

May 1, 2020

Steve Kelly, Commissioner Minnesota Department of Commerce 85 7<sup>th</sup> Place, Suite 500 Saint Paul, MN 55101

RE: Minnesota Waste Wise: 2019 Year-End Report for the Energy Smart Alternative Conservation Improvement Program (CIP), Docket No. E, G002/CIP-16-115.03 & Docket No. G008/CIP-16-119.01

Dear Commissioner Kelly:

Minnesota Waste Wise respectfully submits the following 2019 activity report for the Energy Smart Alternative Conservation Improvement Program (CIP).

Leveraging the Minnesota Chamber of Commerce's strengths and resources as the largest business advocacy organization in Minnesota and our partnerships with local business organizations, we have made great strides in our outreach in the business community. Through this extended outreach we accomplished an increase in onsite energy consultations and verified energy upgrades for 2019.

Thank you for the opportunity to continue assisting Minnesota businesses with energy efficiency and increasing participation in utility conservation improvement programs.

Sincerely,

**Robert Friend** 

**Executive Director** 

Robert Friend

Minnesota Waste Wise Foundation



**382** site visits

 $153_{\text{upgrades}}$ 

2,870,043

kWh savec

6,135 dekatherms saved

**\$277,758.85** Year 1 cost savings



# **EXECUTIVE SUMMARY**

Energy Smart is pleased to share this summary of program activities and accomplishments for 2019, which was another year of successful energy efficiency efforts.

In 2019, Energy Smart continued its work in the business community supporting energy efficiency projects. Energy Smart conducted 382 site visits. Energy Smart is also excited to report that we increased the number of upgrades from 148 in 2018 to 153 in 2019.

We continue to benefit from our relationships with community organizations, such as Lake Street Council and West Bank Business Association, as well as utility partners Xcel Energy and CenterPoint Energy. Also, the Minnesota Chamber of Commerce and Energy Smart's sister program, Waste Wise, collectively referred 27 businesses for an Energy Smart site visit.

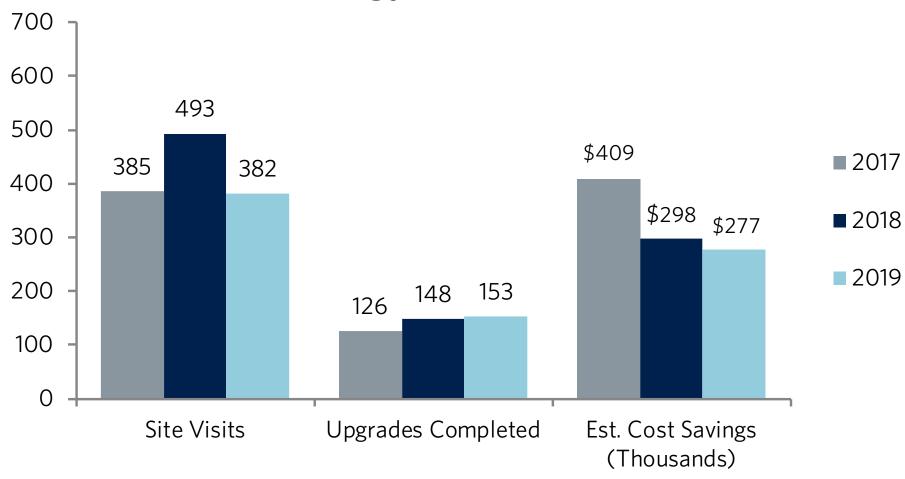
Reflecting on our 2019 results, 1,495 new contacts were made with Minnesota businesses. A total of 1,572 services were provided to businesses located in 86 cities. As mentioned above, Energy Smart staff conducted 382 site visits with 375 of those visits being Xcel Energy customers. We also conducted 221 CenterPoint Energy visits with 215 of those being Xcel, and 8 non-contract electric customers; Energy Smart generated 3,375 follow-up contacts to address barriers and help facilitate upgrades for the businesses we served. Nevertheless, we facilitated 153 upgrades in 2019—the fifth consecutive year with more than 100 upgrades.

In closing, we encourage you to read the client success stories included in this report. These narratives go beyond the numbers, and provide a true measure of energy efficiency's vital role in people's lives. We feel fortunate to be a part of this important work!

## **RESULTS**

# 2017-2019





Note: Natural gas cost-savings estimates are not included in this chart

## **RESULTS**

**Upgrades Estimated** kWh Saved

Internal **Program** 

**Upgrades Estimated Cost/kWh Dekatherms** Saved

Internal **Program** Cost/ **Dekatherm** 

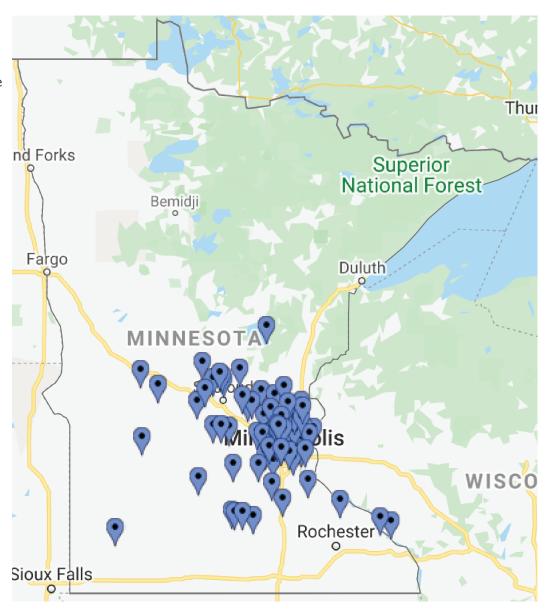


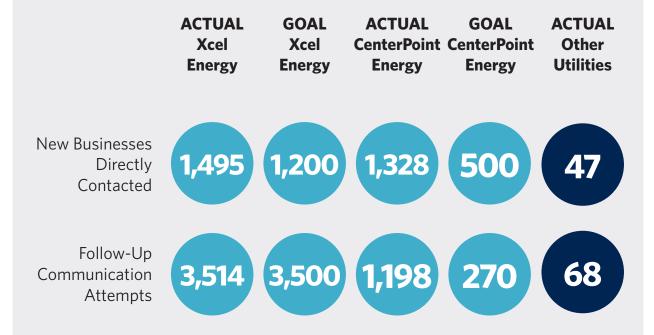
# **RESULTS**

In 2019 Energy Smart helped 521 businesses in Minnesota conserve energy. We offered the technical support that encourages clients to proceed with upgrades. We also addressed financial barriers and helped organizations receive the utility rebates for which their projects qualified.

A total of 1,572 services were provided to businesses located in 86 cities throughout the state. Minnesota Chamber members continued to receive services regardless of their service area.

Apple Valley	1	Glenwood	8	Richfield	3
Becker	1	Golden Valley	3	Robbinsdale	5
Big Lake	4	Green Isle	1	Rogers	6
Bloomington	9	Holdingford	3	Rollingstone	5
Brooklyn Center	4	Hopkins	9	Rosemount	109
Brooklyn Park	4	Howard Lake	2	Roseville	2
Brooten	3	Hugo	1	Saint Anthony	5
Cannon Falls	6	Isanti	4	Saint Louis Park	7
Clara City	1	Janesville	1	Sartell	9
Cokato	3	Jordan	4	Sauk Rapids	13
Cold Spring	4	Lake Elmo	2	Shakopee	3
Columbia Heights	4	Lino Lakes	1	Shoreview	4
Coon Rapids	4	Little Canada	1	Slayton	1
Cottage Grove	9	Long Lake	2	South Saint Paul	20
Crystal	4	Lonsdale	2	St. Cloud	48
Dassel	9	Mahtomedi	3	St. Francis	1
Cottage Grove	3	Mankato	109	St. Joseph	1
Crystal	3	Maple Plain	1	St. Paul	147
Dassel	3	Maplewood	11	St. Paul Park	3
Eagan	4	Mendota Heights	1	Stillwater	13
Eagle Lake	3	Minneapolis	744	Vadnais Heights	1
East Bethel	1	Monticello	6	Wahkon	1
Eden Prairie	8	Mounds View	5	White Bear Lake	14
Eden Valley	1	New Brighton	10	White Bear Township	5
Edina	15	New Hope	3	Winona	12
Faribault	13	North Mankato	21	Woodbury	10
Foley	1	Oakdale	5	Wyoming	4
Forest Lake	11	Plymouth	13	Zimmerman	2
Fridley	10	Prior Lake	2	Zumbro Falls	4
Gibbon	2	Ramsev	1		





## OUTREACH RESULTS

Energy Smart made new contacts with 1,495 businesses in 2019. This was comparable to our 2018 contacts. Energy Smart continued its strong partnership with the Xcel Energy Business Solution Centers (BSC) in Wisconsin and Colorado, handling 73 referrals from the BSC and visiting all of the businesses referred. Energy Smart also worked with Xcel Energy on their Partners in Energy program which resulted in 31 visits. Energy Smart also worked with businesses in the City of Minneapolis through its E-TAP program. We completed 36 site visits which resulted in 6 upgrades.

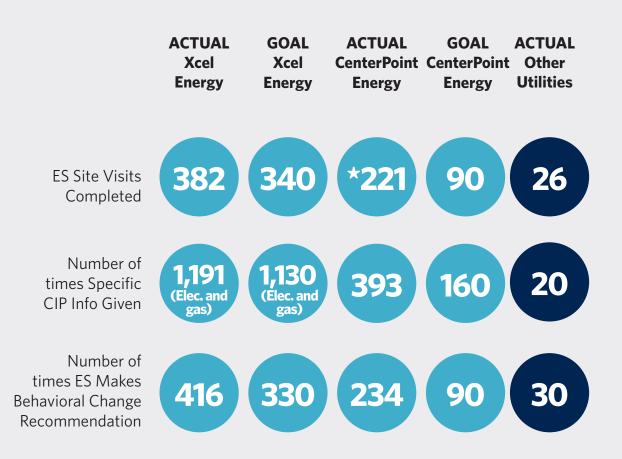
The program continued to work with a professional call center to schedule site visits. In 2019, we continued to reach the most people by means of our direct call center efforts. We conducted 88 site visits 2019 and completed 16 upgrades. The Minnesota Chamber of Commerce and Energy Smart's sister program, Waste Wise, collectively referred 27 businesses for an Energy Smart site visit that led to 11 upgrades.

### SERVICE RESULTS

In 2019, Energy Smart staff conducted 382 site visits. The program exceeded the Xcel Energy site visit goal by over 40 visits for 2019. Energy Smart staff continued the strategy of identifying all opportunities at each business we visit, provide a written summary to the business of all energy efficiency opportunities, and recommended one to three of these opportunities for immediate action. Site visit follow-up also continued in an effort to keep businesses engaged and encourage implementation.

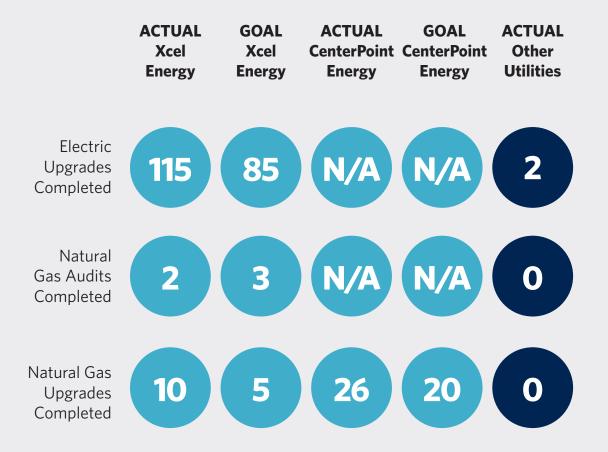
Energy Smart's data show that, on average, 4 CIP services were provided to each business visited. The top five service areas in 2019 were: lighting rebates, cooling efficiency rebates, heating efficiency, the CEE One-Stop program, and the Saver's Switch program. Staff also referred 54 businesses to CEE's commercial programs, 25 businesses to Xcel Energy's Turn Key program\*, and 1 business to the CenterPoint Energy's Natural Gas Energy Analysis program.

(\*Businesses referred to the program, not completed audits)



Of the 1,191 times that specific CIP information was given on Xcel Energy visits, 1,048 were related to electric and 143 were natural gas.

<sup>\*</sup> Of the 221 CenterPoint visits, 215 were also Xcel Energy electric customers, and six were served by an electric utility not under contract with Energy Smart.



# UPGRADE RESULTS

For the fifth year in a row, Energy Smart facilitated more than 100 upgrades. Energy Smart staff verified that 153 upgrades were confirmed by utilities. Thirty-six of the confirmed upgrades were natural gas and 117 were electric. These upgrades yielded estimated energy reductions totaling 2,870,043 kWh, 6,135 dekatherms, and produced Year 1 estimated energy cost savings totaling \$277,758. In 2019, Xcel Energy and CenterPoint Energy where able to verify 100% of claimed upgrades. Energy Smart records also indicate that 68 of the upgrades were handled through the CEE One-Stop program.

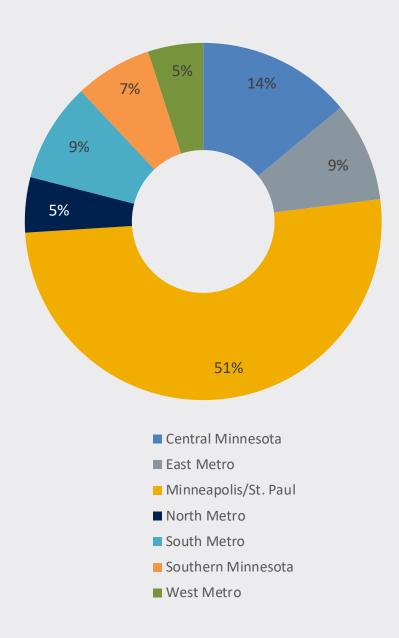
The top three areas for upgrades were lighting (79), HVAC (29), and heating (20). Project implementation continues to require significant staff effort with an average of 13.1 contacts for each business that implemented an upgrade project.

# UPGRADE RESULTS

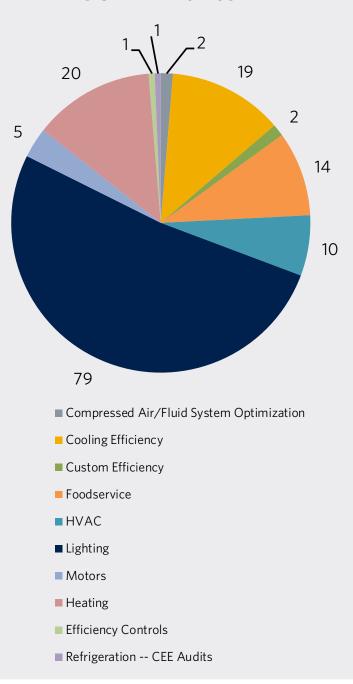
Energy Smart continues to closely track the communities where upgrades take place. The three regions with the highest level of upgrades include (1) Minneapolis/St. Paul (2) Central Minnesota, and (3) South Metro. Much of the results in Minneapolis/St. Paul are directly related to our work in Minneapolis with Lake Street Council and E-TAP program partners. We also partnered with the City of Minneapolis to administer part of the Minneapolis Green Cost Share.

In 2019, Energy Smart had a site-visit-to-upgrade conversion rate in the metro area of 42% and a conversion rate of 33% in Greater Minnesota. The higher conversion rate in the metro can be attributed to the partnership with Lake Street Council, City of Minneapolis on the Green Cost Share program and E-TAP. Our Greater Minnesota success is due to the geotargeted rebates in the Saint Cloud area, our relationship with MN Chamber member contractors, and increased outreach efforts in the Mankato area. Energy Smart is making a concerted effort in 2020, and for the 2021-2023 filing, to not only reach more businesses, but also increase our conversion rates throughout greater Minnesota.

#### **Energy Smart Upgrades by Region**



#### **Upgrades by Type**



# UPGRADE RESULTS

Energy Smart facilitated 153 verified upgrades in 2019. While the majority were lighting (53%), this was a 15% drop over 2018 results in which lighting represented 68% of total upgrades. The percentage of total upgrades categorized as heating and cooling increased by 12% in 2018 while foodservice upgrades represented 9%, in contrast to 6% in 2018.

In 2019, Energy Smart staff continued to take great care in confirming utility rebates and energy savings. For the second consecutive year Xcel Energy and CenterPoint Energy verified 100% of rebated projects that Energy Smart facilitated.

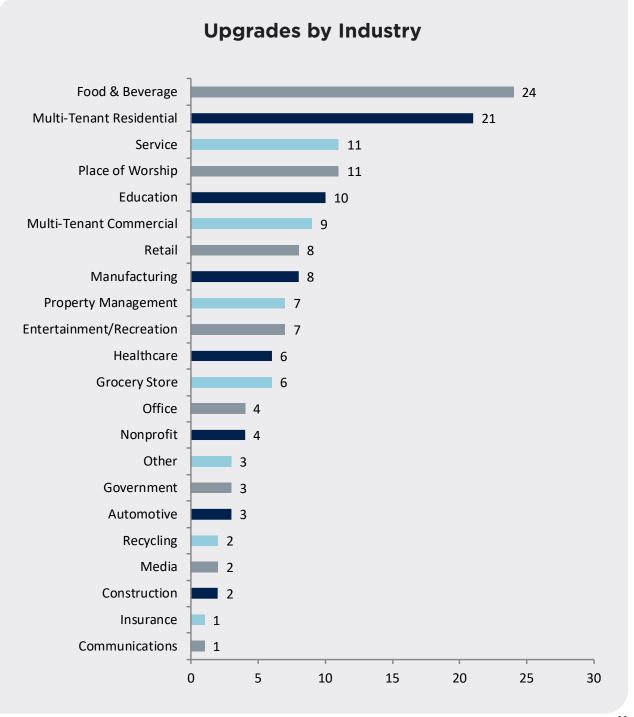
# UPGRADE RESULTS

In 2019, Energy Smart facilitated upgrades for 24 different types of industries. The top three industries were food and beverage (24 upgrades), multi-tenant mixed use (21 upgrades), and service (11 upgrades).

The site-visit-to-upgrade conversion rates differed between industries. Grocery stores continue to yield the highest conversion rate, presumably due to multiple high efficiency technology options present in that industry (i.e. refrigeration, HVAC, foodservice, lighting). Managed properties including Multi-Tenant Commercial/Residential (commercial spaces only) had conversion rates between 60 – 62%. The ability to work directly with property managers and decision makers in these industries facilitated communication and implementation on projects.

The Energy Smart sites visit to upgrade conversion rates for the top six industry types were as follows:

Grocery Store 75%
Property Management 64%
Manufacturing 62%
Multi-Tenant Commercial 60%
Entertainment/Recreation 58%
Place of Worship 58%





### **MARKETING**

Energy Smart continued to market the program through Energy Smart social media channels, the Minnesota Chamber of Commerce social media channels, web site, and publications. Energy Smart has increased its social media presence in 2019 through Twitter and other social media platforms. These platforms are used to promote utility programs, funding opportunities and energy efficiency studies. Energy Smart's sister program, Waste Wise, also continued to promote the program while conducting waste related site visits. Energy Smart and Waste Wise continue to promote the program through presentations done with local chambers, industry meetings, and other outreach opportunities.

The Minnesota Chamber of Commerce continues to endorse Energy Smart through their daily, weekly, and monthly promotional materials that are sent out to all 2,300 members. In 2020, Energy Smart is looking to add a dedicated outreach coordinator to help promote Energy Smart. Energy Smart has also created marketing materials that are sent to new Chamber members once they join the Chamber.

# **CHICAGO LAKE LIQUORS**



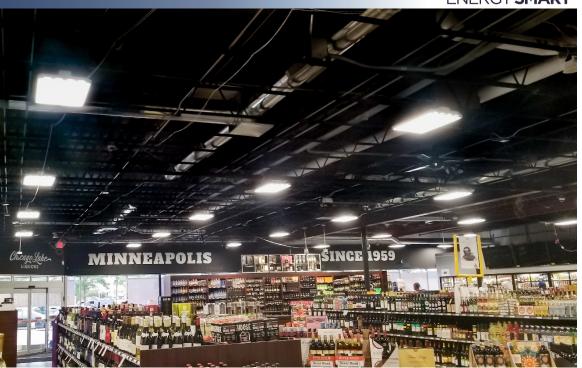
Local business owner renovated his South Minneapolis store for a new look and a smaller energy bill.

John Wolf, owner of Chicago Lake Liquors, was looking to give his store a fresh face and make day-to-day operations more energy efficient. With decades-old walk-in coolers and outdated fluorescent lighting, Wolf worked with Energy Smart to identify upgrade opportunities and capture available incentives.

Energy-saving LED fixtures replaced the fluorescents and allowed the store to cut the number of total lighting fixtures needed in half due to LEDs' higher light output. In total, the project cost \$24,970 before receiving \$6,235 in rebates from Xcel Energy, \$7,491 from Minneapolis' Green Cost Share program, and \$2,500 from Energy Smart's Business Energy Efficiency Grant program. The project will save 40,575 kWh each year amounting to about \$4,000 in annual cost savings.

To address the outdated coolers, Wolf coordinated with Xcel Energy's Commercial Refrigeration program to rearrange the layout, replace walk-in coolers, fan motors, and install no heat case doors. This project received a separate Xcel rebate of \$3,860. With energy savings of 41,356 kWh per year, Chicago Lake Liquors will save thousands in refrigeration costs.

Wolf has already seen his electric bill drop by about \$1,000 a month. "Energy Smart helped me through each step of this process and showed me the virtues of the program and energy savings...and it came to fruition."



- 81,931 kWh saved annually
- 14 kW in demand reduction
- \$12,000 in first year cost savings
- \$20,086 in grants and rebates

## **DEM-CON COMPANIES**



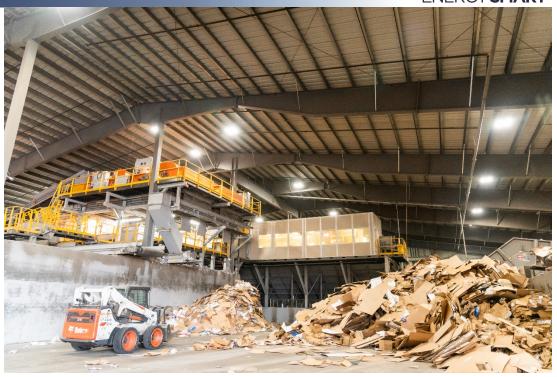
New LED lighting in Material Recovery and Construction & Demolition recycling facilities leads to higher employee satisfaction and energy cost savings.

As a leader in the waste handling industry, Dem-Con Companies is always looking towards the latest technologies to improve their process and streamline their operations. With over 65 employees and 12,000 tons of material passing through their Materials Recovery Facility (MRF) and Construction and Demolition (C&D) operations each month, it's essential to provide the best lighting for employees.

Dem-Con reached out to Energy Smart for help navigating rebate programs and coordinating efforts with utility representatives at Minnesota Valley Electric Cooperative for new LED lighting upgrades. Lonnie Pauly, Director of MRF Operations recounts his experience: "The process was very smooth. Energy Smart helped us navigate through it all and made it very easy to understand the ins and outs of the process. It was a pleasure to work with everyone from Energy Smart."

Employees were also pleased with the new lighting with Lonnie noting, "It made the environment safer and more enjoyable to work in, and seemed to improve the moral of the employees walking into a fresh-looking work environment.

The lighting projects received utility rebates totaling \$7,132 and funding from Energy Smart's Business Energy Efficiency Grant program for \$6,712. Dem-Con anticipates an annual costs savings of over \$14,000 and an annual energy savings of 149,862 kilowatt hours.



- 149,862 kWh saved annually
- 27 kW in demand reduction
- \$14,000 in first year cost savings
- \$13,844 in grants and rebates

## **DINOSAUR PROPERTIES**



Mankato property owner replaces prehistoric HVAC system with new, efficient equipment.

In the fall of 2019, Energy Smart conducted site visits in the Mankato area to help local business owners increase their awareness of energy usage, conservation, and possible energy efficiency upgrades. Tom and Karen Rekstein, owners of Dinosaur Properties, had aging HVAC equipment in their office building and were interested to see what Energy Smart had to offer.

After an initial assessment, Tom and Energy Smart decided to focus on the building's furnace and air conditioning units. Leveraging almost \$6,000 in utility rebates and grant dollars from Energy Smart's Business Energy Efficiency Grant Program, Tom completed the work for about \$12,000. While the project's focus was replacing old equipment nearing the end of its product life, the new and more efficient HVAC equipment will help the Reksteins see an estimated savings of 7,000 kWh of electricity and over 30 dekatherms of natural gas per year.

"All the people from the Energy Smart program were great to work with; they calculated costs, grants, and rebates and communicated to us what we could expect our final cost to be. With that information, we were able to make an educated decision on the HVAC systems."



- 7,000 kWh of electricity saved annually
- 1.976 kW in demand reduction
- **30** dekatherms of natural gas saved annually
- \$6,000 in grants and rebates

## **GROUND ROUND**



#### Winona Ground Round reveals deep fryer savings.

Tim Beier of Ground Round in Winona connected with Energy Smart in 2018 through Xcel Energy's Partners in Energy program. With many energy efficiency projects to consider, Ground Round looked to Energy Smart for guidance on which projects to prioritize.

Energy Smart, with the help of Xcel, determined cost savings would be significant if the restaurant replaced four inefficient fryers with ENERGY STAR®-rated models. Efficient fryers use a convenient oil-filtration system, allowing oil to last longer as well as making the disposal process easier for staff. "I was very happy to have an energy consultation and given the opportunity to see the savings on our fryers," said Beier. "Upgrading the flyers alone would save over \$4,000 per year, and we are saving fuel and using less cooking oil."

Xcel offered a rebate of \$1,000 for the four fryers, but to bring the project to fruition, Ground Round was able to secure an additional \$2,500 from Energy Smart's Business Energy Efficiency Grant Program. The grant motivates businesses to complete projects that would not otherwise be implemented without additional incentives.

"We were able to purchase a two door cooler with the rebate money we received. Overall, we have been extremely satisfied working with Energy Smart."



- 672 dekatherms of natural gas saved annually
- **\$4,334.40** in first year cost savings
- \$3,500 in grants and rebates

## **LUPULIN BREWING**



# Lupulin Brewing taps into energy efficiency rebates for expansion.

During an Energy Smart outreach campaign in Big Lake, Minnesota, Lupulin Brewing picked up the call. The timing was perfect as the brewery was in the beginning stages of expanding into their 22,500 square foot facility and increasing their brewmaking capacity from 3,500 to 30,000 barrels (bbls).

After hosting Energy Smart for an on-site consultation and receiving recommendations for possible energy efficiency measures, the brewery's Facilities Manager Rick "Ranger" Freese enrolled in CenterPoint Energy's Natural Gas Energy Analysis program and filed for both Xcel Energy and CenterPoint rebates. "Energy Smart was very helpful in securing rebates and providing updated details on available grants."

Since beginning the expansion, Lupulin Brewery has received nearly \$7,000 in utility rebates to support new LED fixtures, HVAC systems, a high-pressure steam boiler, and variable frequency drives. Overall, the projects are expected to save \$6,092 in utility costs annually with 32,759 kWh saved on electric and 694.14 dekatherms saved on natural gas. With additional efficiency projects on the horizon, the brewery's expansion ensures both long-term success and a steady supply of beer.



- **32,759** kWh of electricity saved annually
- **6** kW in demand reduction
- 694.14 dekatherms of natural gas saved annually
- \$6,092.10 in first year cost savings
- \$6,956.17 in grants and rebates

## **STARR AUTOMOTIVE**



# Independently-owned auto shop uncovers custom solution for energy savings.

In 2014, the Lake Street Business Council (LSBC) connected Minneapolis auto shop Starr Automotive with Energy Smart for help in identifying energy conservation opportunities. After working together to successfully secure rebates for an LED lighting upgrade back in 2015, Starr Auto reconnected with Energy Smart again in 2019, this time to replace a failing compressed air vehicle lift with a safer and more efficient in-ground electric hydraulic system.

Since the scope of work for a project like this does not fall within the categories of prescriptive rebates offered by Xcel Energy, Energy Smart worked hand-in-hand with the utility's Business Solution Center to acquire pre-approval for a custom rebate. After getting pre-approval from Xcel, Starr then applied for funding through Energy Smart's Business Energy Efficiency Grant program and the City of Minneapolis' Green Business Cost Share program — additional incentives available to cover project costs. In the end, the auto shop was able to fund nearly a third of the project's cost through bundled incentives, and the new in-ground system is expected to save Starr Auto \$655 annually.

"At the end of the day, I only had to sign off on the paperwork, and Energy Smart assembled the necessary information for the incentive funding."

– Jerry Starr – Owner





- **5,427** kWh of electricity saved annually
- 2.01 kW in demand reduction
- \$655 in first year cost savings
- \$32,406 in grants, rebates, and incentives

### BUDGET

The Energy Smart budget for 2019 is displayed on this page. The program completed the year on budget.

Below are several notes related to the budget.

- (1) Includes delivery of Energy Smart outreach and program services.
- (2) Fee retained by utility for administration costs associated with the Energy Smart program.
- (3) Expenses associated with continuous evaluation of Energy Smart program.
- (4) Includes delivery of marketing and public relations efforts promoting CIP and energy efficiency to businesses.



#### **ENERGY SMART STAFF**

Robert Friend Executive Director

**Chris Rustad** Program Manager

Patrick Deal Senior Energy Efficiency Specialist

**Kevin Zickert** Energy Efficiency Specialist

Michael Atkinson Energy Efficiency Specialist

#### **PROGRAM FUNDERS**







## CONCLUSION

At Energy Smart, we're honored to be helping the Minnesota business community to thrive. We look forward to doing even more in the year ahead.

We encourage sustainability and energy efficiency by offering individualized consultations and recommendations tailored to the business's needs. Through our broad experience with commercial energy efficiency and understanding of utility offerings, we are able to guide customers to the most promising energy-saving opportunities for their business. We work with large or small businesses with a focus on the for profit industries. We do this by providing businesses with resources, data, advice, financial assistance, and encouragement. Energy Smart's Business Energy Efficiency grant program is one way we assist businesses to get work done. This program helps businesses that are struggling financially to make the energy efficiency changes that would otherwise not have been possible. The ability to invest now in energy savings is a challenge for many businesses.

We help drive energy efficiency by steering businesses towards smart investments that will hopefully lead to more profitability. Energy efficiency is good business.

It has been a pleasure working with so many organizations in their energy efficiency work and an honor to support the Minnesota business community, and utilities, in achieving their energy efficiency goals

### 2019 Energy Smart Program Summary -- Xcel Energy & CenterPoint Energy

	Xcel Energy-	<b>Xcel Energy-</b>	Xcel Energy-	Xcel Energy-	<b>Xcel Energy-</b>	Xcel Energy-			Xcel/CPE
	elc	elc	gas	gas	gen	gen	CenterPoint	CenterPoint	overlap
	goal	actual	goal	actual	goal	actual	goal	actual	n/a
Program Delivery					\$377,688	\$377,688	\$70,000	\$70,000	n/a
Utility Administration					\$21,062	\$21,062	\$875	\$875	n/a
Eval, Labor & Expenses					\$0	\$0	\$0	\$0	n/a
Ad & Promotion					\$22,500	\$22,500	\$2,200	\$2,200	n/a
Incentives					\$0	\$0	\$0	\$0	n/a
Other					\$0	\$0	\$0	\$0	n/a
Total Budget	\$402,750	402,750	\$18,500	\$18,500	\$421,250	\$421,250	\$73,075	\$73,075	n/a
Attributed Energy Savings									
(kWh/Dth)		2,720,181		1,715				4,420	n/a
	r	Т	Г	_					
Contacted					1,200	1,495	500	1,328	1,314
Follow-up					3,500	3,514	270	1,198	638
Site Visits					340	382	90	221	215
Info Given	980	1048	150	143	1,130	1,191	160	393	48
Behavioral Recs					330	416	90	234	211
Upgrades	85	115	5	10			20	26	1
Audits		20*		4					0

<sup>\* 12</sup> CEE One-Stop Lighting, 1 Xcel Commercial Refrigeration, 7 Turn Key audits

	Triennial	Utility	EnergySmart
	Decision	Status Rpt	Status Rpt
Xcel Energy-elc	\$402,750	\$396,665	\$402,750
Xcel Energy-gas	\$18,500	\$17,927	\$18,500
Xcel Energy-total	\$421,250	\$414,592	\$421,250
		1% under	
CenterPoint Energy	\$73,075	budget	\$73,075



#### Minnesota Chamber of Commerce

# **ENERGY SMART**

This report was submitted by the Minnesota Waste Wise Foundation on May 1, 2020.

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