

GREEN WING ENERGY ACTION PLAN

For



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Executive Summary



Credit: Scott Costello via CC

In the winter of 2015, Red Wing, Minnesota, began a six month process to evaluate how energy is used and sourced in the City, and to develop an Energy Action Plan to help the community work towards short- to mid-term energy goals based upon those findings. The process was facilitated through Xcel Energy's Partners in Energy offering for communities, and convened by Red Wing's Sustainability Commission. Red Wing was the third Minnesota community to participate in Partners in Energy.

Fifteen members of the community were appointed by the Sustainability Commission to serve on the Energy Action Team that developed the content of this plan, primarily through four in-person planning workshops and a few review meetings. This plan is the product of the Energy Action Team's work, completed in partnership with Xcel Energy, to develop a unifying energy vision for the Red Wing community and identify targeted steps towards fulfilling that vision. The team's brainstormed visions and final adopted vision and mission statements are below.



Participants' Visions for Red Wing's Energy Future

Vision

Accomplish environmentally sound, affordable, life sustaining energy for and by the community for generations to come.

Mission

Inspire and facilitate the greater Red Wing community to develop and support sustainable, reliable, healthy energy production and utilization choices.

Red Wing’s participation in Partners in Energy is not the community’s first foray into energy efficiency and renewables. The City of Red Wing is home to many environmental assets, and this has been an important factor in the City Council’s ongoing support of many local sustainability initiatives. The City formed the Sustainability Commission in 2008 to act as a formal advising entity to the City Council. In 2011, the City Council unanimously voted to participate in Minnesota’s GreenStep Cities, a program that sets tiered commitments for city sustainability actions. Red Wing has also invested in alternative energy; most recently by commissioning six solar projects on government facilities with a total capacity exceeding 200 kW.

The Partners in Energy process was designed to allow City resident and business leaders to develop a plan that specifically targets goals within the energy sector, and also leverages implementation support from Xcel Energy. The planning process began by reviewing the community’s baseline energy use, including the total annual energy expenditures for commercial and residential customers in Red Wing (shown below for 2013 in Figure 1).

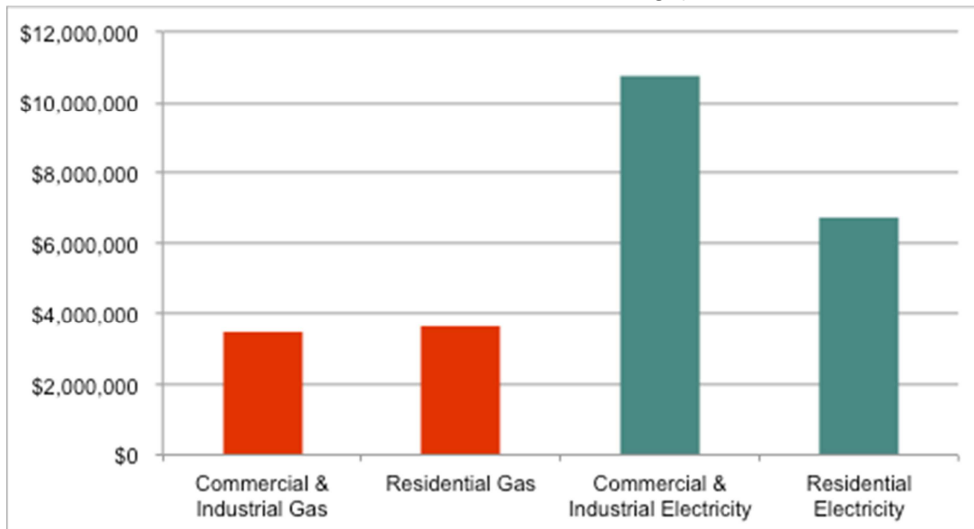


Figure 1. Electricity and gas expenditures in the Red Wing Community (2013)¹

¹ All energy and program data presented in this plan complies with Xcel Energy’s 15x15 data privacy rule. This refers to the policy that the public reporting of statistics on customer energy use or conservation activity must contain at least 15 entities and no single entity can be responsible for more than 15 percent of the total. If large users are above

The Energy Action Team also reviewed data from Xcel Energy on the community's previous participation in energy efficiency and renewable energy programs to understand what residents and businesses had already done. In 2012 and 2013, there were five residential and two commercial customers that filed for solar program rebates with Xcel Energy. In addition, approximately 147 residents subscribe to the Windsource[®] program, which allows customers to purchase electricity from wind power. Residential and commercial participation counts for the most popular energy efficiency programs are shown below (See Figures 2 and Figure 3). These data helped form the basis for the goals set forth in this plan.

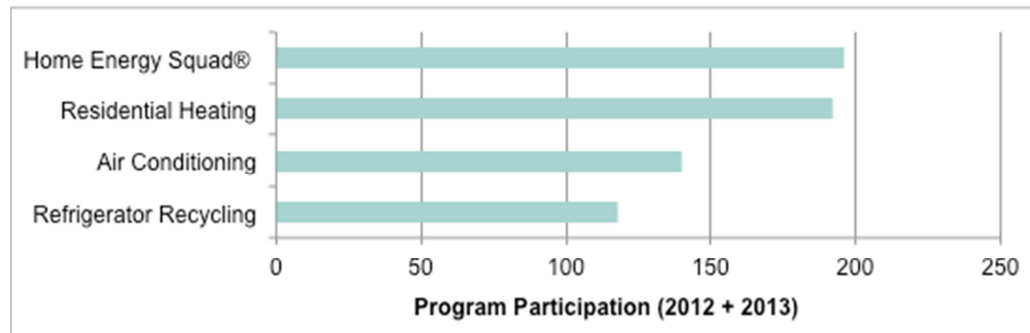


Figure 2. Red Wing residents' recent participation in energy efficiency programs

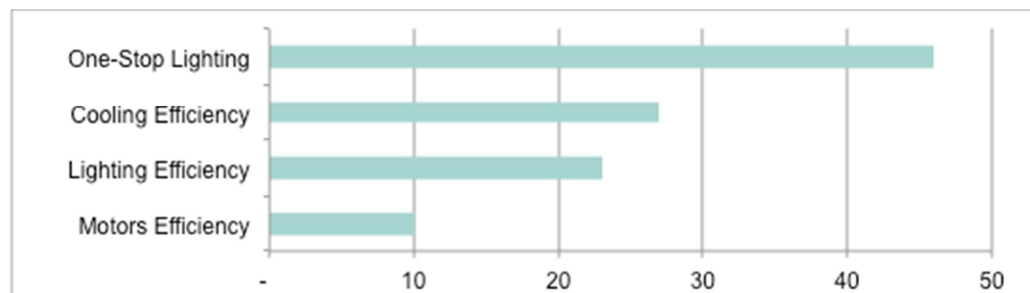


Figure 3. Red Wing businesses' recent participation in commercial and industrial efficiency programs

Throughout the planning process, Energy Action Team members shared perspectives on Red Wing's local community strengths that would be valuable to leverage when implementing the plan. This included Red Wing's close-knit community that fosters face-to-face interactions, numerous local media channels such as the Republican Eagle and local KCUE AM radio, the commitment of the Sustainability Commission volunteers, leadership from local government, and the student-led Sustainability Club at Red Wing High School. Members also shared potential barriers, including the ongoing Highway 61 road construction impacting local businesses and potential skepticism of energy programs from local residents, an observation that was based on recent residential outreach experience.

this 15 percent threshold, they will be removed from the summary. Three premises were removed from the Red Wing energy use and conservation statistics due to these privacy rules.

The Energy Action Team developed areas of focus and core strategies over the course of four workshops and one review meeting, beginning with brainstorming sessions about possible work areas, then sorting priorities based on both feasibility and impact, and finally reviewing strategy details in smaller groups. The group's priorities reflect survey results and review comments from the larger team. The two targeted focus areas for the energy action plan are to promote renewable energy and energy efficiency adoption by residential households and small to mid-sized commercial businesses².

The residential focus area has a goal to have an additional 10% of Red Wing households, or 700 households in addition to the city's baseline participation, engage in an energy efficiency and/or renewable energy activity in the next two years. Two core strategies will support this goal: first, a residential energy campaign will use recent homebuyers and faith-based organizations as two distinct outreach channels to promote energy efficiency and renewable programs, and second, a partnership with the local youth sustainability group will educate and harness the commitment of local youth to promote sustainable energy actions through the use of renewable resources.

The commercial focus area has a similar goal to engage an additional 10% of Red Wing's small to mid-sized businesses in an energy efficiency or renewable energy activity in the next three years, meaning 100 businesses above the city's baseline participation. This focus area contains three strategies: first, organize the numerous program options for businesses into a streamlined "menu of options" that will simplify decisions; second, launch a local recognition campaign for businesses that have participated in programs; and third, partner with trusted local channels such as banks and the Chamber of Commerce to promote the value of and the services offered for energy efficiency and renewable energy.

A summary of these focus areas, goals, and strategies is included in the following table.

² This plan defines small to mid-sized business as business that use less than 1,000,000 kWh a year.

Red Wing Focus Areas, Goals, and Strategies

Focus Area: Residential Sector Energy Use

Goal: An additional 10% of Red Wing households participate in an energy efficiency or renewable energy program in the next two years. This equates to an additional **700 households** above the City’s baseline participation.

Strategy 1: Launch an energy efficiency and renewable energy promotional campaign for residential homebuyers to invest in energy upgrades for their new home.

Strategy 2: Co-sponsor awards with the City of Red Wing for a student sustainability project competition. Eligible projects for the competition will focus on preserving environmental conditions through the use of renewable resources. Details will need to be determined with school staff to ensure that their curriculum protocols are followed.

Focus Area: Local Commercial Businesses

Goal: An additional 10% of Red Wing’s small to mid-sized commercial businesses participate in an energy efficiency or renewable energy program in the next three years. This equates to an additional **100 businesses** above the City’s baseline participation.

Strategy 1: Organize energy efficiency and renewable program options into a streamlined and easily understood “menu of options” to help local businesses understand the relative benefits of different programs.

Strategy 2: Develop a recognition campaign to increase visibility for local businesses that participate in energy efficiency and renewable energy programs.

Strategy 3: Partner with trusted outreach channels such as the Chamber of Commerce and local banks to connect with and influence local businesses.

The title of this plan is “**Green Wing, Energy Challenge.**” It reflects the Planning Team’s desired move towards broad community participation in the “greener” energy choices of conservation, wind, and solar energy production.



Credit: Lance and Erin via CC

Since the 1980's, with strong leadership from its City government, Red Wing has developed numerous successful sustainability initiatives. One emerging theme throughout these projects is a clear focus on energy conservation and solar energy. Successful government-lead initiatives have made Red Wing a regional leader on energy issues. It was this recognition that led Xcel Energy to invite Red Wing to be the third community to participate in Xcel Energy's Partners in Energy — an offering designed to help communities develop and implement community-driven energy plans.

Red Wing's City Council signed a Memorandum of Understanding with Xcel Energy in October of 2014 (see Appendix). From February to October 2015 an Energy Action Team appointed by the City Sustainability Commission met in a series of four workshops and review meetings to develop the contents of this Energy Action Plan.

The purpose of the plan is to outline tangible steps the community can follow to continue increasing energy efficiency and the use of solar and wind energy in the City. The hope is that this plan will both inform the community about Red Wing's baseline energy use and provide the necessary framework to start working towards targeted goals.

Who Are We? – Community Background

Red Wing is home to 16,500 residents. Although the city ranks 65th in Minnesota in terms of population size, Red Wing is the third largest in the state in terms of land area. Residents describe Red Wing a close knit community where residents know and look out for one another. Visitors are often dispersed throughout this local community, attracted by the City's internationally recognized historical downtown and riverside views. Red Wing is also known as a manufacturing city, producing well-known products such as Red Wing Boots and Red Wing Stoneware and Pottery.



Credit: Lance and Erin via

Employment

The median household income from 2009-2013 was \$50,387³. In 2014 there were approximately 340 businesses registered as members of the Red Wing Area Chamber of Commerce. In addition to the Chamber, the Red Wing Port Authority works to promote industry and a strong economy in the region. Major sources of employment in Red Wing are Treasure Island Casino, Red Wing Shoe Co., Mayo Red Wing Health Center, Xcel Energy, BIC, and Independent School District 256.⁴

Education

Red Wing residents are served by School District 256. There are two public elementary schools, one public middle school, one public high school, and two alternative high school opportunities. There are also two private K-8 schools in the area. Of Red Wing's adult residents, 91.9% are high school graduates and 23.9% have continued their education to receive a bachelor's degree or higher. Red Wing is home to one institute of secondary education: Southeast Technical College.

Red Wing's Community Assets

Highlights from community members' feedback during the planning workshops

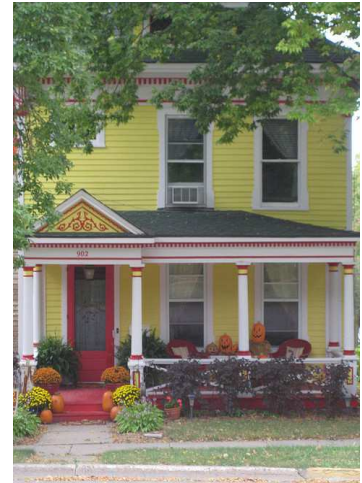
- The environment, especially the river and bluffs
- The human capacity found in the community
- The community's welcoming nature
- People's willingness to work together
- Red Wing's nonprofits and charities
- The City staff who aim to improve the quality of life and service to the people of Red Wing
- Red Wing is readily identifiable — people recognize the name, products, and geographical landscape
- The small business community and strong Chamber of Commerce

³ 2010 US Census Quick Facts

⁴ Red Wing Port Authority

Housing

In the residential sector, 73% of Red Wing's 7,539 housing units are single-family homes and 27% are multiunit structures. Between 2009 and 2013, Red Wing's homeownership rate was 70.9% and the median value of owner-occupied housing units was \$160,800. Eighty-six percent of households live in the same house for over one year. Between 2013 and 2015, approximately 860 homes were sold in Red Wing.⁵



Credit: Seward Inc. via CC

Commitment to Sustainability

Sustainability is a point of pride in the Red Wing community. In 2008 the City established a Sustainability Commission to act as a formal advising entity to the City Council and ensure that the City is continuously evaluating the environmental, social, and economic implications of decisions. Historically Red Wing's City Council has been very supportive of sustainability initiatives. For example, in 2011 they unanimously voted for the City to participate in GreenStep Cities, a program developed to help challenge, assist, and recognize communities for reaching their sustainability goals.

In addition to the work of the Sustainability Commission, the City has a variety of community groups that convene around environmental issues. Examples of these groups include: Red Wings Citizen Climate Lobby, Conservation Minnesota, Audubon Minnesota, and GreenStep Cities with Ken Moon as the community contact.

Xcel Energy Partners in Energy

Xcel Energy is the electric and gas utility serving the City of Red Wing. In the summer of 2014, Xcel Energy launched Partners in Energy, an offering to support communities with developing and implementing their own customized energy action plans. Red Wing was chosen as the third city in Minnesota to participate.

The content of this plan was developed in a series of four planning workshops and a few review meetings with Red Wing's Energy Action Team (more detail below). Xcel Energy's role in the planning process was to facilitate the workshops, provide baseline energy use information, provide conservation and renewable program participation data as available, and assist Red Wing in developing their planning document with community input and feedback.

Partners in Energy will continue to work with Red Wing's Sustainability Commission and members of the Energy Action Team to support the implementation of this plan. Implementation needs are discussed further in this plan. Roles will be codified in a Memorandum of

⁵ Zillow.com housing search

Understanding (MOU) that includes the ongoing support Xcel Energy can provide to help implement and celebrate achievement of the community's energy action goals.

Background to the Energy Planning Process

In the summer of 2014, Red Wing's Sustainability Commission invited Xcel Energy to present information on Partners in Energy, and the Commission unanimously supported City participation. In October of 2014, the Sustainability Commission brought their recommendation to the City Council, and they unanimously approved and signed the Partners in Energy MOU. The reasons expressed for their support included: 1) an understanding that there was a need for a community energy plan and if the opportunity was not taken the process might be delayed, 2) an understanding that Xcel Energy's role in the process would be one of facilitation rather than prescribing outcomes, 3) an understanding that the Sustainability Commission and volunteers would be responsible for carrying out the plan, and 4) an understanding that the Partners in Energy service could provide resources from Xcel Energy to help implement portions of the plan. Additional detail can be referenced in the City Council meeting minutes for October 13, 2014.

The Sustainability Commission recruited a group of volunteers to serve on Red Wing's Energy Action Team. The main role of these members was to attend the planning workshops over a six month period and to help review their Energy Action Plan that was developed based upon their discussions. To assist with the recruiting process, members of the Sustainability Commission met with Partners in Energy staff on December 22, 2014, to discuss more specifics regarding the planning process.

The broad range of participants included a mix of business members representing both small businesses and larger industrial facilities; representatives from the school board, Chamber of Commerce, and Goodhue County Habitat for Humanity; and several residents with various energy and sustainability backgrounds. A full list of Energy Action Team members is included at the end of this section.

The Energy Action Team met over four workshops from February 2015 to June 2015. Additionally the team met for a plan review meeting in September and smaller groups met to flush out strategy details until October 2015. A summary of the topics covered at each of the four workshops is listed below, with additional information available in the Appendix.

Workshop 1

- **Workshop 1 (February 25, 2015):** Welcome and introductions, Partners in Energy overview, presentation of past energy initiatives in Red Wing, energy visioning activity, and initial baseline data presentation.



- **Post Workshop 1:** Volunteers from the Energy Action Team drafted a vision and mission statement.

Workshop 2

- **Workshop 2 (April 14, 2015):** Presentation of the proposed vision and mission statement, further discussion and presentation of Red Wing’s energy data, tour of community energy plan options, and brainstorm of energy action plan strategies.



Workshop 3

- **Workshop 3 (May 19, 2015):** Introduction to the Energy Action Plan template and Compass tool, focus area prioritization, and goal development.
- **Post Workshop 3:** Energy Action Team members completed a survey providing feedback on proposed goals, strategies, target audiences, and communication channels. The survey results can be found in Appendix 6 & 7.



Workshop 4

- **Workshop 4 (June 30, 2015):** Presentation of survey results regarding goals, strategies and tactics for implementation, refinement of strategy details in small groups, and discussion of next steps.



Draft Plan Review Meeting

- **Review Meeting (September 15, 2015):** Review the first draft of the Energy Action Plan and further development of strategy details. Discussion of staying on course during plan implementation.
- **Post Meeting:** Agreement on the name and tagline “Green Wing, Energy Challenge” for plan implementation and further goal refinement (See Appendix 8).

Energy Action Team Members



Energy Action Team Members at June 2015 Planning Workshop

Red Wing's Energy Action Team

Red Wing's Energy Action Team was selected and approved by the City Council. The team was comprised of residents, business representatives, City staff, commission members, and the school district

City of Red Wing

- a) Tina Folch, City of Red Wing Contracts Administrator
- b) Rich Huelskamp, Red Wing Sustainability Commission
- c) Jay McCleary, Former Deputy Director of Public Works, City of Red Wing Volunteer; Community Lead for the Planning Phase
- d) Marilyn Meinke, Red Wing Planning Commission
- e) Dan Munson, Red Wing City Council

Business and Organizations

- a) Paul Cardinal, Pearle Vision Red Wing, Red Wing Area Chamber of Commerce
- b) Rick Devoe, Downtown Mainstreet
- c) Mike Hill, Red Wing Manufacturing Association
- d) John Parkes, Goodhue County Habitat for Humanity
- e) Jim Patterson, Business Owner & Landlord

Red Wing School District

- a) Kevin Johnson, Red Wing Public Schools

Residents

- a) Roseanne Grosso, KCUE/KWING Radio
- b) Peter Jacobs, Red Wing Citizens Climate Lobby
- c) Alan Muller, Energy & Environmental Consulting

Xcel Energy

- a) Tami Gunderzik, Partners in Energy Program Manager
- b) Yvonne Pfeifer, DSM Community Channel Manager
- c) Pam Gorman, Community Relations and Economic Development Manager

Facilitators

- a) Jenny Edwards, Center for Energy and Environment
- b) Emma Struss, Center for Energy and Environment

Where Are We Now? – Baseline Energy Information

Baseline Data Privacy

All energy and program data presented in this plan complies with Xcel Energy's 15 x15 data privacy rule. This refers to the policy that the public reporting of statistics on customer energy use or conservation activity must contain at least 15 entities and no single entity can be responsible for more than 15 percent of the total. If large users are above this 15 percent threshold, they will be removed from the summary. Three premises were removed from the Red Wing energy use and conservation statistics due to these privacy rules.

The Energy Action Team expressed strong interest in working to include all premises in baseline data. One option is to pursue voluntary data submission from the three premises that were excluded to provide a more complete baseline of the city's energy use. At the time of this plan's development Xcel Energy has completed initial outreach to the three outstanding premises per request from the Energy Action Team.

Red Wing's Current Energy Use

An early step in the Partners in Energy planning process was to review the current energy use in the City of Red Wing. The Xcel Energy facilitation team calculated and presented community energy statistics from the past three years of available data (2011–2013). These baseline measurements help the planning team understand how and where energy is currently used in their community. This information was pertinent throughout the planning process as it aided in the development of focus areas and goals. Energy statistics are provided community-wide for planning purposes, though some data are removed in order to protect information of large individual customers.⁶

Not including the top three commercial users, Red Wing used 170 million kWh of electricity in 2013. Of this community-wide electricity use, 66% was used by commercial and industrial customers, and the remaining 34% was used by residential customers (Figure 4). Commercial and industrial customers account for 13% of the total premises and residential customers account for 87%.⁷

⁶ All energy data presented through this process was developed for planning purposes and therefore may contain some variation from data obtained through other sources.

⁷ A premise is a customer service point. In many cases, this will correspond to individual billing meters serving residents or small businesses. In some cases a premise may include more than one individual meter, such as those serving a larger commercial facility.

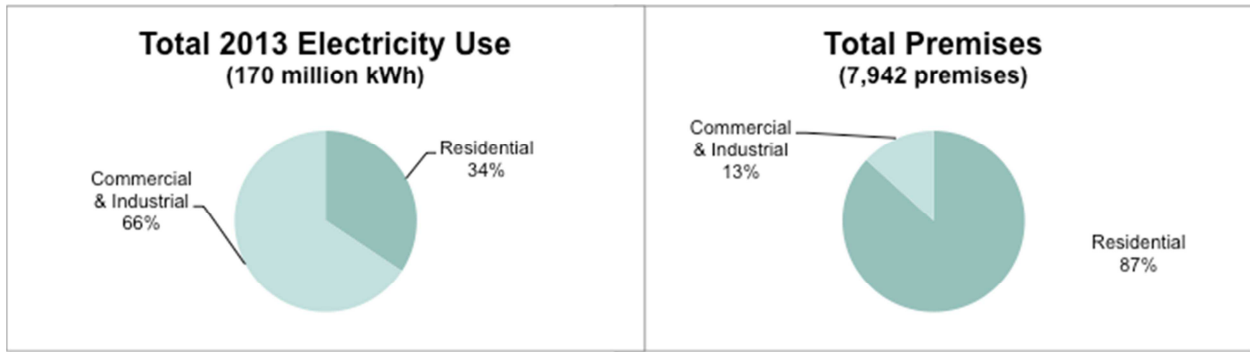


Figure 4. Red Wing Community Wide Electricity Use in 2013

Red Wing customers used 11 million therms of natural gas in 2013. Commercial and industrial customers accounted for 53% of Red Wing’s natural gas use and 10% of Red Wing’s gas premises. Residential customers used 47% of the natural gas and accounted for 90% of the premises. (See Figure 5.)



Figure 5. Red Wing Community Wide Electricity Use in 2013

A summary table of Red Wing’s energy use and premise count by sector is included below for reference.

| Red Wing Energy Use and Premise Count by Sector (2013) | | | | |
|--|----------------|-------------------------|------------------|-------------------------|
| | Electricity | | Natural Gas | |
| | Residential | Commercial & Industrial | Residential | Commercial & Industrial |
| Premise Count | 6,900 | 1,042 | 5,805 | 674 |
| Total Usage | 58,000,000 kWh | 112,000,000 kWh | 5,401,000 therms | 6,023,000 therms |

This energy consumption amounted to a total expenditure of \$24.6 million in 2013. The total expenditures broken down by customer type and fuel are shown in Figure 6. Total natural gas costs were \$7.1 million and electricity costs were \$17.5 million. These costs amount to an

average expenditure of \$1,600 per year per residential premise and \$15,400 per year per commercial and industrial premise.⁸

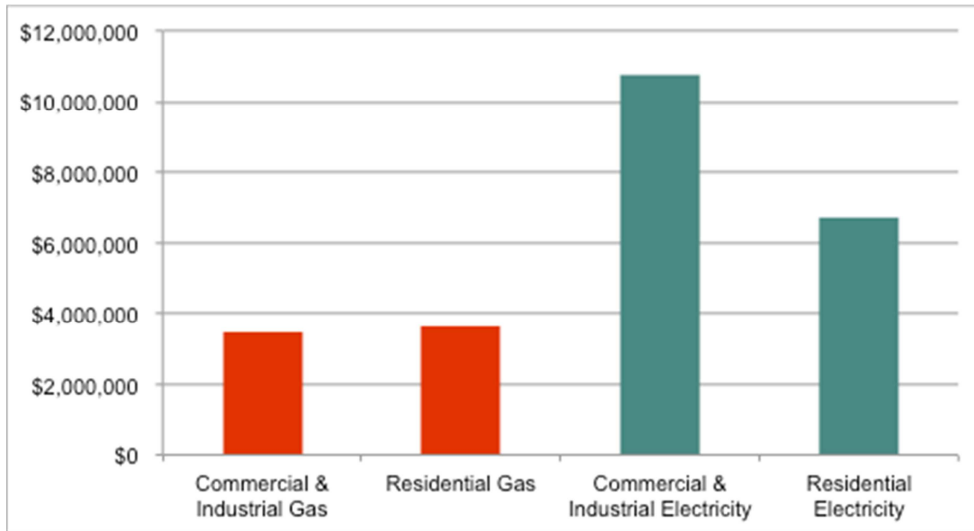


Figure 6. Total Expenditures for Natural Gas and Electricity Service in 2013.

Community-wide energy use also fluctuates seasonally, as shown in Figure 7 and

Figure 8 below. The monthly breakdown of electricity use shows how Red Wing’s electricity use reaches its height in the summer months, when cooling needs are highest, and is lowest during shoulder seasons in spring and fall. Natural gas use, shown for the residential sector, fluctuates more significantly between winter and summer.⁹

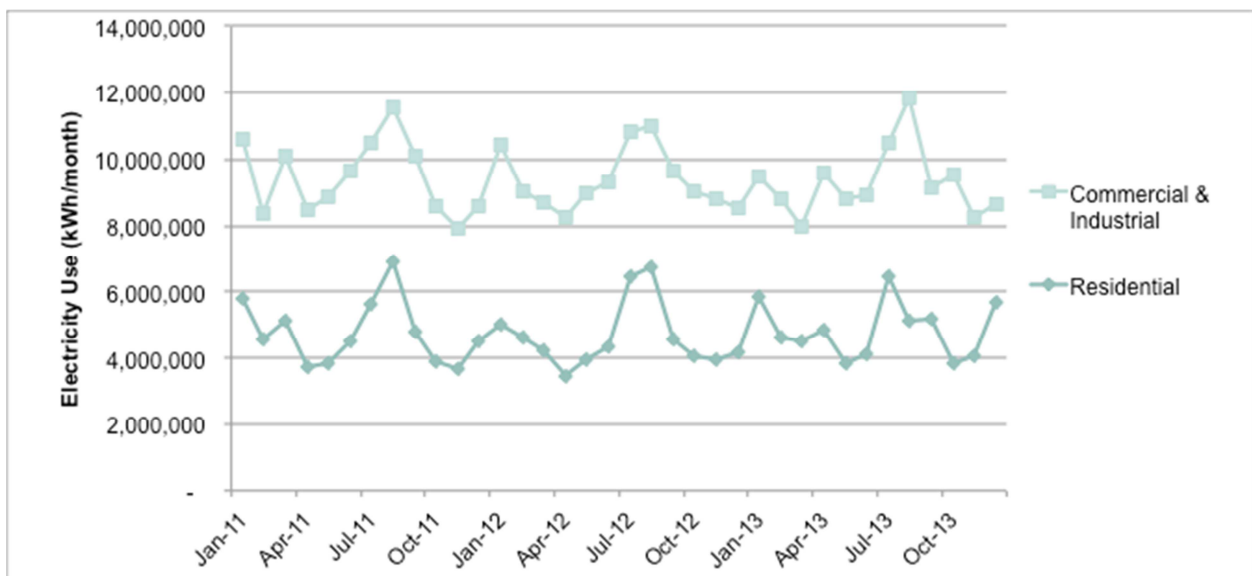


Figure 7. Red Wing Month by Month Commercial and Residential Electricity Use (2011-2013)

⁸ Expenditures account for only the cost of energy, not the entire power bill.

⁹ Monthly gas use for the commercial and industrial sector is not included because individual customers use more than 15% of total demand on a monthly basis

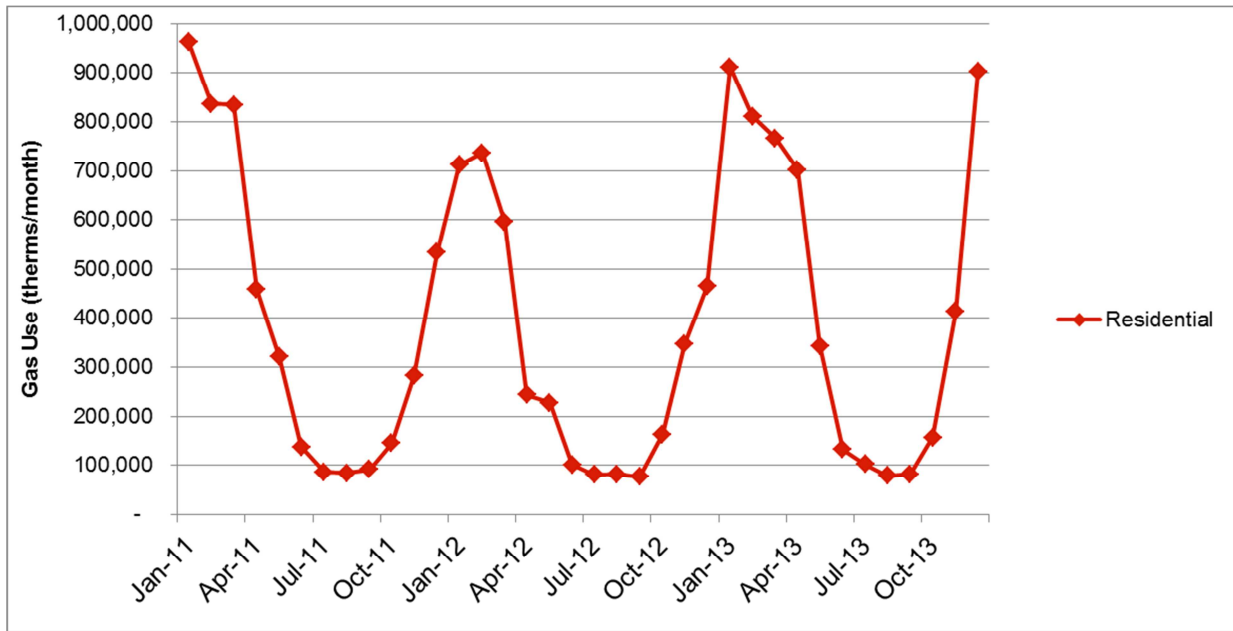


Figure 8. Red Wing Month by Month Residential Gas Use (2011-2013)

Past and Present Energy Initiatives and Program Participation

Red Wing has already taken action to embrace alternative energy sources and reduce its energy consumption. The strategies outlined in this plan build upon the foundation and lessons of these previous efforts. Below is a brief summary of the initiatives that the City has engaged in over the last three decades (See Appendix 3 for more information).



Credit: Jay McCleary, City of Red Wing

Embracing New Sources of Energy

In the past few years Red Wing has installed six solar projects on government facilities. When the six projects are complete, the solar panels are expected have a capacity of 217 kW. The total cost of the six installations is \$1,906,654, although with support from grant funding and private investors the City is responsible for only nine percent of the cost.

Red Wing residents have participated in multiple renewable energy programs through Xcel Energy. In 2012 and 2013, there were five residential and two commercial customers that filed for solar program rebates with Xcel Energy. In addition, approximately 147 residents subscribe to the Windsorce[®] program, which allows customers to purchase electricity from wind power. These accounts total purchases of approximately 286,000 kWh per year. Although wind energy development has been a source of interest, many residents have had hesitations regarding the placement of wind farms and other turbines due to Red Wing's extensive bird habitat along the river valley.

In 2015, the City, School District, local businesses, and residents pursued subscriptions to the Minnesota Solar*Rewards[®]Community[®] (MN SRC) program. As of September of 2015 both Red Wing's School District and City Council have selected solar vendors, and the City Council has completed a request for proposal (RFP) for a garden subscription. These solar projects show the continued growth of local renewable resources in Red Wing.

Energy Conservation Programs

In addition to alternative sources of energy, Red Wing businesses and residents have engaged in conservation programs to lower their overall energy demand. Xcel Energy program information shows that in 2012 and 2013 there were 709 instances of participation in residential energy efficiency programs from the 5,805 residential premises. Of those, 196 households (3% of premises¹⁰), participated in the Home Energy Squad[®] efficiency program (including low income residents). The second most popular program was residential heating rebates, followed by air conditioning rebates and refrigerator recycling (see Figure 9).

¹⁰ This percentage includes all residential premises. The percentage would be higher if only eligible premises were included.

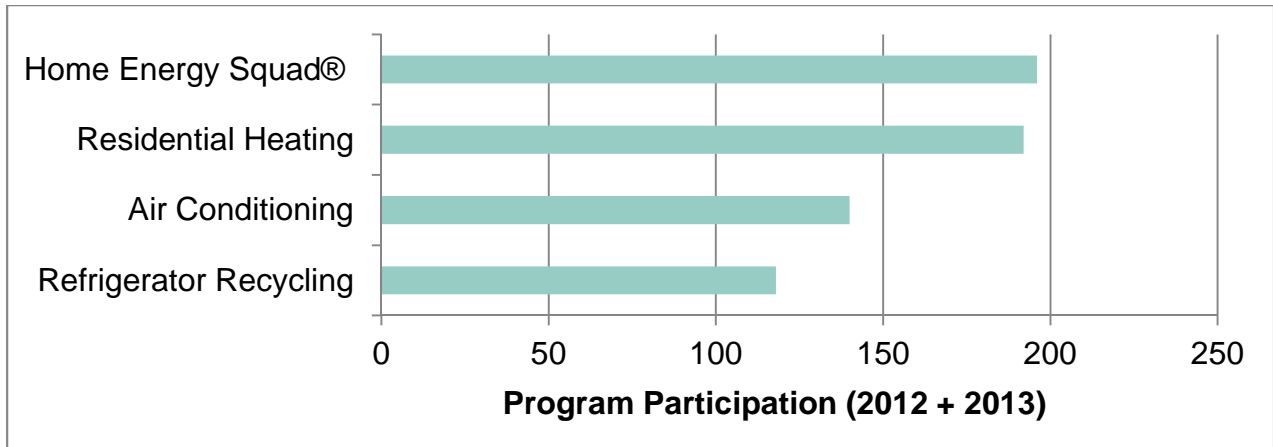


Figure 9. Red Wing Participation in Residential Conservation Programs

In 2012 and 2013, 123 unique commercial and industrial businesses participated in conservation programs. There are 674 commercial premises in Red Wing. The most popular programs (by participation count) were the One-Stop small business lighting program (4% of premises¹¹), followed by cooling, lighting, and motor efficiency rebate opportunities (see Figure 10). Through these programs, government-owned buildings in Red Wing have saved a total of 1.4 million kWh of electricity and 165,554 therms of natural gas, and between 1987 and 2010 they received \$98,405 in rebates from Xcel Energy¹².

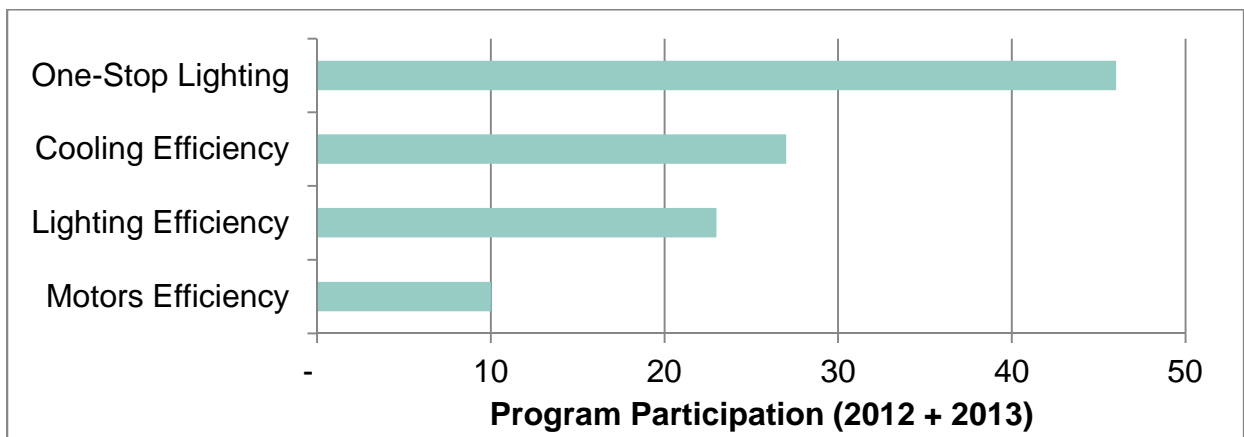


Figure 10. Red Wing Participation in Commercial and Industrial Conservation Programs

¹¹ This percentage includes all C/I electric premises. The percentage would be higher if only eligible premises were included.

¹² City of Red Wing internal communication

Recognition of Achievements

Red Wing has earned national media attention for its work. In addition, the City has received several awards, including the 2013 Best Practice Award from the Minnesota Chapter of the National Institute for Government Purchasing. Sharing the stories of project successes is important to the City, as they hope to encourage other communities to engage in similar initiatives of their own.

Additionally Red Wing has received recognition through the GreenSteps Cities program. The City currently holds a “step two” status out of three. This recognition comes from accomplishing many initiatives including actions pertaining specifically to energy and government facilities. These actions include tracking monthly energy use of city-owned buildings, completing 110 energy saving projects between 1987 and 2010, and installing solar projects on six city buildings. See appendix for more information. Below is a summary of past and present energy initiatives.

A Summary of Red Wing's Past and Present Energy Initiatives

1980's

- Began the Red Wing Community Energy Program responsible for: 1) relamping the Public Library, City Hall, and Public Works Building, 2) installing a new boiler at City Hall, and 3) installing a waste oil furnace at Red Wing's maintenance shop

1990's

- City participated in recycling fluorescent lights
- Sustainability Indicator Report published in 1999

2000's

- Purchased pickups with better fuel efficiency
- Purchased first hybrid vehicle in 2008
- Energy efficient lighting upgrades to city parking ramps
- "Imagine Red Wing Green" 2008 sustainability report

2010's

- Red Wing became a GreenStep City in 2011
- Participating in Xcel Energy's Partners in Energy
- Six solar projects installed on government facilities

Local Community Assets

During the planning workshops, the Energy Action Team was asked to first identify local community assets that would help motivate residents and businesses and then move the plan forward. Several of these assets are described below.

Outreach and Communication Channels

Reaching out to the wider Red Wing community will be essential in achieving the goals outline in this plan. Below is a list of local community outreach channels that can be used to disperse information to residents and businesses.

Local Outreach Channels

Publications

- [Republican Eagle Newspaper](#)
- [New Homeowner Welcome Wagon Materials](#)

TV Channels

- [City of Red Wing Public Access, Channel 6](#)

Social Media and Email

- [City of Red Wing Facebook Page](#)
- [City of Red Wing YouTube Channel](#)
- [City of Red Wing Twitter](#)
- [Email blasts to City Mailing List](#)
- [Red Wing's City Blog](#)
- [Red Wing's City Website](#)

Radio

- [KCUE 1250 AM](#)
- [KWNG 105.9 FM](#)

Annual Events

- [River City Days](#)

Community Spaces

- [YMCA](#)
- [Summer Farmers Market](#)
- [Central Park Band Shell](#)
- [Red Wing Public Library](#)



Red Wing's Facebook Page



Credit: Jason Taellious via CC

Close Knit Community

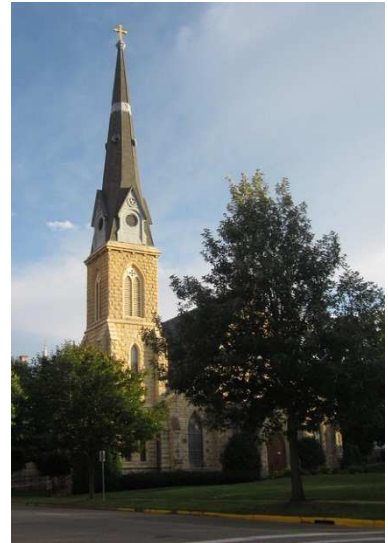
Throughout the workshops residents described Red Wing as having a strong community identity and connectedness. The high level of community involvement and strength of interpersonal relationships offers a strong existing network from which to launch grassroots initiatives. Such initiatives brought directly from the community will have the best traction.

Nonprofits and Faith Communities

Nonprofits and faith communities are well positioned to disseminate information through their networks. Members of the Energy Action Team have experience with various organizations that have been very responsive and willing help with local initiatives in the past.

Red Wing's Sustainability Commission

Red Wing has a sustainability commission comprised of residents who advise the city council on environmental ideas and initiatives. The commission meets monthly and is interested in working on some of the strategies outlined in this plan. Having an organized group of interested residents that communicate directly with the City Council provides a process to work through barriers that might be faced during the plan's implementation.



Credit: Doug Kerr via CC

High School Sustainability Club

In the fall of 2015 Red Wing High School's Sustainability Club began participating in the YES! (Youth Energy Summit) campaign. The mission of YES! is "Empowering youth to partner with their community to create economic and environmental vitality through hands-on learning and team-based projects." The school has received a grant to fund this work. Engaging passionate students in implementing this plan will help bring energy and human-power to these efforts.



Credit: jpellgen via CC

Dedicated City Staff and Governmental Leadership

Red Wing has a history of dedicated City staff following through on sustainability initiatives for the community. Having the approval and support of City employees will be a huge asset for understanding governmental processes and being able to move energy initiatives forward in a timely manner.

Potential Community Barriers

The Energy Action Team has discussed potential community barriers that should be considered when weighing the tradeoffs of different strategies. Some potential barriers Red Wing could face when implementing this plan include:

Main Street (Highway 61) Construction

From April 2015 to August 2016, Highway 61, the major thoroughfare through the heart of Red Wing's downtown, will undergo major renovations. During this period of construction, businesses might struggle to reach their typical sales. Therefore, businesses may have additional near-term constraints that make investments in solar energy or energy efficiency harder to prioritize at the beginning of plan implementation.

Limited Resources from Expert Volunteers

One noted strength of Red Wing is a strong core of residents and business owners well versed in sustainability issues. However, these community members tend to be highly involved in work and volunteer commitments, leaving limited time to take on additional projects. Therefore, successful plan implementation may require new volunteers to carry out tasks that require less community knowledge and energy expertise.

Citizens' Trust in Programs

Some lessons were shared from past outreach for residential programs such as the Home Energy Squad®. In the past, techniques such as door knocking had limited success due to barriers gaining residents' trust. Past experience included the feedback that residents thought the program was too good to be true. This experience demonstrates that in order to be successful, information must be diffused from a trusted source rather than an outside party.

Where Do We Want To Go? — Energy Vision, Focus Areas, and Goals

A clearly articulated, transparent, and shared vision of the community’s energy future sets the direction for subsequent decisions about focus areas, goals, and strategies for achieving those goals. At the outset of the planning process, participants shared their individual visions for what Red Wing’s energy future could be, and iterated on a unified vision and mission to guide the process. The results of that effort are the vision and mission statements below, with details about the workshop planning process included at the end of this section.

Vision

Accomplish environmentally sound, affordable, life sustaining energy for and by the community for generations to come.

Mission

Inspire and facilitate the greater Red Wing community to develop and support sustainable, reliable, healthy energy production and utilization choices.

Workshop Process Overview

The section below includes more detail on how the group developed the above vision, focus areas, and strategies over the course of four workshops.

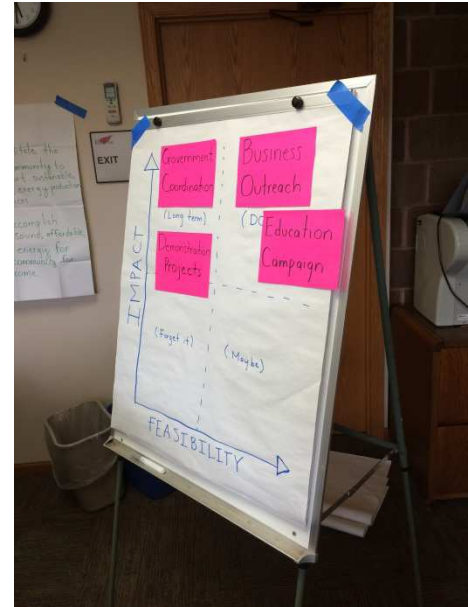
Workshop 1- Visioning Activity

First individually and then as a group, the team defined what an ideal energy future for the Red Wing area would look like. As team members presented the qualities they deemed most important, trends surfaced that included a focus on intergenerational education, resiliency, community involvement, equality, and public health. At the end of Workshop 1, three volunteers formed a small workgroup to wordsmith a draft vision statement.

themes mentioned during the strategy brainstorm such as education and outreach.

Workshops 3 and 4: Guiding the Process

During Workshop 3, the Energy Action Team began to dive deeper to the details of their plan. They brainstormed focus areas to frame the strategies and tactics of the plan. Using an impact feasibility matrix, the team weighed the expected impact of an action with the requirements needed to carry it out. Going through this process allowed the team to discuss the best areas of focus for their community. Out of the process, two focus areas surfaced: outreach to small and medium-sized businesses in Red Wing, and a residential educational campaign that included youth involvement. Having these focus areas sketched out, the team began developing initial goals. Referencing past participation data, the group decided to create a provisional goal of having 10% of Red Wing businesses participate in an energy program within the implementation time frame. Similarly they decided to go with a 10% participation goal for residential premises.



Impact and Feasibility Assessment

Between Workshop 3 and Workshop 4, Energy Action Team members were given a survey to endorse or provide alternative goals to the ones proposed in Workshop 3. The team also had the opportunities to rank the strategies and tactics and provide insight into Red Wing's unique set of communication networks.

The survey results showed that the Energy Action Team supported the preliminary goals that they had developed during the previous workshop. Furthermore, the survey highlighted strategies and tactics that the team was interested in pursuing further. For full survey results see Appendix 6 and Appendix 7.



Preliminary Goal Discussion during Workshop 3

During Workshop 4, the team highlighted the strengths that each member could use to support implementation. Skills ranged from things like offering up specific communication skills to committing to keep the process honest and goal-oriented. The survey was then discussed and the team divided into two subgroups to flesh out details related to the two focus areas. After the workshop, the Energy Action Team was encouraged to contact planning facilitators with any additional ideas or commentary that they

would like to see included in the plan.

Focus Areas

The focus areas identified for Red Wing are the key priorities under which goals and strategies of the plan are organized. The two target focus areas that emerged out of the planning process include Red Wing's local residential and commercial business sectors.

Focus Area: Residential Energy Use

The first area of focus for the 18 month implementation stage is centered around the residential sector. Throughout the workshops, the Energy Action Team communicated that they wanted the plan to result in something that the entire community could engage in, with an additional thread flagging the importance of youth engagement and future generations. Therefore, reaching out to the 16,500 residents in Red Wing is an important component of the team's mission statement.

Red Wing has a history of doing residential outreach surrounding energy efficiency measures. Those experiences will be important assets for this focus area.



Credit: Doug Kerr via CC

Focus Area: Local Commercial Businesses in Red Wing

The second focus area of this plan is targeting small-to-medium sized businesses. The unified business community and strong Chamber of Commerce was identified early on as a strong asset of the community, with numerous businesses having previously participated in energy programs. The "main street" quality of downtown Red Wing is one identifiable feature of the local community.

Energy and Outreach Goals

The goals below were created by the Energy Action Team as a means to track their progress and success in the implementation of their Energy Action Plan.

The overall goal for the residential focus area is to have an additional 10% of Red Wing households participate in an energy efficiency or renewable energy program in the next 2 years. This equates to 700 households above the city's baseline participation.

As a point of reference, in 2012 and 2013 (the past two years of available data combined), there were 709 instances of participation in energy efficiency programs. Of those, 196 households participated in the Home Energy Squad® program (including low-income program participation). There were additionally five participants in solar rebate programs and 147 households with a

WindsorSource® subscription. Increasing and tracking participation in these renewable programs is of particular interest to members of the Energy Action Team.

Residential Goal

The overall goal for these residential strategies is to have an additional 10% of Red Wing households participate in an energy efficiency or renewable energy program in the next two years. This equates to 700 households above the city's baseline participation.

Similarly, the goal for the local commercial business focus area is to have an additional 10% of Red Wing's small to mid-sized commercial businesses participate in an energy efficiency or renewable energy program in the next 3 years. This equates to 100 businesses in Red Wing above the city's baseline participation.

For reference, in 2012 and 2013 (the past two years of data combined), 40 small to mid-sized businesses, defined as businesses that use less than one million kWh per year, participated in an energy efficiency or solar program. In 2013, small to mid-sized businesses used 52% of the electricity and 51% of the gas in the commercial sector.

Local Commercial Business Goal

The goal for the local business focus area is to have an additional 10% of Red Wing's small to medium-sized commercial businesses participate in an energy efficiency or renewable energy program in the next three years. Ten percent equates to 100 businesses above the city's baseline participation.

Measuring Goals

The majority of Energy Action Team members were interested in measuring goals based upon program participation. This was influenced by the team's mission statement which spoke to inspiring and facilitating the greater Red Wing community to develop and support sustainability, as well as reliable, healthy energy production and utilization choices. With community members at the center of their work, tracking program participation was deemed the most appropriate to measure goal obtainment.

However, there was also interest in tracking and maximizing the energy savings produced by program participation. The chart below outlines energy savings based upon both the 10% residential and commercial participation goals.

Percent Energy Savings Based on Energy Action Plan Goals

| | | 2012 | 2013 | 2014 | 2015 | Energy Action Plan and Beyond | | |
|-------------|----------------------|-------|-------|-------|-------|-------------------------------|--------------|--------------|
| | | 2016 | 2017 | 2018 | | | | |
| Electricity | Baseline Savings | 0.90% | 0.90% | 0.90% | 0.90% | 0.90% | 0.90% | 0.90% |
| | Cumulative Baseline | 0.90% | 1.80% | 2.70% | 3.60% | 4.50% | 5.40% | 6.30% |
| | Red Wing Plan Goals | | | | | 1.1% | 1.1% | 1.1% |
| | Total Savings | | | | | 5.60% | 7.60% | 9.60% |
| | | | | | | Energy Action Plan and Beyond | | |
| | | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| Natural Gas | Baseline Savings | 1.10% | 1.10% | 1.10% | 1.10% | 1.10% | 1.10% | 1.10% |
| | Cumulative Baseline | 1.10% | 2.20% | 3.30% | 4.40% | 5.50% | 6.60% | 7.70% |
| | Red Wing Plan Goals | | | | | 0.47% | 0.47% | 0.47% |
| | Total Savings | | | | | 5.97% | 7.54% | 9.11% |

The energy savings or renewable energy use associated with one participant will vary widely depending on what they choose to do. Some options for how the participation goals can relate to kWh can be found in Appendix 9 & 10.

How Are We Going To Get There? — Strategies

Focus Area: Residential Sector

The two strategies below focus on targeted segmentation of residential households. The overall goal for these residential strategies is to have an additional 10% of Red Wing households participate in an energy efficiency or renewable energy program in the next two years. This equates to 700 households above the city’s baseline participation.

Some of the energy efficiency and renewable energy programs offered by Xcel Energy that could be included in this focus area are listed below, along with average household savings and recent participation numbers in Red Wing. The average electricity and gas savings are based on Red Wing averages from the previous two years, unless noted. Based upon the average savings per participant, a higher concentration of participation in Residential Heating, Refrigerator Recycling, and Home Energy Squad® programs than seen in the chart below will result in higher energy savings. This should be considered when prioritizing program participation to reach the strategy’s 10% incremental savings goal.

| Xcel Energy Efficiency and Renewable Program Options for Residents | | | | |
|--|------------------------|--|---|--|
| Program | Participants (2012-13) | Average annual electricity savings per participant (kWh) | Average annual gas savings per participant (therms) | Average annual renewable energy production (kWh) |
| Home Energy Squad® | 196 | 766 | 78 | --- |
| Air Conditioning | 140 | 579 | --- | --- |
| Refrigerator Recycling | 118 | 1,112 | --- | --- |
| Residential Heating | 192 | 203 | 141 | --- |
| Windsorce® | 147 | --- | --- | 1,946 |
| Solar*Rewards® | 5 | --- | --- | 6,600 ¹³ |

Additionally, there are financing programs available for Red Wing business that can assist with energy efficiency and renewable upgrades. Two opportunities include: 1) loans through the nonprofit Center for Energy and Environment, and 2) loans through Property Assessed Clean Energy (PACE).

Strategy 1: Launch a residential energy campaign with a focus on increasing participation in efficiency and renewable programs. The campaign will be carried out using two distinct outreach channels: new homebuyers and faith-based organizations. The portion of the campaign focused on new homebuyers takes advantage of the window of opportunity when residents are more willing to make investments in a new home. According to Zillow, 860 homes were sold in Red Wing within the past two years. The portion of the campaign focused on faith-based organizations leverages the activism and outreach local congregations already have in the community. Furthermore, it provides congregations interested in environmental stewardship tangible ways to carry out their beliefs.

- Develop marketing materials for available programs targeted at new homebuyers and congregants.
- Send promotional inserts in city utility billing packages and/ or provide along with new permitting materials.
- Work with local Welcome Wagon to deliver program information to new Red Wing residents.
- Connect and build relationships with local congregations.

¹³ This represents an estimated average statewide production value for a residential solar system in Minnesota, and is not data specific to the community.

| Who & When: Campaign for Residential Homebuyers | |
|--|--|
| Community Lead(s) | Lead: John Parkes Team: Tina Folch, Peter Jacobs, Roseanne Grosso |
| Community Partners | City Staff (welcome packets), Realtors, Building Inspectors, Home Builders, Home Service Vendors, Ecumenical Organizations |
| Outreach and Communication Channels | New resident welcome packages, Red Wing's Welcome Wagon, Faith based organizations, Realtors |
| Xcel Energy Support | Assist in developing outreach materials for new homeowners |
| Timeline | November 2015- March 2015 |

Initial Implementation Steps

2016

January 2016

- First meeting (Community Team)

February 2016

- Research existing outreach channels for new homebuyers, e.g. new homebuyer welcome packet (Community Team + Xcel Energy)
- Provide information on existing program marketing (Xcel Energy)

March 2016

- Initiate research on homebuyer demographics (Community Team + Xcel Energy)
- Draft information for inclusion in homebuyer information packet and desired action steps (Community Team + Facilitation Team)

April 2016

- Synthesize research on homebuyer demographics (Community Team + Xcel Energy)
- Finalize messaging for homeowner action steps and other information to be included in mailers (Community Team + Facilitation Team)
- Draft materials for welcome packet inserts and follow up mailings for team review (Xcel Energy Team)

May 2016

- Finalize materials for welcome packet inserts and follow up mailings for team review (Xcel Energy Team)
- Develop process for coordinated distribution of mailers (City Staff and Xcel Energy Team)

June 2016

- Test and finalize process for coordinated distribution of mailers (Community Team and City Staff)
- Begin to engage realtors, home inspectors, and other secondary outreach options (Community Team)

July 2016

- Launch of homebuyer mailer campaign (Community Team + City Staff)
- Plan additional outreach campaign needs, e.g. social media (Community Team + Xcel Energy Team)

August 2016

- Ongoing homebuyer mailer campaign — continued each month (Community Team + City Staff)
- Initiate ecumenical outreach and strategy research (Community Team + Xcel Energy Team)

August –September 2016

- Develop and finalize ecumenical outreach plan (Community Team + Xcel Energy Team)
- Revise homebuyer mailing materials if needed, based on goal check (Community Team, City Staff, Xcel Energy Team)

October 2016

- Launch fall ecumenical outreach campaign (Community Team + Xcel Energy Team)
- Revise homebuyer mailing materials, if needed (Community Team + Xcel Energy Team)

Fall 2016 & Onward

- Ongoing ecumenical outreach campaign—continued each month
- Continue homebuyer campaign
- Conduct goal check (December 2016) and revise campaign if needed.

Strategy 2: Co-sponsor awards with the City of Red Wing for a student sustainability project competition. Eligible projects for the competition will focus on preserving environmental conditions through the use of renewable resources. Details will need to be determined with school staff to ensure that their curriculum protocols are followed. The implementation of this strategy depends on RWHS Sustainability Club’s focus for the 2016-2017 school year. The current theme for the 2015-2016 academic year is “water”.

- Coordinate with Laura Wildenborg at Red Wing’s Environmental Learning Center to develop the competition.
- Provide local experts for classroom education and training opportunities focused on defined energy use topics and social marketing strategies that can be used to implement student-designed energy projects.

| Who & When: Local Student Sustainability Clubs | |
|--|--|
| Community Lead(s) | Laura Widenborg, RWHS Sustainability Club |
| Community Partners | City of Red Wing, the Sustainability Commission, Red Wing High School District #256, RWHS Sustainability Club, Red Wing Environmental Learning Center, Youth Energy Summit |
| Outreach and Communication Channels | School newsletters, the Environmental Learning Center, City website |
| Xcel Energy Support | Highlight competition efforts in a newsletter |
| Timeline | 2016-2017 school year — the location and time of the competition could be during Earth Week at the public library, high school, or another appropriate venue |

Focus Area: Local Commercial Businesses

The goal for the local business focus area is to have an additional 10% of Red Wing's small to mid-sized commercial businesses participate in an energy efficiency or renewable energy program in the next three years. Ten percent equates to 100 small to medium businesses above the city’s baseline.

For reference, in 2012 and 2013 there were 106 instances of energy efficiency participation by small to mid-sized businesses, defined as businesses that use less than one million kWh per

year.¹⁴ In 2013, small to mid-sized businesses used 52% of the electricity and 51% of the gas in the commercial sector.

Some of the most popular energy efficiency and renewable energy programs offered by Xcel Energy that could be included in this small business focus area are listed below, along with recent participation numbers in Red Wing and the average annual energy savings or renewable production from each program. The average electricity and gas savings are based on statewide averages for Minnesota.¹⁵ To maximize energy savings in the incremental 10% participation, programs such as Motors Efficiency, One Stop Efficiency Shop[®] Lighting Retrofits, Lighting Efficiency, and Heating Efficiency should be prioritized based upon their kWh savings per participant.

| Xcel Energy Efficiency and Renewable Program Options for Businesses | | | | |
|---|---|--|---|--|
| Program | Small to Medium Business Participants (2012 + 13) | Average annual electricity savings per participant (kWh) | Average annual gas savings per participant (therms) | Average annual renewable energy production (kWh) |
| Cooling Efficiency | 21 | 6,034 | --- | --- |
| Lighting Efficiency | 17 | 21,000 | --- | --- |
| One Stop Efficiency Shop [®] Lighting Retrofits | 45 | 19,121 | --- | --- |
| Motors Efficiency | 7 | 22,089 | --- | --- |
| Heating Efficiency | 5 | --- | 1,752 | --- |
| Turn Key Services | 5 | 6,511 | --- | --- |
| Windsources [®] | 2 | --- | --- | N/A |
| Solar*Rewards [®] | 2 | --- | --- | 30,000 |

¹⁴ Across businesses of all sizes there were 139 instances of participation. Note this does not count unique participants (if a single business participated in two programs, they would be counted twice). In 2013, there were a total of 40 instances of small to medium business participation in programs.

¹⁵ For conservation programs, savings estimates are based on the average participant savings from Xcel Energy's 2014 CIP status report

Similar to residential financing options, loans are available for businesses through the Center for Energy and Environment and through Property Assessed Clean Energy (PACE).

Strategy 1: Organize energy efficiency and renewable program options into a streamlined and easily understood “menu of options” to help local businesses understand the relative benefits of different programs.

- List out available programs and their associated benefits for easy comparison.
- Develop outreach materials such as information flyers or presentations to present the menu of options to local businesses.
- Host a menu of energy program options and other helpful information on City website for easy access.

Strategy 2: Develop a recognition campaign to increase visibility for local businesses that participate in energy efficiency and renewable energy programs.

- Design the recognition campaign (e.g. sticker or window decal).
- Host workshops or other in-person meetings to advertise the campaign and recognize the achievements of local businesses.
- Market the recognition program using local media channels.

Strategy 3: Partner with trusted outreach channels to connect with and influence local businesses.

- Partner with Chamber of Commerce to help with recruitment and outreach.
- Partner with local banks to increase their awareness and promotion of financing options, especially in support of renewable energy.
- Conduct outreach to other groups such as the Rotary Club or Lions Club.

| Who & When: Local Commercial Businesses | |
|---|---|
| Community Team | Lead: Paul Cardinal Team: Jay McCleary, Rich Huelskamp, Jim Patterson |
| Community Partners | Chamber of Commerce, Local Banks, Downtown Main Street, Manufacturer’s Association, Visitor’s Bureau |
| Outreach and Communication Channels | Chamber of Commerce events, Earth Day 2016 event, City-wide mailings to businesses |
| Xcel Energy Support | Provide information on existing programs, draft a tool (handout, presentation) to show small to medium businesses program options, collect case studies, create recognition materials, develop mailers, attend events |
| Timeline | November 2015- March 2017 |

Initial Implementation Steps

2016

January 2016

- First meeting (Community Team)

February 2016

- Provide information on existing business programs (Xcel Energy)
- Research business outreach and recognition programs (Community Team)

March 2016

- Draft a business program tool (Xcel Energy and Partners in Energy Facilitation Team)
- Provide technical program descriptions (Xcel Energy and Partners in Energy Facilitation Team)
- Research business outreach and recognition programs (Community Team)

April 2016

- Meet with Chamber of Commerce (Community Team)

May 2016

- Develop strategy for promotion (Community Team)
- Research tracking options for business leaders (Community Team)
- Plan for July launch events (Community Team)
- Refine the business program tool (Xcel Energy)

June 2016

- Continue to plan for July launch events (Community Team)
- Develop recognition materials (Xcel Energy)
- Continue to develop launch event materials (Xcel Energy)

July 2016

- Business recognition program launch event (Community Team + Chamber of Commerce)

August 2016

- Recruit businesses for recognition program (Whole Team)
- Advertise the business recognition program (Community Team)
- Refine outreach campaign (Community Team)

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September 2016

- Develop round two recognition materials (Xcel Energy)
- Recruit businesses for recognition program (Whole Team)

October 2016

- Progress Check (Community Team)
- Business recognition event (Community Team)
- Present at Chamber's Espresso (Community Team + Chamber of Commerce + Xcel Energy)

November 2016

- Develop outreach materials (Xcel Energy and Chamber of Commerce)
- Recruit businesses for recognition program (Whole Team)
- City newsletter article (Community Team, Xcel Energy, City)
- Advertise the business recognition program to consumers (Community Team)

December 2016

- Recruit businesses for recognition program (Community Team)
- Chamber of Commerce Mailer (Community Team, Chamber of Commerce)
- Develop round three recognition materials (Xcel Energy)

2017

January 2017

- Business recognition event (Community Team + Chamber of Commerce)
- Present at a Chamber event (Community Team + Chamber of Commerce + Xcel Energy)

February 2017

- Plan outreach (Community Team)
- Check-in on progress (Community Team)
- Recruit businesses for recognition program (Whole Team)

March 2017

- Develop round four recognition materials (Xcel Energy)
- Design outreach materials (Xcel Energy)
- Recruit businesses for recognition program (Community Team)

April 2017

- Business recognition event (Community Team + Chamber of Commerce)
- Present at a Chamber event (Community Team + Chamber of Commerce + Xcel Energy)

- Outreach to all local businesses (Community Team)

May 2017

- Recruit businesses for recognition program (Whole Team)
- Make a plan for the recognition program following the Partners in Energy engagement (Community Team)

June 2017

- Develop ongoing materials for community use (Xcel Energy)
- Develop round five recognition materials (Xcel Energy)
- Recruit businesses for recognition program (Whole Team)

July 2017

- Business recognition event (Community Team + Chamber of Commerce)

How Are We Going To Stay On Course? — Monitoring and Reporting

Plan Approval Process

This plan will be formally reviewed by Red Wing's Sustainability Commission during their November 24, 2015 meeting. The Commission's recommendation will be presented to City Council on January 25, 2016. Pending approval from City Council, a memorandum of understanding (MOU) will be developed and signed between the City of Red Wing and Xcel Energy. The MOU will outline the support that both entities will provide to aid in the successful implementation of this plan.

Operational Actions and Tracking

During the plan review meeting on September 15, 2015, the Energy Action Team divided in to two groups to work on the strategies outlined in this plan. Throughout plan implementation, communication within these groups will occur monthly, at a minimum. An increase in communication will be triggered by months with fuller task loads. The platforms used for communication between group members are up to the discretion of each group. In-person meetings, conference calls, and using screen-sharing technology are all possible communication tools.

General updates will be emailed to the entire Energy Action Team on a monthly basis throughout the 18 months of plan implementation. Each strategy lead will be responsible for providing updates pertaining to their group.

Changing Course: Corrective Action

This plan is meant to be a living document, thus changes will occur as the implementation stage progresses. In-person check-ins will be scheduled every six months to allow the entire team to convene and discuss course corrections. Each strategy team will identify interim goals and check-ins on how their strategy is being implemented. Additionally, there will be all-team check in meetings to discuss changes. The first all-team check in meeting is proposed for March of 2016.

External Communication and Reporting

Throughout this process it will be important to keep the larger Red Wing community informed of the progress happening through the Green Wing initiative. The City's website will be an important platform to disseminate information. In addition, Red Wing's City Council and Sustainability Commission are also two important groups to keep updated.

Ongoing Energy Action Team Support

As the larger community gets involved with this initiative, the Energy Action Team will act as a powerful guide. The team's experience going through the planning workshops and developing

this plan gives members unique insight. Therefore, Energy Action Team member participation will continue to be important even after the planning phase has ended.

Appendix 1: Glossary of Terms

Account: Generally refers to a single customer account, or debtor (see below).

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

Debtor: Refers to a single customer account, which could have multiple premises and/ or multiple meters associated with it.

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.

Efficient Showerheads: A DSM program that provides Xcel Energy customers with low-flow showerheads.

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.

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

Home Energy Squad (HES): A partnership program between Xcel Energy and CenterPoint Energy, where they provide natural gas service, to help residential customers reduce energy use in their homes.

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.

One-Stop Efficiency Shop® Lighting Retrofits: A full-service lighting rebate program available to small businesses in Xcel Energy's Minnesota service territory with an electric demand of 400 KW or less.

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.

Refrigerator Recycling: A DSM program that provides an incentive if customers recycle their second refrigerator.

Solar*Rewards®: A program from Xcel Energy that offers incentives and rebates for installation of photovoltaic (PV) solar panels.

Therm: A unit of natural gas consumption

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

Appendix 3: Summary of Red Wing's Energy Projects

By Jay McCleary

The City of Red Wing is continually looking at ways to do a better job for our citizens and at ways to do that job better for the environment. Back in 1985 the price of gasoline dropped to unexpected low levels, and the City saw substantial savings (approximately \$30,000.00) in the cost to operate our fleet vehicles. The City staff saw this savings as a potential way to fund an energy savings program for our public buildings. A presentation was made to the City Council, and authorization was given to the staff to do an energy audit for several of the city's buildings. The results of this audit showed that by investing in energy efficient upgrades to our facilities, we could save enough money on electricity and natural gas to not only attain a short payback on investment, but to save money for several years beyond the payback period. When these results were presented to the City Council, it was approved to implement the "Red Wing Community Energy Program" and begin the investment in energy savings.

Over the following twenty years the City has completed many more projects to help our environment: upgrades to the Waste Water Treatment Facility, combined sewer separation, energy efficient lighting upgrades to the City's parking ramps, construction of two new water treatment facilities, storm water programs to control run off, converting of our street lights to a more energy efficient and less visually polluting light system, implementing a household program for collecting recyclable items that were previously sent to landfills or burned in the waste incinerator. The City has been recycling all of our fluorescent lights for years. We have implemented a program to purchase pickup trucks with diesel engines that get 3 to 6 more miles to the gallon than the comparable gasoline engines. In the spring of 2005 the City converted our cleaning supplies to a "green" system from 3M. In November of 2006 we put new recycling containers in most City buildings to encourage everyone not to just throw everything in the trash. This winter we are looking at converting all of our paper towels, toilet paper and other paper supplies to "green" products as well. All of these programs and more have been put in place by a work staff and a City Council that believe in looking for ways to help our environment. Yes, some of these items came because of State or Federal mandates, but all of these items were undertaken because Red Wing is a community that cares about the environment. This message has been repeated many times by our citizens. Time after time at public meetings, we have heard that the environment is important. We have heard that we need to do the right thing and consider what our actions might do to the environment. The City Staff believes that we need to continually look for options to lessen our negative impact on the environment. The City Council has continually made decisions based on what would be the best thing to help the environment.

This commitment to the environment will be ongoing in 2007. The Public Works Department plans to buy its first hybrid vehicle. We are strongly looking at a Ford Escape but have not made that final decision. This small SUV would be able to ride four people comfortably to meetings. It can haul equipment and supplies if needed. But the real plus is that for in town driving, which is where this vehicle drives almost exclusively, we should get 33 to 34 miles to

the gallon. This compares to the normal 12-16 miles to the gallon that we get with our pickup fleet. We understand that there are cheaper vehicles to buy that would do the same job, but we really believe we need to lead the effort to get everyone in Red Wing thinking about doing the things that are best for the environment. If we can set the example, and most of our citizens agree that the environment matters, then we can show that Red Wing is a community that is truly looking to the future and what our actions today can do to affect that future.

In 2007 the City will be continuing with a plan for the development of the riverfront. The environmental impact of this development is a leading factor in the final decisions that will be made by our City Council. Some citizens may not believe this, but when you look at the last twenty years and the decisions that have been made by our elected officials, it should be obvious to everyone that this group does understand that our environment is very important to all citizens of Red Wing.

I have been an employee of the City of Red Wing for 25 years, and I can tell you that the message from our leadership has always been clear on the issue of preserving our environment. Being a river town we have the need to make sure we are not polluting the Mississippi. Being Pretty Red Wing, we have the opportunity to show everyone that we care about the environment and that we make the right decisions in all of our operations for the benefit of generations to come. We did not have to build a solid waste incinerator. We did not have to make all of our buildings as energy efficient as possible. We did not have to convert our street lights to a system that is less visually polluting. We do not have to buy a hybrid vehicle. Unless you understand what "Pretty Red Wing" means to each of us, then you know why we **had** to do these things. Pretty Red Wing is not just the title to an old song. It is a motto for a community that cares about our environment. It is the reason most of us choose to call this community home. It is the reason that I can take a little pride when someone finds out that I am from Red Wing, and they comment on how beautiful our town is. "Pretty Red Wing" is a statement to the continued commitment to the environment by a small river town that knows we have the opportunity to make a difference.

Appendix 4: Republican Eagle Newspaper Article

Xcel Energy, Red Wing might create city energy plan

By Danielle Killey on Oct 17, 2014 at 8:28 a.m.

Energy issues made up a large portion of Monday's Red Wing City Council meeting, including discussions on partnering with Xcel Energy on a new program to create an energy plan and on a potential solar garden in the area.

The council agreed to work with Xcel on its new Partners in Energy program, which is aimed at facilitating discussions and energy planning in Red Wing.

“The program is not fully defined, the program is outlined,” said Jay McCleary of Public Works. Generally, it includes creating a group to gather information and discuss an energy plan and setting goals for the city. “It’s a community conversation.”

The Sustainability Commission supports the partnership, McCleary said.

Council members said they want to be sure the work is city- and citizen-driven.

Council President Lisa Bayley said she, like two residents who spoke at Monday’s meeting, was wary at first. But she said she understands Xcel’s role to be facilitating local discussion, not influencing it. And it would help get an energy plan in the works, she added.

“I think if we don’t do this we’re going to be delayed a couple years yet just getting going,” Bayley said. “This would really kind of jumpstart us.”

“In all of our discussions with Xcel about this they have been very clear that this is the city’s plan, not Xcel’s plan,” Council member and Sustainability Commission liaison Marilyn Meinke said. Meinke said the commission has been discussing the need for an energy plan for a long time.

Council member Peggy Rehder said the city has had a good working relationship with Xcel in the past on issues from the nuclear plant to the ash landfill.

“We can’t always come to an agreement but at least what we have had is a public/private relationship where I think we have all respected each other,” she said.

Council members said they want to check in frequently and evaluate whether it’s still worth participating in the program, slated to last about two years.

“I’d like to see some stages or decision points where we can come back to the council and say it’s time to back out or move forward,” Council member Ralph Rauterkus said.

The city also heard a presentation Monday about community solar garden efforts in the area and agreed to help facilitate the process. A community solar garden offers what McCleary described as essentially an energy cooperative. Area Xcel customers could purchase shares in the garden and get bill credits.

The city didn’t commit funds or involvement, but will help as sites and options are explored. Sustainability Commission chair Evan Brown said the commission just wants the city to help “shepherd this along” and help with site recommendations.

If city land, among the options being considered, ends up offering the best site, there would be a lease and the city would collect rent, representatives from the solar company Minnesota Community Solar said.

Council members generally were receptive toward the project.

GREEN WING ENERGY ACTION PLAN

“Personally I think this is a great way to go,” Council member Dean Hove said, noting the site will provide tax revenue and will offer residents and property owners who otherwise couldn’t have solar energy on-site participate in benefits from the program.

Appendix 5: Partners in Energy Planning Memorandum of Understanding

Memorandum of Understanding Phase 1 – Plan Development

City of Red Wing
315 West 4th Street
Red Wing, MN 55066

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. Xcel Energy anticipates the Partners in Energy program will launch with the City of Red Wing in January, 2015.

The intent of this Memorandum of Understanding is to confirm Red Wing'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 participants in plan development, 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 Red Wing into the analysis if feasible.

- Professional facilitation support 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.
- Communication tools and support if necessary to facilitate community awareness of the planning initiative. Xcel Energy requests that the City of Red Wing receive approval prior to releasing any public collateral with the Xcel Energy logo. In turn, Xcel Energy will not release any materials publicizing the City of Red Wing's participation in the Partners of Energy program, or containing their logo, without receiving their approval.
- Commitment to delivering an actionable and complete energy action plan within six months of the City of Red Wing and Xcel Energy launching Partners in Energy.

Although participation in the Plan Development phase of Partners in Energy program requires no monetary contribution, the community, the City of Red Wing, 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 City of Red Wing and Xcel Energy launching Partners in Energy.
- Public distribution of the work products developed with the support of the Xcel Energy's Partners in Energy program.

**Resource Commitment Summary
Plan Development Phase**

| City of Red Wing | Xcel Energy |
|---|---|
| <ul style="list-style-type: none">• Single point of contact• Meeting facilities• Access to existing energy-related plans and programs• Involvement in developing implementation strategies• Commitment to completing the plan development• Agreement that the energy plan resulting from this work will be available to the public | <ul style="list-style-type: none">• Assistance recruiting planning participants• Analysis of community energy use and program participation• Facilitation support for planning• Training and guidance developing goals and strategies• Documentation and delivery of the energy action plan• Communication tools and support• Commitment to completing the plan development |

The Memorandum of Understanding for the Implementation Phase of the Partners in Energy program will be developed upon completion of your energy action plan and will outline your goals and the resource commitment from Xcel Energy and the City of Red Wing

All communications pertaining to this agreement shall be directed to Jay McCleary, on behalf of the City of Red Wing and Tami Gunderzik on behalf of Xcel Energy.

Thank you again for your continued interest in Xcel Energy’s Partner in Energy program. We look forward to assisting the City of Red Wing in the development of an action energy plan.

For the City of Red Wing:

For Xcel Energy:

Date: _____

Date: _____

Appendix 6 and 7: Survey Results from Strategy and Goal Setting Activity

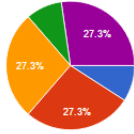
12 responses

[View all responses](#)

Summary

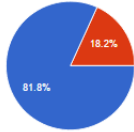
Preliminary Goal Feedback

How long do you think it would take to achieve a 10% participation goal?



| | | |
|-------------------|---|-------|
| 0.5 - 1 year | 1 | 9.1% |
| 1.5 - 2 years | 3 | 27.3% |
| 2.5 - 3 years | 3 | 27.3% |
| 3.5 - 4 years | 1 | 9.1% |
| 4.5 - 5 years | 3 | 27.3% |
| More than 5 years | 0 | 0% |

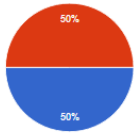
In general, do you support a 10% participation goal for the Red Wing community?



| | | |
|--------|---|-------|
| Yes | 9 | 81.8% |
| No | 2 | 18.2% |
| Unsure | 0 | 0% |

Alternative Goal Suggestion

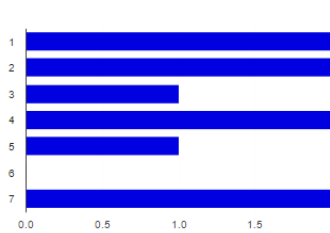
What percent participation should be chosen for Red Wing's final small to medium-sized business goal?



| | | |
|---------------------|---|-----|
| Higher than 10% | 6 | 50% |
| 5% (185 businesses) | 6 | 50% |
| 2% (74 businesses) | 0 | 0% |
| 1% (37 businesses) | 0 | 0% |
| Other | 0 | 0% |

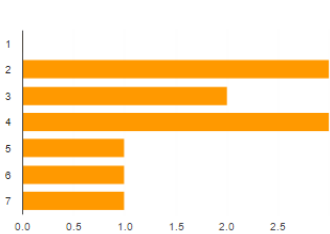
Small Business Strategy Ranking

Campaign about the benefits of energy efficiency and renewables [Please rank the following strategies (1= least valuable, 7= most valuable).]



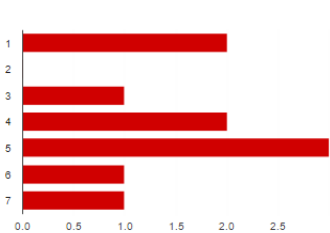
| | | |
|---|---|-----|
| 1 | 2 | 20% |
| 2 | 2 | 20% |
| 3 | 1 | 10% |
| 4 | 2 | 20% |
| 5 | 1 | 10% |
| 6 | 0 | 0% |
| 7 | 2 | 20% |

Education through peer exchanges [Please rank the following strategies (1= least valuable, 7= most valuable).]



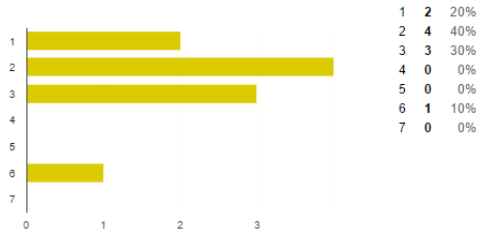
| | | |
|---|---|-------|
| 1 | 0 | 0% |
| 2 | 3 | 27.3% |
| 3 | 2 | 18.2% |
| 4 | 3 | 27.3% |
| 5 | 1 | 9.1% |
| 6 | 1 | 9.1% |
| 7 | 1 | 9.1% |

Using energy experts to educate business owners [Please rank the following strategies (1= least valuable, 7= most valuable).]

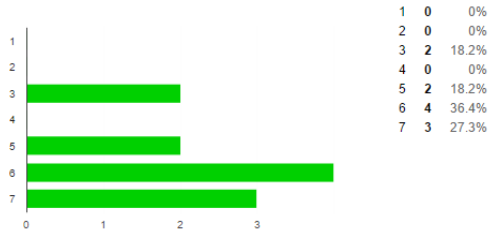


| | | |
|---|---|-----|
| 1 | 2 | 20% |
| 2 | 0 | 0% |
| 3 | 1 | 10% |
| 4 | 2 | 20% |
| 5 | 3 | 30% |
| 6 | 1 | 10% |
| 7 | 1 | 10% |

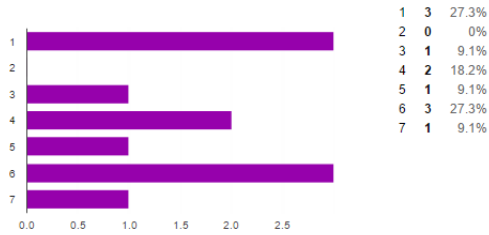
Using social norming to drive program participation [Please rank the following strategies (1= least valuable, 7= most valuable).]



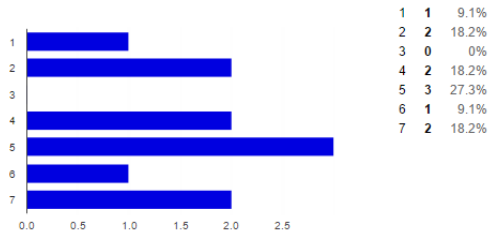
Leveraging preexisting community network channels to reach business owners [Please rank the following strategies (1= least valuable, 7= most valuable).]



Using local celebrities and respected business owners to promote energy actions [Please rank the following strategies (1= least valuable, 7= most valuable).]



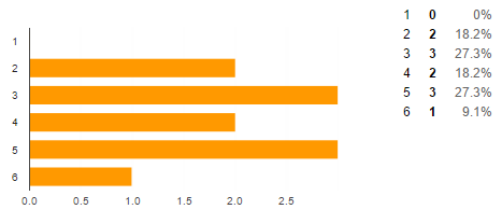
Create energy challenge for local businesses [Please rank the following strategies (1= least valuable, 7= most valuable).]



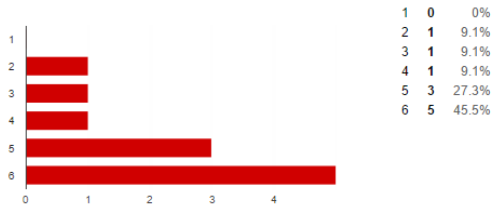
Additional Strategies for Small to Medium-Sized Businesses

Small to Medium-Sized Business Tactic Ranking

Create sticker recognition campaign for storefront windows [Please rank the following tactics from 1-6 (1= least important, 6= most important).]



Host educational workshops for businesses (e.g. Lunch and learns) [Please rank the following tactics from 1-6 (1= least important, 6= most important).]



Host contest for kids (e.g. coloring contest) [Please rank the following tactics from 1-6 (1= least important, 6= most important).]

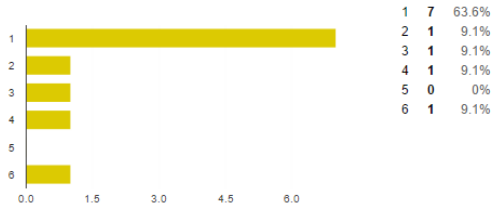
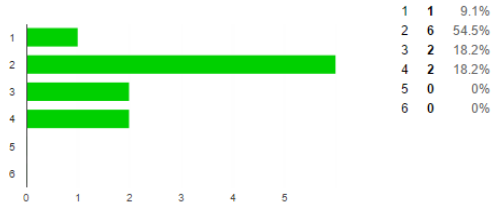
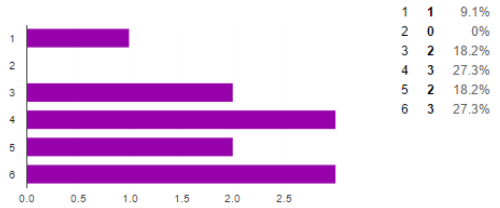


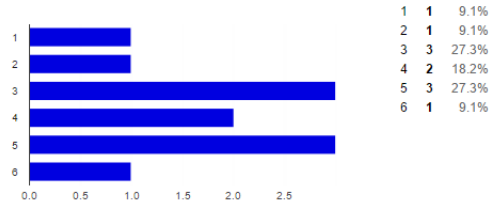
Table at community events as a means of reaching out to business owners [Please rank the following tactics from 1-6 (1= least important, 6= most important).]



Scheduling in person meetings with businesses [Please rank the following tactics from 1-6 (1= least important, 6= most important).]



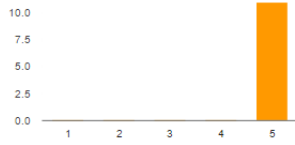
Create high visibility display for businesses that participate in a desired action [Please rank the following tactics from 1-6 (1= least important, 6= most important).]



Additional Tactics for Small to Medium-Sized Businesses

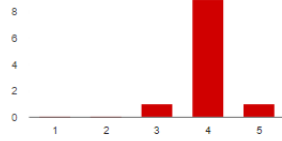
Target Audiences

Business Owners



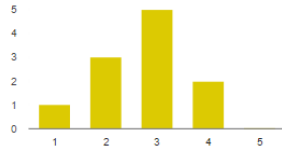
| | | |
|-------------------------|----|------|
| Not essential at all: 1 | 0 | 0% |
| 2 | 0 | 0% |
| 3 | 0 | 0% |
| 4 | 0 | 0% |
| Extremely essential : 5 | 11 | 100% |

Business Employees



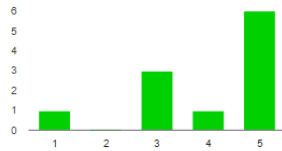
| | | |
|-------------------------|---|-------|
| Not essential at all: 1 | 0 | 0% |
| 2 | 0 | 0% |
| 3 | 1 | 9.1% |
| 4 | 9 | 81.8% |
| Extremely essential : 5 | 1 | 9.1% |

Business Customers



| | | |
|-------------------------|---|-------|
| Not essential at all: 1 | 1 | 9.1% |
| 2 | 3 | 27.3% |
| 3 | 5 | 45.5% |
| 4 | 2 | 18.2% |
| Extremely essential : 5 | 0 | 0% |

Property Owners Who Rent to Businesses



| | | |
|-------------------------|---|-------|
| Not essential at all: 1 | 1 | 9.1% |
| 2 | 0 | 0% |
| 3 | 3 | 27.3% |
| 4 | 1 | 9.1% |
| Extremely essential: 5 | 6 | 54.5% |

Red Wing Area Chamber of Commerce

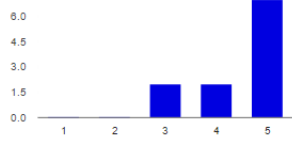


| | | |
|-------------------------|---|-------|
| Not essential at all: 1 | 0 | 0% |
| 2 | 0 | 0% |
| 3 | 2 | 18.2% |
| 4 | 2 | 18.2% |
| Extremely essential : 5 | 7 | 63.6% |

If you would like to consider additional target audiences please list them below.

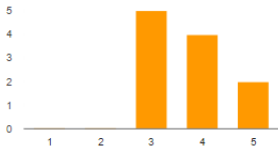
Partners and Communication Channels

Red Wing Area Chamber of Commerce



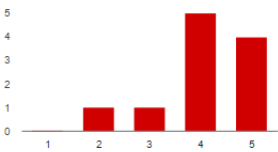
| | | |
|-------------------------|---|-------|
| Not important at all: 1 | 0 | 0% |
| 2 | 0 | 0% |
| 3 | 2 | 18.2% |
| 4 | 2 | 18.2% |
| Very important: 5 | 7 | 63.6% |

Use local media outlets (e.g. the Republican Eagle)



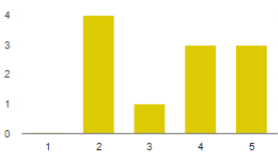
| | | |
|-------------------------|---|-------|
| Not important at all: 1 | 0 | 0% |
| 2 | 0 | 0% |
| 3 | 5 | 45.5% |
| 4 | 4 | 36.4% |
| Very important: 5 | 2 | 18.2% |

Reaching out to businesses via phone calls



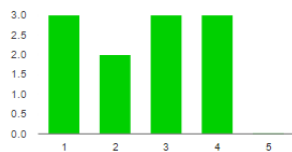
| | | |
|-------------------------|---|-------|
| Not important at all: 1 | 0 | 0% |
| 2 | 1 | 9.1% |
| 3 | 1 | 9.1% |
| 4 | 5 | 45.5% |
| Very important: 5 | 4 | 36.4% |

Reaching out to businesses via email



| | | |
|-------------------------|---|-------|
| Not important at all: 1 | 0 | 0% |
| 2 | 4 | 36.4% |
| 3 | 1 | 9.1% |
| 4 | 3 | 27.3% |
| Very important: 5 | 3 | 27.3% |

Use a character like "Rubin the Blue Bin" to educate about energy issues



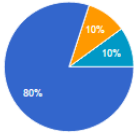
| | | |
|-------------------------|---|-------|
| Not important at all: 1 | 3 | 27.3% |
| 2 | 2 | 18.2% |
| 3 | 3 | 27.3% |
| 4 | 3 | 27.3% |
| Very important: 5 | 0 | 0% |

If you would like to consider additional partners and outreach options please list them below.

Rubin the Blue Bin can help with kids education. Personal contact with business owners is much better than email or phone

Revisiting Goals

What is your revised goal selection?



| | | |
|-----------|---|-----|
| No Change | 8 | 80% |
| Over 10% | 0 | 0% |
| 5% | 1 | 10% |
| 2% | 0 | 0% |
| 1% | 0 | 0% |
| Other | 1 | 10% |

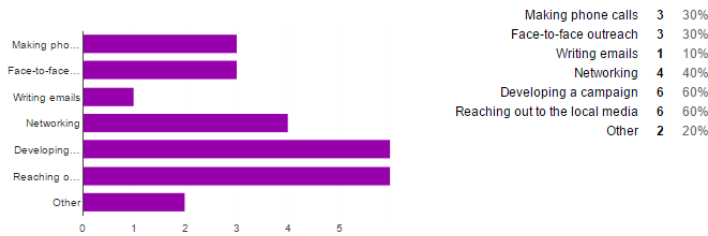
Additional Feedback

Is there anything else you would like to say about the small-medium business focus area?

I really feel the Chamber is the best channel for the small-medium business community.

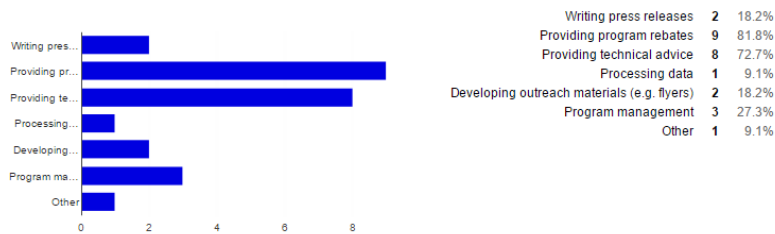
How are you most willing to participate in reaching goal obtainment for both focus areas?

Please check 1-2 boxes.



Which of Xcel Energy's Partners in Energy resources are most valuable to these efforts?

Please check 1-2 boxes.



Number of daily responses



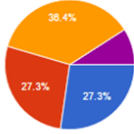
12 responses

[View all responses](#)

Summary

Preliminary Goal Feedback

How long do you think it would take to achieve a 10% participation goal?



| | | |
|-------------------|---|-------|
| 0.5 - 1 year | 3 | 27.3% |
| 1.5 - 2 years | 3 | 27.3% |
| 2.5 - 3 years | 4 | 36.4% |
| 3.5 - 4 years | 0 | 0% |
| 4.5 - 5 years | 1 | 9.1% |
| More than 5 years | 0 | 0% |

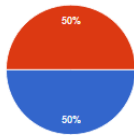
In general, do you support a 10% participation goal for the Red Wing community?



| | | |
|--------|----|-------|
| Yes | 10 | 83.3% |
| No | 1 | 8.3% |
| Unsure | 1 | 8.3% |

Alternative Goal Suggestion

What percent participation should be chosen for Red Wing's final residential goal?



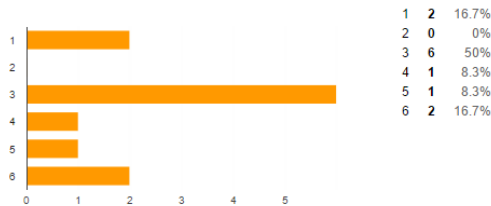
| | | |
|-----------------|---|-----|
| Higher than 10% | 1 | 50% |
| 5% (350) | 1 | 50% |
| 2% (140) | 0 | 0% |
| 1% (70) | 0 | 0% |
| Other | 0 | 0% |

Residential Strategy Ranking

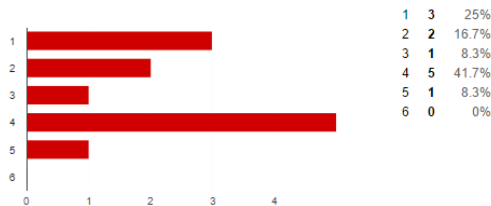
Partner with high school environmental club [The Energy Action Team brainstormed strategies over the first three workshops. These strategies are captured below. Please rank these strategies based upon how effectively you believe they will drive goal attainment.]



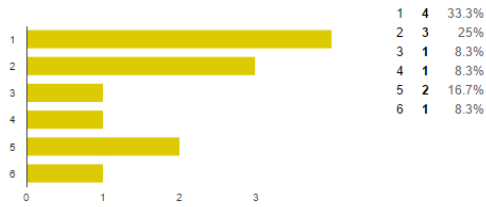
Partner with K-12 youth groups (e.g. Scouts) [The Energy Action Team brainstormed strategies over the first three workshops. These strategies are captured below. Please rank these strategies based upon how effectively you believe they will drive goal attainment.]



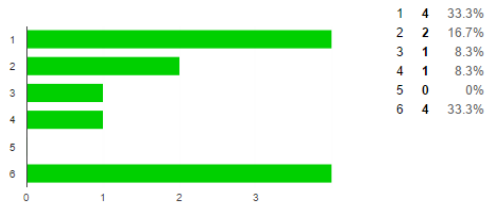
Partner with faith-based organizations [The Energy Action Team brainstormed strategies over the first three workshops. These strategies are captured below. Please rank these strategies based upon how effectively you believe they will drive goal attainment.]



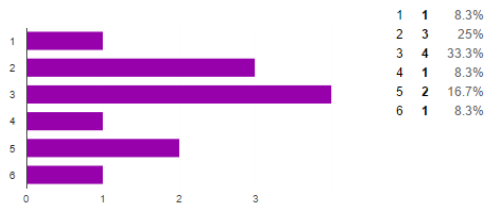
Focus efforts on the public housing sector [The Energy Action Team brainstormed strategies over the first three workshops. These strategies are captured below. Please rank these strategies based upon how effectively you believe they will drive goal attainment.]



Use an energy challenge to frame all implementation efforts [The Energy Action Team brainstormed strategies over the first three workshops. These strategies are captured below. Please rank these strategies based upon how effectively you believe they will drive goal attainment.]



Partner with local nonprofits (e.g. the YMCA) [The Energy Action Team brainstormed strategies over the first three workshops. These strategies are captured below. Please rank these strategies based upon how effectively you believe they will drive goal attainment.]

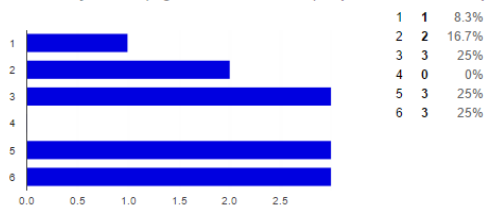


Additional Strategies for Residents

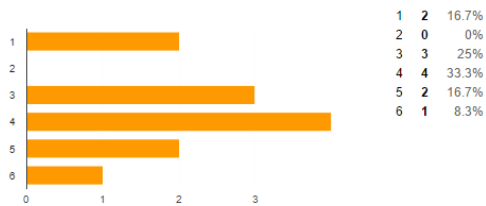
hi
 Does Excel have a mobile demo semi truck that they could bring to parades, River City Days, Concerts in the Park, etc. that would have demos and info to pass along to residents?
 Communicate with residents through City of Red Wing means such as billing. (I don't know that an "energy challenge" is.)

Residential Tactic Ranking

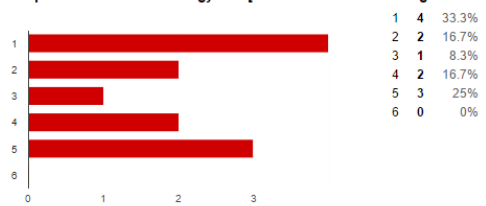
Table at community events (e.g. the farmers market) to promote residential program participation [Please rank the following tactics from 1-6 (1= least valuable, 6= most valuable)]



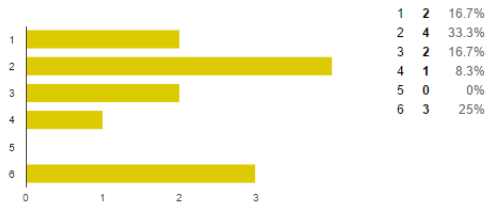
Host educational workshops (e.g. on Community Solar Gardens) [Please rank the following tactics from 1-6 (1= least valuable, 6= most valuable)]



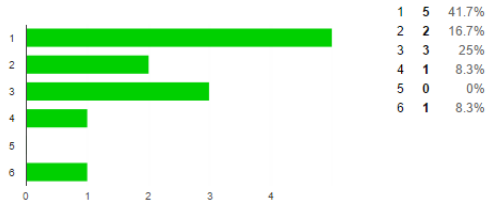
Hold house parties focused on energy use [Please rank the following tactics from 1-6 (1= least valuable, 6= most valuable)]



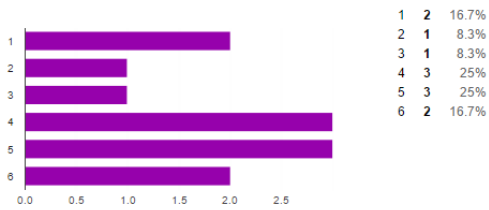
Use door knocking campaigns to promote energy programs (e.g. Home Energy Squad and Windsorce) [Please rank the following tactics from 1-6 (1= least valuable, 6= most valuable)]



Create contest for kids (e.g. coloring contest) [Please rank the following tactics from 1-6 (1= least valuable, 6= most valuable)]



Create high visibility name display for residents that participate in energy programs [Please rank the following tactics from 1-6 (1= least valuable, 6= most valuable)]

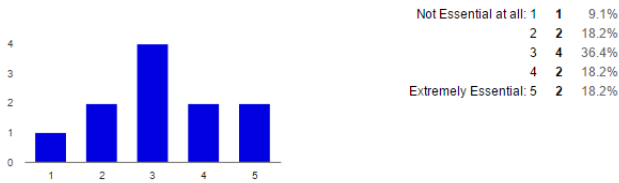


Additional Tactics for Residents

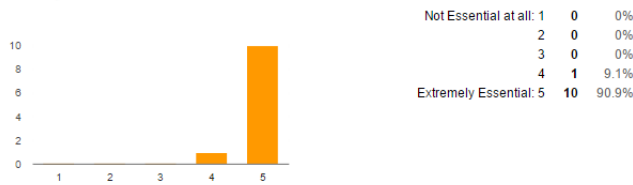
Create some sort of financial incentives for participation

Target Audiences

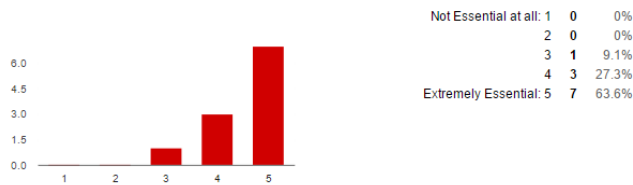
Renters



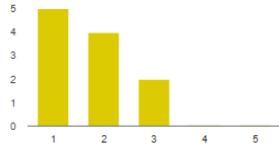
Single Family Homeowners



New Homeowners

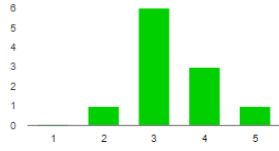


Children Ages 0 to 5



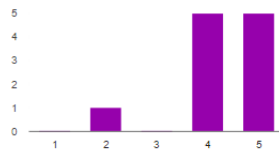
| | | |
|-------------------------|---|-------|
| Not Essential at all: 1 | 5 | 45.5% |
| 2 | 4 | 36.4% |
| 3 | 2 | 18.2% |
| 4 | 0 | 0% |
| Extremely Essential: 5 | 0 | 0% |

Children Ages 6-11



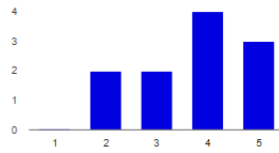
| | | |
|-------------------------|---|-------|
| Not Essential at all: 1 | 0 | 0% |
| 2 | 1 | 9.1% |
| 3 | 6 | 54.5% |
| 4 | 3 | 27.3% |
| Extremely Essential: 5 | 1 | 9.1% |

Children Ages 12-18



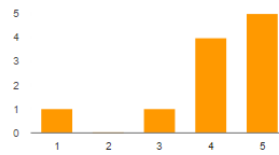
| | | |
|-------------------------|---|-------|
| Not Essential at all: 1 | 0 | 0% |
| 2 | 1 | 9.1% |
| 3 | 0 | 0% |
| 4 | 5 | 45.5% |
| Extremely Essential: 5 | 5 | 45.5% |

Low Income Residents



| | | |
|-------------------------|---|-------|
| Not Essential at all: 1 | 0 | 0% |
| 2 | 2 | 18.2% |
| 3 | 2 | 18.2% |
| 4 | 4 | 36.4% |
| Extremely Essential: 5 | 3 | 27.3% |

Developers



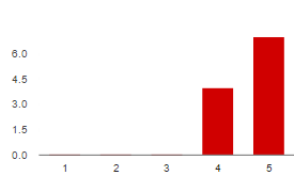
| | | |
|-------------------------|---|-------|
| Not Essential at all: 1 | 1 | 9.1% |
| 2 | 0 | 0% |
| 3 | 1 | 9.1% |
| 4 | 4 | 36.4% |
| Extremely Essential: 5 | 5 | 45.5% |

Are there additional target audiences that you would like to see considered?

Community volunteers .like Downtown Main Street. These are people already engaged in the community.

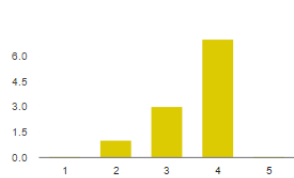
Partners and Communication Channels

Use local media outlets (e.g. the Republican Eagle)



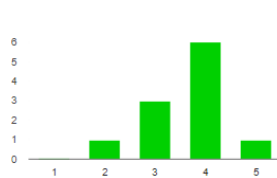
| | | |
|-------------------------|---|-------|
| Not important at all: 1 | 0 | 0% |
| 2 | 0 | 0% |
| 3 | 0 | 0% |
| 4 | 4 | 36.4% |
| Very important: 5 | 7 | 63.6% |

Use a character like "Rubin the Blue Bin" to educate about energy issues



| | | |
|-------------------------|---|-------|
| Not important at all: 1 | 0 | 0% |
| 2 | 1 | 9.1% |
| 3 | 3 | 27.3% |
| 4 | 7 | 63.6% |
| Very important: 5 | 0 | 0% |

Use the welcome wagon to distribute information



| | | |
|-------------------------|---|-------|
| Not important at all: 1 | 0 | 0% |
| 2 | 1 | 9.1% |
| 3 | 3 | 27.3% |
| 4 | 6 | 54.5% |
| Very important: 5 | 1 | 9.1% |

If you would like to consider additional partner and outreach options please list them below.

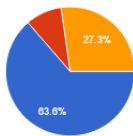
The chamber of commerce "Lunch and Learn" sessions.

Inserts in City mailings as previously suggested....

Local businesses that sell home products like Menards, home stores, etc. Ask them to locally promote as well.

Revisiting Goals

What is your revised goal selection?



| | | |
|-----------|---|-------|
| No Change | 7 | 63.6% |
| Over 10% | 1 | 9.1% |
| 5% | 3 | 27.3% |
| 2% | 0 | 0% |
| 1% | 0 | 0% |
| Other | 0 | 0% |

Additional Feedback

Is there anything else you would like to say about the residential focus area?

I think focusing on contractors who are doing remodels is a really important group to reach.

It would be useful if Xcel energy placed something in utilities billings to local residents to help promote the initiative.

Number of daily responses



Appendix 8: Red Wing Goal Scenarios

Red Wing Goal Scenarios

This is a follow up to some of the discussions around the Red Wing plan goals and how to put them in a larger context. Below is a bit more information about how the goals could translate to energy impacts. We encourage you to read and give feedback about how you would like to see Red Wing's goals structured. We follow with some specific suggestions for your consideration.

Current goals

The current goals in the Red Wing energy plan are set as the number of participants in each focus area: 10% of residential premises, for a total of 700 premises, and 10% of small to medium commercial premises, for a total of 100.

Comparison to recent activity

These participation counts are similar to recent energy efficiency activity in Red Wing. In 2012 and 2013, there were 709 instances of residential participation (see draft plan p. 14). There were 123 unique commercial and industrial businesses that participated (p.15), and 106 that are generally classified as "small to medium sized businesses" (p.27).

Energy savings

The energy savings or renewable energy production from those participation goals will vary greatly based on exactly which actions the participants take. Some of the estimated savings per participant action are included in the plan for residential and commercial programs (p. 25 and p. 27). If past activity is replicated, meaning participants take the same actions, the energy savings would be **1.1%** of total community electricity use and **0.47%** of total community gas use. If just considering the energy use of residential and small to medium commercial customers (the targets of the plan) the savings would be **1.7%** and **0.64%**. These savings could be increased by setting goals to drive participants into actions with higher savings, or by asking participants to take multiple actions.

Red Wing's energy efficiency savings in recent years have averaged 0.9% of electricity use and 1.1% of natural gas use. If these baseline savings continue, and the savings outlined in the plan happen year to year, it will take about 7 years from 2012 for the community to save approximately 9-10% of its energy use (more details below).

GREEN WING ENERGY ACTION PLAN

| | | Energy Action Plan and Beyond | | | | | | |
|-------------|----------------------|-------------------------------|-------|-------|-------|--------------|--------------|--------------|
| | | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| Electricity | Baseline Savings | 0.90% | 0.90% | 0.90% | 0.90% | 0.90% | 0.90% | 0.90% |
| | Cumulative Baseline | 0.90% | 1.80% | 2.70% | 3.60% | 4.50% | 5.40% | 6.30% |
| | Red Wing Plan Goals | | | | | 1.1% | 1.1% | 1.1% |
| | Total Savings | | | | | 5.60% | 7.60% | 9.60% |
| | | Energy Action Plan and Beyond | | | | | | |
| | | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| Natural Gas | Baseline Savings | 1.10% | 1.10% | 1.10% | 1.10% | 1.10% | 1.10% | 1.10% |
| | Cumulative Baseline | 1.10% | 2.20% | 3.30% | 4.40% | 5.50% | 6.60% | 7.70% |
| | Red Wing Plan Goals | | | | | 0.47% | 0.47% | 0.47% |
| | Total Savings | | | | | 5.97% | 7.54% | 9.11% |

Some discussion has occurred that the percent savings numbers should be lower, less than 1.04% and 0.44%, since the total community energy use does not include three premises that have been removed for 15x15 privacy considerations. One caution on interpreting savings as a percent of total use is that if customer energy use been removed, any savings from those customers past activity would have also been removed. This means any energy reduction at these three premises is also **not being counted** in the past activity reported for Red Wing.

Considerations for community goals

We suggest the group consider these additional items to help clarify the goals in the plan and address some of the questions that have been raised:

1) Clarify if goals are instead of or in addition to the **baseline community activity**. If Red Wing assumes the same activity will occur, and goals in the plan will be in addition to that activity, this would amount to a difference of a total residential participation of 700 versus 1400 premises.

Question: Should the goals be in addition to the baseline community activity?

2) Consider setting energy savings and renewable energy goals **in addition to** participation goals. By setting a goal that every other participant will “double their actions” from previous participants (for example) this could increase the savings by 50%. This could be achieved by adjusting mix of energy saving measures to target those with a larger impact or target the higher energy users in the community.

Question: Should small groups set additional energy savings and renewable energy goals?

3) The group could also consider **stretch goals** beyond the baseline, which would encourage the group to go beyond those participation and savings targets. Xcel Energy could potentially support the community via recognition and celebration of reaching stretch goals, through support such as local signage, or sponsoring a community event.

Question: Should small groups set additional stretch goals?

Appendix 9: Residential Program Participation Scenarios

| Residential Program Participation In Addition to Red Wing's Baseline | | | | |
|---|--------------|-------------------------------------|--------------------------------|---|
| Programs | Participants | Estimated electricity savings (kWh) | Estimated gas savings (therms) | Estimated renewable energy production (kWh) |
| Scenario 1: Strong Emphasis on Windsource® and Solar*Rewards® | | | | |
| Home Energy Squad® | 50 | 38,300 | 3,900 | --- |
| Windsource® | 635 | --- | --- | 1,235,700 |
| Solar*Rewards® | 15 | --- | --- | 99,000 |
| TOTAL | 700 | 38,300 | 3,900 | 1,334,700 |
| Scenario 2: Strong Emphasis on Home Energy Squad® Participation | | | | |
| Home Energy Squad® | 650 | 497,900 | 50,700 | --- |
| Windsource® | 45 | --- | --- | 87,600 |
| Solar*Rewards® | 5 | --- | --- | 33,000 |
| TOTAL | 700 | 497,900 | 50,700 | 120,600 |
| Scenario 3: Strong Emphasis on Home Energy Squad® Participation with a 25% Heating Upgrade Conversion Rate | | | | |
| Home Energy Squad® | 650 | 497,900 | 50,700 | --- |
| Residential Heating | 162 | 34,700 | 24,100 | --- |
| Windsource® | 45 | --- | --- | 87,600 |
| Solar*Rewards® | 5 | --- | --- | 33,000 |
| TOTAL | 700 | 559,400 | 77,500 | 120,600 |

Appendix 10: Business Program Participation Scenarios

| Business Program Participation in Addition to Red Wing's Baseline | | | | |
|--|--------------|-------------------------------------|--------------------------------|---|
| Programs | Participants | Estimated electricity savings (kWh) | Estimated gas savings (therms) | Estimated renewable energy production (kWh) |
| Scenario 1: Triple Red Wing's motors efficiency participation from its '12-'13 baseline, as well as promote a variety of other efficiency and renewable programs. | | | | |
| Motors Efficiency | 21 | 463,900 | --- | --- |
| One Stop Efficiency Shop [®] Lighting Retrofits | 45 | 860,400 | --- | --- |
| Solar*Rewards [®] | 5 | --- | --- | 150,000 |
| Heating Efficiency | 19 | --- | 33,300 | --- |
| TOTAL | 100 | 1,324,300 | 33,300 | 150,000 |
| Scenario 2: Have at least 50% of participants engage in a renewable energy program. | | | | |
| Solar*Rewards [®] | 10 | --- | --- | 300,000 |
| Windsorce [®] | 50 | --- | --- | 53,200 |
| Turn Key Services | 10 | 65,100 | --- | --- |
| One Stop Efficiency Shop [®] Lighting Retrofits | 30 | 573,600 | --- | --- |
| TOTAL | 100 | 638,700 | | 353,200 |
| Scenario 3: Stretch goal to engage 150 participants in a variety of business programs. | | | | |
| Heating Efficiency | 15 | --- | 26,300 | --- |
| Motors Efficiency | 15 | 331,300 | --- | --- |
| Lighting Efficiency | 40 | 840,000 | --- | --- |
| Windsorce [®] | 50 | --- | --- | 53,200 |
| Turn Key Services | 30 | 195,300 | --- | --- |
| TOTAL | 150 | 1,366,600 | 26,300 | 53,200 |