

An Energy Action Plan for Central City

October, 2020



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 and gas utility serving Central City. Partners in Energy is a two-year collaboration between Xcel Energy and a community to develop and implement a community's energy goals. For more information about the planning workshops, see **Appendix A: Xcel Energy's Partners in Energy Planning Process.**

Energy Action Team			
Eric Chinn	Central City Opera House		
Lindsey Flewelling	Central City, Historic Preservation Officer		
Dena Hunter	Central City Planning Commission		
Jackie Johnson	Central City, City Council		
Ray Rears	Central City, Community Development Director		
Richelle Rodriguez	Gold Mountain Village, Property Manager		
Lisa Roemhildt	Central City, Main Street Liaison		
Ernie Van Deuchen	Historic Preservation Commission		
Deb Wray	Gilpin Historical Society/Historic Preservation Commission		
Partners in Energy Te	eam		
Michelle Beaudoin	Xcel Energy, Residential Program Lead		

Michelle Beaudoin	Xcel Energy, Residential Program Lead
Channing Evans	Xcel Energy, Communications Lead
Preston Gibson	Xcel Energy, Area Manager
David Heuser	Xcel Energy, Commercial Program Lead
Terry Hatfield	Xcel Energy Partners in Energy, Facilitator
Sarah Martin	Xcel Energy Partners in Energy, Facilitator
Shelby Sommer	Xcel Energy Partners in Energy, Facilitator



This Energy Action Plan was funded by and developed in collaboration with Xcel Energy's Partners in Energy.

TABLE OF CONTENTS

Acknowledgements	i
Introduction	1
Why an Energy Action Plan	1
Our Engagement and Outreach Process	2
Where We Are Now	4
Community Energy Use	4
Greenhouse Gas Emissions	8
Program Participation and Savings	8
Where We Are Going	. 10
Energy Vision Statement	. 10
Focus Areas	. 10
Goals	. 11
How We Are Going To Get There	. 12
Focus Area: Residential Energy Efficiency and Renewable Energy	. 12
Residential 1: In-person and remote education and outreach to inform residents a available programs, incentives, and resources	of . 13
Residential 2: Develop resource guide and Design Guidelines to inform energy efficiency upgrades and renewable energy installations for historic homes	. 15
Focus Area: Commercial and Municipal Energy Efficiency and Renewable Energy	. 17
Commercial 1: Identify opportunity for municipal energy efficiency improvement.	. 17
Commercial 2: Education and outreach to inform businesses of available programin incentives, and resources	ns, . 19
Commercial 3: Develop resource guide and Design Guidelines to inform energy efficiency upgrades and renewable energy installations for historic commercial properties.	. 22
Focus Area: Electric Vehicle Charging	. 24
EV 1: Install at least one publicly available Level 2 EV charging station in the downtown core	. 24
Energy Action Plan Impact	. 26
How We Stay On Course	. 27
Data and Reporting	. 27
Project Management and Tracking	. 28

Energy Action Team Commitment	28
Appendix A: Xcel Energy's Partners in Energy Planning Process	29
About Xcel Energy's Partners in Energy	29
Appendix B: Baseline Energy Analysis	30
Community Premises	30
Electricity and Natural Gas Consumption and Trends by Sector	31
Greenhouse Gas Emissions and Trends	33
Energy Costs	34
Program Participation and Savings	35
Appendix C: Glossary of Terms	37
Appendix D: Implementation Memorandum of Understanding	39
Residential Energy Efficiency and Renewable Energy	39
Commercial and Municipal Energy Efficiency and Renewable Energy	40
Electric Vehicle Charging	41
Project Management, Reimbursed Expenses	41
Residential Energy Efficiency and Renewable Energy	42
Commercial and Municipal Energy Efficiency and Renewable Energy	43
Electric Vehicle Charging	43
Project Management	43

Central City Energy Action Plan Executive Summary

Our Energy Vision

Central City has committed to engaging all sectors of the community - including business owners, multifamily building owners, and single family residents - to achieve the following Energy Action Plan vision:

Through Xcel Energy Partners in Energy, the community will support residents, businesses, and visitors by providing sustainable and affordable energy through energy conservation and renewable energy sources, while preserving the unique historic character of the community.

About this Plan

Representatives from Central City staff, City Council, Historic Preservation Commission, Planning Commission, multifamily housing sector, and Central City Opera House worked together to create an Energy Action Plan with the help of Xcel Energy's Partners in Energy program. By supporting families and businesses through energy efficiency measures identified in the plan, the entire community can benefit from energy and cost savings, improved building comfort, and increased community resiliency. Partners in Energy supports communities like Central City in developing and implementing their energy goals.

2019 Energy Profile









Central City consumed **52,506 MMBtu** of energy

Residents consumed **70%** of total energy

Businesses and the City consumed **30%** of total energy

Spent **\$630,000** on energy community-wide







Our Strategic Priorities – Your Support

The plan has three focus areas, each with opportunities to participate!

Residential

We're focused on making it simple for households to participate in home energy improvements by:

- ✓ Connecting residents with no- and low-cost opportunities to improve energy efficiency and lower energy bills
- ✓ Developing and sharing resources to show residents how they can realize large savings through home improvements while preserving their home's historic character

Commercial and Municipal

We'll improve the bottom line for Central City businesses through commercial energy improvements by:

- ✓ Implementing an energy improvement on City property and sharing lessons learned and successes with local casinos and other key businesses
- Connecting businesses with rebates and other programs to help them reduce the upfront costs of investing in energy efficiency or renewable energy projects
- ✓ Developing and sharing resources to show businesses how they can realize large savings through interior and exterior improvements while preserving historic character

Electric Vehicle (EV) Charging

We'll attract additional visitors to Central City's casinos, art galleries, museums and more by:

✓ Identifying a cost-effective avenue for installing a publicly available EV charging station in the downtown core



By reaching this plan's near-term targets, we will:



Save residents and businesses more than **\$28,000**



Encourage **100** residents and **42** businesses to participate in an energy efficiency program



Reduce greenhouse gas emissions by **200 MT CO₂e** – the equivalent of taking more than **43**^{*}cars off the road!

*https://www.epa.gov/energy/greenhouse-gasequivalencies-calculator





INTRODUCTION



Why an Energy Action Plan

Central City is a rural, historic mining city established in 1859 and serves as the County seat of Gilpin County. Today, Central City is well known for offering visitors historic tourism, outdoor recreation, art, gaming and entertainment without losing any of its historic charm. Central City hopes to show that energy efficiency and historic preservation can coexist, reducing energy costs through efficiency and renewable energy while maintaining the City's unique character.

Central City's 2017 Comprehensive Plan identifies two goals that guide Central City's pursuit of sustainable energy:

- Goal 3: strive for self-sufficiency and position Central City as a great place to live and work.
- Goal 4: Invest in infrastructure and provide public services that will enhance quality of life, facilitate economic growth and improve the attractiveness of our community

Central City has already made great progress toward their sustainable infrastructure and energy goals. In 2018, the City participated in Xcel Energy's Business Lighting Efficiency program, upgrading all City streetlights to LEDs. In 2019, the City partnered with an architecture firm to launch a restoration project for the Belvidere Theater to redesign the theater as a LEED certified building. Still, there is much more work to be done.

Central City is home to 285 historic resources. Across the commercial districts, the average year of construction is 1890. One of the greatest challenges in Central City is the high energy cost experienced by property owners and occupants of historic

buildings. This energy burden has become a deterrent for the re-occupancy of vacant buildings. Currently, the downtown core has an estimated vacancy rate of 31 - 38 percent. Improving the energy efficiency of these historic structures would result in energy cost savings that could incentivize occupancy. However, in many cases commercial and residential building owners and occupants lack an understanding of how these structures can be made more energy efficient while also respecting the City's historic Design Guidelines. This Energy Action Plan (EAP) will serve as a launching pad to connect community members to the resources they need to reduce their energy use and lower energy costs.

Importantly, this EAP was drafted in the midst of the COVID-19 pandemic, which highlighted the importance of practicing and building resilience. The planning process itself showcases Central City's resilience – the Energy Action Team was the first ever to build an EAP entirely through digital workshops. This EAP supports a more resilient energy future by promoting energy conservation and adoption of renewable energy sources.

Our Engagement and Outreach Process

The creation of this Energy Action Plan was a six-month process to help support our community to characterize its energy use, identify our energy-related goals, and develop engaging strategies to guide change toward our energy future. Starting in March 2020, the Energy Action Plan process 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 Central City and Xcel Energy Partners in Energy. By the numbers, we engaged: 33 community members through a planning survey, and held three workshops which included nine Central City participants and seven Xcel Energy Partners in Energy staff members. See **Appendix A: Xcel Energy's Partners in Energy Planning Process** for more information about the planning process and Xcel Energy Partners in Energy.



WHERE WE ARE NOW



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

Community Energy Use

Xcel Energy provides electricity and natural gas to Central City. Three years of utility data (2017-2019) were analyzed for the community, and ultimately 2019 was chosen as the baseline year for the Energy Action Plan.

Across the community in 2019, \$630,000 was spent on energy across 581 premises (Figure 1). A property can have multiple premises assigned to it, leading to a higher number of premises than buildings in the community. The community consumed 4.5 million kilowatt-hours (kWh) of electricity and 370,000 therms of natural gas in 2019. Key takeaways from the baseline data are presented, by sector, below. Community data is presented in the graphs on pages 5-9.



Figure 1. 2019 Premises and Energy Costs by Sector

Residential

Residences in Central City made up about 84 percent of the community's premises and 60 percent of the community's total energy costs in 2019 (Figure 1) at about \$379,200. The residential sector represented the largest portion of both premises and energy costs in the community and presents many potential opportunities for energy savings. The residential sector consumed 2.43 million kWh of electricity (Figure 2) and 285,000 therms of natural gas (Figure 3) which translates on average to about 4,900 kWh and 580 therms per premise in 2019. In dollars, the cost of the energy used in Central City residences in 2019 was about \$770 per premise. Average residential energy consumption, per premise, in Central City is lower than other Colorado Partners in Energy consumption, partly due to its location in the mountains (where air conditioning needs are much lower than in other parts of the state).



Figure 2. 2017-2019 Electricity Consumption by Sector



Figure 3. 2017-2019 Natural Gas Consumption by Sector

Between 2017 and 2019, total residential energy consumption and costs have fluctuated, with weather as one potential driver of the fluctuations as year-over-year changes in energy consumption followed similar trends on heating degree days (HDD)¹. Due to its climate, Central City's residential energy consumption has been driven by heating needs

¹ Heating degree days (HDD) is a measure of how cold a location is. A degree day compares the mean (the average of the high and low) outdoor temperatures recorded for a location to 65° Fahrenheit (F). A high number of heating degree days generally results in higher levels of energy use for space heating.

to a large extent, with 77 percent of total residential energy coming from natural gas (Figure 4) compared to about 70 percent on average across 2019 Colorado Partners in Energy communities². In combination with Central City's historic residential building stock, this higher natural gas use could present opportunities for savings in this sector.



Figure 4. 2019 Residential Energy Use by Fuel Type

Commercial

Commercial properties in Central City made up 30 percent of total energy costs (about \$187,200) and just 13 percent of total premises in 2019 (Figure 1). Business premises make up a smaller portion of total energy users but use a disproportionately higher amount of energy for a higher per-premise cost, presenting a potential opportunity for saving energy through energy efficiency projects. The commercial sector consumed 1.59 million kWh of electricity (Figure 2) and 65,000 therms of natural gas (Figure 3) in 2019, which translates to about 21,400 kWh and 879 therms per premise, on average. In dollars, Central City businesses spent about \$2,530 per premise on energy in 2019. The average commercial energy use and cost per premise is lower than in other Colorado Partners in Energy communities, as a high proportion of businesses in Central City are small businesses in a space of less than 50,000 square feet.

From 2017 to 2019, total commercial premises decreased by nearly 9 percent to 74 premises, leading to a reduction in energy consumption. Over the three years, commercial electricity consumption dropped by 3.5 percent, but natural gas fluctuated due in part to colder winter weather in 2019 (Figure 2 and Figure 3). Total energy costs over this same three-year period were mixed, for the commercial sector, as fluctuations in natural gas costs outweighed the trend of decreasing electricity costs overall.

Municipal

Electricity and natural gas data for Central City-owned properties were broken out separately for tracking and analysis. Across 16 premises, the City's energy costs were about \$64,100, or about 10% of the community's total cost of energy in 2019 (Figure 1).

² Xcel Energy's Partners in Energy Program compiles annual usage data by sector, for each participating community, to combine into state-wide Partners in Energy metrics.

The municipal sector consumed about 488,400 kWh of electricity and 20,900 therms of natural gas in 2019 (Figure 2 and Figure 3). Per premise, this translates to approximately 30,500 kWh and 1,303 therms per premise - costing approximately \$4,000 in total energy costs, on average, in 2019.

Between 2017 and 2019, total municipal energy consumption and costs fluctuated. The year-to-year change in energy consumption followed similar trends in heating degree days (HDD).

Greenhouse Gas Emissions

Energy consumption contributes to the community's carbon footprint by emitting greenhouse gas emissions. The community's greenhouse gas emissions from electricity and natural gas between 2017 and 2019 are displayed in Figure 5 below. Central City emitted 4,317 metric tons of carbon dioxide (equivalent) in 2019, which is comparable to the emissions generated by driving a car over 10.7 million miles.



Figure 5. 2017-2019 Greenhouse Gas Emissions by Sector

Although Central City's energy consumption has fluctuated at the community scale, Xcel Energy's electric grid infrastructure is adding renewable energy sources to lower the emissions associated with using electricity over time.

Between 2018 and 2019 in particular, total energy consumption increased but total emissions remained relatively stable as the greenhouse gas emissions were reduced through adding renewable energy to the electric grid source mix. Investing in energy efficiency improvements and implementing renewable energy installations within the Central City community will continue to help lower the community's carbon footprint.

Program Participation and Savings

The community energy profile also includes Xcel Energy's energy efficiency and renewable energy program participation and associated energy savings for the residents, businesses, and municipality of Central City. These data provide a snapshot of the types of programs customers are using and to what extent. The data also show

opportunities for greater participation in the available programs and the need for increased education and awareness about the programs.

In 2019, about 2.6 percent of eligible residential customers participated in Xcel Energy programs, saving 5,404 kWh and 232 therms. This equates to an average annual energy cost savings of \$46 per participating residence, in addition to rebates and other financial incentives associated with program participation. Figure 6 below shows which programs residents participated in between 2017-2019.



Figure 6. Residential Program Participation by Year, Program

Between 2017 and 2019, no businesses in Central City participated in Xcel Energy programs. This presents an opportunity to help Central City businesses save energy - by providing education and spreading awareness about the resources available to them.

In the three years analyzed, City facilities participated in 2 lighting programs - saving 27,207 kWh of electricity equivalent to over \$2,400 in cost savings annually. The electricity savings from these lighting projects, completed in 2017, represents a 5% reduction in electricity consumption.

WHERE WE ARE GOING



Energy Vision Statement

The Central City Energy Action Team established a vision reflective of the community's core values and energy priorities. To meet this commitment, all of Central City's community members – including casinos, the opera house, multifamily building owners, and single-family residents – will need to work together to implement energy efficiency practices and increase support for renewable energy.

Support residents, businesses, and visitors by providing sustainable and affordable energy through energy conservation and renewable energy sources, while preserving the unique historic character of the community.

Focus Areas

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

- Residential: This focus area will be oriented toward identifying no- or low-cost opportunities to improve energy efficiency and support renewable energy while preserving the City's historic character.
- Commercial: This focus area is oriented toward reducing energy cost while maintaining historic character of Central City's businesses and municipal operations. Municipal energy efficiency and renewable energy efforts will be tracked separately and used as a case study for proving the economic benefit of taking energy action.
- **Electric Vehicle Charging**: This focus area identifies a strategy for installing at least one EV charging station on City property for public use.

Goals

Given the diversity of identified focus areas, especially the inclusion of Electric Vehicle charging, goals were established at the focus area level rather than for the overarching plan. The Energy Action Team reviewed and set these goals to inform the desired direction of each focus area.

Residential

 25% of all housing units participate in at least one energy efficiency or renewable energy program by end of 2021

Commercial

 All Central City businesses and facilities receive an energy audit

Electric Vehicle Charging

• All visitors to Central City can arrive in an EV without having to be concerned about where to get a charge

HOW WE ARE GOING TO GET THERE



Strategies are categories of actions Central City will take to achieve its vision and goals. The Energy Action Team and larger Central City community provided strategy ideas as part of a survey administered over the course of four months during the planning process. At least one strategy was identified for each focus area, based on the information provided during workshops and via the survey. During Workshop 2, the Energy Action Team confirmed the highest priority strategies to complete during the implementation period. Energy Action Team members split into groups, by focus area, and refined the details of each strategy. Strategy details included desired targets, potential barriers, and actions to achieve set targets. Additionally, the Energy Action Team identified timelines, available resources and resource needs, and implementation leads and supporting partners for each strategy.



Focus Area: Residential Energy Efficiency and Renewable Energy

Residential premises make up the majority of energy users, total energy use, and total energy spending in Central City. Strategies in this focus area are oriented toward identifying no- or low-cost opportunities to improve energy efficiency and support renewable energy while preserving the City's historic character.

A recent market study identified 384 homes within the Central City boundary (ArLand, 2020). Most of the housing structures are single family; however, two duplexes and two apartment complexes provide a significant number of residences. Prospector's Run

Townhomes and Gold Mountain Village Apartments contribute 105 and 168 units respectively. Though these apartments are relatively new, Central City boasts a significant percentage of historic housing stock; 75% of the homes within the historic district are classified as historic homes. The prevalence of historic homes indicates significant residential opportunity for energy efficiency improvements, especially weatherization. The abundance of multifamily housing may also present an opportunity for large-scale savings through property-owner-implemented efficiency projects.

Central City is a tourism-based community, and as with many tourism-based communities, housing attainability and affordability often present significant challenges for residents. More than 52% of Central City homeowners have a mortgage exceeding 30% of their household income, compared to 28% of homeowners statewide (U.S. Census Bureau, 2018). Nearly 40% of renters have rent greater than 30% of their household income (U.S. Census Bureau, 2018). Although this is less than the statewide rate of 51%, this still represents a significant proportion of cost-burdened renters (U.S. Census Bureau, 2018). Additionally, over 12% of residents live below the poverty level (U.S. Census Bureau, 2018). Identifying free or low-cost opportunities to reduce residential energy costs will be a crucial outcome of this process.

Residential Goal

• 25% of all housing units participate in at least one energy efficiency or renewable energy program by end of 2021

Residential 1: In-person and remote education and outreach to inform residents of available programs, incentives, and resources

Several no- and low-cost opportunities to save energy and money are available through behavior change and Xcel Energy programs and rebates. The purpose of this strategy is to educate residents about these opportunities to connect them with the best programs and rebates to fit their needs, saving them energy and money. Though email and social media communications can be an efficient means of disseminating information quickly and to many residents, direct mail and in person information sharing is often a more effective means of education.

Potential Barriers

- Upfront cost of energy efficiency and renewable energy upgrades
- Lack of knowledge about available programs, rebates, and energy saving actions
- Emails as ineffective means of communication
- Lack of understanding about how to make energy efficient/renewable energy improvements while preserving the City's historic character

Actions

• Work with Energy Action Team to identify the most applicable Xcel Energy programs and rebates to promote and develop key messaging

- Create a decision tree to help people identify best opportunities based on property type (single-family, townhouse, apartment) and age (newer, historic, etc.)
- Emphasize <u>Home Energy Squad</u>[®] and the <u>Multifamily Building Efficiency</u> programs, where applicable
- Conduct Home Energy Squad sign-up drive
 - Arrange for different locations throughout community
 - Include some Saturday options for sign-ups
 - Offer efficiency kits as incentive to sign up
- Identify upcoming events and host a table to share materials and talk with residents
 - Earth Day TBD
 - May National Preservation Month
 - o Summer Street Fairs
 - Post office table (or near post office)

Target Audience

- Low-medium income households
- Multifamily building property owners/managers

Desired Outcomes

- Reach every household with direct mailers (including coupon for free efficiency kit)
- Sign up 100 households for Home Energy Squad visit (or similar applicable programs, based on housing unit type)

Resources/Communication Channels

- Furnace filters opportunity link to Home Energy Squad visits
- Tabling kit supplies (informational handouts, LEDs, efficiency kits)
- Utility (water) bill inserts mailed from City Hall, including a voucher to pick up a free efficiency kit or similar
- Poster in Post Office or other central location
- Social media posts

Roles and Responsibilities

Lead

- Partners in Energy marketing materials, logistics coordination
- Energy Action Team support material development/review, on call to support events

Support

- Alderman Jackie Johnson Sign up for a Home Energy Squad visit and take a video of the experience to share with others (put on City website and at City Hall)
- City Community Development, Water Billing, Website and Social Media

Timeline

- Fall 2020 Phase 1 Develop Materials and Begin Outreach
 - Begin developing materials theme could be "Prep for winter it's coming!"
 - Begin to organize Home Energy Squad sign-up drive
 - Pre-schedule a few dates (Spring/Summer 2021), target a few different areas, possibly include a Saturday)
 - Start sharing Home Energy Squad opportunities and other information through social media, utility bill inserts, and posters
- Spring/Summer 2021 Phase 2 Reminder and Event
 - Home Energy Squad Sign-up Drive
 - \circ $\,$ Table during April Earth Day event $\,$
 - o Table during National Preservation Month

Residential 2: Develop resource guide and Design Guidelines to inform energy efficiency upgrades and renewable energy installations for historic homes

In addition to participating in no- and low-cost changes in behavior, as well as programs and rebates, many Central City residents could see significant energy and cost savings through more substantial updates to the exterior and interior of homes. For instance, upgrading appliances and heating systems, investing in major energy efficiency upgrades, or even investing in renewable energy could yield large savings for Central City residents. Rebates and financing options can help offset larger upfront costs. The purpose of this strategy is to provide residents with a resource guide and Design Guidelines to direct energy efficient and renewable energy investments while preserving the character of Central City's historic resources.

Potential Barriers

- Upfront cost of energy efficiency and renewable upgrades
- Lack of knowledge about available programs, rebates, and energy saving actions
- Emails as ineffective means of communication
- Lack of understanding of how to make energy efficient/renewable energy improvements while preserving the City's historic character

Actions

- Develop a resource guide for interior and exterior improvements
 - Identify best practices for residential energy efficiency and renewable energy projects for historic homes
 - May include information regarding retrofits, replacement of appliances, replacement of energy systems, etc.
 - Link to rebate programs and opportunities
 - Build in placeholder for Design Guidelines for exteriors (to be developed next)
- Develop energy efficient Design Guidelines for exterior improvements

- Evaluate gaps and opportunities, based on existing Design Guidelines and current efforts to update guidelines
- Work with the Historic Preservation Commission (HPC) to develop guidelines based on gaps, opportunities, and identified best practices
 - Monitor national historic design guidelines for adaptations to incorporate (e.g., Preservation Briefs from National Park Service)
- Share and promote Design Guidelines
 - Disseminate through HPC
 - o Create mini web-videos spotlighting opportunities

Target Audience

- Medium- high-income homeowners
- Multifamily property owners/managers

Desired Outcomes

- Adoption of new exterior Design Guidelines related to solar and other energy efficiency installations
- Development of an interior/exterior resource guide for energy projects online and print

Resources/Communication Channels

- Digital video clips examples of what can be done
- Case studies of successful upgrades to historic properties

Roles and Responsibilities

Lead

- HPC Design Guideline coordination
- Partners in Energy resource guide support

Support

- Main Street Central City Commission (MSCC)
- History Colorado Office of Archaeology & Historic Preservation (OAHP)

Timeline

- Fall 2020: Resource guide development
- On Hold: Development of Design Guidelines while meeting remotely with HPC but will develop following resource guide development



Focus Area: Commercial and Municipal Energy Efficiency and Renewable Energy

Business and municipal premises make up a smaller portion of total energy users but use a disproportionately higher amount of energy for a higher per-unit cost. Central City's small businesses have not participated in energy efficiency programs in the last three years and could significantly benefit from low-cost energy efficiency upgrades. Municipal buildings can serve as a case study by adopting low- to medium-cost upgrades and share the return on investment with the rest of the business community. As with the residential sector, reducing energy cost while maintaining the City's historic character is the main priority.

Tourism lays at the heart of Central City's economy. Approximately 85,600 tourists visit Central City each year; of these, nearly 38,000 are overnight visitors (ArLand, 2020). Central City includes 32 businesses, located primarily in three districts: the Historic Downtown Gaming District, the Gregory Gulch Gaming District, and the KOA campground.

Though commercial activity in Central City includes retail and services to support tourism, gaming rests at the epicenter of Central City's economy. The City boasts 6 casinos operating 24 hours a day. These gaming institutions contribute approximately 55% of the City's general fund through Device Fees and Gaming Taxes (Central City Management Discussion & Analysis, 2019). In addition to the City's casinos, the Central City Opera House, Gilpin County Museum, and several art galleries are important commercial institutions within the City.

Though almost all of Central City's businesses are small, the core institutions within the City can serve as test cases for the rest of the community. Energy efficiency and renewable energy investments can significantly improve their bottom line. Connecting key Central City businesses to the appropriate opportunities to lower their energy costs could inspire others in the business community to reap the same benefits. Xcel Energy's Energy Analysis program is an excellent place for businesses to start, as they provide a helpful snapshot of energy use and can identify no- or low-cost energy opportunities, as well as high-value energy opportunities.

Commercial Goal

• All Central City businesses and facilities receive an energy audit

Commercial 1: Identify opportunity for municipal energy efficiency improvement Central City is uniquely positioned to serve as a test case for the efficacy of energy efficiency and renewable energy improvements. In order to lead by example, the City will identify and implement an energy efficient improvement for a municipal facility. The lessons learned and successes resulting from this endeavor can be shared with business owners to encourage energy efficient behaviors and investments.

Potential Barriers

- Upfront cost of energy efficiency upgrades/return on investment
- Lack of knowledge about available commercial programs, rebates, and energy saving actions
- Lack of understanding about how to make energy efficiency/renewable energy improvements while preserving the City's historic character

Actions

- Identify potential sites for energy audits
 - Fire Station
 - Police Station
 - Public Works building
 - Review previously identified City Hall study for further opportunities
- Identify potential funding support (e.g., Xcel Energy rebates, Colorado Main Street Program grants, etc.)
 - Work with Gilpin County to opt into Commercial Property Assessed Clean Energy Financing (C-PACE)
 - Utilize City and Colorado Main Street contacts to pursue this
- Sign up for Energy Analysis program
- Implement energy efficiency improvement(s) identified through audit
- Share results through case study and City website

Target Audience

- Municipal facility
- Business owners

Desired Outcomes

- Complete an energy audit for at least one municipal facility
- Complete at least one energy efficiency or renewable energy improvement on City property

Resources/Communication Channels

- 2020 free business audits through the Xcel Energy Energy Analysis program
- Past completed study for energy efficiency at City Hall
- Funding for energy efficiency projects in City budget process

Roles and Responsibilities

Lead

• Central City staff - project coordination, website, social media

• Partners in Energy – project support, project spotlight development, and other marketing materials

Support

- Energy Action Team case study review
- MSCC Coordination with Gilpin County, funding opportunities

Timeline

- Fall 2020 review previous study opportunities at City Hall
- Through end of 2020* complete free energy audits at all selected City facilities through Energy Analysis program
- Winter-Spring 2021 Determine list of potential project opportunities
- Summer-Fall 2021 Implement energy efficiency improvement
- Winter 2021 case study development

* Note: municipal facilities should sign up for the Energy Analysis program as soon as possible to ensure services are administered in a timely manner

Commercial 2: Education and outreach to inform businesses of available programs, incentives, and resources

Several no- and low-cost opportunities to save energy and money are available through behavior changes and Xcel Energy programs and rebates. The purpose of this strategy is to educate businesses about these opportunities to connect them with the best programs and rebates to fit their needs, saving them energy and money. Though email and social media communications can be an efficient means of disseminating information quickly and to many businesses, direct mail and in person information sharing is often a more effective means of education.

Potential Barriers

- Upfront cost of energy efficiency upgrades/return on investment
- Lack of knowledge about available commercial programs, rebates, and energy saving actions
- Lack of understanding about how to make energy efficient/renewable energy improvements while preserving the City's historic character
- Lack of time and resources
- Building occupants may be different than building owners

Actions

- Work with Energy Action Team to identify the most applicable Xcel Energy programs and rebates to promote and develop key messaging
 - Emphasis on Business Energy Analysis (audits) and Business Lighting Efficiency programs
 - Messaging for marketing materials to include how to reduce your utility bills and the benefits of saving energy
- Develop case study(s) for previous efficiency projects at casinos

- Determine appropriate contact at Grand Z Casino (Maverick Gaming) to develop content
- Focus on previous lighting and HVAC upgrade projects at Grand Z Casino
- Share case studies on Central City website
- Utilize case study to present cost-benefit of energy efficiency to Central City businesses
 - Work with previous participants in energy efficiency programs to produce testimonials and/or case study for businesses in Central City
 - Work with Colorado Main Street Program to develop outreach and/or amplify messaging
 - Connect with businesses via direct mail and online to share educational materials
- Business Audit Campaign
 - Sign-up drive
 - Outreach and collateral
- Create ad-hoc or more formal business group in Central City (e.g., Chamber of Commerce)
 - Build trust with business community
 - Broaden discussions around energy efficiency

Target Audience

• Business owners (casinos, restaurants, hotels/motels, grocery/liquor/convenience stores, rec/med stores)

Desired Outcomes

- Reach every business in historic district with informational flyer/case study
- Reach every casino with direct outreach

Resources/Communication Channels

- Colorado Main Street Program funding may be available to support outreach
- MSCC guide/toolkit for energy efficiency tips

Roles and Responsibilities

Lead

- Central City staff website, community development for business "chamber"
- Partners in Energy logistics coordination, project spotlight development, and other marketing materials

Support

- Colorado Main Street Program marketing support
- Energy Action Team support material development/review, on call to support events TBD

Timeline

- Fall 2020 Develop outreach materials for chosen programs
- Fall 2020 Identify events (TBD) for Business Energy Analysis (audits) sign-up drive
- Fall 2020 Winter 2021 case study development

Commercial 3: Develop resource guide and Design Guidelines to inform energy efficiency upgrades and renewable energy installations for historic commercial properties

In addition to participating in no- and low-cost changes in behavior, as well as programs and rebates, many Central City businesses could see significant energy and cost savings through more substantial updates to the building interiors and exteriors. For instance, upgrading lighting, upgrading HVAC systems, or even investing in renewable energy could yield large savings for Central City businesses. Rebates and financing options can help offset larger upfront costs. The purpose of this strategy is to provide businesses with a resource guide and Design Guidelines to direct energy efficient and renewable energy investments while preserving the character of Central City's historic resources.

Potential Barriers

- Upfront cost of energy efficiency upgrades/return on investment
- Lack of knowledge about available commercial programs, rebates, and energy saving actions
- Lack of understanding about how to make energy efficient/renewable energy improvements while preserving historic character
- Sale of casinos resulting in turnover of property management and ownership
- Building occupants may be different than building owners

Actions

- Develop resource guide
 - Identify best practices for existing commercial energy efficiency and renewable energy projects for historic businesses
 - Identify best practices for new construction commercial energy efficiency and renewable energy projects for businesses
 - May include information regarding retrofits, replacement of appliances, replacement of energy systems, etc.
 - Link to rebate programs and opportunities
 - Engage with casinos representatives to help inform desired direction of best practice research
 - Build in placeholder for Design Guidelines for exteriors (to be developed next)
- Develop Design Guidelines
 - Evaluate gaps and opportunities based on existing Design Guidelines and current efforts to update guidelines
 - Provide resources to aid the development of clear guidance on how to incorporate solar/renewable energy on rooftops in the historic district
 - Monitor national historic design guidelines for adaptations to incorporate (e.g., Preservation Briefs from National Park Service)

- Work with HPC to develop guidelines based on gaps, opportunities, and identified best practices
 - Ex: Placement rooftop solar cannot be visible from the front facade
- Share and promote Design Guidelines
 - Disseminate through HPC
 - Utilize mailers for outreach
 - o Create mini web-videos spotlighting opportunities

Target Audience

• Business owners (casinos, restaurants, hotels/motels, grocery/liquor/convenience stores, rec/med stores)

Desired Outcomes

- Adoption of new Design Guidelines related to solar and other energy efficiency installations (exterior)
- Development of resource guide for new construction and existing commercial property energy efficiency for both interior and exterior

Resources/Communication Channels

- Historic Preservation funding available to support Design Guidelines
 development
- Case study to support resource guide development
- Digital video clips examples of what can be done

Roles and Responsibilities

Lead

- Historic Preservation Commission coordinated Design Guidelines
- Partners in Energy support resource guide development

Support

- Energy Action Team resource guide review
- City casino engagement
- History Colorado OAHP CLG program

Timeline

- Fall 2020 Resource Guide development
- Holding on Design Guidelines while meeting remotely with HPC but will develop following resource guide development



Focus Area: Electric Vehicle Charging

Coinciding with the Comprehensive Plan (2017) and Strategic Plan (2016), electric vehicle (EV) charging stations would expand public parking options serving the historic downtown as well as advance Primary Goal 4: invest in infrastructure and provide public services that will enhance quality of life, facilitate economic growth and improve the attractiveness of our community. Investing in EV charging may position the City more competitively for visitation by capturing EV travelers. Despite EV growth in Colorado, the State has found prime transportation corridors - interstate highways and scenic byways - lacking public charging. As a result, EV travel across the State especially in rural areas is limited. Given the City's direct connection to I-70 and the Peak to Peak scenic byway, it could be advantageous for the City to have an EV charging station to capture the EV tourism market.

EV 1: Install at least one publicly available Level 2 EV charging station in the downtown core

Installing public charging is an important step toward overcoming range anxiety, which is often cited as a barrier to purchasing or traveling with an EV. Furthermore, as EVs and EV infrastructure become more prevalent, Central City can send a signal to potential visitors that the City is committed to providing a convenient stay for EV owners through the provision of public charging. Since many of Central City's visitors are casino goers, and may stay parked for 4-8 hours, a Level 2 charging station is optimal.

Potential Barriers

- Upfront cost of EV supply infrastructure and charging equipment
- Lack of knowledge about available EV programs, rebates, and rates
- Lack of understanding about how to install EV charging infrastructure while preserving historic character
- Fear of reduced parking options for non-EVs
- Limit to feasibility in customizing charging stations
- Range anxiety lack of EV charging infrastructure along scenic byways

Actions

- Provide case study with photos of charging stations in similar town(s), especially in historic context
 - Include pros and cons; information about how technologies are changing
 - o Include examples of traditional vs "historic" EV charging stations
 - Include options for "hiding" charging stations (location and coverage)
- Hold Council work session to garner approval for submitting grant funding applications
- Identify potential locations (e.g., T lot, Main Street, Opera parking lot, etc.)

- Consider "hiding" charging station(s) off of main streets as potential option (T lot)
- Determine desired ownership and operation model
 - o Ownership: City-owned, utility-owned, or privately-owned
 - City-owned if in T lot
 - Public-private partnership if in Century Parking Garage (privatelyowned public parking)
 - Potentially partially Xcel Energy-owned if necessary to participate in EV Supply Infrastructure (EVSI) program
 - o Operation: free, flat fee, or hourly rate
 - May consider time limits or other restrictions to discourage all day or overnight parking
 - Level 2 chargers are ideal match for casino goers (4-8 hours)
 - App-based platform to run at break-even rate; can increase price to keep people moving
 - Work with Xcel Energy to confirm EV charging rate
- Identify potential grant funding sources (e.g., Xcel Energy programs, Charge Ahead grants)
 - With funding from Charge Ahead and participation in EVSI program, Central City would need an estimated \$3,500-\$6,500 in local match
 - Explore possibility of private partner to secure remaining necessary funding
 - Work with the Main Street Central City Commission to leverage mini grant funds towards the project
 - Explore possibility of securing remaining funding through budget item
- Apply for grant funding
- Procure and install charging station
- Campaign to increase awareness of charging stations (including existing Tesla station at Grand Z)
- Share resources with local businesses to promote utility of EV infrastructure and connect businesses with resources to reduce upfront costs

Target Audience

Municipality

Desired Outcomes

• One publicly available, Level 2 EV charging station

Resources/Communication Channels

- Charge Ahead grant funding (available quarterly)
- EV Supply Infrastructure Program if available
- Colorado Main Street Program Grant funding
- Potential public-private partner funding/other support
- Case study to share successful infrastructure in other historic communities

Social media posts

Roles and Responsibilities

Lead

- City lead communications with the Council and development of grant applications
- Partners in Energy lead development of case studies and other educational materials

Support

- Energy Action Team show support to Council for pursuit of charging infrastructure
- MSCC support exploration of funding opportunities

Timeline

- Fall 2020 Holding work session with Council (Q3/Q4 2020)
- Winter 2020 Forming stakeholder group (Q3/Q4)
- Winter 2020 Applying for grant funding (Q4)

Energy Action Plan Impact

The combined targets and strategies outlined in this plan will save an additional 227,300 kWh of electricity and 23,100 therms of natural gas. The community has set aspirational targets of increasing program participation significantly over historical levels. Achieving these aspirational targets will increase participation by 142 residences and businesses in Central City. Note, though there are only 32 businesses total in Central City, the goals and targets established in this plan identify all businesses will participate in an Xcel Energy's Energy Analysis and 10 additional businesses will participate in either the Lighting or Commercial Refrigeration Efficiency programs.

	Residential	Commercial	Total
Incremental Electricity Savings (kWh/yr)	147,563	79,738	227,301
Incremental Natural Gas Savings (therms/yr)	16,883	6,194	23,077
Incremental GHG Savings (MT CO2e)	140.43	60.34	200.77
Incremental Cost Savings (\$)	\$19,124	\$9,202	\$28,326
Participant Increase	100	42	142

HOW WE STAY ON COURSE



As shown in Figure 7, this Energy Action Plan is a living document and priorities and strategy scope may shift slightly through the implementation process, based on community and staff capacity. Additionally, the impacts of COVID-19 may hinder the feasibility of hosting in-person events. The implementation team will remain nimble and flexible, aiming to achieve established targets and goals amid a changing landscape.



In addition to the core strategies identified



for implementation over the next 18 months, stakeholders also identified suites of other strategies - for each focus group that merits attention. These are listed at the end of each focus area as "strategies for future consideration." Once the priority strategies in this document are implemented, the City and Energy Action Team may use these additional strategies as a starting point to inform next steps for energy action.

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.

Project Management and Tracking

Over the course of implementation, Partners in Energy will host biweekly check-in calls with the Energy Action Team to ensure we stay on course to achieve our strategies. Meetings will rotate across each of the focus areas such that each focus area is discussed every six weeks. Partners in Energy will schedule additional project management check-in calls with City staff as needed during this time period.

Energy Action Team Commitment

The Energy Action Team formed to create this plan will support implementation by attending applicable implementation check-in calls and serving as liaisons to the rest of the community. Energy Action Team commitments are more clearly outlined for each strategy and in the Implementation MOU. The Energy Action Team will be expected to take an active role in identifying appropriate Xcel Energy programs, developing appropriate messaging, and disseminating information to community members. The Energy Action Team may also be asked to serve as liaison to relevant decision-making bodies such as the Planning Commission, Historic Preservation Commission, and City Council.

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



About Xcel Energy's Partners in Energy

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



Partners in Energy Process for Success

Resources from Xcel Energy for Implementation

APPENDIX B: BASELINE ENERGY ANALYSIS



Data was provided by Xcel Energy for all Central City premises for 2017–2019. Xcel Energy provides electric and natural gas service to the community. The data helped the Energy Action Team understand Central City'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 in the future.

Additional charts are provided below to supplement the data and trends described above in the Where Are We Now section. Definitions of key terms presented in these graphs are available in **Appendix C: Glossary of Terms**.

Community Premises



Figure 8. 2019 Premise Count by Sector

Electricity and Natural Gas Consumption and Trends by Sector



Electricity and natural gas consumption is subject to Xcel Energy's 15/15 privacy rules

Figure 9. 2019 Electricity Consumption by Sector



Figure 10. 2019 Natural Gas Consumption by Sector



Figure 11. 2019 Energy Consumption by Sector



Figure 12. 2017-2019 Electricity Consumption by Sector



Figure 13. 2017-2019 Natural Gas Consumption by Sector



Figure 14. 2017-2019 Energy Consumption by Sector

Greenhouse Gas Emissions and Trends



Figure 15. 2019 Greenhouse Gas Emissions by Sector



Figure 16. 2017-2019 Greenhouse Gas Emissions by Sector

Energy Costs











Figure 19. 2019 Energy Costs per Premise by Sector

Program Participation and Savings



Figure 20. 2017-2019 Residential Program Participation



Figure 21. 2017-2019 Commercial Program Participation



Figure 22. 2017-2019 Program Electricity Savings by Sector



Figure 23. 2017-2019 Program Natural Gas Savings by Sector

APPENDIX C: GLOSSARY OF TERMS



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

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

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

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.

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.

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

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

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.



APPENDIX D: IMPLEMENTATION MEMORANDUM OF UNDERSTANDING

Memorandum of Understanding Phase 2 – Plan Implementation

Lisa Roemhildt Main Street Liaison 141 Nevada Street Central City, CO 80427

The intent of this Memorandum of Understanding is to recognize the achievement of Central City in developing an Energy Action Plan. Xcel Energy, through its Partners in Energy program, has supported the development of this Energy Action Plan. This document outlines how Central City and Xcel Energy will continue to work together to implement this Energy Action Plan. The term of this joint support, as defined in this document, will extend from October 1, 2020 through March 31, 2022.

Xcel Energy will support Central City in achieving the goals of its Energy Action Plan in the following ways:

Residential Energy Efficiency and Renewable Energy

- In-person and remote education and outreach to inform residents of available programs, incentives, and resources
 - Support strategy team organization, meetings, and communication
 - o Lead development of printed marketing materials
 - Support promotion of events through coordinated development of email content, website content, or other social media content
 - Serve as liaison among City and Xcel Energy staff on programs such as Xcel Energy Home Energy Squad[®]. Arrange program support, such as Home Energy Squad technicians, to attend events
 - Support outreach initiatives at up to two community events through event support, basic tabling supplies (tablecloths, flyers and brochures, material display stands) and collateral development. This does not include Partners in Energy staff attendance
 - o Train volunteers to provide outreach and information at community events
 - o Provide 250 Light-emitting Diodes (LEDs) for distribution at residential events
 - Support tracking and reporting progress toward goals

Support funded by Xcel Energy for this strategy is not to exceed 40 hours. These hours will include those provided through our Partners in Energy team from Brendle Group and do not include support provided by Xcel Energy internal program staff.

- Develop resource guide and Design Guidelines to inform energy efficiency upgrades and renewable energy installation
 - o Support strategy team organization, meetings, and communication
 - Lead the development of resource guides, including a decision tree and program information
 - Support best practice research for Design Guidelines

Support funded by Xcel Energy for this strategy is not to exceed 40 hours. These hours will include those provided through our Partners in Energy team from Brendle Group and do not include support provided by Xcel Energy internal program staff.

Commercial and Municipal Energy Efficiency and Renewable Energy

- Identify opportunities for municipal energy efficiency improvement
 - \circ $\;$ Support strategy team organization, meetings, and communication
 - Support the process of identifying appropriate municipal buildings for Xcel Energy Energy Analysis program
 - Connect municipality to appropriate programs and Xcel Energy representatives, based on results of Energy Analysis findings
 - Lead project spotlight development to record and share outcomes of Energy Analysis
 - Support tracking and reporting progress toward goals

Support funded by Xcel Energy for this strategy is not to exceed 15 hours. These hours will include those provided through our Partners in Energy team from Brendle Group and do not include support provided by Xcel Energy internal program staff.

- Education and outreach to inform businesses of available programs, incentives, and resources
 - o Support strategy team organization, meetings, and communication
 - Serve as liaison between City and Xcel Energy Account Managers and communications staff, and develop a detailed outreach plan to engage local businesses
 - Provide existing and applicable Xcel Energy case studies and program materials
 - Support development, publishing, and printing of case studies showcasing local businesses that have implemented energy efficiency and develop other sectorspecific collateral targeting conservation
 - Provide coordination with City staff (e.g., Economic Development, Building Department) to leverage other current business marketing efforts and engagement opportunities (e.g., major construction projects)

o Support tracking and reporting progress toward goals

Support funded by Xcel Energy for this strategy is not to exceed 30 hours. These hours will include those provided through our Partners in Energy team from Brendle Group and do not include support provided by Xcel Energy internal program staff.

- Develop resource guide and Design Guidelines to inform energy efficiency upgrades and renewable energy installation
 - Support strategy team organization, meetings, and communication
 - Lead the development of resource guides, including a decision tree and program information
 - o Support best practice research for Design Guidelines

Support funded by Xcel Energy for this strategy is not to exceed 30 hours. These hours will include those provided through our Partners in Energy team from Brendle Group and do not include support provided by Xcel Energy internal program staff.

Electric Vehicle Charging

- Install at least one publicly available Level 2 charging station in the downtown core
 - Support strategy team organization, meetings, and communication
 - Lead development of an EV infrastructure project spotlight to share with City Council and community
 - Serve as liaison among City and Xcel Energy program staff on EV infrastructure programs.

Support funded by Xcel Energy for this strategy is not to exceed 15 hours. These hours will include those provided through our Partners in Energy team from Brendle Group and do not include support provided by Xcel Energy internal program staff.

Project Management, Reimbursed Expenses

- Provide presentation content outlining the Partners in Energy process, identified focus areas and goals, and benefits to community to be presented to Council as part of update process
- Conduct biannual data pulls and status meetings to review progress toward goals
- Facilitate regular check-in meetings, track and report energy impacts and activities (e.g., process annual data from Xcel Energy), and help coordinate implementation kick-off activities
- Provide up to \$1,000 for reimbursed expenses related to printing and distribution of cobranded marketing materials, venue fees, food, and other related needs associated with outreach and education. Xcel Energy funding will not be provided for the purchase of alcohol.

Support funded by Xcel Energy for project management is not to exceed 74 hours. These hours will include those provided through our Partners in Energy team from Brendle Group and do not include support provided by Xcel Energy internal program staff.

Central City commits to supporting the Energy Action Plan to the best of its ability by:

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

	Electricity Savings (in kWh)	Natural Gas Savings (in therms)
Baseline Historic Energy Savings	35,142	73,500
Incremental Plan Energy Savings (2/1/19-9/30/20)	277,301	23,077
Total Plan Energy Savings (baseline + plan energy savings)	312,443	96,577

Central City Conservation Goals

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

Residential Energy Efficiency and Renewable Energy

- In-person and remote education and outreach to inform residents of available programs, incentives, and resources
 - Lead strategy efforts with support from Energy Action Team members
 - Lead campaign development to educate residents and drive conservation actions
 - Support development of printed marketing materials (such as mailers and posters), event materials, and tabling details
 - Help identify which community events will be most beneficial at which to have a formal/increased presence
 - Launch Home Energy Squad sign up drive and track metrics pertaining to number of residences reached
 - Coordinate with Home Energy Squad representatives to promote offering and dedicate funding to offer reduced-price Home Energy Squad visits
 - Use City's media outlets to deliver outreach and communicate with residents
 - Lead event tabling at community events (including coaching volunteers to support)
 - o Share City's Energy Action Plan information at city events as appropriate
- Develop resource guide and Design Guidelines to inform energy efficiency upgrades and renewable energy installation
 - Lead coordination of Design Guideline updates in partnership with Historic Preservation Commission
 - Support development of a resource guide by identifying key program information and messaging
 - Lead distribution of resource guide, to residents, through identified channels

Commercial and Municipal Energy Efficiency and Renewable Energy

- Identify opportunity for municipal energy efficiency improvement
 - Lead identification of facility(ies) optimal for receiving an energy audit
 - Lead application for Energy Analysis program for selected building(s)
 - o Select one or more energy improvements, based on Energy Analysis findings
 - Identify funding and implement energy improvement(s)
 - Support development of project spotlight to share with local businesses and residents
- Education and outreach to inform businesses of available programs, incentives, and resources
 - Lead strategy efforts with support from Energy Action Team members
 - Support development of new case studies, printed marketing materials, and other sector-specific collateral. Provide review and input as appropriate
 - Publish case studies in selected outreach channels
 - Coordinate strategy efforts with other current business marketing efforts delivered by the City
 - o Use City's media outlets to deliver outreach and communicate with local businesses
- Develop resource guide and Design Guidelines to inform energy efficiency upgrades and renewable energy installation
 - Lead coordination of Design Guideline updates in partnership with Historic Preservation Commission
 - Support development of a resource guide by identifying key program information and messaging
 - o Lead distribution of resource guide, to residents, through identified channels

Electric Vehicle Charging

- Install at least one publicly available Level 2 charging station in the downtown core
 - o Inform development of project spotlight, and collect letters of support if needed.
 - Lead presentation of project spotlight and other supporting information to City Council
 - Organize working group to identify infrastructure, ownership, and operation details; develop application for grant funding
 - Identify funding source(s) to cover remaining amount required to purchase and install infrastructure
 - Coordinate EV infrastructure installation if funding secured

Project Management

• Participate in coordination and tracking of scheduled check-ins, activities, and events

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

Single Points of Contact

All communications pertaining to this agreement shall be directed to Lisa Roemhildt, on behalf of Central City, and Tami Gunderzik, on behalf of Xcel Energy.

Legal Applicability and Waiver

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

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

For Central City:
Signature:
Name:
Title:
Date:
For Xcel Energy:
Signature:
Name:
Title:
Date: