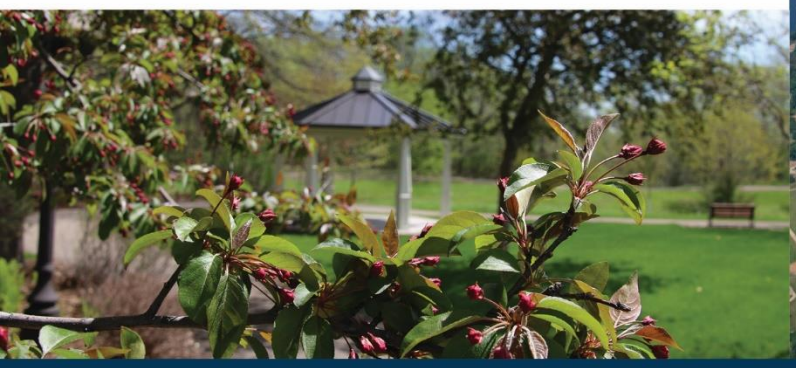
COON RAPIDS
Minnesota



An Energy Action Plan for City of Coon Rapids

December 2022

Xcel Energy®

PARTNERS IN ENERGY
An Xcel Energy Community Collaboration

ACKNOWLEDGEMENTS

Thank you to the following individuals who contributed many hours of service to developing this Energy Action Plan.

The content of this plan is derived from a series of planning workshops hosted by Xcel Energy's Partners in Energy. Xcel Energy is one of two electric utilities serving Coon Rapids. Partners in Energy is a two-year collaboration to develop and implement a community's energy goals. For more information about the planning workshops, see Appendix C: Xcel Energy's Partners in Energy Planning Process.

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Executive Summary
Coon Rapids Energy Action Plan

Vision

The City of Coon Rapids' Energy Action Plan will benefit the community as a whole, including residents, business owners and visitors, as well as the infrastructure and institutions that support them. This plan positions the City of Coon Rapids as a leader in energy and supports generations of community members and visitors. Created and supported by community stakeholders, this plan creates financial savings, while reducing the effects of climate change.

Community Goal

Coon Rapids will reduce greenhouse gas emissions 35% by 2030, resulting in substantial energy costs avoided for the Coon Rapids community.

Focus Areas

Energy Efficiency

Renewable Energy

Residents | Businesses | Municipal | Institutions | Multi-family | Education

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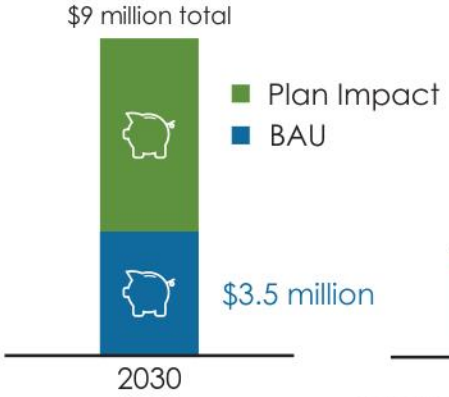
Plan impact

The success of this plan can help our community avoid spending nearly $5 million* on top of a business as usual (BAU) scenario by 2030.

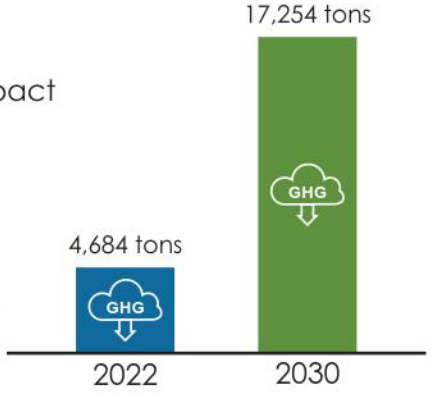
The 2022 baseline of greenhouse gas emissions avoidance is calculated from an average of three years (2019-2021) of energy data from all energy utilities in Coon Rapids.

*This number is estimated based on the community's current energy savings at 2022 rates.

Energy Costs Avoided



CO_2 Avoided



Baseline GHG Avoidance

Actions to get us there

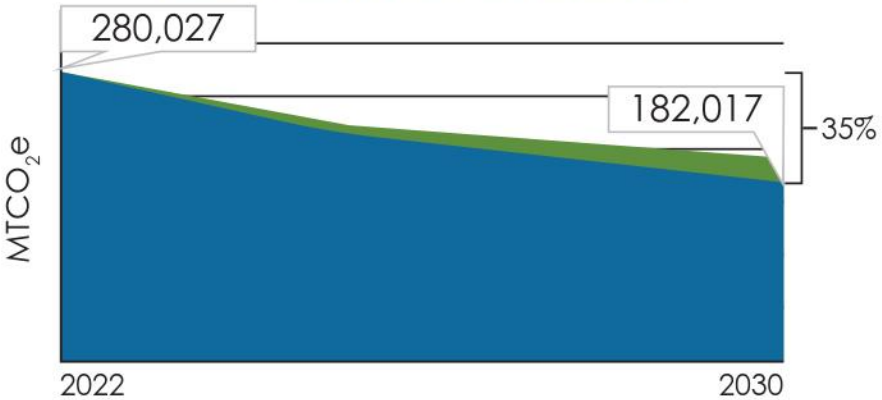
The City of Coon Rapids and its partners, community members, and volunteers, will take actions identified in this plan that will contribute to reaching the goal of reducing greenhouse gas emissions 35% by 2030.

Those actions include:

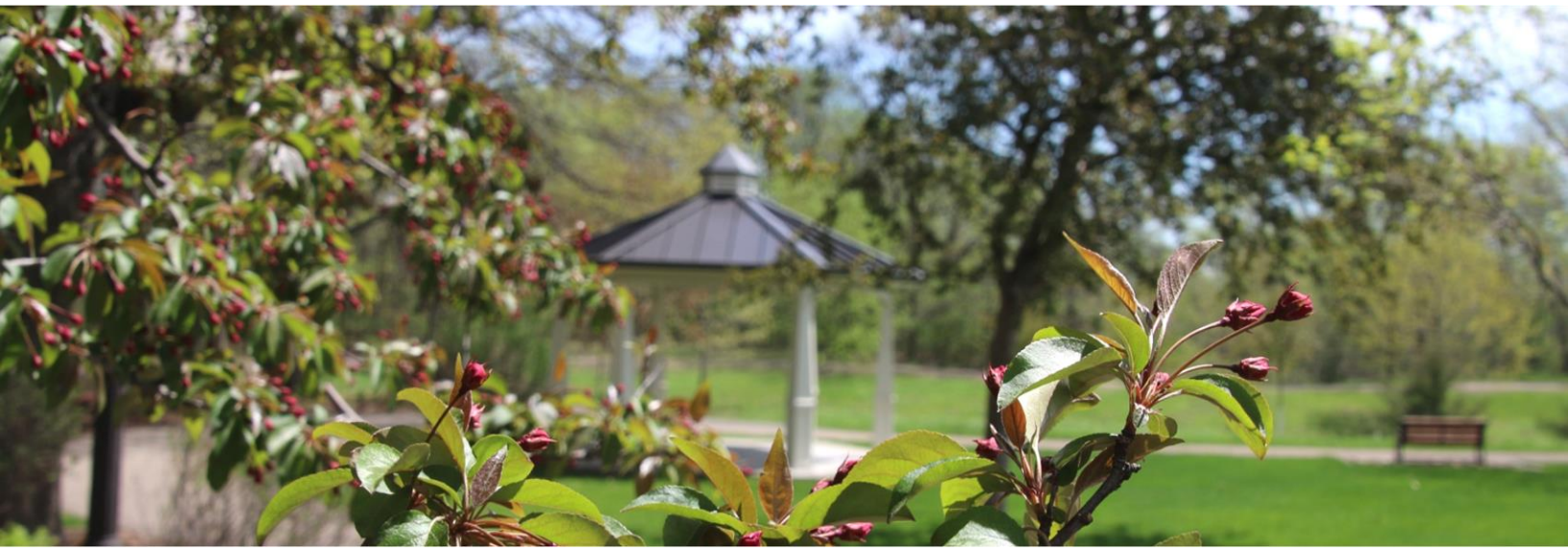
- Collaborating with businesses, social service organizations, and community groups to implement energy campaigns that support the participation in energy programs and opportunities.
- Supporting and developing opportunities for the community to access energy resources that assist in individual energy goals.
- Creating conditions for energy savings, renewable energy, and economic growth to coexist and thrive.

Greenhouse Gas Emissions Savings: 35% Reduction by 2030

(from electricity and natural gas sources)



- Emissions reduction from plan impact
- Total emissions after goal savings



INTRODUCTION

Coon Rapids is a rapidly diversifying city in the northern suburbs of the Minneapolis-St. Paul metro area. Its residents choose Coon Rapids because of its affordability, wide array of services, and accessibility to the metro area. The city is part of Anoka County and is known for its location along the Mississippi River with access to transportation corridors and commuter rails. It is also a welcoming community to residents, businesses, industry, and visitors, and home to a large community college, hospital, and a plethora of regional parks.

Homes in Coon Rapids were largely built before 2000, thus are not as energy efficient as more recent versions of the building code require. Having multiple census tracts that meet the Minnesota Pollution Control Agency's definition of "areas of environmental justice concern" means that increasing energy efficiency and access to programs for these residents will reduce the cost-burden that some experience from utility bills and will increase resident retention. The broader community will also benefit from access to programs and services to become more energy efficient.

Coon Rapids has made progress toward increasing energy savings and renewable energy support and preparing for electric vehicle adoption. With this Energy Action Plan, Coon Rapids will continue to lead the charge for greenhouse gas emission reductions and avoidance. The City will provide residential programs to increase home efficiency and business programs to fund energy projects and technology advances, while offering additional renewable energy options to community members.

Why An Energy Action Plan

Coon Rapids is increasingly interested in integrating sustainability across the community. The City has had a Sustainability Commission for more than a decade and hired a new Sustainability Planner in 2021. However, Coon Rapids lacked a planning document to focus and direct energy-related work.

An Energy Action Plan will help guide city staff and the Sustainability Commission in using energy efficiency and renewable energy initiatives to decrease community-wide emissions.

The City identified Partners in Energy as a resource that could provide support to develop a plan while unifying city staff, elected officials, residents, and the commission around a common goal. This would further cement sustainability as a shared focus area for everyone in Coon Rapids.

A glossary of energy terminology is available in Appendix D for reference when reading this plan. The following are the most frequently used energy terms in this plan.

Greenhouse Gases (GHG): Gases in the atmosphere that absorb and emit radiation and significantly contribute to climate change. The primary greenhouse gases in the earth's atmosphere are water vapor, carbon dioxide, methane, nitrous oxide and ozone.

Metric Tons of Carbon Dioxide Equivalent (MTCO2e): A unit of measure for greenhouse gas emissions. The unit "CO2e" represents an amount of a greenhouse gas whose atmospheric impact has been standardized to that of one unit mass of carbon dioxide (CO2), based on the global warming potential (GWP) of the gas.

Therm (thm): A unit of natural gas consumption.

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

Premise: A unique combination of service address and meter. For residential customers, this is the equivalent of an individual house or a dwelling unit in a multi-tenant building. For business customers, it is an individual business, or for a larger business, a separately metered portion of the business's load at that address.

Equity: The principle of being just, impartial, and fair. In this plan, *equity* means that residents have equal access, influence, or outcomes of the actions in this document.

Our Engagement & Outreach Process

The creation of this Energy Action Plan was a six-month process to help the community characterize its energy use, identify energy-related goals, and develop engaging strategies to guide change toward Coon Rapids' energy future.

Starting in March 2022, the Energy Action Plan was informed by a series of planning workshops held in the community with a planning team committed to representing local energy priorities in collaboration with City of Coon Rapids and Xcel Energy's Partners in Energy. By the numbers, three energy utilities, 20 community representatives and additional Coon Rapids staff completed five surveys and attended five workshops. See Appendix for more information about the planning process and Xcel Energy's Partners in Energy program.

Existing Coon Rapids Sustainability Initiatives

The City of Coon Rapids has demonstrated a commitment to energy and sustainability through current efforts, including city-wide programs and ordinance updates.

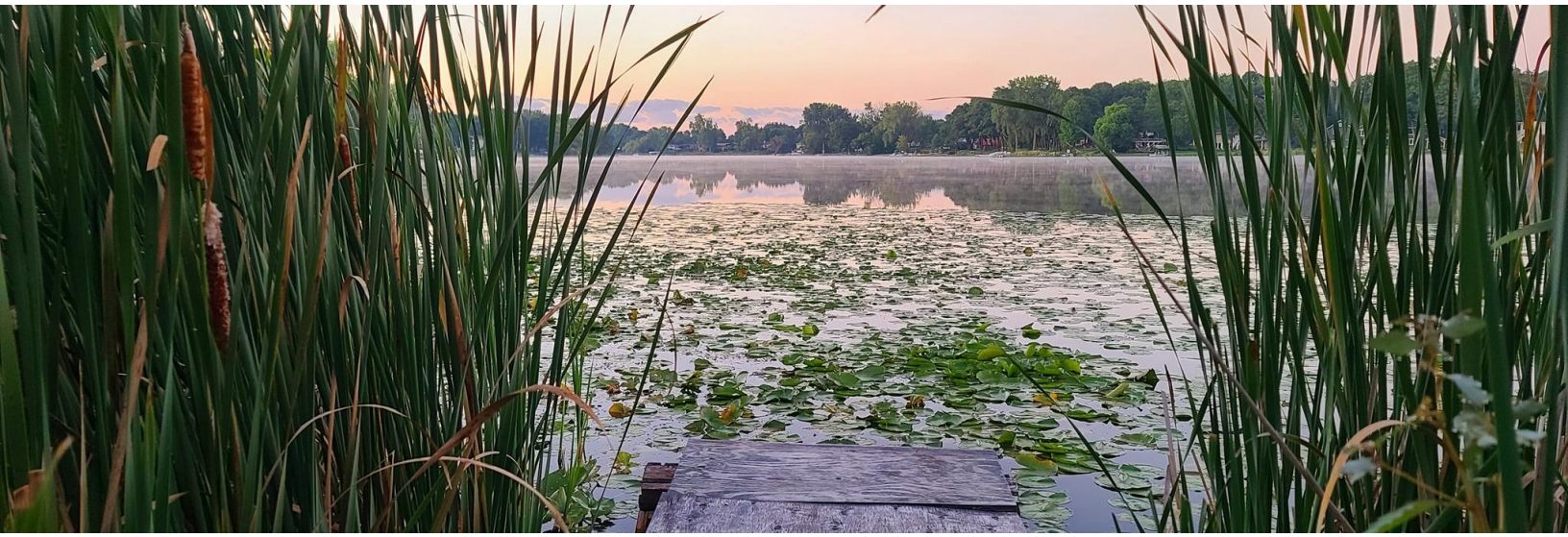
Current Energy Initiatives

- Sustainability Commission (Formed in 2009)
- Step 5 – GreenStep City
- Green Homes Program: Home energy efficiency incentives program (subsidizes home energy assessments and matches utility rebates)
- Intercity Home Energy Squad Challenge® participant
- B3 Benchmarking for all city buildings

- Renewable energy ordinance in place
- SolSmart silver city
- Community Sustainability Partnership Recognition Program
- EV chargers at the Civic Center and Ice Arena
- Energy efficiency measures at municipal facilities

Current Water and Environmental Initiatives

- Recycling Center
- Organics composting at the Recycling Center
- Tree City USA – annual recognition
- Annual Tree Sale
- Native prairie installations at 17 city parks
- Summer watering restrictions
- Protecting pollinators – education and information
- Smart irrigation controller discount for residents



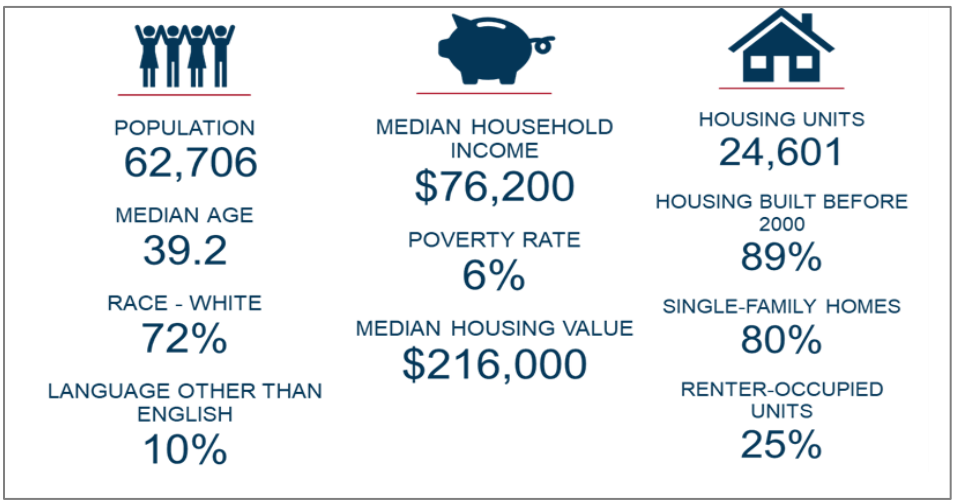
WHERE WE ARE NOW

An integral part of the Partners in Energy planning process is reviewing historic energy data to inform our community's energy baseline. Xcel Energy provided a three-year baseline (2019–2021) for data on energy use, program participation counts, and utility program energy conservation program savings for Coon Rapids, as detailed in the following sections. Connexus Energy, Coon Rapids' other electric utility, and CenterPoint Energy, Coon Rapids' natural gas utility, also provided consumption and program participation data for the same time period.

Community Demographics

Coon Rapids' demographic data from the American Community Survey provides a helpful perspective and context to how the community uses energy. The population of Coon Rapids is sizeable at 62,700 people, with the median age at 39 years old. The median household income is $76,200 and the poverty rate is similar to the state average of 6%, which in Coon Rapids is nearly 3,800 people. Of the 24,600 housing units, almost 90% were built before the year 2000 and were subject to outdated energy codes, which presents an opportunity to improve energy efficiency. See *Figure 1* for Coon Rapids' demographic snapshot.

Figure 1: Coon Rapids demographics



Grid Energy Use

Xcel Energy provides electricity to Coon Rapids and serves approximately one-third of the premises in Coon Rapids. The remainder of the community is served by Connexus Energy Cooperative for electricity Figure *2*). All residents and business in Coon Rapids are served by CenterPoint Energy for natural gas.

Coon Rapids consists of 26,300 distinct premises. For residential customers, a premise is the equivalent of an individual house or dwelling unit in a multi-family building. For business customers, a premise is an individual business or for a larger business, a separately metered portion of the business' load at that address. Most of Coon Rapids' premises are residential (*Figure 3*).

Figure 2: Coon Rapids electric utility service territory map

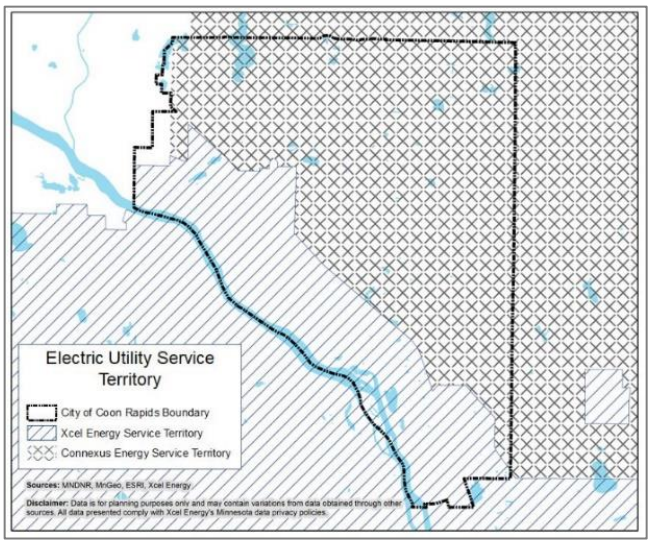
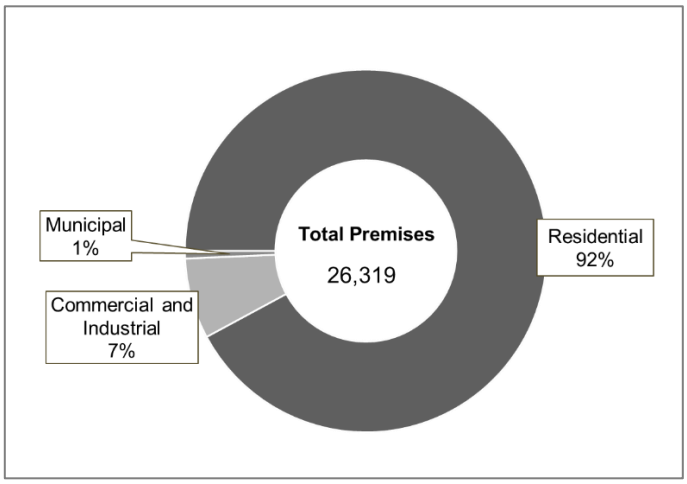
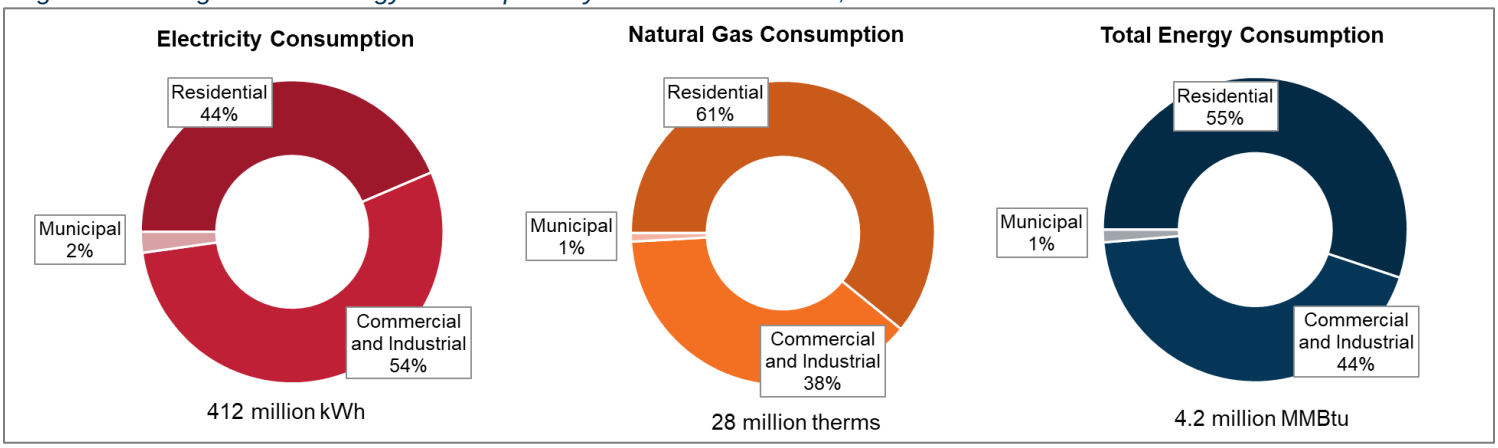


Figure 3: Coon Rapids premise counts by sector



On average, the Coon Rapids community consumes 412 million kWh of electricity (including both Xcel Energy and Connexus Energy) and 28 million therms of natural gas across all sectors per year. The commercial and industrial sector comprises only 7% of premises, but accounts for 44% of total energy consumption. The municipal sector makes up 1% of premises and consumes 1% of total energy in Coon Rapids (*Figure 4*).

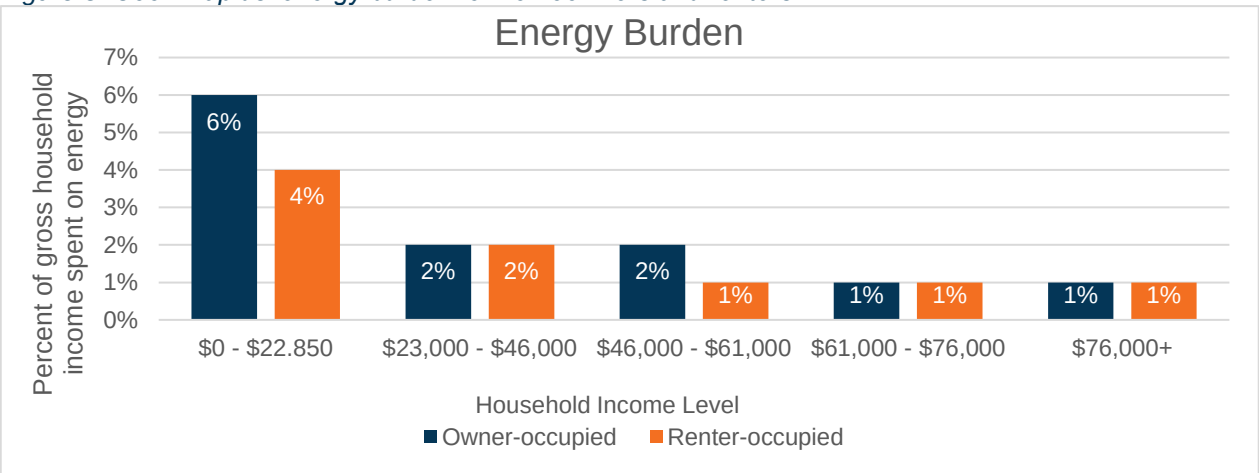
Figure 4: Average annual energy consumption by sector for all utilities, 2019–2021



Energy Burden

Energy burden is defined as the percentage of gross household income spent on energy bills. The average Minnesota household spends 2% of their gross income on energy bills. A household has a high energy burden when they spend more than 6% of their income on energy. In Coon Rapids, 1% of residents experience high energy burden. Most of the residents experiencing high energy burden earn less than 30% of the Area Median Income (AMI). At over 600 residents, this represents a significant number of people in the community (*Figure 5*).

Figure 5: Coon Rapids' energy burden for homeowners and renters

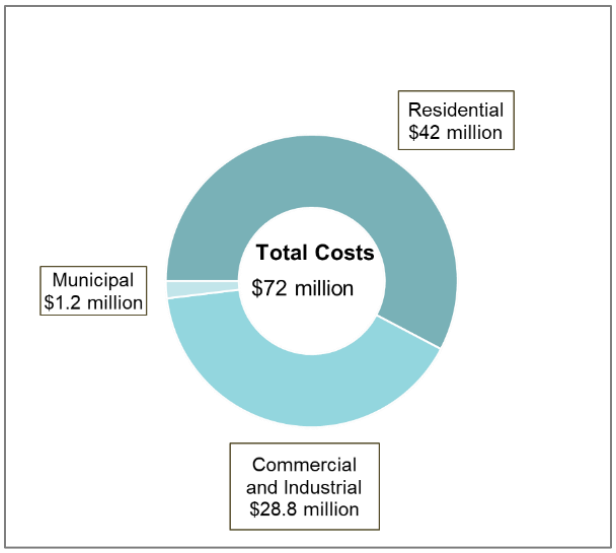


Source: Low-Income Energy Affordability Data (LEAD) Tool, Energy.gov

Energy Costs

Across the baseline period, all premises in Coon Rapids spent an estimated $72 million annually on energy for both electricity and natural gas from Xcel Energy and CenterPoint Energy utilities (*Figure 6*). Almost three-quarters of that was spent on electricity (*Figure 7*). The average residential premise spends an average of $1,700 annually on electricity and natural gas.[1] While costs fluctuate greatly for commercial and industrial premises based on size and industry, on average these premises spend $15,400 on energy each year.

Figure 6: Annual averages of dollars spent on energy (Xcel Energy and CenterPoint Energy utilities) in Coon Rapids by sector, 2019–2021



[1] Xcel Energy and CenterPoint Energy cost estimate averages from baseline years (2019-2021).

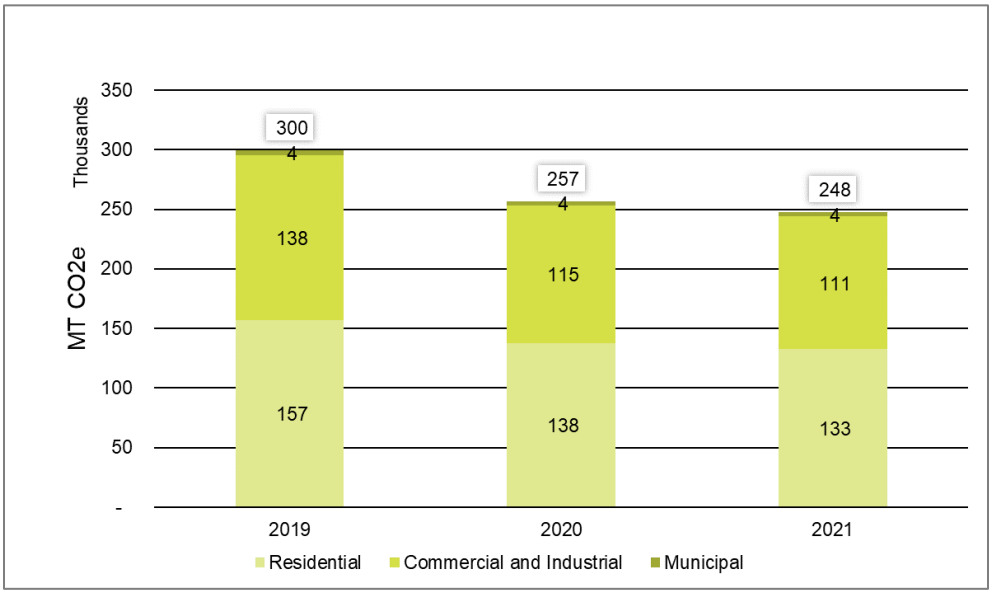
Figure 7: Average annual energy costs for Xcel Energy and CenterPoint Energy utilities by sector, 2019–2021

Sector	Xcel Energy Electricity Costs	CenterPoint Energy Natural Gas Costs	Costs Per Premise
Residential	$27 million	$15 million	$1,700
Commercial & Industrial	$23 million	$5.8 million	$15,400
Municipal	$1.1 million	$174,000	$7,800

Greenhouse Gas Emissions

Annual energy-related greenhouse gas emissions in Coon Rapids amount to 268,000 $MTCO_2e$. Emissions trended down over the three-year baseline, with the commercial and industrial sector's emissions decreasing while residential sector emissions stayed relatively flat (*Figure 8*). This could be attributed to the impacts of Minnesota State shutdown orders in 2020 and 2021 due to the COVID-19 health pandemic, when businesses closed and operations changed.

Figure 8: Greenhouse gas emissions trends, 2019–2021



Renewable Energy

Renewable energy use is a result of both customer subscription programs and on-site installations. Subscription programs are an agreement between the customer and utility (or third party in the case of community solar) to purchase a certain amount of renewable energy at regular intervals to cover an amount of electricity. Community solar gardens offer an option for customers to enter into an agreement with a third-party vendor that has a solar garden to generate electricity that they can purchase to power their home or business. On-site installations involve installing equipment at the premise, such as solar panels on a home or business.

Far more residential Xcel Energy customers than commercial and industrial customers support renewable energy, but the total annual electricity subscribed to renewable energy is more than five times as high in the commercial and industrial sector (*Figure 9*). Although we don't have the same granular data for Connexus Energy programs, we can assume the same trend occurs in that territory. Similarly, Xcel Energy's community solar garden program has the most participation in the commercial and industrial sector resulting in 3.4 million kWh of energy subscribed. In the residential sector, Xcel Energy subscription programs have the most participation, resulting in 880,000 kWh subscribed (*Figure 9*). The data that we have for Connexus Energy's renewable energy programs (*Figure 10*) is a combination of residential and commercial/industrial subscription programs (outside of community solar) that would add 41,000 kWh.

Figure 9: Coon Rapids renewable energy program participation, 2021 (Xcel Energy)

Xcel Energy	**Residential**	**Commercial & Industrial**
Subscription Programs - Windsource® & Renewable*Connect®		
Subscriber Count	376	3
Total Annual Electricity Subscribed (kWh)	860,000	2,143,000
Percent of Sector Xcel Energy Electricity Use	1.6%	2.0%
Community Solar Gardens - Solar*Rewards Community®		
Subscriber Count	4	7
Total Annual Electricity Subscribed (kWh)	18,700	3,405,000
On-Site - Solar*Rewards®		
Subscriber Count	5	2
Total Xcel Energy Renewable Energy Support		
Subscriber Count	385	12
Total Annual Electricity Subscribed (kWh)	878,700	5,548,000

Figure 10: Coon Rapids renewable energy program participation, 2021 (Connexus Energy)

Connexus Energy	**Subscribers**	**kWh**
Renewable Energy Subscription Program	63	41,300
SolarWise™ Solar Garden	54	-
On-Site Metered Net Energy	46	-

Program Participation & Savings

Coon Rapids residents currently rely on a few key programs from Xcel Energy and Connexus Energy to help them improve efficiency. The top programs for residents in Xcel Energy territory are Residential Heating and Cooling, Smart Thermostat, and Refrigerator Recycling. Residential program participation saves Coon Rapids' Xcel Energy customers an average of 145,800 kWh per year (*Figure 11*). Coon Rapids' commercial and industrial sector in Xcel Energy territory saved 1.2 million kWh per year on average by participating in Xcel Energy programs, with two programs accounting for the majority of the sector's electricity savings (Lighting Efficiency and Small Business Lighting). Connexus Energy provided program participation numbers for each

sector but did not report electricity savings attributed to these programs. CenterPoint Energy programs provided annual energy savings of 98,000 therms for the residential sector and 160,800 therms for the commercial and industrial sector (*Figure 13*).

Figure 11: Popular electricity energy efficiency programs for residential participation, Xcel Energy and Connexus Energy, 2019–2021

Residential Programs	Avg. Participation	Total Avg. Savings (kWh)
Efficient New Home Construction	15	2,000
Home Energy Squad	12	11,000
Low-Income Home Energy Squad	5	5,000
Residential Heating and Cooling	220	88,000
Refrigerator Recycling	30	20,000
Smart Thermostat	40	17,000
Connexus Energy Programs (examples below) • Dual Fuel Program • Electric Water Heating • Peak Time Rebates • WiFi Thermostats	1,800	-

Figure 12: Popular electricity energy efficiency programs for commercial and industrial participation, Xcel Energy and Connexus Energy, 2019–2021

Commercial and Industrial Programs	Avg. Participation	Total Avg. Savings (kWh)
Energy Efficient Buildings	2	76,600
HVAC+R Efficiency	7	57,000
Lighting Efficiency	17	488,000
Saver's Switch for Business	2	45
Small Business Lighting	13	517,400
Connexus Energy Programs (examples below) • Commercial Lighting Rebates • Cooling and Heat Pump Rebates • Commercial Kitchen Rebates • Custom Incentives	17	-

Figure 13: Energy efficiency program participation highlights for all utilities in Coon Rapids

Utility	Annual Participation	Annual Energy Savings	MMBtu
Xcel Energy			
Residential Programs	433	145,800 kWh	500
Commercial & Industrial Programs	45	1,157,700 kWh	3,950
CenterPoint Energy			
Residential Programs	1,281	97,920 therms	9,800
Commercial & Industrial Programs	174	160,815 therms	16,100
Connexus Energy			
Residential Programs	1,800		
Commercial & Industrial Programs	17		

Electric Vehicles and Charging Infrastructure

Electric vehicles (EV) are also of interest to the Coon Rapids community and this Energy Action Plan. According to the Minnesota Department of Transportation, as of December 2021, there are 166 registered EVs in Coon Rapids, which is about 12% of all EVs registered in Anoka County. The Coon Rapids community also has seven public EV charging stations according to PlugShare, including city-installed stations at the Coon Rapids Ice Center and Coon Rapids Civic Center. The four City-owned chargers have been a popular charging location. *Figure 14* and *Figure 15* show the usage data of these chargers.

Figure 14: Coon Rapids charging usage data, June 2021–May 2022

Charger	Average Charge Duration	Sum of Usage (kWh)	Count of Sessions
Civic Center	53:20	2,711	221
Civic Center #2	57:02	904	81
Ice Center	07:01	1,497	259
Ice Center #2	26:44	798	93
Grand Total	51:56	5,910	654

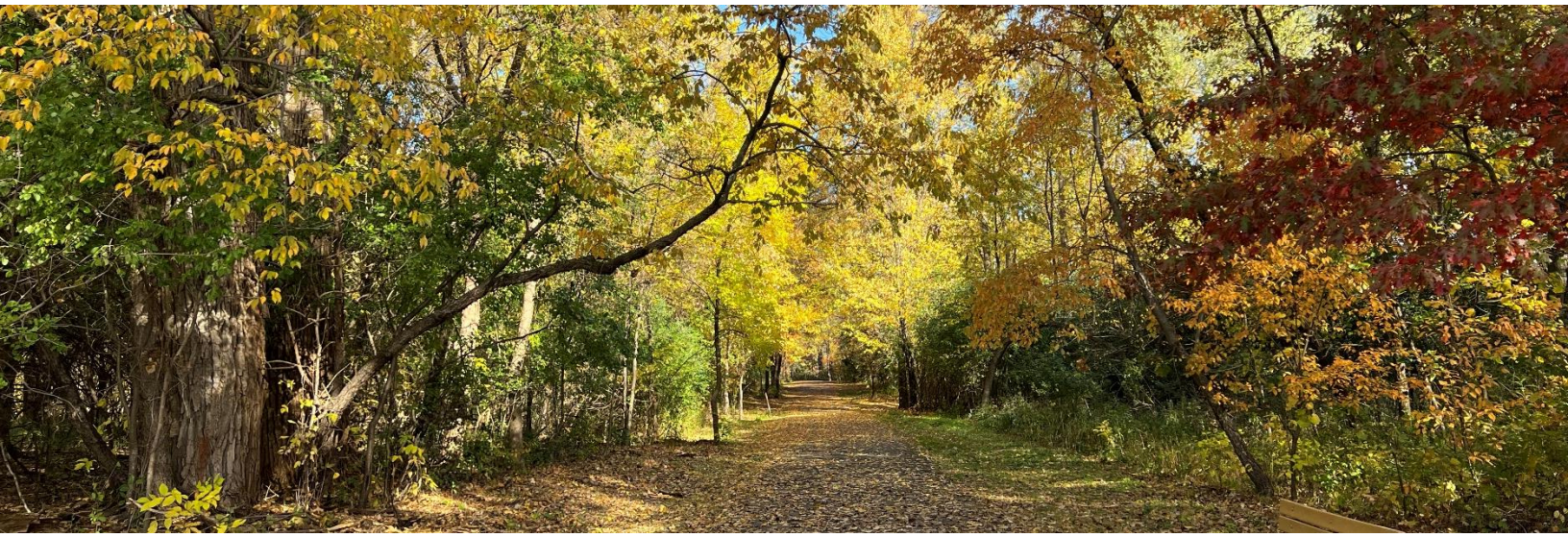
Figure 15: Coon Rapids monthly charging sessions and electricity consumption, June 2021–May 2022

Month	Total Sessions	Total Energy (kWh)
June 2021	42	376
July 2021	37	337
August 2021	64	597
September 2021	58	470
October 2021	67	457
November 2021	67	617
December 2021	61	645
January 2022	56	483
February 2022	59	450
March 2022	53	487
April 2022	39	439
May 2022	51	551
Grand Total	654	5,910

Community Assets

In addition to the energy data and demographics, Coon Rapids has many unique community assets that will help implement this plan. The Energy Action Team identified annual events, local community groups, unique places, businesses, and education institutions as assets in the community. This list will be helpful to refer to when implementing strategies.

Figure 16: Coon Rapids community assets and connections generated by Energy Action Team



WHERE WE ARE GOING

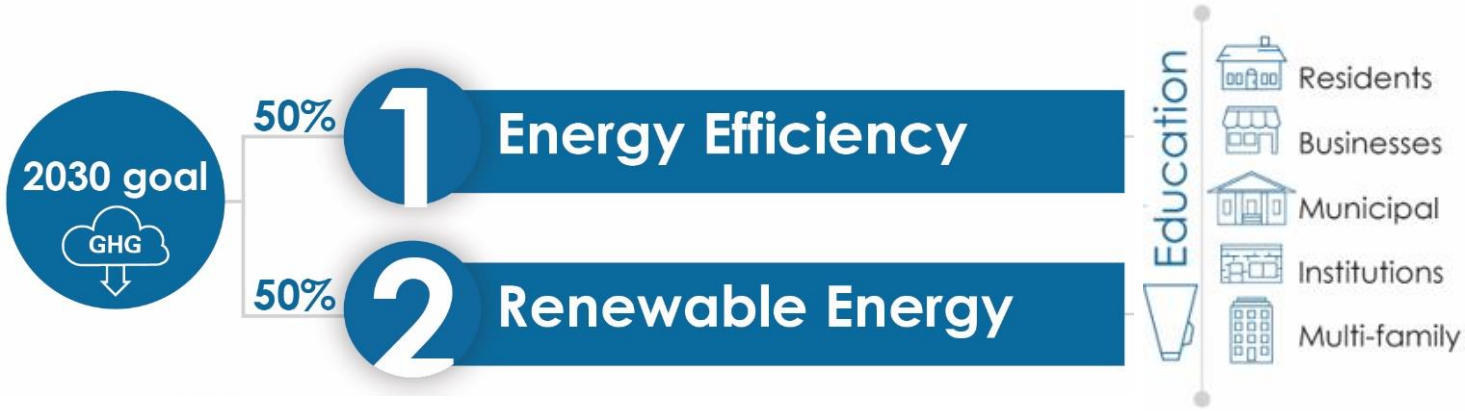
Energy Vision Statement

During the planning process, the Energy Action Team created a vision statement for this Energy Action Plan. This statement helped guide the planning process and reflects the intention of the community.

The City of Coon Rapids Energy Action Plan will benefit the community as a whole, including residents, business owners and visitors, as well as the infrastructure and institutions that support them. This plan positions the City of Coon Rapids as a leader in energy and supports generations of community members and visitors. Created and supported by community stakeholders, this plan creates financial savings while reducing the effects of climate change.

Focus Areas

To achieve a community-wide commitment to energy stewardship, the Energy Action Team identified the focus areas: energy efficiency and renewable energy. These focus areas provide a holistic approach to energy stewardship, covering a broad swath of the community. The Energy Action Team identified five different audiences for engagement and emphasized that equity should be considered across these audiences. These audiences include residents, businesses, municipal buildings, institutions, and multi-family buildings. Educating these audiences was also highlighted as critical to the adoption of energy strategies. The Energy Action Team identified energy efficiency as the most immediate need in the community and a priority for implementation.



Community Energy Goal

Working together, the Energy Action Team set a community-wide goal that will be accomplished by 2030.

Goal: Coon Rapids will reduce greenhouse gas emissions 35% by 2030, resulting in substantial energy costs avoided for the Coon Rapids community.[2]

Figure 17 illustrates the estimated greenhouse gas emission savings from energy conservation and renewable energy, compared to the net greenhouse gas emissions in Coon Rapids. Assuming business as usual energy usage, net emissions are expected to decrease by 26% in future years through Xcel Energy and Connexus Energy's grid decarbonization efforts. A 35% reduction in greenhouse gas emissions, including this plan's additional impact, would lower emissions by an additional 98,000 $MTCO_2e$ from 2022 levels. *Figure 18* provides annual benchmarks for our community to stay on track to meet our goal. Our energy goal will also help Coon Rapids avoid spending an estimated $9 million on energy costs by 2030.[3] Partners in Energy will provide direct implementation support to Coon Rapids for 18 months from January 2023–June 2024, and ongoing support and access to Partners in Energy network resources to help achieve this goal.

[2] In this statement, reduction in greenhouse gas emissions includes both energy efficiency and renewable energy efforts. In the case of renewable energy, greenhouse gasses are avoided rather than reduced or saved. The term "reduced" is used for clarity when combining the two efforts.

[3] $9 million in costs avoided is a cumulative estimate based on the 2022 blended utility rates for savings benchmarks of demand side management programs from the forecasted scenario.

Figure 17: Coon Rapids net greenhouse gas emissions from electricity and natural gas sources and relation of 35% avoidance by 2030

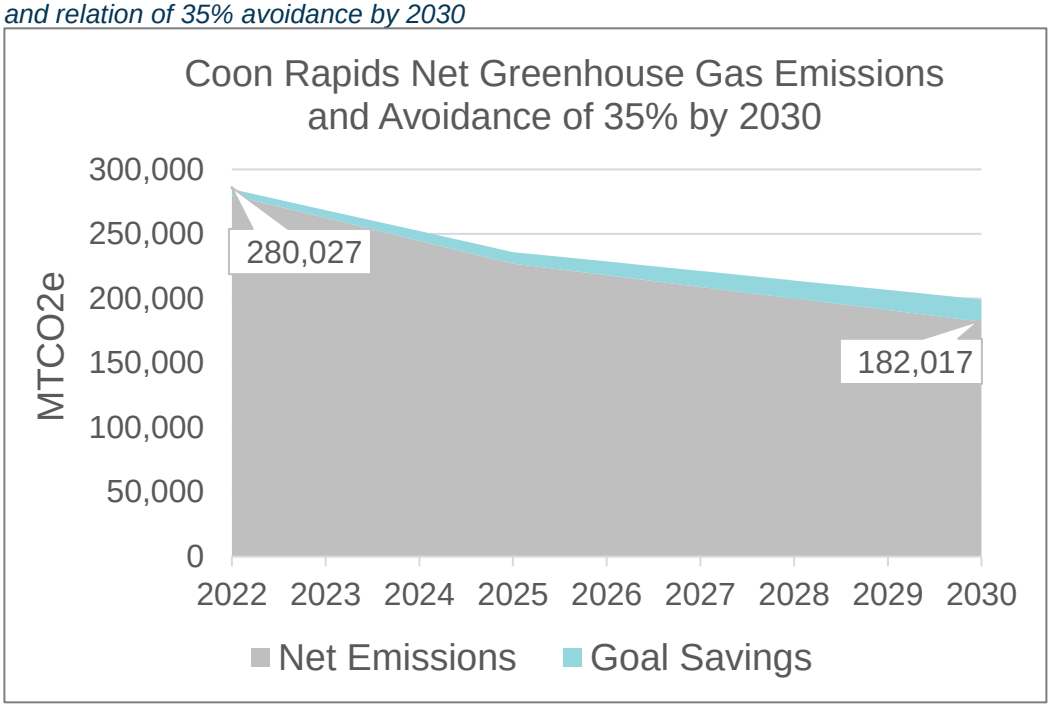
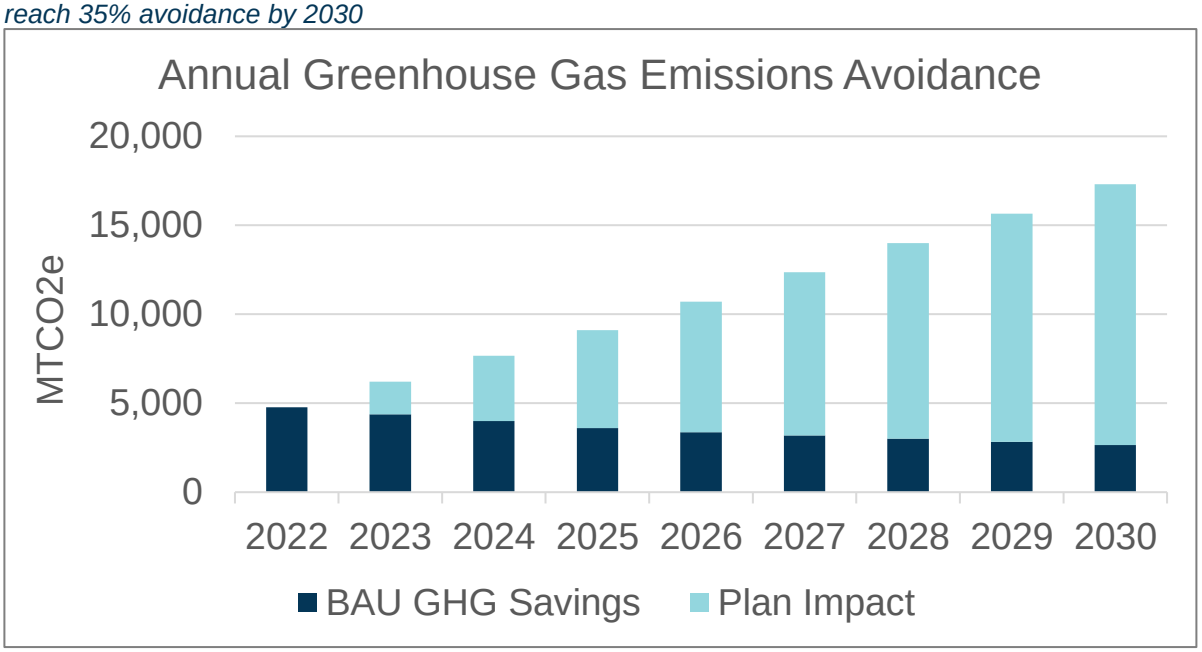


Figure 18: Coon Rapids annual greenhouse gas emissions from electricity and natural gas sources with business as usual (BAU) including grid decarbonization, added to impact from the plan needed to reach 35% avoidance by 2030



HOW WE ARE GOING TO GET THERE

Strategy Overview

The Energy Action Team identified several strategies, best practices, and guidelines to guide implementation of each focus area. These include:

- Strategies are “community strategies,” meaning the City, its partnerships, civic leaders and volunteers are all part of this work.
- Strategies should strive toward equity in implementation.
- Strategies should focus on changing behavior and social norms.
- Communication should include the climate benefits of taking action, as well as cost savings.
- Strategies will be creatively implemented beyond historical or traditional communication channels of other City plans.

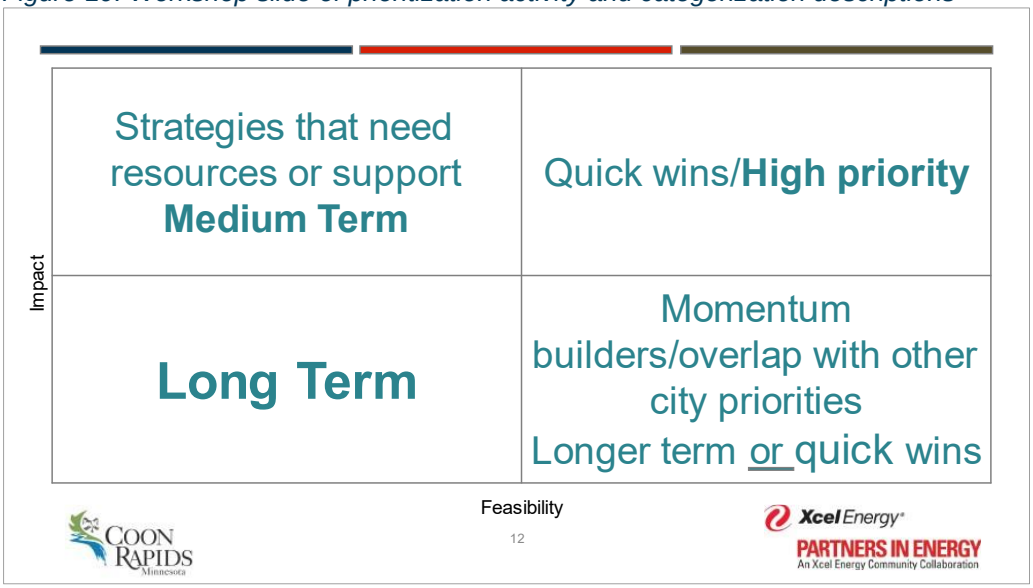
The strategies in this plan are expanded on with tactics that specify the work and audiences of each strategy.

Timeline and Priorities

The development of the strategies in this plan included setting the timeline and priorities to create a two-year work plan for the Energy Action Plan.

To prioritize the strategies, the Energy Action Team weighed the impact and the feasibility of each. The words “impact” and “feasibility” had different meanings to each of the team members depending on their perspective. For example, “feasibility” for City staff and City Council might mean a dollar figure or budget consideration. To community members, it may mean that there are community resources and support available. Similarly, “impact” might mean greenhouse gas impacts to some, and to others it might mean community mobilization or visibility. Each perspective was equally welcomed when ranking the strategies.

Figure 19: Workshop slide of prioritization activity and categorization descriptions



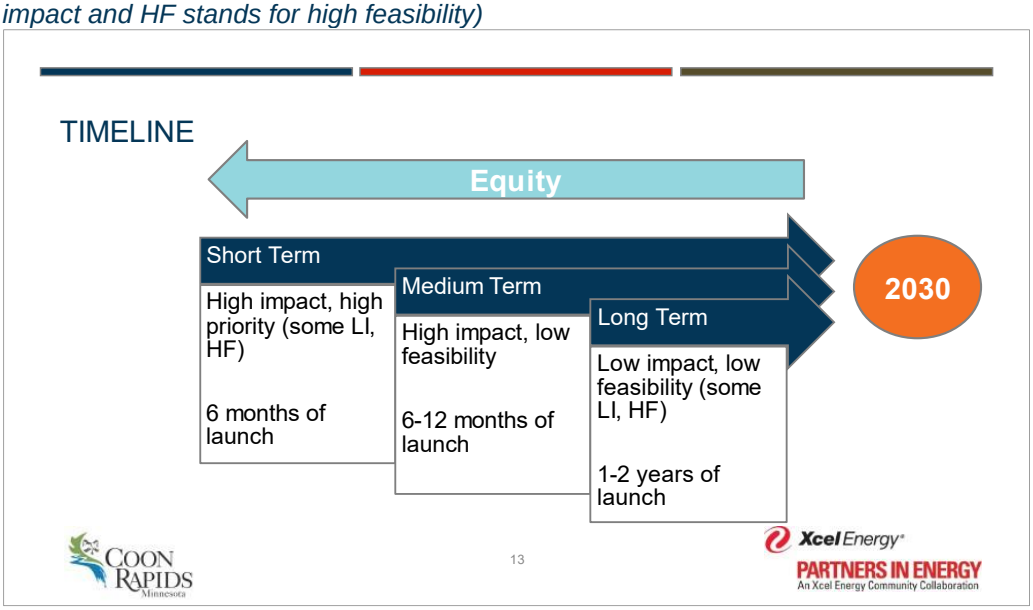
Depending on where the strategy fell in the impact-feasibility matrix during the workshop exercise, that strategy could then be put into a short-, medium- and long-term category. Those timelines were described as the following.

- Short Term: Begin implementing within six months of plan launch.
- Medium Term: Begin implementing within one year of plan launch.
- Long Term: Begin implementing within two years of plan launch.

These timelines were set to take advantage of the Partners in Energy program's implementation period to ensure greater resources for each strategy. The timeline for the strategies will continue throughout the plan as the strategies are refined and repeated.

The group also weighed whether the strategy was equitable. The group agreed to move the most equitable strategies into a nearer term category.

Figure 20: Timeline visual of strategy priorities from workshops (LI stands for low impact and HF stands for high feasibility)



Focus Area: Energy Efficiency

The focus area of Energy Efficiency was modeled in this plan to contribute 50% toward the greenhouse gas reduction goal of 35% by 2030. Energy Efficiency was described by the Energy Action Team as a high priority focus area and should be the first step to engage the community. It was also identified as a way for community members to save on energy costs and build communication channels and relationships that could lead to further engagement on other focus areas, such as renewable energy and electric vehicles.

Strategy 1: Support residential energy assessments and their recommended projects.

Supporting Coon Rapid's residents in receiving home energy assessments helps them understand their household's unique energy needs and identify potential ways to reduce energy.

Target Audience:
Homeowners, landlords, renters and manufactured home park residents.

Desired Outcomes:
Increased understanding of energy use among audiences and a list of energy savings opportunities to use in recommended projects.

Resources/Communication Channels
The utilities and the City provide communication channels and resources for residents to undergo home energy assessments, including the Home Energy Squad® program. Those entities, the assessment program implementers, and other housing and community development channels can be used to communicate assessment opportunities.

Tactics
1A: Promote residential energy assessments using communication channels like printed materials for events and mailings, and social media.
1B: Encourage upgrades to outdated or inefficient heating and cooling systems.
1C: Encourage the installation of smart thermostats and create educational materials on how to program them with efficiency in mind.

Strategy 2: Empower homeowners and renters to take energy efficiency actions.

Asking individuals to take actions such as upgrading to efficient lighting, appliances, and technologies and complete time of use practices can encourage immediate energy savings without added costs. Energy efficiency actions can also fill the gap between energy education and larger, higher cost efficiency projects.

Target Audience
Residents of Coon Rapids who own or rent homes, and anyone within that household, such as children, sub-leasers, etc.

Desired Outcomes

The result of this campaign is primarily to educate and increase behavior changes that can lead to additional energy actions performed by the target audiences.

Resources/Communication Channels

Utility networks can help reach customers and provide educational materials, kits and communications support. Reaching active groups, such as the League of Women Voters, school green teams and faith organizations can help spread messages to multiple households.

Tactics
2A: Create an energy efficiency scavenger hunt as a fun way to engage audiences.
2B: Create maintenance and energy efficiency kits for residents that include tips for home appliance maintenance, behavior change activities and other resources to reduce energy use in homes.
2C: Create a campaign to encourage replacing outdated appliances before equipment failure.
2D: Create a refrigerator recycling campaign aimed at getting people to recycle inefficient or second refrigerators.

Strategy 3: Make energy and utility program information accessible with intentional communication about opportunities.

Coon Rapids residents have different access to programs based on their utility providers. Access to these programs requires residents to know their utility providers and the available programs. Making this information easy to understand and accessible in multiple locations is key to energy efficiency action.

Target Audience

Residents of Coon Rapids who are able to use the resources provided by utilities and take energy action.

Desired Outcomes

The outcome for this strategy is to better inform audiences about their energy opportunities and increase participation in programs, while the City and utilities build relationships and trust with the residents.

Resources/Communication Channels

The City webpage, utility communications and social media outreach were identified as communication channels. Resources identified were language translation, interactive GIS maps and platforms created through Partners in Energy, and other marketing resources from all utility partners.

Tactics
3A: Update City webpages to make energy efficiency opportunities easily navigable and accessible.
3B: Create a map of utility coverage for distribution.

Strategy 4: Leverage partnerships to expand the reach of energy efficiency opportunities through large organizational gatherings and direct communications.

Existing and future partnerships with residents, City departments, faith organizations, and community groups will expand messaging to broader audiences and provide a chance for deeper engagement through events and personal interactions with subject matter experts.

Target Audience

Any group or business that has existing communications and gatherings that bring together audiences or any entity that can take advantage of energy efficiency actions.

Desired Outcomes

Expand communications through trusted messengers and platforms, as well as build relationships for additional partnerships.

Resources/Communication Channels

Existing partnerships within city communications and events, utility networks, and other groups that gather residents for learning purposes.

Tactics
4A: Partner with the utilities, Chamber of Commerce, schools and institutions, events, and other recognizable entities to create and distribute email and social media promotions about energy efficiency opportunities and rebates.

Strategy 5: Leverage city building and housing policies to enhance opportunities for energy efficiency projects.

City policy can boost energy efficiency actions by making them easier to complete and requiring standards when projects are funded through taxpayer dollars. Reviewing existing policies for barriers and creating new policies where needed can help achieve energy efficiency goals.

Target Audience

Policy makers and implementers, as well as project implementers and contractors.

Desired Outcomes

Form new relationships between City departments and policy decision makers and increase energy efficiency education for City staff and elected officials. Create new energy efficiency policies in housing and building areas.

Resources/Communication Channels

This strategy requires buy-in from city council members, sustainability commission members and City staff. There are opportunities to use existing processes to make inroads to policy updates and changes.

Tactics
5A: Explore creating a green building/energy efficiency policy for City financed buildings.
5B: Promote available interest free loans or grants to support energy efficiency projects.
5C: Explore creating an energy disclosure requirement for rental properties or renter tool to assess energy efficiency of a potential rental.
5D: Explore requiring home audits for rental properties/licenses.

Strategy 6: Reach underserved areas of our community through partnerships.

In addition to greenhouse gas reductions, the benefits of energy efficiency efforts include utility cost savings. Outreach to students, seniors, English Language Learners, faith organizations and other social service organizations will help reach those who may be experiencing the highest energy burdens and could benefit the most from energy efficiency programs.

Target Audience

Residents with the highest energy burden and organizations and networks that currently work with those impacted by high energy costs.

Desired Outcomes

Lower energy utility bills and comfortable, safe housing for families and individuals.

Resources/Communication Channels

The City and Energy Action Team members have relationships with food shelves, the senior center, faith organizations and social service organizations that can support this strategy. These organizations work to help underrepresented residents and families, and we can partner with them to share energy efficiency opportunities by creating and distributing supporting resources.

Tactics
6A: Create a resource guide and campaign for underrepresented residents to save money through efficiency.
6B: Create an outreach campaign targeting manufactured home residents to help increase energy efficiency and save money.
6C: Create an outreach campaign targeting renters to complete energy assessments, make behavior changes and access resources to increase energy efficiency.
6D: Translate materials as appropriate to reach audiences who could benefit from resources.

Strategy 7: Conduct passive energy strategies where possible, such as increasing green space and tree growth.

Passive energy efforts can support building energy efficiency efforts through assisting heating and cooling by adding tree canopies and green space to curb urban heat island effects and storm impacts.

Target Audience

Landowners, parks systems, developers, landscapers, Arbor Day events and City planning department.

Desired Outcomes

Increased green spaces and tree canopies to help curb climate effects.

Resources/Communication Channels

Watershed district, ACD, forestry departments and Energy Action Team members with architectural backgrounds are all helpful resources and communication channels for this effort.

Tactics
7A: Work with the City planning department and Arbor Day program to include energy messaging.

Focus Area: Renewable Energy

The focus area of Renewable Energy was modeled in this plan to contribute 50% toward the greenhouse gas avoidance goal of 35% by 2030. The Energy Action Team decided to make the adoption of renewable energy the next step to engage the community. In selecting a focus area dedicated to increasing the community's knowledge of and participation in renewable energy programs, the team referenced the importance to community members of having resilient energy systems, saving money over time, and reducing greenhouse gas emissions.

Strategy 8: Promote renewable energy education and conduct outreach to residents and businesses.

The team identified a lack of knowledge of the subject and available programs as the largest barrier to renewable energy actions. Education can help overcome that barrier. Creating a campaign that speaks to and educates specific audiences will be a first step in asking people to adopt renewable energy practices.

Target Audience

The target audience spans sectors from individuals to businesses and institutions. Homeowners, renters, building owners and leasers can participate in renewable energy programs, and are therefore included in the audience for this strategy.

Desired Outcomes

Increasing knowledge on renewable energy topics and driving increased use of renewable energy through installations and subscriptions.

Resources/Communication Channels

The City can support this strategy through the continuation of and updates to the Community Sustainability Partnership program. Partners in Energy can support the program with case studies. The City Council can support this effort through recognition and the utilities can provide program information that is relevant to campaign efforts.

Tactics
8A: Leverage communication channels and existing events for dissemination of information (e.g., North Suburban Home Show, city and neighborhood group email lists, utility contacts, City and partner social media).
8B: Host informational events and webinars.
8C: Create activities and contests encouraging renewable adoption (e.g., photo contest, neighborhood challenges and games).
8D: Develop demonstration projects and create hands-on activities and communications to encourage and support adoption of renewable energy.
8E: Develop communications using infographics, translated materials and renter information.
8F: Develop the City webpage for easy access to renewable energy information, with links, videos and navigation tools.
8G: Create a take-home kit with renewable energy resources.

Strategy 9: Create and implement new policies to encourage and incentivize renewable energy growth.

The City has implemented a solar ordinance and can further the accessibility of renewable energy projects and subscriptions by exploring new policies that support participation.

Target Audience

Our audience for this strategy is City staff, policy makers and community members impacted by a policy or change in policy.

Desired Outcomes

The outcome of these actions would create more access and fewer barriers to participation in on-site solar and solar subscription programs.

Resources/Communication Channels

The City council and sustainability commission can be the champions of these policies and two-way communication channels to the community.

Tactics
9A: Promote a solar suitability assessment for building owners to complete and explore implementing requirements.
9B: Create a sustainable building policy to incentivize renewable energy projects.

Strategy 10: Promote existing external financial incentives for solar while creating new City-owned financing programs for renewable energy projects.

Alongside utility programs and rebates, this strategy can combine efforts of other renewable energy opportunities and support them with City incentives or group-buy opportunities where applicable.

Target Audience

Business and industry partners have a large impact and are therefore a priority target audience, while homeowners and smaller projects will create momentum and community buy-in for other projects.

Desired Outcomes
Increased solar project installations throughout the city.

Resources/Communication Channels
The utilities can provide program information and connection to outside organization programming, while the City can provide guidance to residents and business owners.

Tactics
10A: Develop cost-sharing opportunities for solar installations.
10B: Support and promote group buy-in opportunities for solar.
10C: Update City financing programs to include renewable energy systems.
10D: Explore reducing or waiving permit fees for solar installations.
10E: Maintain an accessible list of financing options (e.g., grants, tax credits, loans) for renewable energy projects for different types of organizations and projects.

Strategy 11: Partner and build relationships with organizations to increase renewable energy adoption.
Partnering with educational institutions, community groups, business organizations and multi-cultural organizations will help reach all corners of the community to connect them with relevant renewable energy resources.

Target Audience
Organization leaders who have communication channels and can act as trusted messengers and community connectors.

Desired Outcomes
Consistent messaging about renewable energy can help people identify misinformation, understand barriers, and build relationships that lead to renewable energy adoption across the city's sectors.

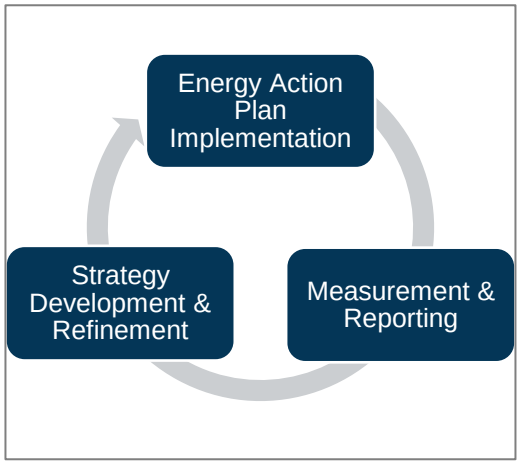
Resources/Communication Channels
Understanding and fostering existing city department relationships with community organizations and creating new relationships through one-on-one outreach will make this strategy a success.

Tactics
11A: Partner with the Chamber of Commerce to reach businesses.
11B: Partner with multi-cultural organizations, (e.g., Transformative Circle) to connect with households and families served.
11C: Partner with Homeowners Associations to encourage renewable energy adoption.
11D: Leverage utility relationships to connect with large businesses.
11E: Partner with Anoka County on best practices and opportunities to reduce barriers to renewable energy.
11F: Connect with school district to network with students and parents.

HOW WE STAY ON COURSE

This Energy Action Plan is a living document. Goals and strategies will be assessed and refined as needed based on data and community staff capacity.

Figure 21: Actions and Tracking



Data and Reporting

Partners in Energy will provide biannual progress reports with metrics of success and overall progress toward goals for Xcel Energy rebates and programs. These reports will be available publicly and shared with both the community and Energy Action Team.

If available, ad hoc participation reports for specific Xcel Energy programs (e.g., Home Energy Squad) can be provided to measure success of campaigns and to determine if we need to change course.

Connexus Energy and CenterPoint Energy were involved in the planning process and the city of Coon Rapids will request data progress reports from those utilities at the same cadence as the Xcel Energy data to best measure progress toward goals. Partners in Energy will support this effort by facilitating connections and helping the City communicate what data is needed.

Project Management and Tracking

Partners in Energy will host regular project management check-in calls with staff to ensure we stay on course to achieve our strategies. If necessary, an implementation check-in meeting with the Energy Action Team can be convened to assess progress toward goals and discuss strategy refinement.

Roles and Responsibilities

Implementing the strategies outlined in this plan will require leadership and collaboration among the City of Coon Rapids, members of the Energy Action Team, community representatives, and Xcel Energy.

City of Coon Rapids

The City of Coon Rapids will provide a primary point of contact for implementation and will assign members to attend regular project management check-ins. The City commits to leveraging existing communication channels and community connections to promote the Energy Action Plan. In addition, the City of Coon Rapids will lead strategies specific to City-owned buildings.

Energy Action Team

The Energy Action Team formed to create this plan will support implementation by serving as community connectors to their networks, promoting Coon Rapids' energy vision, encouraging participation in programs and outreach campaigns, and sharing success stories. When relevant, members will serve as partners and leaders in strategies targeting residents, businesses, institutions, and municipalities. Energy Action Team members may be invited to project management calls or other check-in meetings to ensure strategies are implemented successfully.

Xcel Energy

In addition to data reporting, project management, and implementation tracking, Xcel Energy commits to 18 months of implementation support, including marketing and communications support and program expertise. It will also provide a dedicated community facilitator to serve as a primary point of contact. Partners in Energy digital resources, including webinars, community portal, and community events will also be available to Coon Rapids.

APPENDIX A: IMPLEMENTATION WORK PLAN

This appendix gives additional details for each strategy, including the implementation team and tasks, timeline, and goals. This appendix will serve as a work plan for the Energy Action Team and Partners in Energy.

	Strategy		Action	2023 Q1	2023 Q2	2023 Q3	2023 Q4	2024 Q1	2024 Q2
	Energy Efficiency Strategies								
1	Support residential energy assessments and their recommended projects.	A	Promote residential energy assessments using communication channels like printed materials for events and mailings, and social media.						
		B	Encourage upgrades to outdated or inefficient heating and cooling systems.						
		C	Encourage the installation of smart thermostats and create educational materials on how to program them with efficiency in mind.						
2	Empower homeowners and renters to take energy efficiency actions.	A	Create an energy efficiency scavenger hunt as a fun way to engage audiences.						
		B	Create maintenance and energy efficiency kits for residents that include tips for home appliance maintenance, behavior change activities and other resources to reduce energy use in homes.						
		C	Create a campaign to encourage replacing outdated appliances before equipment failure.						
		D	Create a refrigerator recycling campaign aimed at getting people to recycle inefficient or second refrigerators.						
3	Make energy and utility program information accessible with intentional communication about opportunities.	A	Update City webpages to make energy efficiency opportunities easily navigable and accessible.						
		B	Create a map of utility coverage for distribution.						
4	Leverage partnerships to expand the reach of energy efficiency opportunities through large organizational gatherings and direct communications.	A	Partner with the utilities, Chamber of Commerce, schools and institutions, events, and other recognizable entities to create and distribute email and social media promotions about energy efficiency opportunities and rebates.						
5	Leverage city building and housing policies to enhance opportunities for energy efficiency projects.	A	Explore creating a green building/energy efficiency policy for City financed buildings.						
		B	Promote available interest free loans or grants to support energy efficiency projects.						
		C	Explore creating an energy disclosure requirement for rental properties or renter tool to assess energy efficiency of a potential rental.						
		D	Explore requiring home audits for rental properties/licenses.						
6	Reach underserved areas of our community through partnerships.	A	Create a resource guide and campaign for underrepresented residents to save money through efficiency.						
		B	Create an outreach campaign targeting manufactured home residents to help increase energy efficiency and save money.						
		C	Create an outreach campaign targeting renters to complete energy assessments, make behavior changes and access resources to increase energy efficiency.						
		D	Translate materials as appropriate to reach audiences who could benefit from resources.						
7	Conduct passive energy strategies where possible, such as increasing green space and tree growth.	A	Work with the City planning department and Arbor Day program to include energy messaging.						

	Strategy		Action	2023 Q1	2023 Q2	2023 Q3	2023 Q4	2024 Q1	2024 Q2
	Renewable Energy Strategies								
8	Promote renewable energy education and conduct outreach to residents and businesses.	A	Leverage communication channels and existing events for dissemination of information (e.g., North Suburban Home Show, city and neighborhood group email lists, utility contacts, City and partner social media).						
		B	Host informational events and webinars.						
		C	Create activities and contests encouraging renewable adoption (e.g., photo contest, neighborhood challenges and games).						
		D	Develop demonstration projects and create hands-on activities and communications to encourage and support adoption of renewable energy.						
		E	Develop communications using infographics, translated materials and renter information.						
		F	Develop the City webpage for easy access to renewable energy information, with links, videos and navigation tools.						
		G	Create a take-home kit with renewable energy resources.						
9	Create and implement new policies to encourage and incentivize renewable energy growth.	A	Promote a solar suitability assessment for building owners to complete and explore implementing requirements.						
		B	Create a sustainable building policy to incentivize renewable energy projects.						
10	Promote existing external financial incentives for solar while creating new City-owned financing programs for renewable energy projects.	A	Develop cost-sharing opportunities for solar installations.						
		B	Support and promote group buy-in opportunities for solar.						
		C	Update City financing programs to include renewable energy systems.						
		D	Explore reducing or waiving permit fees for solar installations.						
		E	Maintain an accessible list of financing options (e.g., grants, tax credits, loans) for renewable energy projects for different types of organizations and projects.						
11	Partner and build relationships with organizations to increase renewable energy adoption.	A	Partner with the Chamber of Commerce to reach businesses.						
		B	Partner with multi-cultural organizations, (e.g., Transformative Circle) to connect with households and families served.						
		C	Partner with Homeowners Associations to encourage renewable energy adoption.						
		D	Leverage utility relationships to connect with large businesses.						
		E	Partner with Anoka County on best practices and opportunities to reduce barriers to renewable energy.						
		F	Connect with school district to network with students and parents.						

APPENDIX B: METHODOLOGY FOR MEASURING SUCCESS

As part of implementation support, Partners in Energy will provide biannual progress reports for Xcel Energy participation and savings data for Coon Rapids. Partners in Energy will facilitate acquiring data from the other utility partners for the city to aggregate. All goals will be measured against Coon Rapids' three-year baseline of 2019–2021 data unless otherwise noted.

The following section defines how to measure various aspects of the goals outlined in this Energy Action Plan, including which programs and activities may be included and any assumptions used to measure the goals.

Community Goal

Coon Rapids will reduce greenhouse gas emissions 35% by 2030, resulting in substantial energy costs avoided for the Coon Rapids community.

Assumptions

This goal assumes that "reduce greenhouse gas emissions" includes both the energy savings through efficiency programs, and the avoided greenhouse gas emissions from renewable energy participation. Emissions factors used for goal setting are utility-specific and reflect 2021 emission intensity reporting.

This goal assumes that Xcel Energy's, Connexus Energy's, and CenterPoint Energy's demand side management program participation and kWh and therm savings will continue business as usual (BAU) from 2023 to 2030. BAU assumes an annual savings of 1.3 million kWh through Xcel Energy's energy efficiency program participation, 1 million kWh through Connexus Energy program participation, and 265,000 therms through CenterPoint Energy program participation, across all sectors. Cumulative participation for the BAU scenario between 2023 and 2030 will be 70,884 with a cumulative energy savings of 276,824 MMBtu. An increase in annual program

participation will result in increased annual energy savings, through which the Coon Rapids community can avoid energy costs. Due to a lack of data available for Connexus Energy utility programs, estimated savings are based on comparable Xcel Energy programs. Projected participation and savings estimates assume that the utility programs remain the same throughout the plan's implementation.

This goal assumes that the renewable energy participation rates will increase due to this plan's efforts and the relationships built through energy efficiency campaigns. The estimated kWh production of each project participation is based on an average for Coon Rapid's building and home sizes and kWh usage.

Measuring Energy Savings

The community-wide goal will be measured by comparing cumulative electricity and natural gas savings from 2023 through 2030 for all sectors against projected BAU savings over the same time period. This goal includes all Xcel Energy, Connexus Energy, and CenterPoint Energy demand side management and renewable energy programs available to every sector and measures the first-year savings data provided by the utilities. The following table outlines the assumptions for GHG avoidance through energy efficiency program participation in Coon Rapids.

Figure 22: Estimated emissions avoided through demand side management program participation for all utilities in Coon Rapids

Estimated Emissions Avoided: DSM Program Participation	2030 BAU ($MTCO_2e$)	2030 Goal ($MTCO_2e$)	Incremental ($MTCO_2e$)
Xcel Energy	1,592	6,086	761
Connexus Energy	2,786	12,281	1,535
CenterPoint Energy	11,304	27,879	3,485

Measuring Renewable Energy Emissions Avoided

Projected greenhouse gas emissions avoidance includes cumulative emissions savings from participation in renewable programs where customers retain the Renewable Energy Credit. This includes Xcel Energy's renewable subscription programs, Windsource and Renewable*Connect, Connexus Energy's Community Solar program, and on-site solar installed by residents in Coon Rapids.

The table below outlines the assumptions for greenhouse gas emission avoidance through renewable energy in Coon Rapids from 2023–2030. To estimate avoided greenhouse gas emissions, utility-specific emissions factors were applied to the electricity and natural gas savings estimates for both the business as usual and goal scenarios.

Figure 23: Estimated emissions avoided through renewable energy program participation for all utilities in Coon Rapids by 2030

Estimated Emissions Avoided: Renewable Energy Participation	2030 BAU ($MTCO_2e$)	2030 Goal ($MTCO_2e$)	Incremental ($MTCO_2e$)
Xcel Energy - Windsource® and Renewable*Connect®	3,668	14,045	1,756
Connexus Energy - SolarWise™	741	3,273	409
Connexus Energy – OnSite Solar	6,551	28,928	3,616

Measuring Energy Costs Avoided

In addition to avoiding emissions, participation in energy efficiency programs may also help residents avoid spending on energy costs. Estimated energy costs avoided were calculated using 2022 electricity and natural gas estimated rates by sector for each utility included in the data rollup[4].

Figure 24: Energy costs per kWh and therm for all utilities in 2022

Energy Costs 2022		Rate per kWh	Rate per therm
Xcel Energy	Residential rate	$0.113	-
	Commercial/Industrial rate	$0.087	-
Connexus Energy	Residential rate	$0.122	-
	Commercial/Industrial rate	$0.55-.065	-
CenterPoint Energy	Residential rate	-	$0.91
	Commercial/Industrial rate	-	$0.601

Anticipated energy cost avoidance is calculated using estimated electricity and natural gas first-year savings from projected energy efficiency program participation. 2030 goal levels are modeled from anticipated cumulative energy savings and use 2022 rates.

Figure 25: Energy costs avoided for all utilities in Coon Rapids to reach the goal of 35% reduction in greenhouse gas emissions by 2030

Energy Cost Avoidance	2030 BAU	2030 Goal	Incremental
Xcel Energy	$937,554	$2,510,103	$313,763
Connexus Energy	$916,423	$2,616,026	$327,003
CenterPoint Energy	$1,630,522	$4,021,151	$502,644
Total Estimated Cost Avoidance	$3,484,498	$9,147,281	$1,143,410

This model assumes increased participation in energy efficiency programs annually to meet Coon Rapids' greenhouse gas emissions goals.

[4] *Energy rates current as of 2022 but are subject to change.*

APPENDIX C: XCEL ENERGY'S PARTNERS IN ENERGY PLANNING PROCESS

About Xcel Energy's Partners in Energy

Xcel Energy is an electric and natural gas utility that provides the energy that powers millions of homes and businesses across eight Western and Midwestern states. Each community Xcel Energy serves has its own unique priorities and vision for its energy future. The energy landscape is dynamically changing with communities leading the way in setting energy and sustainability goals. To continue to innovatively support their communities, Xcel Energy launched Partners in Energy in the summer of 2014 as a collaborative resource with tailored services to complement each community's vision. The program offerings include support to develop an energy action plan or electric vehicle plan, tools to help implement the plan and deliver results, and resources designed to help each community stay informed and achieve their outlined goals.

Plan Development Process

The content of this plan is derived from a series of planning workshops held in the community with a planning team committed to representing local energy priorities and implementing plan strategies. The engagement process included both a series of five in-person workshops from May 2022 through September 2022, as well as multiple surveys between workshops.

Workshop 1: What should Coon Rapids' energy future look like?

The team learned about Partners in Energy, established a vision for Coon Rapids and reviewed shared goal language and priorities for the Energy Action Plan.

Workshop 2: How will we focus our efforts to achieve our vision?

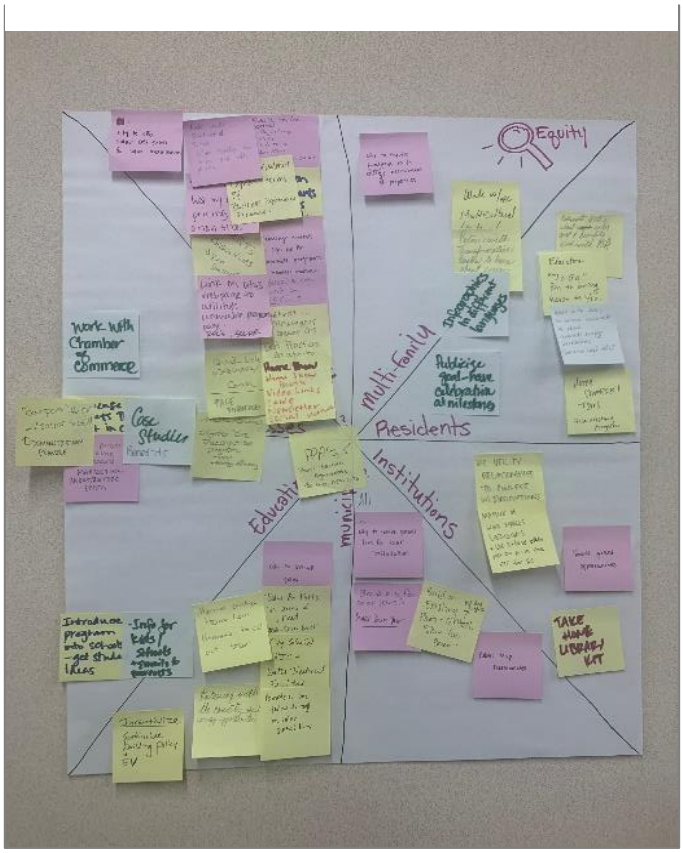
At workshop two, the team finalized the vision for Coon Rapids. Three focus areas were decided on, in order of progression: energy efficiency, renewable energy, and electric vehicles (EVs). The team discussed who and what would be impacted by this work, including municipal buildings, residents, businesses, nonprofits, and education institutions. The team incorporated equity into each focus area for all to benefit. They decided goal metrics, priorities, and reviewed available energy programs from utilities.

Figure 26: Coon Rapids Energy Action Team in Workshop 1

Workshop 3: What do we want to do?

In workshop three, the team discussed program data and brainstormed strategies to increase energy efficiency and renewable energy adoption in Coon Rapids. They devised actionable strategies that crossed all audiences for each focus area. Education was a common theme that arose within each focus area. They discussed a community-wide goal for greenhouse gas emissions reductions for Coon Rapids.

Figure 27: Energy efficiency strategy brainstorming by Energy Action Team



Workshop 4: How are we going to do it?

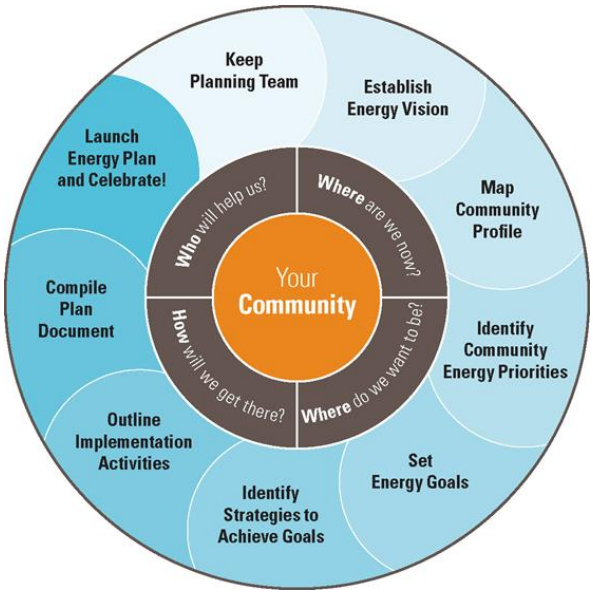
In workshop four, the team reviewed EV program information from utility representatives. They brainstormed strategies for EV adoption in Coon Rapids and prioritized strategies from all focus areas. They decided on a community-wide goal for Coon Rapids to reduce greenhouse gas emissions 35% by 2030.

Workshop 5: What needs to be done?

In workshop five, the team confirmed priority strategies and discussed the Energy Action Plan process. They laid out all the strategies and had participants commit to where they could provide support during implementation. They celebrated a great team and planning process!

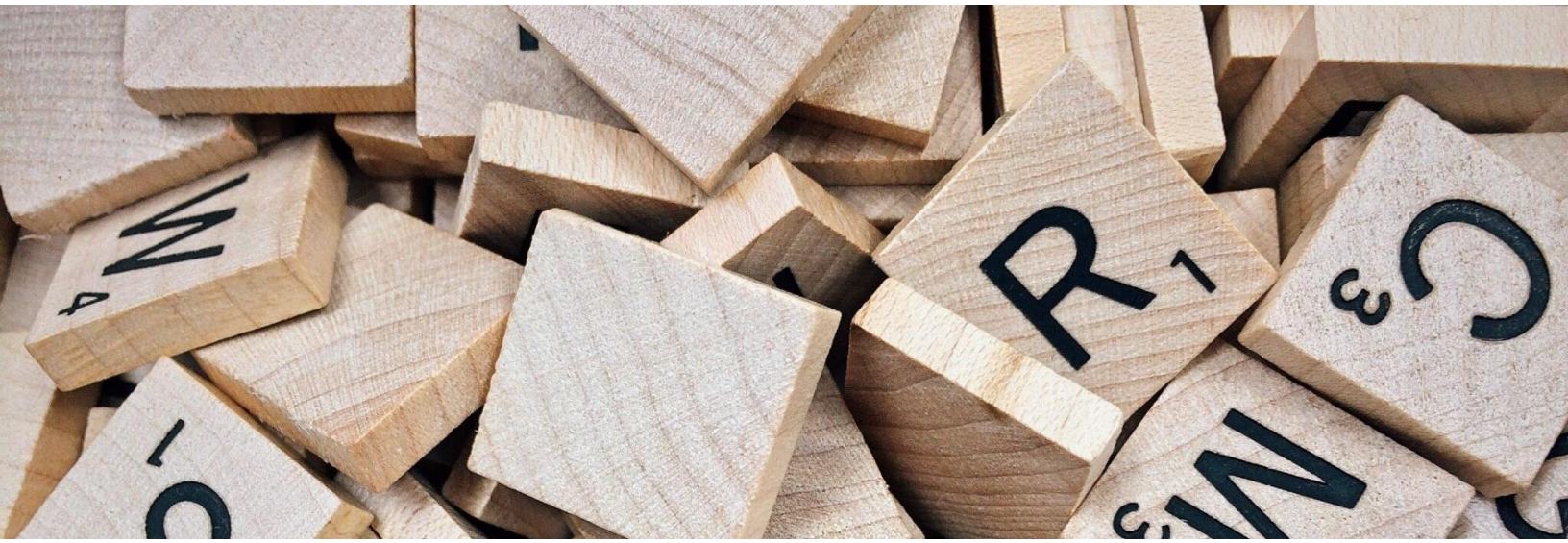
Figure 28: Energy Action Team members participating in a gallery walk activity to create strategies to increase EV adoption in Coon Rapids

Figure 29: Coon Rapids Energy Action Team members



Partners in Energy Process for Success

Resources from Xcel Energy for Implementation



APPENDIX D: GLOSSARY OF TERMS

15 x 15: Xcel Energy's privacy rule, which require all data summary statistics to contain at least 15 premises, with no single premise responsible for more than 15% of the total. Following these rules, if a premise is responsible for more than 15% of the total for that data set, it is removed from the summary.

British Thermal Unit (BTU): The amount of heat needed to raise one pound of water at maximum density through one degree Fahrenheit

Carbon-free: Carbon-free refers to sources of energy that will not emit additional carbon dioxide into the air. Wind, solar and nuclear energy are all carbon-free sources but only wind and solar are renewable.

Conservation Improvement Programs (CIP): Portfolio of approved utility energy efficiency and demand management programs. Minnesota electric utilities have a goal of saving 1.5% of their total energy sales each year via customer conservation efforts. Minnesota natural gas utilities have a goal of saving 0.5% of their total energy sales each year via customer conservation efforts.

Cost Avoidance: Represents the estimated energy costs not spent as a result of energy efficiency measures.

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 at night and on weekends.

Direct Installation: Free energy-saving equipment installed by Xcel Energy or other organization for program participants that produces immediate energy savings.

Energy Burden: Percentage of gross household income spent on energy costs.

Energy Reduction: The result of behavior changes that cause less energy to be used. For example, setting the thermostat lower reduces the energy used in your home during the winter. Since energy reductions can be easily reversed, they are not accounted for when calculating changes in energy usage.

Energy Savings: Comes from a permanent change that results in using less energy to achieve the same results. A new furnace uses X% energy less to keep your home at the same temperature (all things being equal), resulting in energy savings of X%. For accounting purposes, energy savings are only counted in the year the new equipment is installed.

Greenhouse Gases (GHG): Gases in the atmosphere that absorb and emit radiation and significantly contribute to climate change. The primary greenhouse gases in the earth's atmosphere are water vapor, carbon dioxide, methane, nitrous oxide, and ozone.

Greenhouse Gas Avoidance: Represents the estimated greenhouse gasses not emitted as a result of energy efficiency measures.

Grid Decarbonization: The current planned reduction in the carbon intensity of electricity provided by electric utilities through the addition of low- or no-carbon energy sources to the electricity grid.

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

Million British Thermal Units (MMBtu): A unit of energy consumption that allows both electricity and natural gas consumption to be combined.

Metric Tons of Carbon Dioxide Equivalent (MTCO2e): A unit of measure for greenhouse gas emissions. The unit "CO2e" represents an amount of a greenhouse gas whose atmospheric impact has been standardized to that of one unit mass of carbon dioxide (CO2), based on the global warming potential (GWP) of the gas.

Megawatt (MW): A unit of electric power equal to 1 million watts.

Premise: A unique combination of service address and meter. For residential customers, this is the equivalent of an individual house or dwelling unit in a multi-tenant building. For business customers, it is an individual business, or for a larger business, a separately metered portion of the business’s load at that address.

Renewable Energy Credit (REC): For every megawatt-hour of clean, renewable electricity generation, a renewable energy credit (REC) is created. A REC embodies all the environmental attributes of the generation and can be tracked and traded separately from the underlying electricity. This is also known as a Renewable Energy Certificate.

Solar Garden: Shared solar array with grid-connected subscribers who receive bill credits for their subscriptions.

Subscription: An agreement to purchase a certain amount of something at regular intervals.

Therm (thm): A unit of natural gas consumption.

APPENDIX E: IMPLEMENTATION MEMORANDUM OF UNDERSTANDING

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Xcel Energy®
PARTNERS IN ENERGY
An Xcel Energy Community Collaboration

Memorandum of Understanding
Phase 2 – Plan Implementation

Olivia Dorow Hovland
Sustainability Planner
City of Coon Rapids
11155 Robinson Drive NW
Coon Rapids, MN 55433

The intent of this Memorandum of Understanding is to recognize the achievement of the City of Coon Rapids in developing an Energy Action Plan. Northern States Power Company doing business as Xcel Energy, through its Partners in Energy offering, has supported the development of this Energy Action Plan. This document outlines how the City of Coon Rapids and Xcel Energy will continue to work together to implement this Energy Action Plan. The term of this joint support, as defined in this document, will extend from March 1, 2023 through August 30, 2024.

Xcel Energy will support Coon Rapids in achieving the goals of its Energy Action Plan in the following ways:

Energy Efficiency

- **Support residential energy assessments and their recommended projects:**
  - Create Home Energy Squad® marketing materials for events, mailings and social media.
  - Create Home Energy Squad® follow up marketing materials for heating and cooling upgrades.
  - Create smart thermostat campaign outline and marketing materials.
- **Renter and homeowner outreach:**
  - Create an interactive activity promoting energy efficiency
  - Develop energy efficiency kits
  - Create appliance replacement outreach materials
  - Create refrigerator recycling campaign and materials
- **Energy and utility program information communications:**
  - Review and recommend changes to city energy webpages.
  - Develop an interactive map for City webpage utility navigation.
- **Facilitate partnerships and meetings with chamber, or other entities.**
- **Support city building and housing policies through facilitating connections with experts.**
- **Outreach to underserved residents:**
  - Create a resource guide and campaign outline
  - Create manufactured home park outreach campaign materials and facilitate other supportive partnerships in XE Territory
  - Develop renter outreach campaign and materials
  - Translate materials and outreach efforts where possible
- **Support passive energy strategies by creating messaging/materials for City to use as needed.**

Support funded by Xcel Energy for this strategy is not to exceed 150 hours. These hours will include those provided through the Partners in Energy team from Brendle Group and Center for Energy and Environment and do not include support provided by Xcel Energy internal program staff.

Renewable Energy

- **Resident and Business outreach:**
  - Develop event structures and facilitate speakers and invitations
  - Create contest campaign outline
  - Support and create outreach for demonstration projects including case studies and social media
  - Develop subscription program participation campaign and materials
  - Create renewable energy kits
- **Support policy and financial incentive strategies of the City by facilitating connection to other cities and experts.**
- **Support and facilitate partnerships with organizations to encourage renewable energy projects.**

Support funded by Xcel Energy for this strategy is not to exceed 60 hours. These hours will include those provided through the Partners in Energy team from Brendle Group and Center for Energy and Environment and do not include support provided by Xcel Energy internal program staff.

Project Management and Reimbursed Expenses

- Provide presentation content outlining Partners in Energy process, identified focus areas and goals, and benefits to community to be presented to Council as part of update process
- Facilitate regular check-in meetings, track and report energy impacts and activities (process annual data from Xcel Energy), and help coordinate implementation kick-off activities
- Provide up to $2,450 for reimbursed expenses related to printing and distribution of co-branded marketing materials, venue fees, food, and other related needs associated with outreach and education. Xcel Energy funding will not be provided for the purchase of alcohol

Support funded by Xcel Energy for this strategy is not to exceed 120 hours. These hours will include those provided through the Partners in Energy team from Brendle Group and Center for Energy and Environment and do not include support provided by Xcel Energy internal program staff.

Coon Rapids commits to supporting the Energy Action Plan to the best of its ability by:

- Achieving the energy savings impacts outlined in the energy action plan and shown in the table below:

City of Coon Rapids Conservation Goals

	Electricity Savings (in kWh)
Baseline Historic Energy Savings	1,250,000
Incremental Plan Energy Savings (1/1/23-6/30/24)	1,050,000
Total Plan Energy Savings (baseline + plan energy savings)	2,300,000

- Performing the coordination, tracking, and outreach duties as outlined in the Energy Action Plan that include but are not limited to the following:

Energy Efficiency

- **Support residential energy assessments and their recommended projects:**
  - Conduct Home Energy Squad®, heating and cooling, and smart thermostat campaigns and follow-up outreach via City communications channels.
- **Renter and homeowner outreach:**
  - Promote efficiency activity interactions and distribute energy efficiency kits.
  - Conduct an appliance replacement and refrigerator recycling campaign through city communications channels.
- **Update City website with relevant energy materials and programs**
  - Develop partnerships and host energy conversations with the chamber of commerce, or other entities.
- **Leverage city building and housing policies to enhance opportunities for energy efficiency projects.**
- **Reach underserved areas of Coon Rapids:**
  - Disseminate resource guides and conduct manufactured home park outreach and renter outreach campaigns through City channels.
- **Conduct passive energy strategies where possible, such as increasing green space and tree growth.**
  - Work with planning department and arbor day outreach

Renewable Energy

- **Promote renewable energy education events and conduct program and campaign outreach to residents and businesses.**
- **Create and implement new policies to encourage and incentivize renewable energy growth.**
- **Promote existing external financial incentives for solar while creating new City-owned financing programs for renewable energy projects.**
- **Partner and build relationships with organizations to increase renewable energy adoption.**

Project Management

- Participate in coordination and tracking of scheduled check-ins, activities, and events
- Provide Xcel Energy an opportunity to review marketing materials to assure accuracy when they incorporate the Xcel Energy logo or reference any of Xcel Energy's products or services
- Share the plan document, supporting work documents, collateral, and implementation results from the Energy Action Plan with the public. The experience, successes, and lessons learned from this community will inform others looking at similar or expanded initiatives
- Share progress on upcoming sustainability planning as it relates to activities outlined in the Energy Action Plan

Legal Applicability and Waiver

This is a voluntary agreement and not intended to be legally binding for either party. This Memorandum of Understanding has no impact, nor does it alter or modify any existing Franchise Agreement or other existing agreements between Xcel Energy and Coon Rapids Parties agree that this Memorandum of Understanding is to memorialize the intent of the Parties regarding Partners in Energy but does not create a legal agreement between the Parties. It is agreed by the Parties that nothing in this Memorandum of Understanding will be deemed or construed as creating a joint venture, trust, partnership, or any other legal relationship among the Parties. This Memorandum of Understanding is for the benefit of the Parties and does not create third party rights. Nothing in this Memorandum of Understanding constitutes a waiver of Coon Rapids ordinances, Coon Rapids regulatory jurisdiction, or Minnesota's utility regulatory jurisdiction.

Single Points of Contact

All communications pertaining to this agreement shall be directed to the Sustainability Planner on behalf of Coon Rapids and the Partners in Energy Program Manager on behalf of Xcel Energy.

Xcel Energy is excited about this opportunity to support the City of Coon Rapids in advancing its goals. The resources outlined above and provided through Partners in Energy are provided as a part of our commitment to the communities we serve and Xcel Energy's support of energy efficiency and renewable energy as important resources to meet your future energy needs.

For Coon Rapids:

Signature: DocuSigned by: Jerry Koch E2E995038DB9453...

Name: Jerry Koch

Title: Mayor

Date: 2/23/2023

For Xcel Energy:

Signature: DocuSigned by: Trisha A Duncan 7097C9664EEA474...

Name: Trisha A Duncan

Title: Director, MN Community Relations

Date: 2/23/2023

Signature: DocuSigned by: Matt Stemwedel EA1CD94079AA4B8...

Name: Matt Stemwedel

Title: City Manager

Date: 2/23/2023

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