

An Energy Action Plan for Faribault, Minnesota



April 11, 2017

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Executive Summary

Plan Purpose Statement

This Energy Action Plan supports the values and strategic priorities outlined in Faribault's Vision 2040 by proposing cost-effective strategies to conserve energy and resource clean energy.

The City of Faribault's Energy Goal

Reduce community-wide energy expenditure by 1% annually from business as usual (2015 baseline). By 2040 this is estimated to save Faribault residents and businesses over \$8 million a year, with accumulated savings of over \$100 million.¹

Near-Term Actions

Between 2017 and 2020 the City of Faribault will prioritize three focus areas to promote electricity and natural gas conservation. These focus areas aim to increase economic vitality by reducing unnecessary spending on energy bills. Energy focus areas A, B, and C are summarized in the charts below.

Focus Area A: Decrease dollars spent on energy in the residential sector.			
OBJECTIVES	Educate Faribault residents on energy efficiency programs and behaviors using trusted messengers. Empower Faribault residents to better understand their energy and energy use. Encourage all households to participate in energy efficiency be that will reduce unnecessary spending on energy bills.	y bills	

¹ Based on planning scenario modeling (See Near-Term Focus Area Impact).

What is annual versus accumulated savings? Let's say a Faribault resident replaced incandescent lightbulbs with LEDs on January 1, 2017. By January 1, 2018 the new bulbs saved them \$20. Three years later (in 2020), the annual savings would still be \$20, but the accumulated savings of that one light bulb would be \$60. Now, if a neighbor installs an LED bulb on January 1, 2018, the total annual savings of the two bulbs is \$40. In 2020, that annual savings is still \$40, but the accumulated savings is \$100.

Focus Area B: Decrease dollars spent on energy in the large commercial and industrial sector.

	a)	Increase opportunities for businesses to discuss energy efficiency projects and opportunities with peers.
OBJECTIVES	b)	Provide key decision makers with tools to make informed decisions around energy efficiency projects.
	c)	Recognize businesses for being energy efficiency leaders in the community.

Focus Area C: Decrease dollars spent on energy in the government and institutional sector.

	a)	Use prominent buildings in the community as models for energy efficiency.
OBJECTIVES	b)	Increase opportunities for facility managers to discuss energy efficiency projects and opportunities with peers.
	C)	Provide key decision makers with tools to make informed decisions around energy efficiency projects.

Long-Term Actions

After the first phase of plan implementation is complete (2017-2020), the City of Faribault will continue its energy efficiency efforts post 2020 by implementing energy focus areas D, E, and F.

Focus Area D: Decrease dollars spent on energy in the small and mediumsize business sector.

a) Increase	energy efficiency in Faribault's small and medium-size
b) Place sp	s community. ecial emphasis on energy efficiency efforts in Faribault's downtown.

Focus Area E: Invest in the "customers of the future" by providing Faribault's youth with energy educational opportunities.

a) Seek opportunities to cover energy curriculum in schools that includes topics such as:

OBJECTIVES

- a. How to read an energy bill,
- b. Where energy comes from and what is required to make it,
- c. Why it is important to save energy,
- d. Familiarization with energy units,
- e. How to make informed appliance purchases, and
- f. How to be an energy-conscious homeowner or renter.

Focus Area F: Decrease dollars spent on energy in the government and institutional sector.

OBJECTIVES

- a) Maintain momentum built over the first three years of plan implementation in the government and institutional sector.
- b) Create programs and processes that institutionalize energy efficiency measures.



Faribault's Energy Action Plan: Energizing the Future of Faribault!

April 11, 2017

Dear Members of the Faribault Community:

Faribault has a bold vision to be one of America's best communities. A place where all people find opportunities to succeed, grow, and prosper. As a community, we embrace the future and plan for positive change through our commitment to innovation and excellence, making Faribault an outstanding place to live, work, grow, invest, and visit.

How we use energy is critical to our continued success as a community. Energy fuels our industries, businesses, institutions, and residences. Faribault's Energy Action Plan helps ensure that our



community has access to clean and affordable energy, which benefits all of us.

The City of Faribault is grateful to Xcel Energy's Partners in Energy Program for their assistance in the development and implementation of the Faribault Energy Action Plan. At no direct cost to the City, Xcel Energy provided expertise and resources to help the City develop our Energy Action Plan. However, the Plan itself developed out of a collaborative effort involving representatives from our industries, businesses, institutions, residential developments, and City government.

On behalf of the Faribault community, I extend our sincere thanks to the Faribault Energy Action Team for developing the Faribault Energy Action Plan. The Plan provides cost-effective strategies to help the community conserve energy, resource clean energy, and save an estimated \$8 million annually in energy costs by the year 2040, with cumulative energy savings of roughly \$100 million.

Now, each of us has the opportunity to implement the energy actions presented in this plan. In doing so, we will save money, help protect our environment, and continue to strengthen Faribault as an outstanding place to live, work, grow, invest, and visit!

Sincerely,

Kevin Voracek Mayor of Faribault

Why an Energy Action Plan?

Faribault: An Evolving Community



Photo by Doug Kerr / CCBY

Over the past 25 years the City of Faribault has undergone numerous changes in terms of its population and economy. From experiencing a 36% growth rate and becoming home to the 8th largest Hispanic population in Minnesota to adding approximately four square miles to its borders and welcoming new industry, the city is larger, more diverse, and more economically vibrant than ever before.² As the community continues to evolve, some things remain the same: Faribault stands firmly in its values of maintaining a strong sense of community, traditions, and commitment to excellence.

Strategic Planning

To ensure that Faribault continues to thrive in the years ahead, the City has invested in a series strategic planning efforts. Faribault's Energy Action Plan is an extension of planning efforts such as Community Vision 2040, Faribault's Comprehensive Plan update, and Faribault's participation in Minnesota's GreenStep Cities program. The following provides an overview of how Faribault's Energy Action Plan supplements these important planning efforts.

Community Vision 2040

Community Vision 2040 outlines a bold vision and strategic priorities for Faribault.

Why is it Important to have an Energy Action Plan?

"It pulls people together; by having a plan people and business have a direction and goal to move forward."

-Tim Johnson, Facilities Manager, Allina Health System

"We would like Faribault businesses and organizations to thrive, and leadership in energy efficiency helps to make Faribault an attractive place to live, work, and locate a business."

-Brett Chappell, CFO, Shattuck-St. Mary's School

Thriving economic development is a strategic priority of Faribault's vision, and a key to a thriving economy is access to reliable and cost-effective energy. Faribault's Energy Action Plan provides goals and specific steps to help industries, businesses, institutions, and others reduce their energy costs, which in turn helps Faribault's economy.

² Faribault Then and Now. City of Faribault . Accessed March 3, 2017. https://www.youtube.com/watch?v=FDe3uBA3ass.

Comprehensive Plan Update

Faribault's Comprehensive Plan update recognizes the strong connection between energy and the economic vitality of the community. Clean, affordable, and efficient energy also promotes quality of life and environmental resilience, which are important to the long-term success of Faribault. Key aspects of Faribault's Energy Action Plan will be directly integrated into Faribault's Comprehensive Plan update.

Minnesota GreenStep Cities

As a participant in the Minnesota GreenStep Cities program, Faribault is taking steps to promote community cost savings, energy reduction, and civic innovation. Faribault's Energy Action Plan does not simply duplicate the City's work with the Minnesota GreenStep Cities program, it strengthens the work by identifying specific strategies to reduce energy consumption and promote cost savings.

Xcel Energy's Partners in Energy Offering

The City of Faribault enlisted Xcel Energy to assist with its energy planning efforts. Xcel Energy is the natural gas provider and one of two electricity service providers for Faribault residents and businesses. In 2014 Xcel Energy launched an offering called "Partners in Energy" to support communities in the development and implementation of customized, community-driven energy plans. In 2016 the City of Faribault submitted an application to participate in Partners in Energy and became the seventh community in Minnesota to be selected. Other participating Minnesota communities include the Lake Street Corridor in Minneapolis, Ramsey County's Parks and Recreation Department, and the cities of Maplewood, Red Wing, St. Louis Park, Edina, St. Cloud, Saint Paul, Shorewood, Mahtomedi, Eden Prairie, and Winona. In addition to these 13 Minnesota communities, there are currently 10 communities participating in Colorado.

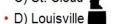
The objective of Partners in Energy is to allow communities to develop actionable plans that advance their energy goals while being supported by Xcel Energy's technical expertise, facilitation resources, and program knowledge. After approximately six months of planning, Xcel Energy continues to collaborate with communities by providing plan implementation assistance over the course of 18 **Exchange**

The Exchange

Xcel Energy's Partners in Energy also provides opportunities for participating communities to collaborate with one another and learn from national energy experts. This is accomplished by pairing three-to-five peer







• E) Garfield County

Faribault's Exchange Communities

communities together to form an "Exchange." Exchanges meet for office hour calls, webinars, and in-person dialogues developed around topics that support energy planning and implementation tasks. The goal of these interactions is to foster collaboration between communities and provide access to energy experts in the field. Faribault is in an Exchange with Saint Paul, MN, St. Cloud, MN, Louisville, CO, and Garfield County, CO.

Energy Action Plan

Developing an Energy Action Plan

COLORADO I MINNESOTA	Q Xcel Energy*
	PARTNERS IN ENERGY ANXEL ENERGY COMMUNITY PARTNERS
Partners in Energy	
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SUBMIT COMPLETED APPLICATION VIA EMAIL TO: Purt	tuerclaf surge@ccalesergy.com. Feturn this application by 5:00 p.m. CST on March 10, 2016.
COMMUNITY CUSTOMER INFORMATION	
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City Resolution and Application

On March 8, 2016, Faribault's City Council adopted a resolution to participate in Partners in Energy. Interest in the offering stemmed from the City's focus on strategic planning. With the recent adoption of Faribault's Community Vision 2040, the City identified six priorities to achieve long-term community success. Developing an Energy Action Plan was one way the City could discover opportunities to work on those priority areas — especially those relating to economic development and a vibrant downtown. Furthermore, the City planned to leverage data and support provided through Xcel Energy to strengthen and expedite writing the energy sections of Faribault's updated Comprehensive Plan.

Planning Memorandum of Understanding

To outline both the City of Faribault and Xcel Energy's expectations for the development of Faribault's Energy Action Plan, both entities signed a voluntary Memorandum of Understanding (MOU) for the first phase of their collaboration. In planning the MOU the City was responsible for recruiting community stakeholders to serve on an Energy Action Team. Xcel Energy was responsible for guiding the community's Energy Action Team through the planning process by providing workshop facilitation, data analysis, energy expertise, and writing support. A full description of responsibilities can be found in the planning MOU in Appendix 2.

Energy Action Team

In the interest of having a wide range of community expertise on Faribault's Energy Action Team, the City recruited representatives from local industry, institutions, businesses, nonprofits, and the community at large. All team members were professionally connected to Faribault, and 70% of the team members were also Faribault residents. At the beginning of the planning process team members were asked to complete the sentence: *"My time serving on this planning team will be well spent if..."*

Responses included:

- ...I learn about what goes on around town.
- ... I leave with a better understanding of what program offerings are out there.
- ...program information is in the forefront of discussion.
- ...the City is successful in getting measurable results.
- ...the plan helps people become more energy efficient.
- ...I learn something, act as an example, and see that building infrastructure is being matched with initiatives.
- ... I can help articulate what Faribault is doing and what makes the City unique.
- ...the team looks into the state's solar garden and conservation programs.
- ... I can bring back information and resources to my company and share what my company has been doing.
- ...I can learn and meet people.
- ...get some measurable results and a plan that will help the community move forward.
- ...the plan helps the City have more efficient operations.



Faribault's Energy Action Team and Community Facilitators

Front Row: Marty Smith, Yvonne Pfeifer, Emma Struss, Jenny Edwards, Leah Weston, Dave Wanberg **Back Row:** Karl Vohs, Tim Johnson, Tami Gunderzik, Paul Peanasky, Dave Tieman

Not Pictured: Steve White, Deanna Kuennen, Kevin Hildebrant, Brett Chappell, Rick Karow, Lynette Stott, Curt Thoeny, Johnny Maxson

Role in Process

Energy Action Team members were asked to attend a series of five planning workshops over the course of six months. Their role in the planning process was to advise the City on the focus areas, strategies, and goals Faribault should adopt in the City's Energy Action Plan. Energy Action Team members were specifically asked to: a) represent their organization or community; b) be a critical eye for credibility, transparency, and accuracy throughout the planning process; c) advise City Council on the best steps forward; and d) be a conduit to their network to relay updates about the City's actions around energy planning.

Appointments

The City of Faribault's Energy Action Team was approved by City Council on June 14, 2016 (See Appendix 3).

Why Did You Serve on Faribault's Energy Action Team?

"I am interested in finding ways to save the City of Faribault and the residents of the community money on utility bills." –Paul P.

"I believe it is important to be involved in shaping the energy plan for the future of our community. As energy consumers we are responsible for determining methods to save and produce energy so future generations have adequate energy supply." –Dave T.

"First off I was asked and a bit flattered David considered me knowledgeable enough to participate. Actually though I want to see Faribault grow and move forward in this type of activity." –Tim J.

Faribault's Energy Action Team

City of Faribault

- a) Steve White, City of Faribault Planning Commission
- b) Paul Peanasky, Community Center and Parks, City of Faribault
- c) Marty Smith, Rental Inspector, City of Faribault
- d) David Wanberg, Planner, City of Faribault
- e) Deanna Kuennen, Community and Economic Development, City of Faribault

Schools

- f) Kevin Hildebrandt, Faribault Public Schools
- g) Brett Chappell, Shattuck-St. Mary's

Business and Organizations

- h) Tim Johnson, Allina Health System
- i) Karl Vohs, Downtown Business Owner
- j) Tim McNelis, Faribault Business Owner
- k) Rick Karow, Residential Management Firm
- I) Lynette Stott, Three Rivers Community Action
- m) Curt Thoeny, Jennie-O Turkey Store
- n) Johnny Maxson, Daikin Applied Americas, Inc.
- o) David Tieman, Faribault Foods

Xcel Energy Representatives

- p) Tami Gunderzik, Partners in Energy Program Manager
- q) Yvonne Pfeifer, DSM Community Manager
- r) Lisa Drill, Account Manager
- s) Trisha Rosenfeld, Community Relations Manager
- t) Jenny Edwards, Partners in Energy Facilitator
- u) Emma Struss, Partners in Energy Facilitator

Planning Process Overview

The content of this plan was heavily derived from a series of five planning workshops. The Energy Action Team met for the first time in July 2016 and continued meeting via workshops and phone calls through November 2016. During that time the team was led through a series of planning modules developing a plan purpose statement, priority focus areas, community energy goals, and strategies to meet goals. A summary of each of the five in-person workshops is listed below and additional information is located in Appendix 4. Community facilitators from the Center for Energy and Environment led the workshops and Xcel Energy staff was in attendance.



Xcel Energy's Partners in Energy Planning Process

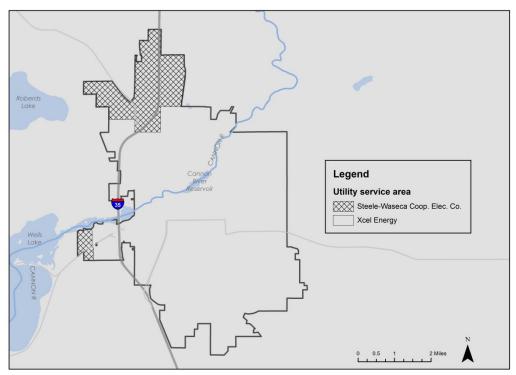
Partners in Energy Workshop Process			
Workshop 1 July 11, 2016	 Team introductions and Partners In Energy process overview Review of baseline energy data and past energy initiatives Discussion of Community Vision 2040 and the objective of an Energy Action Plan for Faribault 		
Workshop 2 August 15, 2016	 Confirmation of a plan objective statement Baseline energy data refresher Energy focus area brainstorm Energy focus area prioritization 		
Workshop 3 September 19, 2016	 Goal development Baseline savings overview Goal scenarios Near-term focus area goal development Near-term strategy development 		
Workshop 4 October 17, 2016	Energy goal finalizationNear-term focus area strategy development		
Workshop 5 November 21, 2016	 Review of Energy Action Plan content Overview of implementation resources Strength, Weakness, Opportunities and Threats (SWOT) analysis 		

Energy Data

Energy data provided by Xcel Energy played a crucial role in the planning process. Communityspecific data enabled the Energy Action Team to accomplish two important tasks. First, they were able to understand how the city currently uses and saves energy. Second, they were able to use scenario modeling with Faribault-specific data to develop energy goals for the community.

Energy Data Sources

City-specific energy use and Xcel Energy program participation data was provided by matching city shape files with Xcel Energy data from 2013-2015. Since Xcel Energy is the only natural gas provider in Faribault the natural gas data included in this plan is representative of the entire community's use. However, on the electric side Xcel Energy is one of two electricity providers — Steele Waseca Cooperative Electric Company serves the northern section of the city (shaded in gray in Figure 1). The electricity data in the plan does not include use from residents and businesses in the portion of the city served by Steele Waseca. The City of Faribault invited Steele Waseca to participate in the development of this plan, but they were not able to share data or attend planning workshops.



Source: Minnesota Public Utilities Commission Figure 1: Electric Utility Service Area

15x15 Rule

The data in this plan complies with Xcel Energy's 15 x15 privacy rules which require all data summary statistics to contain at least 15 entities with no single entity responsible for more than 15 percent of the total. Following these rules, if an entity is responsible for more than 15 percent they are removed from a summary. Two Xcel Energy electric customers were removed from data summaries in this plan.

Energy Action Plan

This energy action plan supports the values and strategic priorities outlined in Faribault's Vision 2040 by proposing cost-effective strategies to conserve energy and resource clean energy.



Where is Faribault Going? — Vision, Guiding Themes, and Energy Goals

The Vision

In 2014 the City of Faribault developed a longterm vision document known as *Community Vision 2040* through the use of a steering committee, focus groups, surveys, and neighborhood discussions. Community Vision 2040 acts as a guide for city planning by articulating the hopes and dreams of Faribault residents and stakeholders in an ever-changing environment. The document is composed of four main elements: a vision statement, five core community values, six strategic priorities, and four key initiatives. Faribault's Energy Action Team recognized the importance of linking all city initiatives back to this vision and



Figure 2: Energy Action Plan Structure

therefore used it as a framework to develop the content in this plan (see Figure 2).

Small Town Pride. Big City Opportunity.

Faribault's Community Vision Faribault is one of America's best small communities. A place where all people find opportunities to succeed, grow, and prosper. We celebrate our unique strengths in education, business, industry, medical, nature, recreation, leisure, and the arts, and we are proud of our historic downtown and iconic intuitions.

As a community we embrace the future and plan for positive change through our commitment to innovation and excellence, making Faribault an outstanding place to live, work, grow, invest, and visit.

Guiding Themes

Inspired by Faribault's five community values and six strategic priorities, the Energy Action Team identified guiding themes as a way to structure the development of the City's Energy Action Plan. These themes helped prioritize the most important energy matters in Faribault and how the community should address them.

The **first theme** that surfaced was **"Community Pride."** This means highlighting excellence, promoting civic pride through leadership in energy conservation strategies, bringing community members together to solve problems, and working to be an innovator in the energy sector.

The second theme was "Economic

Development," which directly relates to one of Faribault's strategic priorities. The team saw value in leveraging the city's business networks (e.g. the Chamber of Commerce) to distribute energy program information. They also identified potential benefits to developing policies that would support economic development via energy efficiency practices.

Community Vision 2040 Values and Strategic Priorities

Community Values

- a. Sense of Community
- b. Sense of Place
- c. Opportunity
- d. Innovation
- e. Excellence

Strategic Priorities

- a. Thriving economic development
- b. Excellent schools and high quality education
- c. Pride in our community
- d. Public safety
- e. A vibrant downtown
- f. Access to nature, leisure, and the arts

Source: www.ci.faribault.mn.us/165/Community-Vision-2040

The **third theme** was **"Education & Information Distribution."** The Energy Action Team believed most residents and businesses in Faribault are probably unaware of available energy resources that could save them money. Therefore the Energy Action Team identified a need to increase the community's awareness of these offerings and encourage community stakeholders to think more about their energy use.

The **fourth theme** that surfaced was **"Financial Savings."** The Energy Action Team recognized while there are many reasons to save energy, saving money is the most relevant to Faribault's residents and businesses. Providing opportunities to save money on energy bills allows capital to be reinvested into other sectors of the community, which can strengthen the local economy.

The **fifth theme** was **"Renewable Energy."** The Energy Action Team recommended sourcing more energy from renewable resources and is excited about upcoming renewable energy

projects in the community.³ For more information about current renewable energy offerings see Appendix 5. As a rule of thumb, the Energy Action Team would like to see energy-efficiency actions completed before renewable energy investments are made. This ensures resources are not wasted on building and maintaining larger energy systems than needed.

Plan Purpose Statement

Based on the themes above, the Energy Action Team developed a purpose statement to drive the development of this plan. The statement is: **This Energy Action Plan supports the values and strategic priorities outlined in Faribault's Vision 2040 by proposing cost-effective strategies to conserve energy and resource clean energy.**

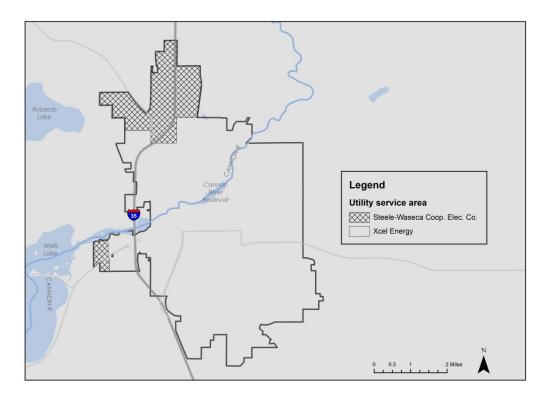
Baseline City Energy Data

Awareness of community values and priorities was crucial in distinguishing what energy outcomes the City should work towards with this plan. Once the Energy Action Team understood the City's overarching vision they needed to understand its energy use. By coupling baseline energy trends with their knowledge of Faribault's 2040 plan, the team could decipher how the City's vision, priorities, and values could be achieved through community energy initiatives. For example, without energy data the team would still have known that "Financial Savings" was an important outcome of the plan, but they wouldn't know the best ways to achieve savings via energy efficiency. Access to data helped the team understand where the City should place its efforts and informed strategy development.

Energy Data Source

The energy data in this plan was provided by Xcel Energy through its Partners in Energy offering. The data represents three years of baseline use from 2013-2015. Data was collected by pulling all of Xcel Energy's gas and electric accounts within Faribault city limits using shape files provided by the City. It is important to note that the City of Faribault is also served by Steele Waseca Cooperative Electric Company. This means not all of the City's electric use is accounted for in this plan. See Figure 3 for Steele Waseca Cooperative Electric Company's service territory.

³ Shattuck-St. Mary School's plans to develop an on-campus solar farm in the next five years. Additionally the City of Faribault passed a resolution in 2016 to participate in a solar garden subscription program. See Appendixes 6 & 7.



Source: Minnesota Public Utilities Commission Figure 3: Electric Utility Service Area

Data Maps

Maps included in this plan represent Xcel Energy data from 2013-2015 divided by census block group.

How is Faribault Using Energy?

In 2015 Faribault had 9,679 electricity premises⁴. Eighty-six percent of those were residential and 14% were commercial and industrial. Energy Action Team members were advised to think of a premise as something larger than an individual energy meter but smaller than an energy customer.

⁴ A premise is a unique identifier for the location of electricity or natural gas service. In most cases it is a facility location. There can be multiple premises per building and multiple premises per individual debtor.

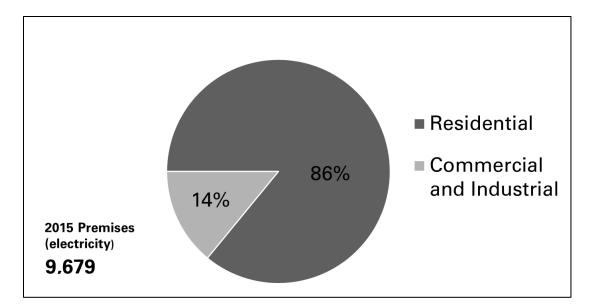
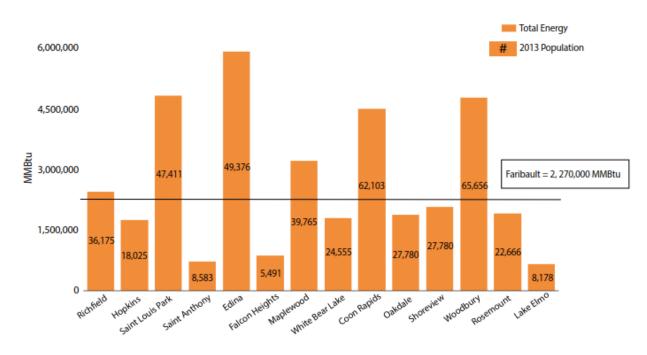


Figure 4: Xcel Energy Premises (2015)

In 2013 Faribault had an annual energy use of 2,270,000 MMBtu. This use was similar to those found in the cities of Richfield, White Bear Lake, Oakdale, Shoreview, and Rosemount according to Regional Indicators Initiative data.



Source: Regional Indicators Initiative Figure 5: Total Energy Use: Comparison to Other Cities Energy Costs⁵

⁵ "2013 Total Energy Use for Select Cities", Regional Indicators Initiative.

Electricity Consumption

In 2015 Faribault consumed 225 million kWh of electricity in Xcel Energy service territory. Out of the total electricity use, residents consumed 28% and commercial and industrial businesses used 72%.

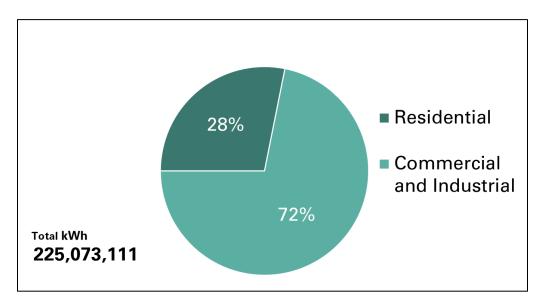


Figure 6: Electricity Consumption (2015)

In 2015 the City of Faribault used almost 14 million therms of natural gas. Residents consumed 41% of total natural gas use and commercial and industrial businesses consumed 59%.

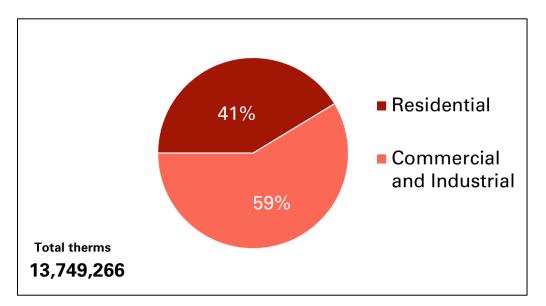


Figure 7: Natural Gas Consumption (2015)

In 2015 Faribault residents, businesses, and industrial users spent \$30,595,976 on energy. Thirty-seven percent of the total cost was spent by residents, and 63% was spent by commercial and industrial businesses.

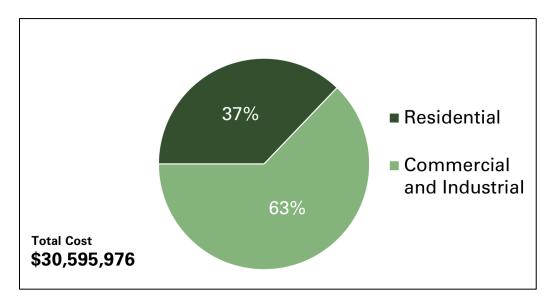


Figure 8: Faribault Energy Costs (2015)

Total annual gas and electric energy spending varies from year to year. Faribault spent approximately \$31 million on energy in 2013, \$35 million in 2014, and \$31 million in 2015. Commercial and industrial businesses consistently accounted for about two-thirds of the total energy spending.

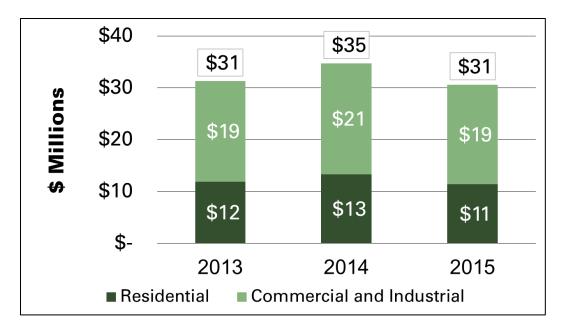


Figure 9: 3 Year Energy Cost Trend (2013-2015)

The average annual energy costs for a residential household in 2015 was \$1,367. The average cost for a commercial or industrial business was \$14,137.

Average Energy Costs				
Customer Type	Total Energy Costs (\$)	Average Cost (\$/Premise)		
Residential	\$ 11,370,742	\$ 1,367		
Commercial and Industrial	\$ 19,225,234	\$ 14,137		
Total	\$ 30,595,976			

Figure 10: Average Energy Costs (2015)

How is Faribault Saving Energy?

Residential Efficiency

From 2013 to 2015 Faribault residents completed 1,115 energy efficiency program actions through Xcel Energy.

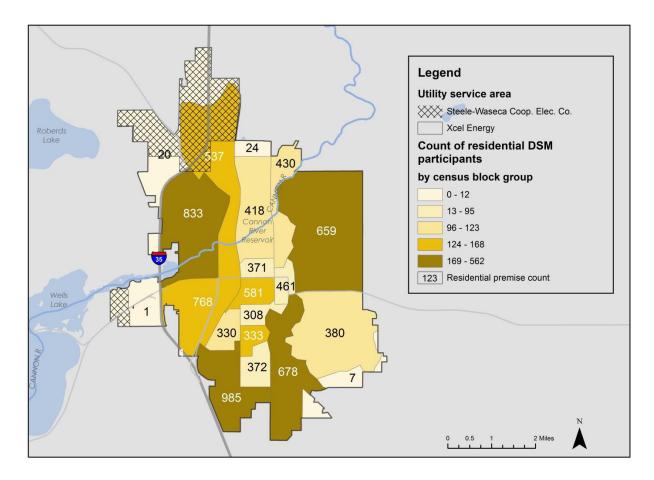


Figure 11: Residential Program Participation (2013-2105)

Commercial/Industrial Efficiency

From 2013 to 2015 Faribault commercial and industrial businesses completed 104 energy efficiency program actions through Xcel Energy.

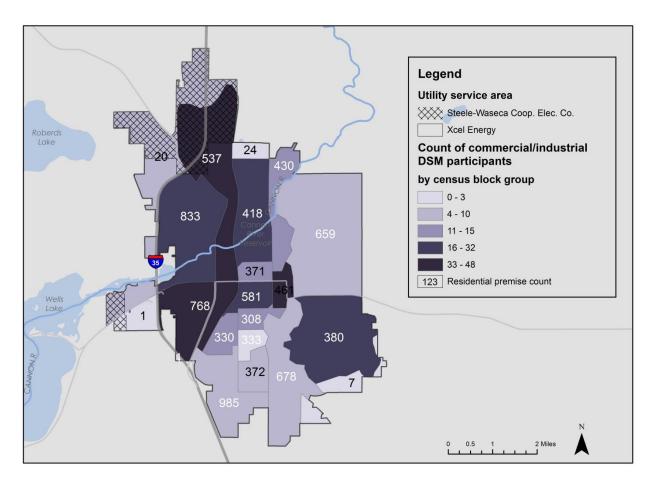


Figure 12: Commercial Program Participation (2013-2015)

City Energy Goal

After reviewing Faribault's baseline energy consumption and opportunities for savings, the Energy Action Team recommended a city-wide goal of 1% annual energy savings. This goal was chosen for two reasons. First, it fell within a range of 1% and 2% annual savings, which is typically deemed "achievable" on a community-wide scale. The State of Minnesota's Next Generation Act, established in 2007, calls for a statewide energy conservation goal of 1.5% of annual retail electric and gas sales.

Second, a 1% annual savings goal will surpass past savings events. For reference, in 2015 Faribault had an annual savings of 0.5% for residential electricity use and 1% for natural gas. On the commercial/industrial side annual electricity savings were 0.4% and 0.8% for natural gas. This means Faribault will experience a significant increase in beneficial financial savings, while avoiding drastic implementation measures that might be associated with savings targets far beyond the City's baseline.

While at first glance targeting 1% annual energy-savings may seem trivial, when translated into financial savings the magnitude of this goal becomes apparent. A community-wide 1% energy savings will allow the community to reinvest millions of dollars between 2017 and 2040 that otherwise would have been tied up in energy bills. By 2040 this is estimated to save Faribault residents and businesses over \$8 million a year, with accumulated savings of over \$100 million.

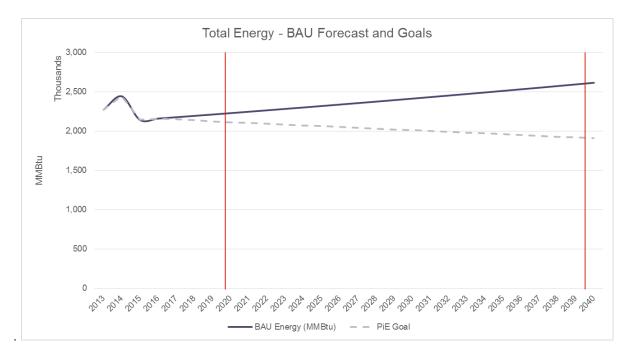


Figure 13: Faribault's Energy Goal

Figure 13 shows Faribault's business-as-usual or "BAU" energy use with the solid purple line. The dotted purple line demonstrates the estimated energy savings from the proposed city-wide energy goal. The red lines at years 2020 and 2040 mark ends of both the City's implementation of near-term (2020) and long-term (2040) energy efforts. This projection assumes 0.5% residential growth and 0.5% commercial growth in energy demand.

What are Faribault's Energy Priorities?

Focus Areas

The Energy Action Team recognized the City would have to be strategic in how it reached a 1% annual savings goal given constrictions of time and financial resources. In order to develop a plan that values fiscal responsibility and efficiency, the team evaluated segments of the population to see where efforts would have the strongest impact. This was accomplished by looking at Faribault's baseline energy data; in particular, who the largest energy users were and where the greatest savings opportunities came from. Once the

"You will never reach your destination if you stop and throw stones at every dog that barks"

-Winston Churchill

team was grounded in Faribault's baseline data, they used that information in conjunction with their local expertise to recommend five focus areas for the City to concentrate its energy efforts. These focus areas (a-f) are:

Decrease dollars spent on energy in the

- a) Residential sector.
- b) Large commercial and industrial sectors.
- c) Government and institutional sector.
- d) Small and medium-size business sector.
- e) Invest in the "customers of the future" by providing Faribault's youth with energy educational opportunities.
- f) Build sustainable energy programs and processes through the government and institutional sector.

Addressing six focus areas at once would likely exceed the City's bandwidth. Therefore the team selected three focus areas to be implemented in the near-term (2017-2020) and three focus areas to be implemented in the long-term (2021-2040). Focus areas were labeled as near-term priorities if there were more existing programs, community assets, and savings opportunities to be leveraged right away.

Near-Term Focus Areas

The Energy Action Team identified three focus areas for the City to concentrate efforts on during the first three years of plan implementation (2017-2020). In alignment with the plan's guiding themes and purpose statement these priorities are rooted in energy conservation with an emphasis on financial savings, economic development, education and information distribution, and community pride. Each of the focus areas are outlined below.

Focus Area A: Decrease dollars spent on energy in the residential sector.

Why is it a Priority?

The Energy Action Team recommends residential energy efficiency as a near-term priority based on both the savings potential and the abundance of pre-existing energy-saving resources that can be leveraged right away.

Energy Use

Residential energy use accounts for almost 40% of the community's total energy costs (see Figure 8). At \$11.4 million this represents a significant portion of the city's energy expenditure. In 2015 the average household spent \$1,367 on energy bills, or approximately 3% of their annual household income⁶. Reducing each household's energy consumption will save residents money.

Savings Potential

Prior to 1980 wall and attic insulation was either left out of building construction or installed using materials and/or insulation levels far below the energy-efficient standards required today. Over 60% of Faribault's housing units were built pre-1980, demonstrating a significant opportunity for energy-efficient upgrades.⁷ The U.S. Department of Energy estimates that the average American household could be wasting 10-20% of the energy they pay for due to air leaks, drafts, and outdated heating and cooling systems.⁸ This means the average Faribault household is currently wasting approximately \$200 a year on energy payments — savings that could be reinvested to better serve families and the community at large.

⁶ Population estimates, July 1, 2015, (V2015)

http://www.census.gov/quickfacts/table/PST045215/27043 and Xcel Energy's Compass 7 "Rice County Housing Study 2012." City of Faribault Section. Accessed March 6, 2017. http://www.co.rice.mn.us/sites/default/files/pdfs/housing/documents/HousingStudyFbo.pdf. 8 Why Energy Efficiency Upgrades?

https://energy.gov/eere/why-energy-efficiency-upgrades

Existing Energy Programs and Services

Faribault residents currently have access to over a dozen energy programs and services through Xcel Energy, the City of Faribault, and local nonprofits to assist with energy efficiency measures. However, less than ten percent of households took advantage of Xcel Energy programs over the last three years. Promoting existing programs is one way the City can help residents save money without investing in the development of new resources.

Baseline Data

Baseline Residential Energy Use

In 2015, Faribault had 8,319 residential premises⁹. The total annual electricity use from those premises was 63,349,494 kWh, and the total annual natural gas use was 5,683,345 therms. Figure 14 shows that in 2015, 28% of residential energy came from electricity and 72% was sourced from natural gas.

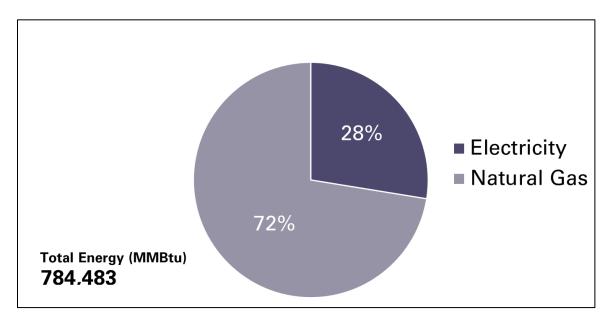


Figure 14: Residential Fuel Breakdown (2015)

Energy use is not evenly distributed throughout the City. Figure 15 below shows the distribution of electricity use by census block group as a percent of total use.

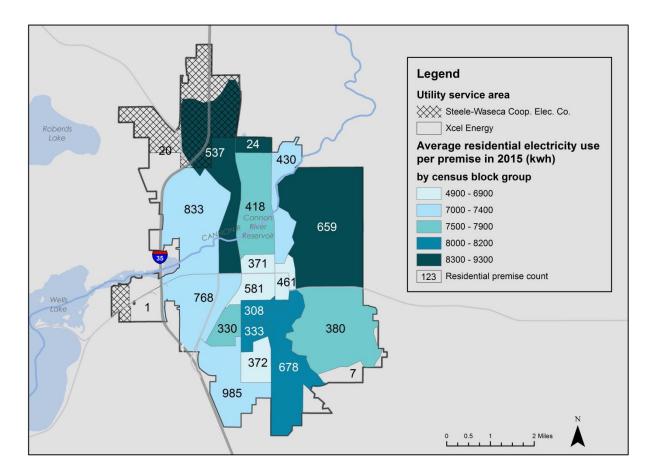


Figure 15: Residential Electricity Use (2015)

The average annual electricity use per premise ranges per census block groups from 4,900 kWh per year to 9,300 kWh per year. The northern half of the city is home to the largest electricity consumers.

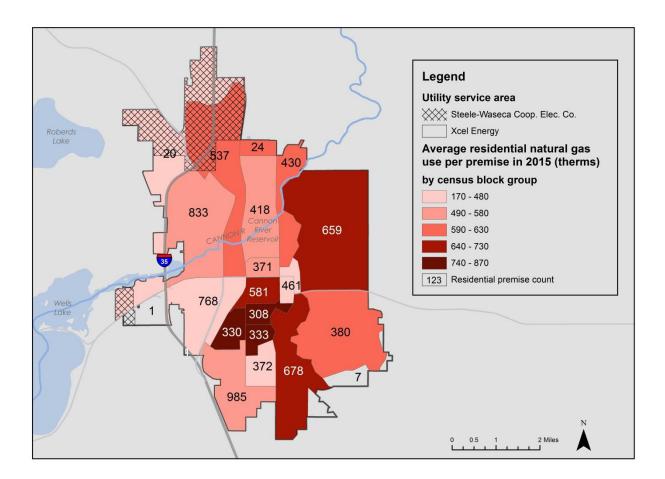


Figure 16: Residential Natural Gas Use (2015)

The average annual residential natural gas use per premise in 2015 ranged from 170 therms to 870 therms. The highest concentration of use was in the south central part of the city.

Residential Energy Users

Faribault is home to 23,650 residents that make up 8,600 households.¹⁰ Of these 8,600 households, 70% own their home and 30% rent. The average cost of rent in Faribault from 2011 to 2015 was \$538, and the average cost of a single family home was \$85,600 during that same time period.¹¹The median household income is \$50,428. As stated above, in 2015 the average household spent \$1,367 on energy bills, or approximately 3% of their annual household income.¹² For the 16.8% of Faribault residents living in poverty, the energy burden (the percentage of income spent on energy bills), was higher than the overall average, creating a greater incentive to reduce gas and electric energy spending waste.

¹¹ Population estimates, July 1, 2015, (V2015)

¹⁰ Demographics & Development Statistics | Faribault, MN

http://www.ci.faribault.mn.us/201/Demographics-Development-Statistics

http://www.census.gov/quickfacts/table/PST045215/27043

¹² Population estimates, July 1, 2015, (V2015)

http://www.census.gov/quickfacts/table/PST045215/27043 and Xcel Energy's Compass

Baseline Program Participation

Between 2013 and 2015 Faribault residents participated in 1,115 Xcel Energy program actions, representing 8% of households. These actions ranged from receiving rebates for purchasing energy-efficient equipment or recycling a second refrigerator or freezer to participating in a home energy assessment. For a breakdown of participation per program see Figure 17. A full Xcel Energy residential program description summary can be found in Appendix 8.

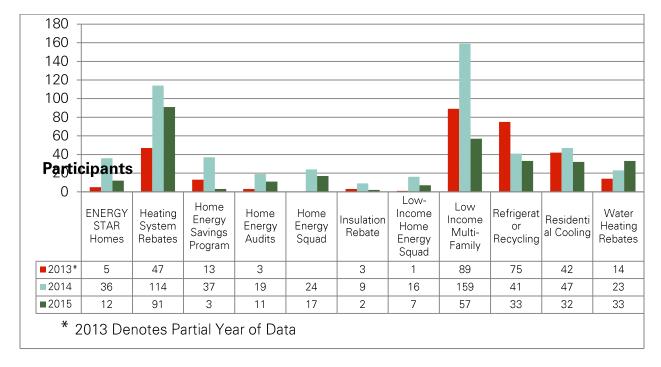


Figure 17: Faribault's Residential Energy Program Participation 2013-2015

In 2015, Faribault's participation in Xcel Energy's residential programs saved 313,316 kWh, resulting in an overall electricity savings of 0.5%, and also saved 56,367 therms, resulting in an overall 1% natural gas savings.

Figure 18 shows the distribution of residential program participation from 2015. The map shows the highest participation count concentrated in the south-central part of the city.

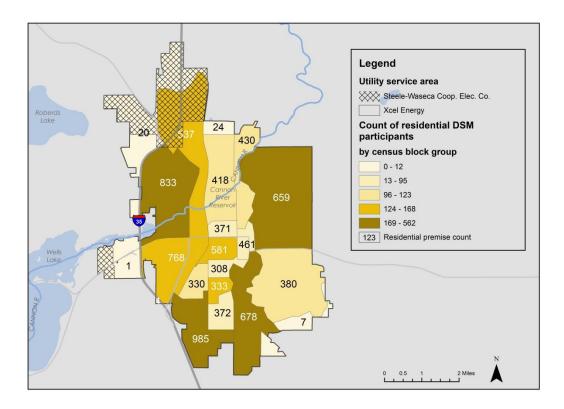


Figure 18: 2015 Xcel Energy Residential Program Participation Count by Census Block Group

The residential program participation rate in Figure 19 shows that between 0% and 2% of eligible premises took part in Xcel Energy's residential programs. This highlights the large opportunity to increase residential energy savings by engaging more households in residential programs.

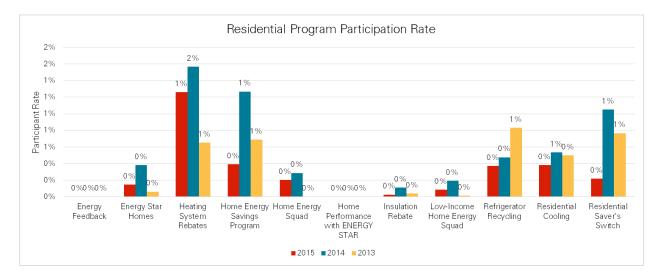


Figure 19: 2013-2015 Xcel Energy Residential Energy Program Participation in Faribault

Focus Area Objectives

To help Faribault reach its annual savings goals, the Energy Action Team identified three objectives for the city's residential sector:

- a) Educate Faribault residents on energy efficiency programs and behaviors using trusted messengers.
- b) Empower Faribault residents to better understand their energy bill and use.
- c) Encourage all households to participate in energy efficiency behaviors that will reduce unnecessary spending on energy bills.

Current Barriers

Current barriers facing residents must be addressed in order to achieve the three objectives. The team identified barriers as:

- a) Residents are unaware of program offerings.
- b) Residents are busy; it's difficult to find time to educate residents and have households participate in programs.
- c) Availability of trusted and knowledgeable messengers to conduct outreach on energy efficiency programs.
- d) Residents do not always understand upfront cost and payback benefits.
- e) Expense of energy efficiency upgrades.

Strategy Recommendations

Based upon the identified focus area objectives and current barriers facing residents, the Energy Action Team proposed two primary actions:

- a) Increase awareness of My Account, a free Xcel Energy webpage that allows residents to track their energy use over time, view their energy bill, and register for programs online.
- b) Launch a year-long educational campaign with a unified message on energy efficiency for Faribault.

The Energy Action Team identified financial incentives as key motivator to encourage residents to take action. The team acknowledged both the City of Faribault and neighbors as trusted messengers for local residents.

Additional outreach actions include:

- Increase awareness of residential energy programs by sharing information on the City's and community partners' websites.
- Translate program information into Spanish and Somali; make language interpreters available when needed.

- Partner with membership groups (congregations, service clubs) to spread the word on residential energy efficiency programs at community events.
- Build an energy video library of program testimonials from Faribault residents and City leaders that can be used on the City's website, in presentations, on social media, etc.
- Use the City's digital billboard to promote energy saving opportunities.
- Develop lawn signs to signify that a resident took an action to save money on their energy bill.
- Create a "meeting in a box" with tools for residents to host their own energy gatherings with peers.

Important Community Partners

- City of Faribault
- Congregations
- Membership groups (Rotary Club, Moose, etc.)
- Xcel Energy

Additional ideas for community partnerships include:

- a) Three Rivers Community Action
- b) Landlords
- c) Community gathering spaces (e.g. YMCA, Library)

Top Outreach and Communication Tactics

- a) An energy resource page on the City's website under the "Residents" tab
- b) Energy presentations/workshops at community gathering spaces
- c) Utility bill inserts highlighting residential programs
- d) Distributing residential information through City staff members who regularly have faceto-face interactions with residents.

Residential Energy Programs

A handful of residential energy program opportunities were discussed during the workshops. A full description of Xcel Energy residential programs is included in Appendix 8. Below is a summary of a few program opportunities.

Educational Tools

- Energy Advisor Service Free home energy efficiency support
- Xcel Energy's Home Energy Audit Learn how to improve residential efficiency and comfort
- Xcel Energy's My Account Free tool to track residential energy use online

Energy Efficiency Programs

- **Home Energy Squad**[®] Energy experts who make house calls
- Xcel Energy's Refrigerator Recycling Get paid by recycling a working fridge or freezer
- Xcel Energy's Home Energy Efficiency Rebates Save upfront on equipment and appliances

Financing Opportunities

- **Residential loans** from Minnesota-based energy nonprofit Center for Energy and Environment
- Loan Rehabilitation Program administered by the City of Faribault

Contribution to City Energy Goal

Residential contributions to the City's energy goal are outlined under "Near-Term Focus Area Impacts." Between the three impact scenarios listed, residential efforts contribute between 4% and 14% of the annual financial savings associated with Faribault's city-wide energy goal.

Focus Area B: Decrease dollars spent on energy in the large commercial and industrial sector.

Why is it a Priority?

Energy Use

The large commercial and industrial sector is an energy priority for the City of Faribault because it represents entities that use a large amount of energy in their day-to-day operations. As shown in the baseline data earlier in the plan, commercial and industrial businesses contribute to 63% of the City's total gas and electric energy spend (See Figure 20). Of that portion, the top 20% of users account for 90% of Faribault's commercial and industrial energy use (See Figure 18). Lowering energy bills will allow resources to be reinvested into other facets of large commercial and industrial businesses. These new investments can increase profit margins and result in a stronger local economy that creates local jobs.

The concentration of savings potential in a smaller portion of the community is ideal for the City's outreach efforts. Talking to just a few facility managers is likely to result in the same savings as talking to hundreds of homeowners. This high savings-to-outreach effort ratio will help the City stretch its outreach efforts further.

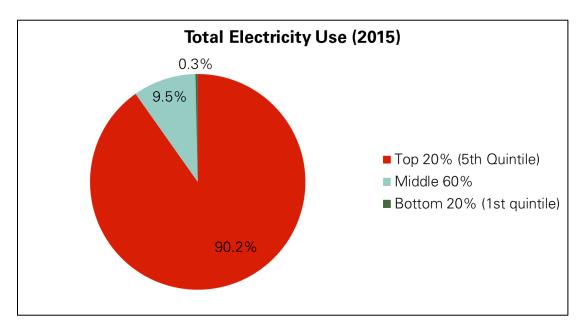
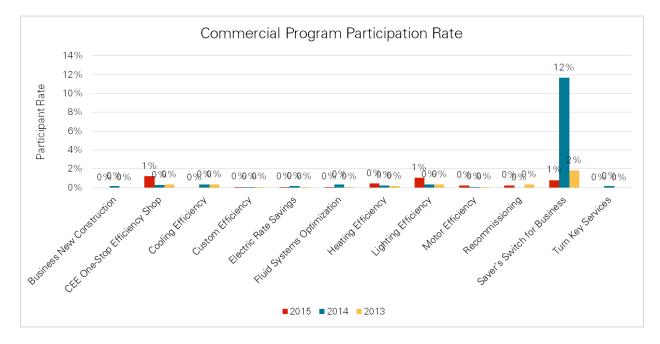


Figure 20: Large Commercial Electricity Use by Quintile

Savings Potential

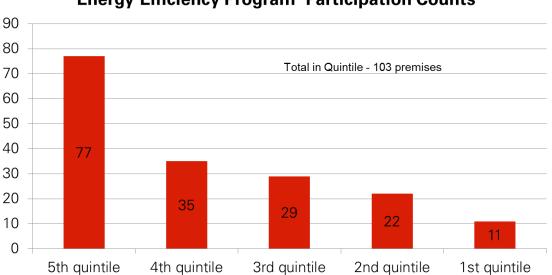
Figure 21 shows the percent of businesses that participated in a given Xcel Energy commercial program between 2013 and 2015. The majority of programs show a participation rate of 2% or less, with the anomaly of the Saver's Switch for Business program in 2014 with a participation



rate of 12%. This shows many eligible businesses have yet to take advantage of energy savings programs.

Figure 21: Commercial Program Participation Rate (2013-2015)

Figure 22 shows the top 20% of commercial/industrial energy users also had the highest participation counts for Xcel Energy's commercial programs. This demonstrates that the large commercial and industrial sector has been a receptive audience for program offerings, which bodes well for achieving the City's savings goal. Each quintile below represents 103 premises.



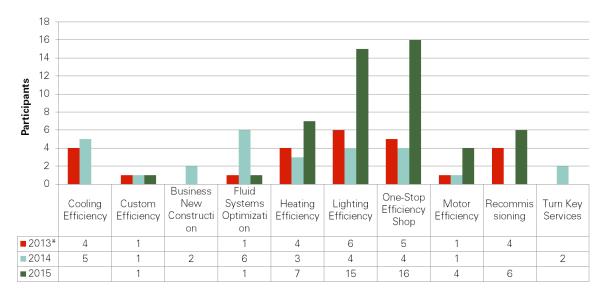
Energy Efficiency Program Participation Counts

Figure 22: Commercial Energy Efficiency Program Participation Counts (2015)

Existing Programs and Services

As demonstrated above, there are significant opportunities to engage businesses in energy efficiency programs. One reason the large commercial sector surfaced as a priority for the City is that Xcel Energy already has a portfolio of program and rebate offerings to help these businesses save (See Appendix 8). By leveraging existing program resources the City is able to avoid costs associated with developing new programs.

Between 2013 and 2015 the programs with the most participation dealt with lighting efficiency, building cooling and heating, and fluid systems optimization. The City can work with Xcel Energy to develop local case studies from these programs to encourage other large commercial businesses to participate as well.



* 2013 Denotes Partial Year of Data

Figure 23: 2013-2015 Xcel Energy Commercial Energy Program Participation in Faribault

Baseline Data

Commercial Energy Use

In 2015 cost commercial and industrial businesses spent \$19,225,234 on their energy use. Electricity use totaled 161,723,617 kWh and made up 41% of the total commercial/industrial energy use. Natural gas use totaled 806,592 therms and made up 59% of the total commercial/industrial energy use.

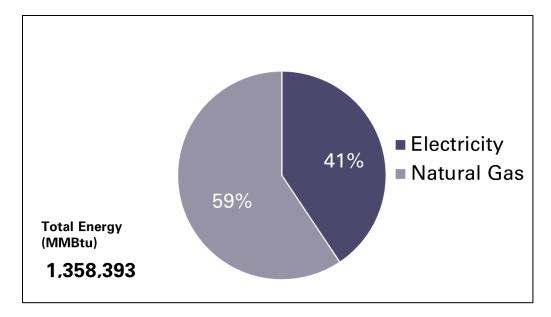


Figure 24: Baseline Energy Source Breakdown

Baseline Program Participation

Between 2013 and 2015, 104 businesses participated in an Xcel Energy program. The map below shows the location of those participants.

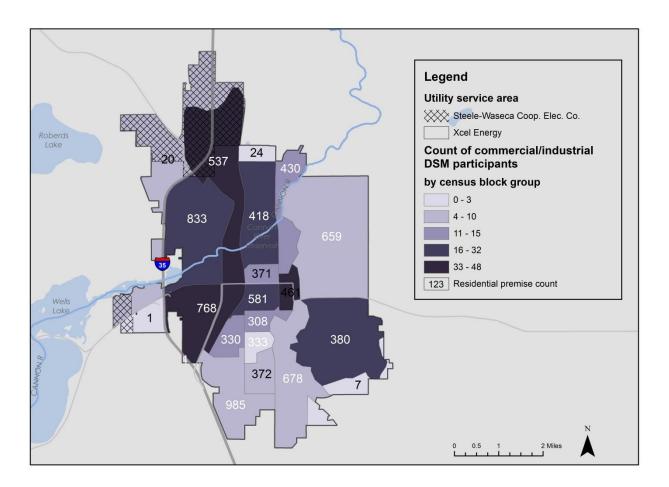


Figure 25: Commercial & Industrial Program Participation (2015)

Baseline Energy Savings

Through energy efficiency program participation among commercial and industrial energy users achieved 0.4% electric savings and 0.8% natural gas savings in 2015.

It is important to note that this percentage isn't specific to the large commercial and industrial sector, it includes commercial energy users of any size.

Focus Area Objectives

The Energy Action Team outlined three objectives for the large commercial and industrial sector to help reach Faribault's energy goal. The objectives are as follows:

- Increase opportunities for businesses to discuss energy efficiency projects and opportunities with peers.
- Provide key decision makers with tools to make informed decisions around energy efficiency projects.
- Recognize businesses for being energy efficiency leaders in the community.

The Energy Action Team saw these three objectives as important elements to address the energy-saving barriers identified below.

Current Barriers

- Upfront costs required to complete energy efficiency projects.
- Energy efficiency upgrades have trouble competing with investments that have more transparent benefits to employees and customers.
- Decision makers are unaware of program opportunities that can save businesses money, how to calculate return on investment (ROI), or how to navigate rebates.

Top Strategy Recommendations

In order to accomplish the objectives above the Energy Action Team recommended the following actions:

- Hold energy resource workshops and summits for building and operations managers to learn techniques and opportunities for saving energy.
- Increase awareness of Xcel Energy support for businesses through various outreach channels such as mailers, utility bill inserts, meetings, emails, calls, and other methods.

These two strategies aim to bring community members together to solve problems and encourage innovation in the energy sector, which tie back to themes outlined in Faribault 2040.

What would make a Faribault business attend an energy workshop?

- Peer-to-peer exchanges to provide time for facility managers to talk amongst themselves.
- Presentations on energy topics relevant to attendees (e.g. how to get leadership buyin to support energy efficiency projects and how to calculate ROI on energy projects).
- Presentations from local businesses discussing their experience participating in an energy efficiency program including what the savings opportunity was, how they took action, and what the results have been.
- Energy tours of local facilities.

Additional outreach actions include:

- Launch a year-long educational campaign with a unified message on energy efficiency for Faribault and send out a campaign announcement to businesses with support options.
- Apply for a Minnesota Green Corps member to help educate the community about energy efficiency opportunities.
- Develop annual awards for energy efficiency leaders in the community.
- Interview large commercial businesses that have completed energy efficiency upgrades to develop case studies to be shared through local publications.
- Have the City of Faribault provide gap financing for businesses to make energy efficiency improvements.

Business Sector Community Partners

- City of Faribault
- Daikin Applied Americas, Inc.
- Faribault Area Chamber of Commerce and Tourism
- Faribault Foods
- Jennie-O Turkey Store
- MN Green Corps
- Steele Waseca
- Xcel Energy

Top Outreach and Communication Tactics

Throughout the planning workshops the Energy Action Team emphasized the importance of having opportunities for businesses to experience face-to-face communication around energy topics. This led the team to identifying three in-person energy workshops and/or summits as the most essential outreach and communication tactics for reaching large commercial and industrial businesses.

Acknowledging that in-person workshops are more resource intensive, the Energy Action Team also recommended that the City leverage its website as a tool to store energy program and resource information that could be used well beyond the initial workshops.

Contribution to City-Wide Goal

The large commercial and industrial sector will contribute significantly to the city-wide goal of reducing gas and electric energy spend by 1% annually. With the residential focus area accounting for 4-14% of annual savings, this sector along with government and institutional buildings will account for 86-96% of savings. In addition to the city-wide energy goal, a handful of large commercial "Controlling energy costs is essential to maintaining a competitive business. We need to conserve energy and minimize energy prices to maintain a profitable business going forward." –Dave, Faribault Foods

businesses such as Daikin Applied Americas Inc., Jennie-O Turkey, and Faribault Foods also have their own energy or sustainability goals. Helping large commercial and industrial businesses understand how their company goals fit into the broader community framework is one way the City can help encourage businesses to take action.

Focus Area C: Decrease dollars spent on energy in the government and institutional sector.

Why is it a Priority?

The Energy Action Team prioritized decreasing dollars spent on energy in the government and institutional sector due to high community visibility, energy use, and savings potential.

High Visibility

Government and institutional buildings such as schools and hospitals have a high volume of foot traffic. This unique visibility can be



Photo by Jimmy Emerson, DVM / CCBY

leveraged to offer educational platforms that inform the community about energy efficiency

practices that are typically hidden behind the scenes. Highlighting energy stories via signage or case studies is also a way to foster community pride which links back to Faribault's strategic priorities. Additionally, due to this sector's high visibility, government and institutions tend to be leaders within the community. This leadership can also be leveraged to inspire other community entities to explore opportunities to save money on energy bills.

Energy Use

From an energy use standpoint, the Energy Action Team reasoned that a handful of institutional and government buildings likely account for some of the City's largest energy users due to their size and the number of people they serve.¹³ Therefore these buildings offer large savings potential.

Savings Potential

Government and institutional buildings had strong representation on Faribault's Energy Action Team. These dedicated members of the community are well networked and have the ability to help implement this focus area. They also have strong track record of completing energy efficiency projects in notable buildings such as City Hall, the library, the community center, and public and private schools.

Focus Area Objectives

The Energy Action Team identified three objectives to accomplish their goals within the institutional and government sector. These objectives are:

- Use prominent buildings in the community as models for energy efficiency.
- Increase opportunities for facility managers to discuss energy efficiency projects and opportunities with peers.
- Provide key decision makers with tools to make informed decisions around energy efficiency projects.

Top Barriers

During the planning workshops the Energy Action Team spent time identifying how the City and institutions could struggle with following through with actions that would save them money. The top barriers include:

• Upfront cost (i.e. not being able to afford the upfront investment to complete the upgrade).

¹³ Due to data privacy the Energy Action Team was not able to identify which commercial/industrial energy users were government or institutional buildings.

- It is hard for energy efficiency upgrades to compete with investments that have more transparent benefits to employees and customers.
- Timing and approval process for projects and funding.

The Energy Action Team, especially those with experience working in either the government or institutional sector, recognized that opportunities often arise that require immediate action to secure funding. These funding timelines make it difficult to fully consider the implementation of decisions on energy efficiency.

Additional Barriers

- Policies around City purchases.
 - There can be many steps to getting a budget approved for a project that can make it difficult to complete upgrades such as the City Council must have buy-in for all City projects.
- Limited regular reminders about program opportunities.
 - Decision makers are unaware of program opportunities, how to calculate return on investment, or how to navigate rebates.
- Disrupting building use to install new equipment.

Strategy Recommendations

To address these barriers the Energy Action Team's top strategy recommendations are:

- Develop case studies on energy projects in government and institutional buildings.
- Send out energy efficiency campaign announcements to facility managers with program support options.
- Hold energy resource workshops, including possible partnership with the Chamber's Lunch & Learns, on topics such as:
 - Energy resources for Faribault businesses.
 - Communicating the value of energy efficiency upgrades to your institution's key decision makers.
 - Overcoming upgrade barriers: Lessons learned from peer energy efficiency projects.
 - Gap financing and loan options.

"As a non-profit institution, energy conservation helps to reduce our costs so that funds are freed up for programs that support our mission. Investment in clean energy is a way that we can express our institutional values of innovation and integrity as responsible citizens of the broader community and the world."

-Brett Chappell, Shattuck-St. Marty's

- Apply for a Minnesota GreenCorps member to assist with community education around energy efficiency opportunities. The 2017 Minnesota GreenCorps applications are due March 17th at 5:00pm.
- Increase awareness of Xcel Energy support for businesses through mailings, calls, and workshops.

Government and Institutional Community Partners

- City of Faribault
- Faribault Area Chamber of Commerce and Tourism
- Minnesota Green Corps
- Steele Waseca
- Xcel Energy
- Allina Health System
- Shattuck-St. Mary's
- Minnesota State Academy for the Deaf
- Minnesota State Academy for the Blind
- Faribault Public Schools
- MNTAP (Minnesota Technical Assistance Program)
- Retired engineers
- State of Minnesota's Small Cities Development Program- resource for funding options

Top Outreach and Communication Tactics

- An energy resource page on the City's website under the "Businesses" tab.
- Sharing case studies in government/school/hospital newsletters.
- In-person, face-to-face events (workshops, summits).

Contribution to City-Wide Goal

Along with the large commercial sector, government and institutional buildings will drive most of the near-term energy and financial savings in Faribault. This is because this sector has a much higher energy-saving potential than residential buildings with dedicated staff that are already interested and experienced in navigating energy efficiency upgrades.

Community-Wide Energy Campaign

The Energy Action Team recommends that the City implement a community-wide energy campaign to drive near-term savings. Having a unified campaign helps facilitate messaging and builds enthusiasm between residents, businesses, institutions, and the government sector. Elements of this campaign include:

- A logo and tagline specific to Faribault's energy efforts.
- A launch event that is perhaps connected to an annual community celebration such as Faribault Heritage Days, Rice County Fair, Blue Collar BBQ and Art Festival, or Manufacturing Week.
- A public goal tracking visual to provide updates on campaign progress.
- 6-12 months of targeted action.
- Participation of local community leaders.
- Closing celebration with report of achievements.

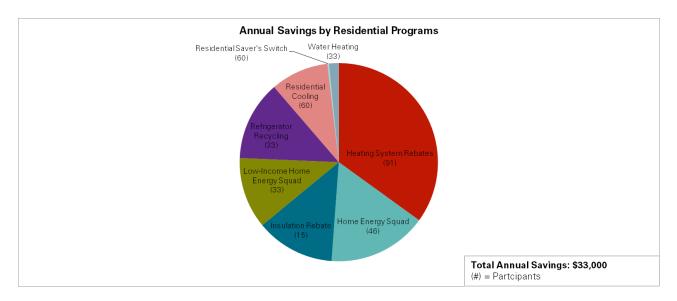


• Ensuring there is an element of fun.

The Energy Action Team did not have a specific recommendation for a person to run the campaign. One suggestion was Faribault's Future, which is run through the Faribault Area Chamber of Commerce and Tourism.

Near-Term Focus Areas Impact

The savings impact of each near-term focus area is influenced by the type of energy actions in which Faribault residents, businesses, and institutions participate. Three savings scenarios are shown below to illustrate how energy savings vary from program to program. The savings estimates are based upon Minnesota state-wide averages.







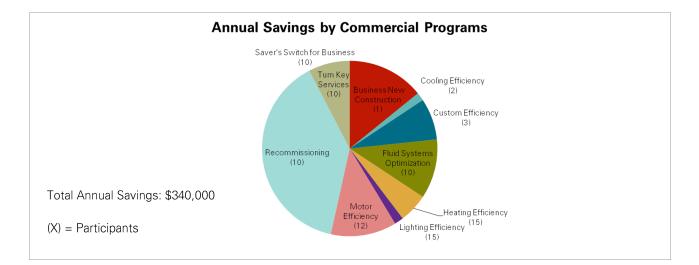


Figure 27: Scenario A-Annual Commercial Program Savings

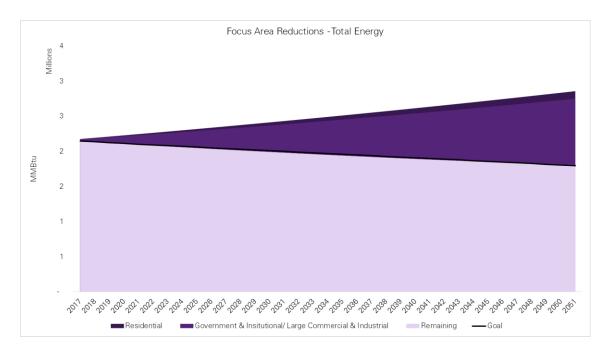
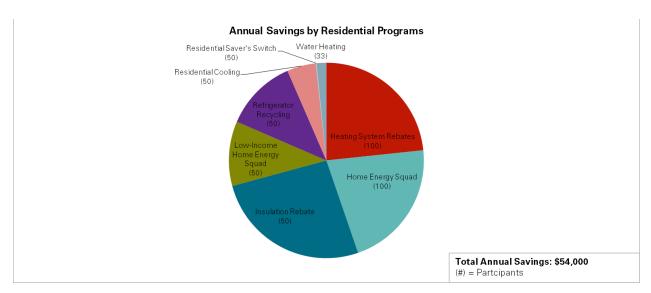


Figure 28: Scenario A Energy Savings Projection

Achieving a 1% annual energy reduction in Scenario A (Figure 28) requires 368 residential program actions (Figure 26) and 88 commercial program actions (Figure 27). For reference, in 2015 Faribault had 316 residential program actions and 50 commercial program actions. This scenario would require an annual participation increase of about 50 residential programs and 40 commercial program actions from baseline. The estimated annual financial savings associated with these actions is \$370,000. By 2040 this is estimated to save Faribault residents and businesses over \$8 million a year, with accumulated savings of over \$100 million.



Scenario B: Program Participation – High Residential, Low Commercial

Figure 29: Scenario B — Annual Residential Program Savings

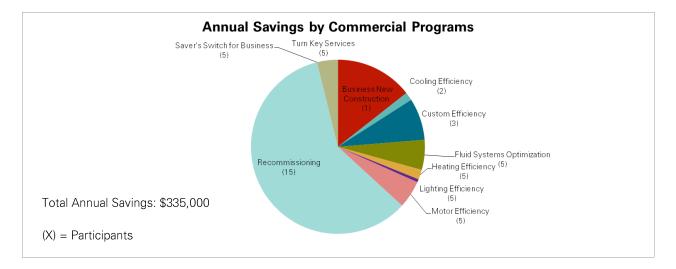


Figure 30: Scenario B — Annual Commercial Program Savings

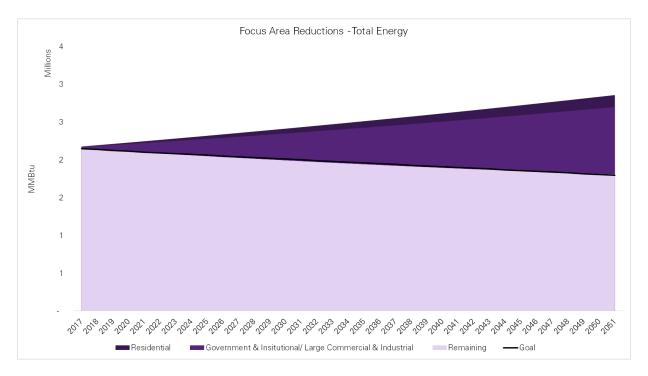


Figure 31: Scenario B – Energy Saving Projection

Achieving a 1% annual energy reduction in Scenario B requires 500 residential program actions and 51commercial program actions. For reference, in 2015 Faribault had 316 residential program actions and 50 commercial program actions. This scenario would require an annual participation increase of about 200 residential program actions from baseline and maintenance of Faribault's baseline commercial program participation. The estimated annual financial savings associated with these actions is \$390,000. By 2040 this is estimated to save Faribault residents and businesses over \$8 million a year. Scenario B requires higher residential program participation and lower levels of commercial program participation than Scenario A.

Scenario C: Program Participation – Low Residential, High Commercial

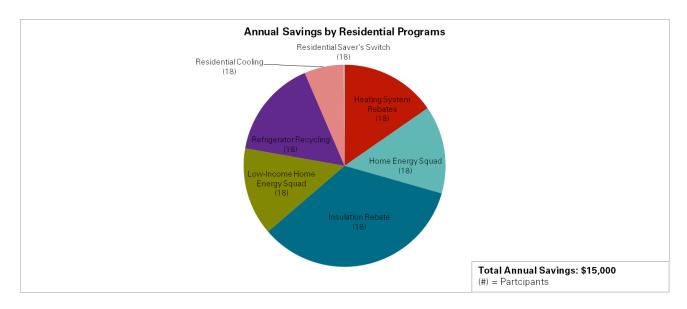


Figure 32: Scenario C — Annual Residential Program Saving

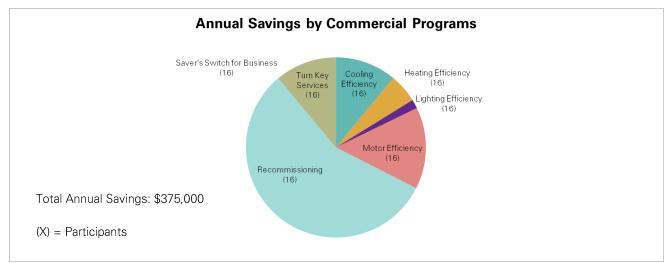


Figure 33: Scenario C — Annual Commercial Program Savings

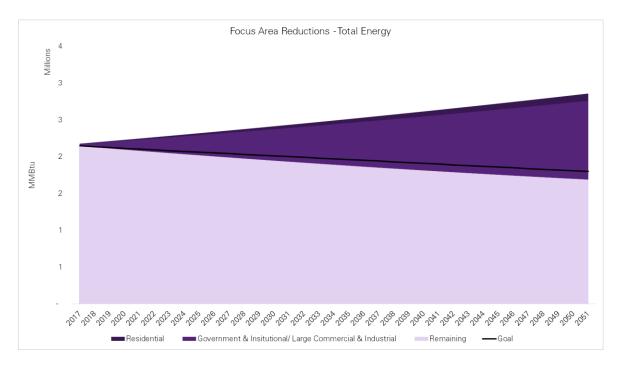


Figure 34: Scenario C – Energy Saving Projection

Achieving a 1% annual energy reduction in Scenario C requires 126 residential program actions and 112 commercial program actions. For reference, in 2015 Faribault had 316 residential program actions and 50 commercial program actions. This scenario would require an annual participation decrease of about 200 residential program actions and increase of about 60 commercial program actions from baseline. The estimated annual financial savings associated with these actions is \$390,000. This will result in the same level of total estimated savings as in Scenario B — by 2040 saving Faribault residents and businesses over \$8 million a year, with accumulated savings of over \$100 million. Scenario C requires the fewest number of program participants and focuses on just seven residential programs and seven commercial programs. This scenario demonstrates that energy savings is not directly correlated with how many energy actions are taken, but rather the type of actions.

Long-Term Focus Areas

Focus Area D: Decrease dollars spent on energy in the small and medium business sector.

Why is it a Priority?

The small and medium business sector is a priority for Faribault's energy efforts due to the two Community Vision 2040 priorities of: "thriving economic development" and "a vibrant downtown." There are 61 businesses identified in Faribault's historic downtown.¹⁴ Lowering the cost of these businesses' energy bills through energy efficiency measures is one way to help



Photo by Gregg Roemhildt / CCBY

them succeed. Improving businesses' profit margin will strengthen the local economy and hopefully make the City a more attractive place to start or grow a business.

Baseline Data

In 2015 small and medium businesses in Faribault accounted for fewer than 10% of total commercial electricity use (Figure 35). This reinforces why large commercial businesses, government, and institutional buildings were prioritized as near-term focus areas in terms of helping the City reach its energy goal. Despite the smaller savings potential in this sector, this focus area is still very important due to its alignment with the City's other strategic priorities of economic development and maintaining a vibrant downtown.

¹⁴ "Manufacturing Map." Faribault Area Chamber of Commerce and Tourism . Accessed March 6, 2017. http://members.faribaultmn.org/map/cat/manufacturing.

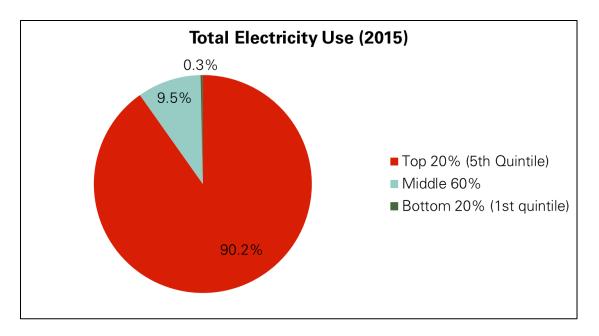


Figure 35: 2015 Commercial Electricity Use by Quintile

Focus Area Objectives

The Energy Action Team identified two objectives to accomplish within this focus area:

- a) Increase energy efficiency in Faribault's small and medium-size business community.
- b) Place special emphasis on energy efficiency efforts in Faribault's historic downtown.

Identified Barriers

The identified barriers when implementing this focus area are:

- <u>Tight budgets</u>: Many businesses do not have extra capital to cover upfront building investment costs. Furthermore, if energy efficiency upgrades do not have a payback of a few years or less they will not make business sense.
- <u>Reaching building owners</u>: Often small and medium-size business owners do not own their building. Coordinating outreach with building owners who may be stationed remotely can be difficult.
- <u>Busy schedules</u>: Small business owners and employees often wear many hats. Finding time to discuss energy efficiency upgrades and getting projects done can be a challenge.
- <u>Decision making</u>: There can be many variables that influence which energy upgrades a business should invest in given their specific circumstances. This requires a trusted messenger who is well-versed in program offerings and building science to assist in helping businesses make the right decision.

- <u>Competing upgrade projects</u>: With finite resources, business owners have to make careful decisions regarding how they invest in their business. For commercial properties, upgrades that are more noticeable to customers are often prioritized over energy efficiency upgrades that tend to be more behind the scenes.
- <u>Lack of community pride</u>: This lack of pride makes it harder for businesses to invest in their buildings for reasons other than direct financial savings, thus making it harder for businesses to make energy efficiency upgrades with longer paybacks since values such as "sustainability" or "community resiliency" are not as prevalent.

Important Small and Medium-Size Business Community Partners

- Faribault Chamber of Commerce and Tourism
- The Downtown Business Association
- City of Faribault
- Local small to medium business owners
- Xcel Energy

Suggested Outreach Channels

- Faribault Chamber of Commerce and Tourism
- Downtown Business Association

Contribution to City-wide Goal

The Energy Action Team identified the importance of setting a specific goal to track progress on this focus area and identify its role in achieving the City's annual savings goal. Given that this section of the Energy Action Plan will be implemented a few years after the initial planning process, the team decided to hold off setting a specific goal and instead recommended that a goal be set right before implementation begins.

Strategy Recommendations

- Provide a free energy audit or walkthrough to small and medium-size businesses to help identify energy efficiency upgrade opportunities with the fastest paybacks.
- Provide financial benefits for businesses if a certain number pledge to complete upgrades.

Focus Area E: Invest in the "customers of the future" by providing Faribault's youth with energy educational opportunities.

Why is it a Priority?

The Energy Action Team prioritized Faribault's youth as an important audience for energy education for three main reasons.

High Quality Education

First, this focus area ties in with Faribault's strategic priority of having excellent schools and a high quality education. Being exposed to energy curriculum will empower Faribault's youth to make smarter energy decisions both for themselves and for their community. The



Photo by jpellgen / CCBY

kindergarteners today are the City Council of tomorrow. Enabling future leaders to navigate the complexities of energy decisions will help keep the community's energy spending down and maintain reliable energy access.

Age of Audience

Second, Faribault's youth are at a great stage in their lives to adopt lifelong habits. Youth are typically more receptive than adults when it comes to adopting new behaviors. Furthermore, given their age they have a longer time to experience the benefits from adopting energy-saving habits. For example, teaching a classroom of thirty 4th graders to turn off the lights will result in about 2,000 years of collective energy-savings. If you switch that audience's average age to 45, the collective savings cuts in half. This demonstrates how the return on investment for education is much higher when focused on youth.

Energy Messengers

Finally, youth can be great energy messengers and educators due to their enthusiasm for learning and interest in sharing information. Every time a student goes home and reminds their parents and siblings to turn off the lights they are spreading educational benefits across the community. This messenger role can be especially important for students who have family members who are not fluent in English. Since very few energy offerings and educational resources are offered in languages other than English, bilingual youth may be the only source of energy education for residents who do not speak English.

Focus Area Objectives

• Invest in the "customers of the future" by providing Faribault's youth with energy educational opportunities

- Seek opportunities to cover energy curriculum that includes topics such as:
 - How to read an energy bill
 - Where energy comes from and what is required to make it
 - Why it is important to save energy
 - Familiarization with energy units
 - How to make informed appliance purchases
 - How to be an energy-conscious homeowner or renter

Current Barriers

The top two barriers identified by the Energy Action Team in providing energy efficiency education in Faribault's youth are:

- School curriculum is governed by state and national standards and leaves little time for incorporating new material.
- Teachers and school staff are very busy, making it difficult to schedule meetings with educators to prepare energy lessons.

Proposed Strategies

The Energy Action Team brainstormed various strategies for incorporating energy curriculum into youth education. Since opportunities to expand on school curriculum are constricted, the team brainstormed ideas that could be implemented in a short period of time or integrated into after school clubs or summer programing. Collaborating with education professionals will be essential to developing realistic and effective strategies.

- Have an energy-themed video contest with prizes for students
- Bring in an energy efficiency specialist or facility manager for a career day speaker
- Create educational energy visuals for schools (e.g. stickers for iPads to remind students to unplug the chargers when not in use)
- Implement a project focusing on building solar boats to learn about renewable energy and perhaps partner with the Minnesota Renewable Energy Society.
- Conduct a school energy audit with 7th grade students, develop a tour of the school that highlights all the energy efficiency features, and perhaps partner with retired engineers.
- Develop an investigation kit that acts as an energy "treasure hunt" for students so students can see how much energy waste they can identify in their home.
- Develop materials that help kids understand the benefits of home energy programs such as the Home Energy Squad visit provided by Xcel Energy.

Possible Youth Education Community Partners

- Junior Achievement
- Boy Scouts/ Girl Scouts
- Community service program
- Engineering curriculum (in schools)
- Summer STEAM program
- Retired engineers
- Retired teachers group
- Leaders of Somali community
- Community Education
- Shattuck-Saint Mary's
- Minnesota State Academy for the Deaf
- Minnesota State Academy for the Blind
- Faribault Public Schools

Proposed City of Faribault Support

The City of Faribault could declare an annual energy week to help endorse education for kids. The City could highlight the reasons why energy curriculum is important and help spread the word about resources available to educators.

Proposed Xcel Energy Support

- Financial support
- Support with 5th grade curriculum
- Recognition and awards
- Marketing/outreach materials
- Additional energy saving resources
- Sponsor prizes for kids (something that kids care about)

Contribution to City-wide Goal

Before this section of the Energy Action Plan is implemented the Energy Action Team recommends that specific goals are identified to track how youth education directly links back to the broader city-wide goal. Suggested metrics for this goal are number of students reached, number of events scheduled, or a before and after survey for students to help measure what they learned. It is essential that Faribault's educators help identify these metrics.

Focus Area F: Decrease dollars spent on energy in the government and institutional sector.

Why is it a Priority?

For the same reasons listed in Focus Area C, Focus Area F expands upon near-term accomplishments in the government and institutional sector to promote deeper institutional change. The Energy Action Team identified the importance of integrating energy best practices into policies and procedures to ensure the longevity of impact. Creating a culture where "business as usual" means using resources wisely and eliminating waste will make it easier for the City and institutions to go about their daily business while saving energy.



Baseline Data

See Focus Area C (pages 42-45).

Focus Area Objectives

- a) Maintain energy momentum built over the first three years of plan implementation in the government and institutional sector.
- b) Create programs and processes that institutionalize energy efficiency measures.

Top Barriers

During the planning workshops the Energy Action Team spent time identifying how the City and institutions could struggle with following through with actions that would save them money. The top barriers include:

- Upfront cost (i.e. not being able to afford the upfront investment to complete the upgrade).
- It is hard for energy efficiency upgrades to compete with investments that have more transparent benefits to employees and customers.
- Timing and approval process for projects and funding.

The Energy Action Team, especially those with experience working in either the government or institutional sector, recognized that often opportunities arise that require quick decisions to secure funding. These funding timelines make it difficult to fully consider the implementations of decisions on energy-efficiency.

Additional Barriers

• Policies around City purchases.

- There can be many steps to getting a budget approved for a project which can make it difficult to complete upgrades. City Council must have buy-in for all City projects.
- Limited regular reminders about program opportunities.
 - Decision makers are unaware of program opportunities, how to calculate return on investment, or how to navigate rebates.
- Disrupting building use to install new equipment.

Proposed Strategies

- Work with government and institutional staff members to develop policies and practices that will reduce energy waste.
- Facilitate quarterly or bi-annual meetings that bring together government and institutional staff to discuss best practices for developing and implementing policies.

Important Government and Institutional Community Partners

- The City of Faribault
- Faribault Area Chamber of Commerce and Tourism
- Minnesota Green Corps
- Steele Waseca
- Xcel Energy
- Allina Health System
- Shattuck-St. Mary's
- Minnesota State Academy for the Deaf
- Minnesota State Academy for the Blind
- Faribault Public Schools
- MNTAP (Minnesota Technical Assistance Program)
- Retired engineers

Contribution to City-Wide Goal

The City of Faribault will have to maintain energy-savings momentum for decades in order to reach its goal. Similar to the other long-term focus areas the Energy Action Team recommends that the City set measurable goals that link back to the annual 1% city-wide savings goal before implementation. Suggested goal metrics are number of programs and/or policies implemented in government and institutional buildings or departments and number of collaboration meetings scheduled.

Energy Action Plan SWOT (Strength/Weakness/Opportunity/Threat) Analysis

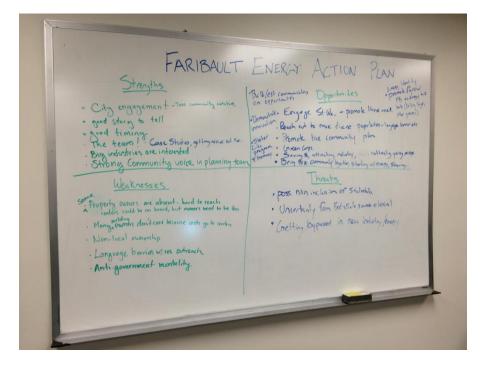


Figure 36: SWOT Analysis from Planning Workshop 5

During the final planning workshop the Energy Action Team completed a "Strengths, Weakness, Opportunities, and Threats" analysis of this Energy Action Plan. The results are as follows:

Strengths

- The Energy Action Plan has the potential to engage the entire city.
- The plan is the result of a true community initiative. The planning team was approved by City Council with the interest to have a broad representation of community stakeholders around the table.
- Saving money and energy is a good story to sell and is the right thing to do.
- The development of this Energy Action Plan comes at a good time for the City in terms of having completed the city-wide visioning process Faribault 2040 and working on the revised comprehensive plan.
- Energy Action Team is well-connected and equipped to help implement the plan.
- Big industries in Faribault are interested in participating.
- The plan engages businesses, and the commercial sector holds a lot of saving opportunities.

Weaknesses

- Many building owners in Faribault's historic downtown live remotely and are hard to contact. This can make it hard to achieve savings in the small business sector.
- Renters might be on board to participate in energy programs, but building owners need to be engaged.
- It can be challenging to engage companies that are not locally owned to participate in energy program due to corporate policies that they need to adhere to.
- Most energy program information is only available in English. This creates a language barrier for Faribault residents and business owners who are not fluent in English.
- Some members of the Faribault community have an anti-government mentality and might feel it's not the City's place to help residents and businesses save money.

Opportunities

- The electricity provider Steele Waseca serves the northern portion of the City which is primarily industrial. There are potentially a lot of savings available through energy efficiency in this area.
- Developing outreach materials in multiple languages provides an opportunity to reach a more diverse audience within the Faribault community.
- Promoting that this Energy Action Plan is a true community initiative, developed by Faribault stakeholders.
- Faribault currently has a Minnesota GreenCorps member, Leah Weston, working with the City from 2016-2017 and can dedicate some time to work on energy initiatives.
- The City of Faribault's commitment to helping businesses save money through energy efficiency might attract new industries and companies to the area.
- Faribault can build an identity around energy that could attract young people to the area who are interested in residing in communities that use resources wisely.
- Cross-fertilization of ideas and experiences between local businesses. Implementing this plan offers opportunities for the business community to support one another. Once the business community works together on energy initiatives they will have a foundation to network and address other issues as well.
- Volkswagen settlement will open up some opportunity to keep working on transportation issues.
- The Energy Action Team brings a lot of expertise and experience to the table. They can act as a strong voice during implementation.

• Leveraging the relationship with Faribault's German sister city, Wurzburg, to have a climate energy exchange.

<u>Threats</u>

- The availability of Steele Waseca to participate in Faribault's energy efforts. Members of the community might have the perception that they weren't invited to participate in the planning process, despite their invitation.
- There might be the perception that Faribault's energy initiatives are driven too much by City staff which detracts from emphasis on community stakeholder planning.
- There is uncertainty on how changes in the federal government will impact policy and funding that helps residents and businesses reduce unnecessary spending on energy.
- Getting bypassed by other cities that are more aggressive in their energy actions and losing a competitive edge to attract businesses that will strengthen the economy.

Energy Action Plan Implementation

Implementation Memorandum of Understanding

Upon City Council's approval of this Energy Action Plan, the City of Faribault and Xcel Energy will develop a memorandum of understand to outline implementation support. Xcel Energy will provide support based on Faribault's annual savings goal and the near-term focus area strategies.

Goal Tracking

Xcel Energy will provide quarterly program participation and energy savings data reports over the first 18 months of plan implementation to help the City of Faribault track progress on its goals. After the first 18 months the City of Faribault will have access to a Community Energy Report produced annually by Xcel Energy.

Energy Action Team

Energy Action Team members have committed to supporting various implementation needs outlined in this plan. Support examples include:

- Demonstrating cutting edge energy technology at a commercial or institutional facility.
- Conducting community outreach by giving presentations and talking to business owners.
- Providing information for large commercial and industrial case studies.
- Integrating energy into Faribault's Comprehensive Plan.

- Educating Faribault community members on energy resources while doing City inspections.
- Conducting outreach to downtown business owners.
- Hosting Energy Action Team meetings and community energy events.

Project Management & Meetings

Xcel Energy's Partners in Energy service provides a community facilitator to help with implementation tracking and project management. This facilitator will work closely with Faribault city staff and the Energy Action Team to keep tasks organized and moving forward. To begin, the Partners in Energy community facilitator and City of Faribault staff lead will check-in on a biweekly basis. Regular in-person Energy Action Team members will be scheduled upon plan approval.

Appendix 1: Glossary of Terms

Community Data Mapping: A baseline analysis of energy data in a geospatial (map) format across the community.

Demand Side Management (DSM): Modification of consumer demand for energy through various methods, including education and financial incentives. DSM aims to encourage consumers to decrease energy consumption, especially during peak hours or to shift time of energy use to off-peak periods, such as nighttime and weekend.

Energy Action Plan: A written plan that includes an integrated approach to all aspects of energy management and efficiency. This includes both short- and long-term goals, strategies, and metrics to track performance.

Goals: The results toward which efforts and actions are directed. There can be a number of objectives and goals outlined in order to successfully implement a plan.

Greenhouse Gas (GHG): Atmospheric gases that absorb infrared radiation and contribute the greenhouse gas effect, including carbon dioxide (CO2), methane (CH4), nitrous oxide (NO2), and water vapor.

kWh (kilowatt-hour): A unit of electricity consumption.

Home Energy Squad (HES): Home Energy Squad is a joint offering between Xcel Energy and CenterPoint Energy in communities where CenterPoint Energy provides natural gas service. The program helps residential customers reduce energy use in their homes by completing direct installs. The "Enhanced" version of the program includes diagnostic testing and follow-up support.

Metro Clean Energy Resource Teams (CERTs): A Twin Cities based organization that empowers communities and their members to adopt energy efficiency and renewable energy technologies and practices for their homes, businesses, and local institutions.

Minnesota GreenStep Cities: Minnesota GreenStep Cities is a voluntary challenge, assistance, and recognition program to help cities achieve their sustainability and quality-of-life goals.

Premise: A unique identifier for the location of electricity or natural gas service. In most cases it is a facility location. There can be multiple premises per building, and multiple premises per individual debtor.

Recommissioning: An energy efficiency service focused on identifying ways that existing building systems can be tuned-up to run as efficiently as possible.

Regional Indicators Initiative: The Regional Indicators Initiative measures annual performance metrics for 22 Minnesota cities. The project tracks data on Energy, Water, Travel, Water, GHG Emissions, and Cost. To learn more, visit <u>www.regionalindicatorsmn.com</u>.

St. Paul Port Authority PACE of MN Program: This program finances energy efficiency and renewable energy upgrades to buildings. PACE provides low-cost, long-term financing that is repaid as a property tax assessment for up to 20 years.

Windsource[®]: A program from Xcel Energy that allows customers to purchase blocks of wind energy as their electricity source.

Appendix 2: Partners in Energy Planning *Xcel* Energy* Memorandum of Understanding

ERS IN ENER AN XCEL ENERGY COMMUNITY PARTNERSHIP

Memorandum of Understanding Phase 1 – Plan Development

Mr. Brian J. Anderson City Administrator City of Faribault 208 1st Avenue NW Faribault, MN 55021

Congratulations on being selected to participate in Xcel Energy's Partners in Energy program. This program is designed to provide your community with the tools and resources necessary to develop and implement an energy action plan that reflects the vision your community has for shaping energy use and supply in its future. Program participation is intended to span 24 months with the initial 4-6 months dedicated to developing of a strategic energy action plan and the remaining time focused on the implementing that plan.

The intent of this Memorandum of Understanding is to confirm the City of Faribault's intent to participate in the initial plan development phase of the Partners in Energy program and outline the commitment that your community and Xcel Energy are making to this collaborative initiative. The primary objective of this phase of the program is to develop your energy action plan.

In order to achieve this Xcel Energy will provide:

- Consulting support to assist in identifying potential community stakeholders, and constructing or delivering an invitation or informational announcement regarding the planning process.
- Data analysis of community energy use and Xcel Energy program participation to the extent that it is legally and technically prudent and feasible. The results can be used to identify potential opportunities to implement plan strategies. Xcel Energy will attempt to integrate data provided by the City of Faribault into the analysis if feasible.

XCEL ENERGY PARTNERS IN ENERGY

Memorandum of Understanding Plan Development Phase

- Professional facilitation of 3-5 plan development work sessions with the community stakeholder group to develop the energy action plan's vision, focus areas, goals and implementation strategies.
- Assistance as needed in synthesizing the community and program data collected with the vision of the community to identify attainable goals that align with suitable strategies and tactics.
- Development of the documented energy action plan that will incorporate inputs from the stakeholder planning team and will be accessible to the community.
- Commitment to delivering an actionable and complete energy action plan within seven months of the City of Faribault and Xcel Energy signing this MOU.

Although participation in the Plan Development phase of Partners in Energy program requires no monetary contribution, the community, the City of Faribault, does agree to provide:

- A single contact point to work with recruiting stakeholders, coordinating planning meeting logistics, and coordinate distribution of deliverables and lead participation of the community.
- Meeting facilities to host the stakeholder group during development of the plan.
- Identification of existing community energy plans or programs that could be leveraged in successful development and delivery of this plan.
- Good-faith evaluation of the recommendations and analysis provided and fair consideration of the potential strategies and tactics identified that align with the community's goals.
- Commitment to delivering an actionable and complete energy plan within six months of the City of Faribault and Xcel Energy signing this MOU.
- Public distribution of the work products developed with the support of the Xcel Energy's Partners in Energy program.

State of Minnesota County of Rice

CITY OF FARIBAULT

RESOLUTION 2016-112

APPROVE EXECUTION OF MEMORANDUM OF UNDERSTANDING TO PARTICIPATE IN XCEL ENERGY'S PARTNERS IN ENERGY PROGRAM

WHEREAS, on March 8, 2016, the City Council of the City of Faribault approved Resolution 2016-059, which authorized the City of Faribault to participate in Xcel Energy's Partners in Energy Program; and

WHEREAS, Xcel Energy approved the City of Faribault's request to participate in the Partners in Energy program; and

WHEREAS, Xcel Energy prepared a memorandum of understanding that specifies the roles and responsibilities of Xcel Energy and the City of Faribault as they relate to the Partners in Energy Program (see attached);

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Faribault does hereby authorize Brian J. Anderson, City Administrator, to execute the Memorandum of Understanding for Phase 1, Plan Development associated with Xcel Energy's Partners in Energy program.

This resolution shall become effective immediately upon its passage and without publication.

Date Adopted: May 24, 2016

Faribault City Council John Jasinski, Mayor

ATTEST:

Brian J. Anderson, City Administrator

Appendix 3: Energy Action Team Appointments



Request for Council Action

TO:	Mayor and City Council
THROUGH:	Brian J. Anderson, City Administrator
	Deanna Kuennen, Community & Economic Development Director
FROM:	David Wanberg, AICP, City Planner
MEETING DATE:	June 14, 2016
SUBJECT:	Resolution 2016-127 Approve Energy Action Team Appointments for Xcel Energy's Partners in Energy Program

Background:

On May 24, 2016, the City Council approved Resolution 2016-112, which approved the execution of a memorandum of understanding for the City's participation in Xcel Energy's Partners in Energy program. The program provides tools and expertise to help communities develop and implement Energy Action Plans, which, in turn, helps communities save energy and money. Participation in the program does not require a monetary contribution from the City of Faribault; however, the City must assemble an Energy Action Team to help develop the Energy Action Plan.

The City Planner has asked representatives from City Staff, residential management firms, businesses, industries, and institutions to serve on the Energy Action Team. Steve White, Planning Commission member, has also agreed to serve on the team. It would be helpful to have a City Council member serve on the team as well. The team will meet roughly five times over six months, with the first meeting starting in July.

The attached Resolution 2016-127 approves appointments to the Energy Action Team. Most, but not all, of the people listed in Exhibit A of the Resolution have agreed to participate on the team pending team meeting dates and times. Consequently, the Resolution includes a provision that would allow City Staff to recruit alternate or additional people to participate on the team should those listed not be able to participate. Alternate or additional appointments would be made with the intent of ensuring broad representation of the community from a government, residential, business, industry, and institutional perspective.

Recommendation:

Approve Resolution 2016-127 Approve Energy Action Team Appointments for Xcel Energy's Partners in Energy Program (requires majority vote – 4/7)

Attachments:

Resolution 2016-127

CITY OF FARIBAULT

RESOLUTION 2016-127

APPROVE ENERGY ACTION TEAM APPOINTMENTS FOR XCEL ENERGY'S PARTNERS IN ENERGY PROGRAM

WHEREAS, the City Council of the City of Faribault approved Resolution 2016-112, which approved the execution of a memorandum of understanding for the City's participation in Xcel Energy's Partners in Energy Program; and

WHEREAS, the Partners in Energy Program requires that the City appoint an Energy Action Team to help develop an Energy Action Plan that will benefit City government, residents, businesses, industries, and institutions in the community; and

WHEREAS, Xcel Energy has requested that the Energy Action Team consist of roughly 10-20 members who will provide broad representation of the community on energy-related matters; and

WHEREAS, the Energy Action Team provides recommendations on the Energy Action Plan, but the City Council is the ultimate authority related to the approval of the Energy Action Plan.

NOW THEREFORE BE IT RESOLVED, by the City Council of the City of Faribault as follows:

- 1. The City Council authorizes the people listed in Exhibit A of this Resolution to serve on the Energy Action Team, pending their availability to serve.
- 2. The City Council authorizes City Staff to take any additional steps and actions necessary or convenient to accomplish the intent of this Resolution, including allowing alternate and/or additional appointments to the Energy Action Team without further City Council approval.
- 3. Adoption of the Energy Action Plan by the City Council shall result in the automatic termination of the Energy Action Team.

Adopted: June 14, 2016

Faribault City Council

John R. Jasinski, Mayor

ATTEST:

Brian J. Anderson, City Administrator

EXHIBIT A:

ENERGY ACTION TEAM APPOINTMENTS

- 1. Representative, City Council
- 2. Steve White, City of Faribault Planning Commission
- 3. Paul Peanasky, City of Faribault Community Center and Parks
- 4. Marty Smith, City of Faribault Rental Inspector
- 5. David Wanberg, City of Faribault Planner
- 6. Kevin Hildebrandt, Faribault Public Schools
- 7. Representative, Shattuck-Saint Mary's
- 8. Tim Johnson, Allina Health System
- 9. Nort Johnson (or alternate), Main Street
- 10. Karl Vohs, Downtown Business Owner
- 11. Tim McNelis, Faribault Business Owner
- 12. Rick Karow (or alternate), Residential Management Firm
- 13. Lynette Stott, Three Rivers Community Action
- 14. Representative, Jennie-O Turkey Store
- 15. Johnny Maxson, Daikin Industries
- 16. Alternate or Additional Members as Needed

Appendix 4: Workshop Process Overview

Workshop Process Overview

The section below includes more detail on how the group developed the plan's objective statement, focus areas, and strategies over the course of five workshops.

Workshop 1

During workshop 1 the Energy Action Team convened at City Hall to learn about Xcel Energy's Partners in Energy and the City's hopes for the process, and discussed the role the plan should play amongst the larger framework of the City's visions, community values, and strategic priorities. The team also reviewed baseline electricity, natural gas, and program participation data for Xcel Energy customers in Faribault. At the end of the workshop Tim Johnson volunteered to take the vision 2040 brainstorm content and draft a plan objective statement that would provide a concise, high-level overview of the plan's role in supporting community values and aligning with ongoing City priorities.



Workshop 1: Vision 2040 Activity

Workshop 2

During workshop 2 the Energy Action Team reviewed the plan objective statement drafted between workshop 1 and workshop 2. The team's discussion highlighted the importance of a developing a concise statement, calling out the objective of reinvesting resources or financial savings, identifying benefits specifically linked to the community, keeping the statement at a higher level by using generic language, and noting the importance of energy strategies being cost effective. After a baseline data refresher, the team brainstormed areas where the city should focus energy efforts. After team members proposed focus areas, they prioritized them through a voting process. The focus areas were then ranked and organized by near-term priorities and long-term priorities, based upon the team's feedback. Those not in attendance were able to contribute their feedback before focus areas were finalized during workshop 3.

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Workshop 2: Focus Area Prioritization

Workshop 3

The workshop 3 objectives were to confirm the selection of near-term and long-term focus areas, decide whether an overarching city goal was needed in Faribault, develop draft goals for near-term focus areas, and propose strategies to achieve goals. The team confirmed the proposed focus areas; chose to further explore an overarching city goal that would be measured in economic units; and developed draft goals of increasing energy savings annually in the residential, government and institutional, and large commercial sectors. All workshop participants contributed to a discussion to develop strategies for each focus area. These strategy suggestions were then taken for further review between workshops 3 and workshop 4.



Workshop 3: Goal Development

Workshop 4

The workshop 4 objectives were to solidify decisions around city-wide goals, review survey responses regarding near term strategies to identify the top strategies and begin to discuss details of long term focus areas. The workshop started by looking at the estimated savings that various program participation scenarios could achieve for near-term strategies. The team decided that a 1% annual savings was a reasonable and realistic goal for Faribault to achieve. After goals and savings were discussed the team reviewed proposed strategies for the residential focus area and discussed what would motivate residents to take action and



Workshop 4: Long Term Focus Area Discussion

who trusted messengers were. Next the team looked in the large commercial survey results. One outcome of that discussion was that outreach to large commercial businesses and institutional could be combined. Finally, the team discussed the government and institutional survey results. During this discussion the topics of gap financing and school district projects came up. The team also decided that a city-wide energy campaign would be helpful to implement the short-term focus areas. Finally, the workshop ended with a discussion of what some of the barriers might be to engage the long-term focus areas.

Workshop 5

The workshop 5 objectives were to review an energy savings scenario based upon the proposed City's energy goals. The team also discussed details of what they wished to accomplish with focus areas that would be implemented after 2020. Finally the Energy Action Team walked through the table contents of the draft Energy Action Plan. During this walkthrough they highlighted elements that they would like to see included in the plan outside of content directly related to energy focus areas. This feedback included ensuring that data pieces in the plan were easy for readers to understand; pointing out sections of the plan that would be of interest to specific subgroups; and ensuring that energy efficiency was linked back to the community's values of being innovative, saving money, and growing Faribault's economy.



Workshop 5: Group Discussion

Appendix 5: Renewable Energy Programs and Resources

Xcel Energy	y Renewable Ene	rgy Programs		
	Solar Rewards®	Solar Rewards Community®	Windsource®	Renewable Connect®
Bill Savings	Yes	Yes	No	Potential Long-Term Hedge
Incentive	\$/kWh production incentive, plus net metering	Premium bill credit pricing	None – Program	is self-funded
Cost	Save \$	Save \$	Slight Premium	Slight Premium; Potential Hedge
Use Green Energy	No (REC goes to utility)	No (REC usually goes to utility; based on developer choice)	Yes (offset your energy)	energy with green
Purchased From	3 rd Party	3 rd Party	Xcel Energy	Xcel Energy
Long Term Contract	Yes	Likely Yes	No	Optional

For more information about Xcel Energy's renewable energy programs go to: <u>www.xcelenergy.com</u>.

Renewable Energy Educational Resources

The Minnesota-based nonprofit, Clean Energy Resource Teams (CERTs) provides free resources to help residents, businesses, and organizations learn more about renewable energy technology, funding, and opportunities. Their website is: www.cleanenergyresourceteams.org.

Appendix 6: Memorandum Solar Garden Subscription Proposal



Request for Council Action

TO: THROUGH: FROM: MEETING DATE: SUBJECT: Mayor and City Council Brian J. Anderson, City Administrator Karla McCall, Finance Director November 9, 2016 Resolution 2016-184 Geronimo Energy Solar Garden Subscription

Background:

City staff has reviewed and presented solar energy proposals from several companies with community solar gardens in the surrounding area. The Council discussed this item and provided direction for staff to prepare the necessary documentation to enter into subscription agreements with Geronimo Energy for electricity volume up to 15% of the allowable, annual volume consumed by the City facilities.

Benefits of the program include:

- No upfront investment or future capital requirements.
- Annual energy savings.
- Xcel Energy remains our electricity provider.
- The Subscription is transferable.
- City support of renewable energy.
- Keep our energy dollars local.
- No maintenance or overhead costs.
- No risk!

This program provides an opportunity for the City to receive energy savings and promotes participation in renewable energy projects in Minnesota. The City will be participating in a solar project that provides clean electricity and provides a savings to the Community.

Recommendation:

Council may wish to adopt Resolution 2016-184: Resolution Approving Contracts for Solar Garden Projects with Geronimo Energy

Attachments:

Resolution 2016-184

Appendix 7: Resolution Approving a Solar Garden Subscription Agreement with Geronimo Energy

State of Minnesota County of Rice

CITY OF FARIBAULT

RESOLUTION 2016-184

RESOLUTION APPROVING A SOLAR GARDEN SUBSCRIPTION AGREEMENT WITH GERONIMO ENERGY

WHEREAS, the City of Faribault wishes to conserve energy and promote the development and use of renewable energy; and

WHEREAS, Geronimo Energy provides site development, permitting and subscription marketing for approximately 100 community solar gardens in Minnesota; and

WHEREAS, as a user of Xcel Energy the City may subscribe under Xcel Energy's Solar*Rewards Community Program to receive energy from a community solar garden; and

WHEREAS, the City will receive a credit on the Xcel Energy bill for their share of the solar energy produced by the solar garden and lower electric energy costs.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Faribault does hereby authorize the City Administrator to enter into a Solar Garden Subscription Agreement under the Xcel Energy Solar*Rewards Community Program to benefit from the renewable energy generated in the Community Solar Garden.

This resolution shall become effective immediately upon its passage and without publication.

Date Adopted: November 9, 2016.

Faribault City Council John R/Jasinski, Mayor

ATTEST:

BAL

Brian J. Anderson, City Administrator

State of Minnesota County of Rice

CITY OF FARIBAULT

RESOLUTION 2017-065

APPROVE FARIBAULT ENERGY ACTION PLAN

WHEREAS, the Faribault City Council approved Resolution 2016-062, which authorized the City of Faribault to participate in Xcel Energy's Partners in Energy Program - a voluntary two-year community partnership commitment designed to support communities as they develop and implement an energy action plan unique to their energy needs; and

WHEREAS, the Faribault City Council approved Resolution 2016-112, which approved a memorandum of understanding that specifies the roles and responsibilities of the City of Faribault and Xcel Energy as they relate to the Partners in Energy Program; and

WHEREAS, the Faribault City Council approved Resolution 2016-127, which approved appointments of community representatives to serve on the Faribault Energy Action Team; and

WHEREAS, the Faribault Energy Action Team, with the support of Xcel Energy, developed the Faribault Energy Action Plan in accordance with the specifications of the memorandum of understanding described in the second recital of this Resolution; and

WHEREAS, the Faribault Energy Action Plan provides cost-effective strategies to conserve energy and resource clean energy, which in turn provides economic savings and quality of life improvements for all sectors of the community; and

WHEREAS, on March 21, 2017, the City Planner and members of the Faribault Energy Action Team reviewed the draft Faribault Energy Action Plan with the Joint Committee of the City Council; and

WHEREAS, the Joint Committee of the City Council did not direct the City Planner to make revisions to the draft Faribault Energy Action Plan; and

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Faribault does hereby approve the Faribault Energy Action Plan dated April 11, 2017.

BE IT FURTHER RESOLVED that the City Council's approval of the Faribault Energy Action Plan dated April 11, 2017 results in the successful completion of Phase 1 of the memorandum of understanding described in the second recital of this Resolution. This resolution shall become effective immediately upon its passage and without publication.

Date Adopted: April 11, 2017

Faribault City Council

Kevin F. Voracek, Mayor

ATTEST:

Brian J. Anderson, City Administrator

Minnesota

Appendix 9: Xcel Energy Program Offerings



Energy Solutions for Your Business

Minnesota business customers can take advantage of our award-winning suite of energy conservation, renewable energy, energy management and billing programs. The programs can help you increase your energy efficiency, reduce operating costs, lower environmental impacts and improve your bottom line.

Our energy efficiency specialists can provide recommendations tailored to your business. They can walk you through programs, explain requirements and discuss different ways to get started. Programs and rebates are subject to change. Contact your Xcel Energy representative or an energy efficiency specialist at **855.839.8862** or by email at **energyefficiency@xcelenergy.com**. Visit **xcelenergy.com/Rebates** for additional details.

Program	Description	Details
Building Operator Certification (BOC) partial tuition	As an incentive to achieving the BOC certification, Xcel Energy will be offering partial tuition reimbursement of \$500 when building operators become certified. After earning the BOC, tuition reimbursement will be applied for and granted with proof of certification.	Incentive of \$500 is awarded regardless if the building is electric only, gas only or combo. Only one building operator is eligible for the reimbursement per building.
Business New Construction Energy Design Assistance*	An integrated design process that includes whole- building computer modeling and verification of measures for new buildings, additions or major renovations.	 Free modeling and design services. Rebates of \$400/kW and \$0.04/kWh plus \$5/Dth saved for implementing projects. 20,000 sq. ft. minimum size. Contact us for further details.
Business New Construction Energy Efficient Buildings*	Free design review to identify potential rebates and energy-saving opportunities, plus rebates for making efficiency improvements to your new building, addition or major renovation.	 Free design review. Prescriptive equipment rebates vary, and custom rebates range up to \$400/kW and/or \$5/Dth saved.
Commercial Efficiency*	A holistic operations and facilities analysis helps create a long-term energy management plan. Commercial customers must have cumulative energy conservation potential of 1 GWh or 4,000 Dth.	 Customized support includes enhanced analysis, study funding and implementation rebates. Call your Xcel Energy account manager for details.
Data Center Efficiency Study*	Data center energy efficiency analysis, includes review of the IT equipment and/or facility systems to detail how to run at peak efficiency.	 Study rebates up to 75% of the study costs depending on the expected energy savings, not to exceed \$25,000. Project implementation rebates up to \$400/kW.
Data Center Design Assistance	An integrated design process that includes building computer modeling and verification of measures for new data centers, additions or major renovations.	 For projects with at least 1 MW of IT load. Free modeling and design services. Rebates of \$400/kW and \$0.04/kWh for implementing projects.
Energy studies* for lighting, heating, cooling, motors, refrigeration or other systems	An in-depth study of major energy efficiency improvements to help you build a project's business case.	 Rebates up to 75% of the study costs depending on expected energy savings, not to exceed \$25,000. Additional equipment rebates may be available for implementing recommendations.

Business Solutions Center 855.839.8862

	Energy audits, studies and holistic programs help identify energy efficiency opportunities for individual projects or a holistic approach to energy savings for your business.			
Program	Description	Details		
Fluid System Optimization*	Analyze your fluid systems to discover no-cost/ low-cost improvements and identify capital projects to increase your system's efficiency, reliability and performance. Eligible systems for study rebates are: • Compressed air – supply • Compressed air – demand • Pump systems • Fan systems • Blower systems • Vacuum systems • Hydraulics	 Fluid system study (excluding compressed air-supply): Study rebates up to 75% of the study costs depending on the expected energy savings, not to exceed \$25,000. Study funding is directly tied to the size of the system and potential energy savings. Implementation rebates up to \$400/kW or \$5/Dth. Implementation bonus incentive for all study-identified measures up to the customer's out-of-pocket study cost of \$0.03/kWh and \$3/Dth. Compressed air - supply study with leak check Study rebates up to 100% of the study costs based on system size (requires 75% of identified leaks fixed): 10 hp-49 hp: \$250 + \$20/hp 50 hp-199 hp: \$3,000 + \$20/hp 500+ hp: \$4,000 + \$20/hp 500+ hp: \$4,000 + \$20/hp 500+ hp: \$4,000 + \$20/hp Study rebates for most auxiliary supply equipment and VFD compressors under 50 hp. Implementation rebates up to \$400/kW or \$5/Dth for custom projects. 		
FREE online assessment	A free, do-it-yourself snapshot of energy consumption that helps find ways to save on energy bills.	Visit energyprofiletool.com/xcelenergy to get started.		
Heating Efficiency steam trap audits	Testing to find failed traps using internal or external labor.	 \$15/trap tested rebate available after all qualifying failed traps are fixed and submitted to Xcel Energy. (Traps that fail closed do not qualify.) Available every other calendar year. Industrial systems using internal testing labor limited to \$15,000 rebate annually. 		
Heating Efficiency System Optimization Study*	Analyze all or part of heating system to uncover and/or assess natural gas savings opportunities, including no-/low-cost adjustments and/or equipment improvements.	 Rebates up to 75% of the study costs depending on the expected energy savings, not to exceed \$25,000 Additional equipment rebates may be available for implementing recommendations 		
Lighting Redesign Study*	A complete building-wide lighting analysis to identify ways to lower lighting output in over-lit or wrongly- lit spaces. (Not for 1-to-1 lighting retrofits; must be performed by a certified lighting professional).	 Study rebates up to 75% of the study costs depending on the expected energy savings, not to exceed \$25,000. Project implementation rebates up to \$400/kW saved. 		
Multi-Family Building Efficiency	The Multi-Family Building Efficiency program is an incentive-based solution to help multi-family building managers address whole-building energy efficiencies. Qualifying multi-family buildings will have a common entrance, common area(s), in-unit kitchens and the the primary purpose of long-term residential housing. Eligible property owners with electric service from Xcel Energy and natural gas service from either Xcel Energy or CenterPoint Energy will earn an incentive for achieving approved electric and natural gas energy-saving goals.	 The Multi-Family Building Efficiency program offers: Free, whole-building energy audit Free consulting support and on-site installations, including: Screw-in LED lights in common areas and resident units Energy-efficient showerheads Energy-efficient faucet aerators Water heater blanket LEDs in exit signs Incentives based on three achievement levels: Tier II: 25% incentive for achieving 15% energy savings Tier III: 40% incentive for achieving 25% energy savings Buildings qualified as affordable multi-housing earn double the incentives. 		
Process Efficiency*	A holistic operations and facilities analysis helps create a long-term energy management plan. Industrial manufacturing customers must have cumulative energy conservation potential of 1 GWh or 4,000 Dth.	 Customized support includes enhanced analysis, study funding and implementation rebates. Call your Xcel Energy account manager for details. 		
*Requires preapproval prior to start	ing the project or study.			

*Requires preapproval prior to starting the project or study.

Some restrictions apply: programs and rebates are subject to change. Please see program application forms for official program details, terms and conditions. Visit xcelenergy.com/Rebates for current details and applications.

Minnesota

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Energy audits, studies and holistic programs help identify energy efficiency opportunities for individual projects or a holistic approach to energy savings for your business.			
Program	Description	Details	
Recommissioning*	Rebates for tuning up existing building systems and controls with low- or no-cost adjustments.	 Study rebates up to 75% of the study costs depending on the expected energy savings, not to exceed \$25,000. Additional implementation rebates up to \$400/kW or \$5/Dth. 	
Refrigeration Recommissioning*	Rebates for tuning up existing commercial refrigeration systems in grocery outlets, convenience stores and other facilities with refrigerated cases.	 Rebate amount is based on expected energy savings. Maximum rebate is 75% of the Recommissioning tune-up cost. 	
Turn Key Services	Energy assessments and/or free project implementation assistance and bundled rebates for the project.	 Participate in an ASHRAE level one assessment to identify energy conservation opportunities. All identified opportunities will include energy savings and cost estimates, cost savings and application rebates. Buildings that are 5,000–75,000 square feet will also receive a recommissioning, or tune-up analysis to identify low- and no-cost adjustments to your existing equipment. Costs range from \$600–\$1,300 depending on your annual energy usage and is charged to your Xcel Energy bill. FREE implementation help is available to move your efficiency projects forward no matter if you participate in an assessment. We can help you with gaining project approval, prioritizing projects, the bidding and selection process, coordination of implementation and/or compiling rebate paperwork. Earn implementation and bonus rebates for completing your project. 	

Equipment rebates help offset the up-front cost of installing qualifying energy-efficient equipment and shorten payback periods. Maximum rebate is 60% of the total project cost.

Program	Description	Details
Cooling Efficiency	Rebates for replacing or updating equipment to increase cooling efficiency.	 Cooling Chillers—air cooled, centrifugal, screw/scroll, VFD retrofits DX Units—RTUs, condensing, split systems Econmizer on RTU–CO₂ & Enthalpy controls Mini-split heat pumps Packaged terminal air conditioner (PTACs) Water source heat pump
		 Refrigeration Anti-sweat heater control Close the case doors (adding doors to existing cases) EC motors Zero loss energy doors (adding no heat doors to existing cases)

*Requires preapproval prior to starting the project or study.

Some restrictions apply: programs and rebates are subject to change. Please see program application forms for official program details, terms and conditions. Visit xcelenergy.com/Rebates for current details and applications.

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Program	Description	Details
Computer Efficiency	Rebates for installing virtual desktop infrastructure and/or PC Power Management software.	 \$60 per Thin Client installed—thin clients are defined as including a small CPU, graphics coprocessor, RAM, and local storage like a solid-state hard drive, or simply flash memory, no operating system. \$60 per Zero Client installed—Zero Client Computing is defined as no client-side processing or management; no CPU, no memory, no operating system, no drivers, no software and no moving parts. \$5 per PC controlled by power management software. Rebates are available for applications on desktop PCs that operate during a typical single shift operation and must prevent computer users from overriding the power management settings. The rebate does not apply to installations on laptops, tablets and other hardware such as virtual desktops, printers and monitors.
Custom Efficiency*	Rebates for energy efficiency projects that aren't covered under our other rebate programs.	 Rebates up to \$400/kW and/or up to \$5/Dth on a wide variety of equipment and process improvements that lead to energy savings. Written preapproval from Xcel Energy is a precursor for all projects.
Data Center Efficiency Equipment Rebates*	Rebates for making energy-saving data center improvements.	 Custom rebates up to \$400/kW EC Motor Plug Fans \$700/fan for new units or \$1,200/fan for retrofit applications Waterside economizer (plate and frame heat exchanger) up to \$120-\$300/ton dependent upon wet bulb temperature Mini-split air conditioning unit = (\$50 + 2/0.1 SEER above minimum qualification) x tons
Efficiency Controls*	Rebates for control systems that save energy by automating building systems such as lighting, HVAC and others.	 Rebates* up to \$400/kW and/or \$5/Dth saved for upgrading or installing new building controls.
Fluid System Optimization	Rebates for replacing, updating or improving system efficiency.	 No-loss air drains \$200/CFM Compressors with integrated drives (10 hp-49 hp) \$100/hp Custom rebates* based on energy savings, up to \$400/kW and/or \$5/Dth. Supply-side projects on compressor systems >49 hp are capped at \$50/kW saved without an approved study if eligible for a study Cycling dryers \$2/rated CFM Dew point demand controls \$1,500/each Mist eliminators \$3/rated CFM

Some restrictions apply; programs and rebates are subject to change. Please see program application forms for official program details, terms and conditions. Visit **xcelenergy.com/Rebates** for current details and applications.

Business Solutions Center 855.839.8862

Minnesota

Program	Description	Details
Foodservice equipment	Rebates for purchasing and installing qualifying energy-efficient foodservice equipment.	 Broilers (gas, infrared and upright) \$600 Charbroilers (gas, infrared) \$300 Combi ovens (gas) \$1,000 Convection ovens (gas) \$500 Conveyor ovens (gas) \$750 Demand controlled ventilation (DCV) (commercial kitchen use only, DCV Located in a lab must go through Custom Efficiency program) Combo natural gas and electric customers or gas-only customers: \$250 per exhaust fan Electric-only customers: \$400 lump sum (total) for all fans under 5 hp Note that the rebate is not per hp \$125 per exhaust fan hp for fans 5 hp but less than 7.5 hp \$100 per exhaust fan hp for fans 7.5 hp or greater ENERGY STAR® commercial dishwashers Low temperature (without booster heater) for gas or electric water heating \$250 High temperature with primary AND booster water heating using Xcel Energy natural gas or electricity \$250 High temperature with either primary OR booster water heating using Xcel Energy natural gas or electricity \$125 Hot food holding cabinets (ENERGY STAR) \$250 Pasta cookers (gas) \$200 Rotating rack ovens (gas) \$500 Salamander broilers (gas, infrared) \$150 Equipment primary fuel source must be gas to qualify for gas rebates an electricity to qualify for electricity rebates.
Heating Efficiency	Prescriptive rebates for qualifying commercial heating systems used for space heating, domestic water heating and up to 30% additional process load.	 New boilers: \$500-\$7,000 per million BTUh New furnaces: \$100-\$300 per furnace New water heaters: \$200/100,000 BTUh Boiler tune-ups (every other year): 25% of cost up to \$250/boiler Auxiliary equipment Outdoor air reset control: \$200/control Oxygen trim controls: 25% up to \$5,000/boiler Modulating burner: \$1,500/boiler million BTUh, \$7,000 maximum/ boiler Stack damper: 25% up to \$250/damper Turbulator: 25% up to \$400/boiler Steam traps Testing rebate: \$15/trap if all failed traps fixed; Repair rebate: \$30/trap repaired Pipe insulation: \$5-\$9/inch of pie diameter/linear foot Unit heaters: \$50-\$500/100,000 BTUh Heating Optimization Study: Up to 75% of cost up to \$25,000/study Custom rebates* up to \$400/kW and/or \$5/Dth saved for projects not listed above, including all industrial process boiler projects, heat recovery and new boilers >10 million BTUh

*Requires preapproval prior to starting the project or study. Some restrictions apply; programs and rebates are subject to change. Please see program application forms for official program details, terms and conditions. Visit **xcelenergy.com/Rebates** for current details and applications.

Business Solutions Center 855.839.8862

	Equipment rebates help offset the up-front cost of installing qualifying energy-efficient equipment and shorten payback periods. Maximum rebate is 60% of the total project cost.			
Program	Description	Details		
Lighting Efficiency retrofit rebates	Rebates for purchasing and installing energy- efficient lighting in an existing building.	 Low-wattage 4-foot fluorescent T8 lamps; 28W or less \$0.50/lamp High-bay fluorescent T8 lamps and T5 H0 lamps with high-efficiency electronic ballasts \$35–\$100 Hardwired or modular compact fluorescent lamps (CFL) \$0.50–\$4 Stand-alone and integral occupancy sensors and photocells \$8–\$40 Bi-level stairwell fixture with integrated sensor \$75 LED or LEC exit signs \$25 LED traffic signs \$25–\$50 ENERGY STAR-qualified LED lamps ENERGY STAR-qualified LED and Downlight Retrofit Kits \$5–\$25 DLC-qualified exterior LED fuel pump canopy fixtures \$100–\$125 DLC-qualified LED wall pack fixtures \$35–\$100 DLC-qualified LED wall pack fixtures (exterior/parking garage) \$35–\$100 DLC-qualified LED wall pack fixtures \$135–\$150 DLC-qualified LED parking garage fixtures \$135–\$150 DLC-qualified LED troffer fixtures and retrofit kits \$30–\$50 DLC-qualified LED troffer fixtures \$100–\$250 DLC-qualified LED high/low bay fixtures \$100–\$250 DLC-qualified LED linear tubes \$2–\$10 DLC-qualified LED linear tubes \$2–\$10 DLC-qualified LED fixtures T5 H0 or T8 with high-efficiency electronic ballasts \$35 Lighting Optimization T8–T8 \$12 Custom rebates* up to \$400/kW saved for other lighting projects Networked Lighting Controls rebates* up to \$600/kW. 		
Lighting Efficiency New Construction rebates	Rebates for purchasing and installing energy- efficient lighting for new or significantly renovated facilities.	 Low-wattage 4-foot fluorescent T8 lamps; 28W or less \$0.50/lamp High-bay fluorescent T8 and T5 H0 lamps with high-efficiency electronic ballasts \$10-\$20 Hardwired or modular compact fluorescent lamps (CFL) \$2 ENERGY STAR-qualified LED downlights luminaires \$25-\$40 DLC-qualified exterior LED fuel pump canopy fixtures \$50-\$100 DLC-qualified Refrigerated LED case lights \$35 DLC-qualified LED wall pack fixtures (exterior/parking garage) \$15-\$50 DLC-qualified LED parking garage fixtures \$25-\$35 DLC-qualified LED troffer fixtures \$30 DLC-qualified LED street lighting \$15-\$85 DLC-qualified LED area lighting fixtures \$125-\$175 ENERGY STAR-qualified LED lamps Custom rebates* up to \$400/kW saved for projects not listed above Networked Lighting Controls rebates* up to \$600/kWh 		
Lighting Efficiency One-Stop Efficiency Shop	Enhanced rebates and special services for small- to medium-sized business customers.	 Free lighting audit with cost-saving recommendations. Financing for lighting projects. Start-to-finish oversight of lighting upgrade and rebate paperwork. Administered by the Center for Energy and Environment (CEE) for customers with peak demand of 400 kW or less. Contact CEE at 612.244.2427 to verify eligibility and rebate details. 		

*Requires preapproval prior to starting the project or study.

Some restrictions apply; programs and rebates are subject to change. Please see program application forms for official program details, terms and conditions. Visit **xcelenergy.com/Rebates** for current details and applications.

Minnesota

Business Solutions Center 855.839.8862

Equipment rebates help offset the up-front cost of installing qualifying energy-efficient equipment and shorten payback periods. Maximum rebate is 60% of the total project cost. Details Program Description Rebates for motors: Motor Prescriptive rebates for motors: and Drive · NEMA Premium and Constant Efficiency permanent magnet Permanent magnet alternating current speed motor alternating current Induction 60 hertz motors (PMAC) motors (PMAC) 60 hertz motors controller HVAC and non- HVAC (CSMC): VFDs or ASDs UPGRADE MOTORS Invoice date of January 11, 2016 or later. Constant speed (variable frequency or motor controllers: ENHANCED NEW MOTORS and ENHANCED UPGRADE MOTORS ENHANCED NEW MOTORS and ENHANCED UPGRADE adjustable speed drive) \$10/hp 1 hp to 500 hp: \$30 to \$13,500 depending on hp MOTORS Water well pump VFDs 1 hp to 500 hp: \$30 to \$13,500 depending on hp. 5 hp-500 hp Upgrade motors must meet or exceed NEMA Premium standards. (WWP VFDs) Enhanced new motors and enhanced upgrade motors must exceed NEMA enhanced new motors and enhanced upgrade motors Constant speed motor Premium efficiency standards by at least one percentage point must exceed NEMA premium efficiency standards by at controllers (CSMCs) least one percentage point. The following RPMs quality under the **Prescriptive rebates for VFDs:** prescriptive VFD and motor rebate VFD (variable frequency drive) and ASD (adjustable speed drive) - \$400 to \$8,000 depending on hp programs: • 8 pole = 900 RPM Requirements for prescriptive HVAC a Water well pump VFDs • 6 pole = 1200 RPM nd Non-HVAC VFD Rebates ...controlled 4 pole = 1800 RPM For these equipment ...in these situations. 2 pole = 3600 RPM ...controlled systems For these must have ... in these situations. See rebate information equipment systems for specific information Invoice date of must be Water well Municipal water supply regarding application pumps January 1, 2016 or Golf course/landscape HVAC systems Fans and blowers Retrofit or failed-VFD-replacement new VFD's requirements. after irrigation (existing (centrifugal or Existing throttling on previously Agricultural irrigation buildings) axial) throttled pumps control Other applications could Single-stage Closed-loop systems Retrofit or 20-percent include: centrifugal pumps and evaporative failed-VFDminimum flow - Snow making when water is condenser and cooling replacement variation pumped from a well. tower spray/circulating Will operate at less Lift stations that are pumps than 100% speed pumping from a well. HVAC systems Fans and blowers Must be ≤ 7.5 hp during summer Waste water pumping from Centrifugal or (new peak hours a well construction Axial) Not used as a - Storm water pumping from buildings) back-up a well. Single-stage Closed-loop systems Must be ≤ centrifugal pumps and evaporative 50 hp The following information is required for the Water Well Pump VFDs condenser and cooling tower sprav/circulating Water well pump design flow (GPM) – the design flow rate (GPM) for a water pumps well pump Water well pump design head pressure (ft of head) Non-HVAC Fans (centrifugal Retrofit and replacing failed VFDs · Static water level: the average well depth (ft) for a water well pump systems or axial) Average Pump Flow: the time weighted average flow rate (GPM) for a water Non-HVAC Single-stage Retrofit and replacing failed VFDs well nump systems centrifugal pumps Maximum Pumping water level: The maximum well depth (ft) for a water well pump Custom rebates* up to \$400/kW saved for: **Constant speed** VFDs Motors motor controller (CSMCs) >500 hp or that otherwise • >200 hp 1 hp-4 hp or >500 hp do not qualify under the VFDs placed on existing refrigeration compressors or air compressors above criteria, or whose · High static pressure installations such as drives on submersible pumps or any hp size is not identified above ground pumps that operate systems with a high static dominated pressure using NEMA premium hp level or poor sequencing, or that do not meet the water well pump or HVAC VFD categories or enhanced prescriptive rebate requirements. hp categories • Non-fan, non-pump equipment such as presses, extruders, stirrers, conveyors, or vacuum pumps, process equipment or chillers Positive displacement blowers or positive displacement pumps Multi-stage booster stations or pumps. • Integrated VFD/pump/motor units • A component of a larger system that does not have separate, itemized receipt/ invoice for the drive Any other situation that does not fit within the "Requirements for prescriptive HVAC and non-HVAC VFD rebates" chart and the "Water well pump VFD" chart Preapproval is required for all custom projects. Drives used in the following situations do not qualify for a rebate under the Xcel Energy Motor and Drive Efficiency rebate program. Soft start Power correction canabilities That run less than 100 hours per year Some restrictions apply; programs and rebates are subject to change. Please see program application forms for official program details, terms and conditions. Visit xcelenergy.com/Rebates for current details and applications

Energy Solutions for your Business

Business Program Summary

Minnesota

Business Solutions Center 855.839.8862

Equipment rebates help offset the up-front cost of installing qualifying energy-efficient equipment and shorten payback periods. Maximum rebate is 60% of the total project cost.			
Program	Description	Details	
Self-Direct	Increased rebates for self-engineered, implemented, commissioned, metered and verified projects.	 Customers with aggregated usage of 10 GWh, 2 MW or 100,000 Dth. Rebates of \$525/kW or \$0.10/kW, and/or \$8/Dth based on amount of energy savings attained. Preapproval of eligibility and project required. New construction projects are not eligible. 	

Financing helps you manage cash flow for implementing your energy-saving project.			
Program	Description	Details	
Trillion BTU financing	Loan program that leverages public and private money to help businesses make improvements that lower their energy costs.	 A joint effort of the St. Paul Port Authority and Xcel Energy. For more information, contact Peter Klein at 651.204.6211 or email him at pmk@sppa.com. 	

Rate-saving discounts let you save on electric bills when you're flexible about how you use energy.			
Program	Description	Details	
Electric rate savings	Tremendous savings for businesses that can reduce or interrupt \ge 50kW of electricity demand upon our request.	Contact us for details and advice on whether this is a good fit for your business.	
Saver's Switch®	A pager-activated device installed on/near outside air conditioning units to help reduce electric load when price or demand for electricity peaks.	 \$5 credit per month per ton of enrolled air conditioning applied to the electricity portion of your bill, June through September, Single- and dual-stage rooftop units are eligible (certain restrictions apply). Peak control customers are not eligible, 	

Renewable energy programs provide high-visibility and high-impact promotional value for your business while lowering your environmental impacts.

Program	Description	Details
Solar*Rewards®	Financial assistance for installing solar panels on your business.	Projects are typically coordinated by PV system installers. After exploring the program details at xcelenergy.com/Solar , contact several installers for bids and design proposals.
Windsource [®]	Purchase renewable energy to offset your business' electricity use.	For a surprisingly low cost, Windsource can help you meet environmental goals, receive LEED certification points or demonstrate your environmental commitment. Contact your account manager, call us for details or visit xcelenergy.com/Windsource .

Billing and account management services provide flexible options that let you view your energy use, manage your account and pay your bills when and how you want.

Program	Description	Details
My Account with eBill	My Account provides an online view of your services all in one place, with the option of adding eBill for paperless billing and payment.	Sign up for My Account and eBill at xcelenergy.com/MyAccount and follow the prompts to add eBill.
Electronic data interchange	Receive your energy bill electronically the day after the billing cycle is complete.	Contact your account manager, or visit xcelenergy.com .
Electronic funds transfer	Pay your bill directly from your account to Xcel Energy.	Contact your account manager, or visit xcelenergy.com .
InfoWise energy management reporting services	A powerful, energy management reporting solution with customized data for your business to help manage and control energy use.	Contact Power TakeOff, our energy management partner at 800.303.9890 or email support@powertakeoff.com .

*Requires preapproval prior to starting the project or study.

Some restrictions apply; programs and rebates are subject to change. Please see program application forms for official program details, terms and conditions. Visit xcelenergy.com/Rebates for current details and applications.

