

An Energy Action Plan for Robbinsdale

August 2023







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 the main electric utility serving Robbinsdale. Partners in Energy is a two-year collaboration to develop and implement a community's energy goals. For more information about the planning workshop, see *Appendix 4: Xcel Energy's Partners in Energy Planning Process*.

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ROBBINSDALE ENERGY ACTION PLAN

Our Energy Action Plan, designed by Robbinsdale community members in collaboration with Xcel Energy's Partners in Energy program, provides immediate opportunities to improve energy efficiency, save on energy costs, and decrease carbon emissions.

Our Energy Vision

Robbinsdale strives to be a leader in sustainable energy action. Through continued partnerships, the City and its community members set to improve upon existing efforts, including energy efficiency, energy affordability, and renewable energy. This plan aims to remove structural barriers to equitably serve all community members, improve quality of life for present and future generations, and make Robbinsdale resilient and adaptable to the changing climate.

Our Goals

Robbinsdale will avoid an additional 30% of energy-related greenhouse gas emissions by 2030 compared to business as usual.

This will save 119,000 MMBtu communitywide in energy savings and will save the community an estimated \$1.3 million through energy efficiency projects by 2030.

Energy Action Plan Impact



8,500 MTCO₂e of avoided greenhouse gas emissions by 2030, which is equivalent to removing 1,800 passenger vehicles from the road for a year.



Estimated savings of \$1.3 million community-wide through participation in utility programs by 2030.



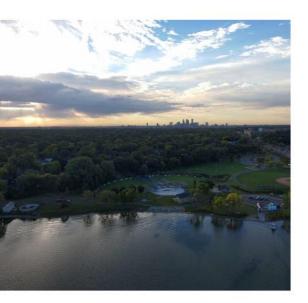
Equitably serving all residents, businesses, and institutions in sustainable energy action.

Making Robbinsdale resilient and adaptable to the changing climate.



The content of this plan is derived from a series of planning workshops hosted by Xcel Energy's Partners in Energy. Thank you to the Robbinsdale Energy Action Team who contributed many hours of service to creating our vision, goals, and strategies for this plan.









How We Are Going to Get There

The City of Robbinsdale and its partners, community members, and volunteers will take actions identified in this plan that will help us achieve our goal. We developed actionable strategies to reach all residents and businesses within four focus areas:

- Reducing Energy Burden
- Residential Energy Efficiency
- Business Energy Efficiency
- Renewable Energy

Actions

- Foster an environment for energy savings, renewable energy, and economic growth to coexist and thrive.
- Collaborate with community groups, social service organizations, and businesses to encourage participation in energy programs and opportunities.
- Conduct outreach and education campaigns to make energy efficiency the easy choice and remove barriers to accessing renewable energy.
- Organize funding resources and incentives for the community to participate in energy programs that result in more comfortable and valuable homes and buildings.
- Engage property owners, building managers, and renters to increase energy efficiency and save money.

Get Involved

Visit **robbinsdalemn.com** to read more about the Energy Action Plan and find ways you can support the plan.

To learn how you can help Robbinsdale achieve our energy goals, please contact Assistant to City Manager Kayla Kirtz at kkirtz@ci.robbinsdale.mn.us.

GLOSSARY OF TERMS

15 x 15: Xcel Energy's privacy rule, which requires 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.

Carbon-neutral: Carbon-neutral, also described as "net zero" refers to energy that removes or avoids as much carbon dioxide as is released over a set period of time. Carbon-neutral is sometimes used to describe a site that produces an excess amount of electricity from a renewable energy source, such as solar, compared to what it consumes. That excess energy is put back into the grid in an amount that offsets the carbon dioxide produced from the electricity it draws from the grid when it is not producing renewable energy.

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

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.

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.

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% 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.

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.

Inflation Reduction Act: It is a United States federal law that offers funding, programs, and incentives to accelerate the transition to a clean energy economy.

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. An REC embodies all the environmental attributes of the generation and can be tracked and traded separately from the underlying electricity. Also known as a Renewable Energy Certificate.

Resilience: The ability to prepare for and adapt to changing conditions and withstand and recover rapidly from disruptions. Resilience includes the ability to withstand and recover from deliberate attacks, accidents, or naturally occurring threats or incidents.

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

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

Solar Photovoltaic (PV): Solar cells/panels that convert sunlight into electricity (convert light, or photons, into electricity, or voltage).

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

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

Trade Partner: Trade Partners, also known as Trade Allies or Business Trade Partners, are vendors and contractors who work with business and residential customers servicing, installing, and providing consulting services regarding the equipment associated with utility rebate programs. Their support for utility programs can range from providing equipment and assisting with rebate paperwork, to receiving rebates for equipment sold.



INTRODUCTION

Robbinsdale is a small suburb of Minneapolis with residential neighborhoods and a downtown main street that is home to thriving businesses. The community is known for its quiet, small-town feel, with access to larger neighboring cities.

Our Energy Action Plan seeks to address and engage Robbinsdale's community on energy issues to create a place that is resilient and adaptable to a changing climate for present and future generations.

Our Engagement & Outreach Process

Who are we talking about?

We, Our and the City refer to the City of Robbinsdale.

Community refers to the broader Robbinsdale community, including residents, businesses, and other stakeholders.

Energy Action Team is the group of individuals whose input created our Energy Action Plan.

Energy Action Plan refers to this document for the City of Robbinsdale.

The creation of this Energy Action Plan was a seven-month process that helped our community characterize its energy use, identify our energy-related goals and develop engagement strategies to guide us toward our energy future. Starting in November 2022, the Energy Action Plan was driven by a series of planning workshops held in the community with a planning team committed to representing local energy priorities, in collaboration with the City of Robbinsdale and Xcel Energy Partners in Energy. See the *Acknowledgements* section for a list of participating Energy Action Team members. By the numbers, we had four surveys, five workshops, 18 community participants and five utility representatives. See *Appendix 4: Xcel Energy's Partners in Energy Planning Process* for more information on the planning process.

Why We Want an Energy Action Plan

The City of Robbinsdale is committed to becoming a more sustainable community. Leading up to this work, the City of Robbinsdale focused on increasing the staff dedicated to sustainability efforts by hiring a new Assistant to the City Manager to prioritize sustainability, and securing GreenCorps Members for '22-'23 and '23-'24 with plans to host more members in the future.

This increased staff capacity will allow Robbinsdale to focus more on energy and the environment and build on existing efforts.

A few existing sustainability initiatives include passing a resolution to join other cities in declaring a climate emergency, achieving Step 3 in GreenStep Cities, and being a Tree City USA for 44 consecutive years. The City has also worked to improve the water quality of the lakes in Robbinsdale and completed the construction of a new water treatment plant with a solar-powered and green roof. When it comes to efficiency in city buildings and properties, Robbinsdale tracks municipal electricity and natural gas use with B3 benchmarking. The City has incorporated renewable energy through installed solar and wind energy lighting the parks, and by generating a portion of the energy in municipal buildings through a community solar subscription.

The mayor of Robbinsdale is invested in this effort and participated in the application process and planning process alongside a City Council member and commission members. Before we started the planning process with Partners in Energy, Robbinsdale asked community members what their priorities were for addressing energy-related issues and they listed the following.

- Reducing emissions of energy-related greenhouse gases
- Educating residents on energy conservation
- Incentivizing and promoting use of electric appliances and technologies
- Switching to renewable energy sources
- Promoting electric vehicles
- Addressing greenhouse gas emissions from transportation
- Energy benchmarking buildings

We have been working toward a more sustainable Robbinsdale, but we lacked an energy plan with specific goals to engage and support all community members. This Energy Action Plan will provide a mechanism that engages community members, businesses, and institutions on energy and will put us on a track to become more sustainable and resilient.



WHERE WE ARE NOW

An integral part of the Partners in Energy planning process is reviewing historic energy data that reveals our community's energy baseline. Xcel Energy and CenterPoint Energy provided data on energy use, participation counts and utility energy conservation program savings for Robbinsdale, as detailed in the following sections. See *Appendix 2: Baseline Energy Analysis* for a comprehensive picture of Robbinsdale's baseline energy data.

Community Demographics

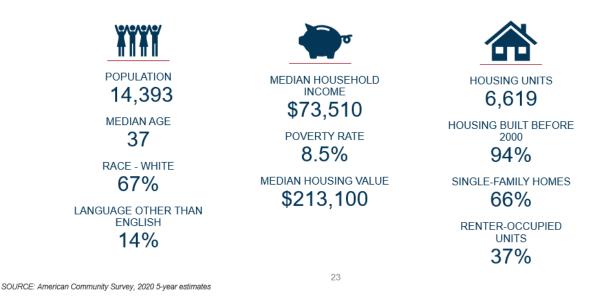
The community demographic data comes from the American Community Survey that uses the 2020 5-year estimates. According to the ACS, Robbinsdale's population is 14,393 people.¹ The City of Robbinsdale's demographic data source indicates there are over 15,000 people living in Robbinsdale in 2023.

Fourteen percent of residents speak a language other than English and 67% of residents are white. Robbinsdale's poverty rate is 8.5%. There are approximately 6,600 housing units. With 94% of its housing built before 2000, most Robbinsdale residents live in housing stock with significant opportunity for energy efficiency improvements because of age and older building codes. Additionally, just over a third of units in Robbinsdale are renter-occupied.² (*Figure 1*).

¹ American Community Survey, 2020 5-year estimates

² Ibid.

Figure 1. An overview of Robbinsdale's community demographics³



Energy Data

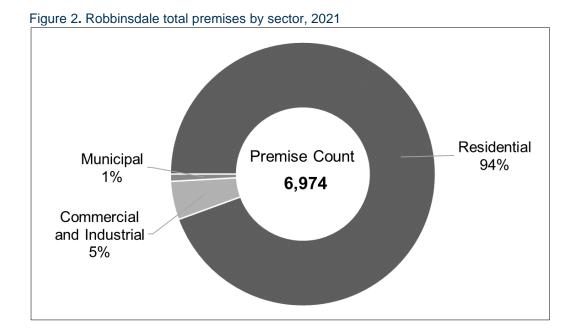
Energy Use

Xcel Energy provides electricity to Robbinsdale residents and businesses, and CenterPoint Energy provides natural gas. Robbinsdale consists of 6,974 distinct premises, which are a unique combination of service address and meter. For residential customers, this is equivalent to 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' load at that address.⁴

The majority of Robbinsdale's premises are residential, with a small number of commercial and industrial premises and a smaller portion of municipal premises rounding out the total (*Figure 2*).

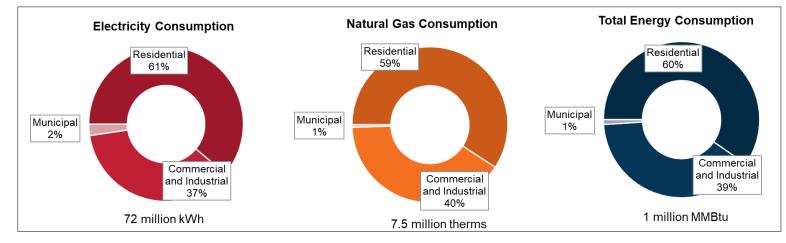
³ Demographic data source is from the American Community Survey 2020 5-year estimates. The City of Robbinsdale's demographic data source indicates there are over 15,000 people living in Robbinsdale in 2023.

⁴ Please refer to *Glossary of Terms* for more detail on energy terms used in this plan.



On average, the Robbinsdale community consumes 72 million kWh of electricity and 7.5 million therms of natural gas across all sectors per year. Although the commercial and industrial (C&I) sector only makes up 5% of premises, it accounts for 39% of total energy consumption (*Figure 3*). The C&I segment use significantly more energy on average per premise than residential ones, a pattern typical of cities like Robbinsdale.





Total energy consumption was calculated using both electricity and natural gas consumption converted into British thermal units, a unit of measure that allows electricity and natural gas to be compared based on a common measure of energy potential.

During the three-year baseline period, Robbinsdale's electricity consumption increased 7% (*Figure 4*). This can be attributed to the residential sector, whose consumption steadily increased year over year during the baseline period. This increase in electricity consumption could be due to growth in the city and weather fluctuations, with a higher number of cooling days each year that drove increased use of air conditioning.

Robbinsdale's natural gas consumption decreased during the baseline period by 10% (*Figure 5*). This correlates with the decrease in heating degree days each successive year. Full energy consumption numbers can be found in Appendix 2: Baseline Energy Analysis.

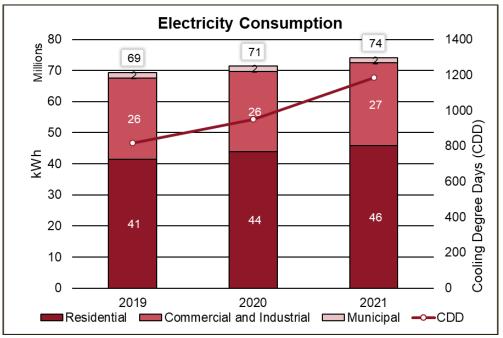


Figure 4. Robbinsdale electricity consumption from Xcel Energy, 2019–2021

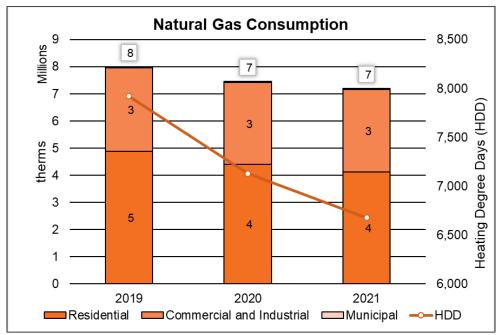


Figure 5. Robbinsdale natural gas consumption from CenterPoint Energy, 2019–2021

Energy Costs

During an average year, all premises in Robbinsdale spend an estimated \$14 million on energy for both electricity and natural gas (*Figure 6*). Most of these costs are being paid by the residential sector, with total annual average energy costs at \$9.4 million. A residential premise spends an average of \$1,500 annually on electricity and natural gas. The commercial and industrial sector spends \$4.4 million annually on energy. While costs fluctuate greatly for commercial and industrial premises based on size and industry, on average these premises spend \$13,300 annually (*Table 1*).

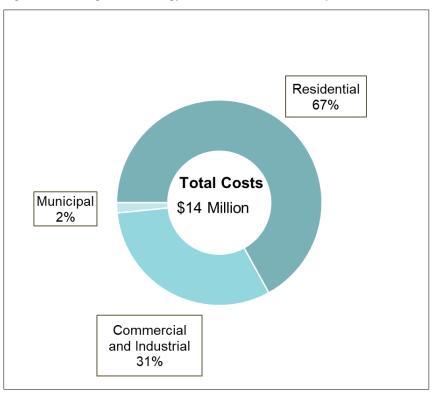


Figure 6: Average total energy costs for Robbinsdale by sector, 2019–2021

Table 1. Average Robbinsdale energy costs by sector for Xcel Energy and CenterPoint Energy, 2019)_
2021	

Sector	Annual Electricity Costs	Annual Natural Gas Costs	Annual Cost per Premise
Residential	\$5.6 million	\$3.8 million	\$1,500
Commercial & Industrial	\$2.7 million	\$1.7 million	\$13,300
Municipal	\$195,000	\$27,000	\$3,700

Greenhouse Gas Emissions

Greenhouse gas emissions are calculated for both electricity and natural gas consumption for all sectors in Robbinsdale.⁵ Robbinsdale's energy-related greenhouse gas emissions in 2019 amount to 66,000 metric tons of carbon dioxide equivalent (MTCO₂e). Similar to total energy consumption, Robbinsdale's residential sector accounts for most energy-related greenhouse gas emissions. Emissions dropped from 2019 to 2020 in all sectors, then were stable from 2020 to 2021 (*Figure 7*).

⁵ Electricity emissions are calculated using Xcel Energy's preliminary and certified emissions factors for their Upper Midwest Fuel Mix for 2019, 2020, and 2021. Emissions factors used during the planning process to calculate electricity consumption and greenhouse gas emissions may change as Xcel Energy completes third-party verification for its emissions intensities. See *Appendix 2: Baseline Energy Analysis* for the emissions factors used to calculate Robbinsdale's energy-related emissions.

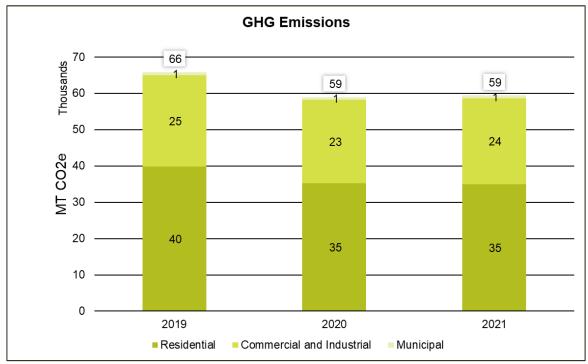


Figure 7. Robbinsdale community-wide greenhouse gas emissions from electricity and natural gas energy utilities, 2019–2021

Renewable Energy

Robbinsdale residents and businesses are using subscription programs and on-site options to support renewable energy. In Robbinsdale, most renewable energy support is in the residential sector, where 584 residents support renewable energy through subscription programs and 34 residents have on-site solar installations. The commercial and industrial sector supports renewable energy, but at a lower rate with seven subscribers and one on-site installation.

Xcel Energy	Residential	Commercial/ Industrial
Subscription Programs - Windsource® and Renewable*Connect®		
Subscriber Count	444	3
Total Annual Electricity Subscribed (kWh)	1,400,000	63,000
Percent of Sector Xcel Energy Electricity Use	2.6%	0.2%
Community Solar Gardens - Solar*Rewards Community®		
Subscriber Count	140	4
Total Annual Electricity Subscribed (kWh)	1,075,000	352,000
On-site Solar – Solar*Rewards® and Net-Metering		
Subscriber Count	34	1

Table 2. Xcel Energy	ronowohlo onormu	aubaarintiana	and program	nortigination 2021
	renewable energy	SUDSCHOHODS	and brootam	Danicidation ZUZT
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Total Electricity Capacity (kW)	228	11
Total Xcel Energy Renewable Energy Support ⁶		
Subscriber Count	618	8
Total Annual Electricity Subscribed (kWh)	2,475,000	415,000

Program Participation & Savings

Both residents and commercial and industrial premises participate in efficiency programs from Xcel Energy and CenterPoint Energy where they can receive rebates for upgrading equipment or a building audit to understand their energy opportunities. Participation in all programs saved an annual average of 983,000 kWh and 107,000 therms (*Table 3*).

Table 3. Average annual program participation and energy savings for utilities in Robbinsdale

Utility	Average Annual Participation	Average Annual Energy Savings
Xcel Energy		
Residential Programs	472	144,000 kWh
Commercial/Industrial Programs	26	839,000 kWh
CenterPoint Energy ⁷		
Residential Programs	392	28,300 therms
Commercial/Industrial Programs	31	78,700 therms

Robbinsdale residents and businesses rely on a few key programs from Xcel Energy to help them improve efficiency (*Table 4*). The Residential Heating and Cooling program had the most participants and results in the most savings, but other programs like Home Energy Squad and Refrigerator Recycling also resulted in significant savings. The commercial and industrial sector has programs, such as Lighting Efficiency which had the most participants, but the Energy Design Assistance program resulted in the most overall energy savings (*Table 5*).

Popular Program Details:

- Residential Heating and Cooling: A rebate program for residential customers who purchase high-efficiency heating and cooling equipment.
- Home Energy Squad: A residential energy assessment program from Xcel Energy that includes a home energy audit and installation of energy efficient materials.
- Refrigerator Recycling: Xcel Energy contractor picks up and recycles working refrigerator and resident gets rebate.
- Lighting Efficiency: Business customers can earn rebates from Xcel Energy for purchasing and installing LED lighting fixtures, bulbs, and control systems.

⁶ Excludes on-site solar due to behind the meter generation.

⁷ Select programs represented for CenterPoint Energy, including Home Efficiency Rebates, Home Insulation Rebates, Home Energy Squad, and New Home Construction Rebates for the residential sector; and Commercial Foodservice Equipment Rebates, C&I Heating and Water Heating Rebates, C&I Audit Services (Natural Gas Energy Analysis and Steam Trap Audits), Energy Design Assistance, and Multi-Family Building Efficiency for the commercial/industrial sector.

• Energy Design Assistance: Identifies energy and cost-saving strategies for new business construction or renovation projects.

Residential Program	Average Participation	Total Average Savings (kWh)
Home Energy Savings Program	23	14,000
Home Energy Squad	19	13,000
Residential Heating and Cooling	211	87,000
Refrigerator Recycling	32	22,000
Smart Thermostat	44	2,000

Table 4. Robbinsdale annual average participation in five Xcel Energy residential programs, 2019–2021

Table 5: Robbinsdale annual average participation in five Xcel Energy commercial and industrial programs, 2019–2021

Commercial/Industrial Program	Average Participation	Total Average Savings (kWh)
Energy Design Assistance	1	633,000
HVAC+R Efficiency	3	41,000
Lighting Efficiency	9	117,000
Multi-Family Building Efficiency	7	25,000
Small Business Lighting	2	24,000



WHERE WE ARE GOING

Energy Vision Statement

During the planning process, the Energy Action Team created a vision statement for this Energy Action Plan to help guide the process and reflect the community's intentions.

Vision

Robbinsdale strives to be a leader in sustainable energy action. Through continued partnerships, the City and its community members set to improve upon existing efforts, including energy efficiency, energy affordability and renewable energy. This plan aims to remove structural barriers to equitably serve all community members, improve quality of life for present and future generations, and make Robbinsdale resilient and adaptable to the changing climate.

Focus Areas

To achieve a community-wide commitment to energy stewardship, the Energy Action Team identified four focus areas to prioritize strategies and resources.

Figure 8. Robbinsdale's Focus Areas



These focus areas were chosen to provide a holistic approach to energy stewardship, covering a broad swath of the community. The team agreed to start with reducing energy burden to help the most vulnerable groups in Robbinsdale first. Many of the strategies to reduce energy burden overlap with energy efficiency, so we will work on engaging residents and businesses to increase energy efficiency as well. Once people become more aware of energy and opportunities to increase efficiency, we will focus on increasing renewable energy support in Robbinsdale.

Goals and Energy Action Plan Impact

The Energy Action Team set goals during the planning process by deciding which metrics were important to measure, reviewing the community's energy baseline data to discuss ambition and feasibility, and constructing a timeline to achieve these goals.

Focus Area Goals

Each focus area includes targets for program participation from residents and businesses, and the number of metric tons of carbon dioxide equivalent avoided to stay on track to achieve the community-wide goal. The energy efficiency focus areas have annual targets, while the renewable energy focus area target measures out to 2030.

Reducing Energy	Residential	Business Energy	Renewable
Burden	Energy Efficiency	Efficiency	Energy
 Engage 43 residents annually 9 MTCO2e avoided annually 	 Engage 984 residents annually 289 MTCO2e avoided annually 	 Engage 71 businesses annually 540 MTCO2e avoided annually 	 Reach 653 residential subscribers by 2030 Reach 5 business subscribers by 2030 2,327 MTCO2e avoided by 2030

Community-wide Goal

All these components informed the community-wide goal. We will measure our success against the community-wide goal, which will guide the actions of this plan.

Our Goal

Robbinsdale will avoid an additional 30% of energyrelated greenhouse gas emissions by 2030 compared to business as usual.

This will save 119,000 MMBtu community-wide in energy savings and will save the community an estimated \$1.3 million through energy efficiency projects by 2030.

The impact of our community-wide goal will help our community achieve a reduction of 8,530 MTCO₂e. The energy-related greenhouse gas emissions are from electricity and natural gas utilities. It includes the greenhouse gas emissions avoided from both energy efficiency and renewable energy program participation in Robbinsdale and grid decarbonization by the utility. Robbinsdale's greenhouse gas avoidance is equivalent to removing 1,800 passenger vehicles from the road for a year or the carbon sequestered by 10,000 acres of U.S. forests in one year.⁸

The total estimated energy savings of 119,000 MMBtu and cost savings of \$1.3 million are calculated from the energy saved and costs avoided by participating in Xcel Energy and CenterPoint Energy energy efficiency programs.

⁸ US Environmental Protection Agency Greenhouse Gas Equivalencies Calculator, https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator

Figure 9. Community-wide goal impact by 2030



8,500 MTCO₂e of avoided greenhouse gas emissions by 2030, which is equivalent to removing 1,800 passenger vehicles from the road for a year.



Estimated savings of \$1.3 million community-wide through participation in utility programs by 2030.



Equitably serving all residents, businesses, and institutions in sustainable energy action.



Making Robbinsdale resilient and adaptable to the changing climate.

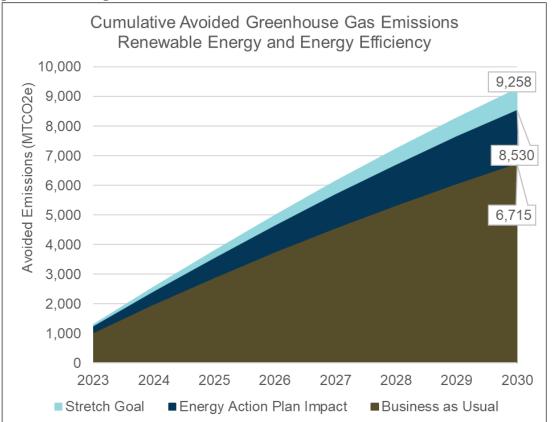
Stretch Goal

The Energy Action Team decided to include a stretch goal to guide our community's efforts if we are on track to meet or exceed the community-wide goal. The stretch goal would be to increase the avoided emissions to 40% by 2030 compared to business as usual. This equates to 9,258 $MTCO_2e$.

Stretch Goal

Robbinsdale will avoid an additional 40% of energy-related greenhouse gas emissions by 2030 compared to business as usual.

This will save 128,000 MMBtu community-wide in energy savings and will save the community an estimated \$1.45 million through energy







HOW WE GET THERE

The following section outlines our implementation work plan, including focus areas, strategies and tactics to help us achieve our goals. These initiatives will be led by the City of Robbinsdale and supported by Partners in Energy, Xcel Energy, the Energy Action Team and other City of Robbinsdale staff. Each focus area has background information, four to five strategies, and specific tactics describing the actions we will take. For a more detailed work plan with a timeline and responsibilities, see *Appendix 1: Implementation Work Plan*.

Strategies by Focus Area

The following strategies were created to help our community achieve its energy vision and community goals.

- Focus Area: Reducing Energy Burden
 - Strategy 1: Partner with local organizations, groups and institutions to act as trusted messengers.
 - Strategy 2: Conduct outreach campaigns to help reduce energy burden.
 - Strategy 3: Share energy assistance resources and funding opportunities with low-income households.
 - Strategy 4: Engage renters and property owners to help reduce energy burden.
- Focus Area: Residential Energy Efficiency
 - Strategy 5: Create a volunteer group for support in outreach to make energy efficiency an easy choice.
 - Strategy 6: Create a central hub of resources and guides for residents to share energy efficiency information.
 - Strategy 7: Conduct outreach and education campaigns.
 - Strategy 8: Engage multi-family building property owners.
- Focus Area: Business Energy Efficiency
 - Strategy 9: Create a business recognition program to promote the benefits of increasing energy efficiency for businesses.
 - Strategy 10: Update City policies around licensing for businesses.

- Strategy 11: Create targeted outreach campaigns to small businesses and restaurants.
- Strategy 12: Partner with business groups to conduct outreach and form authentic relationships with businesses.
- Focus Area: Renewable Energy
 - Strategy 13: Create a central hub to share renewable energy information.
 - Strategy 14: Create educational and targeted outreach campaigns to residents and businesses to support renewable energy.
 - Strategy 15: Municipal sector will lead by example by partaking in renewable energy programs to increase community morale and awareness of the benefits of renewables.
 - Strategy 16: Organize funding resources and create incentives and loans for businesses and residents to support renewable energy.
 - Strategy 17: Update new construction standards and review City code to support renewables.

Focus Area: Reducing Energy Burden

Why is this a priority?

Reducing energy burden was described by the Energy Action Team as a high priority, as it was important that this plan served *all* community members. Energy burden is the percentage of income spent on energy costs. According to the Department of Energy, community members with the lowest incomes pay the highest percentage of that income on utility bills.

The strategies in this focus area support the most vulnerable community members by lowering their energy costs and removing barriers to increasing energy efficiency. These residents can include homeowners and renters. Residents in Robbinsdale with incomes below 30% of the area median income are experiencing high energy burden, spending more than 6% of their income on energy costs (*Figure 11*).

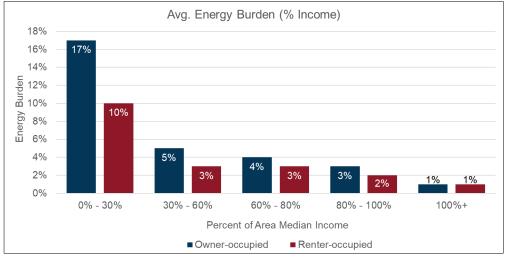


Figure 11. Energy burden by unit occupancy and median income⁹

⁹ Department of Energy Low-income Energy Affordability Data (LEAD) Tool

Annual Targets

The annual targets we are working toward in this focus area are to engage 43 residents per year to participate in income-qualified programs, which would amount to 9 MTCO₂e. If we are on track to engage that number by mid-year, we will strive for the stretch goal of 49 residents. It will also be important to support low-income households with energy assistance through external organizational funding and resources, which will not necessarily be counted in these targets, but is still an important service to provide. The impact of this work helps our community engage all community members, lowering energy burden through reducing energy consumption and supporting these residents through bill pay assistance.

Reducing Energy Burden Focus Area Target:

Engage 43 residents to participate in income-qualified programs annually

MTCO₂e: 9

Stretch Goal Target:

Engage 49 residents annually

MTCO₂e: 10

Strategy 1: Partner with local organizations, groups and institutions to act as trusted messengers.

Our first challenge is finding the people who are struggling with high energy burden and could benefit from energy assistance. It will be important to build a reliable process to locate people experiencing high energy burden. This strategy focuses on building relationships and partnerships with established community groups and organizations in Robbinsdale to act as trusted messengers of energy information. We hope to develop strong relationships with these organizations and gain additional insight into what those community members might need that can be provided by the City.

Schools have been called out as a specific group to partner with, as they can share information at the administrative level and with teachers, parents and students. Robbinsdale plans to form a volunteer group to connect to their sphere of influence for further outreach and education.

The following list was generated by the Energy Action Team as stakeholders that could be involved in reducing energy burden:

- Schools
- Churches and faith-based organizations
- Medical nonprofits, such as Good Samaritan Society, North Memorial Health and Annex
 Teen Clinic
- Senior apartment buildings
- Food shelves, such as PRISM and NEAR

1A: Partner with schools, nonprofits and faith-based organizations to act as trusted messengers of information.

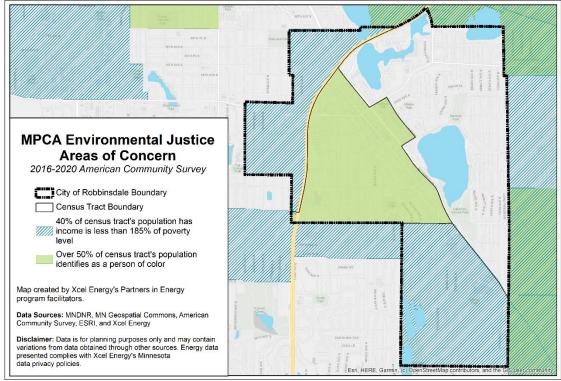
1B: Create a volunteer group to connect with trusted messengers to aid outreach and education.

1C: Engage school district administration to share information with students and parents.

Strategy 2: Conduct outreach campaigns to help reduce energy burden.

We will share information about available energy programs for income-qualified residents in broad and targeted outreach campaigns. Social media and utility bill inserts will be broad outreach campaigns that reach the general population. The targeted campaigns will include collecting information about the age of the housing stock and focusing on older homes. The map in *Figure 12* provides information about specific neighborhoods with higher poverty levels. We will look at the wards of Robbinsdale that overlap with these areas and work with Council Members to assist with targeted outreach. The communication materials will be translated into Spanish, and possibly other languages, to remove barriers to engagement for non-English speakers.





2A: Create a social media campaign to attract new residents to Robbinsdale by showing that we have accessible, affordable energy and energy reduction efforts, which are tied to long-term benefits of living in Robbinsdale like clean water and clean air.

2B: Conduct a campaign to reach older homes informing the homeowner of programs, rebates and assistance. Be sensitive to helping residents who need assistance without being harmful.

2C: Create a utility bill insert and flyer with action items and facts about energy usage tied to cost savings.

Strategy 3: Share energy assistance resources and funding opportunities with low-income households.

There are programs and funding streams that exist to support low-income households with energy assistance and equipment upgrades. It will be important to consolidate the information on a central hub with simple instructions. The initial steps will involve sharing resources from the Community Action Partnership, which helps residents with lower incomes navigate crisis situations. We will share new tax incentives and rebates from the Inflation Reduction Act and identify other resources. We will create materials to distribute to low-income households by targeting certain areas of Robbinsdale where there is a high concentration of eligible households (*Figure 13*). The resources available for this segment of the market are rapidly changing so it will be important to establish a central repository that is updated on a regular basis.

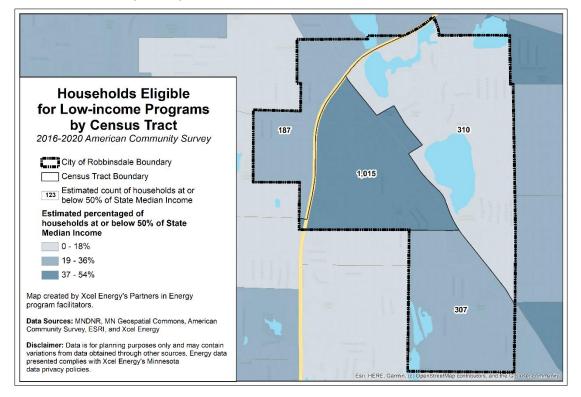


Figure 13. Households eligible for low-income programs by census tract according to the American Community Survey

3A: Coordinate with Community Action Partnership to share information about energy assistance with residents and reach out to residents who are having difficulty paying their energy bills.

3B: Share new tax incentives for upgrading equipment or completing projects.

3C: Create a landing page on the City website to share resources for energy assistance.

Strategy 4: Engage renters and property owners to help reduce energy burden.

Renters are a unique sector of the Robbinsdale community that deserve attention that may be different from homeowners. We will share energy-saving behavior changes and measures renters can pursue and guidance for talking to property owners about energy efficiency practices. We will also work directly with property owners through interactions with the City to promote energy efficiency upgrades in rental properties.

Tactics

4A: Conduct an outreach campaign to renters communicating how much they can save by participating in programs.

4B: Include information in City communications and trainings for rental property owners and managers to increase energy efficiency in multi-family buildings.

4C: Review properties at the end of rental licensure period to promote energy efficiency upgrades and include necessary benchmarks.

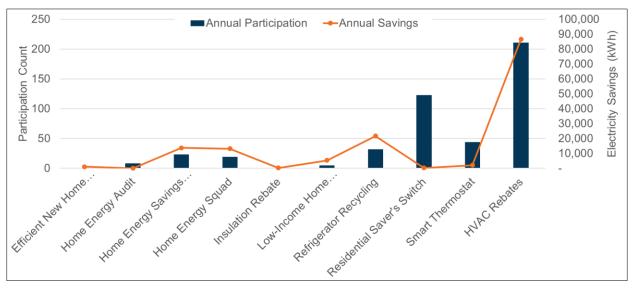
Focus Area: Residential Energy Efficiency

Why is this a priority?

Energy efficiency was described by the Energy Action Team as a high priority focus area and one that overlaps with the Reducing Energy Burden focus area. Identifying residents as the audience in this focus area was intentional, as the strategies and tactics can be focused on homeowners, renters or rental property owners. There are 6,619 housing units in Robbinsdale, with 66% single-family homes and 37% renter-occupied units.¹⁰ Energy efficiency will not only reduce the greenhouse gas emissions in Robbinsdale, it will also save the community money on energy costs and serve as a first step in education and awareness on energy issues.

About 7% of residents in Robbinsdale participate in Xcel Energy programs annually. This is estimated based on baseline data averages. These numbers are typical for community participation, but there is ample opportunity to grow program participation. The Energy Action Team agreed to start promotion with a home energy assessment from Home Energy Squad[®], then promote the other residential programs throughout the year. Smart Thermostat can be promoted over Saver's Switch, as there are already many participants in that program.

¹⁰ American Community Survey, 2020 five-year estimates





Annual Targets

In this focus area, our annual target is to engage 984 residents to participate in energy efficiency programs, which would amount to avoiding 289 MTCO₂e. If we are on track to engage that number by mid-year, we will strive for the stretch goal of engaging 1,117 residents. These targets exclude low-income efficiency programs, which are tracked in the Reducing Energy Burden focus area.

Residential Energy Efficiency Focus Area Target: Engage 984 residents annually in energy efficiency programs. MTCO₂e: 289

Stretch Goal Target:

Engage 1,117 residents annually in energy efficiency programs. MTCO2e: 336

Strategy 5: Create a volunteer group for support in outreach to make energy efficiency an easy choice.

To support the education and outreach of this plan, volunteers will be needed to make a bigger impact than relying solely on City staff. Volunteers can help with specific events and campaigns, and also provide connections to their sphere of influence. The City has an internal Sustainability Committee that includes individuals representing various departments. They will decide the structure of the volunteer group. Robbinsdale has also received a new GreenCorps member for 2023-2024. That person will spearhead the volunteer group and support with energy outreach.

5A: Create structure of volunteer group to include both internal City staff and community members and decide on expectations, involvement and support.

5B: Recruit people to join volunteer group to help with outreach to residents. Volunteers can host an outreach table at events, call, write letters, etc.

Strategy 6: Create a central hub of resources and guides for residents to share energy efficiency information.

Having a central location for energy information and resources on the City website will be essential to engage community members with the most up-to-date programs, rebates, funding opportunities and contractors. Making this information easy to understand and accessible is key to energy action. In addition to this digital hub of resources, we will create printable materials and guides that can be shared at in-person events, in mailings, and with partners. We plan to use Energy Action Team members who participate in programs as the initial case studies and share their testimonials in marketing.

Tactics

6A: Share resources, behavior change tips, and programs and rebates on City website, City newsletters and City Facebook page.

6B: Promote programs and provide list of contractors and eligible installers for energy projects on City website.

6C: Share funding opportunities, like rebates and tax incentives, and provide examples to help residents complete projects and manage cost savings.

6D: Share success stories from the community and create a case study on an old home to use in marketing.

6E: Create resource guides to engage homeowners based on style of home. For example, "The Energy Efficient Cape Cod," "The Energy Efficient Rambler," "The Energy Efficient Split Level," and "The Energy Efficient Apartment."

Strategy 7: Conduct outreach and education campaigns.

It will be important to share information about energy in broad and targeted outreach and education campaigns. The broad outreach campaigns will use City communication channels such as social media, newsletters, mailings and events. The targeted outreach campaigns will include reaching out to renters as a specific audience, and tailoring information to their needs. We will use established City and community events to share energy efficiency information and plan a few events focused on energy.

Tactics

7A: Coordinate an education campaign to residents on energy efficiency, including activities in a newsletter, a video from a City spokesperson, and infographics on social media. 7B: Conduct a targeted outreach campaign to renters by creating postcards, flyers and digital communication to share behavior changes and programs to increase energy efficiency.

7C: Create utility bill inserts to promote energy efficiency tips and programs to all residents. 7D: Use City events to perform outreach to community, including Whiz Bang Days, Public Safety Open House, etc.

7E: Partner with local hardware store to help promote energy audits and meet residents where they are at.

Strategy 8: Engage multi-family building property owners to increase energy efficiency.

Focusing on multi-family building property owners is a priority because they are the decision makers for large building energy users in Robbinsdale. When energy efficiency improvements are made to larger buildings, it could significantly impact the greenhouse gas emissions reductions goals. We will create an outreach campaign to inform property owners of the programs available to increase energy efficiency.

Tactics

8A: Review City code to find opportunities to incorporate energy efficiency.8B: Create a targeted outreach campaign for property owners to increase energy efficiency and engage in programs.

Focus Area: Business Energy Efficiency

Why is this a priority?

Although the business sector makes up 5% of premises in Robbinsdale, it accounts for roughly 40% of total energy use. This disproportionate consumption was why the Energy Action Team identified businesses as a focus area. About 6.5% of businesses in Robbinsdale participate in Xcel Energy programs annually. This is estimated based on baseline data averages. This means a vast majority of businesses are not participating in programs, which presents a great opportunity for more engagement. We will focus on the downtown businesses and small- to medium-sized businesses for engagement. Relationship-building between the City and business groups will be key to successful engagement.

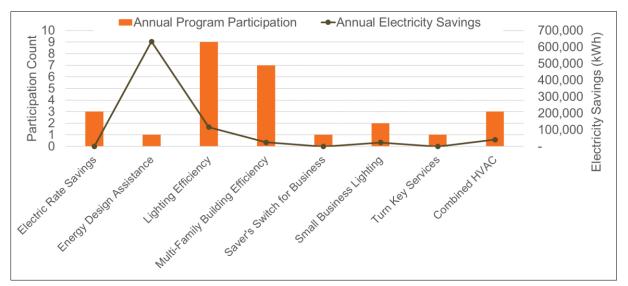


Figure 15. Xcel Energy business program participation and electricity savings in an average year in Robbinsdale

Annual Targets

The annual targets in this focus area are to engage 71 businesses to participate in energy efficiency programs per year, which would amount to avoiding 540 MTCO₂e. If we are on track to engage that number by mid-year, we will strive for the stretch goal of engaging 75 businesses.

Business Energy Efficiency Focus Area Target:

Engage 71 businesses annually in energy efficiency programs. MTCO₂e: 540

Stretch Goal Target:

Engage 75 businesses annually in energy efficiency programs.

MTCO₂e: 560

Strategy 9: Create a business recognition program to promote the benefits of increasing energy efficiency for businesses.

The visibility and publicity from a recognition program is a good incentive for businesses to take energy action and can help increase the number of businesses completing energy efficiency projects in Robbinsdale. An established program can also encourage businesses to take the next step that they might not have without the support. The City will decide the scope and structure of the recognition program and what the business needs to accomplish to qualify for the program, such as completing an energy assessment.

Tactics

9A: Research recognition programs developed by other cities.

9B: Create a program application process and develop business energy program criteria.

9C: Create promotional and outreach materials, program website and program recognition swag for free advertising, including a window sticker.

9D: Host meet and greets to share success stories.

9E: Partner with Chamber of Commerce to support the program.

Strategy 10: Update City policies around licensing for businesses.

The City plans to review and revisit City policies to identify where it might make sense to update with energy efficiency measures for businesses. This work will include City staff from other departments and support from City Council to make changes.

Tactics

10A: Revisit inspection checklist to make it greener. If the business owner complies and energy action goals are met, review possible changes to business license agreement.10B: Review licensing process to see if there is opportunity to encourage energy audits for multi-family buildings.

Strategy 11: Create targeted outreach campaigns to small businesses and restaurants.

The targeted outreach campaigns will create opportunities for direct communication and trust building with businesses, in addition to offering individual guidance. By creating customized collateral for a specific subset of businesses, we will make the material more relevant to optimize engagement. We will target small businesses, restaurants and Robbinsdale downtown businesses. We will use direct outreach tactics like mail, emails, phone calls and door-to-door interactions.

11A: Establish a business owner directory.

11B: Create a central hub on City website with information for businesses on high-energy culprits, programs, rebates and funding like federal and state grants for businesses to engage in energy efficiency.

11C: Create a postcard campaign to share energy information and programs with businesses.

11D: Conduct door-to-door outreach to downtown and small businesses to increase energy efficiency and engage in programs.

Strategy 12: Partner with business groups to conduct outreach and form authentic relationships with businesses.

It's important to connect and partner with groups that are trusted in the business community and can relate to businesses as peers. Most businesses lack the time and awareness to focus on energy efficiency, so a trusted messenger can ensure the message is better received.

Tactics

12A: Partner with the Chamber of Commerce, present the Energy Action Plan and share information on energy efficiency for businesses through their communication channels.12B: Create presentations and share information with business groups at their events and meetings.

12C: Create authentic relationships between the City and businesses by having a greater presence at Chamber of Commerce meetings and events and supporting businesses as they work to save energy and money.

Focus Area: Renewable Energy

Why is this a priority?

Increasing renewable energy support in Robbinsdale is important to achieve our greenhouse gas emissions reduction goal and reduce the impacts of climate change. This has been a consistent priority for the Energy Action Team and is represented well in this focus area. Xcel Energy has a goal to provide 80% carbon-free electricity by 2030, incorporating renewable energy into the fuel mix of the electricity used in Robbinsdale. This is in addition to what residents and businesses choose to do on their own.

Supporting renewable energy can happen through on-site solar installations, community solar gardens and subscription programs. Xcel Energy can support these efforts through their renewable programs, but customers will need to be educated on how the renewable attributes of the energy involved are handled depending on the program selected. In some cases, the incentives from the utility are tied to transferring these attributes, so the utility can count the energy toward their renewable goals.

We will focus on increasing participation in subscription programs for both sectors and use new funding from the Inflation Reduction Act as additional incentives to complete renewable energy projects. The strategies in this focus area will be started in the medium-term to long-term timeline, as increasing energy efficiency will be promoted first to lower energy use before supporting renewables.

2030 Targets

This focus area aims to reach 653 residents to participate in a renewable energy subscription program by 2030, and 5 commercial and industrial participants by 2030. Combined, this would amount to 2,327 MTCO₂e. The stretch goal aims to reach 757 residential subscribers by 2030 and 10 commercial and industrial subscribers by 2030.

Renewable Energy Focus Area Target:

Reach a total of 653 residential subscribers 5 C&I subscribers by 2030.

MTCO₂e: 2,327

Stretch Goal Target:

Reach a total of 757 residential subscribers and 10 C&I subscribers by 2030.

MTCO₂e: 2,573

Strategy 13: Create a central hub to share renewable energy information.

Creating a central location for renewable energy information and resources on the City website will be essential to inform residents and businesses about the most current programs and funding opportunities. Cost is a large barrier to the adoption of on-site renewable energy and subscription programs. We will share the most current grants, tax incentives and rebates to lower the cost of renewable energy installations. We will also create printable materials that can be shared at in-person events, in mailings and with partners.

Tactics

13A: Create a central hub on the City website that includes resources and a spokesperson from the City with a high knowledge of renewable energy options for residents and businesses to share how to get started and how to get information.13B: Identify federal and state grants, tax incentives and rebates to help reduce the

upfront costs of renewable energy projects. 13C: Collaborate with other communities to share ideas on renewable energy support for community members and businesses.

Strategy 14: Create educational and targeted outreach campaigns to residents and businesses to support renewable energy.

The lack of knowledge on available programs is a barrier to adoption for both residents and businesses. 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. The target audience spans sectors from individuals to businesses to institutions. Homeowners, renters, building owners and those who lease can all take advantage of renewable energy offerings.

14A: Create a schedule that includes regular posts in newsletters, on kiosks and via social media on specific renewable energy topics.

14B: Table at events, including Whiz Bang Days, and have meet and greets to how renewables can directly help our energy goal and reduce barriers to engagement.14C: Create a targeted outreach campaign to residents and businesses to promote solar, both on-site and through subscription programs.

Strategy 15: Municipal sector will lead by example by partaking in renewable energy programs to increase community morale and awareness of the benefits of renewables.

The City of Robbinsdale has performed solar suitability analysis for some municipal buildings and has expressed interest in supporting renewable energy. This strategy will help keep the ball rolling and provide information to help the City review options, whether that is on-site or through subscription programs, and create a goal and timeline for project completion. The City must lead the community by example and share success stories of supporting renewable energy

Tactics:

15A: Review options of on-site solar or renewable energy subscription programs for municipal buildings.

15B: Perform solar suitability analysis for municipal buildings and review City budget to assess ability to support renewable energy.

15C: Create goal and timeline for renewable energy installations or program subscriptions.

Strategy 16: Organize funding resources and create incentives and loans for businesses and residents to support renewable energy.

Alongside utility programs and rebates, this strategy can combine benefits of other renewable energy incentives, like tax credits from the Inflation Reduction Act. We will create a toolkit that includes resources and funding specifically for larger buildings and businesses to complete onsite solar installations. The City will also explore creating subsidies or a loan program to remove cost barriers to renewable energy.

Tactics

16A: Create a toolkit of resources for nonprofits and businesses for support in obtaining federal funding for renewable energy projects like solar installations.

16B: Incentivize businesses and residents to partake in solar.

16C: Explore creating subsidies and a revolving loan program to support on-site

renewable energy and bring electricity to detached garages to connect solar.

Strategy 17: Update new construction standards and review City code to support renewables.

The City can advance the feasibility of renewable energy projects by exploring new policies during the construction phase of buildings and homes and reviewing city code to remove barriers to on-site solar installations. In addition, we plan to make support for renewable expansion more accessible. We will conduct a solar suitability study on roofs in Robbinsdale and execute an outreach campaign to residents and businesses that may be good candidates.

This will include a guide on how to proceed with a project and information on where to find additional resources to support the installation.

Tactics

17A: Determine where renewables are feasible with mapping and conduct solar suitability for roofs in Robbinsdale to find solar likely roofs.

17B: Review and update new construction standards to support renewable energy projects.

17C: Review City code to support installation of renewable energy equipment.



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.

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.



Figure 16: Actions and Tracking

CenterPoint Energy was involved in the planning process and the City of Robbinsdale will request data progress reports from them 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 goals. If necessary, an implementation check-in meeting with the Energy Action Team can be convened to assess progress and discuss strategy refinement at the midpoint of implementation.

Roles and Responsibilities

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

City of Robbinsdale

The City of Robbinsdale 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 Robbinsdale 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 Robbinsdale's 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 and businesses. 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 supporting the first 18 months of implementation, including marketing and communications support and program expertise. Xcel Energy 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 be available to the Robbinsdale team. After the first 18 months of implementation, Xcel Energy will continue to provide ad-hoc support and data to the Robbinsdale team.



APPENDIX 1: IMPLEMENTATION WORK PLAN

This appendix gives additional detail for each strategy, including the implementation team leads and timeline. This appendix will serve as a work plan for the City of Robbinsdale and Partners in Energy for the first 18 months of implementation.

Focus Area: Reducing Energy	Burden								
Strategy	/ 1: Partner with local ations, groups and ons to act as trusted 1A: Partner with schools, nonprofits, and faith-based organizations to act as trusted messengers of City information		Support	Q4 2023	Q1 2024	Q2 2024	Q3 2024	Q4 2024	Q1 2025
Strategy 1: Partner with local organizations, groups and institutions to act as trusted messengers.			PiE, Energy Action Team						
	1B: Create a volunteer group to connect with trusted messengers to aid outreach and education.	City	PiE, Energy Action Team						
	1C: Engage school district administration to share information with students and parents.	City	PiE, Energy Action Team						
Strategy 2: Conduct outreach campaigns to help reduce energy burden.	2A: Create a social media campaign to attract new residents to Robbinsdale by showing that we have accessible, affordable energy and energy reduction efforts, which are tied to long-term benefits of living in Robbinsdale like clean water and clean air.	PiE	City						
	2B: Conduct a campaign to reach older homes informing the homeowner of programs, rebates and assistance. Be sensitive to helping residents who need assistance without being harmful.	PiE	City						
	2C: Create a utility bill insert and flyer with action items and facts about energy usage tied to cost savings.	PiE	City						
Strategy 3: Share energy assistance resources and funding opportunities with low- income households.	3A: Coordinate with Community Action Partnership to share information about energy assistance with residents and reach out to residents who are having difficulty paying their energy bills.	PiE	City						
	3B: Share new tax incentives for upgrading equipment or completing projects.	PiE	City						

	3C: Create a landing page on the City website to share resources for energy assistance.	City	PiE			
Strategy 4: Engage renters and property owners to reduce energy burden.	4A: Conduct an outreach campaign to renters communicating how much they can save by participating in programs.	PiE	City			
	4B: Include information in City communications and trainings for rental property owners and managers to increase energy efficiency in multi-family buildings.	City	PiE			
	4C: Review properties at the end of rental licensure period to promote energy efficiency upgrades and include necessary benchmarks.	City	PiE			

Focus Area: Residential Energ	y Efficiency									
Strategy	ategy 5: Create a volunteer pup for support in outreach to ake energy efficiency an easy5A: Create structure of volunteer group to include both internal City staff and community members and decide on expectations, involvement andCityPiE		actics Leads Support		Q4 2023	Q1 2024	Q2 2024	Q3 2024	Q4 2024	Q1 2025
Strategy 5: Create a volunteer group for support in outreach to make energy efficiency an easy choice.			PiE							
	5B: Recruit people to join volunteer group to help with outreach to residents. Volunteers can host an outreach table at events, call, write letters, etc.	City	PiE, Energy Action Team							
Strategy 6: Create a central hub of resources and guides for residents to share energy efficiency information.	6A: Share resources, behavior change tips, and programs and rebates on City website, City newsletters and City Facebook page.	PiE	City							
·	6B: Promote programs and provide list of contractors and eligible installers for energy projects on City website.	PiE	City							
	6C: Share funding opportunities, like rebates and tax incentives, and provide examples to help residents complete projects and manage cost savings.	PiE	City							
	6D: Share success stories from the community and create a case study on an old home to use in marketing.	City	PiE							
	6E: Create resource guides to engage homeowners based on style of home. For example, "The Energy Efficient Cape Cod," "The Energy Efficient Rambler," "The Energy Efficient Split Level" and "The Energy Efficient Apartment."	PiE	City							
Strategy 7: Conduct outreach and education campaigns	7A: Coordinate an education campaign to residents on energy efficiency, including activities in a newsletter, a video from a City spokesperson, and infographics on social media.	PiE	City							

	7B: Conduct a targeted outreach campaign to renters by creating postcards, flyers, and digital communication to share behavior changes and programs to increase energy efficiency.	PiE	City			
	7C: Create utility bill inserts to promote energy efficiency tips and programs to all residents.	PiE	City			
	7D: Use City events to perform outreach to community, including Whiz Bang Days, Public Safety Open House, etc.	City	PiE			
	7E: Partner with Ace Hardware to help promote energy audits and meet residents where they are at.	City	PiE			
Strategy 8: Engage multi-family building property owners to increase energy efficiency.	8A: Review City code to find opportunities to incorporate energy efficiency.	City	PiE			
	8B: Create a targeted outreach campaign to property owners and managers to increase energy efficiency and engage in programs.	PiE	City			

Strategy	Tactics	Leads	Support	Q4 202 3	Q1 2024	Q2 2024	Q3 2024	Q4 2024	Q1 2025
Strategy 9: Create a business recognition program to promote									
the benefits of increasing									
energy efficiency for	9A: Research recognition programs								
businesses.	developed by other cities.	PiE	City						
	9B: Create a program application process								
	and develop business energy program								
	criteria.	City	PiE						
	9C: Create promotional and outreach								
	materials, program website, and program								
	recognition swag for free advertising,								
	including a window sticker.	PiE	City						
	9D: Host meet and greets to share success	0.1	D'-						
	stories.	City	PiE						
	9E: Partner with Chamber of Commerce to		PiE,						
	facilitate and support the program.	City	Chamber						
Ctrate my 10, Lindata City	10A: Revisit inspection checklist to make it								
Strategy 10: Update City policies around licensing for	greener. If the business owner complies and energy action goals are met, review possible								
businesses.	changes to business license agreement.	City	PiE						
	10B. Review licensing process to see if there	Oity							-
	is opportunity to encourage energy audits for								
	multi-family buildings.	City	PiE						
Strategy 11: Create targeted	, <u>,</u>								
outreach campaigns to small									
businesses and restaurants.	11A: Establish a business owner directory.	City	PiE						
	11B: Create a central hub on City website								
	with information for businesses on high-								
	energy culprits, programs, rebates and								
	funding like federal and state grants for						1		

	11C: Create a postcard campaign to share energy information and programs to businesses.	PiE	City			
	11D: Conduct door-to-door outreach to downtown and small businesses to increase energy efficiency and engage in programs.	PiE	City			
Strategy 12: Partner with business groups to conduct outreach and form authentic relationships with businesses.	12A: Partner with the Chamber of Commerce, present the Energy Action Plan and share information on energy efficiency for businesses through their communication channels.	City	PiE, Chamber			
	12B: Create presentations and share information with business groups at their events and meetings.	PiE	City			
	12C: Create authentic relationships between the City and businesses by having a greater presence at Chamber of Commerce meetings and events and supporting businesses as they work to save energy and	City				
	money.	City	PiE			

Strategy	Tactics	Leads	Support	Q4 2023	Q1 2024	Q2 2024	Q3 2024	Q4 2024	Q1 2025
Strategy 13: Create a central	13A: Create a central hub on the City website that includes resources and a spokesperson from the City with a high knowledge of renewable energy options for residents and					2021			
hub to share renewable energy information.	businesses to share how to get started and how to get information.	PiE	City						
	13B: Identify federal and state grants, tax incentives, and rebates to help reduce the upfront costs of renewable energy projects.	PiE	City						
	13C: Collaborate with other communities to share ideas on renewable energy support for community members and businesses.	City	PiE						
Strategy 14: Create educational and targeted outreach campaigns on renewable energy.	14A: Create a schedule that includes regular posts in newsletters, on kiosks and via social media on specific renewable energy topics.	PiE	City						
	14B: Table at events, including Whiz Bang Days, and host meet and greets to explain how renewables can directly help our energy goal and reduce barriers to engagement.	City	PiE						
	14C: Create a targeted outreach campaign to promote solar, both on-site and through subscription programs.	PiE	City						
Strategy 15: Municipal sector lead by example by partaking in renewable energy programs to increase community morale and	15A: Review options of on-site solar or								
awareness of the benefits of renewables.	renewable energy subscription programs for municipal buildings.	City	PiE						

	15B: Perform solar suitability analysis for municipal buildings and review City budget to assess ability to support renewable energy.	City	PiE			
	15C: Create goal and timeline for renewable energy installations or program subscriptions.	City	PiE			
Strategy 16: Organize funding resources and create incentives and loans for businesses and residents.	16A: Create a toolkit of resources for nonprofits and businesses to support them in obtaining federal funding for renewable energy projects like solar installations.	PiE	City			
	16B: Incentivize businesses and residents to partake in solar.	City	PiE			
	16C: Explore creating subsidies and a revolving loan program to support on-site renewable energy and bring electricity to detached garages to connect solar.	City	PiE			
Strategy 17: Update new construction standards and review City code to support renewables.	17A: Determine where renewables are feasible with mapping and conduct solar suitability for roofs in Robbinsdale to find solar-likely roofs.	City	PiE			
	17B: Review and update new construction standards to support renewable energy projects.	City	PiE			
	17C: Review City code to support installation of renewable energy equipment.	City	PiE			



APPENDIX 2: BASELINE ENERGY ANALYSIS

Data was provided by Xcel Energy for all Robbinsdale premises for 2019–2021. Xcel Energy provides electric service to the community, while CenterPoint Energy provides natural gas service. CenterPoint Energy also provided energy consumption and program participation data for 2019–2021. The data helped the Energy Action Team understand Robbinsdale's energy use and opportunities for energy conservation and renewable energy. Data included in this section establishes a baseline against which progress toward goals will be compared.

Electricity and Natural Gas Premises

Most Robbinsdale premises are residential. Of the 6,974 distinct premises in Robbinsdale in 2021, 94% (6,584) are residential, commercial and industrial buildings represent 5% (329), and the remaining 1% are municipal buildings (61).

		Percent of
Sector	Premise Count	Premises
Residential	6,584	94%
Commercial and Industrial	329	5%
Municipal	61	1%
Total	6,974	100%

Table 6. Robbinsdale premise counts by sector, 2021

Electricity and Natural Gas Consumption and Trends by Sector

On average, the Robbinsdale community consumes 72 million kWh of electricity and 7.55 million therms of natural gas across all sectors per year. Total energy consumption decreased over the baseline period, which can be attributed to a decrease in natural gas consumption.

Sector	Electricity Consumption (kWh)	Natural Gas Consumption (Therms)	Total Energy Consumption (MMBtu)	Percent of Total Energy Consumption
Residential	43,742,344	4,466,515	595,900	60%
Commercial and Industrial	26,197,912	3,039,377	393,325	39%
Municipal	1,701,052	40,459	9,850	1%
Total	71,641,308	7,546,351	999,075	100%

Table 7. Average annual energy consumption by sector by fuel type, 2019–2021

Table 8. Annual energy consumption by sector by fuel type, 2019–2021

			Commercial		
	Fuel Type	Residential	and Industrial	Municipal	Total
6	Electric (kWh)	41,424,181	26,209,908	1,719,863	69,353,952
201	Natural Gas (therm)	4,872,440	3,076,392	43,709	7,992,541
2	Total (MMBtu)	628,583	397,067	10,239	1,035,890
0	Electric (kWh)	43,915,255	25,819,054	1,694,615	71,428,924
2020	Natural Gas (therm)	4,401,105	3,016,641	36,077	7,453,823
2	Total (MMBtu)	589,949	389,759	9,390	989,098
-	Electric (kWh)	45,887,597	26,564,773	1,688,677	74,141,047
02	Natural Gas (therm)	4,125,999	3,025,099	41,591	7,192,689
Ñ	Total (MMBtu)	569,168	393,149	9,921	972,238

Total energy consumption during the baseline period showed variation in each sector consistent with variation in weather. Hotter summers (those with more cooling degree days) and colder winters (those with more heating degree days) had higher energy consumption. Robbinsdale's natural gas consumption decreased during the baseline period by roughly 12%. This correlates with the decrease in heating degree days each successive year.

Table 9. Cooling degree and heating degree days, 2019–2021

	2019	2020	2021
Cooling Degree Days	817	952	1184
Heating Degree Days	7,921	7,128	6,678

Greenhouse Gas Emissions and Trends

Robbinsdale's overall greenhouse gas (GHG) emissions decreased from 2019–2020 and remained stable from 2020–2021.

Table 10. Robbinsdale energy-related greenhouse gas emissions in MTCO2e, 2019–2021

Customer Type	2019	2020	2021
Residential	39,857	35,269	35,031
Commercial and Industrial	25,184	23,013	23,658
Municipal	813	651	704
Total Emissions	65,854	58,933	59,393

In 2021, the residential sector generated 59% of Robbinsdale's energy-related greenhouse emissions and the commercial sector generated 40% of the emissions. Natural gas consumption made up the largest proportion of emissions for both the residential and commercial sectors.

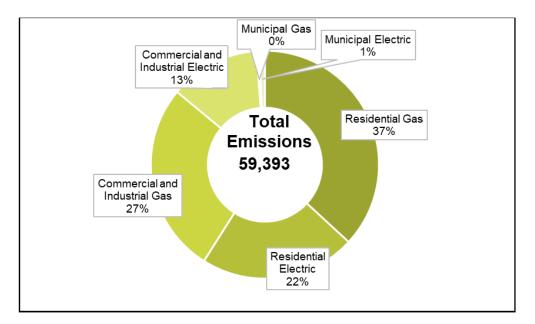


Figure 17. Robbinsdale energy-related greenhouse gas emissions by sector and fuel type, 2021

To calculate Robbinsdale's energy-related emissions, preliminary and certified emissions factors from Xcel Energy's Upper Midwest Fuel Mix and a standard emissions factor for natural gas emissions were used. As Xcel Energy completes third-party verification, the emissions factors used during the planning process to estimate greenhouse gas emissions (*Table 11*) may change.

Table 11. Emissions factors used to calculate energy-related greenhouse gas emissions, 2019–2021

Fuel Type	2019	2020	2021
Electricity Emissions Factor (lbs/MWh)	745	598	631
Natural Gas Emissions Factor (MTCO2e/Dth)	0.053071	0.053071	0.053071

Energy Costs

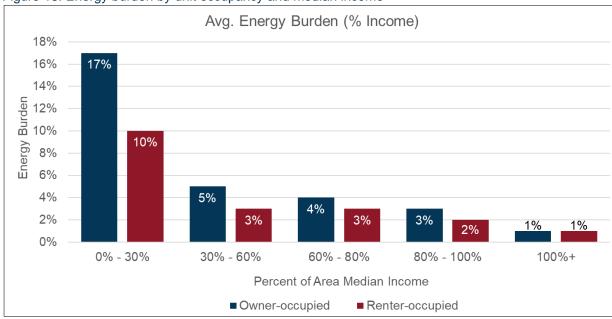
In total, Robbinsdale premises spent an annual average of \$14 million on energy during the baseline period. Robbinsdale residential premises made up two thirds of that spending, while commercial premises made up most of the other third, and a small fraction was from municipal premises. While residential premises spent more overall, their average annual cost was less (\$1,468) than the average cost for commercial premises (\$13,373).

Customer Type	Electricity Costs	Natural Gas Costs	Total Costs	Average Annual Cost per Premise
Residential	\$5,627,327	\$3,769,515	\$9,396,843	\$1,468
Commercial and Industrial	\$2,737,418	\$1,666,796	\$4,404,214	\$13,373
Municipal	\$195,594	\$27,112	\$222,706	\$3,651
Total	\$8,560,340	\$5,463,423	\$14,023,762	



Energy Burden

Energy burden is the percentage of income that residents spend on energy. Energy burden in Robbinsdale is similar to other cities of its size and makeup, with residents making 30% or less of the median income spending up to 17% of their income on energy costs. Notably, energy burden is higher across every income group for homeowners rather than renters. This is unusual and may be due to Robbinsdale's slightly older single-family housing stock in comparison to its multifamily housing stock.





Program Participation and Savings

Robbinsdale already has a significant number of participants in energy efficiency programs from Xcel Energy and CenterPoint Energy, resulting in energy savings for residents and commercial premises. While fewer commercial premises participate, their participation results in larger savings per premise. In total, participation in these commercial programs saved an annual average of 983,028 kWh and 106,960 therms.

¹¹ Department of Energy Low-income Energy Affordability Data (LEAD) Tool

Residential Sector Programs	201	19	20	20	2	021
	Count	Savings (kWh)	Count	Savings (kWh)	Count	Savings (kWh)
Efficient New Home Construction	-	-	-	-	2	3,144
Home Energy Audit	7	-	3	-	14	-
Home Energy Savings Program	31	23,564	18	9,812	21	7,854
Home Energy Squad	26	20,172	13	8,542	17	10,885
Insulation Rebate	-	-	1	151	3	492
Low-Income Home Energy Squad	5	6,267	5	4,883	5	4,892
Residential Cooling	112	29,961	116	29,023	-	-
Residential HVAC	83	55,348	102	68,437	219	77,315
Refrigerator Recycling	30	21,685	36	24,694	29	18,687
Residential Saver's Switch	79	160	169	340	122	133
Smart Thermostat	15	1,340	4	532	113	4,245
Total	388	158,497	467	146,414	545	127,647

Table 13. Annual Xcel Energy residential sector efficiency program participation and savings, 2019–2021

Table 14. Annual Xcel Energy commercial/industrial sector efficiency program participation and savings, 2019–2021

	2	019	20	20	2	.021
Commercial/Industrial Sector Programs	Count	Savings (kWh)	Count	Savings (kWh)	Count	Savings (kWh)
Cooling	-	-	1	148	-	-
Energy Design Assistance	1	1,162,064	-	-	1	737,516
HVAC+R Efficiency	-	-	-	-	1	11,852
Lighting Efficiency	5	359,546	6	74,172	21	478,148
Multi-Family Building Efficiency	8	38,088	8	-	4	37,247
Saver's Switch for Business	-	-	1	11	1	11
Small Business Lighting	1	11,708	2	27,360	3	31,928
Turn Key Services	-	-	-	-	3	-
Total	15	1,571,406	18	101,691	34	1,296,702

Table 15. Select annual CenterPoint Energy residential sector efficiency program participation and savings, 2019–2021

	20	19	20	20	20	21
		Savings		Savings		Savings
Residential Sector Programs	Count	(therms)	Count	(therms)	Count	(therms)
Home Efficiency Rebates	370	26,334	415	29,873	217	23,306
Home Insulation Rebates	15	2,714	11	1,393	25	3,898
Home Energy Squad	36	1,650	21	957	36	1,415
New Home Construction Rebates	11	342	4	190	14	171
Total	432	31,040	451	32,412	292	28,790

Table 16. Select annual CenterPoint Energy commercial/industrial sector efficiency program participation and savings, 2019–2021

	20		20		20	
Commercial/Industrial Sector Programs	Count	Savings (therms)	Count	Savings (therms)	Count	Savings (therms)
Commercial Foodservice Equipment Rebates	3	7,053	1	852	2	722
C&I Heating and Water Heating Rebates	24	50,949	29	95,130	21	37,656
C&I Audit Services (Natural Gas Energy Analysis and Steam Trap Audits)	-	-	-	-	3	339
Energy Design Assistance	-	-	-	-	1	39,500
Multi-Family Building Efficiency	7	2,642	1	330	2	782
Total	34	60,643	31	96,312	29	78,999

Renewable Energy Support

There is support for renewable energy in Robbinsdale with over 600 residential premises subscribing to Xcel Energy renewable programs. These premises receive a total of 2,475,000 kWh of their electricity from renewable sources. Participation by commercial premises is much lower, with only eight subscribers receiving a total of 415,000 kWh of electricity from renewable programs. Overall, there is potential to increase renewable energy use in Robbinsdale, with about 8% of Robbinsdale's electricity coming from renewable energy programs.

Table 17. Xcel Energy renewable energy subscriptions and program participation, 2021

	Residential	Commercial/
Xcel Energy	iteeraemai	Industrial
Subscription Programs - Windsource® and Renewable*Connect®		
Subscriber Count	444	3
Total Annual Electricity Subscribed (kWh)	1,400,000	63,000
Percent of Sector Xcel Energy Electricity Use	2.6%	0.2%
Community Solar Gardens - Solar*Rewards Community®		
Subscriber Count	140	4
Total Annual Electricity Subscribed (kWh)	1,075,000	352,000
On-site Solar – Solar*Rewards® and Net-Metering		
Subscriber Count	34	1
Total Electricity Capacity (kW)	228	11
Total Xcel Energy Renewable Energy Support ¹²		
Subscriber Count	618	8
Total Annual Electricity Subscribed (kWh)	2,475,000	415,000

¹² Excludes on-site solar due to behind the meter generation.



APPENDIX 3: 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 Robbinsdale. All goals will be measured against Robbinsdale's business as usual scenario, which averages data from the three-year baseline of 2019–2021 unless otherwise noted.

The following section defines the values against which progress is measured, including Xcel Energy and CenterPoint Energy program(s) included in the assumptions.

Community-wide Goal

• Robbinsdale will avoid an additional 30% of energy-related greenhouse gas emissions by 2030 compared to business as usual. This will save 119,000 MMBtu community-wide in energy savings and will save the community an estimated \$1.3 million through energy efficiency projects by 2030.

This goal assumes a business as usual (BAU) savings scenarios based on the three-year baseline. The community-wide goal will be measured comparing cumulative greenhouse gas emissions, estimated dollars saved and MMBtu savings equivalencies for electricity and natural gas savings for all sectors between 2023 and 2030 against the estimated BAU value for the same time period. This goal includes current and future Xcel Energy and CenterPoint Energy efficiency programs and measures the first-year savings data provided by the utilities.

	2030 BAU Scenario	2030 Goal Scenario	2030 Stretch Goal Scenario
Greenhouse Gas Emission Savings (MTCO2e)	6,715	8,530	9,258
Dollar Savings	\$935,337	\$1,303,579	\$1,439,027
MMBtu Savings	91,480	118,877	128,217

Table 18. Cumulative savings scenarios

To calculate greenhouse gas emissions, Partners in Energy facilitators will use preliminary and certified emissions factors from Xcel Energy's Upper Midwest Fuel Mix. Partners in Energy facilitators will use energy savings by sector and fuel type to calculate estimated dollars saved in the community.

To meet Robbinsdale's 2030 goal, the community will need to save more electricity and natural gas annually than the BAU scenario. *Table 19* identifies the annual energy savings targets needed to stay on track to meet the 2030 goal and stretch goal scenarios, and the assumption of annual business as usual savings.

Table 19. Annual energy savings targets

	2030 BAU Scenario	2030 Goal Scenario	2030 Stretch Goal Scenario
kWh savings	523,166	806,899	908,239
therm savings	96,499	121,065	129,282
MMBtu savings	11,435	14,860	16,027

Focus Area Goals

Reducing Energy Burden Goals

• Engage 43 residents annually.

This goal will be measured by comparing actual program participation against the BAU scenario. Progress will be measured from July 2023 through December 2030. *Table 20* identifies annual program participation targets to meet this goal. These targets are based on current Xcel Energy and CenterPoint Energy programs. For programs jointly offered by the utilities, participation counts will be included from Xcel Energy, not CenterPoint Energy. If Xcel Energy and CenterPoint Energy offer new low-income programs or programs to address energy burden, they will be included in this calculation at the discretion of the Robbinsdale team and Partners in Energy facilitators.

Table 20. Energy burden focus area annual participation targets by program.

	Annual BAU Target	Annual Goal Target
Home Energy Savings Program	23	35
Low-income Home Energy Squad	5	8

Residential Energy Efficiency Goals

• Engage 984 residents annually.

This goal will be measured by comparing actual program participation against the BAU scenario. Progress will be measured from July 2023 through December 2030. *Table 21* identifies annual program participation targets for select programs to meet this goal. These targets are based on select Xcel Energy and CenterPoint Energy programs. For programs jointly offered by the utilities, participation counts will be included from Xcel Energy, not CenterPoint Energy. If Xcel Energy and CenterPoint Energy offer new residential efficiency

rebate programs, they will be included in this calculation at the discretion of the Robbinsdale team and Partners in Energy facilitators. All low-income program offerings will be excluded from this calculation to avoid double counting toward the energy burden focus area goal.

	Annual BAU Target	Annual Goal Target
Xcel Energy Programs	363	457
Efficient New Home Construction	1	1
Home Energy Audit	8	8
Home Energy Squad	19	29
Insulation Rebate	1	1
Residential HVAC	135	203
Refrigerator Recycling	32	48
Residential Saver's Switch	123	123
Smart Thermostat	44	44
CenterPoint Energy Programs	351	527
Home Efficiency Rebates	334	501
Home Insulation Rebates	17	26

Table 21. Residential energy efficiency focus area annual participation targets by program and utility

Business Energy Efficiency Goals

• Engage 71 businesses annually.

This goal will be measured by comparing actual program participation against the BAU scenario. Progress will be measured from July 2023 through December 2030. *Table 22* identifies annual program participation targets for select programs to meet this goal. These targets are based on select Xcel Energy and CenterPoint Energy programs. For programs jointly offered by the utilities, participation counts will be included from Xcel Energy, not CenterPoint Energy. If Xcel Energy and CenterPoint Energy offer new commercial and industrial efficiency rebate programs, they will be included in this calculation at the discretion of the Robbinsdale team and Partners in Energy facilitators.

	Annual BAU Target	Annual Goal Target
Xcel Energy Programs	28	41
Business Energy Assessments	1	1
Electric Rate Savings	3	3
HVAC+R Efficiency	3	5
Lighting Efficiency	11	17
Multi-Family Building Efficiency	7	11
Saver's Switch for Business	1	1
Small Business Lighting	2	3
CenterPoint Energy Programs	27	30
Commercial Foodservice Equipment Rebates	2	2
C&I Heating and Water Heating Rebates	25	28

Table 22. Business energy efficiency focus area annual participation targets by program

Renewable Energy Goals

- Reach 653 residential subscribers by 2030.
- Reach 5 business subscribers by 2030.

This goal will measure program participation by sector in Xcel Energy's utility subscription programs. The programs currently offered by Xcel Energy are Windsource and Renewable*Connect. If Xcel Energy offers a new subscription program where customers retain the Renewable Energy Credit, this program will be added to the annual goal calculation. *Table 23* identifies the total participation counts for Windsource and Renewable*Connect by sector for 2030.

Table 23. Renewable energy focus area participation targets by sector

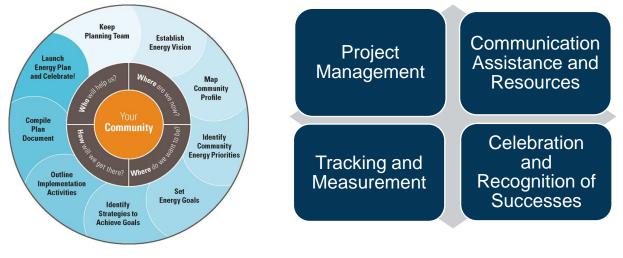
Windsource & Renewable*Connect Targets	2030 Goal Scenario
Residential	653
Commercial/Industrial	5



APPENDIX 4: 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 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.



Partners in Energy Process for Success

Resources from Xcel Energy for Implementation

Plan Development Process

The content of this plan is derived from a series of planning workshops held in Robbinsdale with a planning team committed to representing local energy priorities and implementing plan strategies. The engagement process included a series of five in-person workshops from November 2022 through April 2023, as well as multiple surveys between workshops.

Workshop 1: What should Robbinsdale's energy future look like? November 2022

The Energy Action Team learned about Partners in Energy and Robbinsdale's baseline energy use. After brainstorming what the future of energy action could look like in Robbinsdale, the team considered a vision for Robbinsdale's energy future and discussed potential priorities and focus areas for the energy action plan.

Workshop 2: How will we focus our efforts to achieve our vision? December 2022 Figure 19. Robbinsdale Energy Action Team in Workshop 1



Workshop 2 resulted in a finalized energy vision for Robbinsdale and confirmed focus areas: reducing energy burden, residential energy efficiency, business energy efficiency and renewable energy. The energy action team learned about energy efficiency and renewable energy programs from Xcel Energy and CenterPoint Energy, and how historic participation in these programs could help model their goals. They prioritized goal metrics and focus areas to prepare for a deeper dive in the next workshop.

Figure 20. Robbinsdale Energy Action Team members



Workshop 3: How will we measure each area of focus?

January 2023

During workshop 3, the team decided the metrics, timeline, ambition and approach of their community-wide goal, which informed the modeling of two goal scenarios. They brainstormed barriers and benefits to why residents and businesses would or would not engage in energy efficiency and renewable energy, which helped develop the first draft strategies for the plan.

Figure 21. Team members discuss in small groups their ideas for strategies that are unique to Robbinsdale.



Workshop 4: What are we going to do?

March 2023

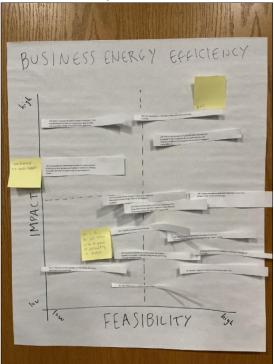
The energy action team chose the conservative goal scenario for the community-wide goal and confirmed including a stretch goal in the plan. They learned about the elements of their Energy Action Plan and how Partners in Energy reports data twice a year. Facilitators presented the refined strategies to the team, and the energy action team gave feedback on their priorities and what they wanted to change, and added any new ideas. This exercise created the final list of strategies for the plan.



Figure 22. Team members working in a group on strategy prioritization.

Workshop 5: How are we going to do the work? April 2023

The team confirmed the annual targets within each focus area to achieve the goal and discussed the Energy Action Plan process. They completed a few activities to confirm the timeline and prioritization of final strategies, as well as determine details for implementation and how the team members could support the work going forward. The team finished with sharing their experiences in the Partners in Energy planning process, and how appreciative they were of all the team members and their enthusiasm and dedication to making Robbinsdale more sustainable. Figure 23. Team members rated the impact and feasibility of business energy efficiency strategies to determine their priorities.



APPENDIX 5: IMPLEMENTATION MEMORANDUM OF UNDERSTANDING