INDUSTRIAL | CLASS OVERVIEW

## Commercial & Industrial: Class Participation and Energy Savings

PROVIDER	2016 ANNUAL KWH/CCF GOAL	TOTAL KWH/CCF ACHIEVED	% OF ACHIEVED GOAL			
ELECTRIC UTILITIES						
Alpena Power Company	2,537,088	2,994,326	118%			
Baraga Electric Utility	157,518	251,776	160%			
Bayfield Electric Cooperative	0	0	-			
The City of Crystal Falls	86,125	263,632	306%			
The City of Dowagiac	467,966	1,194,571	255%			
The City of Gladstone Department of Power & Light	152,596	193,202	127%			
The City of Harbor Springs Electric Department	186,150	227,982	122%			
Hillsdale Board of Public Utilities	806,220	1,455,562	181%			
L'Anse Electric Utility	67,497	102,906	152%			
The City of Negaunee Electric Department	109,590	194,700	178%			
The City of Norway Department of Power & Light	110,742	157,474	142%			
Upper Peninsula Power Company	5,339,103	6,551,420	123%			
We Energies	4,704,579	5,518,920	117%			
Wisconsin Public Service	2,061,574	1,487,508	72%			
Xcel Energy	827,806	1,001,244	121%			
TOTAL ELECTRIC	17,614,554	21,595,224	123%			
	NATURAL	GAS UTILITIES				
MGU	1,299,140	2,509,498	193%			
WPS Corp - Gas	95,864	157,414	164%			
Xcel Energy - Gas	30,786	107,955	351%			
TOTAL NATURAL GAS	1,425,790	2,774,867	195%			

CLEAResult continued to demonstrate its dedication to excellence in program design, implementation and evaluation for Efficiency UNITED through its quality check process. An internal inspection team regularly investigated customer satisfaction, confirmed rebate eligibility and assessed reported energy savings integrity through on-site verification and phone interviews with recent program participants.

To ensure consistency across the Efficiency UNITED service territory, CLEAResult sampled applications of varying contractors and measure mixes wherever possible. Results were shared regularly with program teams to assess areas of excellence and identify opportunities for improvement.

Participation with the quality process is voluntary; however, CLEAResult surpassed its 5 percent inspection target of approved projects annually across the Efficiency UNITED service territory.

### Measure Inspection Results | Residential Programs

5.1%

**REBATES INSPECTED** 

100% kWh SAVINGS RESULTS

98.6% THERMS SAVINGS RESULTS

99.1%
PRESENTATION QUALITY

### PARTICIPANT FEEDBACK ON RESIDENTIAL PROGRAMS

What prompted you to participate in this rebate program?

SAVE MONEY	SAVE ENERGY	REDUCE HOME'S ENERGY WASTE	PRESERVE THE ENVIRONMENT	INCREASE YOUR HOME'S VALUE	LEARN WAYS TO MANAGE ENERGY BILL	OTHER
59.4%	12.6%	14.3%	13.7%	6.3%	1.1%	5.1%

How did you first hear about this rebate program?

RETAILER	UTILITY BILL INSERT	CONTRACTOR	internet search	RECEIVED CALL	FRIEND/FAMILY	MAILER	BUILDER SHOW	OTHER
1.4%	5.0%	71.4%	2.9%	4.3%	5.7%	1.4%	0.7%	5.0%

How likely are you to recommend this program?

DEFINITELY	VERY LIKELY	MODERATELY LIKELY	NOT AT ALL LIKELY
89.5%	4.2%	3.5%	2.1%

How likely are you to participate in another Efficiency UNITED program?

DEFINITELY	VERY LIKELY	MODERATELY LIKELY	NOT AT ALL LIKELY
86.2%	7.2%	4.3%	0.7%

Marketing focused on maintaining our increased presence in the retail arena while introducing new customer outreach methods. Throughout the year, to maximize efficiency, Efficiency UNITED marketing utilized existing materials, including our comprehensive residential overview brochure. The 10-panel brochure offers residential customers the opportunity to identify rebates and savings opportunities for their entire home in a one-stop-shop approach. This concept was originally developed in 2015 and retooled for 2016 program offerings.

### SPECIFIC PROGRAM HIGHLIGHTS

#### **Home Performance**

A greater emphasis was placed on the development of trade ally relationships and program participation. Regular communication, expanded co-branding opportunities and additional outreach through the Market Outreach Specialist team all added to the development efforts.

#### **ENERGY STAR**

The availability of the Online Store, which makes LED lighting products conveniently available to customers at reduced rates, required an expansion of marketing tactics to reach customers most likely to take advantage of the online shopping experience. To better reach these customers, Efficiency UNITED introduced social media advertising through Facebook and Instagram, with great success. These avenues were also used to advertize "Day of Energy Savings" events held throughout the Efficiency UNITED territory. These ads not only increased attendance and participation in the program, but they also significantly increased the awareness of Efficiency UNITED's online presence. The Efficiency UNITED Facebook following more than tripled to nearly 400, and the social media interactions continue to reach an average of approximately 35,000 people weekly.

#### **Commercial & Industrial Education**

The 2016 Commercial & Industrial Energy
Conferences saw tremendous growth with the
continued support of energy providers throughout
Michigan. Collaboration with Consumers
Energy, DTE Energy, Efficiency UNITED, Energy
Optimization and SEMCO ENERGY Gas Company
allowed for the inclusion of customers throughout
Michigan, furthering energy efficiency education
and outreach. Both conferences, in Battle Creek
and Harris, continue to grow annually. In 2016, a
combined total of approximately 400 customers, trade
allies, utility representatives and vendors collaborated
on energy efficiency in these areas.

#### **ONLINE IMPACT**

The website continued to be a primary focus for all marketing materials across all programs. In total, 32,869 users visited the Efficiency UNITED website, representing a total of 191,770 page views. Of these users, 58.2 percent were new visitors. These statistics demonstrate how the program continues to reach new customers while providing a service customers deem valuable enough to return to for additional opportunities.

### Collateral | Program Brochure



≤ \$47,700 **Ω ... ... .. ..** Visit efficiencyunited.com/shop to start saving today ≤ \$55,820 **Ω . . . Ω .** ≤ \$63,940 **Ω . . . Ω . . .** ≤ \$72,060 <u>Ω . . . Ω . . Ω</u> Bacago Feature Two Control \*Add \$8.120 for each additional household member.

≤\$31,460 **Ω** ♣ ≤ \$39,580 Ω ♣ ♣









		SHGC rating	(max \$350
INSTALLED INSULATION	ADD TO EXISTING		
Attic*	Must add at least R-19, final R-value must be > R-49	500 ft <sup>3</sup> minimum	\$300
Azzic Hanch, Pull-down Stains* or Scuttle*	Final R-value must be > R-38	Ensire hatch and weatherstrip opening perimeter	\$25
Basement Wall*	Must add at least R-10	250 ft <sup>1</sup> minimum	\$250
Crawlepace Whit <sup>®</sup>	Must add at least R-11	250 ft <sup>1</sup> minimum	\$250
Rim Joist*	Must add at least R-10	100 lineal feet minimum or entire area, if smaller	\$200
Floor*	Must add at least R-11	100 ft <sup>3</sup> minimum	\$300
Well	Must add at least R-5	550 ft <sup>3</sup> minimum	\$300



MEASURE			REBATE
Natural Gas Boiler	Replace natural gas heating system	90+ AFUE boiler	\$1,000
Natural Gas Burraca	Replace natural gas	95 AFUE furnace	\$300
Potural Gas Purnace	heating system	96+ AFUE furrace	\$440
		Wi-Fi thermostat	\$100
Thermostat firmt one per house)	Replace nonprogrammable	Programmable thermostat - Contractor installed	\$30
()	thermostat	Programmable thermostat - Self installed	\$15
Boller Reset Control			\$100
Natural Gas Water Heater		0.80+ EF or > 90% TE water heater	\$100
Tankless Natural Gas Water Heater		0.82+ EF water heater	\$300
Air Sealing		> 10% change	\$150
Duct Sealing		> 15% change	\$100
Window		< 0.3 U-factor or SHGC rasing	\$70 (max \$350)

INSTALLED INSULATION MEASURE	ADD TO EXISTING R-VALUE		
Assic	Must add at least R-19, final R-value must be a R-49	500 fc <sup>2</sup> minimum	\$300
Assic Hasth, Pull-down Stairs or Scutzle	Final R-value must be > R-38	Entire hasch and weatherstrip opening perimeter	\$20
Basement Wall	Must add at least R-10	250 ft <sup>2</sup> minimum	\$250
Crzwkpace Whili	Must add at least R-11	250 ft <sup>2</sup> minimum	\$200
Kneewall	Must add at least R-19	100 fc² minimum	\$100
Wall	Must add at least R-5	500 ft <sup>2</sup> minimum	\$250
Rim Joist	Must add at least R-10	100 lineal feet minimum or entire area, if smaller	\$200

### ADDITIONAL OFFERINGS

#### Online Energy Audit

The Online Audit collects basic information about the home and instantly generates an overview report specifically for you. The report provides information on no-cost or low-cost energy-saving opportunities, as well as other improvements throughout your home.

Visit efficiencyunited.com/onlineaudit to get started.

Visit efficiencyunited.com/tuneup for details.

SAVINGS FOR A STRONG MICHIGAN

MARKETING 37

## Collateral | Flyer & Email





38 CONTACTS

Customers may obtain program information, place orders or download rebate applications for mail-in rebates on items purchased by visiting the Efficiency UNITED website at efficiencyunited.com or by calling the Efficiency UNITED Customer Service Center at 877.367.3191. The Customer Service Center is open 8:00 a.m. to 8:00 p.m., Monday through Friday, and 9:00 a.m. to 1:00 p.m. Saturdays.

## Key Efficiency UNITED Contacts

CONTACT NAME	TITLE	PROGRAM ROLE	PHONE	EMAIL
Paul Brown	Program Manager	C&I	517.999.2343	pbrown@clearesult.com
Chere Coleman	Program & Policy Director	Project Manager	517.679.6405	ccoleman@mcaaa.org
Brett Garver	Program Manager, CLEAResult	ENERGY STAR/ Appliance Recycling/ Residential Education	517.999.2341	brett.garver@clearesult.com
Patrick Leahy	Program Specialist, CLEAResult	Income Qualified	517.999.2317	pleahy@clearesult.com
Tim Mahler	Vice President, CLEAResult		517.999.2321	tim_mahler@clearesult.com
Amanda Pawloski	Program Portfolio Manager, CLEAResult	Residential Portfolio	517.999.2327	apawloski@clearesult.com
Stephanie Rockafellow	Marketing Manager, CLEAResult	Marketing	517.999.2366	stephanie.rockafellow@clearesult.com
Glenn Voisin	Account Manager, CLEAResult		517.999.2319	gvoisin@clearesult.com
Tony Walker	Program Manager	Residential	517.999.2342	twalker@clearesult.com
Brad Warrenburg	Program Manager, CLEAResult	Home Performance/ Residential Pilots	517.999.2310	brad.warrenburg@clearesult.com
Sean Williams	Program Portfolio Manager, CLEAResult	C&I Portfolio	517.999.2325	swilliams@clearesult.com

## Customer Service Center

## **Efficiency UNITED**

3100 West Road Building 3, Suite 200 East Lansing, MI 48823

877.367.3191

efficiencyunited.com

### ccf (therm)

The therm is a unit of heat energy equal to 100,000 British thermal units (BTU). It is approximately the energy equivalent of burning 100 cubic feet (often referred to as 1 ccf) of natural gas.

#### Financial Audit

The process of reviewing information in the contract year and ensuring its accuracy. This is usually performed by an independent third party.

### Holdback

The amount of money held back from the Implementation Contractor until goals have been achieved or exceeded.

### **Implementation**

The amount of dollars set aside in the budget, which are used toward the implementation and administration of the program(s). Examples of items included in Implementation are staffing expenses, program design expenses and systems support.

### Incentive

The amount of dollars set aside in the budget that are used towards the payment of incentives for the specific program(s). Examples of items included in incentive are rebate amounts paid to customers/members.

#### kWh

The kilowatt-hour is a unit of energy equivalent to one kilowatt (1 kW) of power expended for one hour (1 h) of time.

### **Participants**

The number of customers or members that have participated in the program.

### **Pipeline**

The amount of work that has arrived for processing but has not yet been entered into tracking system or paid to client.

## Prime/Fiduciary Mgt.

The fee paid to the administrator for program operations, management and independent third-party contracts.

## Re-Commissioning

A type of Commercial & Industrial program that focuses on updating/upgrading existing equipment and improving operating controls and practices.

## Reserved Percentage

The percentage of completed applications that have been approved but not yet paid to client.

#### Self-Directed

A utility customer who chooses to implement their own energy savings program. The savings generated by self-directed programs count toward Efficiency UNITED savings achieved.

## Third-Party Evaluation

The process of reviewing the work done during the previous year and validating the information obtained throughout the year. This process is completed by an independent third-party contractor.

### Total Collection

The total amount of funds that have been collected from the utility provider.

Total Budget & Expenses: Includes All Classes

TOTAL BUDGET & EXPENSES	2016 IMPLEMENTATION & INCENTIVE BUDGET	2015 INCENTIVE CARRY FORWARD	2016 ADJUSTED BUDGET WITH CARRYOVER	TOTAL IMPLEMENTATION & INCENTIVE SPENT	2016 INCENTIVE CARRY FORWARD	% OF 2016 BUDGET SPENT				
	ELECTRIC UTILITIES									
Alpena Power Company	\$451,638	\$98,604	\$550,242	\$355,850	\$194,392	65%				
Baraga Electric Utility	\$40,137	\$30,858	\$70,995	\$39,714	\$31,281	56%				
Bayfield Electric Cooperative	\$817	\$629	\$1,446	\$493	\$953	34%				
The City of Crystal Falls	\$41,510	\$8,072	\$49,583	\$45,341	\$4,242	91%				
The City of Dowagiac	\$127,551	\$26,756	\$154,307	\$129,653	\$24,654	84%				
The City of Gladstone Department of Power & Light	\$75,556	\$69,665	\$145,222	\$57,954	\$87,267	40%				
The City of Harbor Springs Electric Department	\$60,237	\$27,315	\$87,552	\$55,198	\$32,354	63%				
Hillsdale Board of Public Utilities	\$244,511	\$73,793	\$318,304	\$219,734	\$98,570	69%				
L'Anse Electric Utility	\$26,987	\$15,116	\$42,103	\$23,703	\$18,400	56%				
The City of Negaunee Electric Department	\$56,808	\$58,823	\$115,631	\$57,994	\$57,637	50%				
The City of Norway Department of Power & Light	\$64,783	\$21,264	\$86,047	\$61,252	\$24,795	71%				
Upper Peninsula Power Company	\$2,044,034	\$1,211,575	\$3,255,609	\$1,671,348	\$1,584,260	51%				
We Energies	\$871,685	\$388,440	\$1,260,125	\$744,740	\$515,385	59%				
Wisconsin Public Service	\$342,846	\$85,534	\$428,380	\$314,360	\$114,021	73%				
Xcel Energy	\$271,989	\$47,435	\$319,424	\$259,435	\$59,989	81%				
TOTAL ELECTRIC	\$4,721,091	\$2,163,878	\$6,884,969	\$4,036,769	\$2,848,201	59%				
	NATURAL GAS UTILITIES									
Michigan Gas Utilities	\$3,233,469	\$731,959	\$3,965,428	\$3,264,340	\$701,089	82%				
Wisconsin Public Service	\$99,462	\$21,375	\$120,837	\$109,107	\$11,729	90%				
Xcel Energy	\$129,118	\$13,667	\$142,785	\$127,074	\$15,712	89%				
TOTAL NATURAL GAS	\$3,462,049	\$767,001	\$4,229,050	\$3,500,520	\$728,530	83%				

# Total Energy Savings Achieved: Includes All Classes

PROVIDER	TOTAL PARTICIPANTS	2016 SAVINGS GOAL	SELF-DIRECTED	TOTAL GOAL	TOTAL SAVINGS ACHIEVED	% OF ACHIEVED GOAL			
ELECTRIC UTILITIES									
Alpena Power Company	2,963	2,019,903	1,379,387	3,399,290	4,544,421	134%			
Baraga Electric Utility	163	187,957	-	187,957	304,830	162%			
Bayfield Electric Cooperative	14	1,673	-	1,673	1,868	112%			
The City of Crystal Falls	482	163,403	-	163,403	446,430	273%			
The City of Dowagiac	458	650,567	-	650,567	1,426,664	219%			
The City of Gladstone Department of Power & Light	541	323,963	-	323,963	390,920	121%			
The City of Harbor Springs Electric Department	459	377,228	-	377,228	426,427	113%			
Hillsdale Board of Public Utilities	588	1,186,310	-	1,186,310	1,905,379	161%			
L'Anse Electric Utility	331	119,540	-	119,540	204,302	171%			
The City of Negaunee Electric Department	1142	226,923	-	226,923	585,253	258%			
The City of Norway Department of Power & Light	859	286,640	-	286,640	502,836	175%			
Upper Peninsula Power Company	7,782	8,197,413	-	8,197,413	10,653,088	130%			
We Energies	6,506	3,268,253	2,496,690	5,764,943	8,199,078	142%			
Wisconsin Public Service	3,661	2,775,403	-	2,775,403	3,182,642	115%			
Xcel Energy	4,060	1,406,560	-	1,406,560	2,614,564	186%			
TOTAL ELECTRIC	30,009	21,191,738	3,876,077	25,067,815	35,388,701	141%			
	NATURAL GAS UTILITIES								
Michigan Gas Utilities	5,972	2,324,496	-	2,324,496	3,812,197	164%			
Wisconsin Public Service	350	132,637	-	132,637	216,775	163%			
Xcel Energy	293	68,428	-	68,428	159,615	233%			
TOTAL NATURAL GAS	6,615	2,525,562	-	2,525,562	4,188,588	166%			

## Total Incentive Budget & Expenses: Includes All Classes

PROVIDER	2016 INCENTIVE BUDGET	2015 INCENTIVE CARRY FORWARD	2016 ADJUSTED BUDGET WITH CARRYOVER	TOTAL INCENTIVE SPENT	2016 CARRY FORWARD	% OF DOLLARS SPENT				
Electric Utilities										
Alpena Power Company	\$266,878	\$98,604	\$365,482	\$171,090	\$194,392	47%				
Baraga Electric Utility	\$23,717	\$30,858	\$54,575	\$23,294	\$31,281	43%				
Bayfield Electric Cooperative	\$483	\$629	\$1,112	\$159	\$953	14%				
The City of Crystal Falls	\$24,529	\$8,072	\$32,601	\$28,360	\$4,242	87%				
The City of Dowagiac	\$75,371	\$26,756	\$102,127	\$77,473	\$24,654	76%				
The City of Gladstone Department of Power & Light	\$44,647	\$69,665	\$114,312	\$27,045	\$87,267	24%				
The City of Harbor Springs Electric Department	\$35,595	\$27,315	\$62,910	\$30,555	\$32,354	49%				
Hillsdale Board of Public Utilities	\$144,485	\$73,793	\$218,277	\$119,707	\$98,570	55%				
L'Anse Electric Utility	\$15,947	\$15,116	\$31,063	\$12,663	\$18,400	41%				
The City of Negaunee Electric Department	\$33,569	\$58,823	\$92,391	\$34,754	\$57,637	38%				
The City of Norway Department of Power & Light	\$38,281	\$21,264	\$59,545	\$34,750	\$24,795	58%				
Upper Peninsula Power Company	\$1,207,842	\$1,211,575	\$2,419,417	\$835,157	\$1,584,260	35%				
We Energies	\$515,088	\$388,440	\$903,529	\$388,144	\$515,385	43%				
Wisconsin Public Service	\$202,592	\$85,534	\$288,126	\$174,105	\$114,021	60%				
Xcel Energy	\$160,722	\$47,435	\$208,156	\$148,168	\$59,989	71%				
TOTAL ELECTRIC	\$2,789,745	\$2,163,878	\$4,953,624	\$2,105,423	\$2,848,201	43%				
	NATURAL GAS UTILITIES									
Michigan Gas Utilities	\$1,910,693	\$731,959	\$2,642,652	\$1,941,563	\$701,089	73%				
Wisconsin Public Service	\$58,773	\$21,375	\$80,148	\$68,419	\$11,729	85%				
Xcel Energy	\$76,297	\$13,667	\$89,965	\$74,253	\$15,712	83%				
TOTAL NATURAL GAS	\$2,045,763	\$767,001	\$2,812,765	\$2,084,235	\$728,530	74%				

# Efficiency UNITED Design & Analysis Budget Summary

PROVIDER	TOTAL EU COLLECTION FOR PROGRAM YEAR 2016	ADMINISTRATION 3.98%	COLLECTED 2016 EVALUATION						
ELECTRIC UTILITIES									
Alpena Power Company	\$513,108	\$20,422	\$41,049						
Baraga Electric Utility	\$45,612	\$1,815	\$3,649						
Bayfield Electric Cooperative	\$929	\$37	\$74						
The City of Crystal Falls	\$47,160	\$1,877	\$3,773						
The City of Dowagiac	\$144,912	\$5,768	\$11,593						
The City of Gladstone Department of Power & Light	\$85,840	\$3,416	\$6,867						
The City of Harbor Springs Electric Department	\$68,436	\$2,724	\$5,475						
Hillsdale Board of Public Utilities	\$277,791	\$11,056	\$22,223						
L'Anse Electric Utility	\$30,660	\$1,220	\$2,453						
The City of Negaunee Electric Department	\$64,540	\$2,569	\$5,163						
The City of Norway Department of Power & Light	\$73,600	\$2,929	\$5,888						
Upper Peninsula Power Company	\$2,322,238	\$92,425	\$185,779						
We Energies	\$990,326	\$39,415	\$79,226						
Wisconsin Public Service	\$389,509	\$15,502	\$31,161						
Xcel Energy	\$309,009	\$12,299	\$24,721						
TOTAL ELECTRIC	\$5,363,670	\$213,474	\$429,094						
	NATURAL GA	AS UTILITIES							
Michigan Gas Utilities	\$3,673,562	\$146,208	\$293,885						
Wisconsin Public Service	\$112,999	\$4,497	\$9,040						
Xcel Energy	\$146,691	\$5,838	\$11,735						
TOTAL NATURAL GAS	\$3,933,252	\$156,543	\$314,660						

Program Implementation Budget Summary

																				$\overline{}$	1 1	_  \  L
NON-LOW INCOME IMPLEMENTATION HOLDBACK (10%)		(\$16,424)	(\$1,460)	(\$30)	(\$1,509)	(\$4,638)	(\$2,748)	(\$2,190)	(\$8,892)	(186\$)	(\$2,066)	(\$2,356)	(\$74,330)	(\$31,698)	(\$12,467)	(168'6\$)	(\$171,680)		(\$117,583)	(\$3,617)	(\$4,695)	(\$125,896)
RESIDENTIAL C&I PROGRAM IMPLEMEENTATION		\$164,236	\$14,596	\$297	\$15,095	\$46,383	\$27,476	\$21,905	\$18,915	\$9,814	\$20,658	\$23,558	\$743,302	\$316,984	\$124,674	\$98,907	\$1,716,799		\$1,175,834	\$36,169	\$46,953	\$1,258,955
RESIDENTIAL C&I PROGRAM INCENTIVE		\$236,091	\$20,987	\$427	\$21,699	\$66,677	\$39,497	\$31,489	\$127,817	\$14,107	\$29,696	\$33,865	\$1,068,508	\$455,669	\$179,221	\$142,181	\$2,467,932		\$1,690,279	\$51,993	\$67,495	\$1,809,768
INCOME QUALIFIED IMPLEMENTATION HOLDBACK (10%)		(\$2,052)	(\$182)	(\$4)	(\$189)	(\$580)	(\$343)	(\$274)	(\$1,11,1)	(\$123)	(\$258)	(\$294)	(\$9,289)	(\$3,961)	(\$1,558)	(\$1,236)	(\$21,455)		(\$14,694)	(\$452)	(\$587)	(\$15,733)
INCOME QUALIFIED PROGRAM IMPLEMENTATION	ELECTRIC UTILITIES	\$20,524	\$1,824	\$37	\$1,886	\$5,796	\$3,434	\$2,737	\$11,112	\$1,226	\$2,582	\$2,944	\$92,890	\$39,613	\$15,580	\$12,360	\$214,547	NATURAL GAS UTILITIES	\$146,942	\$4,520	\$5,868	\$157,330
INCOME QUALIFIED PROGRAM INCENTIVE		\$30,786	\$2,737	\$56	\$2,830	\$8,695	\$5,150	\$4,106	\$16,667	\$1,840	\$3,872	\$4,416	\$139,334	\$59,420	\$23,371	\$18,541	\$321,820	2	\$220,414	\$6,780	\$8,801	\$235,995
PROGRAM ALLOCATION TO CLEARESULT		\$451,638	\$40,147	\$818	\$41,510	\$127,552	\$75,556	\$60,237	\$244,512	\$26,987	\$56,808	\$64,783	\$2,044,034	\$871,685	\$342,846	\$271,990	\$4,721,102		\$3,233,469	\$99,462	\$129,117	\$3,462,048
TOTAL EU COLLECTION FOR PROGRAM YEAR 2016		\$513,108	\$45,612	\$929	\$47,160	\$144,912	\$85,840	\$68,436	\$277,791	\$30,660	\$64,540	\$73,600	\$2,322,238	\$990,326	\$389,509	\$309,009	\$5,363,670		\$3,673,562	\$112,999	\$146,691	\$3,933,252
PROVIDER		Alpena Power Company	Baraga Electric Utility	Bayfield Electric Cooperative	The City of Crystal Falls	The City of Dowagiac	The City of Gladstone Department of Power & Light	The City of Harbor Springs Electric Department	Hillsdale Board of Public Utilities	L'Anse Electric Utility	The City of Negaunee Electric Department	The City of Norway Department of Power & Light	Upper Peninsula Power Company	We Energies	Wisconsin Public Service	Xcel Energy	Electric Utility Total		Michigan Gas Utilities	Wisconsin Public Service	Xcel Energy	Natural Gas Utility Total

## Class Transfers

PROVIDER	INCOME QUALIFIED INCENTIVE BUDGET	RESIDENTIAL INCENTIVE BUDGET	COMMERCIAL & INDUSTRIAL INCENTIVE BUDGET							
	ELECTRIC UTILITIES									
Alpena Power Company	\$2,339	(\$2,339)	-							
Baraga Electric Utility	-	-	-							
Bayfield Electric Cooperative	\$4	(\$4)	-							
The City of Crystal Falls	\$10	(\$10)	-							
The City of Dowagiac	\$17	(\$17)	-							
The City of Gladstone Department of Power & Light	\$210	(\$210)	-							
The City of Harbor Springs Electric Department	\$39	(\$39)	-							
Hillsdale Board of Public Utilities	-	-	-							
L'Anse Electric Utility	\$32	(\$32)	-							
The City of Negaunee Electric Department	\$193	(\$193)	-							
The City of Norway Department of Power & Light	\$1,202	(\$1,202)	-							
Upper Peninsula Power Company	\$115	(\$115)	-							
We Energies	\$125	(\$125)	-							
Wisconsin Public Service	\$644	(\$644)	-							
Xcel Energy	\$24	(\$24)	-							
TOTAL ELECTRIC	\$4,956	(\$4,956)	-							
	NATURAL G	AS UTILITIES								
Michigan Gas Utilities	\$3,513	(\$3,513)	-							
Wisconsin Public Service	\$120	(\$120)	-							
Xcel Energy	-	(- )	-							
TOTAL NATURAL GAS	\$3,634	(\$3,634)	-							

 $<sup>\</sup>ensuremath{\ast}$  Positive numbers reflect transfers in, negative reflects transfers out

































