

2018 Efficiency United Annual Report

16:

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Executive Summary

Efficiency United is the brand name for Energy Optimization (EO) programs offered on behalf of participating providers of retail electric and natural gas services pursuant to PA 295 of 2008, Section 91(1). This section allows interested providers to comply with PA 295 EO requirements by making annual payments to qualified, independent nonprofit organizations selected by the Michigan Public Service Commission (MPSC). These payments are derived from surcharges collected from customers via their utility bills.

After a competitive bid process in July 2009 and November 2013, the MPSC selected Michigan Community Action (MCA, formerly Michigan Community Action Agency Association), with CLEAResult as its primary implementation contractor, to administer Efficiency United EO programs. MCA is a non-profit state association of 29 Michigan Community Action Agencies that provide programs and services, such as weatherization, to help income-gualified individuals and families throughout the state achieve greater economic self-sufficiency and stability. MCA has extensive experience with administering grant-funded weatherization and energy efficiency programs. The contract between the State of Michigan and MCA includes energy savings target for each participating provider. In December 2017, MCA extended its contract with CLEAResult through December 31, 2021.

PA 295 expired December 31, 2016 and was replaced by PA 342 on December 16, 2016. This legislative change took place on April 20, 2017 and ushered in several updates to Michigan's energy efficiency programs, including the change of program terminology from Energy Optimization to Energy Waste Reduction (EWR). Due to the nature of Efficiency United, not all updates associated with this legislative change were required for the 2018 EWR program; however, changes to savings' multipliers were implemented to the 2018 programs.

Efficiency United's EWR Program once again exceeded its energy savings targets for 2018 while maintaining a focus on delivering energy-saving solutions to income qualified families, as well as both residential and non-residential customers. Both SEMCO ENERGY Gas Company and Upper Peninsula Power Company collaborated with the Efficiency United Programs in 2018.

Achievements of the 2018 Efficiency United EWR Plan

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

- Served nearly 39,444 customers
- Distributed nearly \$3,136,273 through incentive funding of core program projects
- Exceeded first-year net therm energy savings target by 8 percent, realizing 108 percent of goal
- Exceeded first-year net kWh energy savings target by 20 percent, realizing 120 percent of goal
- Enhanced the lives of 1,181 customers through the Income Qualified Energy Assistance Program



Program Communication and Collaboration

Communication efficacy continued to serve as a vital ingredient to the success of the 2018 EWR Program. Regular communication and collaboration occurred between these partners:

- Michigan Public Service Commission (MPSC)
- Michigan Community Action (MCA)
- CLEAResult
- DNV GL
- Morgan Marketing Partners
- National Energy Foundation (NEF)

Efficiency United and CLEAResult provided regular communications to members of the collaborative, which included:

- Monthly reporting
- Marketing collateral
- Invoicing and approvals
- Available program funds
- Strategic planning
- New initiatives

Collaboration With DNV GL and MPSC

Collaboration between Efficiency United, DNV GL through Michigan Community Action Agency Association (MCA) and MPSC continued in 2018. A summary of activities included:

- Participation in the MPSC EWR Collaborative Design, Implementation & Evaluation Workgroups
- Soliciting input and feedback on the Michigan Energy Measures Database (MEMD)
- Participation in MPSC and Michigan Agency for Energy workgroups and studies: Low Income Workgroup, UP Housing Baseline Study, rural and agricultural study

- Providing updates on contractor and retailer efforts
- Working closely with the Michigan Energy Efficiency Contractors Association (MEECA) to solicit contractor feedback

Efficiency United and CLEAResult proactively worked with program evaluator DNV GL, which made it possible to make real-time adjustments where necessary throughout the year. Efforts included:

- Weekly communication on evaluation activities planned
- Review of engineered savings calculations for select Commercial and Industrial Custom Program projects
- Regular submission and review of project data

Efficiency United continued enhancing program delivery through feedback provided by DNV GL, and continually sought ways to enhance the programs through:

- Innovative EWR program offerings
- Competitive rebate levels
- Outstanding customer satisfaction
- Robust educational tools (including online residential and small business energy audits)
- Partnerships with local retailers and contractors

Satisfaction

For each energy efficiency program and in each program year, DNV GL asked participants about their level of overall satisfaction with the program, using a five-point satisfaction scale where five meant "very satisfied" and one meant "very dissatisfied." The following figures show the percentage of respondents who gave each program a rating of four or five.

High participant satisfaction with Efficiency United's program has remained strong through the last five evaluation cycles, including the 2018 program year.



Figure 1: Satisfaction with Contractors and the Income Qualified Program, EY 2015 to 2018



Figure 2: Satisfaction with Contractors and the Home Performance Program, EY 2015 to 2018



Figure 3: Satisfaction with Contractors and the ENERGY STAR Program, EY 2015 to 2018



Figure 4: Percent Satisfied with the Commercial & Industrial Program Characteristics, EY 2015 to 2018

Portfolio Achievements

Efficiency United Natural Gas Total Incentives

Class	2018 Incentive Budget	2017 Incentive Unspent	Total Available 2018 Incentive Budget	Incentive Spent	Incentive Remaining*	Incentive Spent (% Portfolio)
Income Qualified	\$168,741	\$16,268	\$185,010	\$191,958	\$(6,948)	11%
Residential	\$883,675	\$1,351	\$885,026	\$1,242,689	\$(357,663)	74%
Commercial and Industrial	\$401,571	\$243,599	\$645,170	\$244,485	\$400,685	15%
Total	\$1,453,987	\$261,218	\$1,715,205	\$1,679,132	\$36,074	100%

*Remaining incentive funds will be carried forward into the 2019 EWR programs.

Efficiency United Natural Gas Total Implementation

Class	2018 Implementation Budget	Implementation Spent	Remaining	Implementation Spent (% Portfolio)
Income Qualified	\$112,494	\$112,494	\$-	11%
Residential	\$614,899	\$614,899	\$-	61%
Commercial and Industrial	\$279,430	\$279,430	\$-	28%
Total	\$1,006,823	\$1,006,823	\$-	100%

Efficiency United Natural Gas First-Year Therm Savings

Class	2018 Therm Target	Therms Achieved	% Achieved	% Portfolio
Income Qualified	71,032	68,687	97%	2%
Residential	995,403	1,254,156	126%	44%
Commercial and Industrial	1,569,325	1,536,930	98%	54%
Total	2,635,760	2,859,774	108%	100%

The Appendix includes detailed Efficiency United collection breakdown by utility.

Class	2018 Incentive Budget	2017 Incentive Unspent	Total Available 2018 Incentive Budget	Incentive Spent	Incentive Remaining*	Incentive Spent (% Portfolio)
Income Qualified	\$174,418	\$2,042	\$176,460	\$184,636	\$(8,177)	13%
Residential	\$625,997	\$677,505	\$1,303,502	\$448,245	\$855,257	31%
Commercial and Industrial	\$1,519,870	\$420,609	\$1,940,479	\$824,259	\$1,116,220	57%
Total	\$2,320,285	\$1,100,156	\$3,420,441	\$1,457,141	\$1,963,301	100%

Efficiency United Electric Total Incentives

*Remaining incentive funds will be carried forward into the 2019 EWR programs.

Efficiency United Electric Total Implementation

Class	2018 Implementation Budget	Implementation Spent	Remaining	Implementation Spent (% Portfolio)
Income Qualified	\$116,279	\$116,279	\$-	8%
Residential	\$435,595	\$435,595	\$-	28%
Commercial and Industrial	\$982,981	\$982,981	\$-	64%
Total	\$1,534,855	\$1,534,855	\$-	100%

Efficiency United Electric First-Year kWh Savings

Class	2018 kWh Target	kWh Achieved	% Achieved	% Portfolio
Income Qualified	254,519	337,627	133%	1%
Residential	4,347,762	6,364,595	146%	22%
Commercial and Industrial	19,592,708	22,358,313	114%	77%
Total	24,194,989	29,060,534	120%	100%

The Appendix includes detailed Efficiency United collection breakdown by utility.

Income Qualified



Income Qualified Class Overview

Energy-efficient homes use less energy and have lower monthly energy bills. Unfortunately, not everyone has the means to make multifaceted, sometimes costly, updates and repairs to their home. The 2018 Efficiency United Income Qualified Energy Assistance Program provided Michigan's most vulnerable residents with no-cost, energy-efficient equipment and home envelope upgrades. By identifying existing inefficiencies, removing old inefficient equipment and installing new high-efficiency equipment and technologies, this program aims to make a lasting difference, proven to save both energy and money.

Program Design

As in previous years, achieving the program's energy savings and incentive spend objectives required a series of strategic partnerships. The program leveraged relationships with multiple contractors, community-based organizations and public housing projects to help qualifying customers overcome financial barriers associated with critical home repairs. 1,181 total participants

-year net therm savings achieved

337,627 first-year net kWh savings <u>achieved</u>

\$376,594

Program Offerings

The program continued to place a sizeable focus on weatherizing manufactured homes through the Manufactured Home Initiative. Nationally, manufactured homes are a leading source of affordable housing. These homes, especially older models, commonly use a lot of energy and are likely to leak that energy to the outside. The program focused primarily on duct and air sealing, coupled with heating system tune-ups and direct install fixtures, to deliver cost-effective energy savings and health and safety services to families residing in manufactured homes.

Also continuing in 2018 was a focus on the removal, recycling and replacement of old, inefficient appliances, LED lighting and occupant education. The targeted replacement of older large appliances such as furnaces, water heaters and refrigerators allowed for substantial reduction in the energy demand within participant homes.

Community-Based Partnerships

In 2018 a renewed focused was placed on Community Action Agency (CAA) collaboration, through coupling full pay EWR measures with weatherization services and weatherization rebates. Throughout the 2018 program community investment through CAAs more than doubled over figures from 2017. Continued partnership with CAAs is expected to continue beyond the 2018 program as many multi-year initiatives have been identified.

The following agencies received support from Efficiency United during the 2018 program year:

- Community Action of Allegan County
- Dickinson Iron Community Services Agency
- Gogebic-Ontonagon Community Action Agency

- Northeast Michigan Community Service Agency
- Monroe County Opportunity Program
- Menominee-Delta-Schoolcraft Community Action Agency & Human Resource Authority
- Southwest Michigan Community Action Agency

By building a strong network of local communitybased agencies the program was able to provide individual low-income customers direct access to EWR services resulting in considerable benefits for program participants and their communities.

Additionally, the program was able to further maximize available funds through strategic partnerships with Public Housing Commissions. Housing Commissions own and operate rental housing and assistance programs for low-income families and seniors through the Department of Housing and Urban Development. Their limited funding is received solely from rental income and federal housing subsidies. By assisting with improvements to public housing, the program directly impacts all residents by making affordable housing also quality housing.

The following public housing entities received support from Efficiency United during the 2018 program year:

- Baraga Housing Commission
- Benton Township Housing Commission
- Bessemer Housing Commission
- Dowagiac Housing Commission
- Hillsdale Housing Commission
- Iron County Housing Commission
- Iron Mountain Housing Commission
- Ironwood Housing Commission
- Kingsford Housing Commission
- Lac Vieux Desert Housing Authority
- Menominee Housing Commission

Marketing

The Income Qualified Program is promoted through a collaboration between Efficiency United, Michigan Community Action and community partners. Marketing provides collateral support for many aspects of the Income Qualified Program, for use with in-person outreach efforts. These materials including posters, flyers and brochures, promote the energy-saving benefits of EWR programs, products and programs available, along with qualifications and how to contact program officials.

Income Qualified Program Incentive Budgets

Provider	2018 Incentive Budget	Incentive Carryforward Remaining from Previous Years	Total Available Incentive Budget	Incentive Spent	% of Budget Spent (Based on 2018 Incentive Budget)	Remaining Incentive Budget*
			Electric Utilities			
Alpena	\$30,521	\$3,320	\$33,841	\$33,841	100%	\$-
Baraga	\$3,239	\$3,952	\$7,192	\$7,192	100%	\$-
Bayfield	\$56	\$888	\$944	\$120	13%	\$824
Crystal Falls	\$2,852	\$8	\$2,860	\$2,860	100%	\$-
Dowagiac	\$9,001	\$39	\$9,040	\$9,040	100%	\$-
Gladstone	\$4,085	\$25	\$4,110	\$4,110	100%	\$-
Harbor Springs	\$4,398	\$9	\$4,407	\$4,407	100%	\$-
Hillsdale	\$14,750	\$498	\$15,248	\$15,248	100%	\$-
L'Anse	\$1,873	\$17	\$1,890	\$1,890	100%	\$-
Negaunee	\$4,016	\$-	\$4,016	\$4,016	100%	\$ -
Norway	\$4,211	\$829	\$5,040	\$5,040	100%	\$-
Wisconsin Electric	\$-	\$-	\$-	\$-	-	\$-
UMERC - Electric	\$78,002	\$10	\$78,013	\$78,013	100%	\$-
Xcel Energy - Electric	\$17,413	\$1,446	\$18,859	\$18,859	100%	\$-
Total Electric	\$174,418	\$11,042	\$185,460	\$184,636	100%	\$824
Natural Gas Utilities						
MGU	\$159,044	\$21,194	\$180,238	\$180,238	100%	\$-
UMERC - Gas	\$4,031	\$1,174	\$5,205	\$5,205	100%	\$-
Xcel Energy - Gas	\$5,667	\$848	\$6,515	\$6,515	100%	\$-
Total Natural Gas	\$168.741	\$23.216	\$191.958	\$191.958	100%	\$-

*Incentive funds will be transferred from the residential class where overdraws are present.

Provider	# of Participants	Annual kWh/ Therms Goal	2018 kWh/ Therms Achieved	2017 Carryforward Savings	Total kWh/ Therms Achieved	% of Goal Achieved
		E	Electric Utilities			
Alpena	74	43,032	32,688	14,344	47,032	109%
Baraga	74	6,888	10,637	2,296	12,933	188%
Bayfield	1	168	216	56	272	162%
Crystal Falls	19	2,774	5,861	925	6,786	245%
Dowagiac	66	16,028	17,846	5,343	23,188	145%
Gladstone	6	4,636	5,676	1,545	7,221	156%
Harbor Springs	9	5,504	3,325	1,835	5,159	94%
Hillsdale	38	13,375	18,417	4,458	22,876	171%
L'Anse	3	2,975	2,541	992	3,532	119%
Negaunee	66	10,568	6,802	3,523	10,325	98%
Norway	3	6,475	-	2,158	7,951	123%
Wisconsin Electric	-	-	-	-	-	-
UMERC - Electric	390	116,725	101,715	58,885	160,601	138%
Xcel Energy - Electric	87	25,373	21,293	8,458	29,751	117%
Total Electric	836	254,519	232,810	104,817	337,627	133%
Natural Gas Utilities						
MGU	286	68,909	40,011	22,970	62,981	91%
UMERC - Gas	44	838	4,103	47	4,150	495%
Xcel Energy - Gas	15	1,285	1,128	428	1,556	121%
Total Natural Gas	345	71,032	45,242	23,445	68,687	97%

Income Qualified Energy Savings

Residential

Residential Class Overview



incentives distributed

Class Achievements

The Efficiency United Residential Program provided rebate incentives to encourage the adoption of energy efficiency equipment.

Efficiency United continued to offer a variety of program opportunities to its diverse residential customer base. These included:

- Home Performance Program
- ENERGY STAR Program
- Appliance Recycling Program
- Residential Education Program
- Residential Pilot Program

Residential Program	Incentive Budgets

Provider	2018 Incentive Budget	Incentive Carryforward Remaining from Previous Years	Total Available Incentive Budget	Incentive Spent	% of Budget Spent (Based on 2018 Total Available Budget)	Remaining Incentive Budget*
		Elec	tric Utilities			
Alpena	\$108,330	\$38,677	\$147,007	\$108,724	74%	\$38,283
Baraga	\$4,663	\$10,575	\$15,237	\$4,372	29%	\$10,866
Bayfield	\$426	\$326	\$753	\$95	13%	\$658
Crystal Falls	\$10,776	\$3,631	\$14,407	\$8,688	60%	\$5,719
Dowagiac	\$20,225	\$21,348	\$41,573	\$12,500	30%	\$29,074
Gladstone	\$17,641	\$35,193	\$52,834	\$15,468	29%	\$37,365
Harbor Springs	\$16,348	\$43,831	\$60,178	\$10,334	17%	\$49,845
Hillsdale	\$40,893	\$20,580	\$61,473	\$18,341	30%	\$43,132
L'Anse	\$6,321	\$16,753	\$23,074	\$11,504	50%	\$11,570
Negaunee	\$17,621	\$41,321	\$58,942	\$17,107	29%	\$41,835
Norway	\$19,275	\$18,483	\$37,758	\$16,615	44%	\$21,144
Wisconsin Electric	\$-	\$-	\$-	\$-	-	\$-
UMERC - Electric	\$302,999	\$234,773	\$537,772	\$180,936	34%	\$356,837
Xcel Energy - Electric	\$60,479	\$19,219	\$79,698	\$43,563	55%	\$36,135
Total Electric	\$625,997	\$511,386	\$1,137,383	\$448,245	39%	\$689,138
Natural Gas Utilities						
MGU	\$838,276	\$202,762	\$1,041,038	\$1,160,596	112%	\$(119,558)
UMERC - Gas	\$19,588	\$4,593	\$24,181	\$24,181	100%	\$-
Xcel Energy - Gas	\$25,810	\$17,219	\$43,029	\$43,029	100%	\$-
Total Natural Gas	\$883,675	\$224,573	\$1,108,248	\$1,227,806	111%	\$(119,558)

*Unspent incentive funds will be carried forward into the 2019 EWR Program.

Residential	Energy	Savings

Provider	# of Participants	Annual kWh/ Therms Goal	2018 kWh/ Therms Achieved	2017 Carryforward Savings	Bulbs from 2016 & 2017	Total kWh/ Therms Achieved	% of Goal Achieved		
Electric Utilities									
Alpena	9,576	473,218	1,157,926	157,739	114,831	1,430,496	302%		
Baraga	397	24,588	52,437	8,196	733	61,366	250%		
Bayfield	10	1,832	1,293	611	39	1,943	106%		
Crystal Falls	434	72,994	74,440	24,331	4,776	103,547	142%		
Dowagiac	890	158,342	123,770	52,781	3,251	179,802	114%		
Gladstone	996	161,348	142,977	53,783	5,378	202,137	125%		
Harbor Springs	581	187,028	104,735	62,343	4,098	171,176	92%		
Hillsdale	842	366,515	163,638	122,172	4,710	290,519	79%		
L'Anse	616	45,641	82,366	15,214	2,550	100,130	219%		
Negaunee	1,156	101,479	140,506	33,826	10,551	184,883	182%		
Norway	1,067	143,385	148,706	47,795	11,043	207,545	145%		
Wisconsin Electric	-	-	-	-	-	-	-		
UMERC - Electric	11,515	2,082,363	1,578,723	1,016,004	190,325	2,785,053	134%		
Xcel Energy - Electric	3,244	529,027	425,058	176,342	44,598	645,998	122%		
Total Electric	31,324	4,347,762	4,196,575	1,771,137	396,883	6,364,595	146%		
			Natural Ga	s Utilities					
MGU	5,916	930,093	875,236	310,031	-	1,185,267	127%		
UMERC - Gas	237	32,035	23,237	1,796	-	25,033	78%		
Xcel Energy - Gas	343	33,275	32,764	11,092	-	43,856	132%		
Total Natural Gas	6,496	995,403	931,238	322,919	-	1,254,156	126%		



Home Performance Program

Through the Home Performance Program, residential customers gained access to financial and educational resources to improve indoor comfort and reduce energy waste within their homes.

Like previous years, the 2018 program continued to offer rebates on the following equipment:

- Home heating systems
- Home heating add-on upgrades (such as boiler reset controls, ECM technology and thermostats)
- Water heaters
- Insulation
- Air sealing and duct sealing
- Windows and doors

These no-cost services continued to be made available for eligible customers:

- Self-paced Online E-Z Home Audit
- Home Energy Assessment
- Manufactured Home Initiative



1,156,462 ear net therm savings achieved

475,068 first-year net kWh savings achieved

\$1,272,582

Additional services offered through this program include:

- Contractor network
- Furnace and boiler tune-up with combustion analysis promotion
- ECM furnace fan and ECM circulating pump promotions

Self-paced EZ Home Checkup

Customers were offered an opportunity to conduct a self-guided home energy audit, called the EZ Home Checkup, through a secure portal accessed from the Efficiency United website. By answering several questions about insulation levels, mechanical system efficiency and energy behaviors, homeowners are presented with a colorful breakdown of how their home uses and loses energy. Tips, tricks and other helpful recommendations were provided within each summary report to guide homeowners along their journey to improving indoor home comfort while reducing energy waste.

Home Energy Assessment

In 2018, Efficiency United revamped its in-home energy assessment service from a Joint Energy Efficiency Plan (JEEP) to a Home Energy Assessment (HEA). The new service still provided a complimentary assessment of the home's appliances, envelope, mechanical systems and occupants' energy-behaviors, by a trained technician. Custom recommendations were also provided, aligned with available program rebates, and were unique to each home, family objectives, lifestyle and handiness. Dependent on eligibility, customers may have received common directly installed measures such as faucet aerators, highefficiency showerheads, LED light bulbs and water heater pipe insulation. HEA participants encountered a refreshed educational approach, improved summary report and continual customer support to assist in implementing recommended improvements. Gas customers also received a UL-2034 listed carbon monoxide detector at no cost.

Manufactured Home Initiative

The Manufactured Homes 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 hometype communities, but does not include homes traditionally built entirely at the construction site. The program overcame common market barriers preventing customers from accessing deeper energy-saving improvements.



The 2018 MHI Program again proved to be successful, achieving cost-effective first-year and lifetime therm savings. This was met through the strategic utilization of short-life, low-cost energy improvements combined with long-life improvements performed at special pricing based on contractor volume and exclusivity. Depending on eligibility, customers may have received the following upgrades:

- High-efficiency showerheads and faucet aerators
- Water heater pipe insulation
- Furnace tune-up
- Air sealing
- Duct system repair and sealing
- Carbon monoxide detectors

Contractor Network

Quality contractors continued to serve as the primary force behind project installation in 2018 for the Home Performance Program. The program's dedicated contractor outreach team is responsible for recruiting, training and supporting the vast network of HVACR, plumbing, insulation and building science experts across Michigan's Upper and Lower Peninsulas. Therefore, maintaining high contractor satisfaction is critical to the success of this program. In 2018, contractor approval was 97 percent, which aligns with previous years. This high rating year-over-year affirms contractors' support of and confidence in this program. It also testifies to the efforts of the program's dedicated outreach field team, which continually demonstrated program value to contractors through these activities:

- Providing timely communication regarding application status or pending rebate structure adjustments
- Offering co-branded marketing opportunities
- Facilitating on-site technician and sales rebate training
- Connecting contractors with new technologies through the Residential Pilot Program
- Coaching on market differentiation
- Soliciting and incorporating contractor feedback into program design

Complimentary Tune-ups With Combustion Analysis Promotion

Combustion analysis testing is a critical diagnostic and safety procedure that should be performed whenever a heating system tune-up is performed. Unfortunately, this valuable step is often overlooked by many HVAC contractors in Michigan. In its 2018 program, select Efficiency United utilities allocated funds to promote the importance of combustion analysis by issuing full-pay rebates to select contractors, who performed these services at no cost for eligible customers.

ECM Furnace Fan and ECM Circulating Pump Promotions

Select Efficiency United utilities offered promotional rebates on ECM furnace fans and circulating pumps. These promotions were initiated to offered to customers to encourage higher efficient components as they ungraded or updated their heating systems.

Serving as a personal program connection

Marketing and Outreach

The marketing and outreach strategy for the Home Performance Program focuses on a combination of business-to-consumer and business-to-business efforts. Working closely with contractors through the Market Outreach team allows customers to make fully informed decisions while making home improvements. Collateral support included the creation of brochures, flyers and event materials all providing information on available EWR rebates. Point-of-purchase materials are also used to increase program awareness for the do-it-yourself customers, specifically heating and cooling, insulation, window and water heating measures.

Home Performance Program Overview

Provider	# of Participants	Incentive Spent	2017 Carryforward Savings	2018 kWh/ Therms Achieved	Total kWh/ Therms Achieved	2018 Annual kWh/Therms Goal	% of Savings Goal Achieved			
Electric Utilities										
Alpena	43	\$10,651	2,724	39,048	41,772	7,458	560%			
Baraga	11	\$1,333	1,599	5,199	6,798	4,305	158%			
Bayfield	0	\$-	-	-	-	-	-			
Crystal Falls	5	\$2,672	2,818	9,045	11,863	7,753	153%			
Dowagiac	7	\$1,464	17,127	4,207	21,334	46,853	46%			
Gladstone	9	\$4,464	9,390	12,638	22,028	25,850	85%			
Harbor Springs	7	\$1,661	12,894	5,146	18,040	35,497	51%			
Hillsdale	22	\$4,410	40,865	10,568	51,433	112,430	46%			
L'Anse	15	\$5,245	3,426	9,463	12,888	9,401	137%			
Negaunee	15	\$5,896	5,460	12,518	17,978	14,934	120%			
Norway	14	\$4,015	7,393	15,302	22,694	20,323	112%			
UMERC - Electric	140	\$53,737	72,565	116,783	189,348	143,653	132%			
Xcel Energy - Electric	48	\$15,078	18,347	40,544	58,891	50,426	117%			
Total Electric	336	\$110,625	194,607	280,461	475,068	478,885	99%			
Natural Gas Utilities										
MGU	4665	\$1,096,851	308,814	785,903	1,094,718	846,837	129%			
UMERC - Gas	94	\$23,272	1,610	20,661	22,271	26,366	84%			
Xcel Energy - Gas	213	\$41,834	10,304	29,170	39,474	28,343	139%			
Total Natural Gas	4,972	\$1,161,957	320,728	835,734	1,156,462	901,546	128%			



Residential ENERGY STAR Program

30,369 total participants

8,398 first-year therm savings achieved

5,368,985

\$309,674 incentives distributed The Residential ENERGY STAR Program provided multiple paths and opportunities to Efficiency United residential customers. Program representatives engaged, educated and informed customers on how and why customers should take advantage of Efficiency United energy efficiency programs. Discounted pricing on highefficiency products were also available to eligible customers through participating retailers and local sales events.

In 2018, the ENERGY STAR Program added 11 new retail store locations to better serve the Efficiency United utility customers in the hard-toreach territories through Dollar General, True Value Hardware and Family Dollar locations, giving the program the ability to reach customers in utility territories that did not have a retail presence in previous years. The ENERGY STAR Program offered financial rebates on the following products and appliances:

- LED light bulbs
- Handheld shower wand
- Showerheads
- Kitchen and bath aerators
- Dishwasher
- Clothes washer
- Clothes dryers
- Televisions
- Air conditioning units
- Dehumidifiers
- Air purifiers
- Ceiling fans with light kit

Program representatives attended public events and hosted stand-alone educational Day of Energy Savings events throughout the Efficiency United service territory. Representatives cross-promoted all Efficiency United program offerings based on conversations with attendees. In addition, discounted energy-saving products were available for purchase by eligible customers. In 2018 additional LED products were added to the event product listing to include different wattages and colors to increase participation in the events.

2018 Day of Energy Savings Event Locations and Dates:

- Alpena County George N. Fletcher Public Library | April 10–11, August 28–29
- Hillsdale BPU office | April 4–5, June 7–8
- L'Anse Village Hall | April 18–19, July 25–26
- Harbor Springs City Hall | April 24–25, June 19–20
- Dowagiac City Hall | May 2–3, August 25–26
- Menominee City Hall | May 9–10, August 8–9
- Village of Baraga | March 21–22, June 27–28
- Negaunee Senior Center | April 3–4, July 31– September 1
- Crystal Falls City Hall | July 19–20
- Gladstone City Hall | May 16–17, August 16–17
- Norway City Hall | May 24, September 24
- Ironwood Memorial Building | June 13–14

2018 ENERGY STAR Appliance Rebate Program

Through the Efficiency United ENERGY STAR Appliance Rebate Program, customers accessed mail-in rebate opportunities for a variety of qualifying energy-efficient appliances. Program representatives continually educated retailer employees to help them understand program guidelines and how to encourage consumer adoption of high-efficiency appliances. Marketing materials were also updated and replenished often to further empower retailer employees as program ambassadors.

Provider	# of Participants	Incentive Spent	2017 Carryforward Savings	Bulbs from 2016 & 2017	2018 kWh/ Therms Achieved	Total kWh/ Therms Achieved	2018 Annual kWh/Therms Goal	% of Savings Goal Achieved		
Electric Utilities										
Alpena	9,322	\$92,439	150,057	114,831	1,024,111	1,289,000	410,884	314%		
Baraga	361	\$2,886	5,254	733	43,120	49,106	14,148	347%		
Bayfield	10	\$81	268	39	1,137	1,444	735	197%		
Crystal Falls	390	\$4,875	20,919	4,776	53,861	79,556	57,545	138%		
Dowagiac	831	\$10,372	35,654	3,251	107,270	146,176	97,539	150%		
Gladstone	852	\$9,683	43,398	5,378	113,965	162,741	119,479	136%		
Harbor Springs	516	\$8,136	49,448	4,098	88,958	142,504	136,129	105%		
Hillsdale	770	\$11,311	79,091	4,710	124,580	208,381	217,600	96%		
L'Anse	563	\$6,051	11,788	2,550	68,616	82,954	32,351	256%		
Negaunee	1,005	\$9,399	26,366	10,551	109,323	146,239	72,110	203%		
Norway	992	\$10,851	34,524	11,043	114,867	160,434	94,912	169%		
UMERC - Electric	11,198	\$111,562	921,940	190,325	1,245,300	2,357,565	1,825,113	129%		
Xcel Energy - Electric	3,141	\$26,158	155,616	44,598	342,670	542,884	427,710	127%		
Total Electric	29,951	\$303,804	1,534,325	396,883	3,437,777	5,368,985	3,506,254	153%		
				Natural Gas Uti	ilities					
MGU	290	\$5,256	1,217	-	3,531	4,747	3,336	142%		
UMERC - Gas	51	\$266	186	-	1,065	1,250	3,039	41%		
Xcel Energy - Gas	77	\$348	788	-	1,612	2,400	2,168	111%		
Total Natural Gas	418	\$5,870	2,190	-	6,207	8,398	8,543	98%		

ENERGY STAR Program Overview



Residential Appliance Recycling Program

The Appliance Recycling Program offered in-home collection of refrigerators, freezers, room air conditioners and dehumidifiers. Participation was generated through direct mail flyers, utility bill inserts, promotion at other Efficiency United events, and Efficiency United and member utility websites, including the Efficiency United Facebook page. Participation was also encouraged financially by offering this service at no cost and issuing a \$50 incentive per freezer or refrigerator and a \$15 incentive per room air conditioners and dehumidifiers.

The 2018 Efficiency United Appliance Recycling Program picked up appliances from April through September and retrieved and responsibly recycled 87 appliances. As in previous years, refrigerators were the most popular appliance recycled and accounted for 62 percent of all appliances recycled in 2018.

total participants 128,037 first-year net kWh savings achieved ^{\$}13,269

Provider	# of Participants	Incentive Spent	2017 Carryforward Savings	2018 kWh/ Therms Achieved	Total kWh/ Therms Achieved	2018 Annual kWh/Therms Goal	% of Savings Goal Achieved		
Electric Utilities									
Alpena	11	\$2,079	4,958	14,129	19,087	13,576	141%		
Baraga	0	\$-	1,343	÷	1,343	3,617	37%		
Bayfield	0	\$-	342	-	342	937	37%		
Crystal Falls	5	\$788	594	5,209	5,803	1,634	355%		
Dowagiac	0	\$-	-	-	-	-	0%		
Gladstone	5	\$743	995	4,592	5,587	2,740	204%		
Harbor Springs	0	\$-	-	-	-	-	0%		
Hillsdale	7	\$1,278	2,215	8,375	10,591	6,094	174%		
L'Anse	0	\$-	-	-	-	-	0%		
Negaunee	7	\$1,233	2,001	7,930	9,930	5,471	181%		
Norway	6	\$1,116	5,879	6,364	12,243	16,161	76%		
UMERC - Electric	28	\$5,691	21,499	37,064	58,563	42,561	138%		
Xcel Energy - Electric	2	\$342	2,379	2,168	4,547	6,539	70%		
Total Electric	71	\$13,269	42,205	85,831	128,037	99,331	129%		

Appliance Recycling Program Overview



Residential Pilot Program

26 total participants

\$45,858 incentives distributed

55,215 first-year therm savings achieved

203,857 first-year net kWh savings achieved

2018 Manufactured Homes Belly Insulation

The MHI has served as a powerful platform through which Michigan Gas Utilities (MGU) has positively impacted the health and safety, comfort, durability and overall energy efficiency of thousands of eligible residential customers.

Belly insulation is a common measure offered through many weatherization programs. Typically, this service is not widely utilized due to the high costs associated with plumbing issues, bug or critter infestation, structural rot, and the inherent risks and labor costs associated with operating in confined spaces. These high costs combined with relatively low deemed energy savings are not ideal for scaling this measure across the broad spectrum of MHI.

For the 2018 Residential Pilot Program, MGU partnered with ES Contracting to explore the risks, techniques and marketability of adding belly insulation services to its proven MHI offering.

This offering was well received by the customers, and they provided immediate feedback, which primarily included notes that: "The floors felt warmer immediately, such that we were able to comfortably walk bare foot again," and "We noticed that the furnace did not turn on nearly as often."

A full report of this pilot is available by request.

Residential Education Program

Efficiency United continued its partnership with the National Energy Foundation (NEF) to delivery its Education Program. The Think! Energy© Program encouraged teachers and their students to Think! about energy, Talk! about energy, and Take Action! to save energy for the future.

Education Program Overview

Provider	Incentive Spent	2018 kWh/ Therms Achieved
	Electric Utilities	
Alpena	\$3,556	41,907
Baraga	\$153	2,105
Bayfield	\$14	62
Crystal Falls	\$354	3,120
Dowagiac	\$664	5,721
Gladstone	\$579	5,927
Harbor Springs	\$537	4,971
Hillsdale	\$1,342	8,798
L'Anse	\$207	2,339
Negaunee	\$578	5,534
Norway	\$633	6,100
UMERC - Electric	\$9,945	82,982
Xcel Energy - Electric	\$1,985	19,082
Total Electric	\$20,547	188,649
Na	atural Gas Utilities	
MGU	\$27,515	32,176
UMERC - Gas	\$643	824
Xcel Energy - Gas	\$847	1,081
Total Natural Gas	\$29,005	34,082



The NEF Think! Energy Program consisted of three facets:

- Think! Energy classroom presentations
- Community in Action (CIA) events
- Teacher workshops

Interactive classroom presentations were delivered in 2018 from September through October. Presentations were generally 45-60 minutes in length and were facilitated by a NEF presenter. Utility collaboration continued with SEMCO ENERGY Gas Company, UPPCO and DTE Energy. These collaborations allowed many schools to be served this program year. Energy efficiency kits were placed in homes throughout the Efficiency United territories, with Home Energy Worksheets (HEWs) that were returned by the classes at a higher percentage rate than previous years. Additional information related to the Think! Energy Program, as well as the CIA events, participating schools and teacher workshops, are available in the full annual report submitted by NEF and included as Appendix.

Commercial & Industrial



C&I Class Overview

443* total participants

1,536,930 first-year net therm savings achieved

22,358,313

\$1,114,104 incentives distributed

*Participants exclude C&I Education since participants are not utility specific.

Class Achievements

The Efficiency United Commercial & Industrial (C&I) Programs provide rebate incentives to encourage the adoption of high-efficiency equipment. CLEAResult utilizes an energy advisor model to perform outreach that offers customers a streamlined approach and the necessary expertise to assist them in developing projects. The assigned energy advisors also work very closely with trade allies both within the Efficiency United service area and those regional trade allies working with Efficiency United customers.

Efficiency United continued to offer a variety of program opportunities to its diverse C&I customer base, including:

- C&I Prescriptive & Custom Program
- Education Program
- Commercial Pilot Program

Provider	2018 Incentive Budget	Incentive Carryforward Remaining from Previous Years	Total Available Incentive Budget	Incentive Spent	% of Budget Spent (Based on 2018 Incentive Budget)	Remaining Incentive Budget			
Electric Utilities									
Alpena	\$124,138	\$15,594	\$139,732	\$119,259	85%	\$20,473			
Baraga	\$20,009	\$25,933	\$45,942	\$17,671	39%	\$28,271			
Bayfield	\$-	\$-	\$-	\$-	-	\$-			
Crystal Falls	\$10,950	\$1,273	\$12,223	\$7,104	58%	\$5,119			
Dowagiac	\$48,335	\$5,178	\$53,514	\$50,881	95%	\$2,633			
Gladstone	\$13,472	\$9,741	\$23,213	\$13,693	59%	\$9,520			
Harbor Springs	\$17,152	\$1,706	\$18,857	\$17,044	90%	\$1,813			
Hillsdale	\$71,450	\$-	\$71,450	\$70,647	99%	\$803			
L'Anse	\$7,947	\$8,323	\$16,270	\$4,346	27%	\$11,925			
Negaunee	\$12,971	\$12,920	\$25,891	\$7,822	30%	\$18,069			
Norway	\$12,797	\$19,390	\$32,186	\$14,338	45%	\$17,848			
Wisconsin Electric	\$713,634	\$-	\$713,634	\$224,018	31%	\$489,617			
UMERC - Electric	\$394,866	\$157,967	\$552,833	\$206,162	37%	\$346,671			
Xcel Energy - Electric	\$72,151	\$12,992	\$85,143	\$71,276	84%	\$13,867			
Total Electric	\$1,519,870	\$271,018	\$1,790,888	\$824,259	46%	\$966,629			
Natural Gas Utilities									
MGU	\$373,106	\$-	\$373,106	\$253,548	68%	\$119,558			
UMERC - Gas	\$11,114	\$7,043	\$18,157	\$10,803	60%	\$7,354			
Xcel Energy - Gas	\$17,351	\$10,361	\$27,712	\$25,494	92%	\$2,218			
Total Natural Gas	\$401.571	\$17.404	\$418.975	\$289.845	69%	\$129.129			

Commercial and Industrial Program Incentive Budgets

Commercial and	Industrial	Energy	Savings
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Provider	# of Participants	Annual kWh/ Therms Goal	2018 kWh/ Therms Achieved	2017 Carryforward Savings	Total kWh/ Therms Achieved	% of Goal Achieved		
			Electric Utilities					
Alpena*	46	2,966,750	3,231,113	516,250	3,747,363	126%		
Baraga	13	151,524	160,301	50,508	210,809	139%		
Bayfield	-	-	-	-	-	-		
Crystal Falls	12	88,232	147,336	29,411	176,746	200%		
Dowagiac	22	483,630	565,040	161,210	726,250	150%		
Gladstone	14	146,016	143,206	48,672	191,878	131%		
Harbor Springs	12	186,468	131,309	62,156	193,465	104%		
Hillsdale	27	826,110	909,899	275,370	1,185,269	143%		
L'Anse	10	69,384	51,384	23,128	74,512	107%		
Negaunee	13	108,953	88,418	36,318	124,736	114%		
Norway	19	104,140	140,696	34,713	175,409	168%		
Wisconsin Electric	2	7,824,000	290,558	7,533,442	7,823,980	100%		
UMERC - Electric*	102	5,805,901	5,226,368	1,631,444	6,857,812	118%		
Xcel Energy - Electric	47	831,600	592,884	277,200	870,084	105%		
Total Electric	339	19,592,708	11,678,511	10,679,801	22,358,313	114%		
Natural Gas Utilities								
MGU	64	1,437,588	833,854	479,196	1,313,050	91%		
UMERC - Gas	10	100,217	177,125	5,618	182,743	182%		
Xcel Energy - Gas	30	31,520	30,631	10,507	41,137	131%		
Total Natural Gas	104	1,569,325	1,041,609	495,321	1,536,930	98%		

*Savings achieved includes self-direct achievements.



C&I Prescriptive and Custom Program

The Efficiency United Commercial and Industrial (C&I) Prescriptive and Custom Program provides incentives for high-efficiency equipment upgrades in non-residential facilities. The prescriptive program offers pre-determined rebates often associated with one-for-one retrofits. The custom program allows customers to take a more unique and innovative look at energy efficiency and customize it to their specific needs.

As in previous years, the energy advisor outreach model was effective in generating new opportunities and achieving nearly all savings goals in 2018 despite the changes to savings multipliers that were available in prior years. The savings multiplier changes primarily impacted lighting projects, which remain a source of primary savings with electric programs.

Program participants were encouraged to work with their energy advisor to develop or update a Joint Energy Efficiency Plan. These plans are designed to provide customers with a starting point for long-term energy planning and establishing a strategic energy plan.

In 2018, Efficiency United offered initiatives (bonuses) in targeted service areas to help generate project activity. The introduced bonuses were implemented to stimulate general project activity within a utility area or to drive a specific measure.



1,423,162 first-year net therm savings achieved



\$**996,592**

Due to the change in savings multipliers, shorter life measures became more cost effective to incentivize. Efficiency United provided boiler tune-up bonuses in most gas utility service areas, which were well received and generated new savings for gas programs.

Market Changes

Technological changes continue to impact two EWR areas for C&I customers and trade allies: lighting and building controls.

- Since 2013, the Efficiency United service territories have seen a dramatic shift to the adoption of 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. Essentially all lighting projects utilize LEDs, reaching down to nearly every type of lighting niche. Tariff impacts to LED pricing in late 2018 did impact customers' project costs, but did not appear to slow down project activity.
- The C&I sector continues to adopt digital controls primarily for process and HVAC projects to capture energy savings. This technology upgrade is becoming more affordable and accessible to almost all utility customers. As an example, new commercial smart thermostats and their associated software are becoming sophisticated enough to become an answer for small facilities and their energy management system needs.

Outreach Efforts

The main source of outreach is performed by Efficiency United's energy advisors using one-onone meetings with customers and contractors. To



make this work, energy advisors are very aware that persistence is a key attribute when attempting to meet with busy facility managers. Energy advisors also participate in events, listed in the C&I Education section, while also attending those events hosted by industry associations including the Michigan Energy Efficiency Contractor's Association and Michigan Energy Innovation Business Council.

Marketing

The Commercial & Industrial Prescriptive and Custom Program is marketed through the one-onone outreach efforts of the C&I energy advisors. Attending community events and trade shows has also shown to be an effective way to reach potential commercial and industrial customers. Collateral materials, including brochures, postcards, flyers and emails, are used to highlight the overall program offerings as well as limited-time specials for both individual and group outreach efforts for distribution by the energy advisors.
Provider	# of Participants	Incentive Spent	2017 Carryforward Savings	2018 kWh/ Therms Achieved	Total kWh/ Therms Achieve <u>d</u>	2018 Annual kWh/Therms Goal	% of Savings Goal Achieved
			Electric Ut	ilities			
Alpena	39	\$115,879	516,250	1,606,531	2,122,781	1,424,850	149%
Baraga	6	\$16,411	50,508	145,383	195,891	139,402	141%
Bayfield	0	\$-	-	-	-	-	-
Crystal Falls	4	\$6,545	29,411	134,468	163,879	81,173	202%
Dowagiac	14	\$46,921	161,210	511,432	672,642	444,940	151%
Gladstone	6	\$13,005	48,672	130,731	179,403	134,335	134%
Harbor Springs	4	\$15,639	62,156	116,979	179,135	171,551	104%
Hillsdale	17	\$67,202	275,370	833,749	1,109,119	760,021	146%
L'Anse	2	\$3,940	23,128	45,865	68,993	63,833	108%
Negaunee	5	\$7,160	36,318	79,186	115,504	100,237	115%
Norway	11	\$13,685	34,713	129,789	164,502	95,809	172%
Wisconsin Electric	2	\$224,018	7,533,422	290,558	7,824,000	7,824,000	100%
UMERC - Electric	88	\$189,131	1,631,444	2,146,382	3,777,826	2,975,189	127%
Xcel Energy - Electric	40	\$69,311	277,200	545,224	822,424	765,072	107%
Total Electric	238	\$788,847	10,679,801	6,716,277	17,396,099	14,980,411	116%
			Natural Gas	Utilities			
MGU	41	\$174,023	479,196	736,591	1,215,787	1,322,581	92%
UMERC - Gas	2	\$10,000	5,618	163,589	169,207	92,199	184%
Xcel Energy - Gas	22	\$23,722	10,507	27,662	38,169	28,999	132%
Total Natural Gas	65	\$207,744	495,321	927,841	1,423,162	1,443,779	99%

Commercial and Industrial Prescriptive and Custom Program Overview

C&I Education Program

The 2018 Efficiency United C&I Education Program followed two tracks. The first track aligned with education programs offered to both Efficiency United and UPPCO customers, taking the more traditional approach of information sharing to a wide audience. The activities under this track in 2018 were:

42,694 first-year net therm savings achieved

406,451 first-year net kWh savings achieved



Michigan Commercial and Industrial Energy Conferences (MCIEC)

These two conferences (Battle Creek and Harris, Michigan) are jointly sponsored by Efficiency United, Upper Peninsula Power Company, Consumers Energy, DTE Energy and Energy Optimization. These sponsorships allowed each organization's respective customers and trade allies to attend the events at no cost. The one-day events featured exhibitors, breakout sessions, and multiple networking opportunities for participants to learn about energy use and energy waste reduction strategies.

The 2018 conference in Harris saw 90 attendees participate, while the Battle Creek event had 250 attendees.

New for 2018 was on-demand educational webinars through a relationship with Seventhwave. Seventhwave's EWR webinar library was made available to Efficiency United's customers and trade allies starting mid-year. Promotion of this program offering was through an email marketing campaign generated by Seventhwave. This initiative will run through 2019. In addition to these two education initiatives, Efficiency United offered customers the following services:

- A Commercial Online Audit, which offered customers a quick and simplified audit report based on information provided using online software. This tool has been made available for several years and will be discontinued at the end of 2018 due to a significant reduction in usage by customers.
- A Tool Library Program, which continues to be offered to customers. This program was initiated in 2014 when the tools were purchased. These measurement and verification tools are available to all Efficiency United customers on a no-fee basis to help them better understand and quantify energy opportunities. These tools are also utilized by program staff in assisting customers.

In addition, the Efficiency United C&I Outreach Team participated in multiple events to assist in marketing the program. These events included:

- Michigan Plumbers & Mechanical Contractors Association Show (Mt. Pleasant)
- International Radiant and Mechanical Systems

 Annual Open House
- Standard Electric/Whitlock Supply Trade Show (Gaylord)
- Wastewater Plant Operators Conference (Harris)
- Michigan Petroleum Association Annual Conference
- Werner Electric/Widdock Supply Customer Appreciation Day event (Munising)
- Michigan School Business Official Facility Manager Conference
- Michigan Grocers Association Annual Conference

- MI Saves Contractor Breakfast (Escanaba)
- MI Saves Contractor Breakfast (Houghton)
- MI Saves Contractor Event (Marquette)
- MI Saves Contractor Breakfast II (Escanaba)
- Cochrane Burner Controls Trade Show (Madison Heights)
- Cochrane Burner Controls Trade Show (Grand Rapids)

Commercial and Industrial Education Program Overview

Provider	Incentive Spent	2018 kWh/ Therms Achieved
	Electric Utilities	
Alpena	\$3,380	106,223
Baraga	\$644	5,877
Bayfield	\$-	-
Crystal Falls	\$298	4,916
Dowagiac	\$1,316	19,976
Gladstone	\$367	5,382
Harbor Springs	\$467	5,374
Hillsdale	\$1,945	33,274
L'Anse	\$216	2,070
Negaunee	\$353	3,465
Norway	\$348	4,727
Wisconsin Electric	\$-	-
UMERC - Electric	\$7,926	190,495
Xcel Energy - Electric	\$1,964	24,673
Total Electric	\$19,225	406,451
Ν	latural Gas Utilities	
MGU	\$12,258	36,474

Natural Gas Utilities						
MGU	\$12,258	36,474				
UMERC - Gas	\$303	5,076				
Xcel Energy - Gas	\$698	1,144				
Total Natural Gas	\$13,259	42,694				

C&I Pilot Program

Historically, Efficiency United's C&I Pilot Program has been oriented toward technology demonstration efforts to test new equipment in 'real world' situations and perform verification of the energy savings. For 2018, the pilot program relied less on 'new technologies' and instead increased focus on how to increase the uptake of some relatively common measures through different delivery methods and by performing rigorous verification of the energy savings.

Pilot initiatives for 2018 were:

- Advanced evaporator and defrost controls. After a multi-year effort, the metering and verification for this pilot concluded in late 2018. This technology provides a package of advanced controls to control the evaporator and defrost cycle of walk-in coolers and freezers. The metering and verification methodology evolved to a very robust approach with continuous monitoring of multiple data points for both active control and baseline sites. CLEAResult also worked with Consumers Energy to implement a parallel pilot with this technology and the combined results are planned to be developed into a work paper for submittal to the EWR Collaborative in 2019 as a proposed addition to the 2020 MEMD.
- Steam Trap Survey and Repair Pilot, which began in 2017 and was finalized in 2018. This direct-to-customer initiative was designed to assist customers with process steam activities and provided a new approach for steam trap projects. Initially, this was offered to customers with small process steam loads (e.g., dry cleaners) but expanded to larger customers and some HVAC-oriented customers to better understand the savings opportunities and the costs when failed open steam traps are repaired. This measure and initial customer segment were targeted after determining that this is an underserved market and that steam trap maintenance is poorly understood and undervalued. The pilot



utilized trained staff to perform the surveys and failed open traps were evaluated primarily on a custom calculation basis. Staff then met with the customer to discuss the findings and savings opportunity and to schedule repairs. The pilot paid 100 percent of the repair cost of failed "open" steam traps. In 2018, 14 Efficiency United customers participated in this pilot. In addition, this pilot was offered in the SEMCO ENERGY Gas Company service territory.

 Compressed Air Survey and Repair Pilot. This pilot used a similar approach and measurement tools as the Steam Trap pilot. The objective was to determine if small commercial customers (auto dealers and repair shops) had meaningful compressed air leaks and whether the leak repairs could be cost-effectively implemented. This pilot was discontinued early due to challenges with calculating reliable energy savings and with getting contractors engaged with performing these low-cost repairs. Eight Efficiency United customers participated in this Pilot. With a more intensive engineering approach, the savings calculation challenges can be overcome. For cost-effectively completing the repair work, the repairs ideally would be performed by pilot staff. This pilot may be revisited in the future.

Commercial and Industrial Pilot Program Overview

Provider	Incentive Spent	2018 kWh/ Therms Achieved
	Electric Utilities	
Alpena	\$-	100,358
Baraga	\$616	9,041
Bayfield	\$-	-
Crystal Falls	\$261	7,951
Dowagiac	\$2,644	33,632
Gladstone	\$321	7,093
Harbor Springs	\$938	8,957
Hillsdale	\$1,500	42,877
L'Anse	\$189	3,450
Negaunee	\$309	5,767
Norway	\$305	6,180
Wisconsin Electric	\$-	-
UMERC - Electric	\$9,104	317,491
Xcel Energy - Electric	\$-	22,987
Total Electric	\$16,186	565,783
N	atural Gas Utilities	
MGU	\$21,907	60,789
UMERC - Gas	\$500	8,460
Xcel Energy - Gas	\$1,074	1,825
Total Natural Gas	\$23,481	71,075

Marketing

The 2018 Efficiency United marketing approach focused on producing quality marketing materials for both customers and trade allies. Building on the success of the 2017 rebranding efforts, collateral materials drove traffic to the Efficiency United website where customers could learn more about energy-saving products and available rebates.

Maintaining an increased presence in the retail arena while introducing new customer outreach methods provided on-going success throughout the year. To maximize efficiency Efficiency United utilized existing materials, including its comprehensive residential overview brochures. The 10-panel brochure offers Efficiency United residential customers the opportunity to identify rebates and savings opportunities for their entire home in a one-stop-shop approach. The Efficiency United website continued to be a primary focus for all marketing materials across all programs. In total, 25,752 users visited the Efficiency United website, representing a total of 209,649-page views. Of the total page views 82 percent of those visitors were new. These statistics show once again that the program continues to reach new customers while providing a service that customers deem valuable enough to return to for additional opportunities.

Visually creating Efficiency United's collaborative status with SEMCO ENERGY Gas Company and Upper Peninsula Power Company required separate but similar marketing materials. When possible, Efficiency United-specific materials are used to promote the program offerings; in instances where utility service overlap is likely, Efficiency United materials are used and include the member utility logos are in the logo band.

Branded Templates

Letterhead



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PowerPoint



Collateral

Residential Brochure



Tool Lending Library Flyer



Not sure where to begin your energy efficiency journey?

The Tool Library is designed to help you and your company get started. Identify and promote correction of energy inefficiencies through the use of one of many tools we have available, including: FLIR IR Camera • Extach Thermo-anemometer • Reed AC Clamp Meter • Dent Elitepro XC Power Meter • Reed Light Meter • Toum-4G Logger • Hydronic BTU Flow Meter • Extech Indoor Air Analyzer

- To begin the rental process, follow these easy steps
- 1. Visit efficiencyunited.com/toollibrary
- 2. Determine what tool would best fit your company's needs 3. Request a rental period by emailing tool.library@clearesult.com
- Read, sign and return agreement
- 5. Once you receive the tool, review instructions before use
- Once you receive ine toor, review instructions being use
 After use, work with an Efficiency United Advisor to determine next steps, what your results mean and how Efficiency United can assist in improving those results
- 7. Return item through UPS using materials provided in shipment Efficiency United helps commercial and industrial customers reduce energy use and save money through valuable energy efficiency rebate programs and education.

Please email tool.library@clearesult.com For more information

Contractor Flyer

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Velcome Home t	the Sa	vings.	
eck out the available rebates below to	o see how we	can help you make this	
ar your most efficient—and comfortab	le—one yet.		
Measure	Rebate	Installed Measure Requirements	Participating
Air Source Heat Pump 15 SEER	\$200	Must replace an existing 13 SEER or lower ASHP or an electric furnace.	Electric Utilities
Air Source Heat Pump 16 SEER	\$300	Must replace an existing 12 SEER or lower ASHP or an electric furnace.	Alpena Power Company
Air Source Heat Pump 17 SEER	\$400	Must replace an existing 12 SEER or lower ASHP or an electric furnace.	Baraga Electric Utility
Air Source Heat Pump 18 SEER	\$500	Must replace an existing 12 SEER or lower ASHP or an electric furnace.	City of Crystal Falls City of Downsian
Air Source Heat Pump 19 SEER	\$600	Must replace an existing 12 SEER or lower ASHP or an electric furnace.	City of Gladatone
Air Source Heat Pump 20 SEER	\$700	Must replace an existing 12 SEER or lower ASHP or an electric furnace.	City of Harbor Springs
Air Source Heat Pump 21+ SEER	\$800	Must replace an existing 12 SEER or lower ASHP or an electric furnace.	Hiladale Utilities
Minisplit Heat Pump 21+ SEER	\$1,250	Must replace an existing 14 SEER or lower ASHP or an electric furnace.	L'Anse Electric Utility
Split System Central Air Conditioner 15+ SEER	\$350	Must replace an existing 12 SEER or lower CAC. Window A/C units are not eligible.	Oty of Norway
Electronically Commutated Motor (ECM)	\$150		UMERC - We Energies
ECM Boiler Circulator Pump (+500 W)	\$150		 UMERC - WPS
ECM Boller Circulator Pump (500 W-1.000 W)	\$200		Xcel Energy
Programmable Thermostat	\$25	Primary heating system must be electric. Must replace nonprogrammable thermostat.	
Wi-Fi Enabled Thermostat	\$50	Primary heating system must be electric. Must replace nonprogrammable thermostat.	
Heat Pump Water Heater 2.00+ EF	\$750	Must replace an existing electric water heater.	
Air Sealing 15% Change or Greater	\$150	Primary heating system must be electric. See rebate application for additional details.	
Above Grade Wall Insulation (500 s.q. ft.)	\$250	Primary heating system must be electric. Must add at least R-5 to existing R-value.	
Attic Hatch (Pull Down Stairs)	\$50	Primary heating system must be electric. See rebate application for additional details.	
Attic Hatch (Scuttle)	\$25	Primary heating system must be electric. See rebate application for additional details.	
Attic Insulation (500 sq. ft.)	\$250	Primary heating system must be electric. Must add at least R-19 to existing R-value with final R-value R-49 or greater.	
Basement Wall Insulation (250 sq. ft.)	\$250	Primary heating system must be electric. Must add at least R-10 to existing R-value.	
Crawlapace Wall Insulation (250 sq. ft.)	\$250	Primary heating system must be electric. Must add at least R-11 to existing R-value.	
Floor Insulation (250 sq. ft.)	\$250	Primary heating system must be electric. Must add at least #111 to existing R-value.	
Knewvall Insulation (100 sq. ft.)	\$250	Primary heating system must be electric. Must add at least R-19 to existing R-value.	
Rim Joist Insulation (100 linear feet or entire area if amaller)	\$250	Primary heating system must be electric. Must add at least R-10 to existing R-value.	
Window Replacement (0.30 or less U-Factor or SHGC rating)	\$35	Primary heating system must be electric. Must attach certificate stating U-Factor or SHGC.	

Co-Branded Boiler Tune-Up Flyer



Summertime Savings No-cost boiler tune-ups!

Whatever your energy-saving goals are, we're here to help! Our Commercial & Industrial Program offers rebates and resources toward energy efficiency projects designed to make your business a safer, more efficient, more comfortable and more productive place to work.

For a limited-time, Efficiency United and Michigan Gas Utilities are offering boiler tune-ups at no-cost to you!

Why you need a boiler tune-up

- Whether steam or hot water, bollers require routine tune-ups to run at top efficiency. A boller tune-up will: Provide a safety check by checking for natural gas and water leaks, inspecting safety controls, wenting and dampers Typically improve the operating efficiency resulting in lower operating oscib. As an example, a four percent combustion improvement will yield a five percent (or more) reduction in fuel usage
- While it's impossible to eliminate all boiler breakdowns, routine maintenance can take care of problems before they become emergencies
 Extend the service life of the boiler



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Call us at 877.367.3191 or visit efficiencyunited.com to learn more. Start saving today.

BENEFITS

Energy Smart Grocer, brought to you by Efficiency United, delivers proven solutions that help grocery stores reduce operating costs and achieve the highest possible energy savings.

1.00

Benefits of Being Energy Smart

ENERGY SMART GROCERY

- Lower operating cost:
- Higher profit margins

Grocery Store Flyer

Efficiency

Immediate and long-term energy savings

What We Provide

 No-cost energy assessments A customized energy efficiency investment plan

Your Store, Your Savings.

- Expert recommendations for persistent energy savings
- Incentives to offset installation costs

· Review of contractor bids to ensure eligibility of products

A Customized Approach

Our Grocery Audiors will work closely with you to develop an energy efficiency roadmap that's specific to your needs and uses your preferred contractors.



Call us at 517.999.2376 or email roger.wiseley@clearesult.com to learn more

Product Marketing

Day of Energy Savings Flyer





Point of Purchase Shelf Talker Labels



Quality Check Process

Efficiency United continued its dedication to excellence through its quality control efforts for both residential and commercial and industrial projects. These efforts have been developed and implemented to ensure rebate eligibility, energy savings integrity and customer satisfaction.

For the residential programs, quality checks occur through both on-site inspections and telephone interviews. Annually, 5 percent of residential projects receive this quality check. On an ongoing basis, data from these efforts are shared with the program team to recognize areas of excellence and opportunities for improvement.

For the Commercial and Industrial Programs, pre and/or post inspections occur with projects at a 75%+ rate. These inspections are performed by the program's energy advisors on a both formal and informal basis. First and foremost, these inspections ensure project eligibility and consistently result in a very high rate of verified energy savings. A dividend from this inspection activity is the opportunity to continue the dialog with the customer on energy waste reduction investments.

Appendix

Total Available Budgets: All Classes

Provider	Total Collection for Program Year 2018	MCA Administration Spending Cap (4.5%)	DNVGL Evaluation Spending Cap (8%)	Income Qualified Spending Requirement (10%)	Pilot Program Spending Cap (5%)	Education Program Spending Cap (3%)	Remaining Programs Spending Cap
			Electric U	tilities			
Alpena	\$508,683	\$22,891	\$40,695	\$50,868	\$25,434	\$15,260	\$353,535
Baraga	\$53,986	\$2,429	\$4,319	\$5,399	\$2,699	\$1,620	\$37,520
Bayfield	\$933	\$42	\$75	\$93	\$47	\$28	\$648
Crystal Falls	\$47,540	\$2,139	\$3,803	\$4,754	\$2,377	\$1,426	\$33,040
Dowagiac	\$150,024	\$6,751	\$12,002	\$15,002	\$7,501	\$4,501	\$104,267
Gladstone	\$68,080	\$3,064	\$5,446	\$6,808	\$3,404	\$2,042	\$47,316
Harbor Springs	\$73,303	\$3,299	\$5,864	\$7,330	\$3,665	\$2,199	\$50,946
Hillsdale	\$245,826	\$11,062	\$19,666	\$24,583	\$12,291	\$7,375	\$170,849
L'Anse	\$31,220	\$1,405	\$2,498	\$3,122	\$1,561	\$937	\$21,698
Negaunee	\$66,940	\$3,012	\$5,355	\$6,694	\$3,347	\$2,008	\$46,523
Norway	\$70,180	\$3,158	\$5,614	\$7,018	\$3,509	\$2,105	\$48,775
We Energies	\$1,380,337	\$62,115	\$110,427	\$-	\$-	\$-	\$1,207,795
UMERC - Electric	\$1,300,035	\$58,502	\$104,003	\$130,004	\$65,002	\$39,001	\$903,524
Xcel Energy - Electric	\$290,218	\$13,060	\$23,217	\$29,022	\$14,511	\$8,707	\$201,702
Total Electric	\$4,287,305	\$192,929	\$342,984	\$290,697	\$145,348	\$87,209	\$3,228,138
			Natural Gas	Utilities			
MGU	\$2,650,726	\$119,283	\$212,058	\$265,073	\$132,536	\$79,522	\$1,842,255
UMERC - Gas	\$67,183	\$3,023	\$5,375	\$6,718	\$3,359	\$2,015	\$46,692
Xcel Energy - Gas	\$94,445	\$4,250	\$7,556	\$9,445	\$4,722	\$2,833	\$65,639
Total Natural Gas	\$2,812,354	\$126,556	\$224,988	\$281,235	\$140,618	\$84,371	\$1,954,586

Total Implementation Budget: By Class

Provider	Income Qualified Implementation Budget	Residential Implementation Budget	Commercial & Industrial Implementation Budget	Total Implementation Budget	Total Implementation Collected
		Electric	c Utilities		
Alpena	\$20,347	\$75,381	\$86,380	\$182,109	\$182,109
Baraga	\$2,159	\$3,245	\$13,923	\$19,327	\$19,327
Bayfield	\$37	\$297	\$-	\$334	\$334
Crystal Falls	\$1,902	\$7,498	\$7,619	\$17,019	\$17,019
Dowagiac	\$6,001	\$14,074	\$33,634	\$53,709	\$53,709
Gladstone	\$2,723	\$12,275	\$9,374	\$24,373	\$24,373
Harbor Springs	\$2,932	\$11,375	\$11,935	\$26,242	\$26,242
Hillsdale	\$9,833	\$28,455	\$49,718	\$88,006	\$88,006
L'Anse	\$1,249	\$4,398	\$5,530	\$11,177	\$11,177
Negaunee	\$2,678	\$12,261	\$9,026	\$23,965	\$23,965
Norway	\$2,807	\$13,413	\$8,905	\$25,124	\$25,124
We Energies	\$-	\$-	\$494,161	\$494,161	\$494,161
UMERC - Electric	\$52,001	\$210,840	\$202,571	\$465,413	\$465,413
Xcel Energy - Electric	\$11,609	\$42,084	\$50,205	\$103,898	\$103,898
Total Electric	\$116,279	\$435,595	\$982,981	\$1,534,855	\$1,534,855
		Natural G	as Utilities		
MGU	\$106,029	\$583,308	\$259,623	\$948,960	\$948,960
UMERC - Gas	\$2,687	\$13,630	\$7,734	\$24,052	\$24,052
Xcel Energy - Gas	\$3,778	\$17,960	\$12,073	\$33,811	\$33,811
Total Natural Gas	\$112,494	\$614,899	\$279,430	\$1,006,823	\$1,006,823

Provider	Total Participants	2017 Annual kWh/Therms Goal	Self-Directed	Total Goal	Total Savings Achieved	% of Goal Achieved
		E	lectric Utilities			
Alpena	9,696	2,065,000	1,418,000	3,483,000	5,224,890	150%
Baraga	484	183,000	-	183,000	285,108	156%
Bayfield	11	2,000	-	2,000	2,215	111%
Crystal Falls	465	164,000	-	164,000	287,079	175%
Dowagiac	978	658,000	-	658,000	929,241	141%
Gladstone	1,016	312,000	-	312,000	401,237	129%
Harbor Springs*	602	379,000	-	379,000	379,000	100%
Hillsdale	907	1,206,000	-	1,206,000	1,498,664	124%
L'Anse	629	118,000	-	118,000	178,174	151%
Negaunee	1,235	221,000	-	221,000	319,944	145%
Norway	1,089	254,000	-	254,000	390,904	154%
Wisconsin Electric	2	7,824,000	-	7,824,000	7,823,980	100%
UMERC - Electric	12,007	5,432,989	2,572,000	8,004,989	9,803,465	122%
Xcel Energy - Electric	3,378	1,386,000	-	1,386,000	1,545,833	112%
Total Electric	32,499	20,204,989	3,990,000	24,194,989	29,069,734	120%
		Nat	ural Gas Utilities			
MGU	6,266	2,436,590	-	2,436,590	2,561,298	105%
UMERC - Gas	291	133,090	-	133,090	211,926	159%
Xcel Energy - Gas	388	66,080	-	66,080	86,549	131%
Total Natural Gas	6,945	2,635,760	-	2,635,760	2,859,774	108%

Total Energy Savings Achieved: All Classes

Note: Participation does not match scorecard because participants exclude C&I Education since participants are not utility specific.



THINK! ENERGY WITH EFFICIENCY UNITED

Program Report



Prepared for:

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

Prepared by:

Robin Reinarts Sr. Program Director National Energy Foundation

Chaise Ewert-Meyer Program Coordinator National Energy Foundation

February 2019

Summary

kWh saved

- Annual: 190,152 -- Lifetime: 2,235,563 -

Therms saved

- Annual: 9,192 -- Lifetime: 94,574 -

HEWs Returned

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- 1,581 -- 68% -

Teacher Packets

- Returned: 70 -- 79.5% -

Participants

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Kits Placed

Students - 2,313 -

Teachers



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Program Description

The Think! Energy with Efficiency United energy efficiency education program is a collaborative partnership between CLEAResult and the National Energy Foundation (NEF). Think! Energy with Efficiency United assists teachers and their students to Think! about energy, Talk! about energy, and Take Action! now about our energy for the future. The program objectives are to expand and promote energy awareness through an educational in-school program and to obtain actual energy savings through student and educator household behavior changes and the use of energy-efficient devices provided in the *Take Action Kit*.

In 2018, collaboration continued with SEMCO Energy Gas Company and DTE Energy, and the collaboration with Consumers Energy was expanded. These collaborations allowed a total of 31 schools to be served this program year. Energy efficiency products were placed in 2,325 Michigan homes and 1,581 *Home Energy Worksheets* (HEWs) were returned, a 68 percent return rate. Please see the chart below for a breakdown by program component.

Program	Schools	Teachers	Students	Kits	HEWs Returned	% of HEWs	Grants Awarded*
EU Electric / Combo	3	8	180	188	153	88%	\$750
EU- Consumers	5	19	525	525	318	61%	\$1,200
EU-DTE	7	24	628	632	537	87%	\$2,150
EU-DTE No LED	6	14	349	347	239	70%	\$1,100
EU-SEMCO	2	3	59	59	59	100%	\$300
EU-SEMCO No LED	2	6	152	152	136	93%	\$600
UPPCO only	3	9	230	230	NA	NA	NA
EU-SEMCO no lighting	3	5	190	192	136	71%	\$300
Totals	31	88	2,313	2,325	1,581	68%	\$6,400

* Where there is both gas and electric sponsorship, each sponsor pays 50% of the grant totals listed here.

Program Administration

The Think! Energy with Efficiency United program is administrated by the National Energy Foundation, a non-profit organization (established in 1976) dedicated to the development, dissemination, and implementation of supplementary educational materials, programs and services relating primarily to energy, water, the environment, and natural resources. NEF's mission is to cultivate and promote an energy literate society.

NEF reports all program progress to Brett Garver at CLEAResult. The program was provided to 31 schools in the service territories of 14 participating utilities. Utilities included Alpena Power Company, Xcel Energy, Michigan Gas Utilities (MGU), Upper Peninsula Power Company (UPPCO), UMERC (formerly We Energies and Wisconsin Public Service), L'Anse Electric Utility, The City of Gladstone Department of Power & Light, The City of Norway, The City of Harbor Springs Electric Department, Hillsdale Board of Public Utilities, Baraga Electric Utility, Negaunee Electric, The City of Dowagiac, The City of Crystal Falls, plus collaborators Consumers Energy, DTE Energy and SEMCO ENERGY Gas Company.

Program Implementation

The authorization for the Think! Energy with Efficiency United energy education program was secured in June 2018 for classroom presentations held during September and October of 2018. As in prior years, the program attempted to maximize the number of electric kits given out by actively seeking out schools with both gas and electric service from Efficiency United members and schools where there was overlapping service territory with DTE Energy, Consumers Energy and SEMCO ENERGY Gas Company. The rationale was that the electric kit was better received by families and giving out kits in combination territories allows for higher customer satisfaction as well as the ability to use available funding from utilities in the most efficient manner to reach the largest number of participants for each utility possible.

The Michigan Team

Robin Reinarts, NEF Senior Program Director, served as the director for the project. Chaise Ewert-Meyer was the program coordinator and scheduler for all aspects of the program.

Michigan based presenters were used to deliver the program. The programs were delivered in three weeks, from September 25 to October 12. Presentations began on the west side of the state and moved east. Presentations in the lower part of the state were conducted by Connie Bockelman, Josie Seamon, Lauren Johnson, Chaise Ewert-Meyer, Anne Gardner, and Mary Godert. Presentations in the Upper Peninsula were conducted by John and Patricia Foldesi.

Program Promotion and Registration

In May of 2018, schools within the utility service territories were invited via email to participate in the fall program. The registration process was handled online at *ThinkEnergy.org/eu*. Schools eligible for participation were invited to participate based upon the number of kits funded by the sponsoring utility in each service territory. Invitations were extended to individual schools based on geographic location and the number of students in the 4th and 6th grades.

Response was overwhelming, with the original program scope for all but two of the participating utilities filling in less than a month. Funding from DTE Energy and SEMCO partially offset reduced budgets for many of the electric utilities in Efficiency United, while Consumers Energy partnered to offer combo kits to five MGU schools. Presentations reached 2,401 students and teachers in the 4th and 6th grades.

Materials Fulfillment

Upon confirmation of the scheduled date and time for the presentation and the student numbers with each school, customized instructional materials were shipped. These materials, including the *Letter to Parents* and *Home Energy Worksheet Scan Forms*, were delivered to schools approximately three weeks before the classroom presentation.

Kits were ordered and shipped on a daily basis as kit numbers were confirmed. Shipping was tracked daily, and any problems were addressed immediately. Every participating student received a kit unless they specifically opted out of receiving one. This negated the need to collect documentation from schools prior to ordering kits, allowing students to receive their kits the day of the presentation and reducing the number of students excluded from receiving a kit. Presentation teams collected any extra kits when they visited the classroom.

Classroom Presentation

Scheduling and Confirming - the enrolled schools were divided into regional groups. Chaise coordinated the creation of a schedule for regional groups. Communication was directed to the "lead" contact teacher at each school as identified in the registration process. All arrangements were made for date, time and room setup. Brett Garver accessed the master schedule through the program web portal at *NEF1.org/programs.sponsors.php*.

Presentation Customization - the presentation introduced teachers and students to the first two sections of the instructional curriculum guide. Brett Garver reviewed and approved the presentations.

The National Energy Foundation presenter teams and representatives from CLEAResult conducted interactive, hands-on programs (45 - 60 minutes in length) in participating schools from September 26 to October 27, 2018. Presentations included the distribution of take-home Think! Energy with Efficiency United *Take Action Kits*. A total of 88 teachers at 31 schools participated in the program. Tables of participating schools and detailed information on each member's reach is included in the appendix.

Presentation Outline

The classroom program used a Keynote presentation (in the appendix), explaining:

What is meant by Think! Energy

- THINK! about energy
- TALK! about energy
- TAKE ACTION! now for the future

What is meant by **ENERGY** and where we get it

- Natural Resources: Renewable and Nonrenewable
- Energy in Michigan

Electricity and Circuits

- How Electricity is Generated from Resources
- Parts of an Electric Circuit
- Insulators and Conductors

Examples of ways to be more **Energy Efficient** with our resources through wise behaviors and technologies

- Electricity
- Natural Gas
- Water

The 3 **"R"s**

- Reduce use less of something
- Reuse use something again
- **Recycle** make something into another new thing
- Think! Energy

The students participated in Brain Breaks to review material covered, created a human circuit in an inquiry activity and played the Think! Energy review game. These interactive exercises reinforce the educational concepts and vocabulary presented in the presentation while helping the participants see how they can make a difference when they Think! Energy and Take Action. The energy saving devices in the kit, as well as the steps needed to complete the program, were explained. The presentation was updated with improved video clips and revised to support new academic standards in science.

The complete presentation may be found in the appendix.

Follow-up Communication

Follow-up - the scheduling team communicated with teachers with follow-up reminders to return packets by the required due date in order to qualify for a mini-grant. Weekly emails both before and after the due date were used to keep teachers informed on the status of their return packets.

Emails to teachers provided instructions on how to complete the *Home Energy Worksheets* online and a link to a site where teachers could track the students that completed the form online and see the status of their mini-grant. Links to PDFs of the *Kit Reconciliation Form* signed on the day of the presentation and to each teacher's customized *Home Energy Worksheet Scan Form* allowed teachers to access these documents without needing to contact their scheduler or wait until forms were sent to them. Teachers who had not returned packets were contacted after the due date to remind them that they could earn a grant for returning their materials. Some teachers reported they still had their materials and sent them in after being contacted.

Customer Service

Teacher Inquiries - Chaise Ewert-Meyer was the point of contact for teacher questions or problem solving. She responded daily, via e-mail or phone to all teacher needs. Teacher inquiries usually involved the need for additional kits or supplies due to changes in enrollment.

NEF "800" Line - No complaints were fielded on the program's toll-free help line in 2018. NEF did receive one call from a customer who wanted a kit because they liked the one their grandchild received. The customer was guided to the Efficiency United website and verbally walked through how to find programs that would be beneficial for them.

Energy Savings

The Think! Energy with Efficiency United program produced significant kWh and therm savings. NEF estimates that the 2018 distribution of 2,325 energy efficiency kits and the installation of devices from those kits, will save the participating utilities' residential customers 190,152 kWh of electricity and 9,192 therms of natural gas annually and a total of 2,235,563 kWh and 94,574 therms of natural gas over the lifetime of the devices. For a detailed presentation of these savings estimates, please see the appendix.

Behavioral Change and Impact on Savings

Efficiency United's electric and natural gas program has been implemented with a goal of positively impacting the energy use behavior of Michigan students and families. In the Think! Energy model, NEF works directly with students in a classroom setting, building enthusiasm for change, and showing students how they can make a difference in their own homes.

A number of specific behavioral change ideas and suggestions have been made to students in the Efficiency United program. Examples include: lowering the home's thermostat setting in winter; raising the home's thermostat setting in summer; and lowering the water heater setting. Participating students were also asked if the program has changed the way they use energy.

Following up on these suggestions, NEF used the *Home Energy Worksheet* to ask families if they had adopted any of the behaviors. For example, 80 percent of families reported that the program changed the way they use energy in their homes. One promising response from the survey: 77 percent of respondents indicated that they would turn down the thermostat setting in winter and 74% said they would turn it up in the summer, a sure way to garner energy savings in the home. Between lowering thermostats in the winter and raising them in the summer, program participants are demonstrating that they are making efforts to save energy throughout the whole year.

While NEF is not in a position to make specific savings claims based on the responses received, the results are very promising. The *Home Energy Worksheets* indicate evidence of behavioral action that

has either already occurred or is planned by families living in the Michigan utility service territories of the Efficiency United program.

Program Summary and Analysis

The Think! Energy program was successfully implemented in 31 schools within the participating utilities' service areas. *Home Energy Worksheet Scan Forms* were received from 70 (79.5 percent) of the 88 participating classrooms. Fifty nine of the 88 (67 percent) participating teachers returned 80 percent or more of their scantron forms to earn the \$100 mini-grant. Nine teachers (10 percent) returned between 79 and 50 percent of their scan forms and earned the \$50 grant and two (two percent) who returned less than 50 percent received a \$25 grant for a total of \$6,400 in grant money awarded.

Teachers returned an average of 76 percent of the *Home Energy Worksheet Scan Forms*. The lowest return rate was in the EU-Consumers schools, at 61%. The highest return rate was the EU-SEMCO schools, with a 100% return rate.

Teacher responses on the program evaluation form show support and satisfaction with the interactive student presentation and the educational materials. A summary of parent and teacher responses to the program may be found in the attachments.

Teacher comments included:

- Thank you for supporting this program. Students were so excitied to take the kits home and talk to their parents about saving energy!! Many of them even installed parts last night! A grandmother came into the school this morning raving about her son taking a 5 minute shower for the first time ever!
- This is a great program to help students learn about energy.
- We enjoy the program every time they come. The students really enjoy everything that is discussed.
- As a teacher, I truly appreciate this opportunity for my students. The funding for the presenters and materials is money well spent.
- This is a very good, informative program. The family kits are great.
- This is a fun way to get students involved in saving energy and being able to talk about it with their families.
- Thank you for bringing this program to school
- Keep the program lined with the state objectives and provide a variety of methods like this one had.
- Thank you for sponsoring Think Energy the program and kits are wonderful!
- Very well done and worth it program!
- Thanks for bringing awareness of resources and the need for conservation to our students and families.
- KEEP THE PROGRAM GOING THE STUDENTS LOVE IT!
- Thank you! This is a fantastic program that ties in with our curriculum and helps students understand the importance of energy efficiency. This program helps students get their families involved in their learning and real life energy efficiency.
- Please continue to support the program. The kids love it!!

Parent responses to the program included:

- Love all the equipment to save energy and look forward to using it in our home. Our 9 year old is already faithfully using the shower timer which is a HUGE savings because she used to take the longest showers :)
- The aerators and shower head didn't fit. If they did, we would have installed them.
- I had to complete this worksheet with what seem like very little time to really get an idea of the impact this would have on my home.
- Great to see my child so interested in saving energy!
- Very impressed with this program, awesome job!
- It was fun and easy to use my favorite aspect was the shower timer and the stickers.
- Great program I didn't do well putting in the showerhead.
- Very good program. Some people can't afford to change their faucets or showerheads and some landlords won't change them until they are broken.
- We already use these products in our home, and have for a few years.

The CLEAResult sponsored Think! Energy with Efficiency United education program has been successful in increasing the knowledge and awareness of energy efficiency in the 4th and 6th grade households of 2,325 citizens. Technologies supplied in the *Take Action Kits* will result in reduced electrical natural gas and water usage.

The increase in household energy and resource awareness will result in greater energy efficiency, conservation of resources and monetary savings in the long term.

Continuous Improvement

Ideas for Improvement Implemented in 2018:

- Added content on ThinkEnergy.org websites.
- Revised kit printed materials with more family activities.
- Upgraded device videos in the presentation Improved *ThinkEnergy.org* websites.
- Piloted the use of kit posters and stickers in the EU-DTE program.
- Provided teacher workshops for teachers in UPPCO, L'Anse and Baraga service territories in collaboration with SEMCO ENERGY Gas Company.

Improvements Planned for 2019:

- Updated take-home booklet with more color and games to increase student interest and family involvement.
- Adding mini-posters with stickers to all kits to increase interest in device installation and behavior modification.
- Add more interactive features to the online *Home Energy Worksheet* so customers can easily view installation videos, etc.

Other Ideas for Improvement:

• Consider adding a high school component, especially if a collaborative partner could be found.

ATTACHMENTS

- Michigan Program Team
- Participation by EU Member Company
- Participating Schools List
- Savings Summary
- Program Promotional Email
- Classroom Presentation
- Teacher Evaluation Summaries
- Family Feedback Summaries

Attachments

Michigan Program Team



Robin Reinarts, National Energy Foundation – Sr. Program Director M.S. Geosciences, Mississippi State University B.S. Curriculum and Instruction, Texas A&M University

Mrs. Robin Reinarts directs the implementation of custom programs, develops new curricula and ancillary materials for use in programs, and directs the implementation of demand side management programs.

NEF program implementation has been the core of Mrs. Reinarts' work since joining the staff in 2002. She is responsible for overseeing the Michigan program team, reporting accomplishments to partners and revising program materials to meet partners' needs.

Mrs. Reinarts represented NEF for many years as the coordinator of Brevard Public Schools' energy efficiency program, which successfully reduced energy consumption in the district. She assisted in refining the strategy to relate education and behavior modification directly to energy savings and directed the implementation of several behavior modification programs over the past nine years. Other project experience includes mineral resources programs, water conservation, fossil fuels and renewable energy, and environment and sustainability programs. She has assisted in the development and implementation of NEF programs in energy literacy and efficiency.

A Texas A&M graduate, Mrs. Reinarts received her Bachelor of Sciences Degree with certification as a secondary science educator and went on to receive a M.S. in Geosciences from Mississippi State. She has teaching experience in junior and senior high school science, math and health education.



Chaise Ewert-Meyer, National Energy Foundation - Michigan Program Coordinator

M.S. Education, University of Minnesota B.S. Biology, Seattle University

Mrs. Chaise Ewert-Meyer recruits, enrolls and schedules the schools for the Efficiency UNITED programs and assists in scheduling for other Michigan Think! Energy programs. She also works as a classroom presenter and assists in training and evaluating presentation teams to ensure high standards are met.

Before joining NEF in 2014, Chaise served as Dean of Students at

Academy of the Sacred Heart in Bloomfield Hills. She also has several years of classroom experience, teaching math, science and health.

Participation by Member Company

EU Member	Total Students	Total Teachers	Total Kits Placed
Alpena Power	200	7	200
Baraga Electric	25	1	25
City of Crystal Falls	34	2	34
City of Dowagiac	52	2	52
City of Gladstone	130	5	130
City of Harbor Springs	60	3	58
City of Norway	55	2	55
Hillsdale	43	2	43
L'Anse Electric	38	2	38
Negaunee Electric	127	2	129
NS Xcel	53	2	53
UMERC (We - includes Crystal Falls)	91	5	91
UMERC (WPS Corp)	90	4	92
UPPCO	463	18	467
MGU (includes Hillsdale)	935	36	935
Grand Total	2,319	92	2,325

Notes: There are several overlaps between utilities. One co-branded kit with all utility logos was distributed in overlapping territories. For example, Hillsdale and MGU share kits, and Crystal Falls and UMERC (We) share kits.

Participating Schools List

School Name	School City	Kits	Teachers	Students	Grant	Gas	Electric
					Earned	Sponsor	Sponsor
Jennings Elementary	Quincy	52	2	52	100	MGU	Consumers
Lakeland Elementary	Coldwater	204	7	204	400	MGU	Consumers
Mason Central Elementary	Erie	84	3	84	250	MGU	Consumers
Washington Street Elementary	Otsego	79	3	79	300	MGU	Consumers
Williams Elementary School	Jonesville	106	4	106	150	MGU	Consumers
Dundee Elementary School	Dundee	141	7	141	400	MGU	DTE Electric
James T. Jones Elementary	Gladstone	130	5	130	500	DTE Gas	Gladstone & UPPCO
Jefferson Middle School	Monroe	136	5	136	500	MGU	DTE Electric
Mather Elementary	Munising	59	2	56	200	DTE Gas	UPPCO
North Elementary	Iron Mountain	49	2	49	200	DTE Gas	We
Rapid River Schools	Rapid River	27	1	26	50	DTE Gas	UPPCO
Triumph Academy	Monroe	90	3	90	300	MGU	DTE Electric
Ella White Elementary	Alpena	90	3	90	300	DTE	Alpena
Forest Park School	Crystal Falls	34	2	34	100	DTE	Crystal Falls & We
Hinks Elementary School	Alpena	58	2	58	50	DTE	Alpena
Lincoln Elementary	Alpena	52	2	52	150	DTE	Alpena
Norway Elementary	Norway	55	2	55	200	DTE	Norway
Shay Elementary	Harbor Springs	58	3	60	300	DTE	Harbor Springs
Blesch Intermediate School	Menominee	92	4	90	400	WPS Corp	WPS Corp
Pittsford Area School	Pittsford	43	2	43	200	MGU	Hillsdale
Washington Elementary School	Bessemer	53	2	53	150	NS Xcel	NS Xcel
Barkell Elementary	Hancock	51	2	51	200	SEMCO	UPPCO
Watersmeet Township School	Watersmeet	8	1	8	100	SEMCO	We
Aspen Ridge Elementary	Ishpeming	100	4	100	400	SEMCO	UPPCO
Patrick Hamilton	Dowagiac	52	2	52	200	SEMCO	City of Dowagiac
CJ Sullivan Elementary	L'Anse	38	2	38	0	SEMCO	L'Anse Electric
Negaunee Middle School	Negaunee	129	2	127	200	SEMCO	Negaunee Electric
Philip LaTendresse Elementary School	Baraga	25	1	25	100	SEMCO	Baraga Electric
CLK Elementary	Calumet	104	4	104	0	No gas service	UPPCO
Stambaugh	Iron River	73	3	73	0	DTE	UPPCO
T.R. Davis Elementary School	Dollar Bay	53	2	53	0	No gas service	UPPCO

Program Savings Summary

Estimated Electric Saving	s - 2018 Program							
Energy-Efficient Measure	Number of Devices ³	Water Heater Share ²	In-Service Rate (ISR) ¹	MEMD Unit Savings	Annual kWh Savings	Years ⁴	Lifetime kWh Savings	
Low Flow Showerhead	1,011	0.32	0.37	491	58,773.88	10	587,739	
Kitchen Aerator	1,011	0.32	0.34	279	30,689.11	10	306,891	
Bathroom Aerator 1	1,011	0.32	0.35	109.108	12,354.52	10	123,545	
Bathroom Aerator 2	1,011	0.32	0.22	109.108	7,765.70	10	77,657	
Pipe Insulation, R3	3,672	0.32	0.29	51	17,378.84	15	260,683	
LED Night Light	1,241		0.84	22	22,933.68	12	275,204	
9W LED 1	1,130		0.65	28.5	20,933.25	15	313,999	
9W LED 2	1,130		0.6	28.5	19,323.00	15	289,845	
Total kWh Savings							2,235,563	
Estimated Natural Gas Savings - 2018 Program								
Energy-Efficient Measure	Number of Devices ³	Water Heater Share ²	In-Service Rate (ISR) ¹	MEMD Unit Savings	Annual Therm Savings	Years ⁴	Lifetime Therm Savings	
Low Flow Showerhead	892	0.55	0.37	21.6	3,920.88	10	39,209	
Kitchen Aerator	892	0.55	0.34	12.3	2,051.69	10	20,517	
Pipe Insulation, R3	2,202	0.32	0.29	2.6	531.30	15	7,969	
Bathroom Aerator 1	1,784	0.55	0.35	4.806	1,650.48	10	16,505	
Bathroom Aerator 2	1,784	0.55	0.22	4.806	1,037.44	10	10,374	
Total Therm Savings							94,574	

1 All in-service rates calculated from Home Energy Worksheet "Installed" only data. Actual rates are likely higher.

2 Water heater share values calculated from Home Energy Worksheet data.

3 Total number of participants taking home Take Action Kits for selected fuel type multiplied by the number of devices per kit. EU-DTE and EU-DTE NL kits contained six feet of pipe insulation.

4 All lifetime values from MEMD.

Program Promotional Email

"Very informative; it builds off of previous experiences and prior knowledge as well as prepares for future lessons."

– Arbor Academy, Battle Creek teacher

SPECIAL OPPORTUNITY for Michigan schools

"I think this is a great introduction to energy resources and the importance of an individual's conservation efforts. ... It stimulated a great deal of discussion."

– Moccasin Elementary, Galien parent

Michigan energy companies support teachers as they cover energy curriculum standards with their students. The FREE Think! Energy program will take place at schools in your area this October!

Teachers and students learn about energy by taking part in a presentation at school and installing energy-efficient products at home with their families.

- In-school presentation (45 – 60 minutes)
- Every student receives a *Take Action Kit* of energy-efficient products for their home
- Program correlated to the Michigan Science Standards as well as math and language arts
- Registration, teacher and family resources, data collection, and more all available online
- Teachers may earn a minigrant of up to \$100, subject to eligibility
- For fourth through sixth grade classes

Register to save your spot today!

ThinkEnergy.org/mi or call the National Energy Foundation at 800.616.8326 ext. 157







SEMCOENERGY

GAS COMPANY





Classroom Presentation

- Sponsor: Efficiency United and SEMCO ENERGY Gas Company
- Where to use this presentation: UP, Dowagiac
- Job Code: EU-SEMCO
- Uniform: One presenter in SEMCO ENERGY Gas Company shirt and NEF badge, other in NEF shirt and badge, dress slacks or khakis and closed shoes.
- Super important note: some schools will not get LED bulbs in their kits. These are noted by the program designation EU-SEMCO NL on your schedule.

Remember, stick to this script!!













































Experiment Time

How can we make a human circuit? What happens when paper is put into our circuit? What happens when foil is put in our circuit?
































turn off the lights.



















































Name Michigan's primary resource for generating electricity.



The Length of an Energy Efficient Shower



Save electricity by turning these off when you leave the room.



Melting down water bottles and using the plastic to make a shopping bag is an example of _____.





What gas heats most of the homes in Michigan?



What is a good temperature to set the water heater?



Which water temperature setting should we use most to wash clothes?





What type of light bulb uses up to 80% less electricity than incandescents?



What form of energy is found in natural gas?

Chemical Rotential Energy



What do we call it when we Think!, Talk! and Take Action! about energy?

















THINK! ENERGY Take Action Program Home Energy Worksheet Summary Report

Equipment installation: Showerhead			
Response	Frequency	Percent]
Installed	529	37%	
Will install later	646	45%	
Do not plan to install	247	17%	
Tota	l: 1422		25% 50% 75% 100%
Equipment installation: Bathroom faucet gerator 1			
	Fraguanay	Doroont	1
Installed	400		
Will install later	492	17%	
Do not plan to install	268	10%	
	1/21	1970	
1012	1421		25% 50% 75% 100%
Equipment installation: Bathroom faucet aerator 2			1
Response	Frequency	Percent	
Installed	306	22%	
Will install later	684	50%	
Do not plan to install	385	28%	
Tota	ll: 1375		25% 50% 75% 100%
Equipment installation: Kitchen faucet aerator			
Response	Frequency	Percent	
Installed	477	34%	
Will install later	579	41%	
Do not plan to install	344	25%	
Tota	l: 1400		25% 50% 75% 100%
Equipment installation: LED 1			
Besnonse	Frequency	Percent	1
Installed	689	65%	
Will install later	338	32%	
Do not plan to install	25	2%	
	1052	270	ያ 25% 50% 75% 100%
Equipment installation: LED 2		i	1
Response	Frequency	Percent	
Installed	629	60%	
Will install later	390	37%	
Do not plan to install	31	3%	
Tota	l: 1050		25% 50% 75% 100%
Equipment installation: Pipe Insulation			
Response	Frequency	Percent	
Installed	215	29%	
Will install later	370	49%	
	1 405	000/	
Do not plan to install	165	22%	

Equipment installation: Night light		-	_
Response	Frequency	Percent	
Installed	1198	84%	
Will install later	181	13%	
Do not plan to install	41	3%	
Total	1420		25% 50% 75% 100%
How do you rate the Think! Energy program?	1_	-	1
Response	Frequency	Percent	
Great	859	64%	
Good	448	33%	
Fair	31	2%	
Poor	4	0%	
Total	1342		25% 50% 75% 100%
Has participation in this program changed the way you use energy in your home?			
Response	Frequency	Percent	1
Voe	1044	80%	
No	250	20%	
Total	1303	2070	
Iotai	1505		25% 50% 75% 100%
What is the main source of heat in your home?			_
Response	Frequency	Percent	
Natural gas	766	58%	
Electricity	257	19%	
Other fuel or unknown	307	23%	
Total	1330		25% 50% 75% 100%
In winter, now much will you turn down your thermostat to save on heating?		.	1
Response	Frequency	Percent	
1 - 2 degrees	350	27%	
3 - 4 degrees	481	36%	
5+ degrees	190	14%	
Will not adjust thermostat	297	23%	
Total	1318		25% 50% 75% 100%
In summer, how much will you turn up your thermostat to save on cooling?			
Response	Frequency	Percent]
1 - 2 degrees	298	23%	
3 - 4 degrees	348	27%	
5+ degrees	174	14%	
Will not adjust thermostat	455	36%	
Total	1275	00/0	
10141	1210		23/0 30/0 73/0 100/0
How many LEDs were you using before this program?			-
Response	Frequency	Percent	
None	187	21%	
1 - 10	468	51%	
11 - 20	152	17%	
21+	102	11%	
Total	909		25% 50% 75% 100%

What was the flow rate of your old showerhead?

Response		Frequency	Percent	
0 - 1.0 gpm		39	3%	
1.1 - 1.5 gpm		76	6%	
1.6 - 2.0 gpm		122	10%	
2.1 - 2.5 gpm		72	6%	
2.6 - 3.0 gpm		42	3%	
3.1 gpm +		45	4%	
Did not test		857	68%	
	Total:	1253		25% 50% 75% 100

How is your water heated?

Response		Frequency	Percent	
Natural gas		683	55%	· · · ·
Electricity		396	32%	
Other method		174	14%	
	Total:	1253	•	25% 50%

Did you adjust your water heater setting? (eu-dte only)

Response	Frequency	Percent	
Yes	186	27%	
No	514	73%	
Total:	700		25% 50% 75% 100%

How much did you lower your water heater setting?

Response	Frequency	Percent		
1 - 5 degrees	144	26%		
6 - 10 degrees	54	10%		
11+ degrees	12	2%		
Did not adjust setting	352	63%		
Total	: 562		25% 50% 75% 1	00%

How easy were the kit and products for you and your child to install and use?

Response	Frequency	Percent	
Very easy	753	61%	
Somewhat easy	427	35%	
Somewhat difficult	48	4%	
Very difficult	9	1%	
Total:	1237	-	25% 50% 75% 100%

Would you like to see this program continued in local schools?

Response	Frequenc	y Percent	
Yes	1229	97%	
No	36	3%	
То	tal: 1265	·	25% 50% 75% 100%

Have you visited the Efficiency United website?

Response		Frequency	Percent				
Yes		26	20%				
No		104	80%				
	Total:	130		25%	50%	75%	100

Send information on other programs.

Response	Frequency	Percent]
Yes	179	12%	
No	1263	88%	
Total:	1442		25% 50% 75% 100%
Who is completing this form?			_
Response	Frequency	Percent	
Parent/Guardian of student	90	15%	
Student with parent/guardian help	66	11%	
Student at home	17	3%	
Student at school	262	43%	
Transcriptionist, from paper scan form	180	29%	
Total:	615	-	25% 50% 75% 100%



Program Evaluation - THINK! ENERGY Take Action Program

Educators' impressions of the program from 21 educators.

	Excellent	Good	Fair	Poor	25%	50%	75%	100%
Materials	18	3	0	0				
Kits	19	2	0	0				
Student engagement	16	4	1	0				
Content	17	4	0	0				
Program overall	17	4	0	0				

Was the educational mini-grant a good incentive to participate in the program?





What additional activities did you or will you use from the Teacher Guide?

The activity book had ideas in it that I will use in the classroom. Not sure - we switch for science - so the science teacher will do that I will be covering all of the topics that were discussed during the presentation, this year. I don't teach science so the other 4th grade teacher may use it The Search for Energy I will cover making circuits and energy conservation with your materials and my text later in the school year. additional activities will be completed in science Water usage Energy Transformations and Electric Circuits I have continued to teach about the different kinds of energy When I review energy later, I will find some activities to use. I especially liked the human circuit we made with the circuit tube, paper, and aluminum foil. I will look for interactive activities like that. I also will revisit the survey the students took. I will use the presentation to supplement the units when we get to energy! We made circuits I will use many of them, and those from the summer workshop when I teach about energy after the holidays.

The wall charts!

The posters and some of the lessons as extensions for my teaching.

Energy Transformations and Electricity and Circuits

What would you tell other teachers about the program?

I would tell them to sign up for this program each year!!!
yes
Yes
yes
It was eye opening for both the students and myself.
This program engages students in meaningful learning that they will embrace.
great program
to do it
Was a good was to introduce energy conservation
Sign up!!
It is a great program to help kids see how to save energy and to start thinking about it.
This is a great program and lines up with objectives. It includes discussion, video, and interactive activities.
I would tell other teachers that this program is very student focused and engaging. It is beneficial for students at all levels.
It's engaging and the students love it.
A great opportunity!
yes
The program teaches a great science lesson.
It's a great program, minimal effort on teacher part, great incentive to participate.
It is a fantastic program that ties in with our curriculum and helps students understand the importance of energy efficiency.
It is a great way to introduce Energy or build on energy. The presenters have been AMAZING every year.

What would you like us to tell the program sponsor about the program?

Thank you for sponsoring this program. Students were so excited to take the kits home and talk to their parents about saving energy!! Many of them even installed parts last night! A grandmother came into the school this morning raving about her son taking a 5 minute shower for the first time ever! This is a great program to help students learn about energy. We enjoy the program every time they come. The students really enjoy everything that is discussed. Great job, keep it up. As a teacher, I truly appreciate this opportunity for my students. The funding for the presenters and materials is money well spent. This is a very good, informative program. The family kits are great. they did a great job This is a fun way to get students involved in saving energy and being able to talk about it with their families. Keep it going!! Thank you for bringing this program to school Keep the program lined with the state objectives and provide a variety of methods like this one had. I would tell the sponsors to keep up the funding because science is a subject that needs much focus now days. Thank you for sponsoring Think Energy - the program and kits are wonderful! Very well done and worth it program! Thanks for bringing awareness of resources and the need for conservation to our students and families. KEEP THE PROGRAM GOING THE STUDENTS LOVE IT! Thank you! This is a fantastic program that ties in with our curriculum and helps students understand the importance of energy efficiency. This program helps students get their families involved in their learning and real life energy

efficiency. Please continue to support the program. The kids love it!!

Additional comments and recommendations:

As always, your presenters know how to engage the students and are great to have come visit!

GREAT program each year!

Thank you for the great incentive! Thank you so much!!!

Thank you to everyone involved for bring this program to the schools.

The presenters did an amazing job!

The presenters we had were terrific. The students connected to them and were really listening. If updates occur, it would be great if we knew about them. Thank you.

We love our presenters! They were excited to work with students and were helpful to us teachers as well! Thanks, again!!!

Parent Feedback Summary

Favorite aspect of the program or suggestions for improvements.

I think it is great to get kids and parents involved and to learn how to be more efficient.

I think that it is a great thing.

Nice to see the kids get excited.

I like that you are making students aware especially since kids are always leaving lights on and taking very long showers.

Great program!

I think this a freat way for families to learn together on saving.

Good to revisit energy efficiency ideas; new items are available you may not know about.

Great Program!!

The kids really liked getting the box.

We also plastic our windows during winter

Thank you!

Very good program to get the students involved!

I think it's a very good idea to help make people more aware of how easy a difference can be made with a few small changes.

I think this is a good program to teach kids!

Maybe a log for 30 days so they can see the difference in energy use.

I think it's a great idea to excite our children on energy savings.

Great program - need 2 nightlights in each kit!

very informative for kids!

its a great program

my daughter really enjoyed the program

The speakers were dynamic and captured students' attention.

i like it

Great program!

More LED's would help.

We didn't use the provided pipe insulation in the kit-although we do use pipe insulation throughout our house.

My daughter had a great time helping install new bulbs, faucet aerators and nightlights. Thank you so much for these useful products.

Keep up the good work, awareness brings about change.

Great Program!

Our son was very excited about all the items in the kit.

This was an amazing idea to give children and families an opportunity to discuss saving energy.

Thank you, it was really neat to do.

Great at getting kids to think about energy consumption.

Great program that got us thinking about our energy use and making some changes.

Most of our electric is solar-no option to check that out.

Think this is great! Please continue this program.

My favorite was the timer for the shower.

My son loved coming home and sharing his knowledge and his box.

This is a great program to educate our children on being observant width Energy Efficiency.

The shower timer has been great. The kids love beating the clock.

Some equipment seems wasted. I wish we could select which items to receive-Our faucets are not compatible.

It gets young minds thinking about energy & conservation.

Everything I have is energy efficient except my hot water and dryer. Maybe more rebate forms from all energy companies.

I think this is a great program for kids.

This is a great idea!

Awesome!

Have people return what they don't use or install elsewhere so it doesn't become waste.

Awesome!

Great Program!

Awesome!

Good idea.

Love it!

I love energy. I want to save it too.

I wish there was more information about what this was & why it was sent home.

I use plastic for some windows, helps a lot.

I think it's a great way for kids to understand conserving water, electricity, etc. My son learned some great information!

It was very very good.

My older son brought the kit home last year, so some of it was installed already.

Very neat idea on how to show people different ways to save energy.

Great idea. Favorite part was the showerhead & kitchen sink aerator.

Thank you!

I think it was a very good program for the students. I think the program was very informative and educational.

Amazing program.

My daughter enjoyed the education and using the kit at home.

My kids thought this was awesome!!

My favorite part was the energy stick! It was fun to hold and work with.

It is awesome. We love it!!

My son couldn't stop talking about it. Very excited.

I shared the shower head with my family.

It got me a way to think about saving energy.

Very good way to teach kids. My child has used the shower timer every night!

Very cool! Nice to get the kids involved and thinking.

I think you did good. :)

I thought it was amazing! We swapped out some light bulbs and they are the brightest LED light bulbs we have.

Thank you for all you have done.

Thank you for what you have done.

What a wonderful program :) It's great to teach children about this!

I loved that it got my son thinking about energy usage in terms of saving money.

Great way to get the kids involved in energy conservation. My son really enjoyed sharing what he learned.

I think it's a great program! :)

It was great!!

I enjoyed going over the kit with Gracie.

Great way to teach children how to save energy!

I think it's a good idea it will save people money

What an amazing program! Thank you!

Not currently living where we could change etc.

Good program to learn about saving energy and making sure we have supplies available to conserve.

Thank you for providing knowledge to the students.

More night lights

Brooklyn came home very educated and excited about the program.

Loved receiving all the products and helping my son install.

My fav thing is the shower head

I think it would be great to give more presentations to other schools it really made a great difference in our home.

good

I am so glad that you let us took home our own kits so we can save energy THANK YOU!

Awesome program! Thank you for coming and sharing your enthusiasm for conserving energy

The money used to pass out the kits could go towards lowering my electric bill.

The Think! Energy program was a great experience. I suggest going to other local schools!

Favorite idea was the five minute shower timer.

Amazing!

I loved the energy stick!! It was super cool!!

cool

The best presentation

I had all the stuff before the program bc my dad works at dte

It would help the other parents in other school.

The led lights

Love the shower timer, great idea. This is something the students can use to save energy. As well as the stickers to remind the students to be more attentive to saving energy.

think the program is good and the products are great.

More light bulbs

to personal for the school to know what all in my house

Making kids cognizant of energy usage and preservation.

The faucet aerators and shower head did not fit our faucets or showers. We have a touch faucet in the sink and we were not able to use it.

I think its a great idea. Everyone should conserve energy.

Fittings did not match faucets, could not use

Items not used was only due to already having similar products in place

I think it's awesome, because it helps with energy and it helps with keeping people healthy.

Great program!

We already use all energy saving products as much as we can.

Thanks for help showing kids to get involved and to understand more about energy.

This is a great program to help teach kids how to save energy.

Really got my daughter to think about energy before this, she didn't think at all about it.

l liked it.

Great program!

lt was fun.

Made energy adjustments years ago.

They rock. They rock.

I think this was a great way to help the kids learn more about how they can help save energy.

The graph on page 8 doesn't match the text

I love that this program is teaching young kids to save energy and water

Thank you!

I like the nightlight

I liked the LED light the most

Our daughter has been so excited about this program, everything she learned and everything she brought home. We are currently remodeling aspects of our home and can't wait to use the items received! Thank you.

The showerhead is very relaxing and it was very helpful and it saves water too.

My favorite aspect is the saving money and energy.

Thank you these kits are wonderful for our homes and the learning of children.

Thank you for the energy saving equipment

I thought it was very interesting to see the water efficiency of the aerator and faucets we already use.

Thank you! I love that you're teaching our kids about this.

Keep up the good work

Experiments

Loved the program. Great science stem lessons

Great program!

I think this is a great program. I only wish we could have natural gas provided to more homes (like mine)!

Thank you.

Great program- We just moved so have not had time to check kit out, but we will soon. I love that kids are learning about this.

We rent an apartment so we're not able to use stuff.

I really needed a new nightlight and now I have one.

His great to get people thinking and using smarter product choices. We had already made many of these changes already.

I think this program is wonderful and it gave our family the tools and information necessary to think about our energy consumption.

I like that it makes the children think how much energy is used and what can be done to decrease usage.

This is a great program. I hope it continues.

We have already tried to maximize efficiency in our home.

I think it's great to show our kids how important it is to conserve energy.

Got the kids thinking and understanding why the adults do things.

Chloe liked the new things to install. She and her dad enjoyed the shower head and faucet heads, and her little sister loved the nightlight.

We are now timing our showers. It's a challenge (like a fun challenge) but has helped us all be more conscious.

It is a great activity to do at home as a family & come up with new ideas of how to save energy.

We have already tried to maximize efficiency in our home.

Good conversation with child on energy saving. Thank you!

Really enjoyed when you had the light bulbs in yrs. Past, but the shower timers are real eye openers for everyone in family. Maybe teach more about the benefits of turning lights off when leaving a room or include one of those cool little light switches.

I love the nightlight. I think it's a great idea. (Addison)

The faucet heads worked good.

More stickers for the light switches.

Thank you very much for giving us tools to conserve energy & save money.

Faucet aerator doesn't fit on faucets.

It's a great program. Karlie had fun helping and was proud to bring it home.

Great program.

Thank you!! :)

We are very conscious of our energy conservation in the household. We have energy efficient appliances and keep our thermostats below and above the recommended for efficiency. This is a great program. If you met her dad, you'd understand why we won't be using the items we received as we already use similar products.

I think this is a good program to teach kids to conserve energy

Think! Energy is a good program because students can visualize energy usage and have a better understanding of how to save it.

We have already tried to maximize efficiency in our home.

Made me rethink my usage

This is a great program and I hope it continues in the school.

Good program for schools! Hope they continue to teach energy tips.

I like the idea of working with children at a young age

Great idea! Would be great to see them get the kids involved to develop new ideas of how they can save energy/resources.

Thank you for making my student understand importance of conservation.

We already use many of these water saving measures.

We just purchased new faucets and showerheads so that is why we are not installing the new pieces.

Learned how to save a lot of energy.

Good Program

Very good program!

this is a very great way to save money for your water, electricity, and save hot water.

great job

We are renting and don't have tools to be able to do it. Sorry

Efficiency box should be given out on Friday so we have the weekend to work on.

What a thoughtful and useful kit. Thank you!

Shower head would not work in our bathroom, would point at ceiling

You rock. Think energy.

My daughter was very excited to share her knowledge of energy efficiency with her family. This program is valuable because our children are learning about energy and our environmental responsibilities. Thank you.

My daughter was so excited; it was a great way to get involved.

Probably should sea the kit before giving to students, so they are less apt to play with everything.

Very neat project! Electrical energy saving would be great (additional to this kit).

Going to put in after we replace the sinks.

This is great program. We have used a program like this is the past and practice what we did then now.

Thank you

* Add furnace filter whistler, tells you when filter is full

Great program - hope it continues.

Great program.

We will install soon, we are waiting to move into our new home.

We have well water. LEDs are great.

It's fun for the kids and they really learn a lot! We've had two kids experience this program and have both talked about the need to conserve energy. It's great!

I like Think! Energy because it teaches you how to make and use energy.

Knowing how to use energy.

I love the kitchen sink aerator!

Enjoyed the presentation

Thank you for supporting this program to remind us the importance of discussing this with all members of our family.

Make the nightlight brighter. Thank you!

Actually nice that we can lower bills.

Giving some items to a neighbor on a budget.

Thank you for the items.

Thank you for sharing this program with our family.

Need more time between receiving and survey.

Great idea thank you.

Great program hope it continues

This is a great idea although we already have low flow faucets. We hoped that the aerators provided could be returned and used in other kits.

Great learning for kids to start learning to conserve.

Makes the kids think about turning off the lights, shorter showers etc.

I think you should send the kits home when you send the worksheet. It would make things easier.

This was a great program.

Thank you!

I think it's a great program and learning for children.

Saving energy with less water is good, however we as a family already practice energy savings. Solar power would be nice too

Would like to see more promotions like this to help others be informed on ways to save money on electricity

The program was great!

Thank you!

Awesome! Very helpful!

My son came home very excited about and loved the program. He was eager to share what he learned.

We did not have a use for this kit as we have already addressed these things. If will be donated if possible

Great program!

Thank you for teaching the students about conserving energy and providing this program!

This program is a great experiment with my child. She's very intrigued on how all the items in our house are powered by electric and gas.

Love the program

Great home kit!

We miss the hand cranked flashlight. Also how about a motion sensor LED light. Thank You!

This is a great program, very informational

I think they could make it easier.

Great idea to teach kids about conserving energy.

Shower head was cool.

My daughter thought it was fun learning about energy conservation. She enjoyed teaching us about the products as well. What a great program!

Very good program!

I loved it all!

I really liked the shower head.

Thank you very much!

Daughter really enjoyed this.

I try to use LEDs for all lights. Electric h2o heater with pump.

Thank you -Autumn is very excited about it!

I love that teaching the importance of saving water is a priority.

Kids like me with split home should get two kits.

It was fun and I learned more.

Great program!

Getting ready to move so will be taking the kit with us.

Kids thought it was fun to measure the usage to determine the better options. Made them aware of energy being used.

Great idea to haave kids and adults talk about energy conservation

Kitchen sink aerator end was not compatible to my sink

Our aerator used less water that what came in the kit

I think this program is an excellent idea. It not only helps families but it teaches children to save on energy.

Nice idea, but we already have water saving shower heads

Why do you give everyone a kit

I like the showerhead

I don't think anything needs improvement, it was awesome

Awesome program for students and families!

Great ways to save energy and to get kids into learning ways to save energy!

You guys are awesome!

Excellent program! Gets the kids thinking to not waste water and shut off lights when not in rooms

I like the program. Smart ideas.

Thank you. What an awesome program.



